



MEASUREMENT REPORT

FCC PART 15.407 WLAN 802.11a/n/ac

FCC ID: TK4WLE1216V520

APPLICANT: Compex Systems Pte Ltd

Application Type: Certification

Product: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module

Model No.: WLE1216V5-20, WLE1216V5-20-I

Brand Name: COMPEX

FCC Classification: Unlicensed National Information Infrastructure (UNII)

FCC Rule Part(s): Part15 Subpart E (Section 15.407)

Test Procedure(s): ANSI C63.10-2013, KDB 789033 D02v01r04,
KDB 644545 D03v01, KDB 662911 D01v02r01

Test Date: October 25 ~ November 19, 2017

Reviewed By : _____
(Jame Yuan)

Approved By : _____
(Marlin Chen)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 789033 D02v01r04. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
1710RSU02001	Rev. 01	Draft Report	11-20-2017	

CONTENTS

Description	Page
§2.1033 General Information	6
1. INTRODUCTION	7
1.1. Scope	7
1.2. MRT Test Location	7
2. PRODUCT INFORMATION	8
2.1. Equipment Description.....	8
2.2. Product Specification Subjective to this Report.....	8
2.3. Working Frequencies for this report	8
2.4. Description of Available Antennas	9
2.5. Description of Support Units	10
2.6. Description of Antenna RF Port	10
2.7. Test Mode	10
2.8. Description of Test Software	11
2.9. Device Capabilities	17
2.10. Test Configuration	19
2.11. EMI Suppression Device(s)/Modifications	19
2.12. Labeling Requirements.....	19
3. DESCRIPTION OF TEST	20
3.1. Evaluation Procedure	20
3.2. AC Line Conducted Emissions	20
3.3. Radiated Emissions	21
4. ANTENNA REQUIREMENTS.....	22
5. TEST EQUIPMENT CALIBRATION DATE	23
6. MEASUREMENT UNCERTAINTY	24
7. TEST RESULT	25
7.1. Summary	25
7.2. 26dB Bandwidth Measurement.....	26
7.2.1. Test Limit	26
7.2.2. Test Procedure Used	26
7.2.3. Test Setting.....	26
7.2.4. Test Setup	26
7.2.5. Test Result.....	27
7.3. 6dB Bandwidth Measurement.....	57

7.3.1. Test Limit	57
7.3.2. Test Procedure Used	57
7.3.3. Test Setting.....	57
7.3.4. Test Setup	57
7.3.5. Test Result.....	58
7.4. Output Power Measurement	63
7.4.1. Test Limit	63
7.4.2. Test Procedure Used	63
7.4.3. Test Setting.....	63
7.4.4. Test Setup	63
7.4.5. Test Result.....	64
7.5. Transmit Power Control	71
7.5.1. Test Limit	71
7.5.2. Test Procedure Used	71
7.5.3. Test Setting.....	71
7.5.4. Test Setup	71
7.5.5. Test Result.....	72
7.6. Power Spectral Density Measurement	76
7.6.1. Test Limit	76
7.6.2. Test Procedure Used	76
7.6.3. Test Setting.....	76
7.6.4. Test Setup	77
7.6.5. Test Result.....	78
7.7. Frequency Stability Measurement.....	161
7.7.1. Test Limit	161
7.7.2. Test Procedure Used	161
7.7.3. Test Setup	162
7.7.4. Test Result.....	163
7.8. Radiated Spurious Emission Measurement	164
7.8.1. Test Limit	164
7.8.2. Test Procedure Used	164
7.8.3. Test Setting.....	164
7.8.4. Test Setup	166
7.8.5. Test Result.....	168
7.9. Radiated Restricted Band Edge Measurement	350
7.9.1. Test Limit	350
7.9.2. Test Result.....	352
7.10. AC Conducted Emissions Measurement.....	684
7.10.1. Test Limit	684

7.10.2. Test Procedure	684
7.10.3. Test Setup	685
7.10.4. Test Result.....	686
8. CONCLUSION.....	688

§2.1033 General Information

Applicant:	Compex Systems Pte Ltd
Applicant Address:	No:9 Harrison Road, Harrison Industrial Building, #05-01, Singapore 369651
Manufacturer:	Compex Systems Pte Ltd
Manufacturer Address:	No:9 Harrison Road, Harrison Industrial Building, #05-01, Singapore 369651
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
FCC Registration No.:	893164
FCC Rule Part(s):	Part15 Subpart E (Section 15.407)
Model No.:	WLE1216V5-20, WLE1216V5-20-I
FCC ID:	TK4WLE1216V520
Test Device Serial No.:	N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 893164) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module
Model No.	WLE1216V5-20, WLE1216V5-20-I
Brand Name:	COMPEX
Wi-Fi Specification:	802.11a/b/g/n/ac
Operating Temperature:	-20 ~ 55 °C

Note: The difference between models is for different market sale.

2.2. Product Specification Subjective to this Report

Frequency Range	For 802.11a/n-HT20/ac-VHT20: 5180~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40: 5190~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80/ac-VHT80+80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz
Type of Modulation	802.11a/n/ac: OFDM
Data Rate	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 600Mbps 802.11ac: up to 1733.2Mbps

Note: For other features of this EUT, test report will be issued separately.

2.3. Working Frequencies for this report

802.11a/n-HT20/ac-VHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz	100	5500 MHz
104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz
128	5640 MHz	132	5660 MHz	136	5680 MHz
140	5700 MHz	144	5720 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz	--	--	--	--

802.11n-HT40/ac-VHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz
62	5310 MHz	102	5510 MHz	110	5550 MHz
118	5590 MHz	126	5630 MHz	134	5670 MHz
142	5710 MHz	151	5755 MHz	159	5795 MHz

802.11ac-VHT80/ac-VHT80+80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz
122	5610 MHz	138	5690 MHz	155	5775 MHz

Note: For 802.11ac-VHT80+80 mode, Ant 0 & Ant 1 ports work on one frequency of the above table, Ant 2 & Ant 3 ports work on another frequency of the above table. E.g. channel 58 + 138 group, channel 58 will transmit by Ant 0+1 ports and channel 138 will transmit by Ant 2+3 ports. Only channel 122 and channel 138 can't transmit simultaneously.

2.4. Description of Available Antennas

No.	Antenna	Manufacturer	Frequency Band (MHz)	Max Peak Gain (dBi)
Wi-Fi External Antenna List (5GHz 4*4 MIMO)				
1#	Omni Directional	Exceltek Electronics Technology Co., Ltd.	2400 ~ 2500	3.0
			5150 ~ 5850	5.0
2#	Omni Directional	Laird Smart Technology Co., Ltd.	2400 ~ 2500	2.2
			5150 ~ 5850	3.5
3#	Omni Directional	Linx Technologies	2400 ~ 2500	2.5
			5150 ~ 5850	4.6
4#	Omni Directional	Kenbotong Technology Co., Ltd.	5150 ~ 5850	10.0

Note 1: The device didn't support beam-forming technology and Cyclic Delay Diversity (CDD) technology, and the transmit signals are uncorrected, so no add array gain to the band power and band PSD.

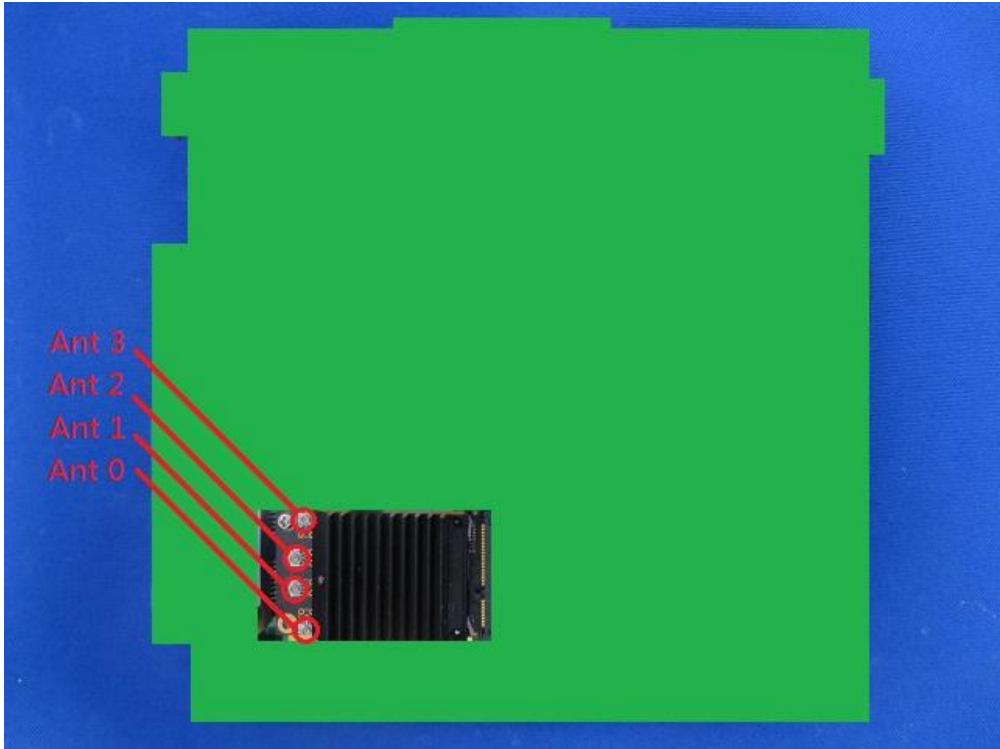
Note 2: We selected the max peak gain antenna 4# to perform all RF testing.

2.5. Description of Support Units

The EUT has been tested with associated equipment below:

Description	Manufacturer	Model No.
PCB Board	Compex Systems Pte Ltd	WPQ864HV

2.6. Description of Antenna RF Port

Antenna RF Port				
--	5GHz RF Port			
Software Control Port	Ant 0	Ant 1	Ant 2	Ant 3
				

2.7. Test Mode

Test Mode	Mode 1: Transmit by 802.11a
	Mode 2: Transmit by 802.11n-HT20
	Mode 3: Transmit by 802.11n-HT40
	Mode 4: Transmit by 802.11ac-VHT20
	Mode 5: Transmit by 802.11ac-VHT40
	Mode 6: Transmit by 802.11ac-VHT80
	Mode 7: Transmit by 802.11ac-VHT80+80

2.8. Description of Test Software

The test utility software used during testing was “QCARCT”, and the version was “v3.0.174.0”.

Power Parameter Value for 1TX

Test Mode	Channel No.	Test Frequency (MHz)	Power Parameter Value			
			Ant 0	Ant 1	Ant 2	Ant 3
802.11a	36	5180	17.0	17.0	17.5	17.5
	44	5220	17.5	17.5	17.5	17.5
	48	5240	18.0	17.5	17.5	18.0
	52	5260	17.0	17.0	17.0	17.5
	60	5300	17.0	17.0	17.0	17.5
	64	5320	17.0	17.0	17.0	17.5
	100	5500	17.0	16.5	16.5	17.0
	116	5580	17.0	16.5	16.0	16.5
	120	5600	17.0	16.5	16.5	16.5
	140	5700	17.5	16.5	16.5	17.0
	144	5720	17.5	16.5	16.5	17.0
	149	5745	21.0	21.0	21.0	21.0
	157	5785	21.0	21.0	21.0	21.0
	165	5825	21.0	21.0	21.0	21.0
802.11 n-HT20	36	5180	--	17.5	--	--
	44	5220	--	17.5	--	--
	48	5240	--	17.5	--	--
	52	5260	--	17.0	--	--
	60	5300	--	17.0	--	--
	64	5320	--	17.0	--	--
	100	5500	--	17.0	--	--
	116	5580	--	16.5	--	--
	120	5600	--	17.0	--	--
	140	5700	--	17.0	--	--
	144	5720	--	17.0	--	--
	149	5745	--	21.0	--	--
	157	5785	--	21.0	--	--
	165	5825	--	21.0	--	--

Test Mode	Channel No.	Test Frequency (MHz)	Power Parameter Value			
			Ant 0	Ant 1	Ant 2	Ant 3
802.11n-HT40	38	5190	--	18.5	--	--
	46	5230	--	19.0	--	--
	54	5270	--	20.0	--	--
	62	5310	--	18.5	--	--
	102	5510	--	17.5	--	--
	110	5550	--	19.5	--	--
	118	5590	--	19.5	--	--
	134	5670	--	18.5	--	--
	142	5710	--	19.5	--	--
	151	5755	--	21.0	--	--
	159	5795	--	21.0	--	--
802.11ac-VHT20	36	5180	--	17.5	--	--
	44	5220	--	17.5	--	--
	48	5240	--	17.5	--	--
	52	5260	--	17.5	--	--
	60	5300	--	17.5	--	--
	64	5320	--	17.0	--	--
	100	5500	--	17.0	--	--
	116	5580	--	16.5	--	--
	120	5600	--	16.5	--	--
	140	5700	--	17.0	--	--
	144	5720	--	17.0	--	--
	149	5745	--	21.0	--	--
	157	5785	--	21.0	--	--
	165	5825	--	21.0	--	--

Test Mode	Channel No.	Test Frequency (MHz)	Power Parameter Value			
			Ant 0	Ant 1	Ant 2	Ant 3
802.11ac-VHT40	38	5190	--	18.0	--	--
	46	5230	--	19.0	--	--
	54	5270	--	20.0	--	--
	62	5310	--	18.5	--	--
	102	5510	--	17.5	--	--
	110	5550	--	19.0	--	--
	118	5590	--	19.0	--	--
	134	5670	--	18.5	--	--
	142	5710	--	19.5	--	--
	151	5755	--	21.0	--	--
	159	5795	--	21.0	--	--
802.11ac-VHT80	42	5210	--	17.0	--	--
	58	5290	--	17.0	--	--
	106	5530	--	16.5	--	--
	122	5610	--	20.0	--	--
	138	5690	--	20.0	--	--
	155	5775	--	19.5	--	--

Power Parameter Value for 4TX

Test Mode	Channel No.	Test Frequency (MHz)	Ant 0 + 1 + 2 + 3 Power Parameter Value
802.11 n-HT20	36	5180	11.5
	44	5220	12.0
	48	5240	12.0
	52	5260	11.0
	60	5300	11.0
	64	5320	11.0
	100	5500	10.5
	116	5580	10.0
	120	5600	10.5
	140	5700	10.5
	144	5720	10.5
	149	5745	18.5
	157	5785	18.0
	165	5825	18.0
802.11n-HT40	38	5190	13.5
	46	5230	13.5
	54	5270	14.0
	62	5310	14.0
	102	5510	13.5
	110	5550	14.0
	118	5590	14.0
	134	5670	13.5
	142	5710	13.5
	151	5755	19.5
	159	5795	20.0

Test Mode	Channel No.	Test Frequency (MHz)	Ant 0 + 1 + 2 + 3 Power Parameter Value
802.11ac-VHT20	36	5180	11.5
	44	5220	12.0
	48	5240	12.0
	52	5260	11.0
	60	5300	11.0
	64	5320	11.0
	100	5500	10.5
	116	5580	10.0
	120	5600	10.5
	140	5700	10.5
	144	5720	10.5
	149	5745	18.5
	157	5785	18.0
	165	5825	18.0
802.11ac-VHT40	38	5190	13.5
	46	5230	13.5
	54	5270	14.5
	62	5310	14.0
	102	5510	13.5
	110	5550	14.0
	118	5590	14.0
	134	5670	13.5
	142	5710	13.5
	151	5755	19.0
	159	5795	19.0
802.11ac-VHT80	42	5210	11.5
	58	5290	12.0
	106	5530	11.5
	122	5610	13.5
	138	5690	13.5
	155	5775	11.5

Test Mode	Channel No.	Test Freq. (MHz)	Power Parameter Value	
			Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Ant 2 + 3 / Ant 0 + 1 + 2 + 3
Non-contiguous 80+80 MHz mode fall within different UNII band				
802.11ac-VHT80+80	42	5210	16.5	--
	42	5210	--	17.5
	58	5290	16.5	--
	58	5290	--	15.5
	106	5530	16.5	--
	106	5530	--	15.5
	122	5610	16.5	--
	122	5610	--	17.5
	138	5690	16.5	--
	138	5690	--	17.5
	155	5775	18.0	--
	155	5775	--	17.0
Non-contiguous 80+80 MHz mode fall within same UNII band				
802.11ac-VHT80+80	106	5530	13.0	--
	138	5690	--	13.0
	106	5530	--	13.0
	138	5690	13.0	--

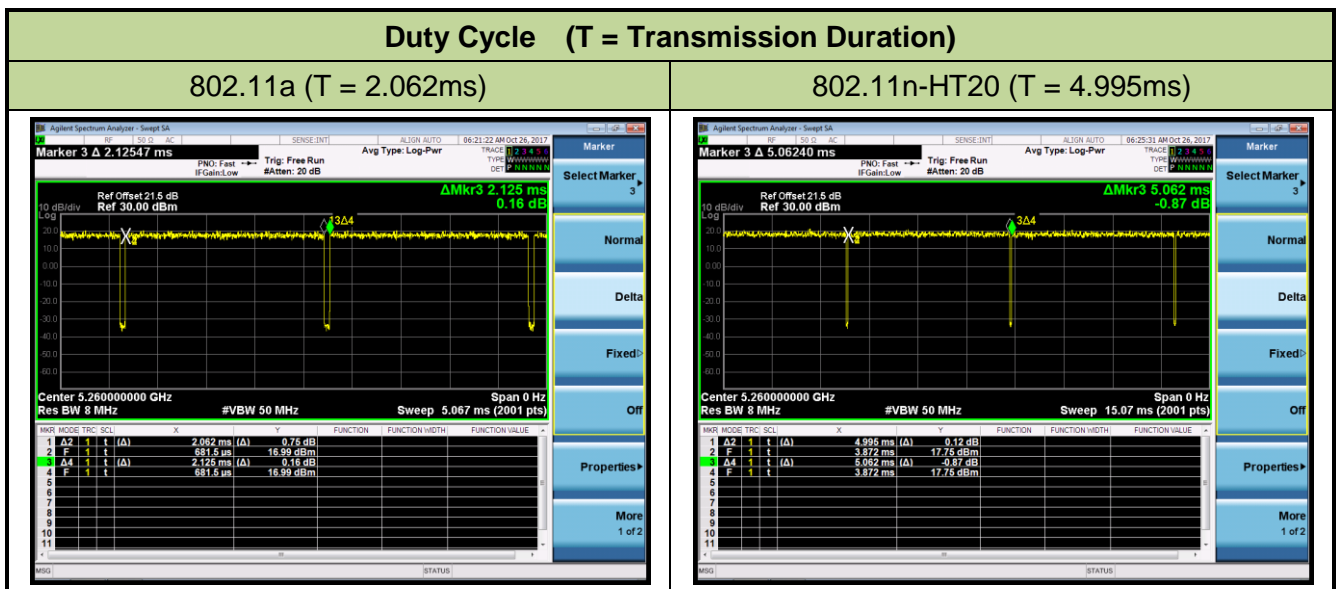
2.9. Device Capabilities

This device contains the following capabilities:

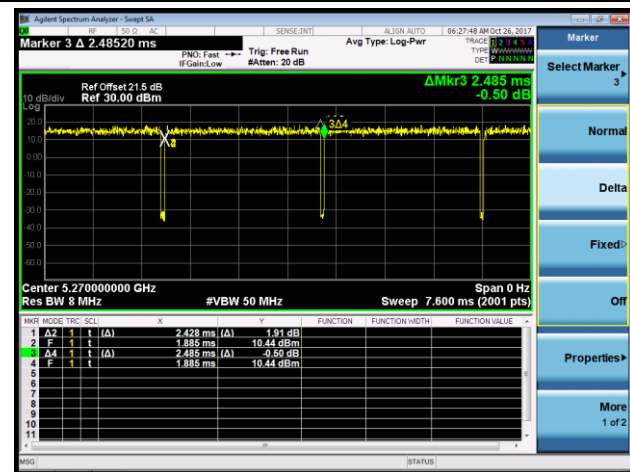
802.11a/n/ac Wi-Fi

Note: 5GHz (NII) operation is possible in 20MHz, 40MHz and 80MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = average per the guidance of Section B)2)b) of KDB 789033 D02v01r04. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

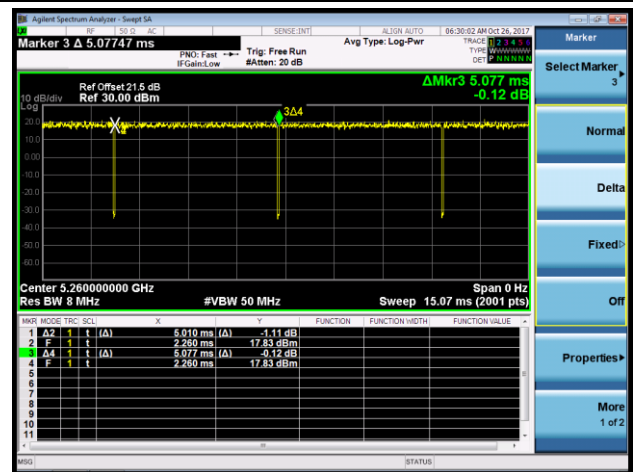
Test Mode	Duty Cycle
802.11a	97.04%
802.11n-HT20	98.68%
802.11n-HT40	97.71%
802.11ac-VHT20	98.68%
802.11ac-VHT40	97.44%
802.11ac-VHT80	95.03%
802.11ac-VHT80+80	95.03%



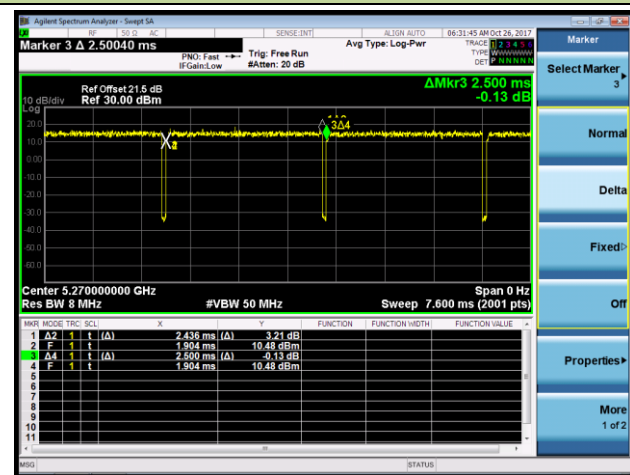
802.11n-HT40 (T = 2.428ms)



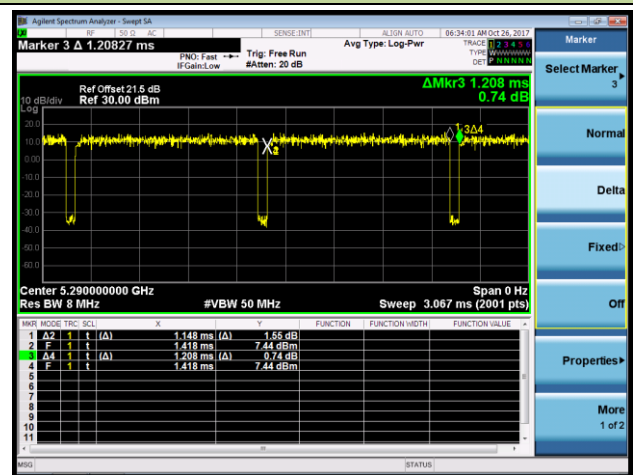
802.11ac-VHT20 (T = 5.010ms)



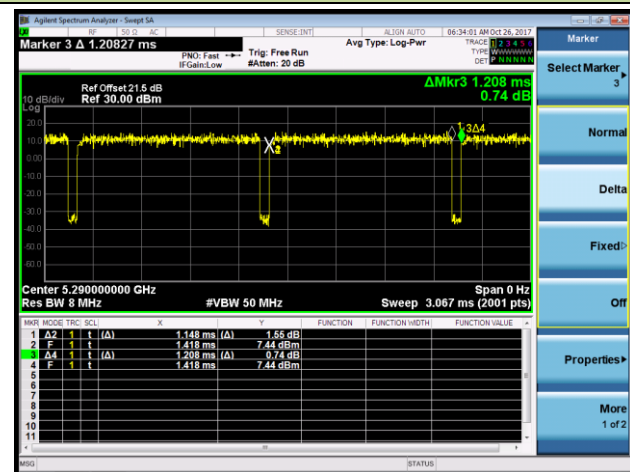
802.11ac-VHT40 (T = 2.436ms)



802.11ac-VHT80 (T = 1.148ms)



802.11ac-VHT80+80 (T = 1.148ms)



2.10. Test Configuration

The **4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module** was tested per the guidance of KDB 789033 D02v01r04. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.11. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.12. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlets supplied to the user and be readily visible to the purchaser at the time of purchase.

However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

3. DESCRIPTION OF TEST

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the guidance provided in KDB 789033 D02v01r04 were used in the measurement of the **4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module**.

Deviation from measurement procedure.....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

Line conducted emissions test results are shown in Section 7.10.

3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remotecontrolled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

4. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- The antenna of the EUT uses a unique (IPEX) connector.

Conclusion:

This **4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module** unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATE

Conducted Emissions - SR2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2018/04/25
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2018/06/20
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2018/06/20
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06181	1 year	2017/12/20
Shielding Anechoic Chamber	Mikebang	Chamber-SR2	MRTSUE06214	1 year	2018/05/10

Radiated Emissions - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Agilent	N9038A	MRTSUE06125	1 year	2018/08/03
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2018/03/28
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2017/11/21
				1 year	2018/11/21
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2017/11/19
				1 year	2018/11/19
Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2018/10/21
Broadband Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06024	1 year	2018/01/04
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06183	1 year	2017/12/20
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2018/05/10

Conducted Test Equipment - TR3

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Power Meter	Agilent	U2021XA	MRTSUE06030	1 year	2017/12/06
EXA Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2018/04/25
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06180	1 year	2017/12/20

Software	Version	Function
e3	V 8.3.5	EMI Test Software

6. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

AC Conducted Emission Measurement - SR2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 150kHz~30MHz: 3.46dB
Radiated Emission Measurement - AC2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz ~ 1GHz: 4.18dB 1GHz ~ 25GHz: 4.76dB
Spurious Emissions, Conducted - TR3
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.78dB
Output Power - TR3
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.13dB
Power Spectrum Density - TR3
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.15dB
Occupied Bandwidth - TR3
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.28%

7. TEST RESULT

7.1. Summary

Product Name: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module
FCC ID: TK4WLE1216V520
FCC Classification: Unlicensed National Information Infrastructure (UNII)
Data Rate / MCS 6Mbps ~ 54Mbps (a); MCS0 for 802.11n-HT20MHz;
Tested: MCS0 for 802.11n-HT40MHz; MCS0 for 802.11ac-VHT20MHz;
MCS0 for 802.11ac-VHT40MHz; MCS0 for 802.11ac-VHT80MHz;
MCS0 for 802.11ac-VHT80+80MHz.

FCC Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(a)	26dB Bandwidth	N/A	Conducted	Pass	Section 7.2
15.407(e)	6dB Bandwidth	≥ 500kHz		Pass	Section 7.3
15.407(a)(1)(iv), (2), (3)	Maximum Conducted Output Power	Refer to Section 7.4		Pass	Section 7.4
15.407(h)(1)	Transmit Power Control	≤ 24 dBm		Pass	Section 7.5
15.407(a)(1)(iv), (2), (3), (5)	Peak Power Spectral Density	Refer to Section 7.6		Pass	Section 7.6
15.407(g)	Frequency Stability	N/A		Pass	Section 7.7
15.407(b)(1), (2), (3), (4)(i)	Undesirable Emissions	Refer to Section 7.8 & 7.9	Radiated	Pass	Section 7.8 & 7.9
15.205, 15.209 15.407(b)(5), (6), (7)	General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		Pass	
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.10

Notes:

- The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- Test Items “26dB Bandwidth” & “99% Bandwidth” & “6dB Bandwidth” have been assessed single and MIMO transmission, and showed the worst test data in this report.

7.2. 26dB Bandwidth Measurement

7.2.1.Test Limit

N/A

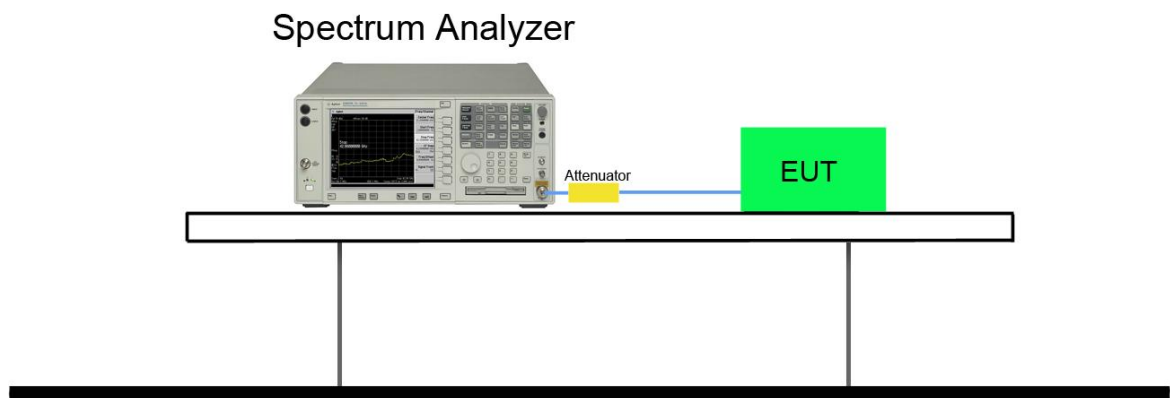
7.2.2.Test Procedure Used

KDB 789033 D02v01r04 - Section C.1

7.2.3.Test Setting

1. The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 26$. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediated power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth.
3. VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.

7.2.4.Test Setup



7.2.5.Test Result

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	24°C
Test Engineer	Amy Zhang	Relative Humidity	58%
Test Site	SR2	Test Date	2017/11/04

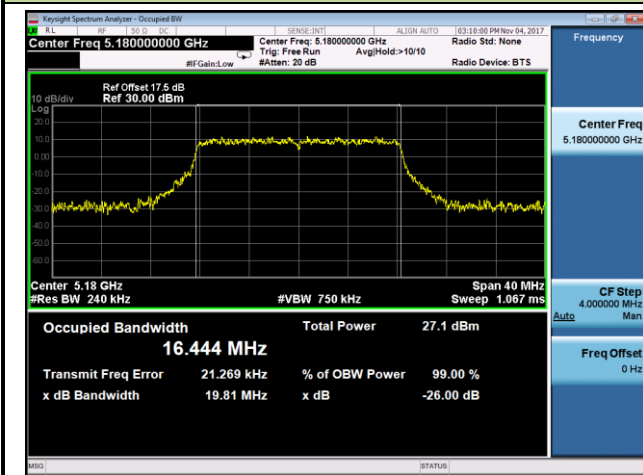
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
1TX_Ant 1					
802.11a	6Mbps	36	5180	19.81	16.44
802.11a	6Mbps	44	5220	21.35	16.53
802.11a	6Mbps	48	5240	21.47	16.50
802.11a	6Mbps	52	5260	19.57	16.44
802.11a	6Mbps	60	5300	19.40	16.41
802.11a	6Mbps	64	5320	19.55	16.42
802.11a	6Mbps	100	5500	19.14	16.42
802.11a	6Mbps	116	5580	19.79	16.43
802.11a	6Mbps	120	5600	19.24	16.43
802.11a	6Mbps	140	5700	19.37	16.45
802.11a	6Mbps	144	5720	19.54	16.42
802.11a	6Mbps	149	5745	19.46	16.41
802.11a	6Mbps	157	5785	19.51	19.41
802.11a	6Mbps	165	5825	19.46	16.40
802.11n-HT20	MCS0	36	5180	20.13	17.60
802.11n-HT20	MCS0	44	5220	21.19	16.67
802.11n-HT20	MCS0	48	5240	21.83	16.55
802.11n-HT20	MCS0	52	5260	20.19	17.60
802.11n-HT20	MCS0	60	5300	20.27	17.60
802.11n-HT20	MCS0	64	5320	19.98	17.59
802.11n-HT20	MCS0	100	5500	20.10	17.59
802.11n-HT20	MCS0	116	5580	20.14	17.64
802.11n-HT20	MCS0	120	5600	20.24	17.61
802.11n-HT20	MCS0	140	5700	20.26	17.61
802.11n-HT20	MCS0	144	5720	20.10	17.61
802.11n-HT20	MCS0	149	5745	20.02	17.58
802.11n-HT20	MCS0	157	5785	20.17	17.57
802.11n-HT20	MCS0	165	5825	20.27	17.58

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
1TX_Ant 1					
802.11n-HT40	MCS0	38	5190	39.37	35.90
802.11n-HT40	MCS0	46	5230	39.39	35.98
802.11n-HT40	MCS0	54	5270	39.81	36.01
802.11n-HT40	MCS0	62	5310	39.22	35.93
802.11n-HT40	MCS0	102	5510	39.39	35.95
802.11n-HT40	MCS0	110	5550	39.65	35.95
802.11n-HT40	MCS0	118	5590	39.59	36.06
802.11n-HT40	MCS0	134	5670	39.20	35.95
802.11n-HT40	MCS0	142	5710	39.46	35.99
802.11n-HT40	MCS0	151	5755	39.37	35.93
802.11n-HT40	MCS0	159	5795	39.55	35.85
802.11ac-VHT20	MCS0	36	5180	20.11	17.61
802.11ac-VHT20	MCS0	44	5220	20.50	17.64
802.11ac-VHT20	MCS0	48	5240	21.26	17.68
802.11ac-VHT20	MCS0	52	5260	20.14	17.61
802.11ac-VHT20	MCS0	60	5300	19.92	17.60
802.11ac-VHT20	MCS0	64	5320	20.20	17.62
802.11ac-VHT20	MCS0	100	5500	20.16	17.61
802.11ac-VHT20	MCS0	116	5580	20.03	17.60
802.11ac-VHT20	MCS0	120	5600	20.29	17.63
802.11ac-VHT20	MCS0	140	5700	20.22	17.61
802.11ac-VHT20	MCS0	144	5720	20.01	17.60
802.11ac-VHT20	MCS0	149	5745	20.20	17.59
802.11ac-VHT20	MCS0	157	5785	20.01	17.59
802.11ac-VHT20	MCS0	165	5825	20.19	17.59

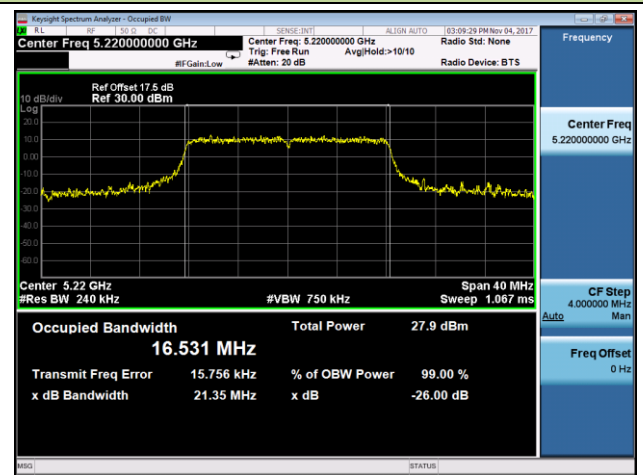
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
1TX_Ant 1					
802.11ac-VHT40	MCS0	38	5190	39.46	35.88
802.11ac-VHT40	MCS0	46	5230	39.20	36.03
802.11ac-VHT40	MCS0	54	5270	46.36	36.04
802.11ac-VHT40	MCS0	62	5310	38.99	35.95
802.11ac-VHT40	MCS0	102	5510	39.30	35.91
802.11ac-VHT40	MCS0	110	5550	39.06	35.93
802.11ac-VHT40	MCS0	118	5590	39.81	36.03
802.11ac-VHT40	MCS0	134	5670	39.16	35.97
802.11ac-VHT40	MCS0	142	5710	43.61	36.14
802.11ac-VHT40	MCS0	151	5755	39.52	35.90
802.11ac-VHT40	MCS0	159	5795	39.47	35.88
802.11ac-VHT80	MCS0	42	5210	82.68	75.81
802.11ac-VHT80	MCS0	58	5290	82.87	75.85
802.11ac-VHT80	MCS0	106	5530	81.77	75.69
802.11ac-VHT80	MCS0	122	5610	83.59	75.92
802.11ac-VHT80	MCS0	138	5690	83.48	75.81
802.11ac-VHT80	MCS0	155	5775	83.46	76.07

802.11a 26dB Bandwidth & 99% Bandwidth - Ant 1

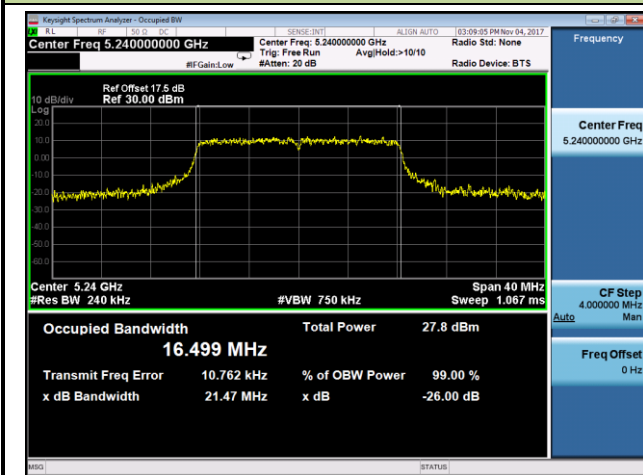
Channel 36 (5180MHz)



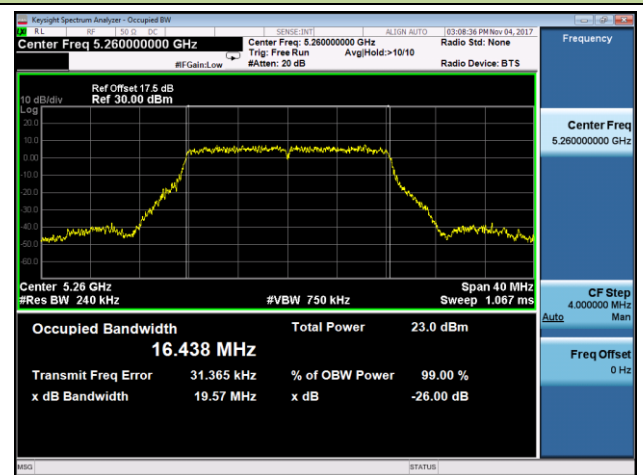
Channel 44 (5220MHz)



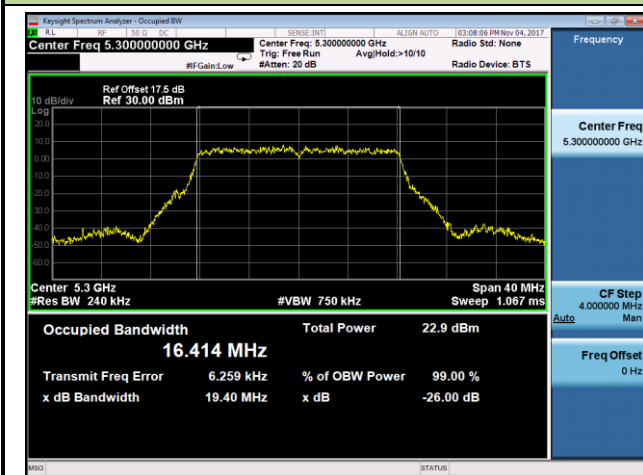
Channel 48 (5240MHz)



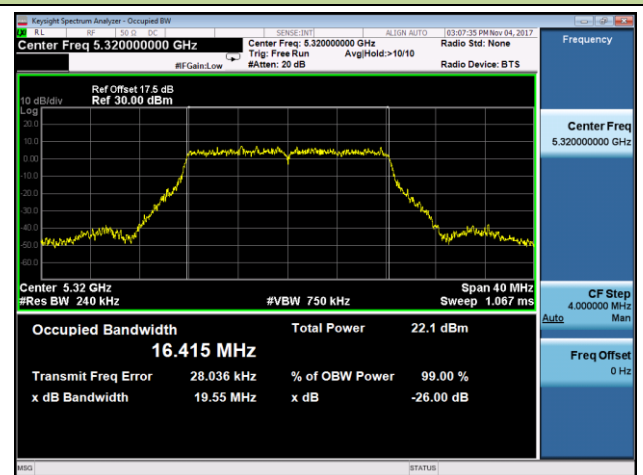
Channel 52 (5260MHz)



Channel 60 (5300MHz)

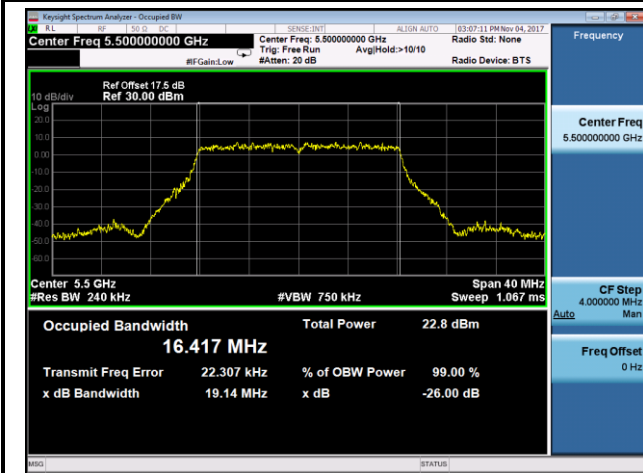


Channel 64 (5320MHz)

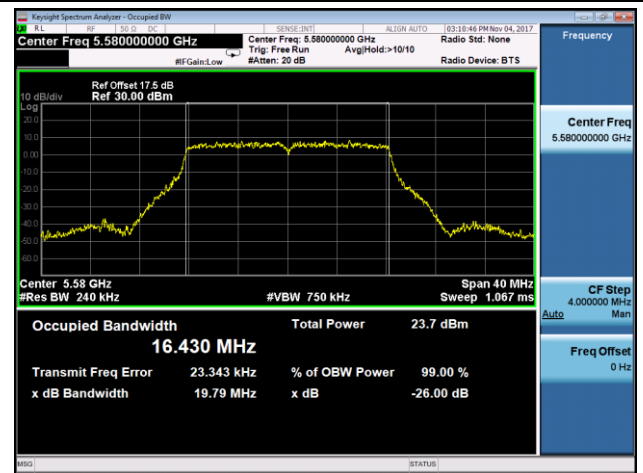


802.11a 26dB Bandwidth & 99% Bandwidth - Ant 1

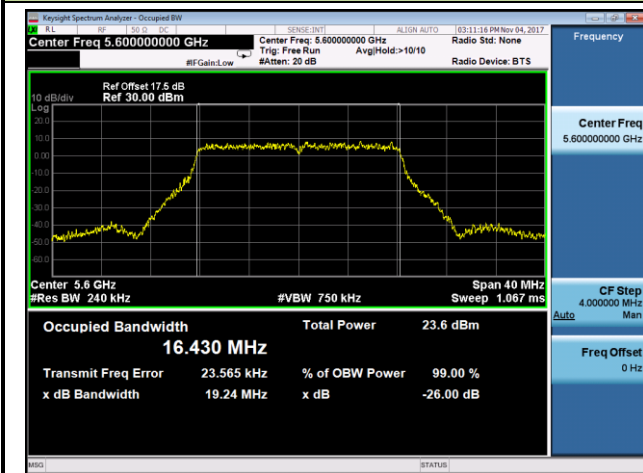
Channel 100 (5500MHz)



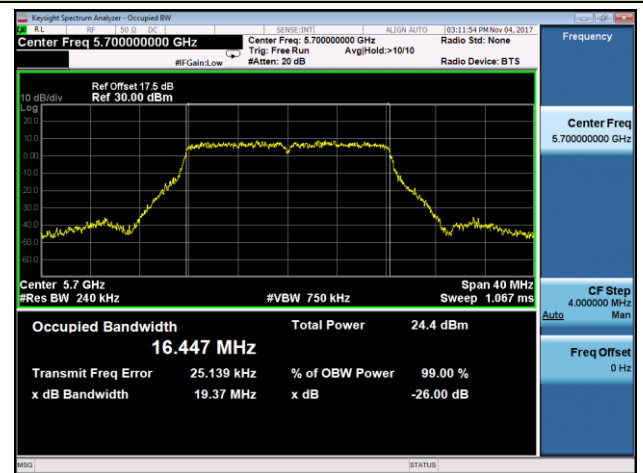
Channel 116 (5580MHz)



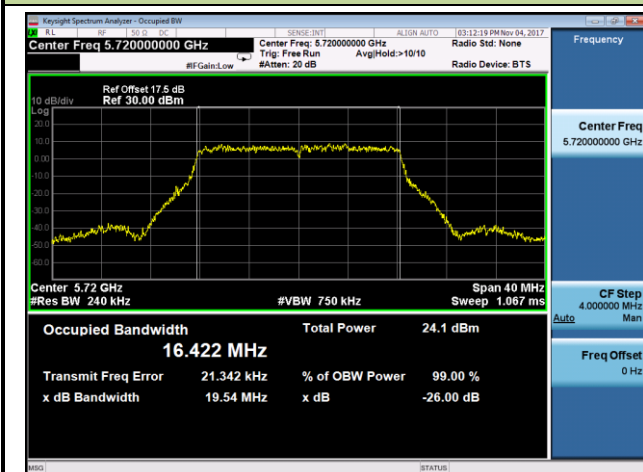
Channel 100 (5600MHz)



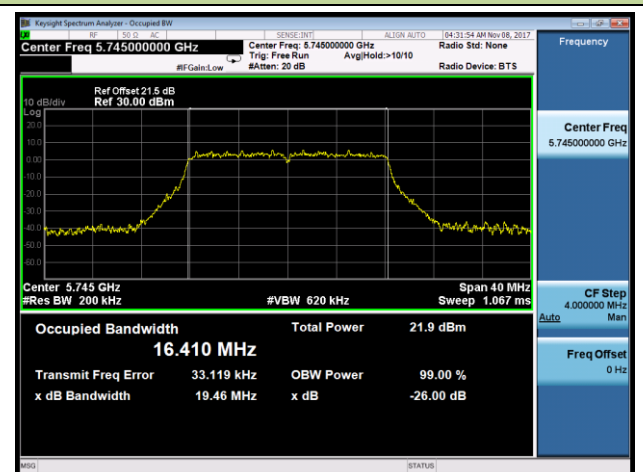
Channel 140 (5700MHz)



Channel 144 (5720MHz)

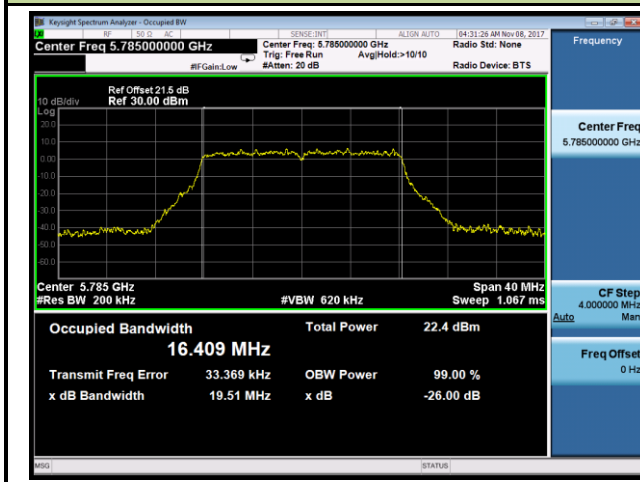


Channel 149 (5745MHz)

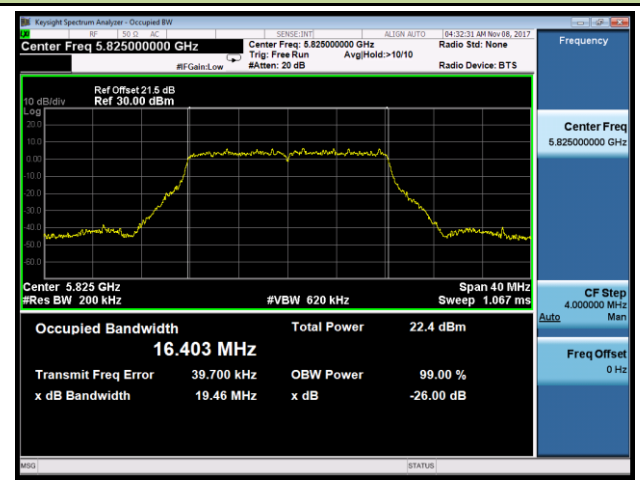


802.11a 26dB Bandwidth & 99% Bandwidth - Ant 1

Channel 157 (5785MHz)

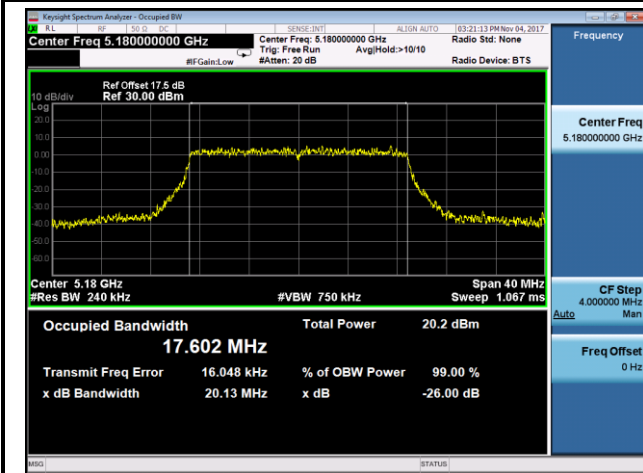


Channel 165 (5825MHz)

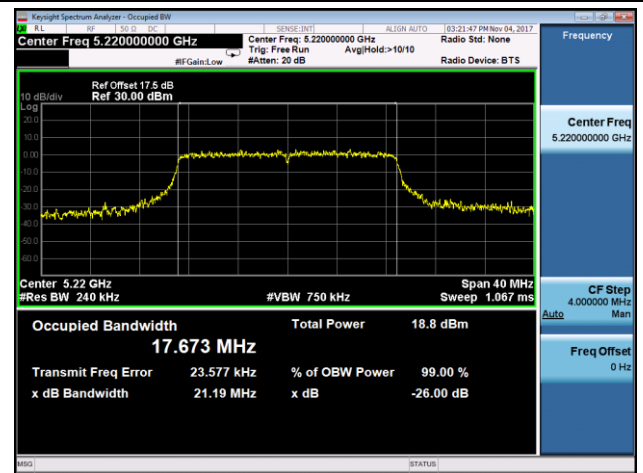


802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 1

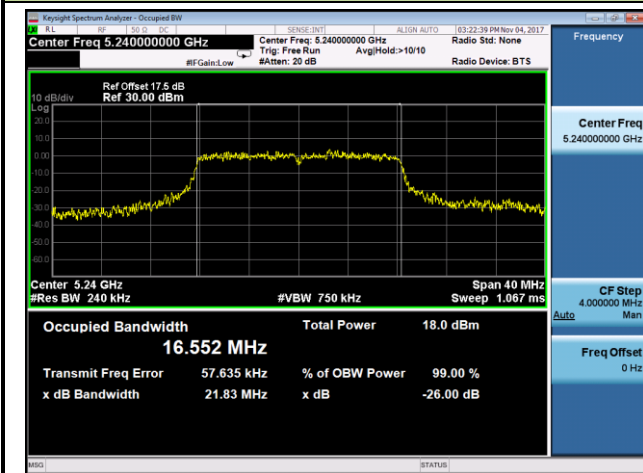
Channel 36 (5180MHz)



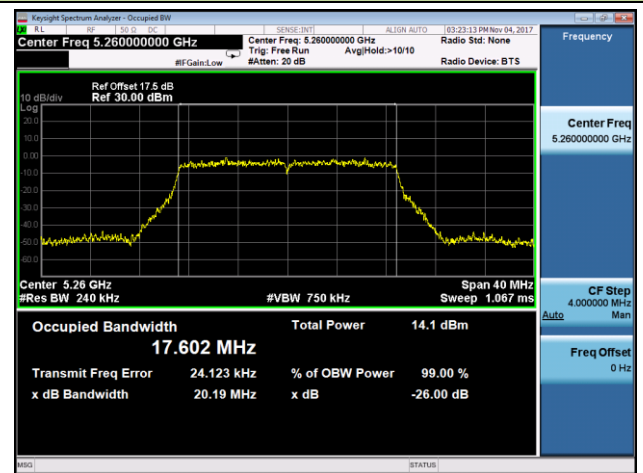
Channel 44 (5220MHz)



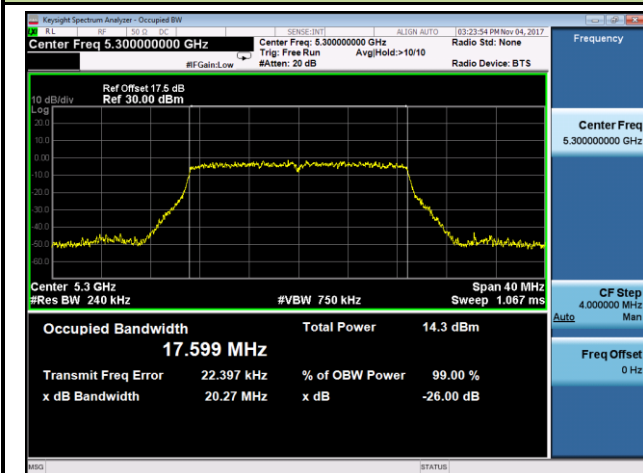
Channel 48 (5240MHz)



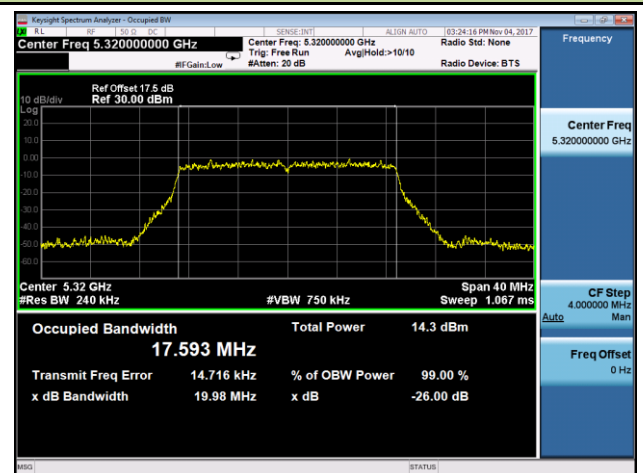
Channel 52 (5260MHz)



Channel 60 (5300MHz)

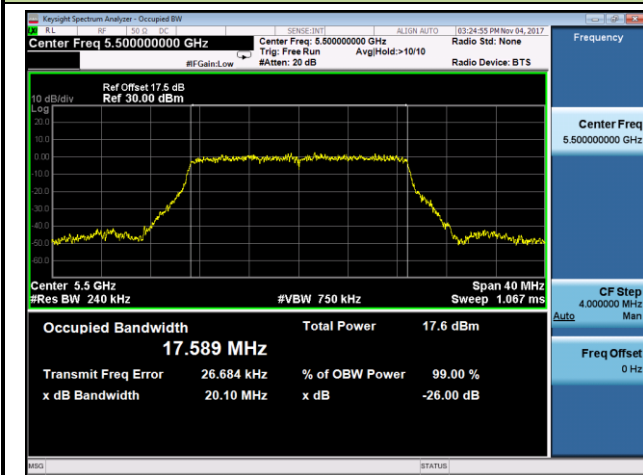


Channel 64 (5320MHz)

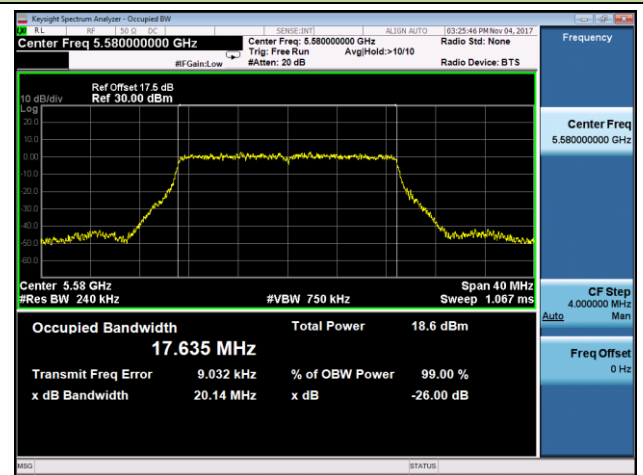


802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 1

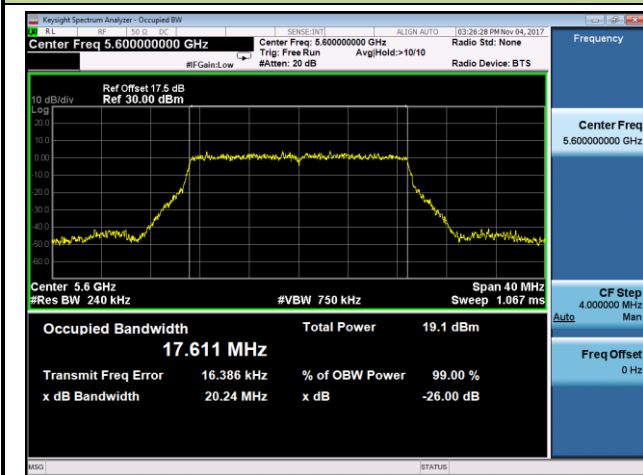
Channel 100 (5500MHz)



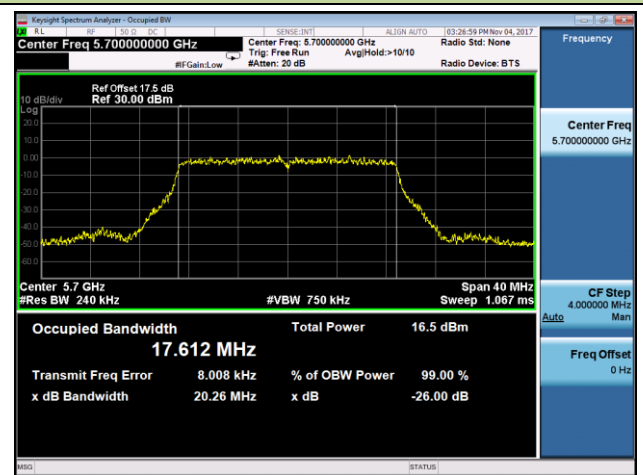
Channel 116 (5580MHz)



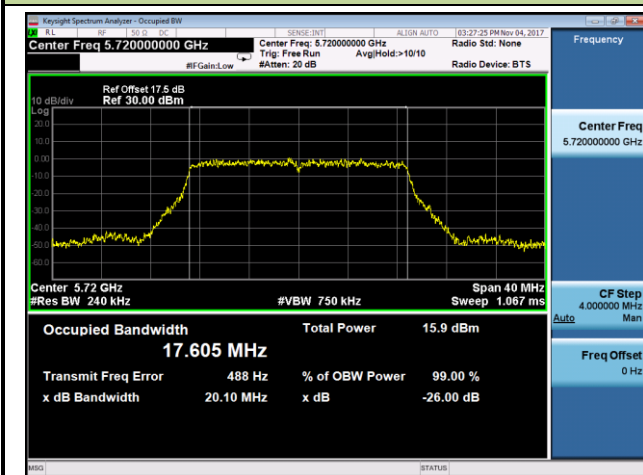
Channel 120 (5600MHz)



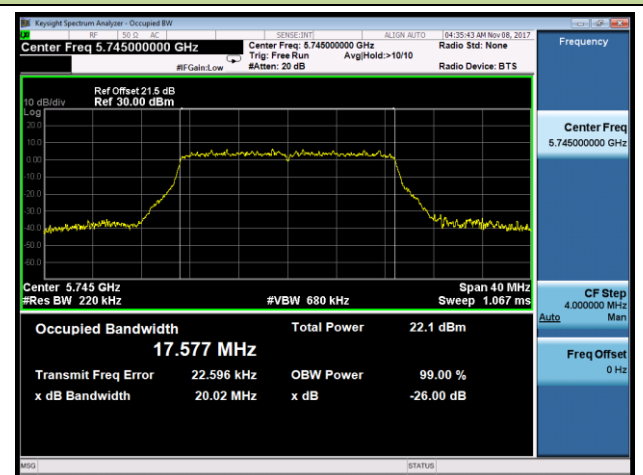
Channel 140 (5700MHz)



Channel 144 (5720MHz)

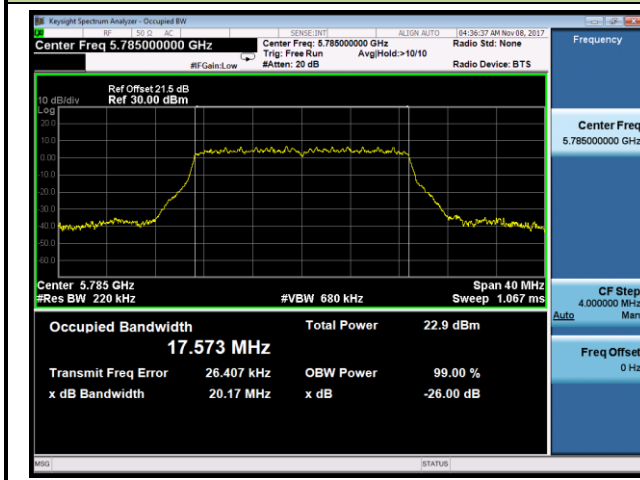


Channel 149 (5745MHz)

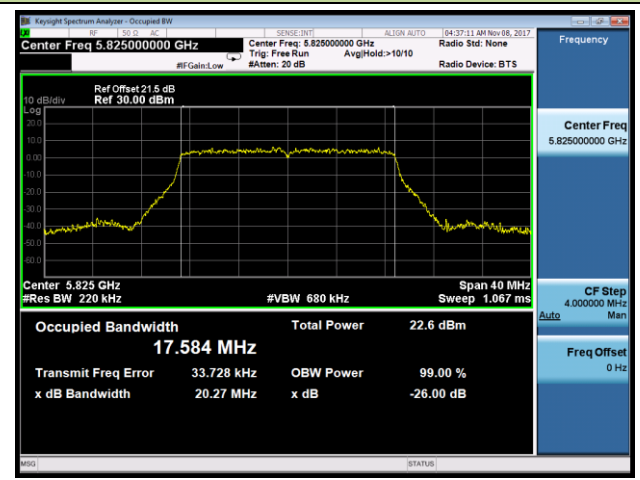


802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 1

Channel 157 (5785MHz)

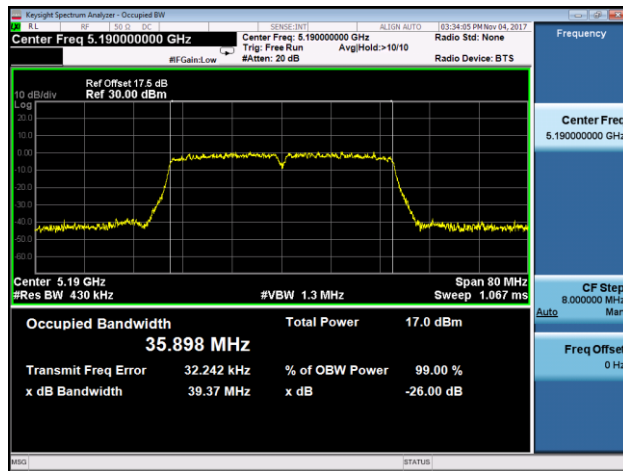


Channel 165 (5825MHz)

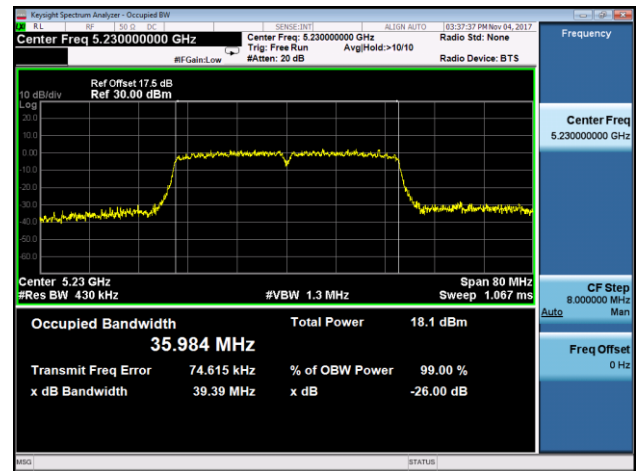


802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 1

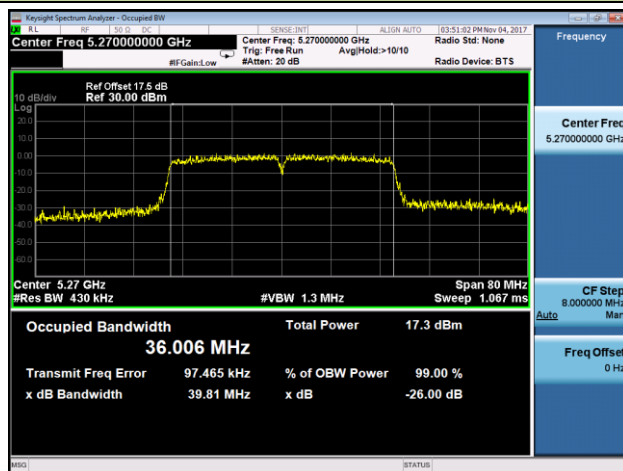
Channel 38 (5190MHz)



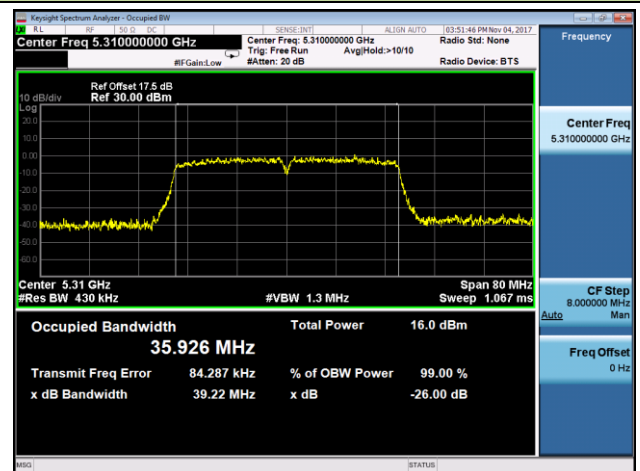
Channel 46 (5230MHz)



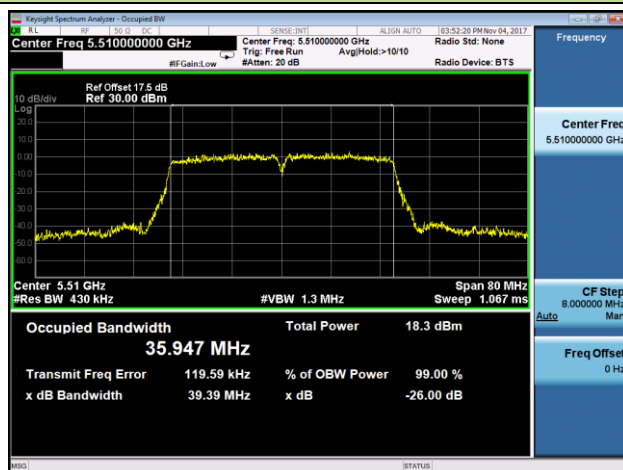
Channel 54 (5270MHz)



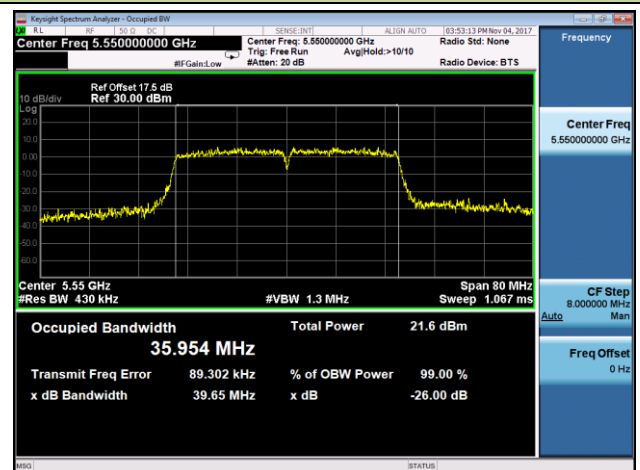
Channel 62 (5310MHz)



Channel 102 (5510MHz)



Channel 110 (5550MHz)

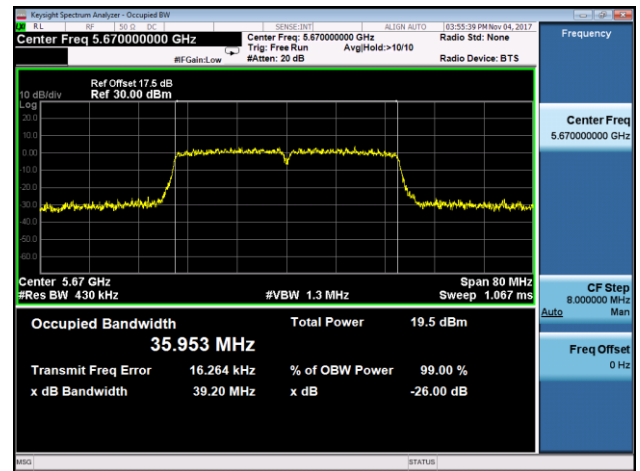


802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 1

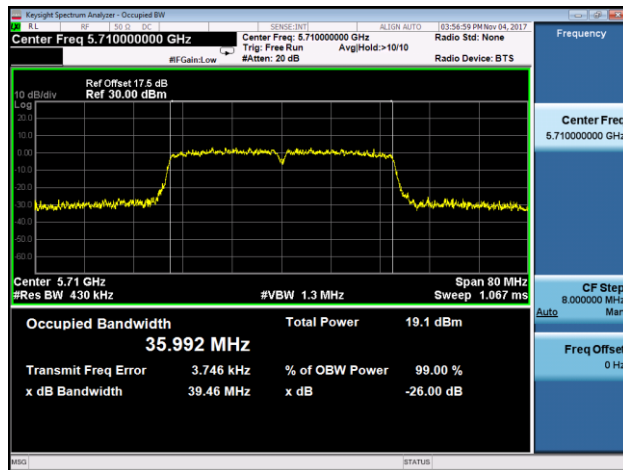
Channel 118 (5590MHz)



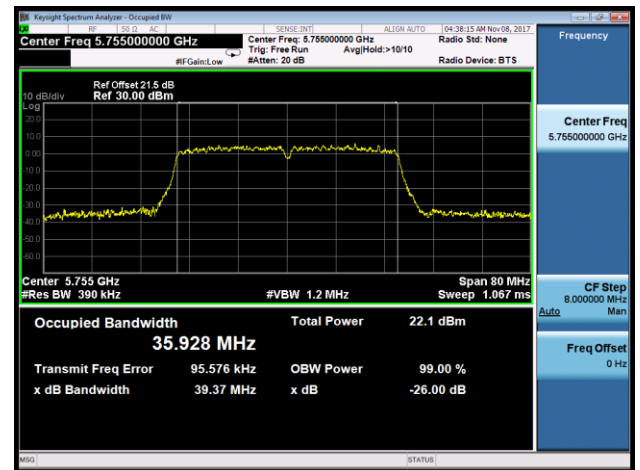
Channel 134 (5670MHz)



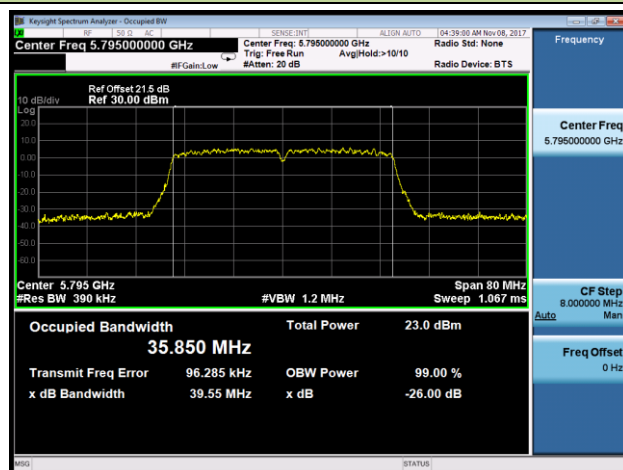
Channel 142 (5710MHz)



Channel 151 (5755MHz)

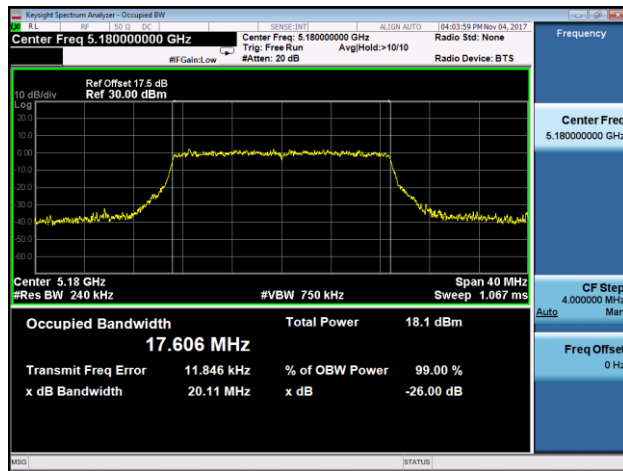


Channel 159 (5795MHz)

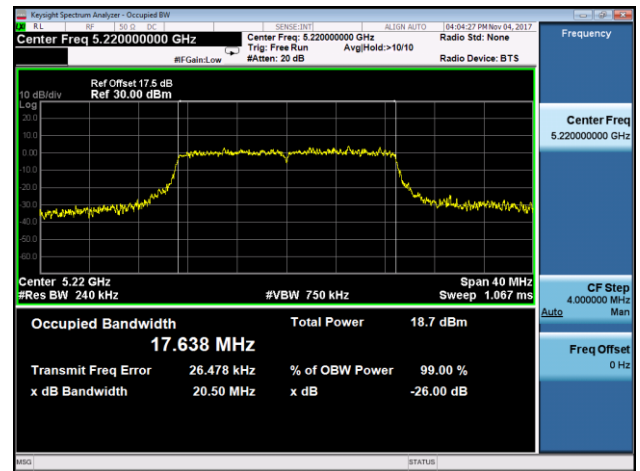


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 1

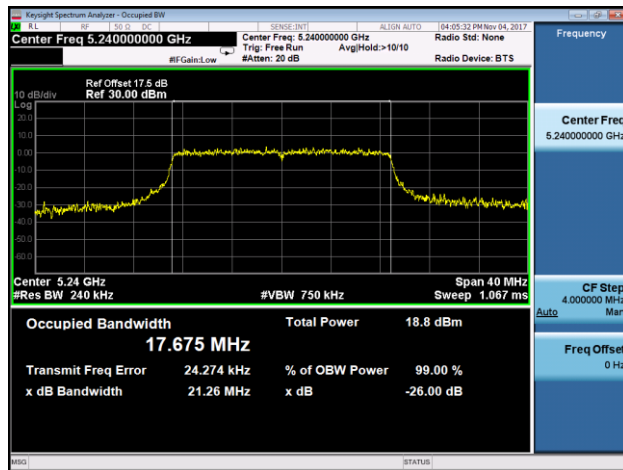
Channel 36 (5180MHz)



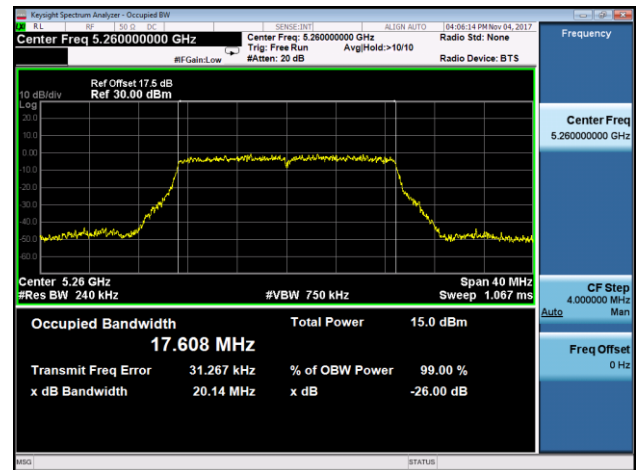
Channel 44 (5220MHz)



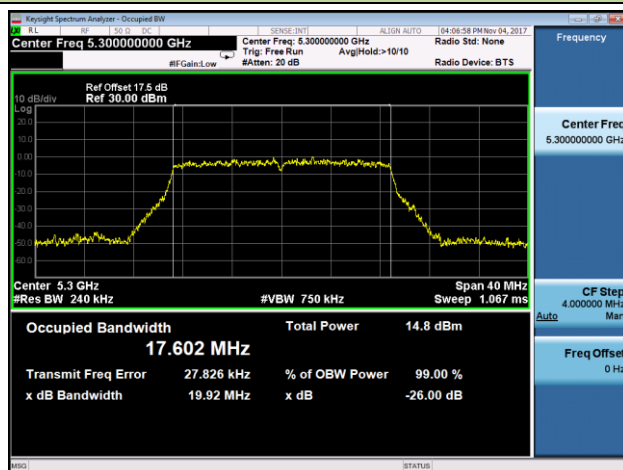
Channel 48 (5240MHz)



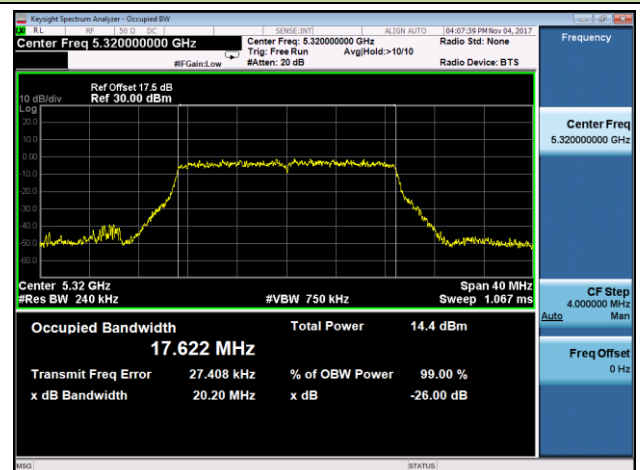
Channel 52 (5260MHz)



Channel 60 (5300MHz)

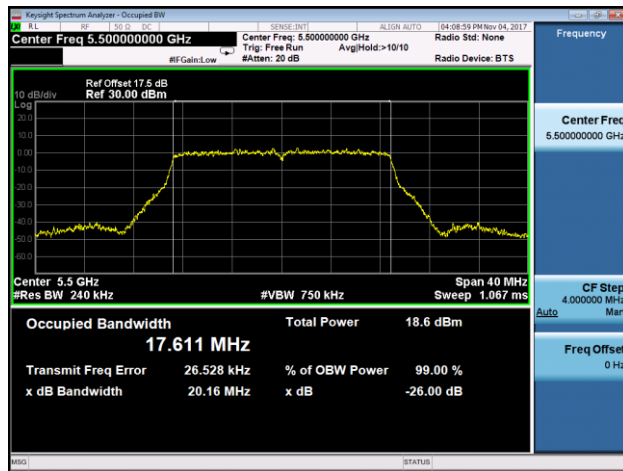


Channel 64 (5320MHz)

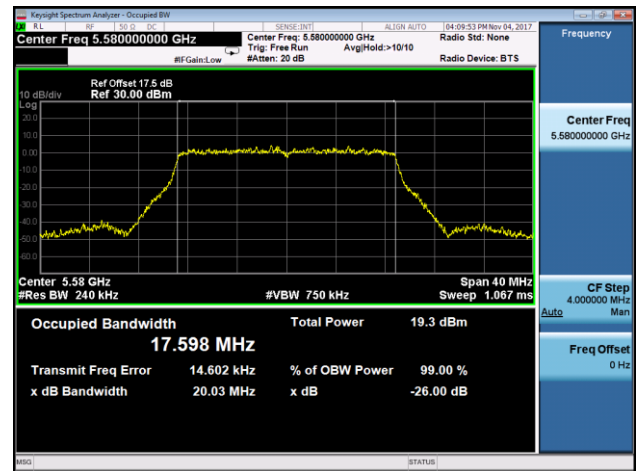


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 1

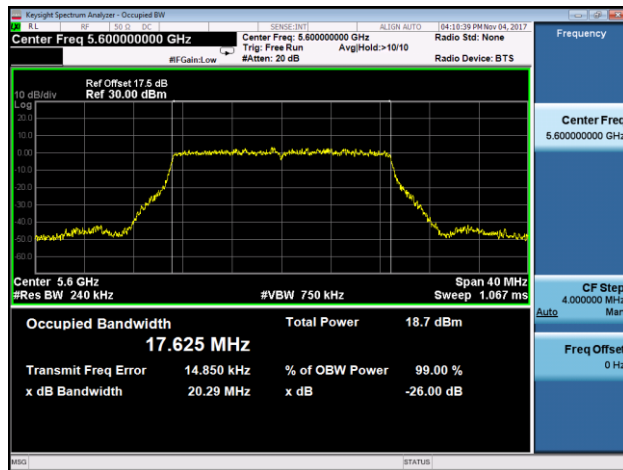
Channel 100 (5500MHz)



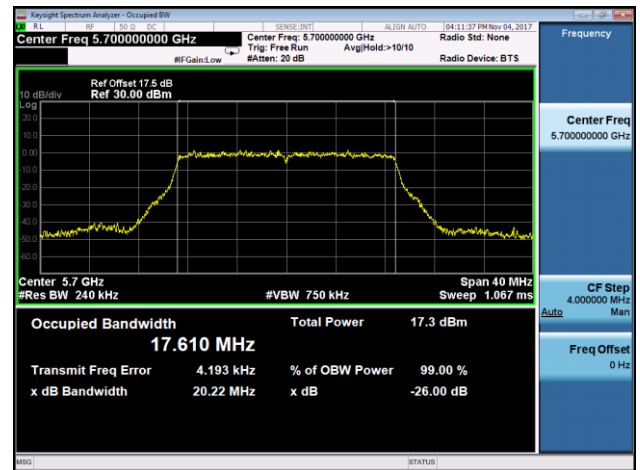
Channel 116 (5580MHz)



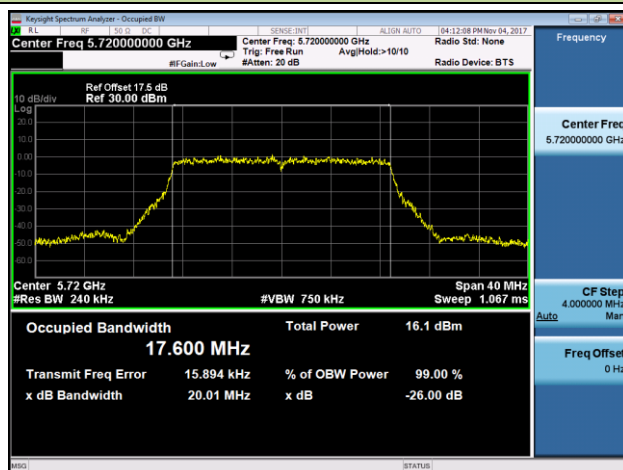
Channel 120 (5600MHz)



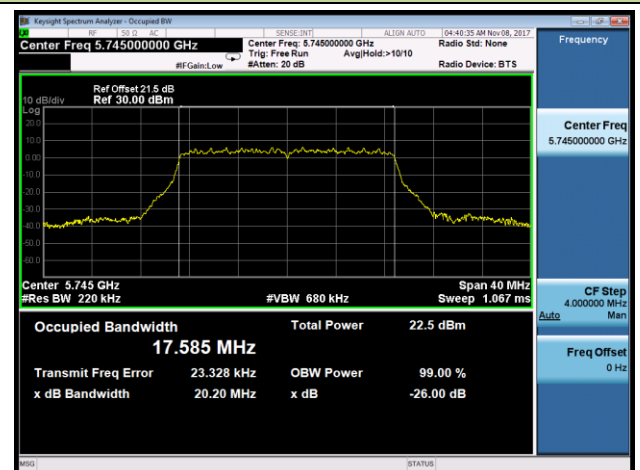
Channel 140 (5700MHz)



Channel 144 (5720MHz)

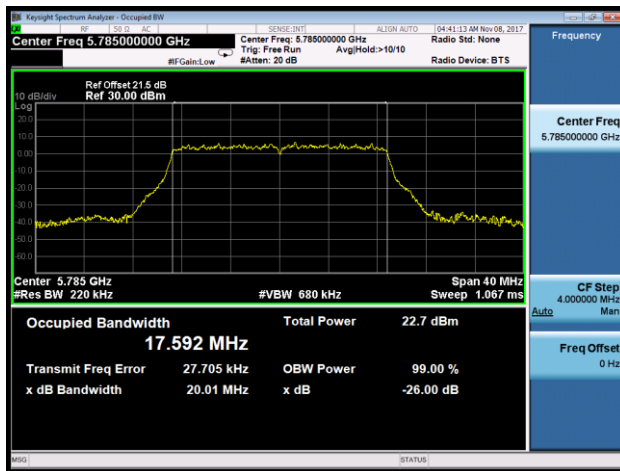


Channel 149 (5745MHz)

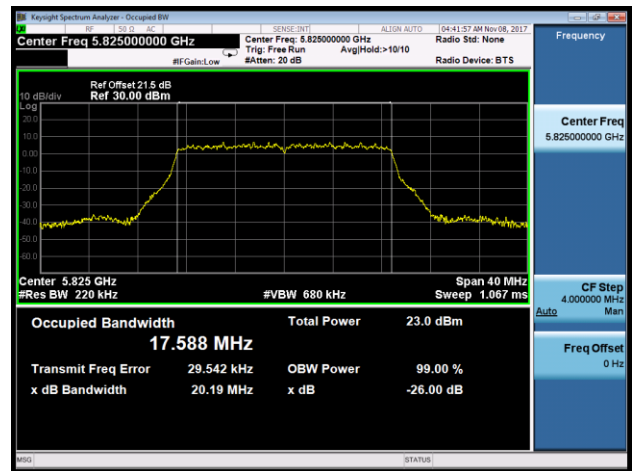


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 1

Channel 157 (5785MHz)

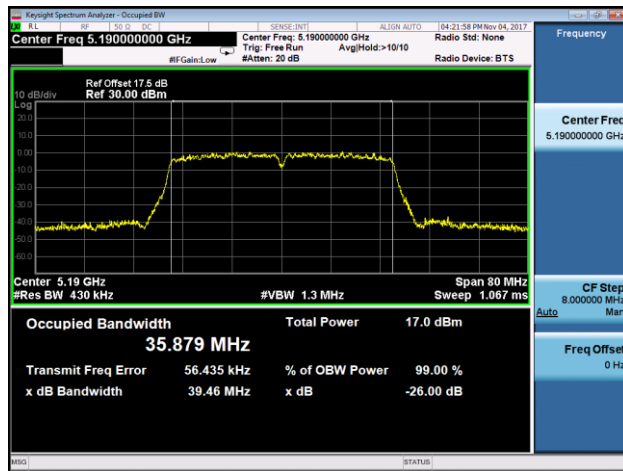


Channel 165 (5825MHz)

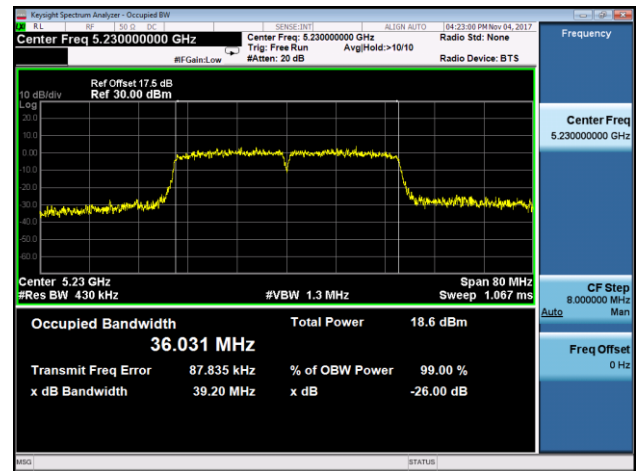


802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 1

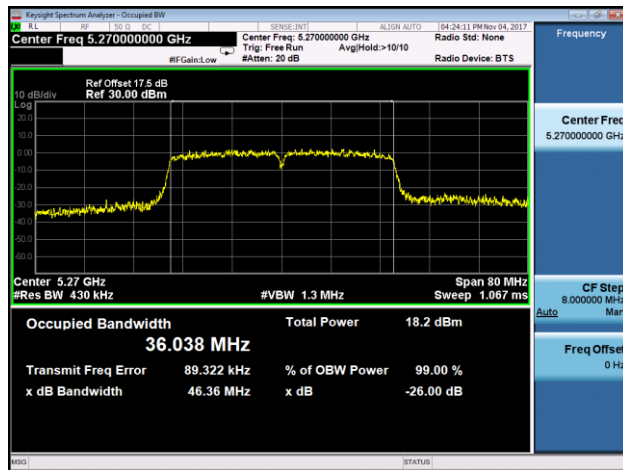
Channel 38 (5190MHz)



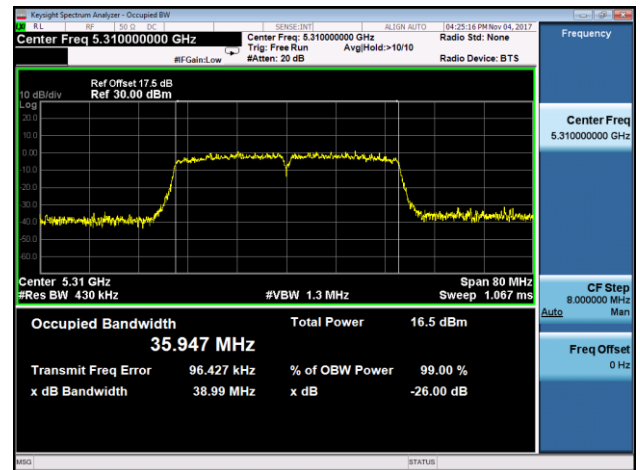
Channel 46 (5230MHz)



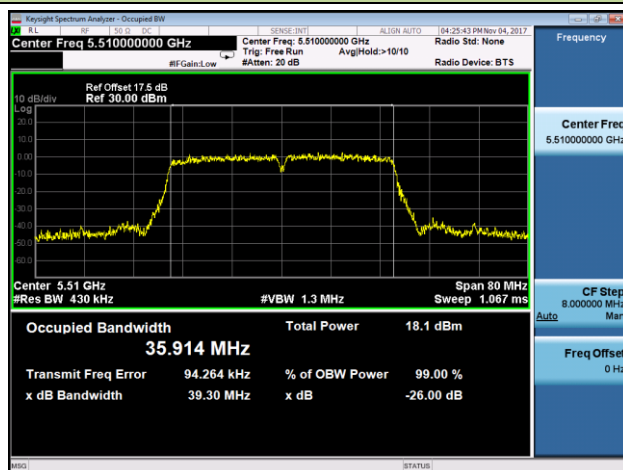
Channel 54 (5270MHz)



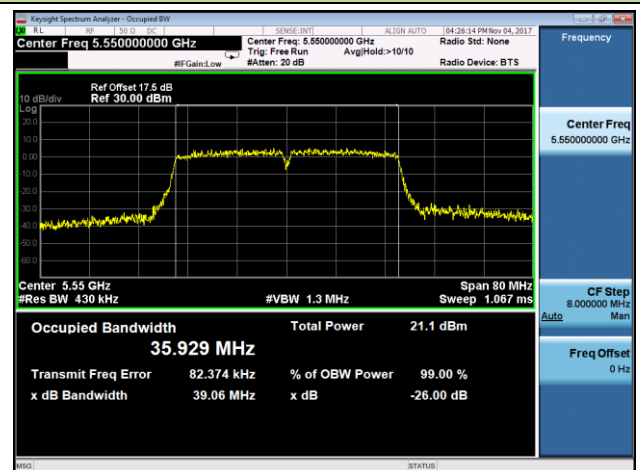
Channel 62 (5310MHz)



Channel 102 (5510MHz)

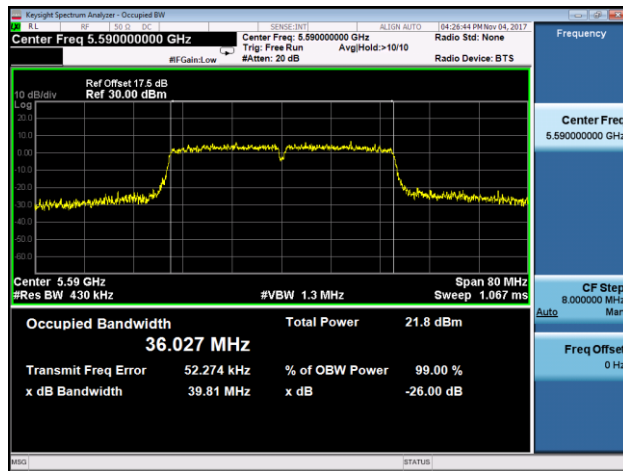


Channel 110 (5550MHz)

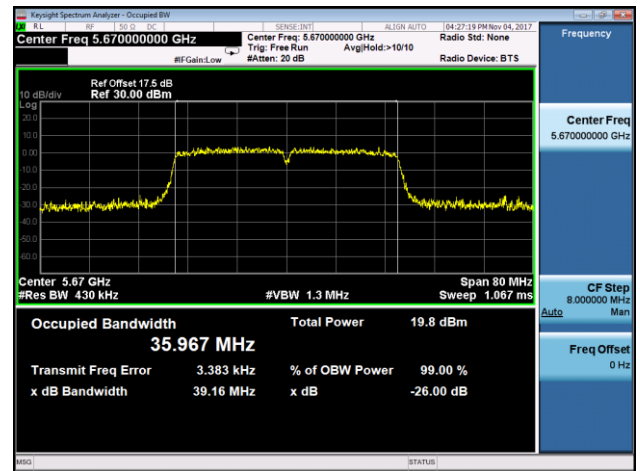


802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 1

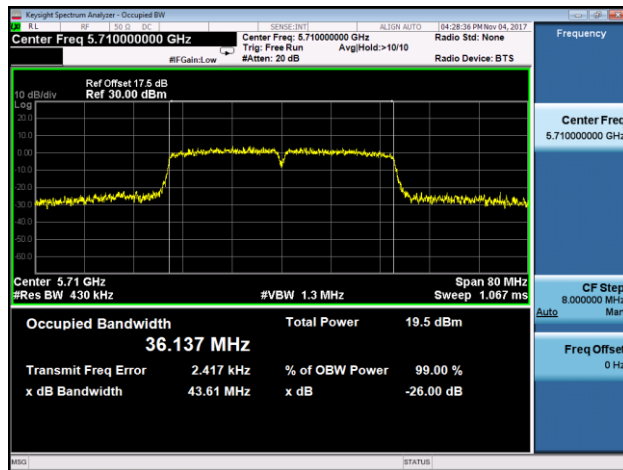
Channel 118 (5590MHz)



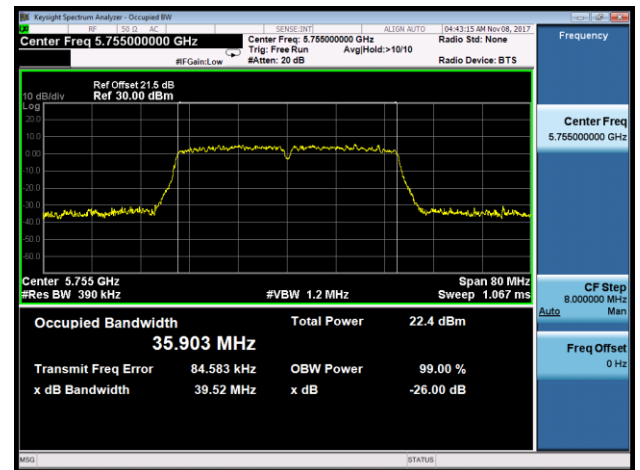
Channel 134 (5670MHz)



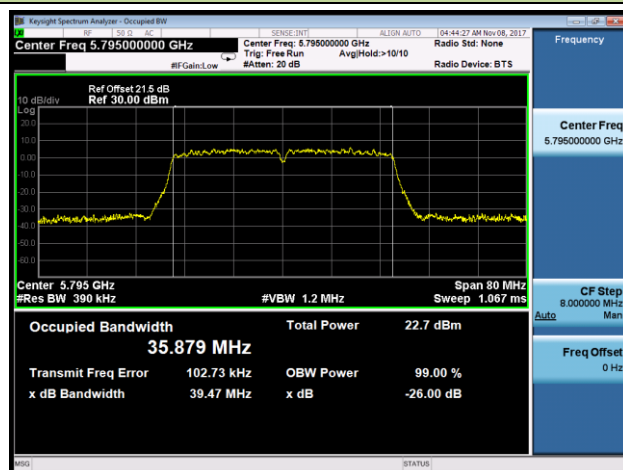
Channel 142 (5710MHz)



Channel 151 (5755MHz)

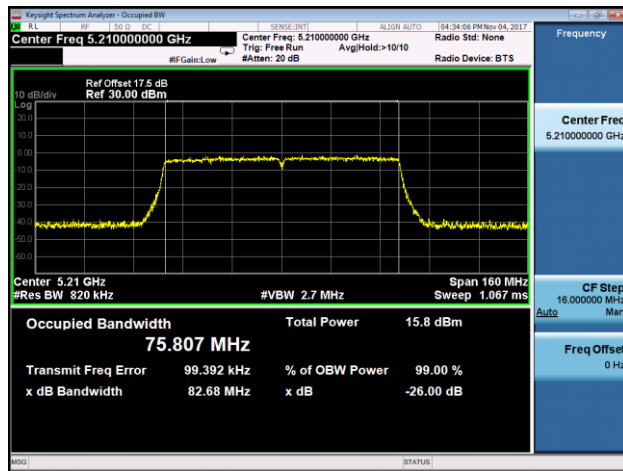


Channel 159 (5795MHz)

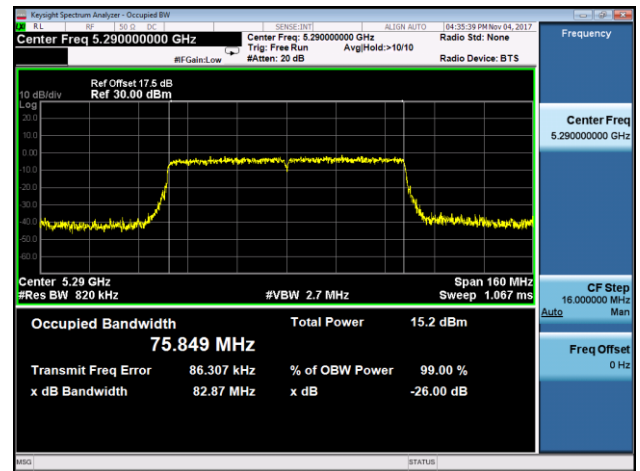


802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 1

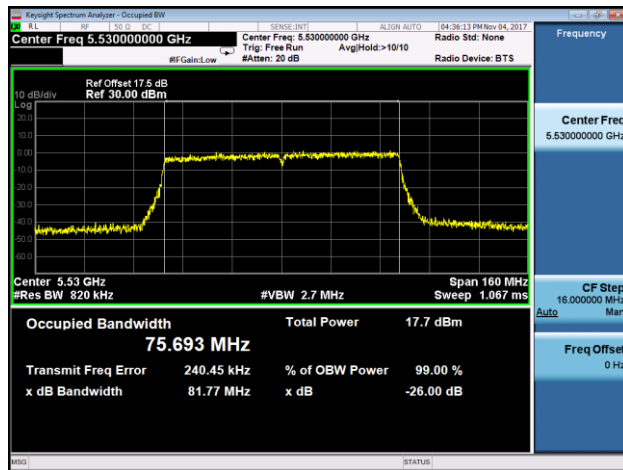
Channel 42 (5210MHz)



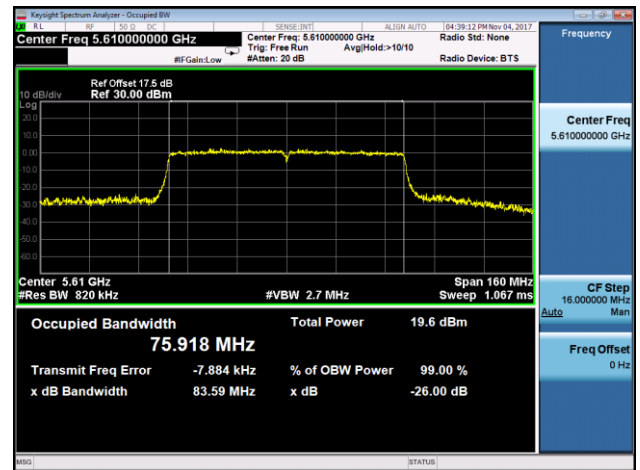
Channel 58 (5290MHz)



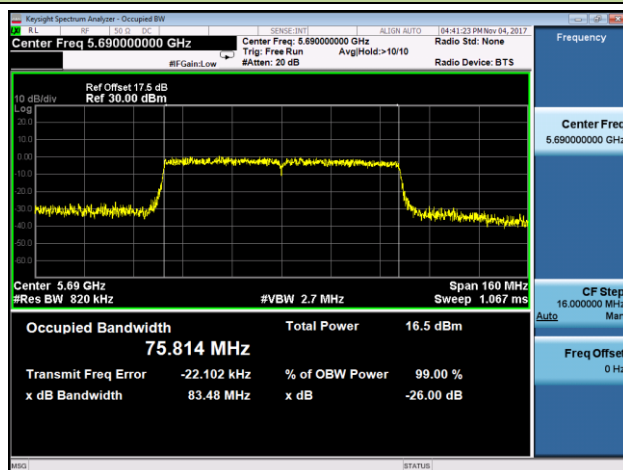
Channel 106 (5530MHz)



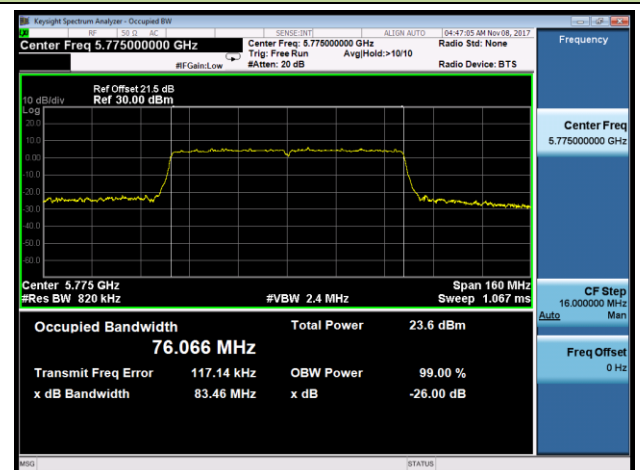
Channel 122 (5610MHz)



Channel 138 (5690MHz)



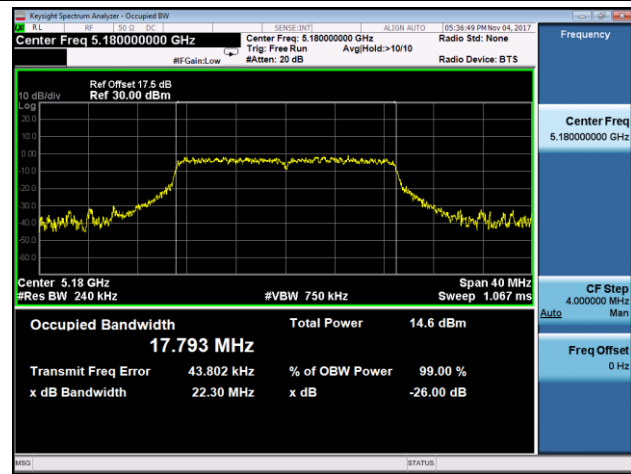
Channel 155 (5775MHz)



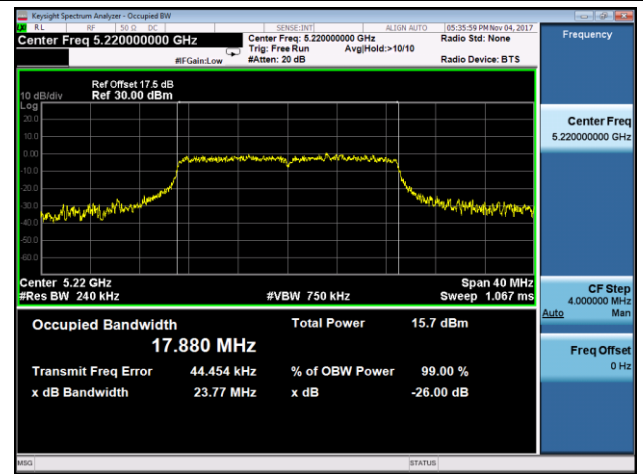
4TX

802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

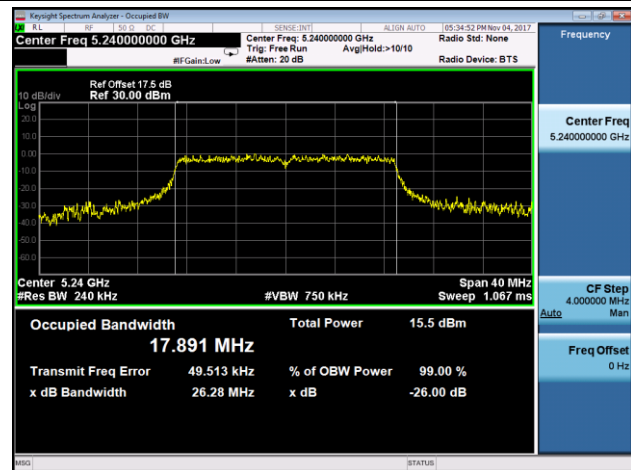
Channel 36 (5180MHz)



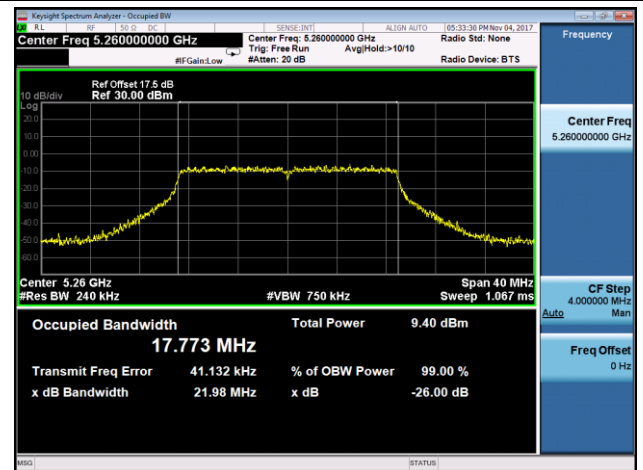
Channel 44 (5220MHz)



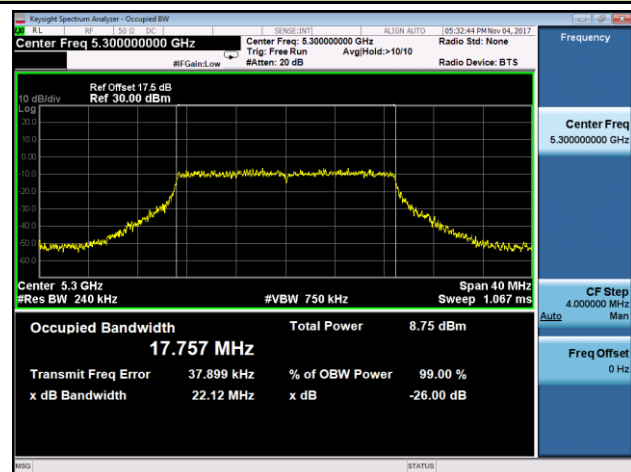
Channel 48 (5240MHz)



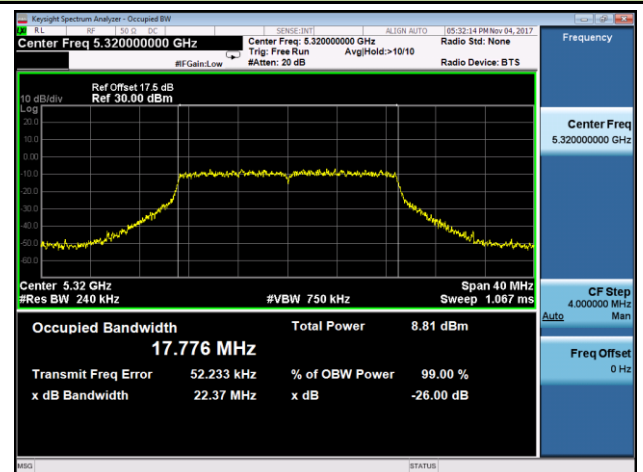
Channel 52 (5260MHz)



Channel 60 (5300MHz)

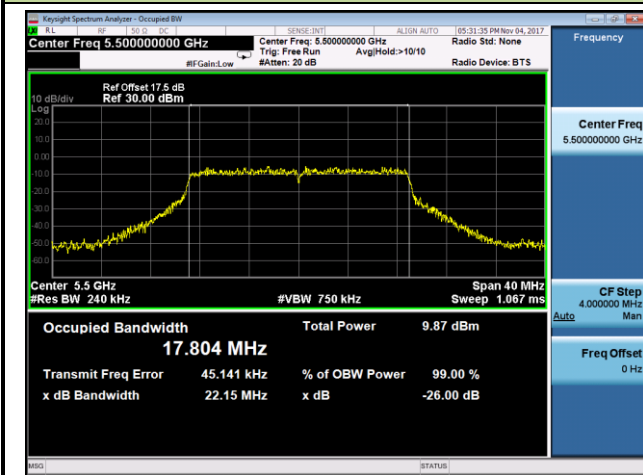


Channel 64 (5320MHz)

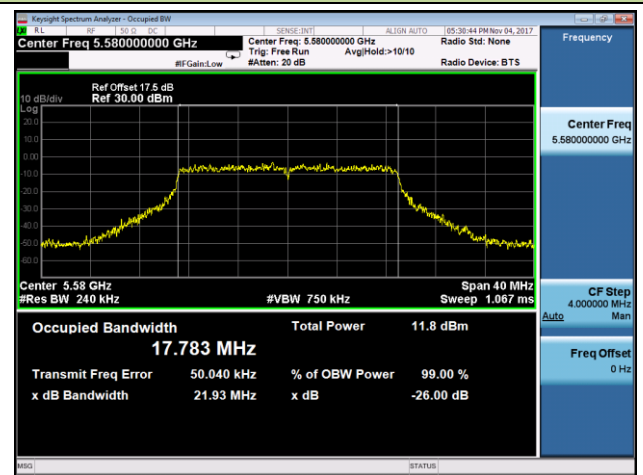


802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

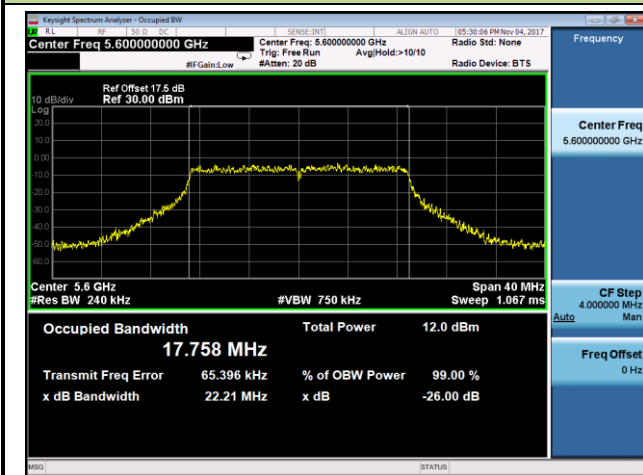
Channel 100 (5500MHz)



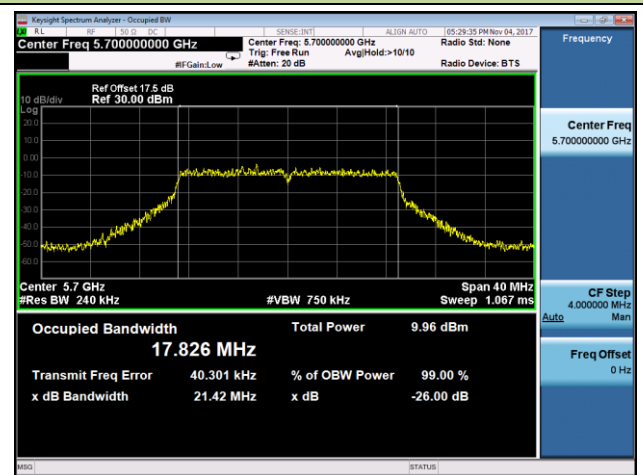
Channel 116 (5580MHz)



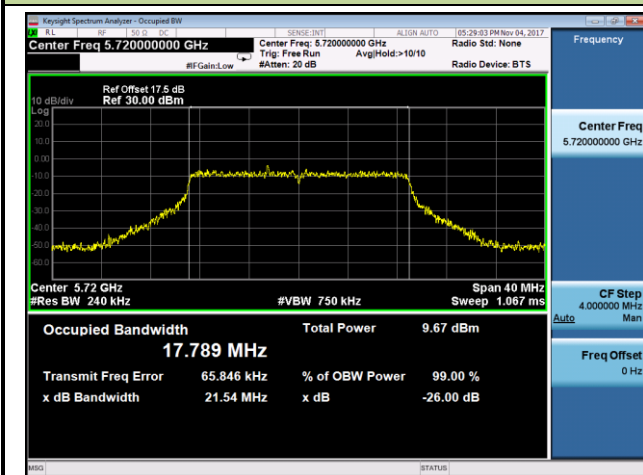
Channel 120 (5600MHz)



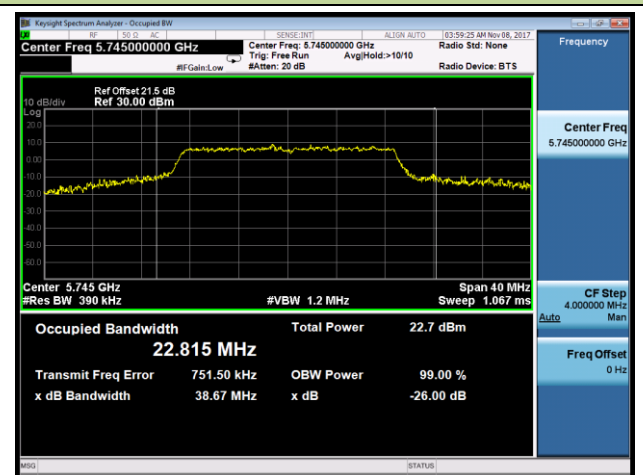
Channel 140 (5700MHz)



Channel 144 (5720MHz)

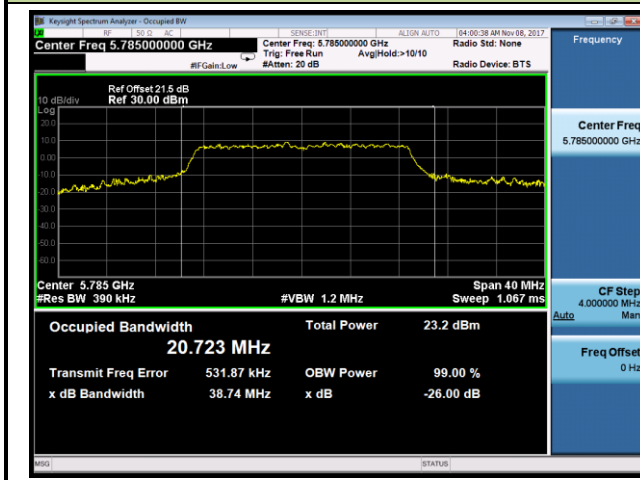


Channel 149 (5745MHz)

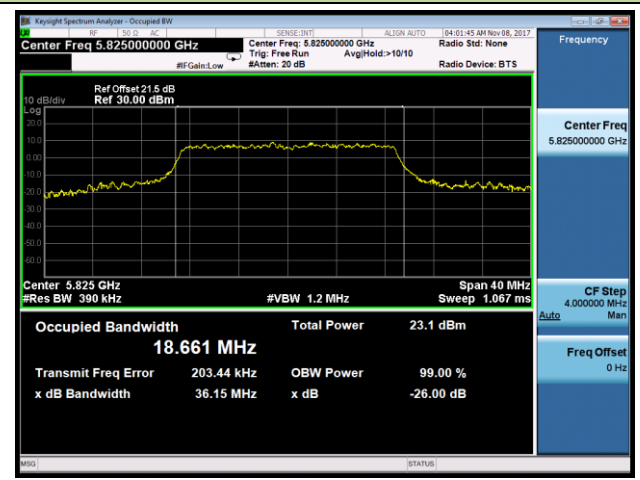


802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

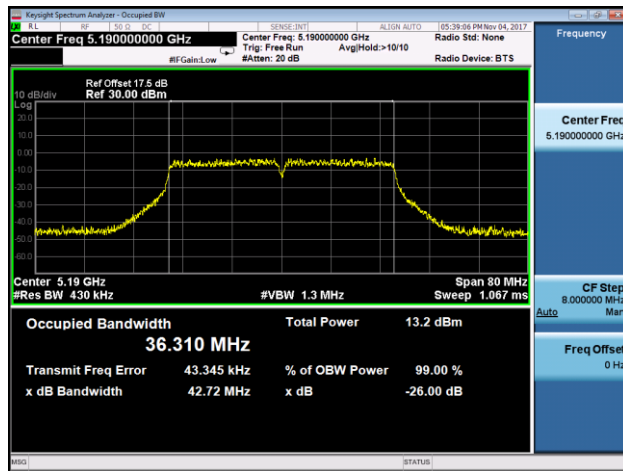


Channel 165 (5825MHz)

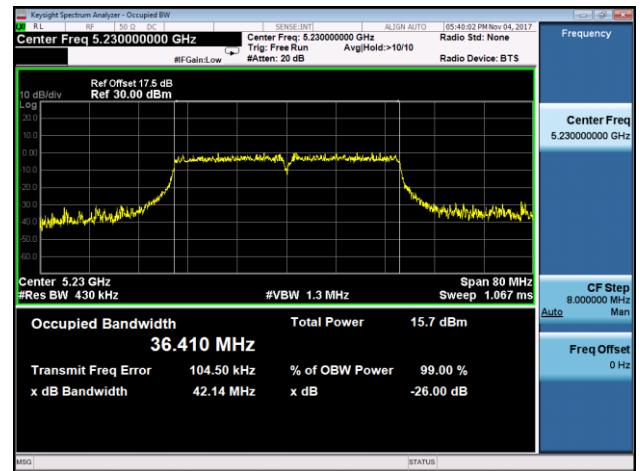


802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

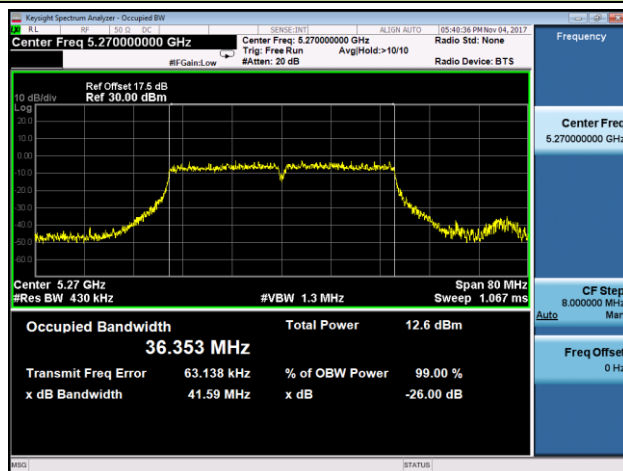
Channel 38 (5190MHz)



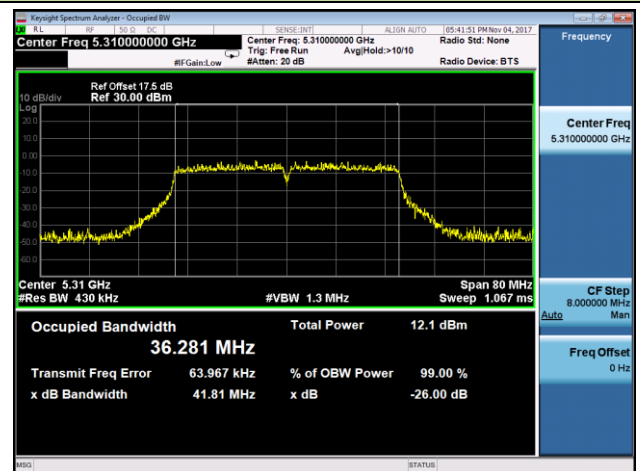
Channel 46 (5230MHz)



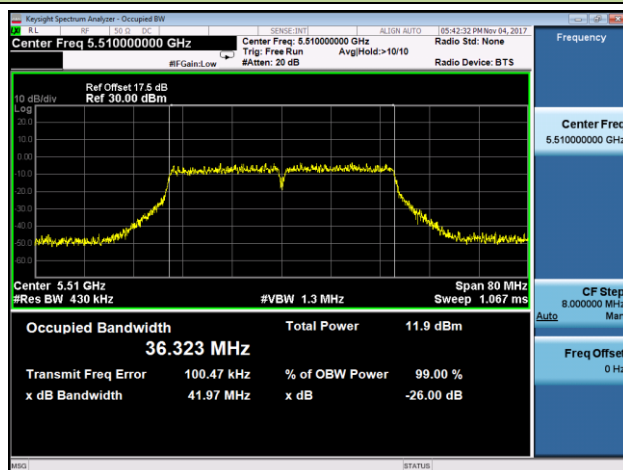
Channel 54 (5270MHz)



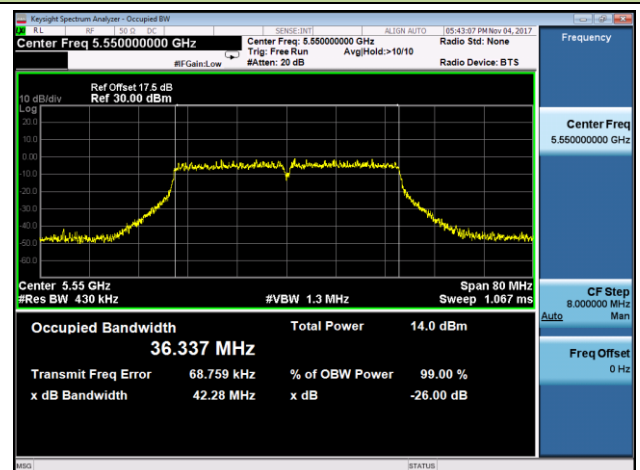
Channel 62 (5310MHz)



Channel 102 (5510MHz)

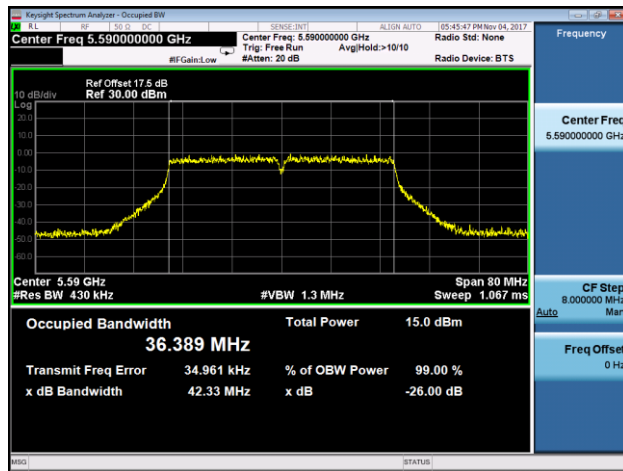


Channel 110 (5550MHz)

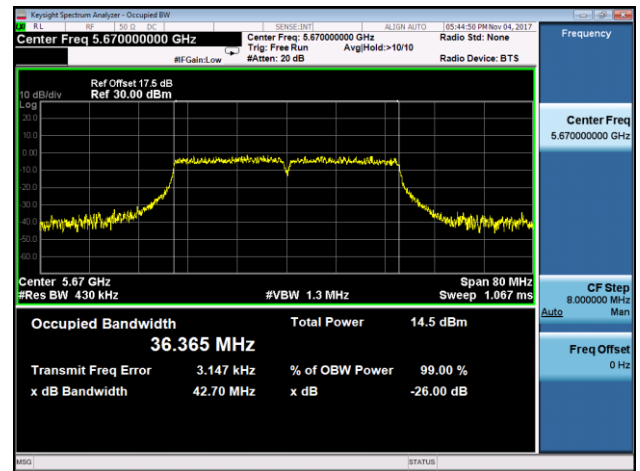


802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

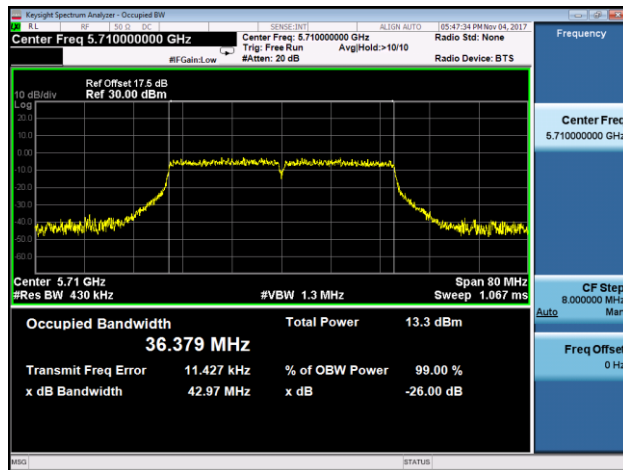
Channel 118 (5590MHz)



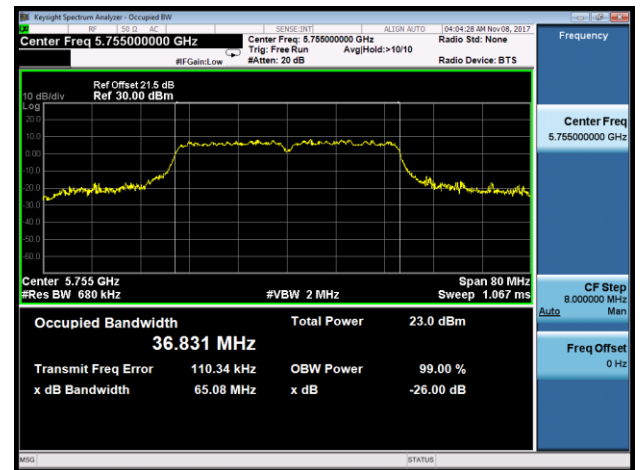
Channel 134 (5670MHz)



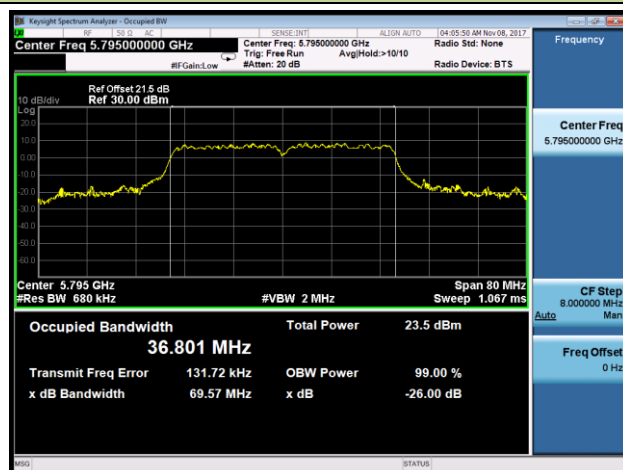
Channel 142 (5710MHz)



Channel 151 (5755MHz)

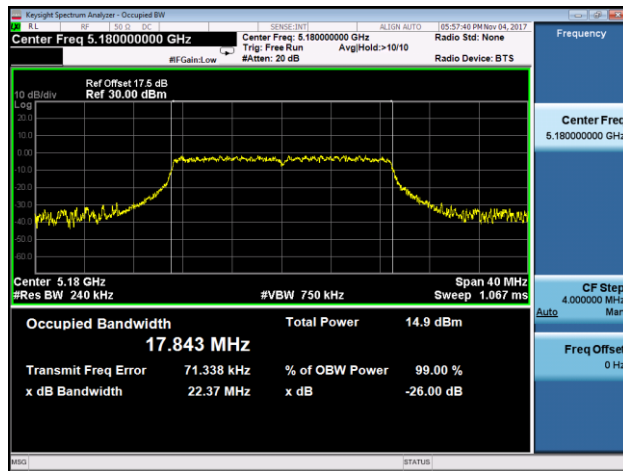


Channel 159 (5795MHz)

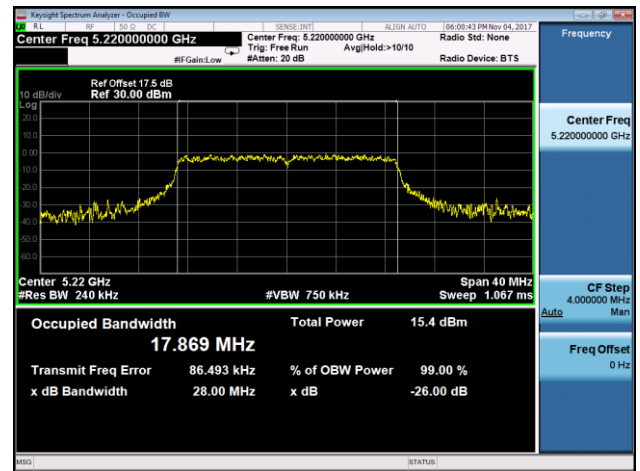


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

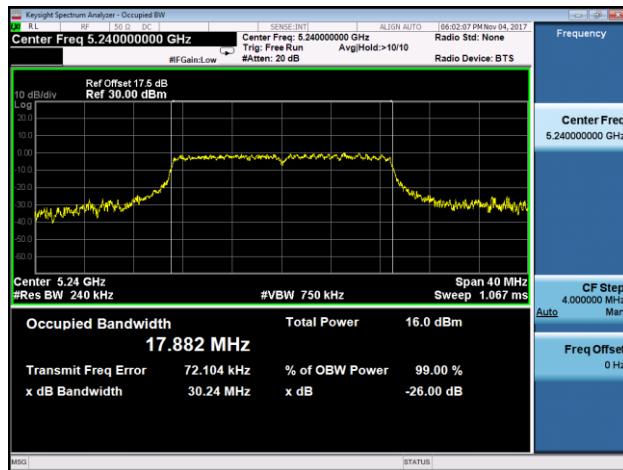
Channel 36 (5180MHz)



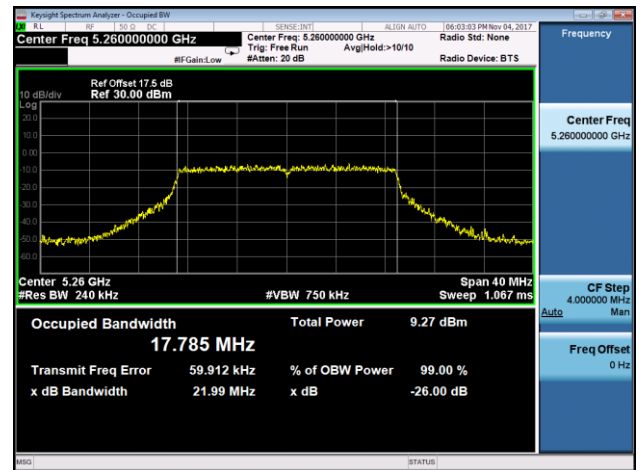
Channel 44 (5220MHz)



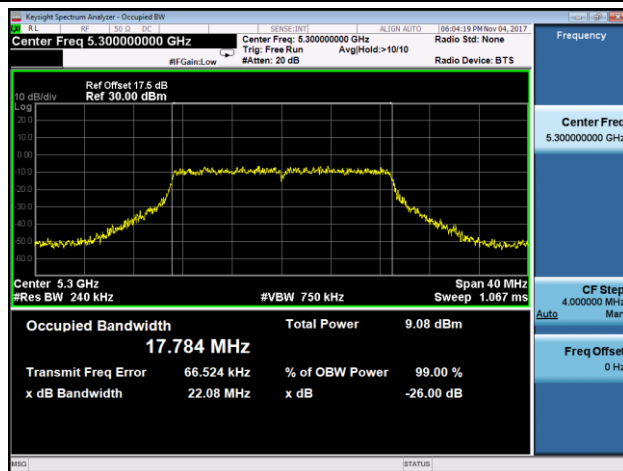
Channel 48 (5240MHz)



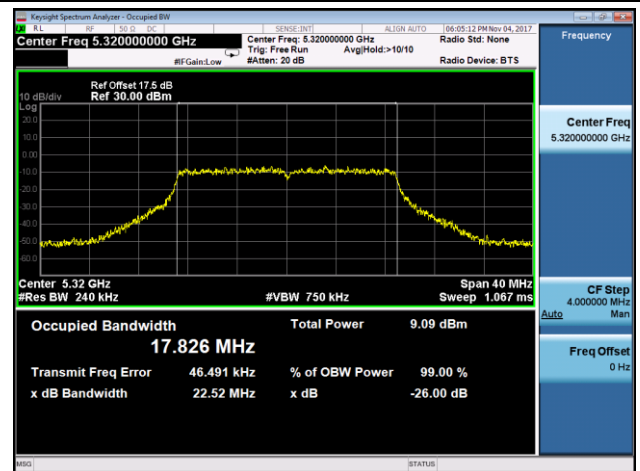
Channel 52 (5260MHz)



Channel 60 (5300MHz)

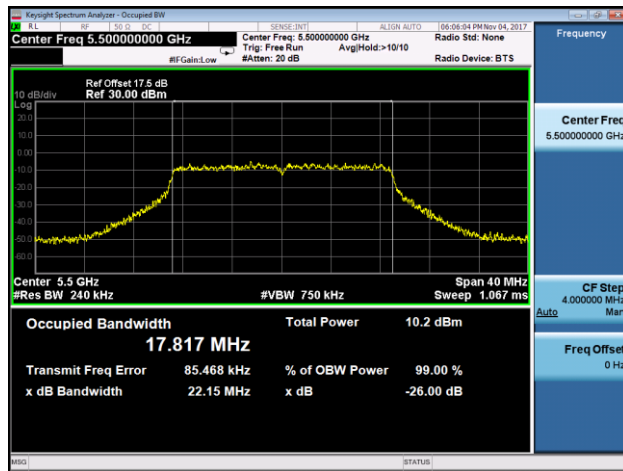


Channel 64 (5320MHz)

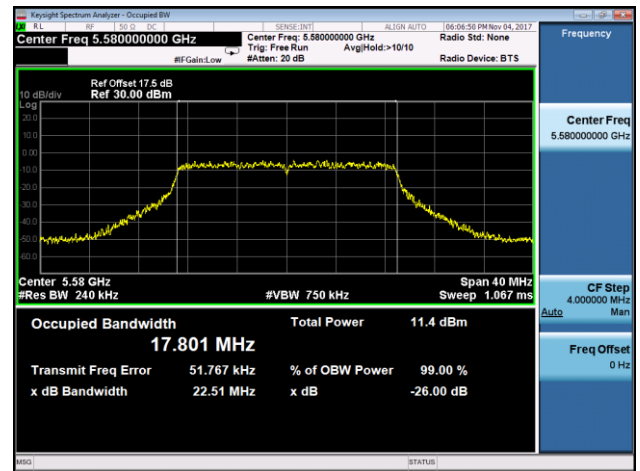


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

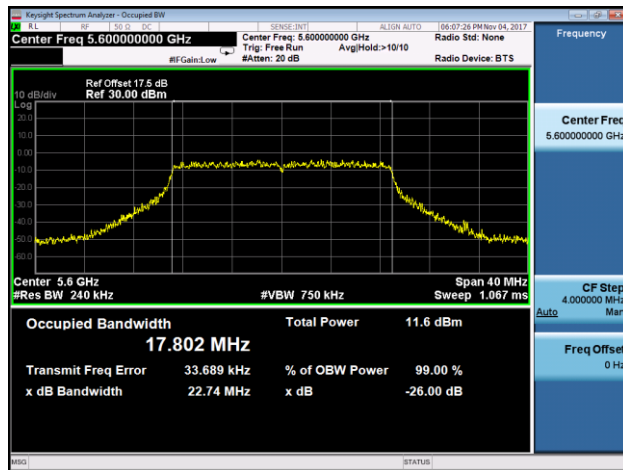
Channel 100 (5500MHz)



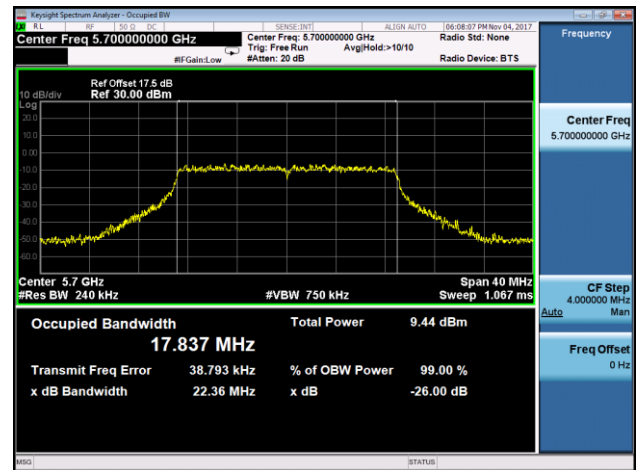
Channel 116 (5580MHz)



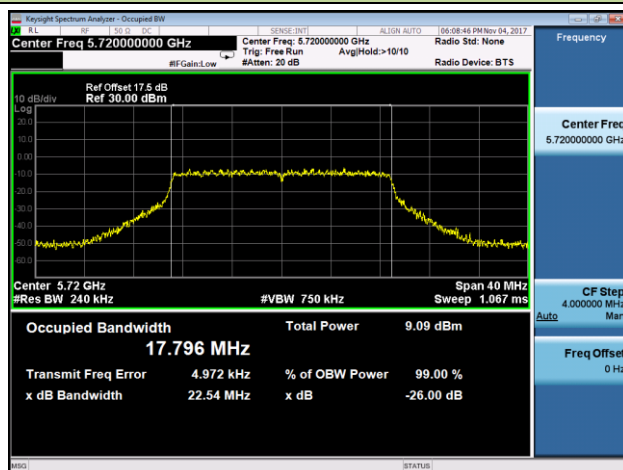
Channel 120 (5600MHz)



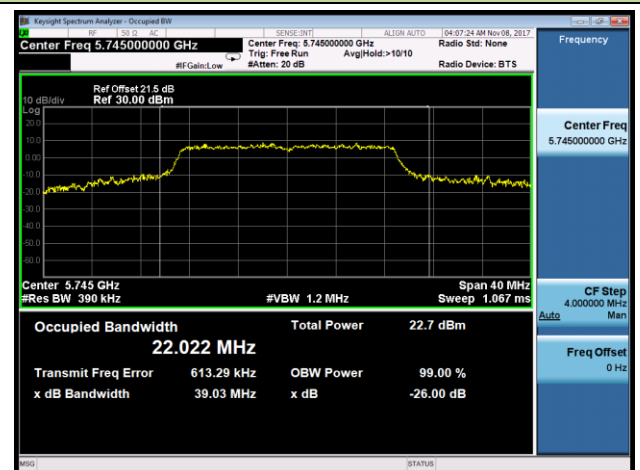
Channel 140 (5700MHz)



Channel 144 (5720MHz)

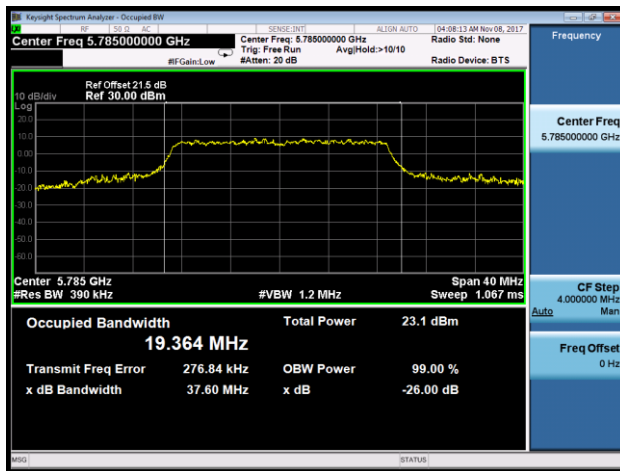


Channel 149 (5745MHz)

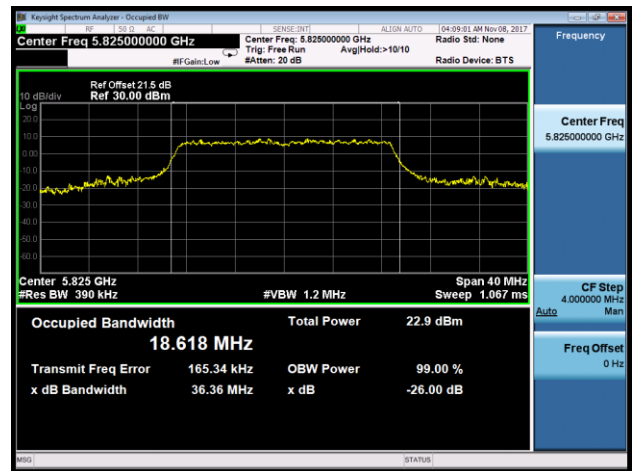


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

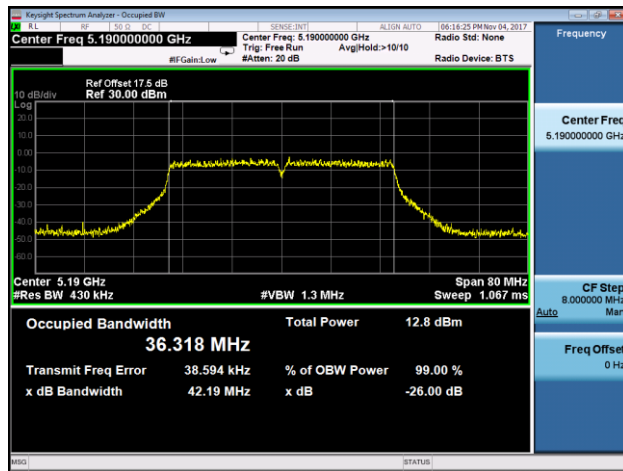


Channel 165 (5825MHz)

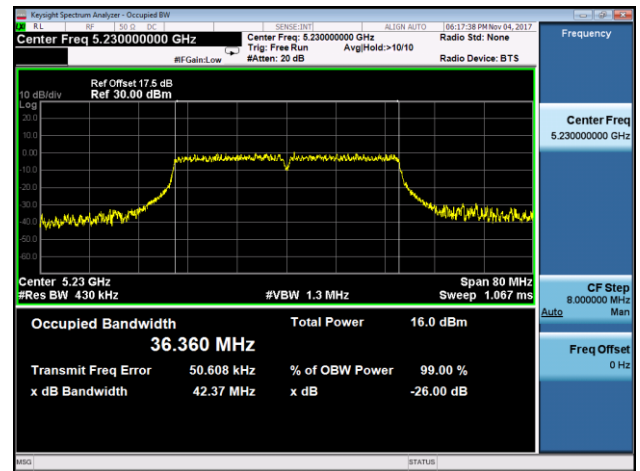


802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

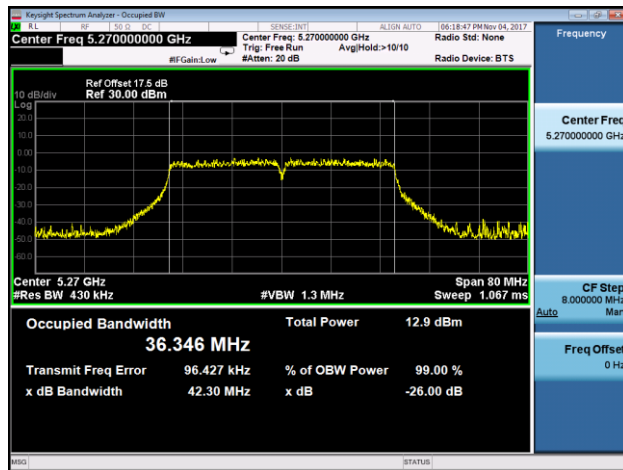
Channel 38 (5190MHz)



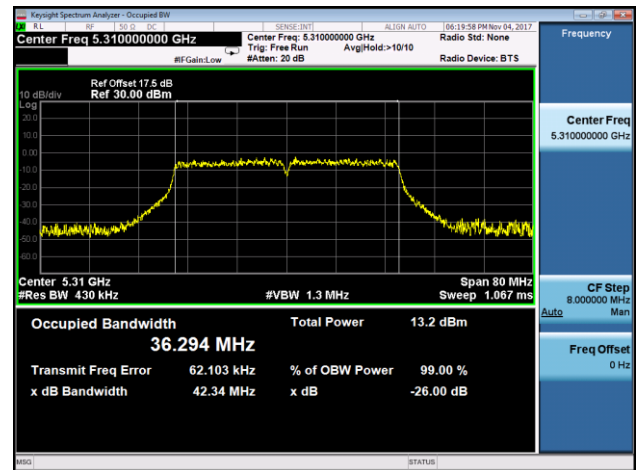
Channel 46 (5230MHz)



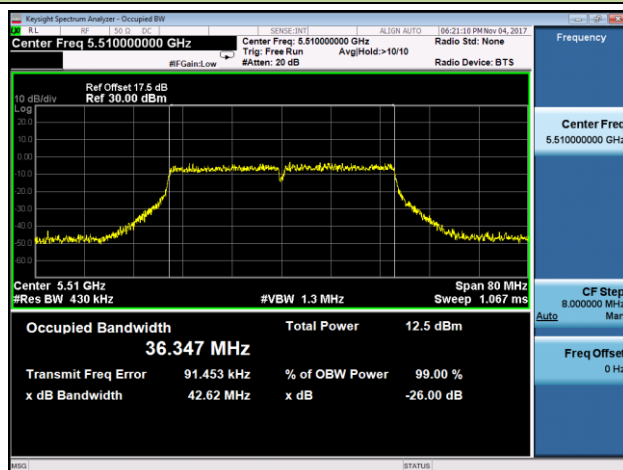
Channel 54 (5270MHz)



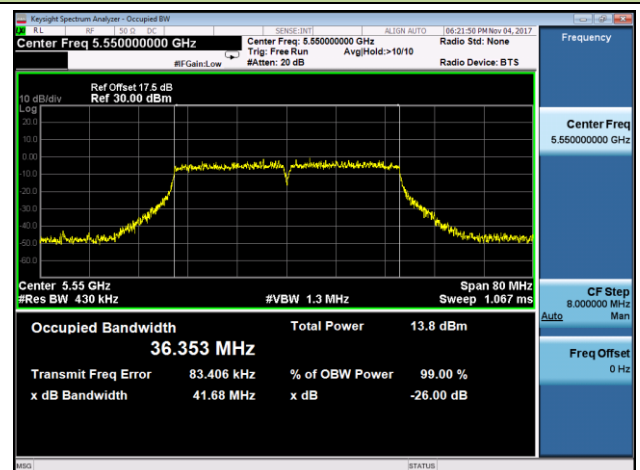
Channel 62 (5310MHz)



Channel 102 (5510MHz)

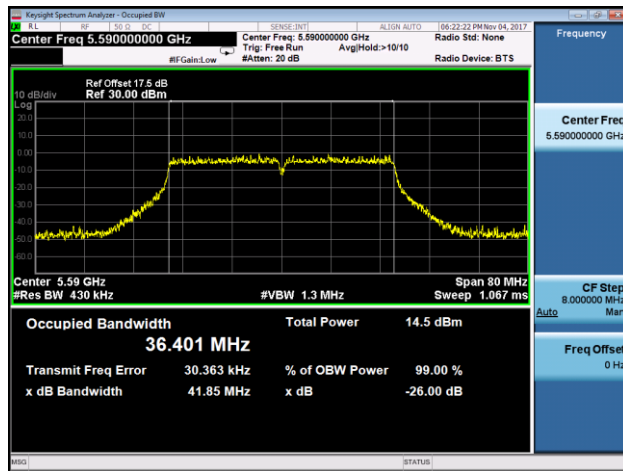


Channel 110 (5550MHz)

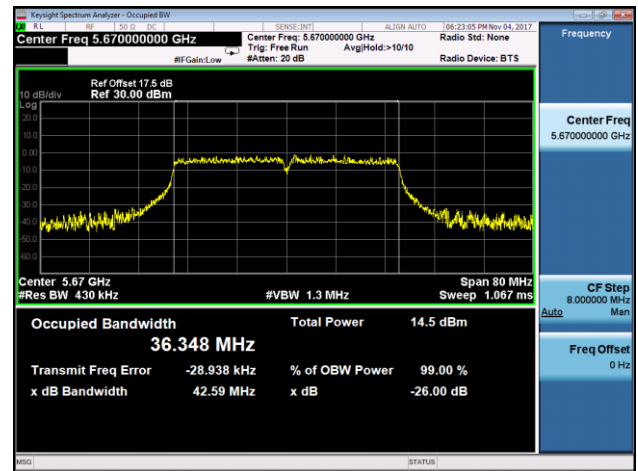


802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

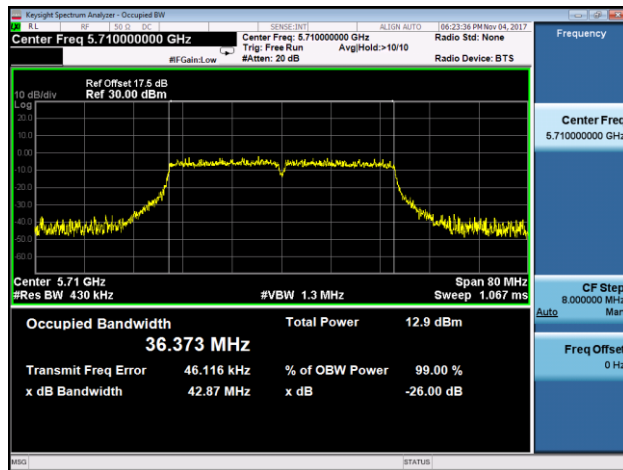
Channel 118 (5590MHz)



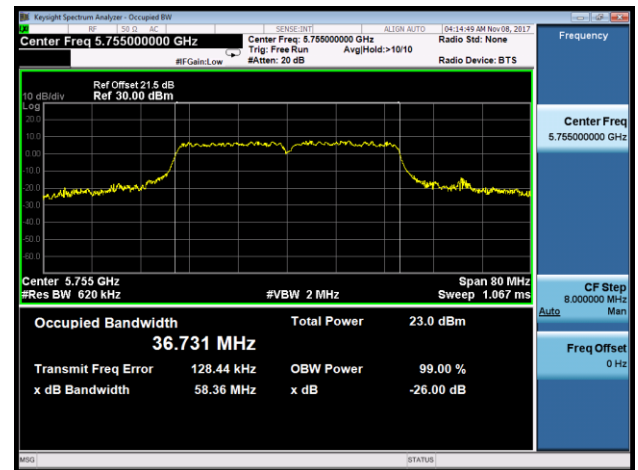
Channel 134 (5670MHz)



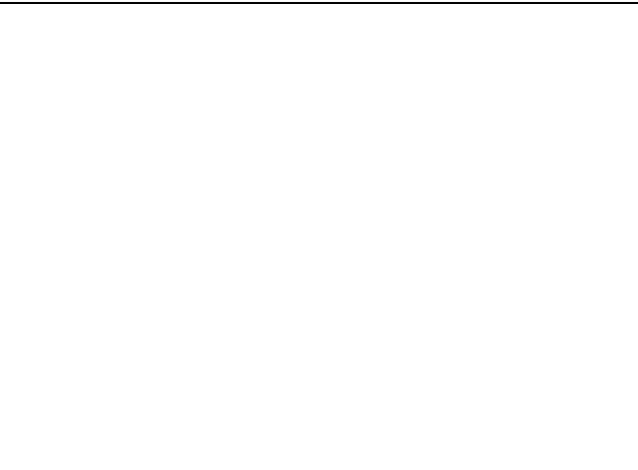
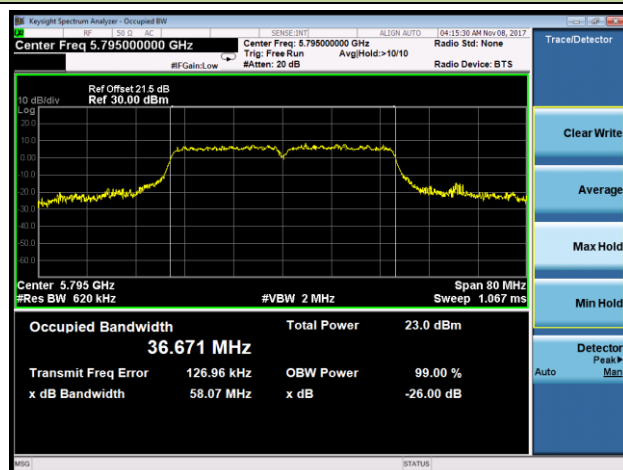
Channel 142 (5710MHz)



Channel 151 (5755MHz)

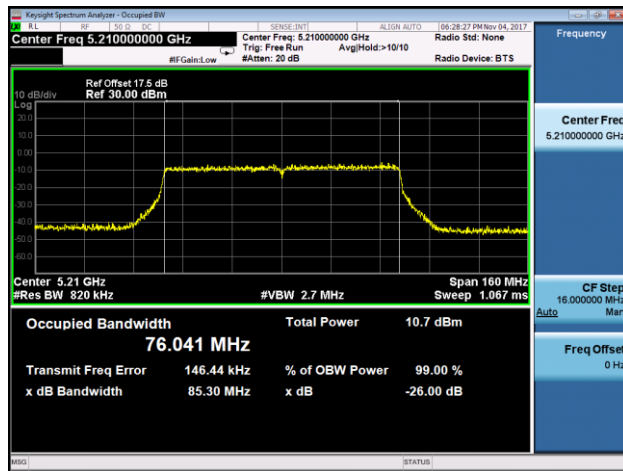


Channel 159 (5795MHz)

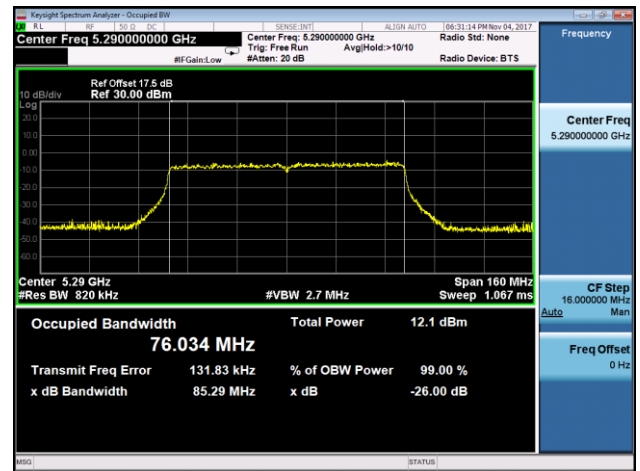


802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 + 2 + 3

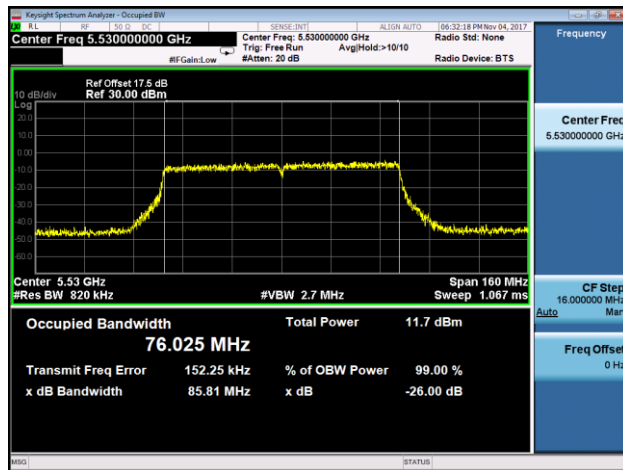
Channel 42 (5210MHz)



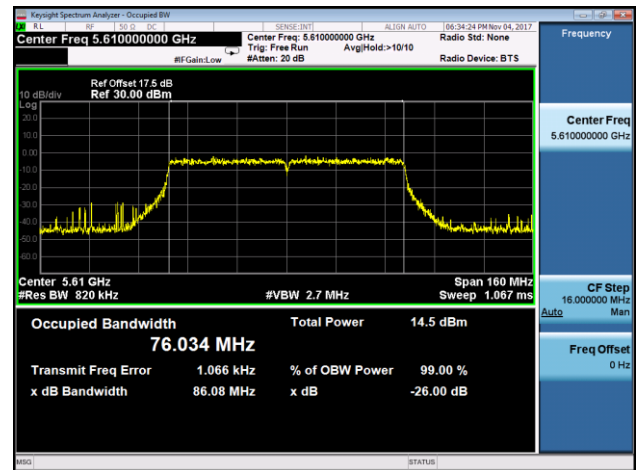
Channel 58 (5290MHz)



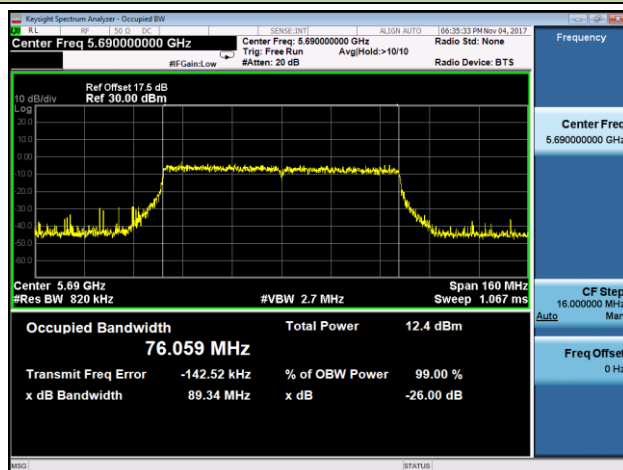
Channel 106 (5530MHz)



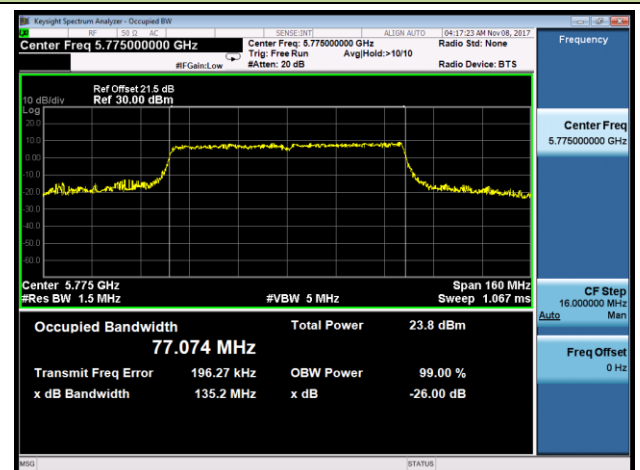
Channel 122 (5610MHz)



Channel 138 (5690MHz)

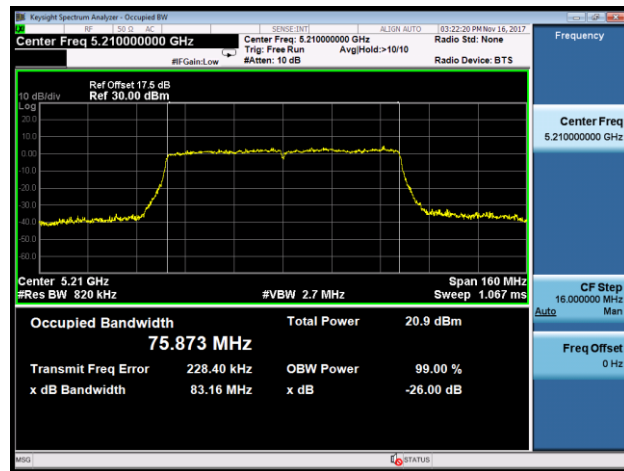


Channel 155 (5775MHz)

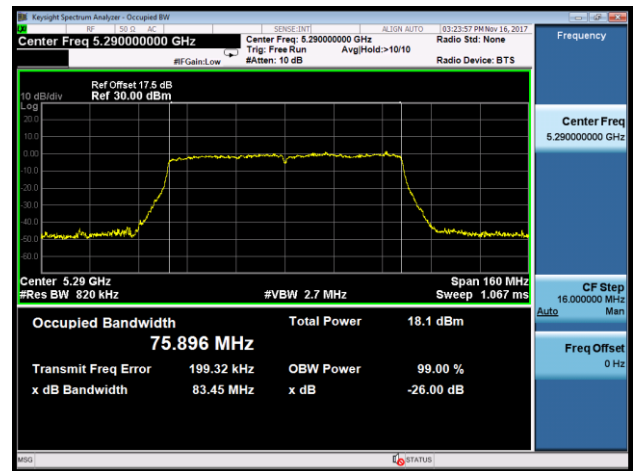


802.11ac-VHT80+80 26dB Bandwidth & 99% Bandwidth - Ant 1 / Ant 0 + 1 (Ant 0 + 1 + 2 + 3)

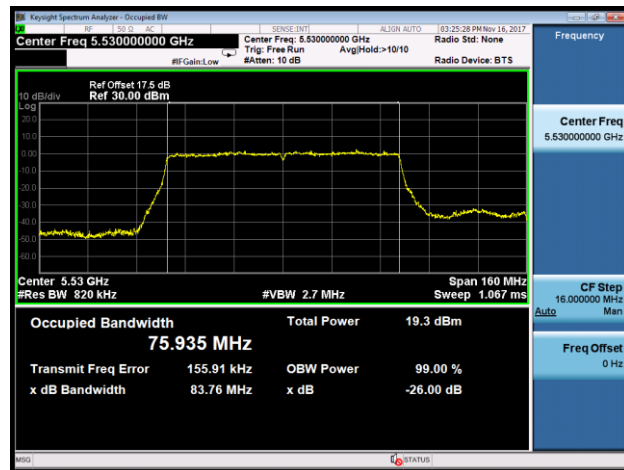
Channel 42 (5210MHz)



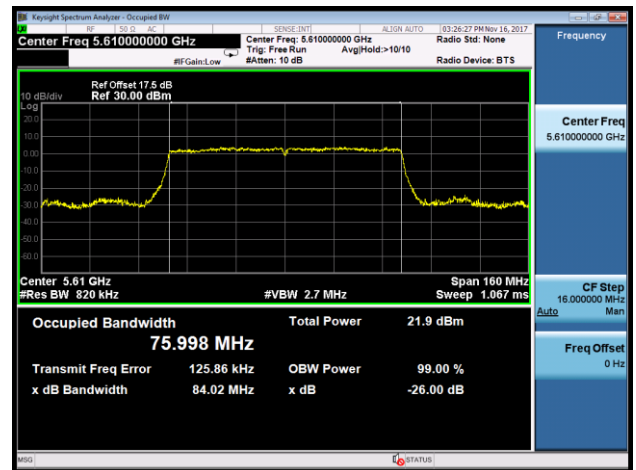
Channel 58 (5290MHz)



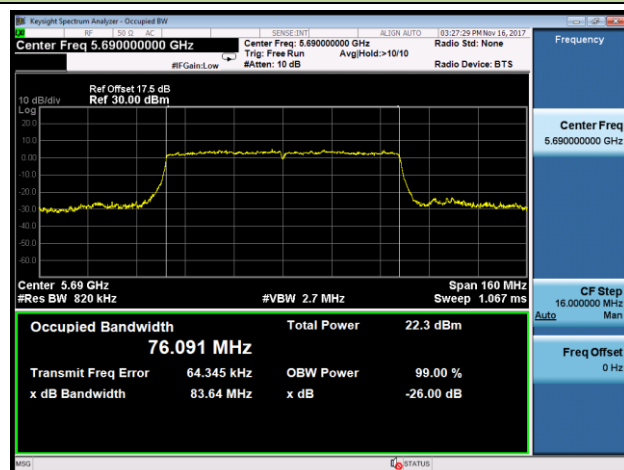
Channel 106 (5530MHz)



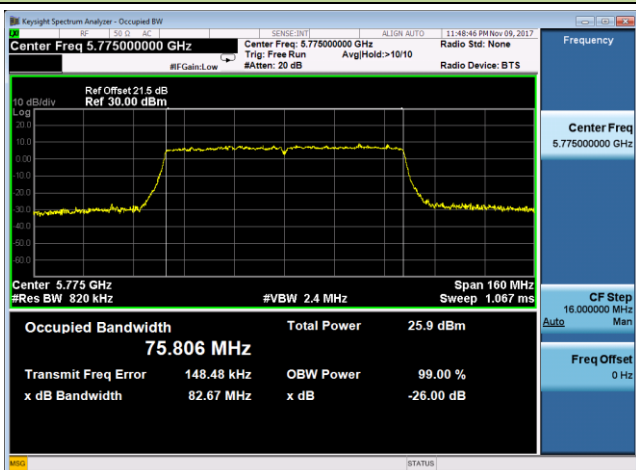
Channel 122 (5610MHz)



Channel 138 (5690MHz)

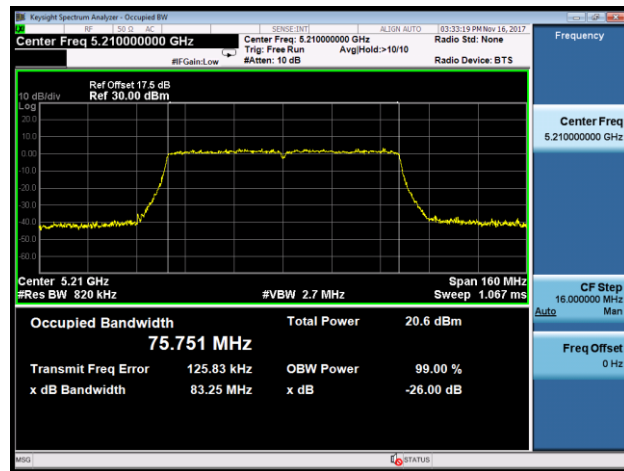


Channel 155 (5775MHz)

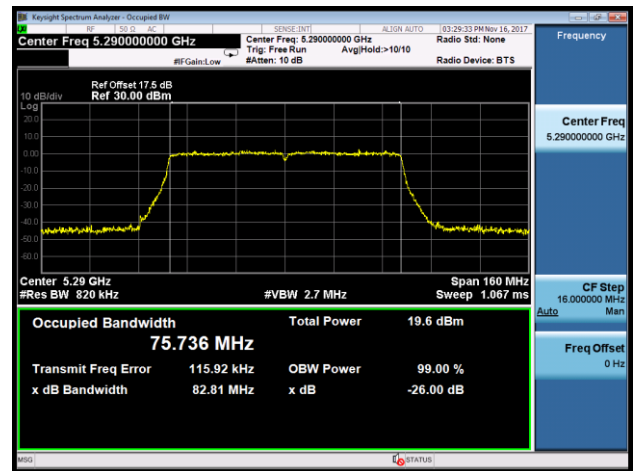


802.11ac-VHT80+80 26dB Bandwidth & 99% Bandwidth - Ant 3 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3)

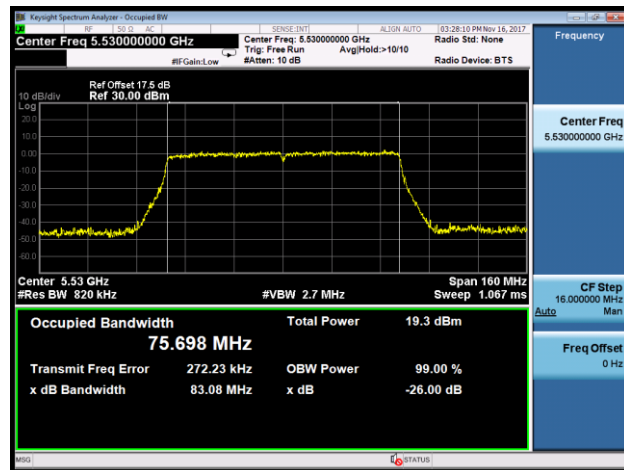
Channel 42 (5210MHz)



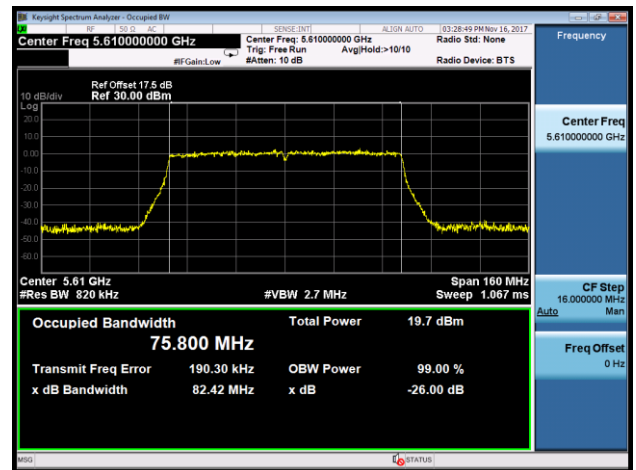
Channel 58 (5290MHz)



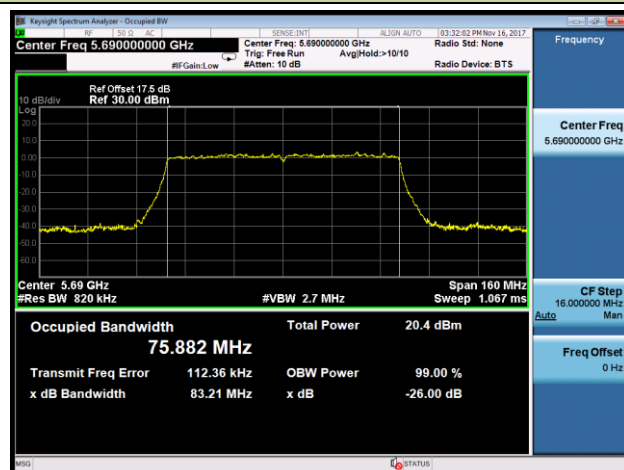
Channel 106 (5530MHz)



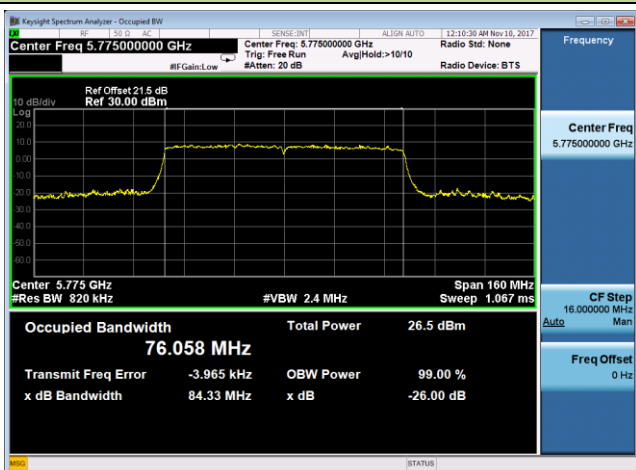
Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)



7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

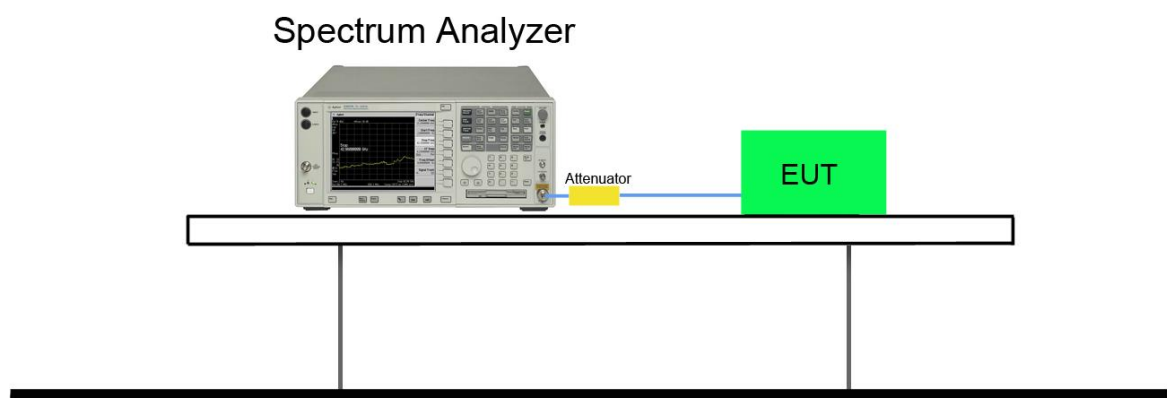
7.3.2. Test Procedure Used

KDB 789033 D02v01r04 - Section C.2

7.3.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. $VBW \geq 3 \times RBW$.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3.4. Test Setup



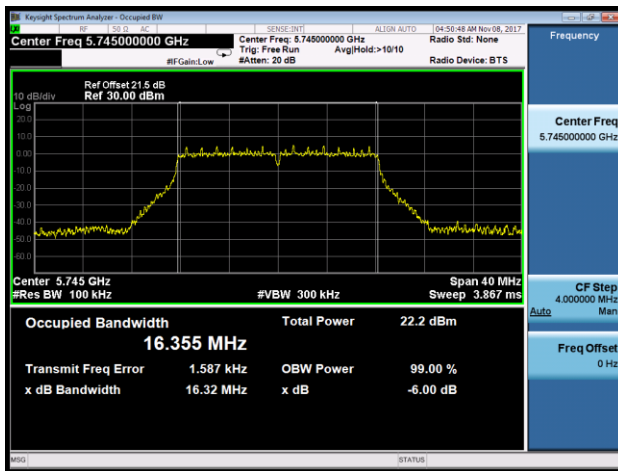
7.3.5.Test Result

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	23°C
Test Engineer	Flag Yang	Relative Humidity	52%
Test Site	SR2	Test Date	2017/11/08

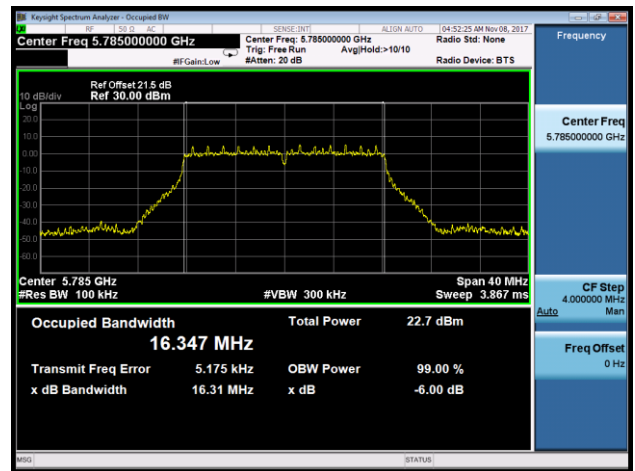
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
1TX_Ant 1						
802.11a	6Mbps	149	5745	16.32	≥ 0.5	Pass
802.11a	6Mbps	157	5785	16.31	≥ 0.5	Pass
802.11a	6Mbps	165	5825	16.31	≥ 0.5	Pass
802.11n-HT20	MCS0	149	5745	17.30	≥ 0.5	Pass
802.11n-HT20	MCS0	157	5785	17.55	≥ 0.5	Pass
802.11n-HT20	MCS0	165	5825	16.94	≥ 0.5	Pass
802.11n-HT40	MCS0	151	5755	35.12	≥ 0.5	Pass
802.11n-HT40	MCS0	159	5795	35.08	≥ 0.5	Pass
802.11ac-VHT20	MCS0	149	5745	17.55	≥ 0.5	Pass
802.11ac-VHT20	MCS0	157	5785	17.15	≥ 0.5	Pass
802.11ac-VHT20	MCS0	165	5825	17.55	≥ 0.5	Pass
802.11ac-VHT40	MCS0	151	5755	35.12	≥ 0.5	Pass
802.11ac-VHT40	MCS0	159	5795	35.90	≥ 0.5	Pass
802.11ac-VHT80	MCS0	155	5775	75.64	≥ 0.5	Pass

802.11a 6dB Bandwidth - Ant 1

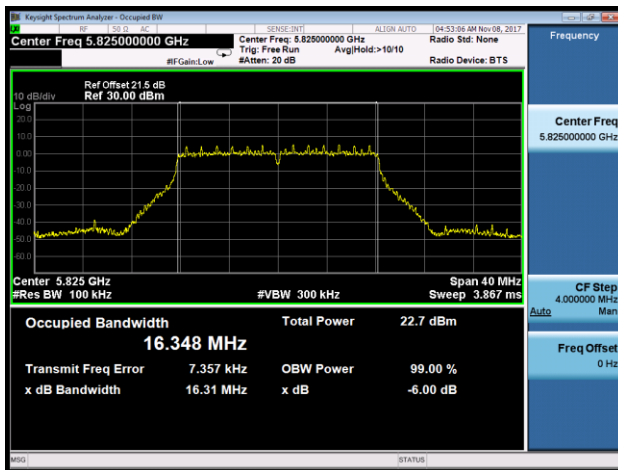
Channel 149 (5745MHz)



Channel 157 (5785MHz)

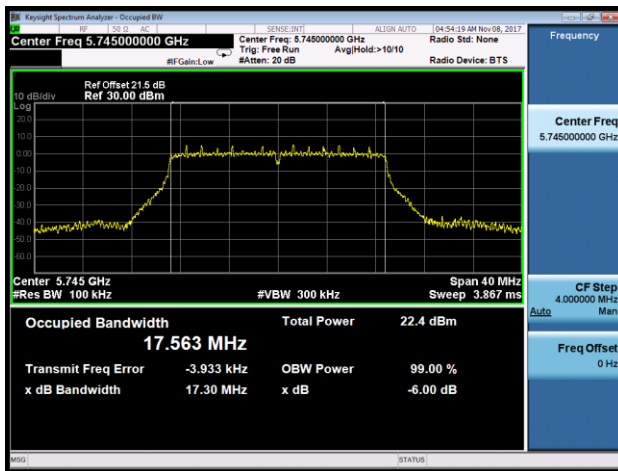


Channel 165 (5825MHz)

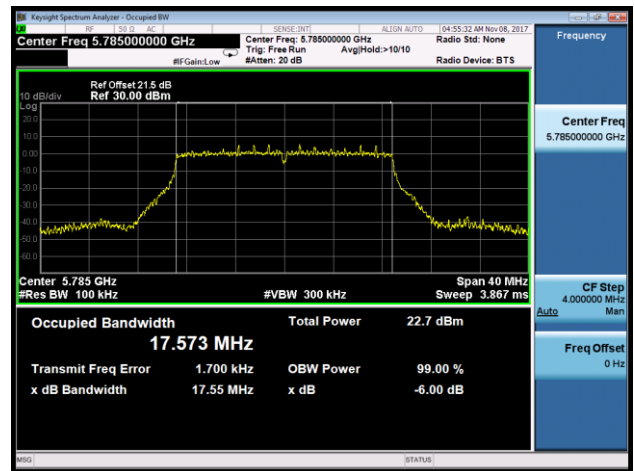


802.11n-HT20 6dB Bandwidth - Ant 1

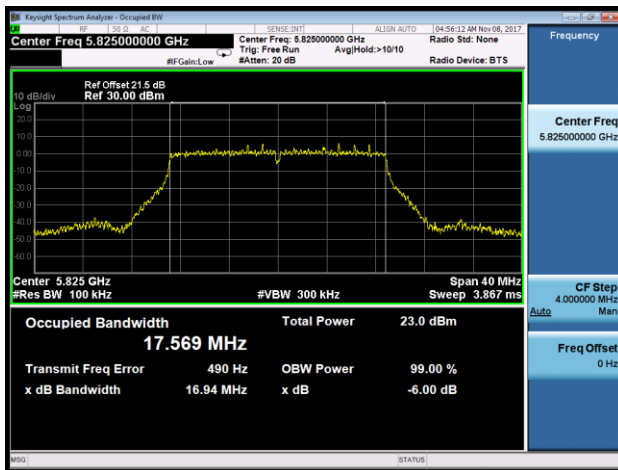
Channel 149 (5745MHz)



Channel 157 (5785MHz)

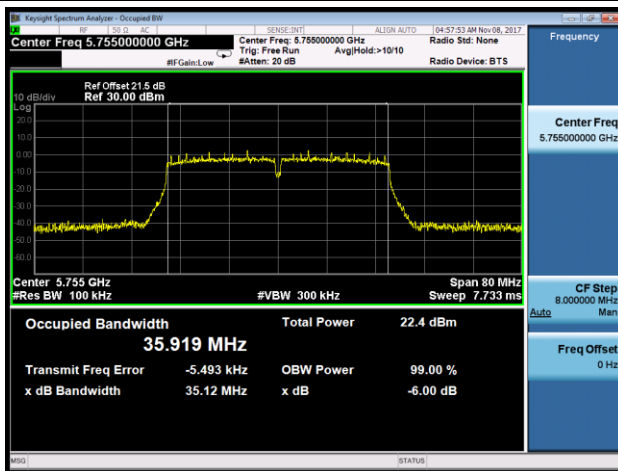


Channel 165 (5825MHz)

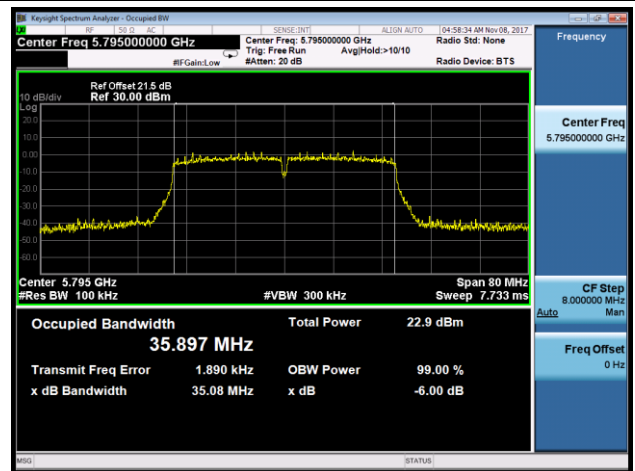


802.11n-HT40 6dB Bandwidth - Ant 1

Channel 151 (5755MHz)

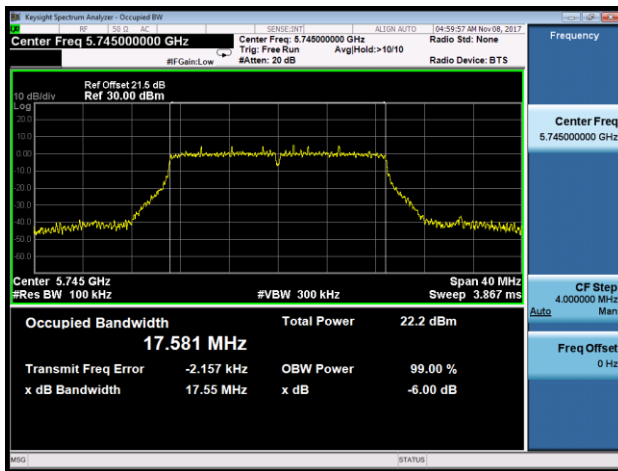


Channel 159 (5795MHz)

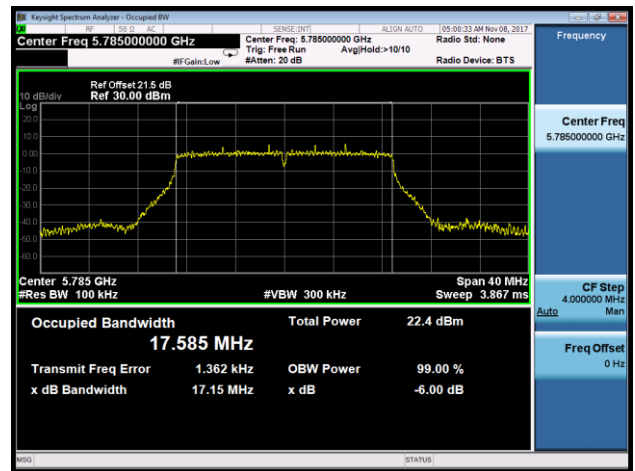


802.11ac-VHT20 6dB Bandwidth - Ant 1

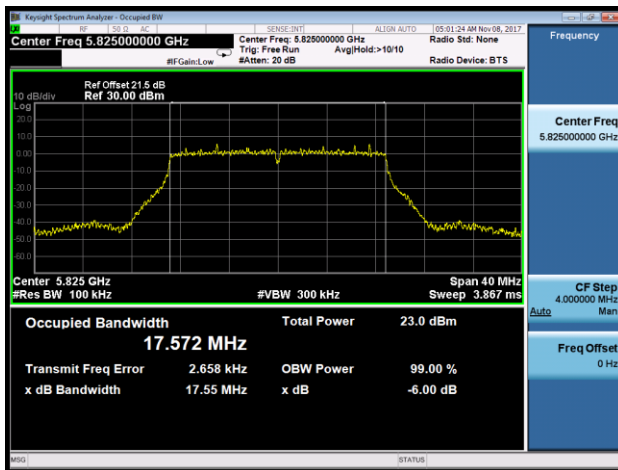
Channel 149 (5745MHz)



Channel 157 (5785MHz)

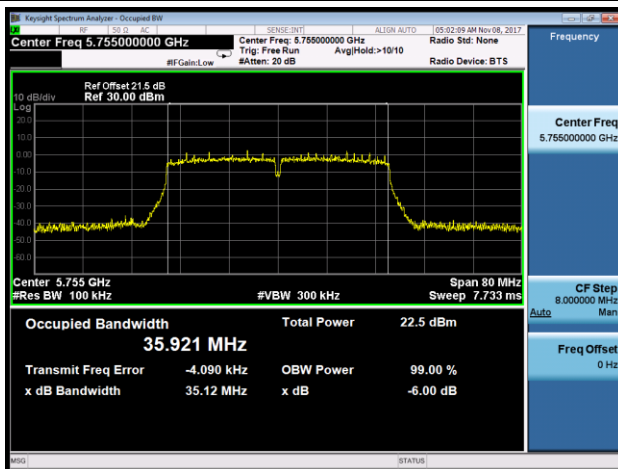


Channel 165 (5825MHz)

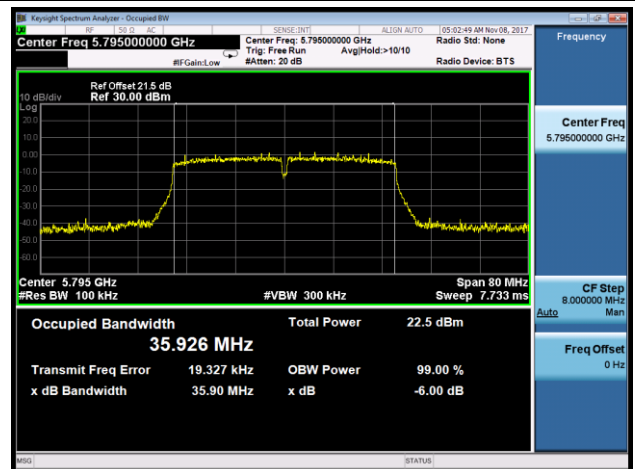


802.11ac-VHT40 6dB Bandwidth - Ant 1

Channel 151 (5755MHz)

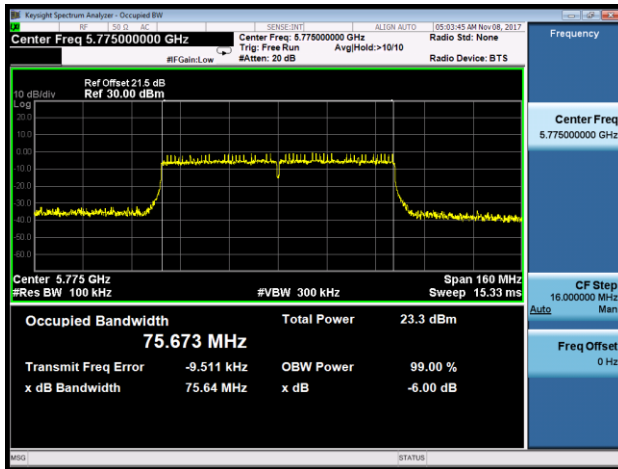


Channel 159 (5795MHz)



802.11ac-VHT80 6dB Bandwidth - Ant 1

Channel 155 (5775MHz)



7.4. Output Power Measurement

7.4.1. Test Limit

For client device operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30 dBm).

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

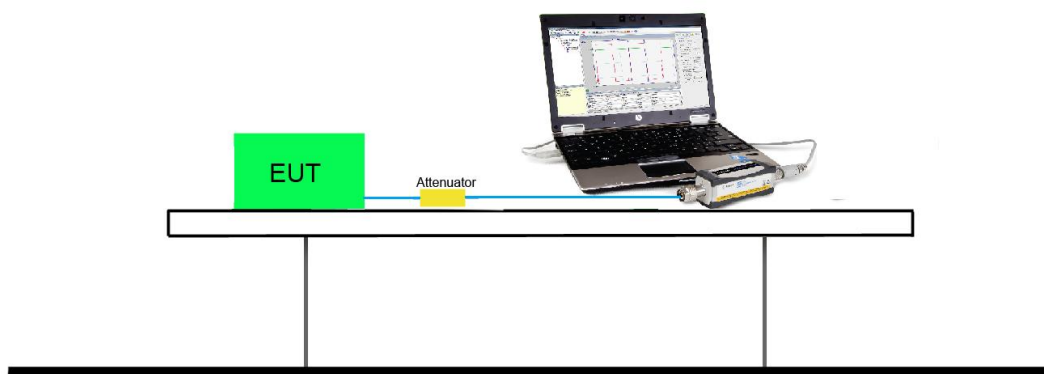
7.4.2. Test Procedure Used

KDB 789033D02v01r04 - Section E) 3) b) Method PM-G

7.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.4.4. Test Setup



7.4.5. Test Result

Power output test was verified over all data rates of each mode shown as below table, and then choose the maximum power output (yellow marker) for final test of each channel.

For Ant 1:

Test Mode	Bandwidth	Channel	Frequency (MHz)	Data Rate/ MCS	Average Power (dBm)
802.11a	20	36	5180	6Mbps	17.62
				24Mbps	17.38
				54Mbps	17.09
802.11n	20	36	5180	MCS0	17.83
				MCS3	17.59
				MCS7	17.31
802.11n	40	38	5190	MCS0	18.97
				MCS3	18.73
				MCS7	18.54
802.11ac	20	36	5180	MCS0	17.86
				MCS4	17.65
				MCS8	17.40
802.11ac	40	38	5190	MCS0	18.52
				MCS4	18.19
				MCS9	18.03
802.11ac	80	42	5210	MCS0	17.51
				MCS4	17.26
				MCS9	17.03
802.11ac	80+80	42	5210	MCS0	16.89
				MCS4	16.68
				MCS9	16.44

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	24°C
Test Engineer	Flag Yang	Relative Humidity	56%
Test Site	SR2	Test Date	2017/10/31

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Average Power Limit (dBm)	Result
1TX									
11a	6Mbps	36	5180	17.43	17.62	17.70	17.62	≤ 19.98	Pass
11a	6Mbps	44	5220	17.85	17.88	17.73	17.64	≤ 19.98	Pass
11a	6Mbps	48	5240	18.03	17.95	17.78	18.05	≤ 19.98	Pass
11a	6Mbps	52	5260	16.89	15.81	15.08	17.55	≤ 19.98	Pass
11a	6Mbps	60	5300	17.00	15.63	15.03	17.40	≤ 19.98	Pass
11a	6Mbps	64	5320	17.23	15.71	14.81	17.43	≤ 19.98	Pass
11a	6Mbps	100	5500	17.48	15.11	14.70	16.24	≤ 19.98	Pass
11a	6Mbps	116	5580	17.39	15.45	14.90	16.35	≤ 19.98	Pass
11a	6Mbps	120	5600	17.52	15.66	15.62	16.41	≤ 19.98	Pass
11a	6Mbps	140	5700	17.66	15.14	15.75	17.92	≤ 19.98	Pass
11a	6Mbps	144	5720	17.69	15.44	15.81	18.10	≤ 19.98	Pass
11a	6Mbps	149	5745	21.37	20.63	21.13	22.11	≤ 26.00	Pass
11a	6Mbps	157	5785	21.63	20.97	21.53	22.61	≤ 26.00	Pass
11a	6Mbps	165	5825	21.56	21.08	21.73	22.72	≤ 26.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)	Average Power Limit (dBm)	Result
1TX _Ant 1						
11n-HT20	MCS0	36	5180	17.83	≤ 19.98	Pass
11n-HT20	MCS0	44	5220	17.91	≤ 19.98	Pass
11n-HT20	MCS0	48	5240	17.85	≤ 19.98	Pass
11n-HT20	MCS0	52	5260	15.76	≤ 19.98	Pass
11n-HT20	MCS0	60	5300	15.75	≤ 19.98	Pass
11n-HT20	MCS0	64	5320	15.76	≤ 19.98	Pass
11n-HT20	MCS0	100	5500	15.66	≤ 19.98	Pass
11n-HT20	MCS0	116	5580	15.52	≤ 19.98	Pass
11n-HT20	MCS0	120	5600	16.15	≤ 19.98	Pass
11n-HT20	MCS0	140	5700	15.90	≤ 19.98	Pass
11n-HT20	MCS0	144	5720	15.97	≤ 19.98	Pass
11n-HT20	MCS0	149	5745	20.38	≤ 26.00	Pass
11n-HT20	MCS0	157	5785	20.77	≤ 26.00	Pass
11n-HT20	MCS0	165	5825	20.79	≤ 26.00	Pass
11n-HT40	MCS0	38	5180	17.83	≤ 19.98	Pass
11n-HT40	MCS0	46	5220	17.91	≤ 19.98	Pass
11n-HT40	MCS0	54	5270	19.01	≤ 19.98	Pass
11n-HT40	MCS0	62	5310	17.27	≤ 19.98	Pass
11n-HT40	MCS0	102	5510	16.22	≤ 19.98	Pass
11n-HT40	MCS0	110	5550	18.72	≤ 19.98	Pass
11n-HT40	MCS0	118	5590	18.87	≤ 19.98	Pass
11n-HT40	MCS0	134	5670	17.74	≤ 19.98	Pass
11n-HT40	MCS0	142	5710	18.76	≤ 19.98	Pass
11n-HT40	MCS0	151	5755	20.59	≤ 26.00	Pass
11n-HT40	MCS0	159	5795	20.86	≤ 26.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)	Average Power Limit (dBm)	Result
1TX _Ant 1						
11ac-VHT20	MCS0	36	5180	17.86	≤ 19.98	Pass
11ac-VHT20	MCS0	44	5220	17.93	≤ 19.98	Pass
11ac-VHT20	MCS0	48	5240	17.95	≤ 19.98	Pass
11ac-VHT20	MCS0	52	5260	16.27	≤ 19.98	Pass
11ac-VHT20	MCS0	60	5300	16.25	≤ 19.98	Pass
11ac-VHT20	MCS0	64	5320	15.73	≤ 19.98	Pass
11ac-VHT20	MCS0	100	5500	15.68	≤ 19.98	Pass
11ac-VHT20	MCS0	116	5580	15.54	≤ 19.98	Pass
11ac-VHT20	MCS0	120	5600	15.57	≤ 19.98	Pass
11ac-VHT20	MCS0	140	5700	15.93	≤ 19.98	Pass
11ac-VHT20	MCS0	144	5720	15.95	≤ 19.98	Pass
11ac-VHT20	MCS0	149	5745	20.48	≤ 26.00	Pass
11ac-VHT20	MCS0	157	5785	20.78	≤ 26.00	Pass
11ac-VHT20	MCS0	165	5825	20.86	≤ 26.00	Pass
11ac-VHT40	MCS0	38	5190	18.52	≤ 19.98	Pass
11ac-VHT40	MCS0	46	5230	19.68	≤ 19.98	Pass
11ac-VHT40	MCS0	54	5270	19.03	≤ 19.98	Pass
11ac-VHT40	MCS0	62	5310	17.40	≤ 19.98	Pass
11ac-VHT40	MCS0	102	5510	16.26	≤ 19.98	Pass
11ac-VHT40	MCS0	110	5550	18.14	≤ 19.98	Pass
11ac-VHT40	MCS0	118	5590	18.29	≤ 19.98	Pass
11ac-VHT40	MCS0	134	5670	17.79	≤ 19.98	Pass
11ac-VHT40	MCS0	142	5710	18.75	≤ 19.98	Pass
11ac-VHT40	MCS0	151	5755	20.62	≤ 26.00	Pass
11ac-VHT40	MCS0	159	5795	20.94	≤ 26.00	Pass
11ac-VHT80	MCS0	42	5210	17.51	≤ 19.98	Pass
11ac-VHT80	MCS0	58	5290	15.93	≤ 19.98	Pass
11ac-VHT80	MCS0	106	5530	15.28	≤ 19.98	Pass
11ac-VHT80	MCS0	122	5610	19.63	≤ 19.98	Pass
11ac-VHT80	MCS0	138	5690	19.64	≤ 19.98	Pass
11ac-VHT80	MCS0	155	5775	19.05	≤ 26.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
4TX_Ant 0 + 1 + 2 + 3										
11n-HT20	MCS0	36	5180	11.62	11.90	11.21	11.23	17.52	≤ 19.98	Pass
11n-HT20	MCS0	44	5220	12.14	12.28	11.73	11.86	18.03	≤ 19.98	Pass
11n-HT20	MCS0	48	5240	12.24	12.13	11.76	11.95	18.04	≤ 19.98	Pass
11n-HT20	MCS0	52	5260	11.72	10.91	9.61	12.21	17.24	≤ 19.98	Pass
11n-HT20	MCS0	60	5300	12.15	10.97	9.71	12.17	17.38	≤ 19.98	Pass
11n-HT20	MCS0	64	5320	11.83	10.74	9.52	11.97	17.14	≤ 19.98	Pass
11n-HT20	MCS0	100	5500	12.13	10.35	9.35	10.74	16.78	≤ 19.98	Pass
11n-HT20	MCS0	116	5580	11.53	10.20	9.55	10.59	16.55	≤ 19.98	Pass
11n-HT20	MCS0	120	5600	11.89	10.59	10.23	10.93	16.98	≤ 19.98	Pass
11n-HT20	MCS0	140	5700	11.05	10.38	10.82	11.96	17.11	≤ 19.98	Pass
11n-HT20	MCS0	144	5720	11.08	10.51	10.83	11.95	17.15	≤ 19.98	Pass
11n-HT20	MCS0	149	5745	19.61	19.16	19.78	20.27	25.74	≤ 26.00	Pass
11n-HT20	MCS0	157	5785	19.38	18.67	19.60	20.06	25.48	≤ 26.00	Pass
11n-HT20	MCS0	165	5825	19.30	18.97	19.71	20.34	25.63	≤ 26.00	Pass
11n-HT40	MCS0	38	5190	13.83	13.80	13.36	13.51	19.65	≤ 19.98	Pass
11n-HT40	MCS0	46	5230	13.82	13.88	13.29	13.62	19.68	≤ 19.98	Pass
11n-HT40	MCS0	54	5270	14.37	12.99	12.03	13.91	19.44	≤ 19.98	Pass
11n-HT40	MCS0	62	5310	14.41	12.99	12.04	13.98	19.47	≤ 19.98	Pass
11n-HT40	MCS0	102	5510	14.41	12.10	12.28	12.63	18.98	≤ 19.98	Pass
11n-HT40	MCS0	110	5550	14.90	12.95	12.91	13.68	19.71	≤ 19.98	Pass
11n-HT40	MCS0	118	5590	14.55	12.76	13.15	14.01	19.70	≤ 19.98	Pass
11n-HT40	MCS0	134	5670	13.92	12.79	13.10	14.01	19.51	≤ 19.98	Pass
11n-HT40	MCS0	142	5710	13.55	12.61	13.35	14.36	19.53	≤ 19.98	Pass
11n-HT40	MCS0	151	5755	19.81	19.01	19.58	20.63	25.82	≤ 26.00	Pass
11n-HT40	MCS0	159	5795	19.61	18.84	19.51	20.56	25.69	≤ 26.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
4TX_Ant 0 + 1 + 2 + 3										
11ac-VHT20	MCS0	36	5180	11.64	12.02	11.21	11.23	17.56	≤ 19.98	Pass
11ac-VHT20	MCS0	44	5220	12.19	12.29	11.71	11.94	18.06	≤ 19.98	Pass
11ac-VHT20	MCS0	48	5240	12.35	12.14	11.74	11.96	18.07	≤ 19.98	Pass
11ac-VHT20	MCS0	52	5260	11.72	10.83	9.72	12.49	17.33	≤ 19.98	Pass
11ac-VHT20	MCS0	60	5300	12.43	10.92	9.78	12.35	17.52	≤ 19.98	Pass
11ac-VHT20	MCS0	64	5320	12.11	10.84	9.72	12.21	17.36	≤ 19.98	Pass
11ac-VHT20	MCS0	100	5500	12.34	10.40	9.51	10.71	16.89	≤ 19.98	Pass
11ac-VHT20	MCS0	116	5580	11.51	9.94	9.63	10.58	16.50	≤ 19.98	Pass
11ac-VHT20	MCS0	120	5600	11.95	10.67	10.47	11.19	17.13	≤ 19.98	Pass
11ac-VHT20	MCS0	140	5700	11.21	10.48	10.86	12.13	17.23	≤ 19.98	Pass
11ac-VHT20	MCS0	144	5720	11.20	10.63	11.06	12.34	17.38	≤ 19.98	Pass
11ac-VHT20	MCS0	149	5745	19.56	19.31	19.87	20.61	25.89	≤ 26.00	Pass
11ac-VHT20	MCS0	157	5785	19.26	18.78	19.56	20.38	25.56	≤ 26.00	Pass
11ac-VHT20	MCS0	165	5825	19.34	19.13	19.70	20.69	25.78	≤ 26.00	Pass
11ac-VHT40	MCS0	38	5190	13.83	13.82	13.38	13.55	19.67	≤ 19.98	Pass
11ac-VHT40	MCS0	46	5230	13.83	13.88	13.44	13.72	19.74	≤ 19.98	Pass
11ac-VHT40	MCS0	54	5270	14.80	13.22	12.52	14.35	19.84	≤ 19.98	Pass
11ac-VHT40	MCS0	62	5310	14.42	12.83	11.98	13.91	19.41	≤ 19.98	Pass
11ac-VHT40	MCS0	102	5510	14.34	12.08	12.18	12.75	18.96	≤ 19.98	Pass
11ac-VHT40	MCS0	110	5550	14.80	12.85	12.80	13.48	19.58	≤ 19.98	Pass
11ac-VHT40	MCS0	118	5590	14.72	12.93	12.98	13.90	19.72	≤ 19.98	Pass
11ac-VHT40	MCS0	134	5670	13.89	12.85	12.98	14.01	19.48	≤ 19.98	Pass
11ac-VHT40	MCS0	142	5710	13.45	12.73	13.11	14.29	19.45	≤ 19.98	Pass
11ac-VHT40	MCS0	151	5755	19.23	18.45	18.93	20.02	25.22	≤ 26.00	Pass
11ac-VHT40	MCS0	159	5795	19.51	18.81	19.35	20.48	25.60	≤ 26.00	Pass
11ac-VHT80	MCS0	42	5210	12.08	12.04	11.72	11.73	17.59	≤ 19.98	Pass
11ac-VHT80	MCS0	58	5290	12.81	11.32	10.35	12.41	17.85	≤ 19.98	Pass
11ac-VHT80	MCS0	106	5530	12.97	10.53	10.44	11.15	17.42	≤ 19.98	Pass
11ac-VHT80	MCS0	122	5610	14.51	12.89	13.30	14.07	19.76	≤ 19.98	Pass
11ac-VHT80	MCS0	138	5690	14.20	13.09	13.38	14.67	19.90	≤ 19.98	Pass
11ac-VHT80	MCS0	155	5775	12.21	11.57	12.22	13.38	18.42	≤ 26.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
4TX_Ant 0 + 1 + 2 + 3										
Non-contiguous 80+80 MHz mode fall within different UNII band										
11ac-VHT80+80	MCS0	42	5210	16.61	16.89	--	--	19.76	≤ 19.98	Pass
11ac-VHT80+80	MCS0	42	5210	--	--	17.14	16.67	19.92	≤ 19.98	Pass
11ac-VHT80+80	MCS0	58	5290	17.04	15.77	--	--	19.46	≤ 19.98	Pass
11ac-VHT80+80	MCS0	58	5290	--	--	15.95	16.86	19.44	≤ 19.98	Pass
11ac-VHT80+80	MCS0	106	5530	17.25	15.53	--	--	19.48	≤ 19.98	Pass
11ac-VHT80+80	MCS0	106	5530	--	--	16.03	16.88	19.49	≤ 19.98	Pass
11ac-VHT80+80	MCS0	122	5610	17.23	15.91	--	--	19.63	≤ 19.98	Pass
11ac-VHT80+80	MCS0	122	5610	--	--	15.85	17.24	19.61	≤ 19.98	Pass
11ac-VHT80+80	MCS0	138	5690	17.07	16.40	--	--	19.76	≤ 19.98	Pass
11ac-VHT80+80	MCS0	138	5690	--	--	15.84	17.20	19.58	≤ 19.98	Pass
11ac-VHT80+80	MCS0	155	5775	18.77	17.75	--	--	21.30	≤ 26.00	Pass
11ac-VHT80+80	MCS0	155	5775	--	--	15.39	16.73	19.12	≤ 26.00	Pass
Non-contiguous 80+80 MHz mode fall within same UNII band										
11ac-VHT80+80	MCS0	106	5530	13.02	13.59	--	--	19.68	≤ 19.98	Pass
11ac-VHT80+80	MCS0	122	5610	--	--	14.03	13.91			
11ac-VHT80+80	MCS0	122	5530	--	--	14.04	13.45	19.56	≤ 19.98	Pass
11ac-VHT80+80	MCS0	106	5610	12.93	13.66	--	--			
11ac-VHT80+80	MCS0	106	5530	12.98	13.52	--	--	19.75	≤ 19.98	Pass
11ac-VHT80+80	MCS0	138	5690	--	--	14.21	14.11			
11ac-VHT80+80	MCS0	106	5530	--	--	13.92	13.35	19.51	≤ 19.98	Pass
11ac-VHT80+80	MCS0	138	5690	12.87	13.73	--	--			

Note1: Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ (dBm).

Note2: For 802.11ac-VHT80+80 mode fall within different UNII band:

$$\text{Total Average Power (dBm)} = 10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\} \text{ (dBm)}.$$

$$\text{Total Average Power (dBm)} = 10 \cdot \log \{10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\} \text{ (dBm)}.$$

For 802.11ac-VHT80+80 mode fall within same UNII band:

$$\text{Total Average Power (dBm)} = 10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}.$$

Note3: For UNII-1 Band, Power Limit = 23.98dBm - (10dBi - 6dBi) = 19.98dBm

For UNII-3 Band, Power Limit = 30dBm - (10dBi - 6dBi) = 26.00dBm;

For UNII-2A & UNII-2C Band, Power Limit = 23.98dBm - (10dBi - 6dBi) = 19.98dBm.

7.5. Transmit Power Control

7.5.1. Test Limit

The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

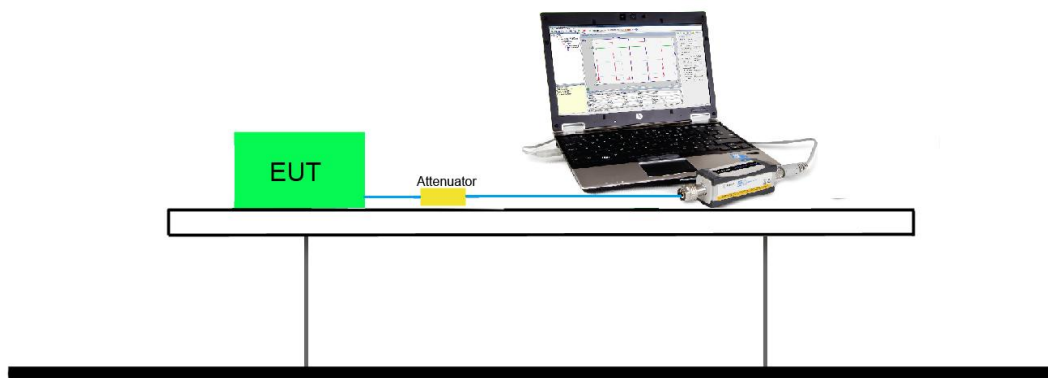
7.5.2. Test Procedure Used

KDB 789033 D02v01- Section E) 3) b) Method PM-G

7.5.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.5.4. Test Setup



7.5.5.Test Result

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	24°C
Test Engineer	Flag Yang	Relative Humidity	56%
Test Site	SR2	Test Date	2017/10/31

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 TPC Power (dBm)	Ant 1 TPC Power (dBm)	Ant 2 TPC Power (dBm)	Ant 3 TPC Power (dBm)	Limit (dBm)	Result
1TX									
11a	6Mbps	52	5260	22.18	22.78	22.70	22.49	≤ 24.00	Pass
11a	6Mbps	60	5300	22.32	22.46	22.01	22.10	≤ 24.00	Pass
11a	6Mbps	64	5320	22.11	22.47	22.52	22.23	≤ 24.00	Pass
11a	6Mbps	100	5500	22.11	22.38	22.36	22.11	≤ 24.00	Pass
11a	6Mbps	116	5580	22.09	22.48	22.59	22.32	≤ 24.00	Pass
11a	6Mbps	120	5600	22.27	22.52	22.39	22.23	≤ 24.00	Pass
11a	6Mbps	140	5700	22.56	22.39	22.52	22.72	≤ 24.00	Pass
11a	6Mbps	144	5720	22.38	22.47	22.71	22.70	≤ 24.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 1 TPC Power (dBm)	Limit (dBm)	Result
1TX_Ant 1						
11n-HT20	MCS0	52	5260	21.67	≤ 24.00	Pass
11n-HT20	MCS0	60	5300	21.57	≤ 24.00	Pass
11n-HT20	MCS0	64	5320	21.46	≤ 24.00	Pass
11n-HT20	MCS0	100	5500	21.48	≤ 24.00	Pass
11n-HT20	MCS0	116	5580	21.18	≤ 24.00	Pass
11n-HT20	MCS0	120	5600	21.09	≤ 24.00	Pass
11n-HT20	MCS0	140	5700	21.74	≤ 24.00	Pass
11n-HT20	MCS0	144	5720	21.59	≤ 24.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 1 TPC Power (dBm)	Limit (dBm)	Result
1TX_Ant 1						
11n-HT40	MCS0	54	5270	21.96	≤ 24.00	Pass
11n-HT40	MCS0	62	5310	21.89	≤ 24.00	Pass
11n-HT40	MCS0	102	5510	21.84	≤ 24.00	Pass
11n-HT40	MCS0	110	5550	22.58	≤ 24.00	Pass
11n-HT40	MCS0	118	5590	21.84	≤ 24.00	Pass
11n-HT40	MCS0	134	5670	21.71	≤ 24.00	Pass
11n-HT40	MCS0	142	5710	21.54	≤ 24.00	Pass
11ac-VHT20	MCS0	52	5260	21.97	≤ 24.00	Pass
11ac-VHT20	MCS0	60	5300	21.92	≤ 24.00	Pass
11ac-VHT20	MCS0	64	5320	21.37	≤ 24.00	Pass
11ac-VHT20	MCS0	100	5500	21.55	≤ 24.00	Pass
11ac-VHT20	MCS0	116	5580	21.35	≤ 24.00	Pass
11ac-VHT20	MCS0	120	5600	21.36	≤ 24.00	Pass
11ac-VHT20	MCS0	140	5700	21.58	≤ 24.00	Pass
11ac-VHT20	MCS0	144	5720	21.83	≤ 24.00	Pass
11ac-VHT40	MCS0	54	5270	21.69	≤ 24.00	Pass
11ac-VHT40	MCS0	62	5310	21.18	≤ 24.00	Pass
11ac-VHT40	MCS0	102	5510	21.13	≤ 24.00	Pass
11ac-VHT40	MCS0	110	5550	21.80	≤ 24.00	Pass
11ac-VHT40	MCS0	118	5590	22.13	≤ 24.00	Pass
11ac-VHT40	MCS0	134	5670	22.40	≤ 24.00	Pass
11ac-VHT40	MCS0	142	5710	21.42	≤ 24.00	Pass
11ac-VHT80	MCS0	58	5290	21.78	≤ 24.00	Pass
11ac-VHT80	MCS0	106	5530	22.03	≤ 24.00	Pass
11ac-VHT80	MCS0	122	5610	21.73	≤ 24.00	Pass
11ac-VHT80	MCS0	138	5690	21.66	≤ 24.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 TPC Power (dBm)	Ant 1 TPC Power (dBm)	Ant 2 TPC Power (dBm)	Ant 3 TPC Power (dBm)	Total EIRP TPC Power (dBm)	Limit (dBm)	Result
4TX_Ant 0 + 1 + 2 + 3										
11n-HT20	MCS0	52	5260	6.34	6.12	6.33	6.21	22.27	≤ 24.00	Pass
11n-HT20	MCS0	60	5300	6.94	6.64	6.44	6.88	22.75	≤ 24.00	Pass
11n-HT20	MCS0	64	5320	6.52	6.35	6.31	6.71	22.50	≤ 24.00	Pass
11n-HT20	MCS0	100	5500	6.96	6.29	6.18	6.64	22.55	≤ 24.00	Pass
11n-HT20	MCS0	116	5580	6.37	6.36	6.22	6.24	22.32	≤ 24.00	Pass
11n-HT20	MCS0	120	5600	6.71	6.52	6.14	6.61	22.52	≤ 24.00	Pass
11n-HT20	MCS0	140	5700	6.65	6.27	6.65	6.61	22.57	≤ 24.00	Pass
11n-HT20	MCS0	144	5720	6.38	6.46	6.65	6.74	22.58	≤ 24.00	Pass
11n-HT40	MCS0	54	5270	6.82	6.58	6.72	6.63	22.71	≤ 24.00	Pass
11n-HT40	MCS0	62	5310	7.56	7.67	7.54	7.70	23.64	≤ 24.00	Pass
11n-HT40	MCS0	102	5510	7.09	7.03	7.23	7.62	23.27	≤ 24.00	Pass
11n-HT40	MCS0	110	5550	7.69	7.87	7.70	7.37	23.68	≤ 24.00	Pass
11n-HT40	MCS0	118	5590	7.64	7.54	7.89	7.75	23.73	≤ 24.00	Pass
11n-HT40	MCS0	134	5670	7.85	7.50	7.59	7.69	23.68	≤ 24.00	Pass
11n-HT40	MCS0	142	5710	7.85	7.45	7.54	7.73	23.67	≤ 24.00	Pass
11ac-VHT20	MCS0	52	5260	6.54	6.66	6.38	6.24	22.48	≤ 24.00	Pass
11ac-VHT20	MCS0	60	5300	6.35	6.66	6.58	6.57	22.56	≤ 24.00	Pass
11ac-VHT20	MCS0	64	5320	6.63	6.64	6.71	6.83	22.72	≤ 24.00	Pass
11ac-VHT20	MCS0	100	5500	7.09	7.30	7.13	7.51	23.28	≤ 24.00	Pass
11ac-VHT20	MCS0	116	5580	6.32	6.88	6.52	6.28	22.53	≤ 24.00	Pass
11ac-VHT20	MCS0	120	5600	6.84	6.38	6.24	6.17	22.44	≤ 24.00	Pass
11ac-VHT20	MCS0	140	5700	6.88	6.46	6.63	6.79	22.71	≤ 24.00	Pass
11ac-VHT20	MCS0	144	5720	6.53	6.53	6.74	6.99	22.72	≤ 24.00	Pass
11ac-VHT40	MCS0	54	5270	7.74	7.16	7.38	7.24	23.41	≤ 24.00	Pass
11ac-VHT40	MCS0	62	5310	7.57	7.71	7.26	7.60	23.56	≤ 24.00	Pass
11ac-VHT40	MCS0	102	5510	6.84	6.98	6.88	6.74	22.88	≤ 24.00	Pass
11ac-VHT40	MCS0	110	5550	7.65	7.69	7.48	7.44	23.59	≤ 24.00	Pass
11ac-VHT40	MCS0	118	5590	7.69	7.90	7.81	7.63	23.78	≤ 24.00	Pass
11ac-VHT40	MCS0	134	5670	7.64	7.52	7.71	7.23	23.55	≤ 24.00	Pass
11ac-VHT40	MCS0	142	5710	7.42	7.51	7.68	7.54	23.56	≤ 24.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 TPC Power (dBm)	Ant 1 TPC Power (dBm)	Ant 2 TPC Power (dBm)	Ant 3 TPC Power (dBm)	Total EIRP TPC Power (dBm)	Limit (dBm)	Result
4TX_Ant 0 + 1 + 2 + 3										
11ac-VHT80	MCS0	58	5290	6.63	6.58	6.45	6.31	22.51	≤ 24.00	Pass
11ac-VHT80	MCS0	106	5530	6.84	6.51	6.37	6.86	22.67	≤ 24.00	Pass
11ac-VHT80	MCS0	122	5610	7.33	7.79	7.25	7.68	23.54	≤ 24.00	Pass
11ac-VHT80	MCS0	138	5690	7.62	7.99	7.53	7.65	23.72	≤ 24.00	Pass
Non-contiguous 80+80 MHz mode fall within different UNII band										
11ac-VHT80+80	MCS0	58	5290	10.32	10.45	--	--	23.40	≤ 24.00	Pass
11ac-VHT80+80	MCS0	58	5290	--	--	10.43	10.35	23.40	≤ 24.00	Pass
11ac-VHT80+80	MCS0	106	5530	10.41	10.42	--	--	23.43	≤ 24.00	Pass
11ac-VHT80+80	MCS0	106	5530	--	--	10.67	10.56	23.63	≤ 24.00	Pass
11ac-VHT80+80	MCS0	122	5610	10.63	10.73	--	--	23.69	≤ 24.00	Pass
11ac-VHT80+80	MCS0	122	5610	--	--	10.51	10.65	23.59	≤ 24.00	Pass
11ac-VHT80+80	MCS0	138	5690	10.62	10.55	--	--	23.60	≤ 24.00	Pass
11ac-VHT80+80	MCS0	138	5690	--	--	10.57	10.41	23.50	≤ 24.00	Pass
Non-contiguous 80+80 MHz mode fall within same UNII band										
11ac-VHT80+80	MCS0	106	5530	7.11	7.32	--	--	23.59	≤ 24.00	Pass
11ac-VHT80+80	MCS0	122	5610	--	--	7.93	7.88			
11ac-VHT80+80	MCS0	122	5530	--	--	7.99	7.52	23.45	≤ 24.00	Pass
11ac-VHT80+80	MCS0	106	5610	6.98	7.15	--	--			
11ac-VHT80+80	MCS0	106	5530	7.02	7.33	--	--	23.13	≤ 24.00	Pass
11ac-VHT80+80	MCS0	138	5690	--	--	7.01	7.05			
11ac-VHT80+80	MCS0	106	5530	--	--	7.74	7.41	23.34	≤ 24.00	Pass
11ac-VHT80+80	MCS0	138	5690	6.97	7.13	--	--			

Note1. Total EIRP TPC Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 TPC Power} / 10)} + 10^{(\text{Ant 1 TPC Power} / 10)} + 10^{(\text{Ant 2 TPC Power} / 10)} + 10^{(\text{Ant 3 TPC Power} / 10)}\} + \text{Antenna Gain (dBi)}$.

Note2: For 802.11ac-VHT80+80 mode fall within different UNII band:

Ant 0 & Ant 1: Total EIRP TPC Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 TPC Power} / 10)} + 10^{(\text{Ant 1 TPC Power} / 10)}\} + \text{Antenna Gain (dBi)}$.

Ant 2 & Ant 3: Total EIRP TPC Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 2 TPC Power} / 10)} + 10^{(\text{Ant 3 TPC Power} / 10)}\} + \text{Antenna Gain (dBi)}$.

For 802.11ac-VHT80+80 mode fall within same UNII band:

Total EIRP TPC Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 TPC Power} / 10)} + 10^{(\text{Ant 1 TPC Power} / 10)} + 10^{(\text{Ant 2 TPC Power} / 10)} + 10^{(\text{Ant 3 TPC Power} / 10)}\} + \text{Antenna Gain (dBi)}$

7.6. Power Spectral Density Measurement

7.6.1. Test Limit

For client device operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

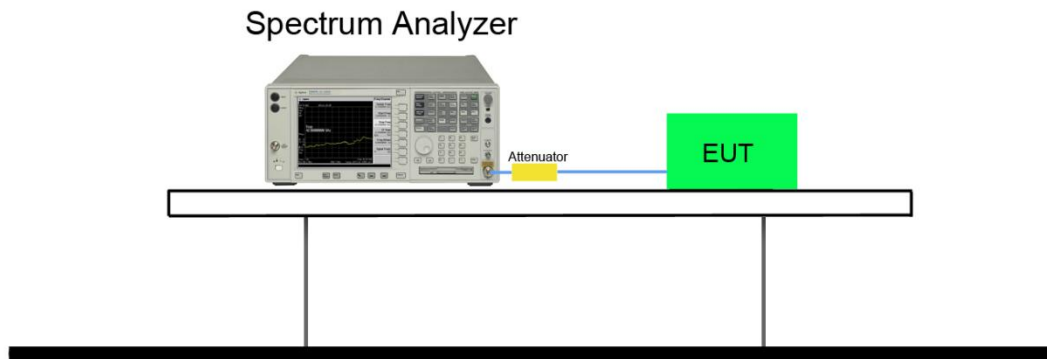
7.6.2. Test Procedure Used

KDB 789033 D02v01r04 - Section F

7.6.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz,
RBW = 100 kHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. Add $10 \cdot \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \cdot \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
11. When the measurement bandwidth of Maximum PSD is specified in 500 kHz, add a constant factor $10 \cdot \log(500\text{kHz}/100\text{kHz}) = 6.99$ dB to the measured result.

7.6.4. Test Setup



7.6.5. Test Result

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	23°C
Test Engineer	Flag Yang	Relative Humidity	52%
Test Site	SR2	Test Date	2017/11/08
Test Item	Power Spectral Density (UNII-Band 1 & UNII-2A & UNII-2C)		

Test Mode	Data Rate	Channel No.	Freq. (MHz)	PSD (dBm/MHz)				Duty Cycle (%)	Final PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
				Ant 0	Ant 1	Ant 2	Ant 3				
1TX_Ant 1											
11a	6Mbps	36	5180	6.44	6.72	6.74	6.71	97.04	6.87	≤ 7.00	Pass
11a	6Mbps	44	5220	6.50	6.37	6.45	6.79	97.04	6.92	≤ 7.00	Pass
11a	6Mbps	48	5240	6.80	6.40	6.34	6.65	97.04	6.93	≤ 7.00	Pass
11a	6Mbps	52	5260	6.63	6.58	6.48	6.65	97.04	6.78	≤ 7.00	Pass
11a	6Mbps	60	5300	6.48	6.74	6.41	6.62	97.04	6.87	≤ 7.00	Pass
11a	6Mbps	64	5320	6.52	6.77	6.57	6.51	97.04	6.90	≤ 7.00	Pass
11a	6Mbps	100	5500	6.44	6.55	6.78	6.60	97.04	6.91	≤ 7.00	Pass
11a	6Mbps	116	5580	6.55	6.75	6.44	6.45	97.04	6.88	≤ 7.00	Pass
11a	6Mbps	120	5600	6.42	6.52	6.75	6.44	97.04	6.88	≤ 7.00	Pass
11a	6Mbps	140	5700	6.61	6.30	6.28	6.58	97.04	6.74	≤ 7.00	Pass
11a	6Mbps	144	5720	6.74	6.56	6.47	6.74	97.04	6.87	≤ 7.00	Pass

Note 1: When EUT duty cycle ≥ 98%, Final PSD (dBm/MHz) = Max Each PSD (dBm/MHz).

Note 2: When EUT duty cycle < 98%, Final PSD (dBm/MHz) = Max Each PSD (dBm/MHz) + 10*log (1/Duty Cycle).

Note 3: PSD Limit Calculation as below:

For UNII-1 & UNII-2A & UNII-2C & UNII-3 Band

802.11a/n-HT20/n-HT40/ac-VHT20/ac-VHT40/ac-VHT80:

11dBm/MHz - (10dBi - 6dBi) = 7.00dBm/MHz.

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 1 PSD (dBm/ MHz)	Duty Cycle (%)	Final PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
1TX_Ant 1								
11n-HT20	MCS0	36	5180	6.93	98.68	6.93	≤ 7.00	Pass
11n-HT20	MCS0	44	5220	6.66	98.68	6.66	≤ 7.00	Pass
11n-HT20	MCS0	48	5240	6.54	98.68	6.54	≤ 7.00	Pass
11n-HT20	MCS0	52	5260	6.58	98.68	6.58	≤ 7.00	Pass
11n-HT20	MCS0	60	5300	6.71	98.68	6.71	≤ 7.00	Pass
11n-HT20	MCS0	64	5320	6.59	98.68	6.59	≤ 7.00	Pass
11n-HT20	MCS0	100	5500	6.75	98.68	6.75	≤ 7.00	Pass
11n-HT20	MCS0	116	5580	6.49	98.68	6.49	≤ 7.00	Pass
11n-HT20	MCS0	120	5600	6.74	98.68	6.74	≤ 7.00	Pass
11n-HT20	MCS0	140	5700	6.54	98.68	6.54	≤ 7.00	Pass
11n-HT20	MCS0	144	5720	6.67	98.68	6.67	≤ 7.00	Pass
11n-HT40	MCS0	38	5190	5.34	97.71	5.44	≤ 7.00	Pass
11n-HT40	MCS0	46	5230	5.97	97.71	6.07	≤ 7.00	Pass
11n-HT40	MCS0	54	5270	6.84	97.71	6.94	≤ 7.00	Pass
11n-HT40	MCS0	62	5310	6.80	97.71	6.90	≤ 7.00	Pass
11n-HT40	MCS0	102	5510	6.68	97.71	6.78	≤ 7.00	Pass
11n-HT40	MCS0	110	5550	6.81	97.71	6.91	≤ 7.00	Pass
11n-HT40	MCS0	118	5590	6.64	97.71	6.74	≤ 7.00	Pass
11n-HT40	MCS0	134	5670	6.53	97.71	6.63	≤ 7.00	Pass
11n-HT40	MCS0	142	5710	6.67	97.71	6.77	≤ 7.00	Pass
11ac-VHT20	MCS0	36	5180	6.90	98.68	6.90	≤ 7.00	Pass
11ac-VHT20	MCS0	44	5220	6.69	98.68	6.69	≤ 7.00	Pass
11ac-VHT20	MCS0	48	5240	6.52	98.68	6.52	≤ 7.00	Pass
11ac-VHT20	MCS0	52	5260	6.59	98.68	6.59	≤ 7.00	Pass
11ac-VHT20	MCS0	60	5300	6.70	98.68	6.70	≤ 7.00	Pass
11ac-VHT20	MCS0	64	5320	6.44	98.68	6.44	≤ 7.00	Pass
11ac-VHT20	MCS0	100	5500	6.81	98.68	6.81	≤ 7.00	Pass
11ac-VHT20	MCS0	116	5580	6.50	98.68	6.50	≤ 7.00	Pass
11ac-VHT20	MCS0	120	5600	6.58	98.68	6.58	≤ 7.00	Pass
11ac-VHT20	MCS0	140	5700	6.66	98.68	6.66	≤ 7.00	Pass
11ac-VHT20	MCS0	144	5720	6.66	98.68	6.66	≤ 7.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 1 PSD (dBm/ MHz)	Duty Cycle (%)	Final PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
1TX_Ant 1								
11ac-VHT40	MCS0	38	5190	4.81	97.44	4.92	≤ 7.00	Pass
11ac-VHT40	MCS0	46	5230	5.84	97.44	5.95	≤ 7.00	Pass
11ac-VHT40	MCS0	54	5270	6.77	97.44	6.88	≤ 7.00	Pass
11ac-VHT40	MCS0	62	5310	6.62	97.44	6.73	≤ 7.00	Pass
11ac-VHT40	MCS0	102	5510	6.76	97.44	6.87	≤ 7.00	Pass
11ac-VHT40	MCS0	110	5550	6.69	97.44	6.80	≤ 7.00	Pass
11ac-VHT40	MCS0	118	5590	6.47	97.44	6.58	≤ 7.00	Pass
11ac-VHT40	MCS0	134	5670	6.44	97.44	6.55	≤ 7.00	Pass
11ac-VHT40	MCS0	142	5710	6.63	97.44	6.74	≤ 7.00	Pass
11ac-VHT80	MCS0	42	5210	0.04	95.03	0.26	≤ 7.00	Pass
11ac-VHT80	MCS0	58	5290	-2.04	95.03	-1.82	≤ 7.00	Pass
11ac-VHT80	MCS0	106	5530	-1.65	95.03	-1.43	≤ 7.00	Pass
11ac-VHT80	MCS0	122	5610	-0.85	95.03	-0.63	≤ 7.00	Pass
11ac-VHT80	MCS0	138	5690	-1.37	95.03	-1.15	≤ 7.00	Pass

Note 1: When EUT duty cycle $\geq 98\%$, Final PSD (dBm/MHz) = Max Each PSD (dBm/MHz).

Note 2: When EUT duty cycle $< 98\%$, Final PSD (dBm/MHz) = Max Each PSD (dBm/MHz) + $10 \cdot \log(1/\text{Duty Cycle})$.

Note 3: PSD Limit Calculation as below:

For UNII-1 & UNII-2A & UNII-2C & UNII-3 Band

802.11a/n-HT20/n-HT40/ac-VHT20/ac-VHT40/ac-VHT80:

11dBm/MHz - (10dBi - 6dBi) = 7.00dBm/MHz.

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
4TX_Ant 0 + 1 + 2 + 3											
11n-HT20	MCS0	36	5180	0.61	0.63	0.21	0.23	98.68	6.45	≤ 7.00	Pass
11n-HT20	MCS0	44	5220	0.87	1.01	0.83	0.65	98.68	6.86	≤ 7.00	Pass
11n-HT20	MCS0	48	5240	0.94	0.96	0.36	0.77	98.68	6.78	≤ 7.00	Pass
11n-HT20	MCS0	52	5260	0.85	1.22	0.37	-0.14	98.68	6.63	≤ 7.00	Pass
11n-HT20	MCS0	60	5300	0.58	1.49	0.45	0.14	98.68	6.72	≤ 7.00	Pass
11n-HT20	MCS0	64	5320	0.69	0.95	0.89	-0.21	98.68	6.62	≤ 7.00	Pass
11n-HT20	MCS0	100	5500	-0.41	1.23	1.46	0.08	98.68	6.68	≤ 7.00	Pass
11n-HT20	MCS0	116	5580	0.01	1.16	0.58	0.23	98.68	6.54	≤ 7.00	Pass
11n-HT20	MCS0	120	5600	-1.09	1.53	1.25	0.84	98.68	6.76	≤ 7.00	Pass
11n-HT20	MCS0	140	5700	0.28	0.43	0.76	0.64	98.68	6.55	≤ 7.00	Pass
11n-HT20	MCS0	144	5720	0.12	0.50	0.80	0.76	98.68	6.57	≤ 7.00	Pass
11n-HT40	MCS0	38	5190	0.77	0.56	0.36	0.42	97.71	6.65	≤ 7.00	Pass
11n-HT40	MCS0	46	5230	0.75	0.72	0.32	0.66	97.71	6.74	≤ 7.00	Pass
11n-HT40	MCS0	54	5270	0.73	1.27	0.56	0.12	97.71	6.81	≤ 7.00	Pass
11n-HT40	MCS0	62	5310	0.45	1.27	0.56	0.35	97.71	6.79	≤ 7.00	Pass
11n-HT40	MCS0	102	5510	0.51	1.23	1.23	0.12	97.71	6.92	≤ 7.00	Pass
11n-HT40	MCS0	110	5550	0.14	0.67	0.91	0.17	97.71	6.61	≤ 7.00	Pass
11n-HT40	MCS0	118	5590	0.04	0.82	0.79	0.02	97.71	6.56	≤ 7.00	Pass
11n-HT40	MCS0	134	5670	0.06	1.04	0.94	0.82	97.71	6.85	≤ 7.00	Pass
11n-HT40	MCS0	142	5710	0.30	0.76	0.86	1.05	97.71	6.87	≤ 7.00	Pass
11ac-VHT20	MCS0	36	5180	0.58	0.69	0.24	0.43	98.68	6.51	≤ 7.00	Pass
11ac-VHT20	MCS0	44	5220	0.72	0.85	0.52	0.47	98.68	6.66	≤ 7.00	Pass
11ac-VHT20	MCS0	48	5240	0.98	0.73	0.50	0.60	98.68	6.73	≤ 7.00	Pass
11ac-VHT20	MCS0	52	5260	0.71	0.86	0.26	0.10	98.68	6.51	≤ 7.00	Pass
11ac-VHT20	MCS0	60	5300	0.81	1.29	0.47	0.13	98.68	6.72	≤ 7.00	Pass
11ac-VHT20	MCS0	64	5320	0.55	1.03	0.94	-0.17	98.68	6.63	≤ 7.00	Pass
11ac-VHT20	MCS0	100	5500	0.15	1.24	1.19	0.05	98.68	6.71	≤ 7.00	Pass
11ac-VHT20	MCS0	116	5580	0.13	1.21	0.50	0.28	98.68	6.57	≤ 7.00	Pass
11ac-VHT20	MCS0	120	5600	0.30	1.28	0.73	0.84	98.68	6.82	≤ 7.00	Pass
11ac-VHT20	MCS0	140	5700	0.15	0.66	0.60	0.58	98.68	6.52	≤ 7.00	Pass
11ac-VHT20	MCS0	144	5720	0.31	0.72	0.60	0.74	98.68	6.62	≤ 7.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
4TX_Ant 0 + 1 + 2 + 3											
11ac-VHT40	MCS0	38	5190	0.93	0.85	0.38	0.58	97.44	6.82	≤ 7.00	Pass
11ac-VHT40	MCS0	46	5230	0.62	0.55	0.31	0.44	97.44	6.61	≤ 7.00	Pass
11ac-VHT40	MCS0	54	5270	0.86	1.31	0.23	0.15	97.44	6.80	≤ 7.00	Pass
11ac-VHT40	MCS0	62	5310	0.77	1.21	0.46	0.29	97.44	6.83	≤ 7.00	Pass
11ac-VHT40	MCS0	102	5510	0.08	1.11	1.12	0.13	97.44	6.77	≤ 7.00	Pass
11ac-VHT40	MCS0	110	5550	0.06	1.25	0.90	0.11	97.44	6.74	≤ 7.00	Pass
11ac-VHT40	MCS0	118	5590	0.13	0.86	0.72	0.26	97.44	6.64	≤ 7.00	Pass
11ac-VHT40	MCS0	134	5670	0.18	0.86	0.97	0.80	97.44	6.85	≤ 7.00	Pass
11ac-VHT40	MCS0	142	5710	0.42	0.70	0.92	1.19	97.44	6.95	≤ 7.00	Pass
11ac-VHT80	MCS0	42	5210	-5.61	-6.81	-7.18	-5.68	95.03	-0.02	≤ 7.00	Pass
11ac-VHT80	MCS0	58	5290	-5.43	-6.50	-7.37	-5.35	95.03	0.16	≤ 7.00	Pass
11ac-VHT80	MCS0	106	5530	-4.80	-7.21	-7.17	-6.69	95.03	-0.11	≤ 7.00	Pass
11ac-VHT80	MCS0	122	5610	3.63	1.88	2.27	3.11	95.03	9.02	≤ 7.00	Pass
11ac-VHT80	MCS0	138	5690	1.63	0.23	0.60	1.74	95.03	7.34	≤ 7.00	Pass
Non-contiguous 80+80 MHz mode fall within different UNII band											
11ac-VHT80+80	MCS0	42	5210	-0.58	-0.59	--	--	95.03	2.65	≤ 7.00	Pass
11ac-VHT80+80	MCS0	42	5210	--	--	-0.90	-1.48	95.03	2.05	≤ 7.00	Pass
11ac-VHT80+80	MCS0	58	5290	-1.23	-2.22	--	--	95.03	1.53	≤ 7.00	Pass
11ac-VHT80+80	MCS0	58	5290	--	--	-3.33	-2.05	95.03	0.59	≤ 7.00	Pass
11ac-VHT80+80	MCS0	106	5530	0.11	-1.74	--	--	95.03	2.51	≤ 7.00	Pass
11ac-VHT80+80	MCS0	106	5530	--	--	-1.98	-0.95	95.03	1.80	≤ 7.00	Pass
11ac-VHT80+80	MCS0	122	5610	-0.36	-1.20	--	--	95.03	2.47	≤ 7.00	Pass
11ac-VHT80+80	MCS0	122	5610	--	--	-0.27	1.00	95.03	3.64	≤ 7.00	Pass
11ac-VHT80+80	MCS0	138	5690	-0.97	-1.94	--	--	95.03	1.80	≤ 7.00	Pass
11ac-VHT80+80	MCS0	138	5690	--	--	-0.20	1.42	95.03	3.92	≤ 7.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
Non-contiguous 80+80 MHz mode fall within same UNII band											
11ac-VHT80+80	MCS0	106	5530	-4.59	-3.47	--	--	95.03	2.65	≤ 7.00	Pass
11ac-VHT80+80	MCS0	122	5610	--	--	-3.07	-3.39				
11ac-VHT80+80	MCS0	122	5530	--	--	-3.59	-3.98	95.03	2.43	≤ 7.00	Pass
11ac-VHT80+80	MCS0	106	5610	-4.32	-3.43	--	--				
11ac-VHT80+80	MCS0	106	5530	-4.55	-3.89	--	--	95.03	2.53	≤ 7.00	Pass
11ac-VHT80+80	MCS0	138	5690	--	--	-3.24	-3.31				
11ac-VHT80+80	MCS0	106	5530	--	--	-3.42	-4.26	95.03	2.38	≤ 7.00	Pass
11ac-VHT80+80	MCS0	138	5690	-4.67	-3.24	--	--				

Note 1: When EUT duty cycle ≥ 98%, Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$.

Note 2: When EUT duty cycle < 98%, Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\} + 10 \cdot \log (1/\text{Duty Cycle})$.

Note 3: For 802.11ac-VHT80+80 mode fall within different UNII band:

Ant 0 & Ant 1: Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\}$ (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$.

Ant 2 & Ant 3: Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$.

For 802.11ac-VHT80+80 mode fall within same UNII band:

Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\} + 10 \cdot \log (1/\text{Duty Cycle})$.

Note 4: PSD Limit Calculation as below:

For UNII-1 & UNII-2A & UNII-2C & UNII-3 Band

802.11a/n-HT20/n-HT40/ac-VHT20/ac-VHT40/ac-VHT80:

11dBm/MHz - (10dBi - 6dBi) = 7.00dBm/MHz.

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	23°C
Test Engineer	Alex Ma	Relative Humidity	52%
Test Site	SR2	Test Date	2017/11/08
Test Item	Power Spectral Density (UNII-Band 3)		

Test Mode	Data Rate	Channel No.	Freq. (MHz)	PSD (dBm/100kHz)				Duty Cycle (%)	Constant Factor (dB)	Final PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
				Ant 0	Ant 1	Ant 2	Ant 3					
1TX												
11a	6Mbps	149	5745	1.30	0.63	0.94	2.15	97.04	6.99	9.27	≤ 26.00	Pass
11a	6Mbps	157	5785	1.41	0.82	0.95	2.62	97.04	6.99	9.74	≤ 26.00	Pass
11a	6Mbps	165	5825	1.42	0.85	1.18	2.50	97.04	6.99	9.62	≤ 26.00	Pass

Note 1: When EUT duty cycle ≥ 98%, Final PSD (dBm/500kHz) = Max each PSD (dBm/100kHz).

Note 2: When EUT duty cycle < 98%, Final PSD (dBm/500kHz) = Max each PSD (dBm/100kHz) + 10*log (1/Duty Cycle).

Note 3: PSD Limit Calculation as below:

For 5725-5850MHz

30dBm/500kHz - (10dBi - 6dBi) = 26.00dBm/500kHz.

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 1 PSD (dBm/100kHz)	Duty Cycle (%)	Constant Factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
1TX									
11n-HT20	MCS0	149	5745	0.60	98.68	6.99	7.59	≤ 26.00	Pass
11n-HT20	MCS0	157	5785	0.61	98.68	6.99	7.60	≤ 26.00	Pass
11n-HT20	MCS0	165	5825	0.29	98.68	6.99	7.28	≤ 26.00	Pass
11n-HT40	MCS0	151	5755	-2.15	97.71	6.99	4.94	≤ 26.00	Pass
11n-HT40	MCS0	159	5795	-1.91	97.71	6.99	5.18	≤ 26.00	Pass
11ac-VHT20	MCS0	149	5745	0.50	98.68	6.99	7.49	≤ 26.00	Pass
11ac-VHT20	MCS0	157	5785	0.54	98.68	6.99	7.53	≤ 26.00	Pass
11ac-VHT20	MCS0	165	5825	0.46	98.68	6.99	7.45	≤ 26.00	Pass
11ac-VHT40	MCS0	151	5755	-2.24	97.44	6.99	4.86	≤ 26.00	Pass
11ac-VHT40	MCS0	159	5795	-2.05	97.44	6.99	5.05	≤ 26.00	Pass
11ac-VHT80	MCS0	155	5775	-7.43	95.03	6.99	-0.22	≤ 26.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/100kHz)	Ant 1 PSD (dBm/100kHz)	Ant 2 PSD (dBm/100kHz)	Ant 3 PSD (dBm/100kHz)	Duty Cycle (%)	Constant Factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
4TX_Ant 0 + 1 + 2 + 3												
11n-HT20	MCS0	149	5745	0.14	-0.43	0.70	0.79	98.68	6.99	13.34	≤ 26.00	Pass
11n-HT20	MCS0	157	5785	0.35	0.11	0.30	0.62	98.68	6.99	13.36	≤ 26.00	Pass
11n-HT20	MCS0	165	5825	0.23	-0.46	0.31	0.23	98.68	6.99	13.10	≤ 26.00	Pass
11n-HT40	MCS0	151	5755	-3.13	-4.37	-3.94	-2.09	97.71	6.99	9.82	≤ 26.00	Pass
11n-HT40	MCS0	159	5795	-3.66	-3.13	-3.07	-1.49	97.71	6.99	10.35	≤ 26.00	Pass
11ac-VHT20	MCS0	149	5745	0.37	-0.21	0.29	0.83	98.68	6.99	13.35	≤ 26.00	Pass
11ac-VHT20	MCS0	157	5785	0.29	0.03	0.75	1.60	98.68	6.99	13.72	≤ 26.00	Pass
11ac-VHT20	MCS0	165	5825	0.34	-0.37	0.35	1.28	98.68	6.99	13.45	≤ 26.00	Pass
11ac-VHT40	MCS0	151	5755	-4.51	-5.11	-4.35	-3.21	97.44	6.99	8.88	≤ 26.00	Pass
11ac-VHT40	MCS0	159	5795	-4.15	-4.80	-3.63	-3.15	97.44	6.99	9.23	≤ 26.00	Pass
11ac-VHT80	MCS0	155	5775	-14.53	-16.49	-14.34	-11.47	95.03	6.99	-0.59	≤ 26.00	Pass
11ac-VHT80+80	MCS0	155	5775	-8.26	-9.05	--	--	95.03	6.99	1.58	≤ 26.00	Pass
11ac-VHT80+80	MCS0	155	5775	--	--	-5.86	-7.42	95.03	6.99	3.65	≤ 26.00	Pass

Note 1: When EUT duty cycle ≥ 98%, Total PSD (dBm/500kHz) = $10^{\log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}}$ (dBm/100kHz) + Constant Factor.

Note 2: When EUT duty cycle < 98%, Total PSD (dBm/500kHz) = $10^{\log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}}$ (dBm/100kHz) + Constant Factor + $10^{\log (1/\text{Duty Cycle})}$.

Note 3: For 802.11ac-VHT80+80:

Ant 0 & Ant 1: Total PSD (dBm/500kHz) = $10^{\log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\}}$ (dBm/100kHz) + Constant Factor + $10^{\log (1/\text{Duty Cycle})}$.

Ant 2 & Ant 3: Total PSD (dBm/500kHz) = $10^{\log \{10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}}$ (dBm/100kHz) + Constant Factor + $10^{\log (1/\text{Duty Cycle})}$.

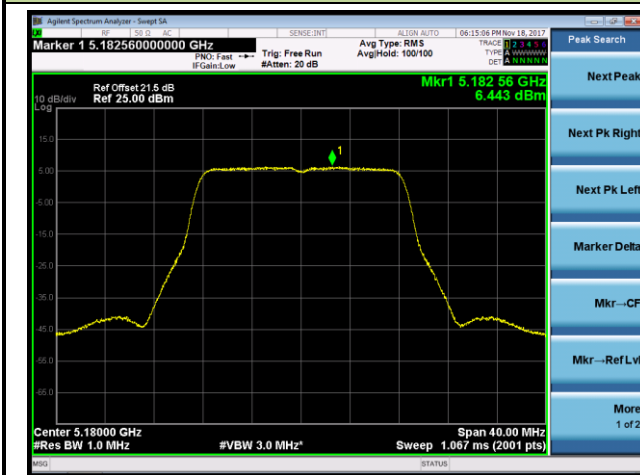
Note 3: PSD Limit Calculation as below:

For 5725-5850MHz

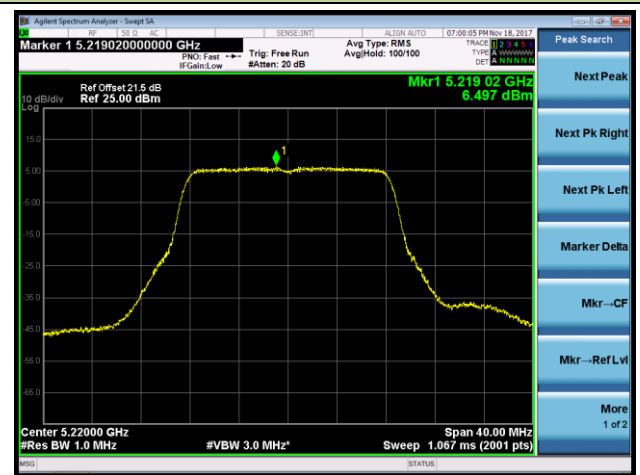
30dBm/500kHz - (10dBi - 6dBi) = 26.00dBm/500kHz.

802.11a Power Spectral Density - Ant 0

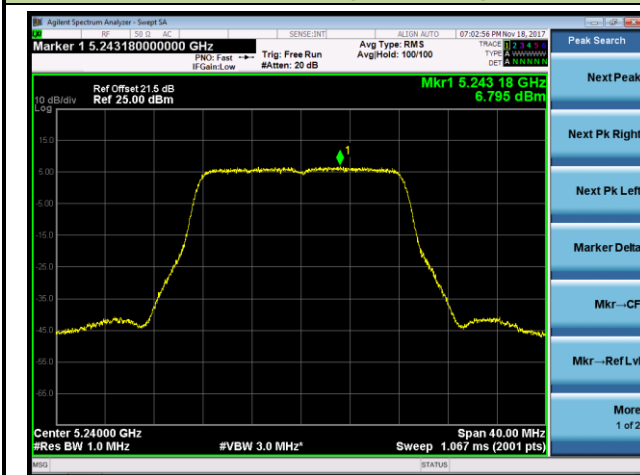
Channel 36 (5180MHz)



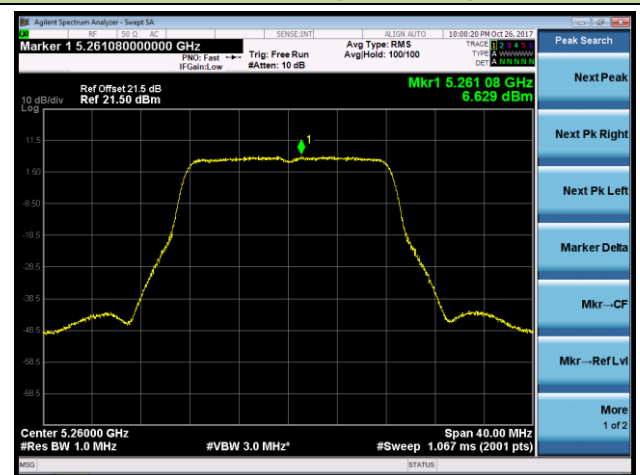
Channel 44 (5220MHz)



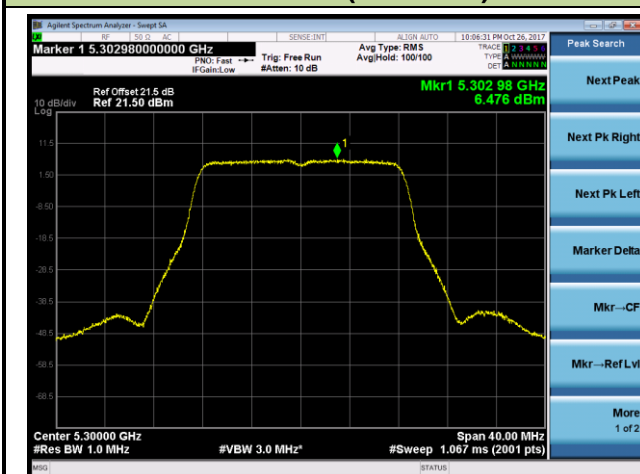
Channel 48 (5240MHz)



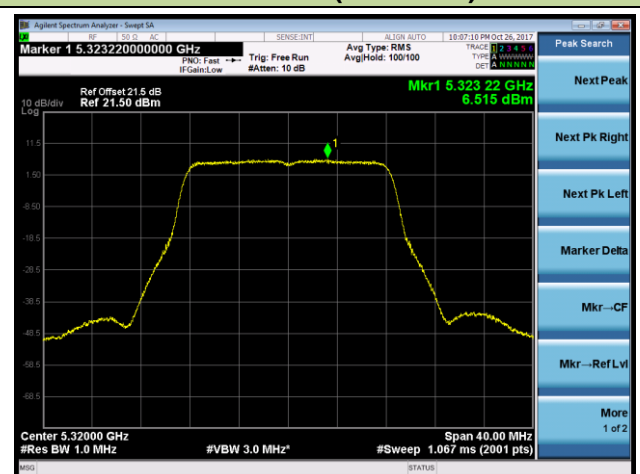
Channel 52 (5260MHz)



Channel 60 (5300MHz)

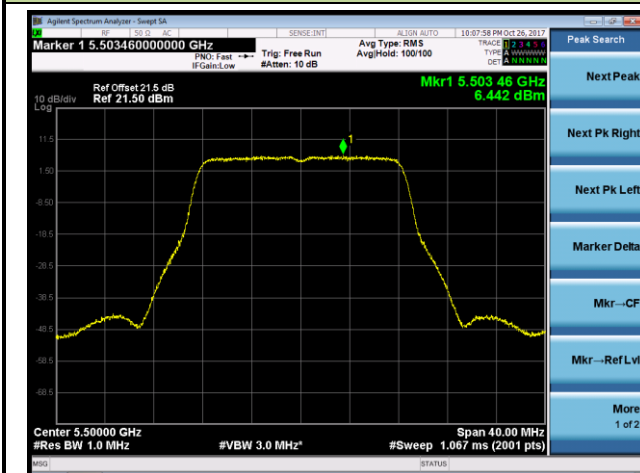


Channel 64 (5320MHz)

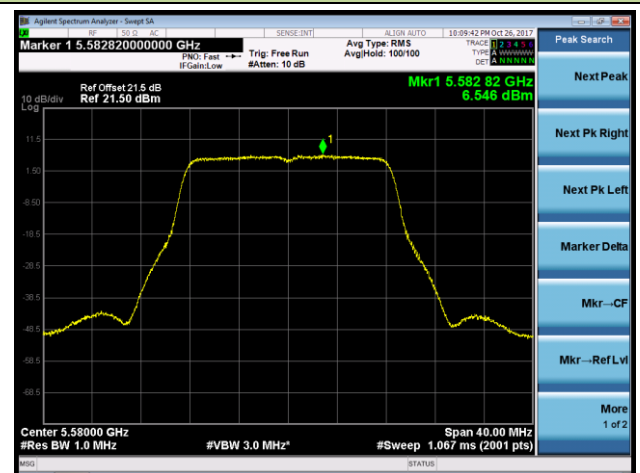


802.11a Power Spectral Density - Ant 0

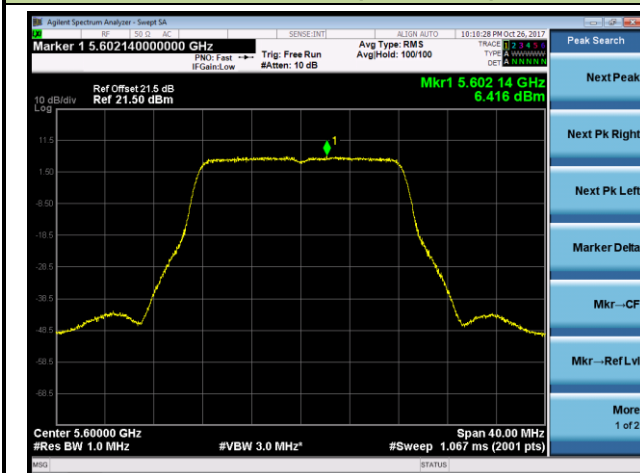
Channel 100 (5500MHz)



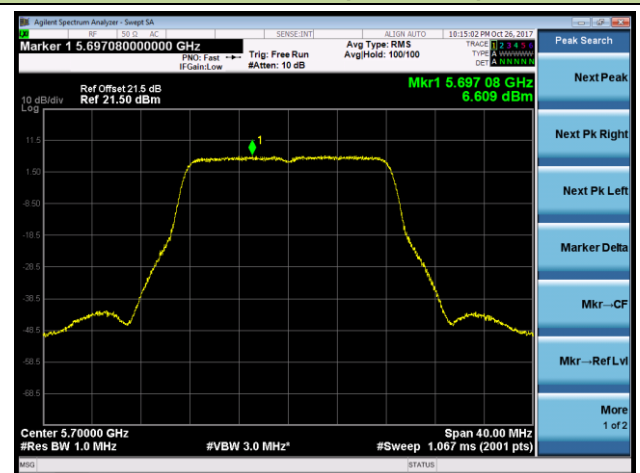
Channel 116 (5580MHz)



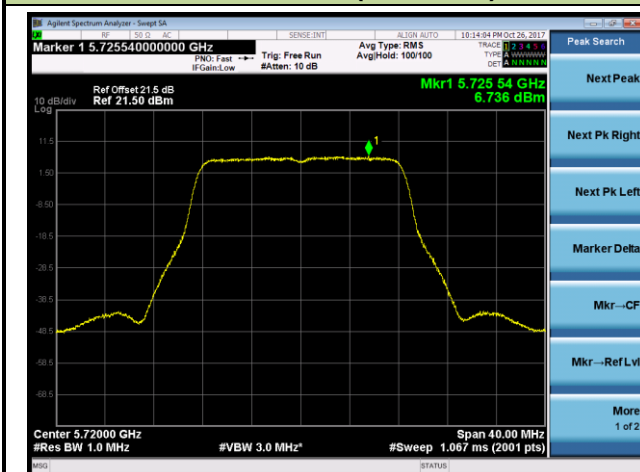
Channel 120 (5600MHz)



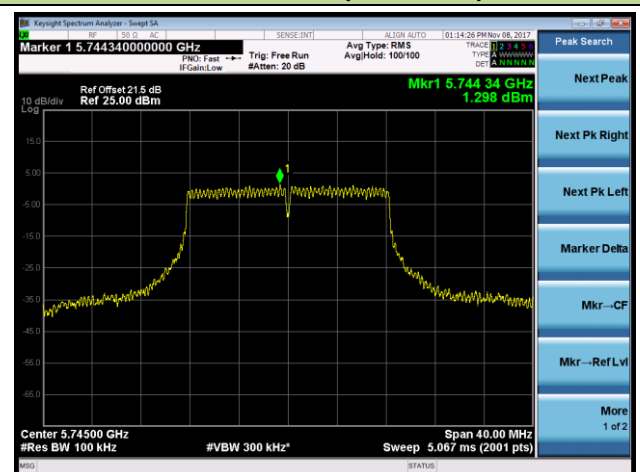
Channel 140 (5700MHz)



Channel 144 (5720MHz)

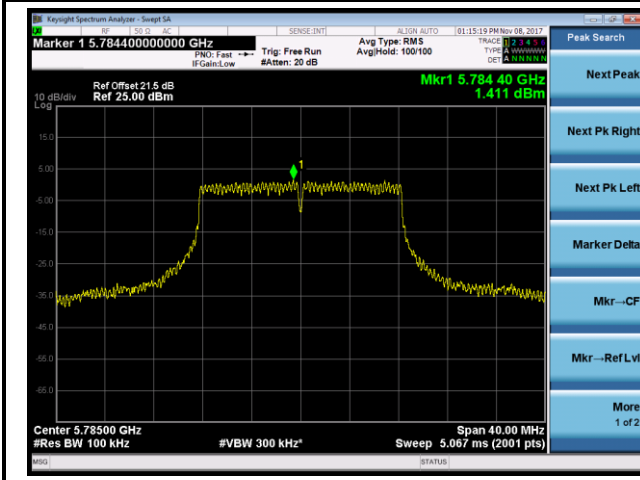


Channel 149 (5745MHz)

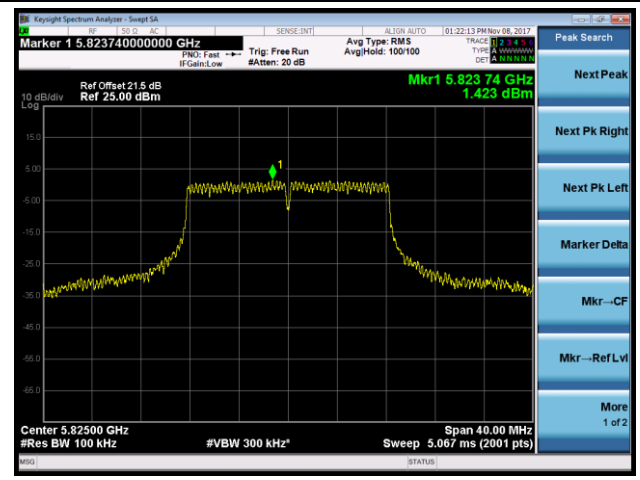


802.11a Power Spectral Density - Ant 0

Channel 157 (5785MHz)

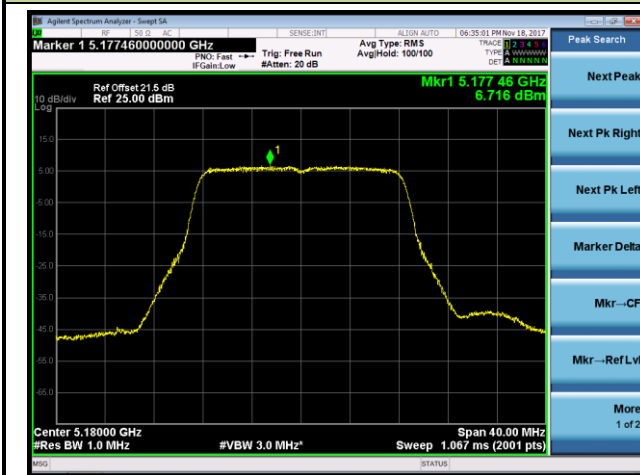


Channel 165 (5825MHz)

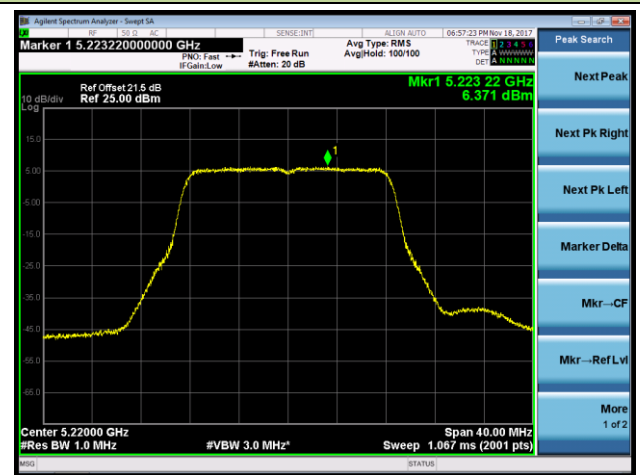


802.11a Power Spectral Density - Ant 1

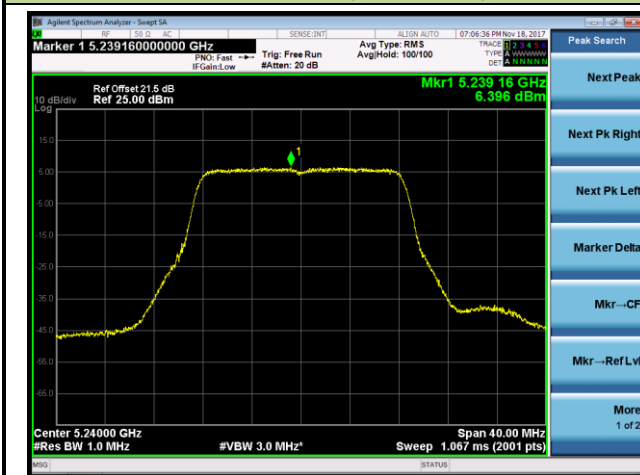
Channel 36 (5180MHz)



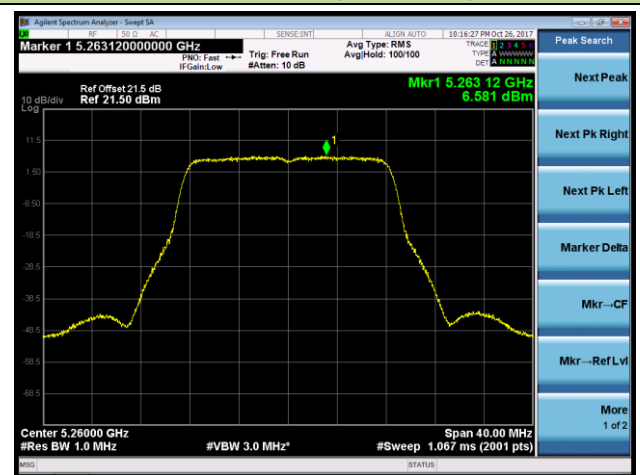
Channel 44 (5220MHz)



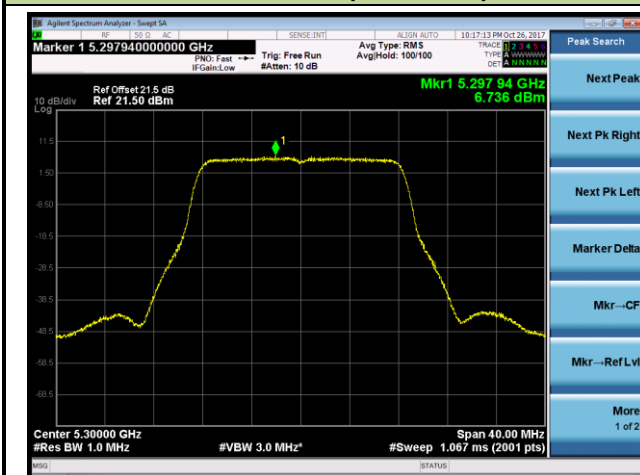
Channel 48 (5240MHz)



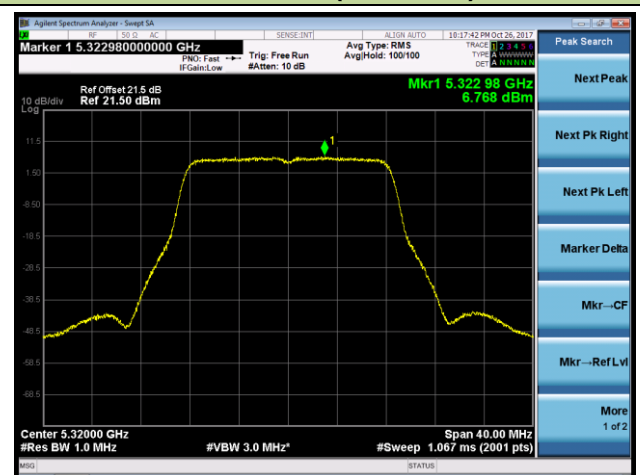
Channel 52 (5260MHz)



Channel 60 (5300MHz)

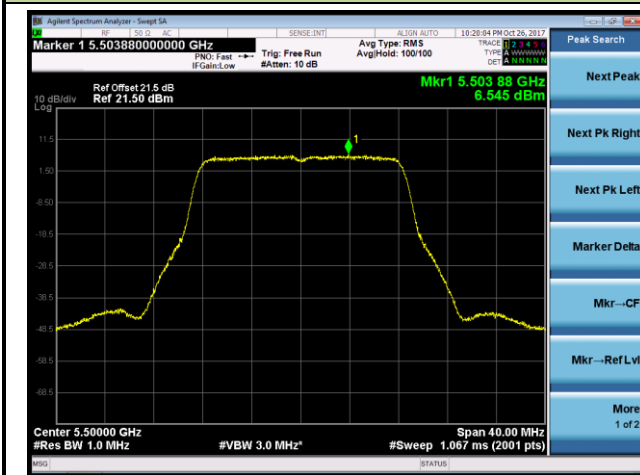


Channel 64 (5320MHz)

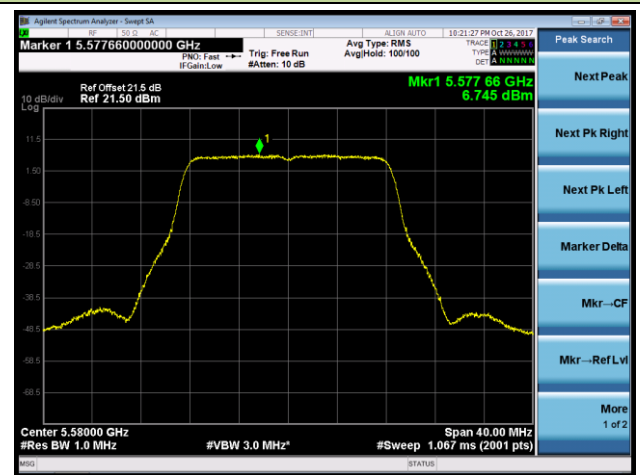


802.11a Power Spectral Density - Ant 1

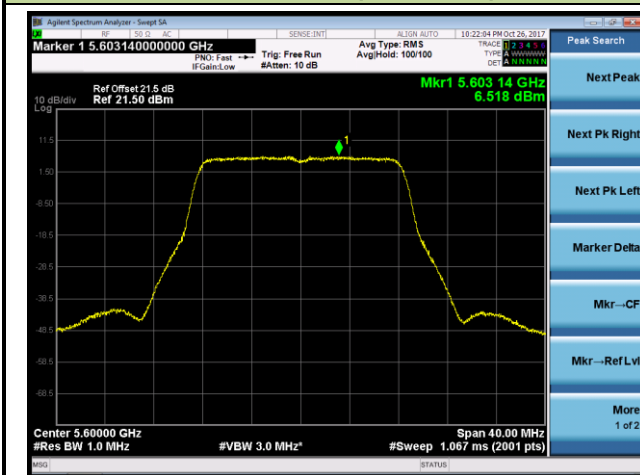
Channel 100 (5500MHz)



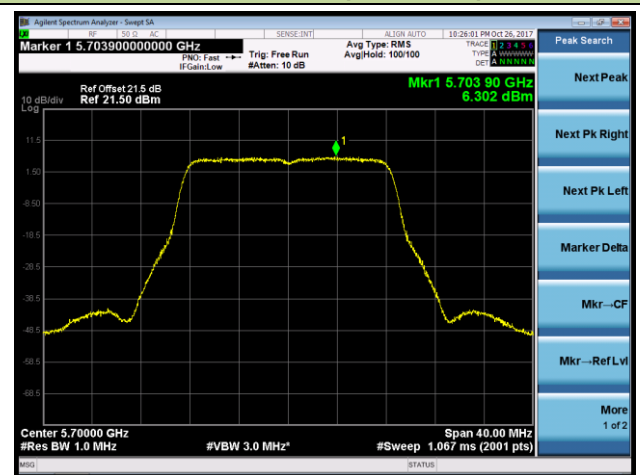
Channel 116 (5580MHz)



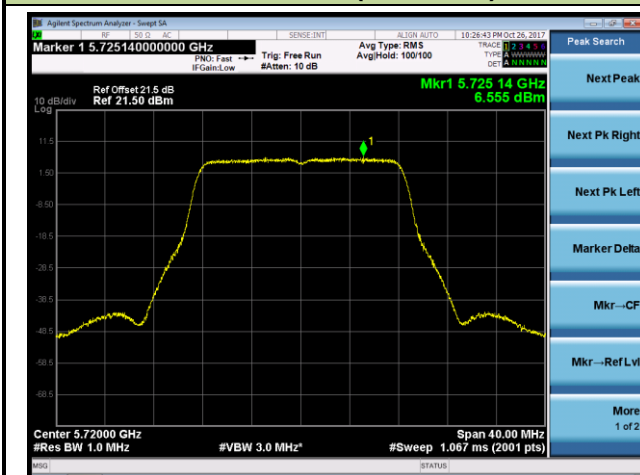
Channel 120 (5600MHz)



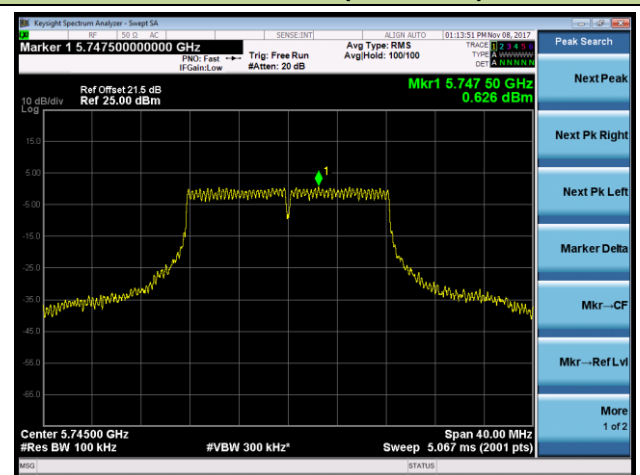
Channel 140 (5700MHz)



Channel 144 (5720MHz)

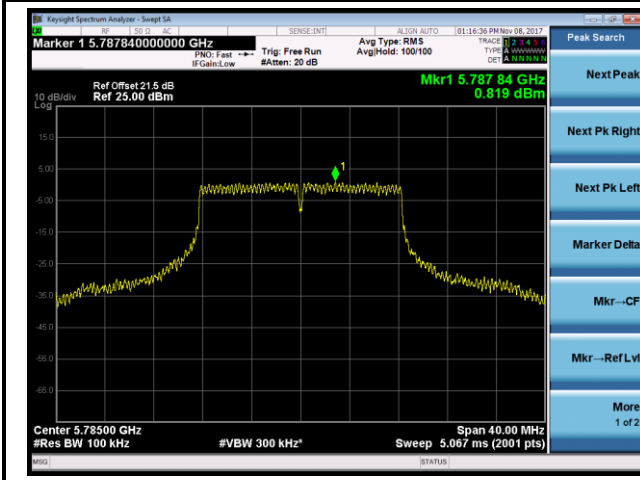


Channel 149 (5745MHz)

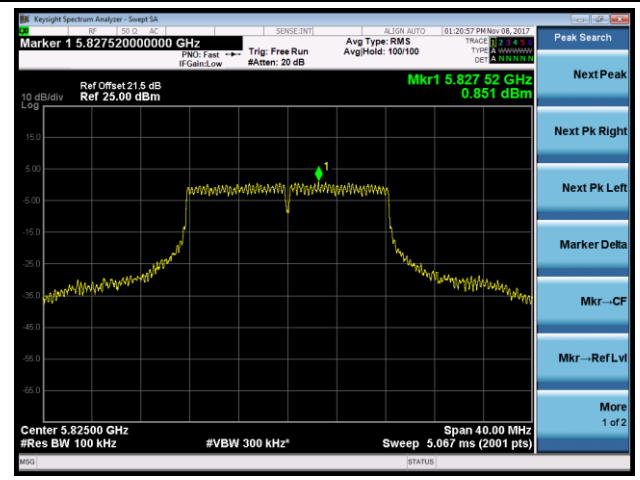


802.11a Power Spectral Density - Ant 1

Channel 157 (5785MHz)

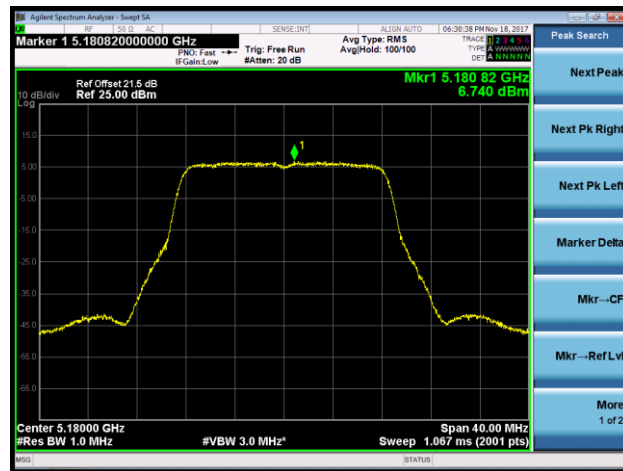


Channel 165 (5825MHz)

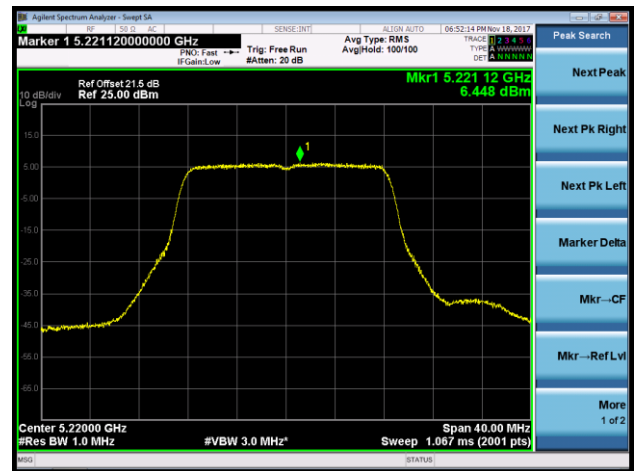


802.11a Power Spectral Density - Ant 2

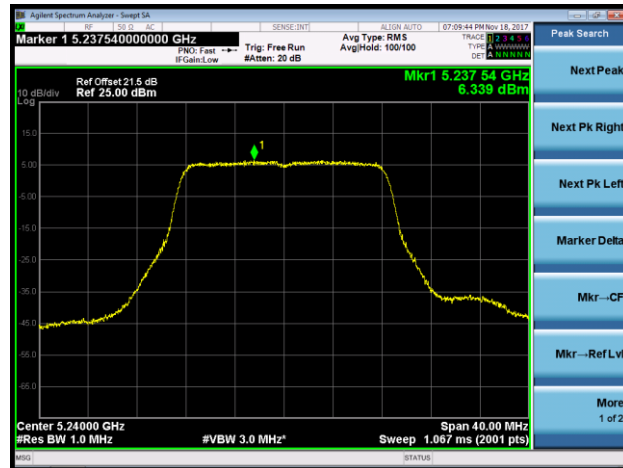
Channel 36 (5180MHz)



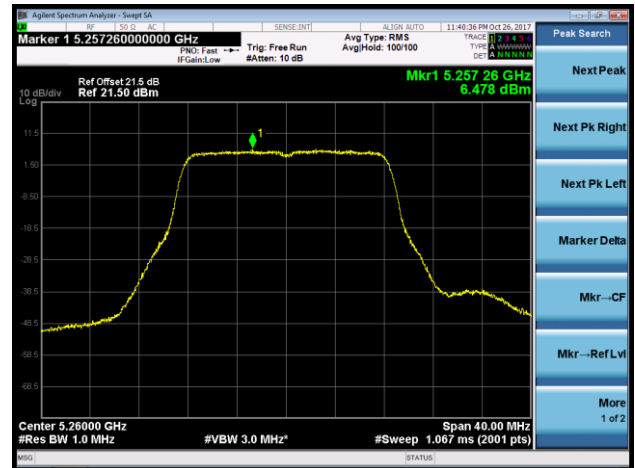
Channel 44 (5220MHz)



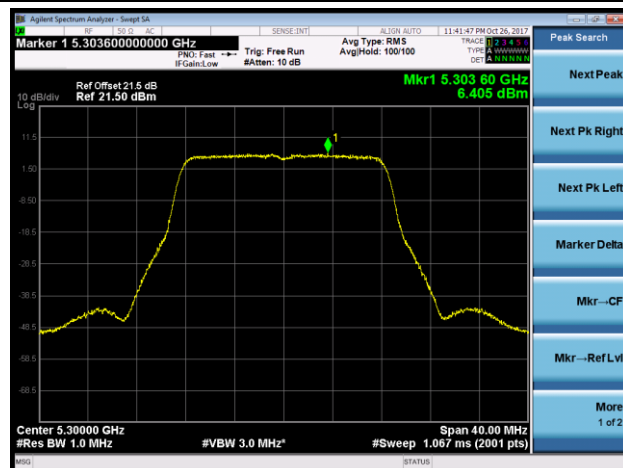
Channel 48 (5240MHz)



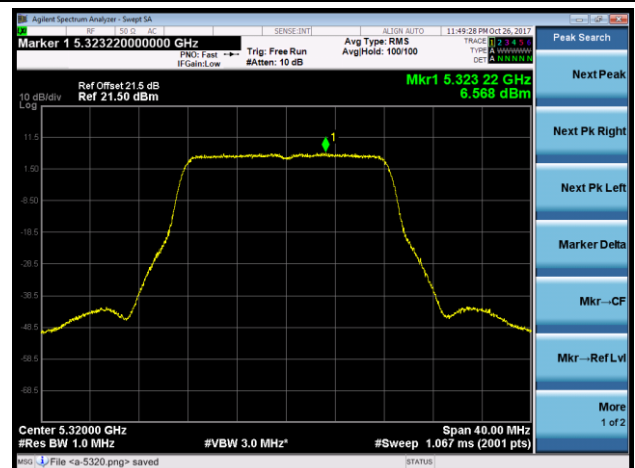
Channel 52 (5260MHz)



Channel 60 (5300MHz)

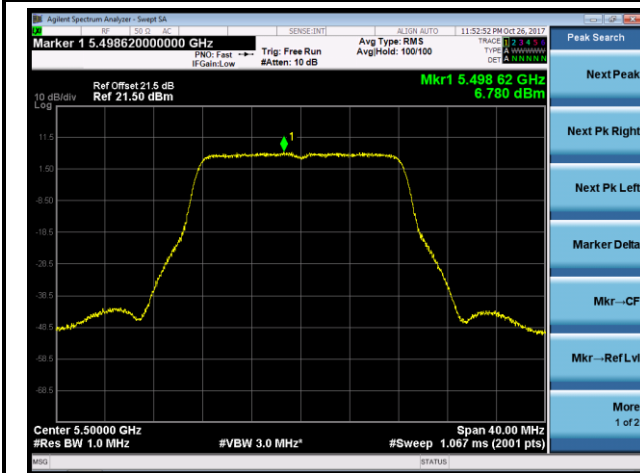


Channel 64 (5320MHz)

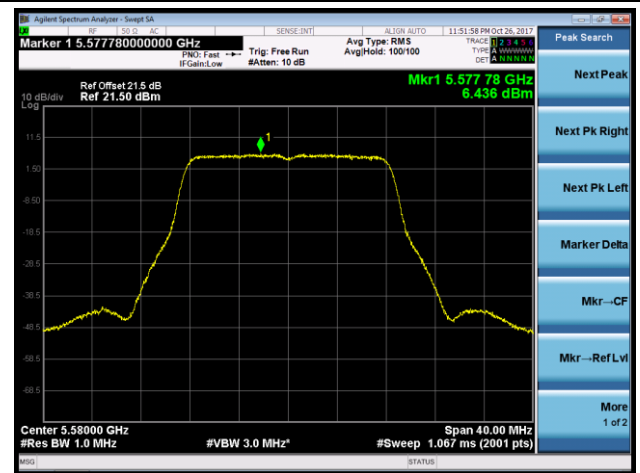


802.11a Power Spectral Density - Ant 2

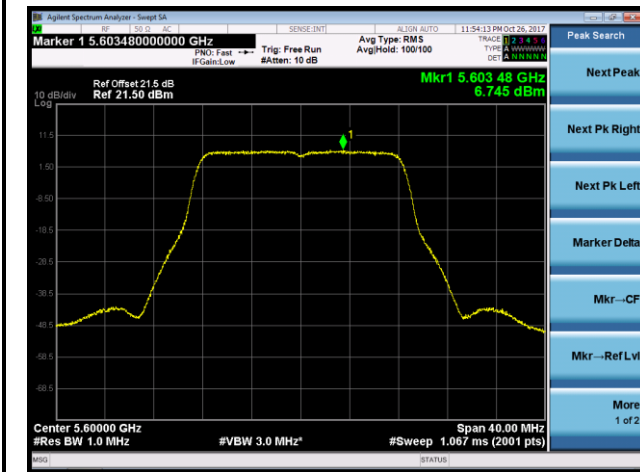
Channel 100 (5500MHz)



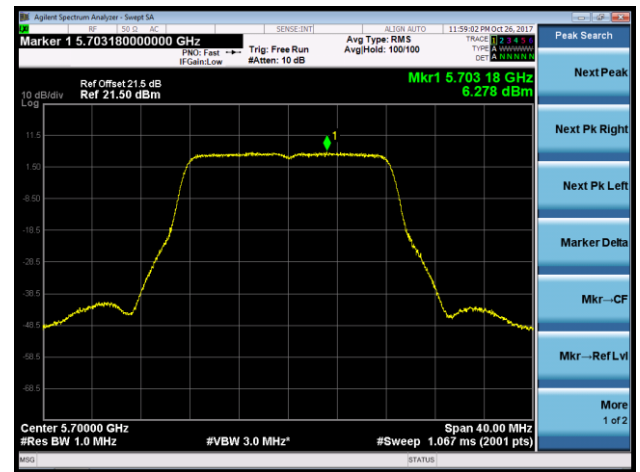
Channel 116 (5580MHz)



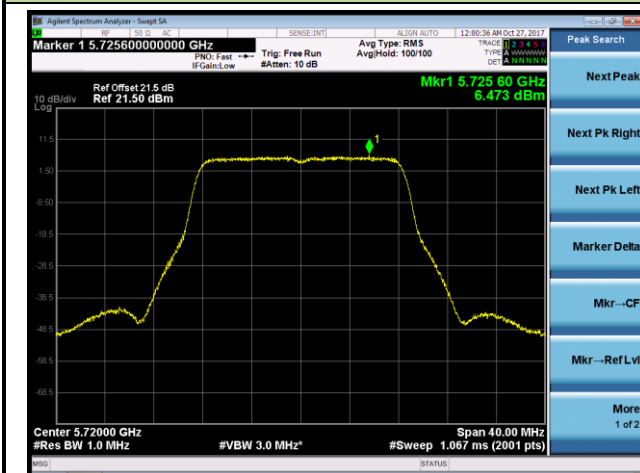
Channel 120 (5600MHz)



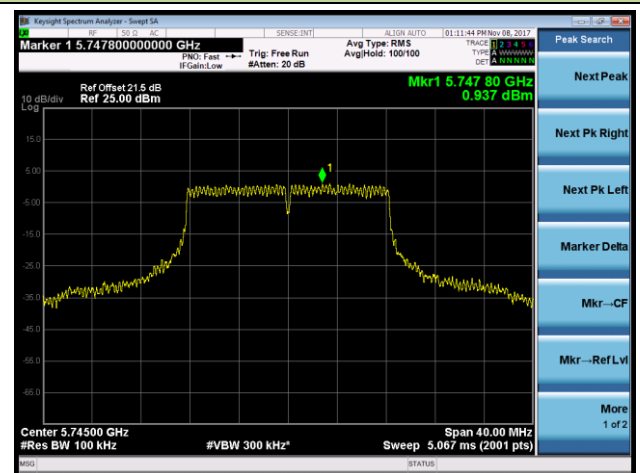
Channel 140 (5700MHz)



Channel 144 (5720MHz)

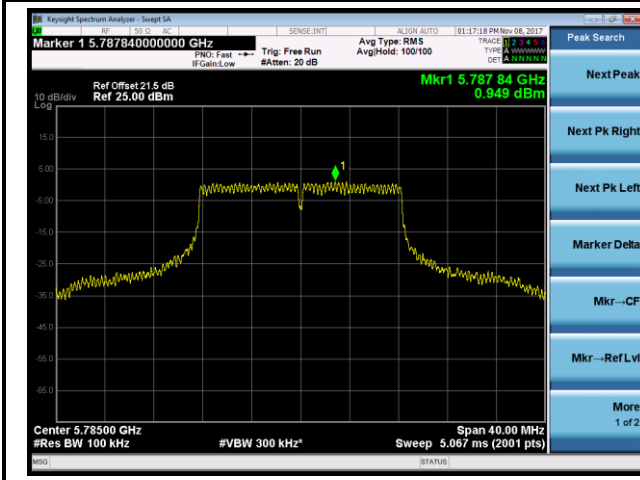


Channel 149 (5745MHz)

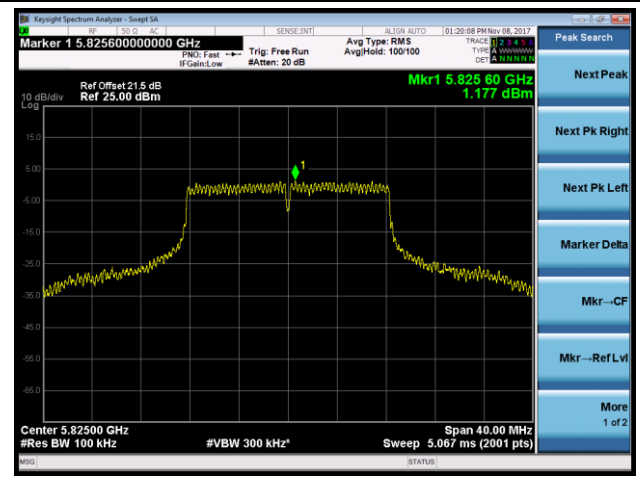


802.11a Power Spectral Density - Ant 2

Channel 157 (5785MHz)

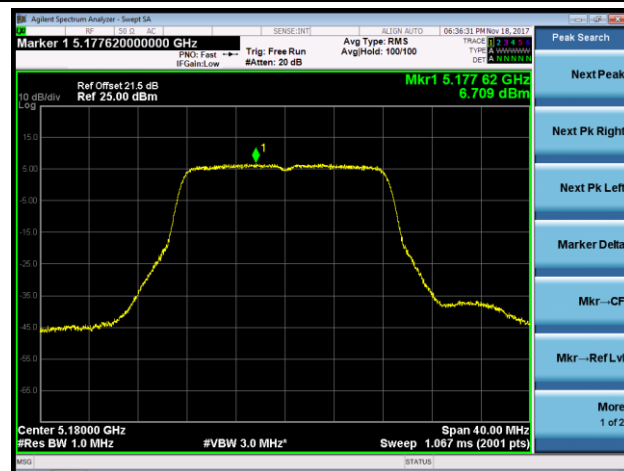


Channel 165 (5825MHz)

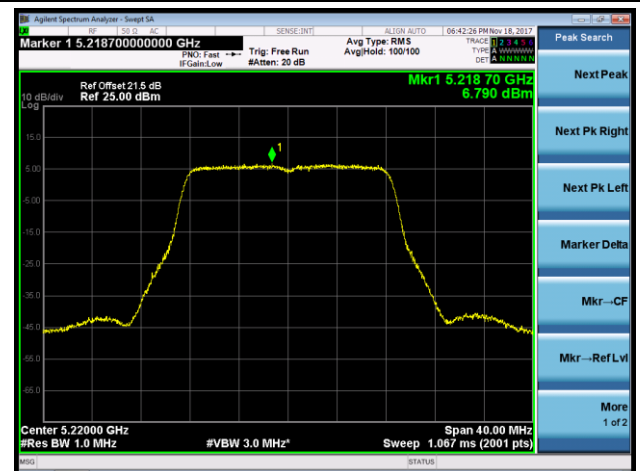


802.11a Power Spectral Density - Ant 3

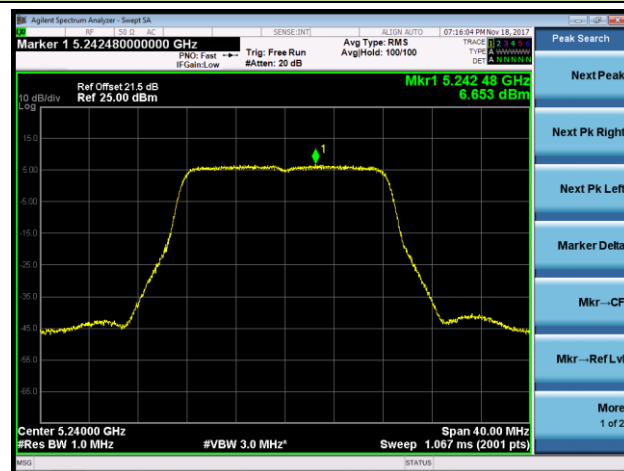
Channel 36 (5180MHz)



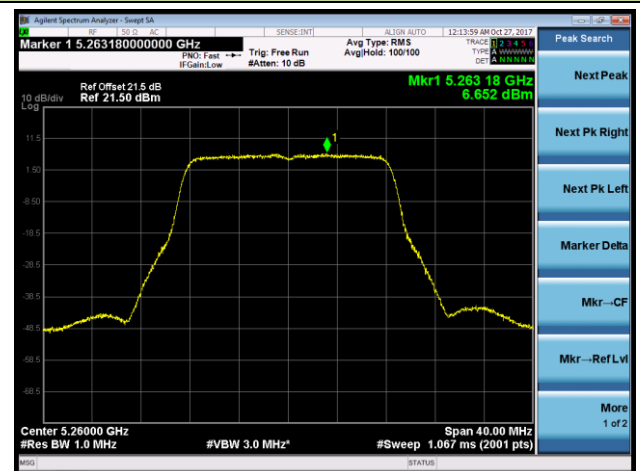
Channel 44 (5220MHz)



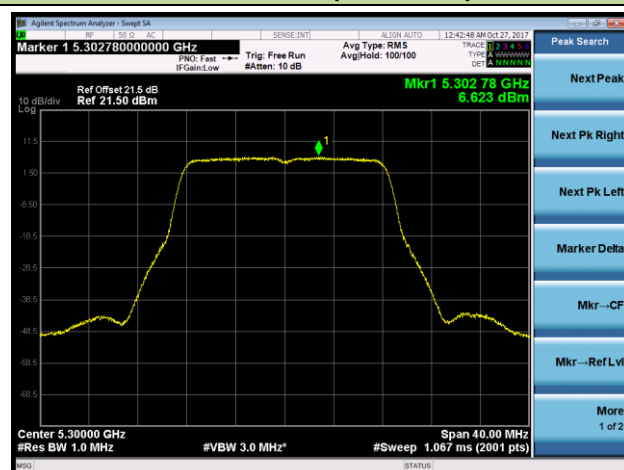
Channel 48 (5240MHz)



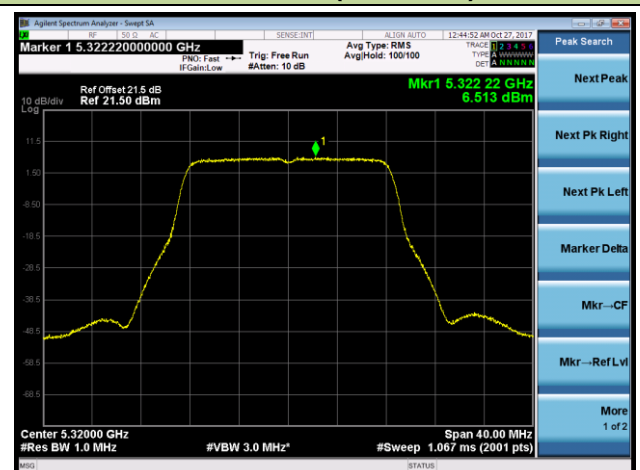
Channel 52 (5260MHz)



Channel 60 (5300MHz)

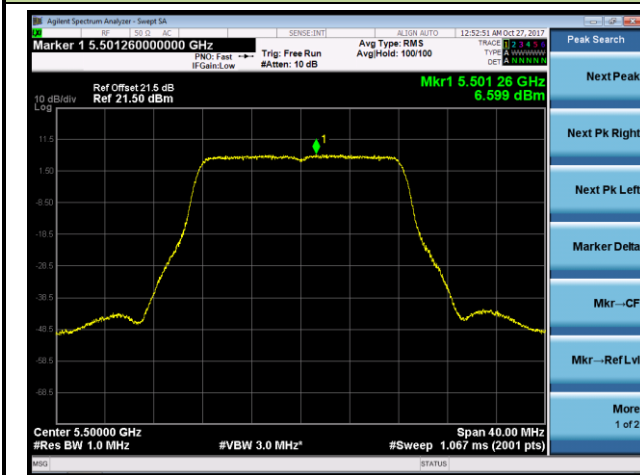


Channel 64 (5320MHz)

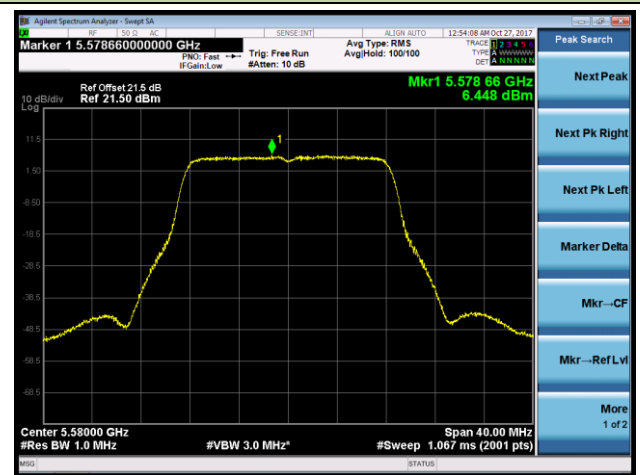


802.11a Power Spectral Density - Ant 3

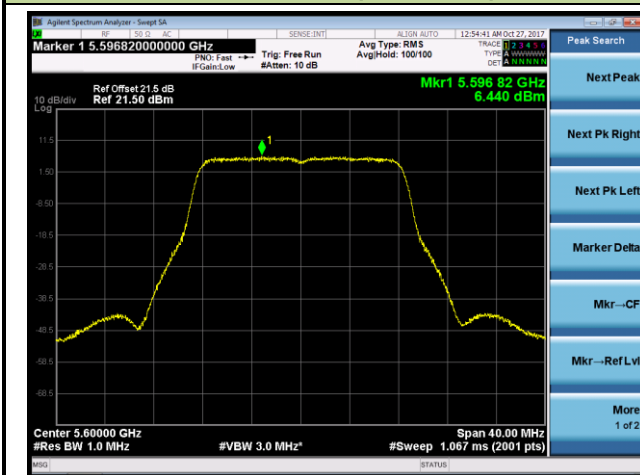
Channel 100 (5500MHz)



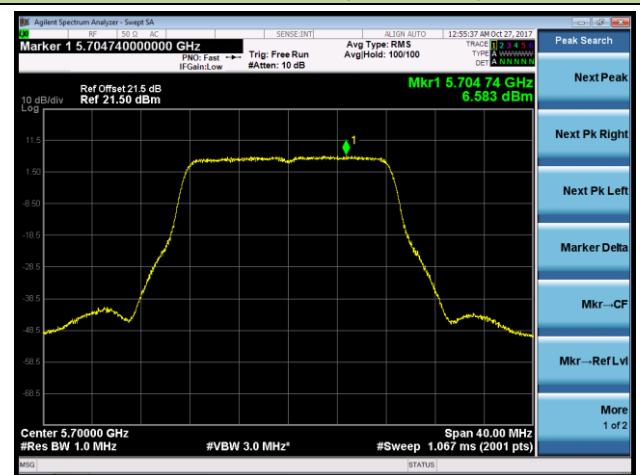
Channel 116 (5580MHz)



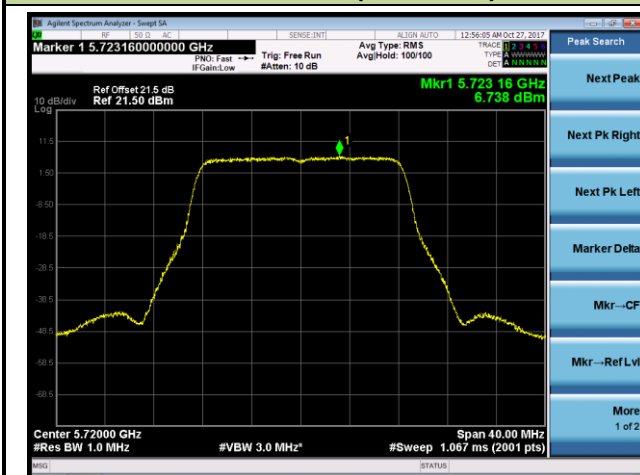
Channel 120 (5600MHz)



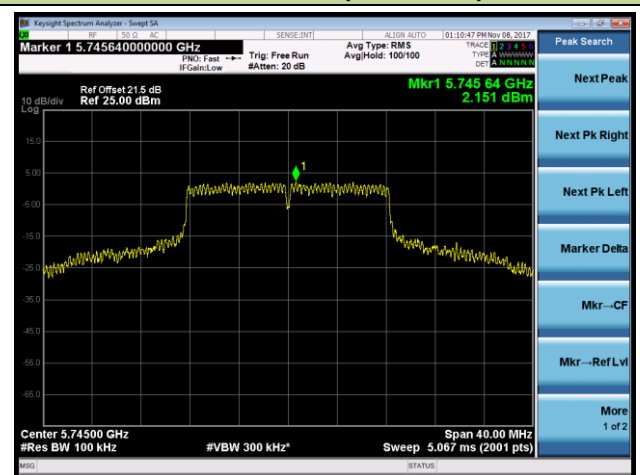
Channel 140 (5700MHz)



Channel 144 (5720MHz)

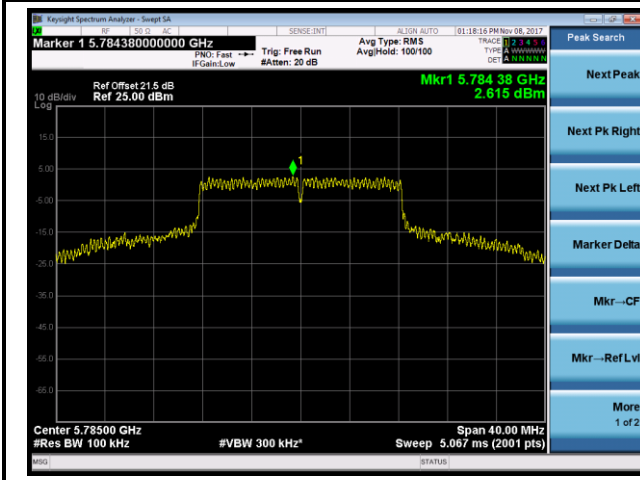


Channel 149 (5745MHz)

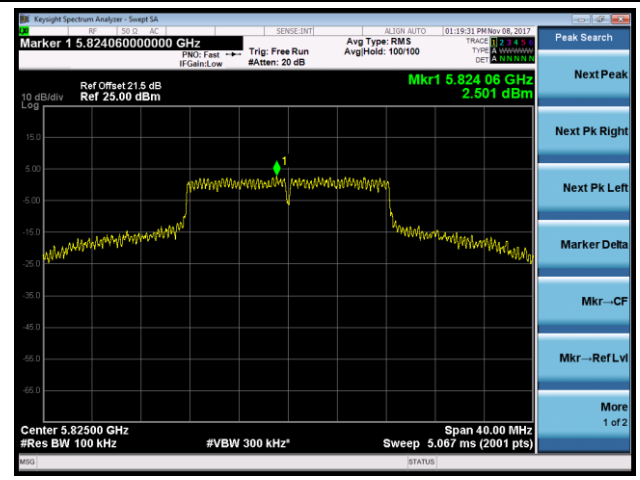


802.11a Power Spectral Density - Ant 3

Channel 157 (5785MHz)

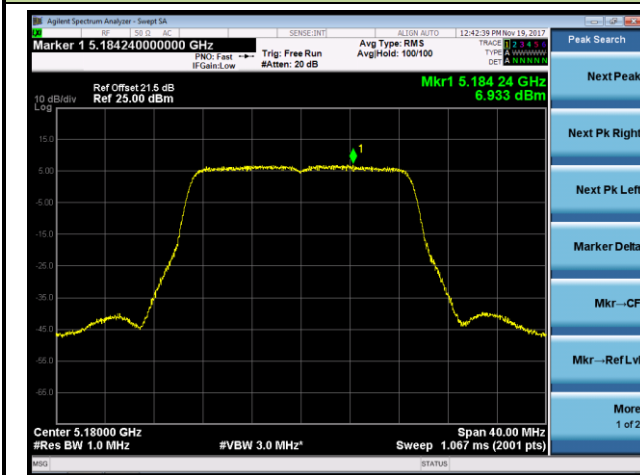


Channel 165 (5825MHz)

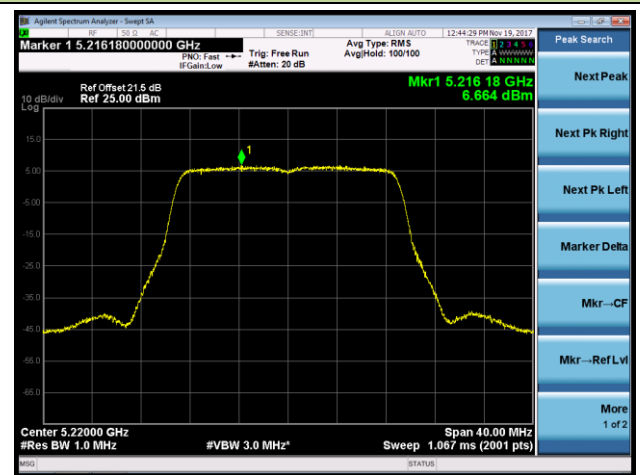


802.11n-HT20 Power Spectral Density - Ant 1

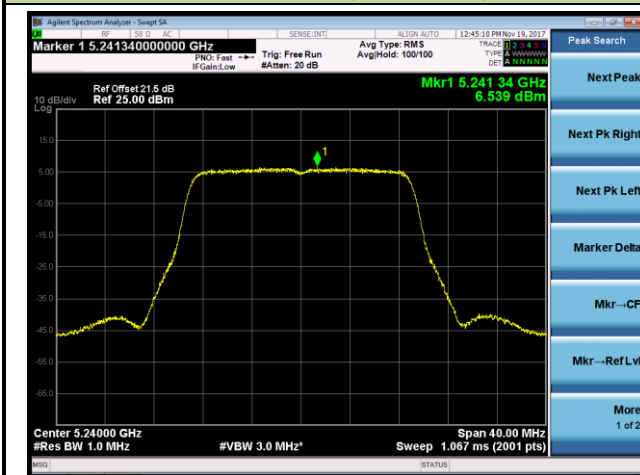
Channel 36 (5180MHz)



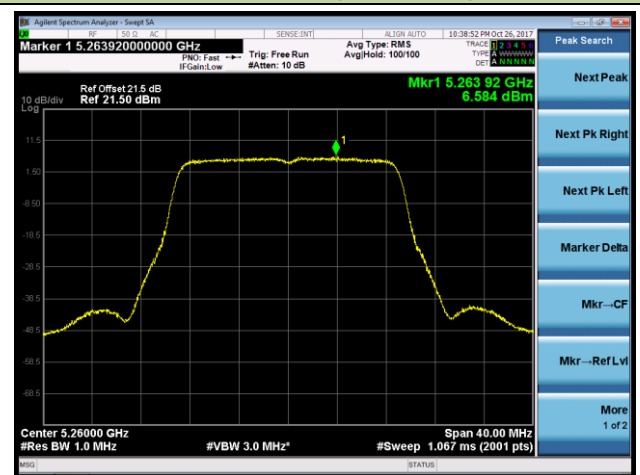
Channel 44 (5220MHz)



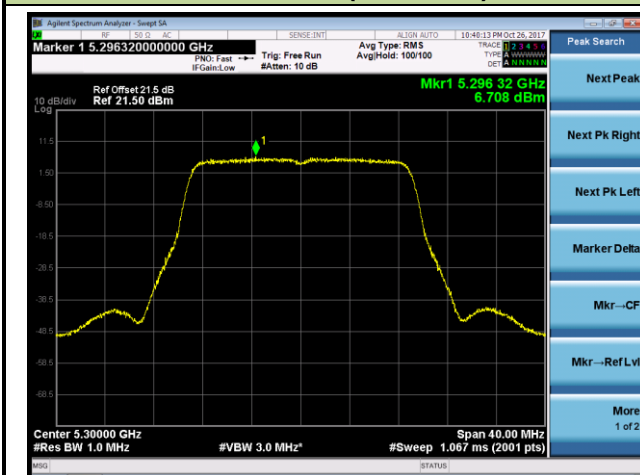
Channel 48 (5240MHz)



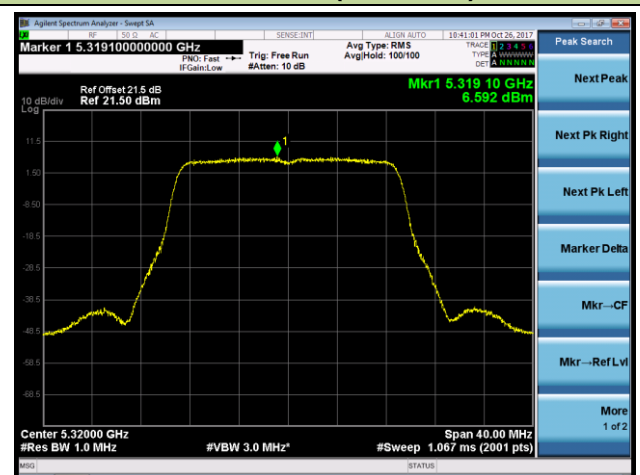
Channel 52 (5260MHz)



Channel 60 (5300MHz)

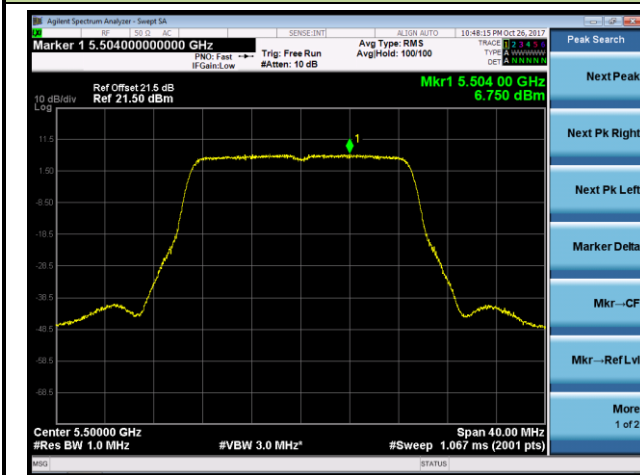


Channel 64 (5320MHz)

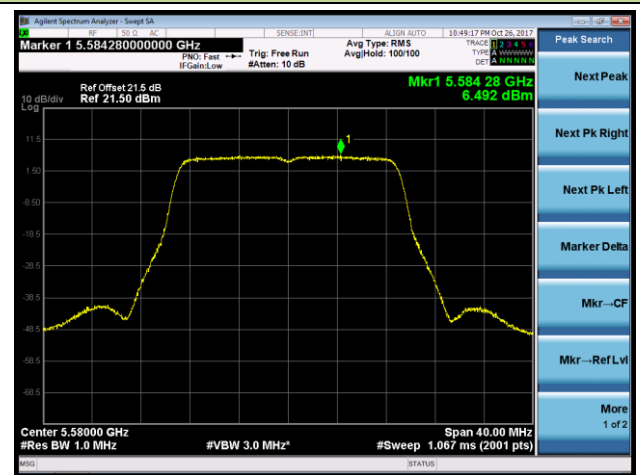


802.11n-HT20 Power Spectral Density - Ant 1

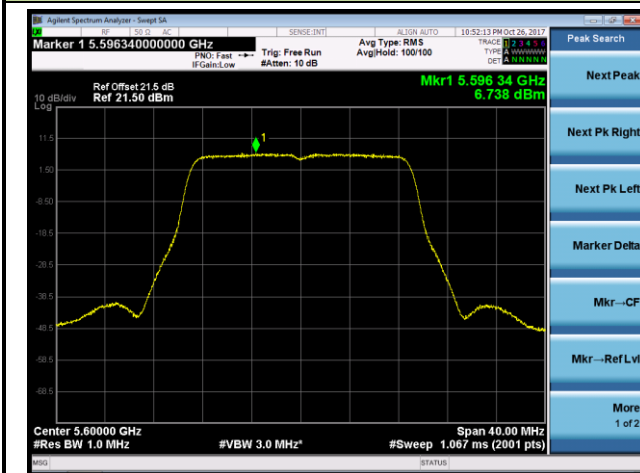
Channel 100 (5500MHz)



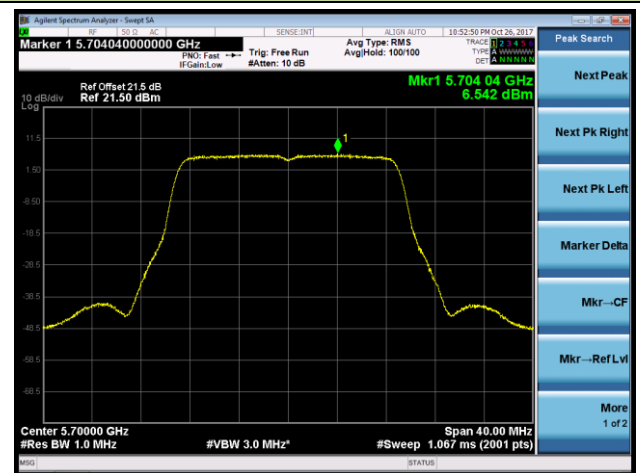
Channel 116 (5580MHz)



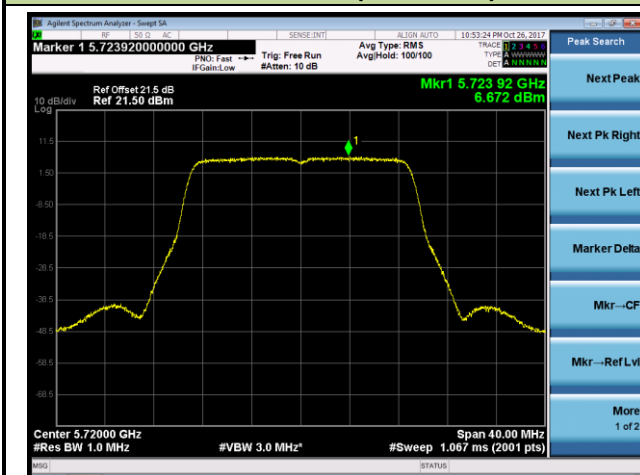
Channel 120 (5600MHz)



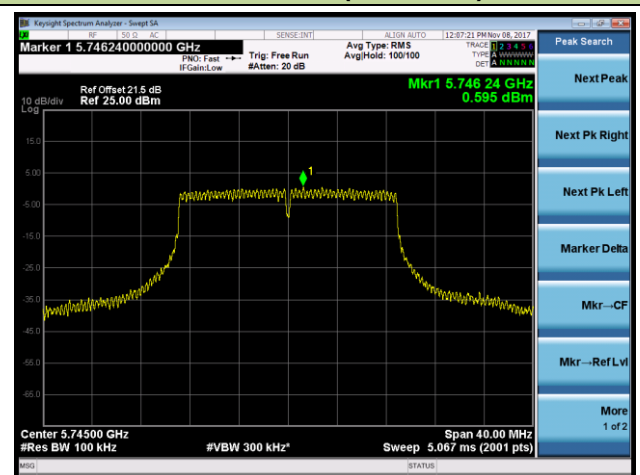
Channel 140 (5700MHz)



Channel 144 (5720MHz)

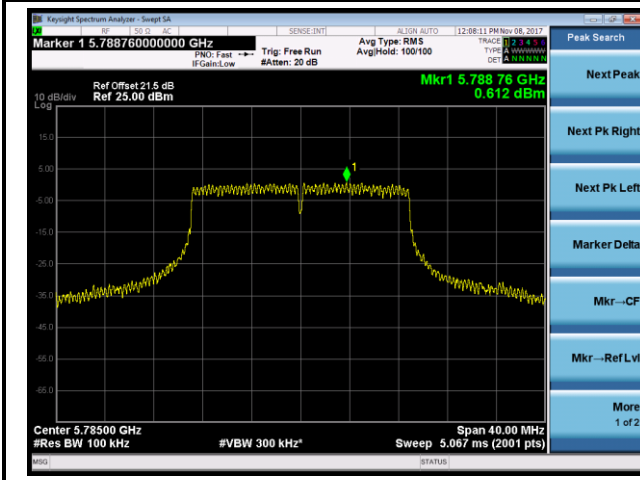


Channel 149 (5745MHz)

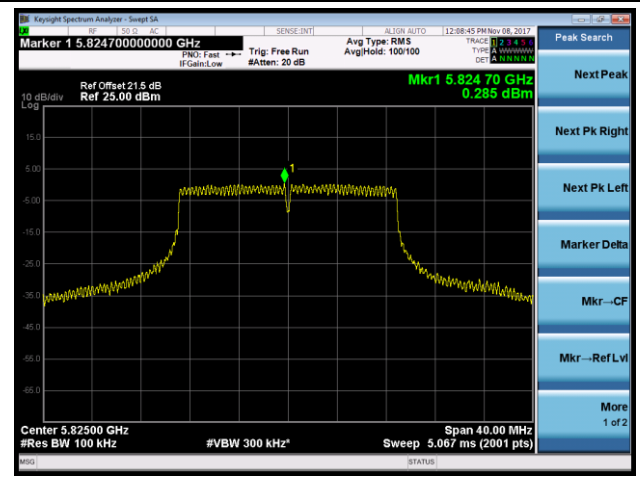


802.11n-HT20 Power Spectral Density - Ant 1

Channel 157 (5785MHz)

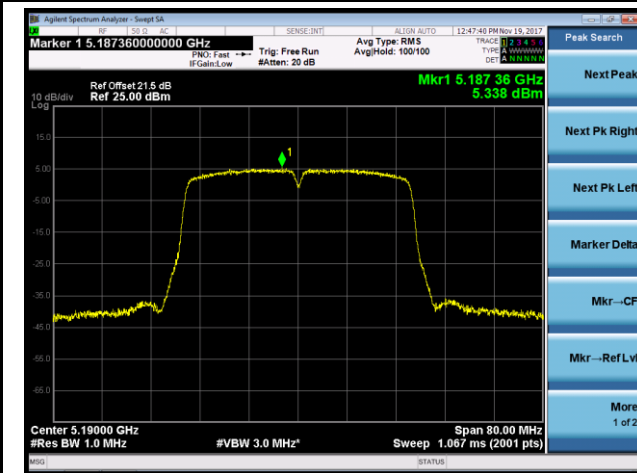


Channel 165 (5825MHz)

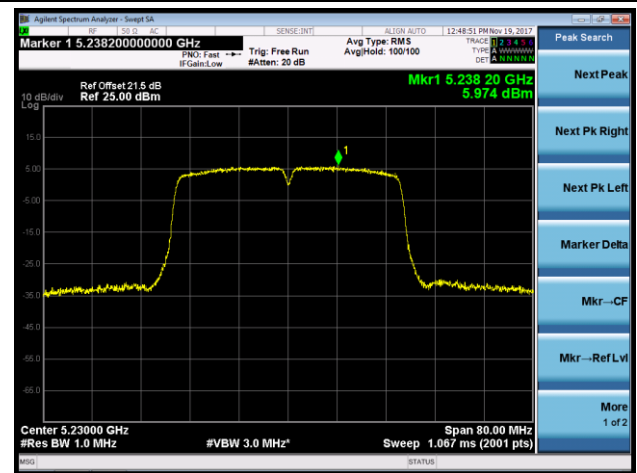


802.11n-HT40 Power Spectral Density - Ant 1

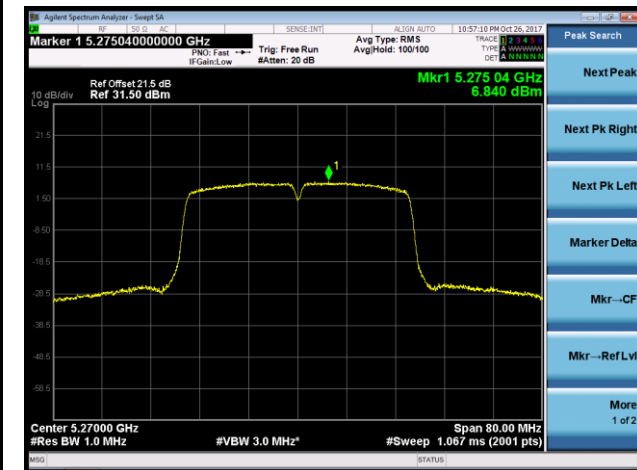
Channel 38 (5190MHz)



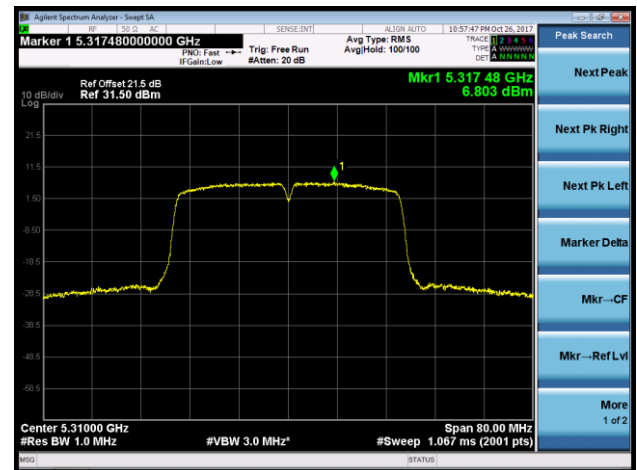
Channel 46 (5230MHz)



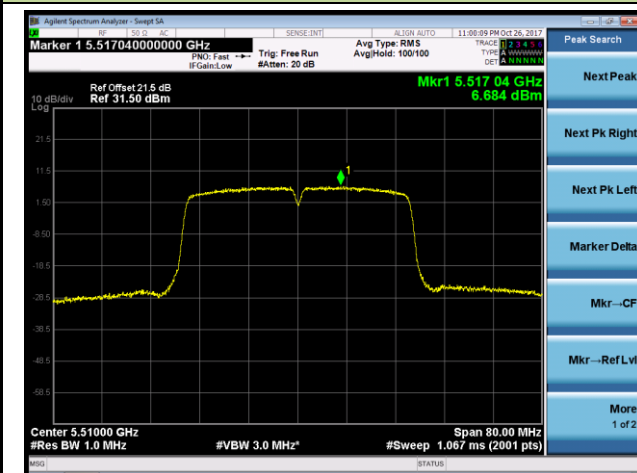
Channel 54 (5270MHz)



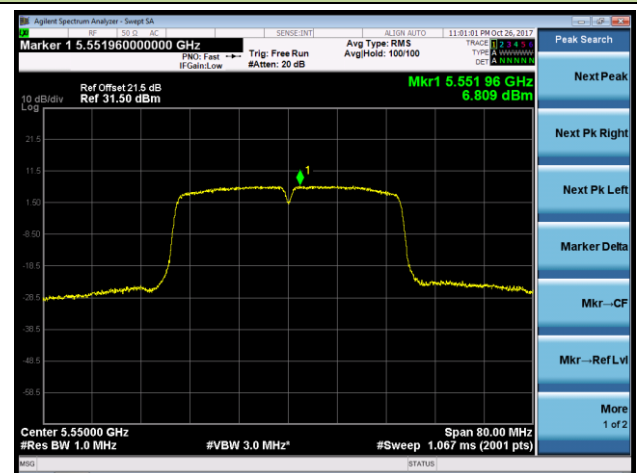
Channel 62 (5310MHz)



Channel 102 (5510MHz)

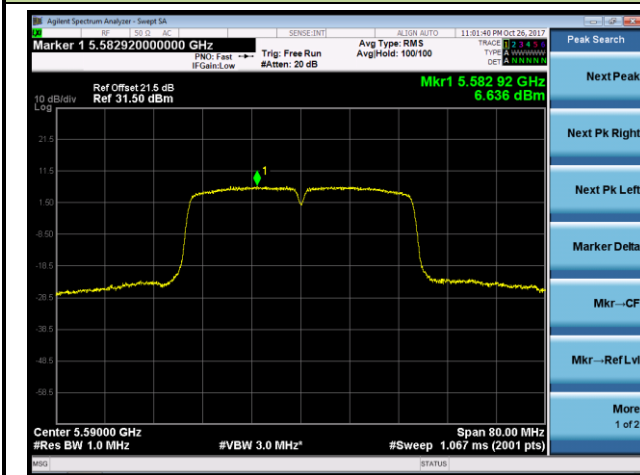


Channel 110 (5550MHz)

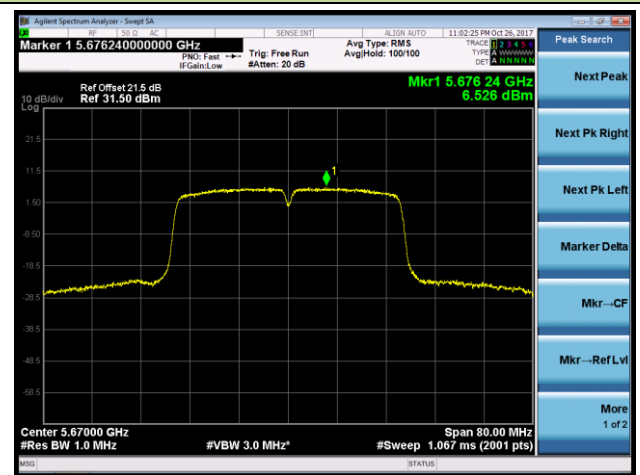


802.11n-HT40 Power Spectral Density - Ant 1

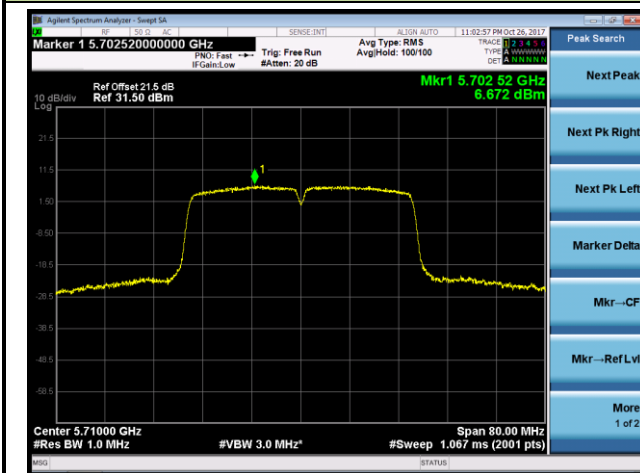
Channel 118 (5590MHz)



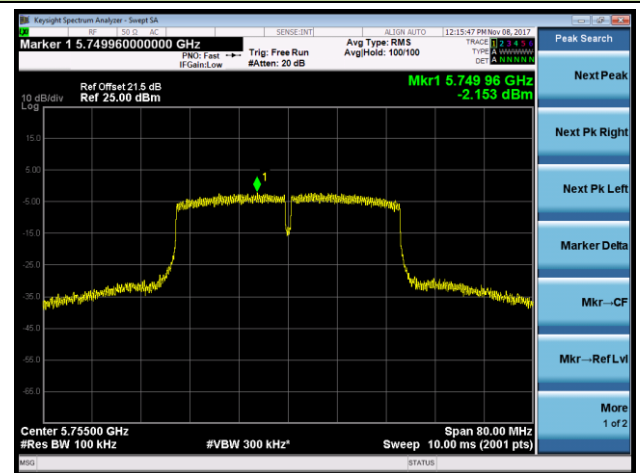
Channel 134 (5670MHz)



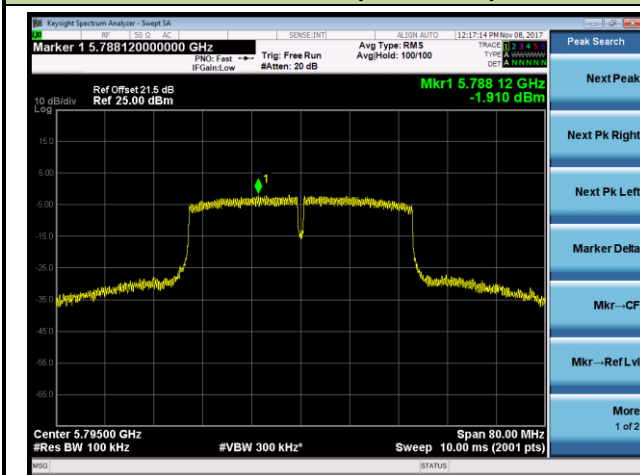
Channel 142 (5710MHz)



Channel 151 (5755MHz)

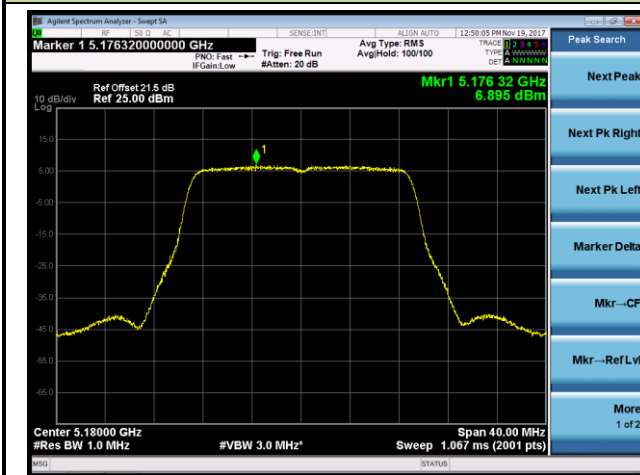


Channel 159 (5795MHz)

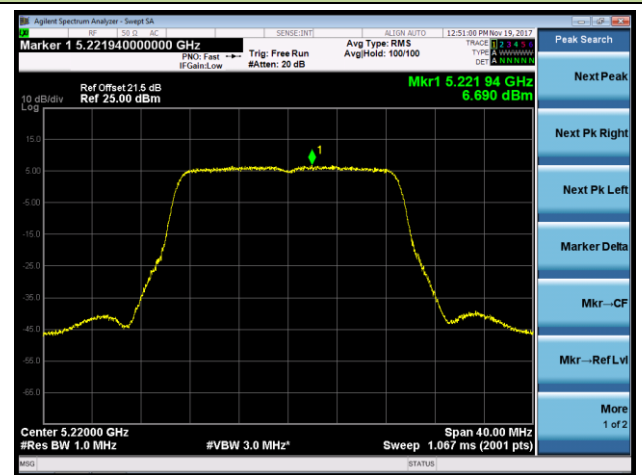


802.11ac-VHT20 Power Spectral Density - Ant 1

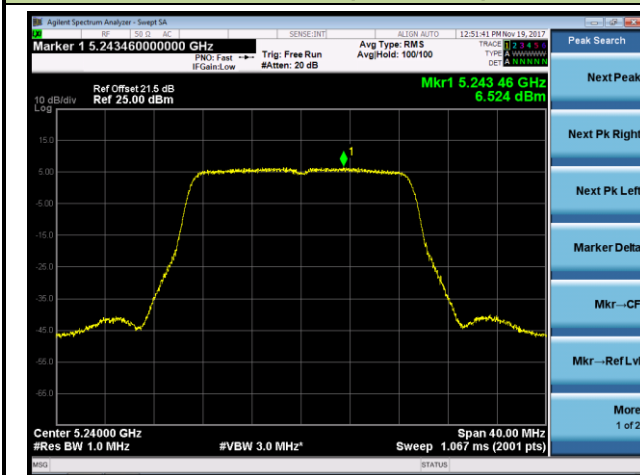
Channel 36 (5180MHz)



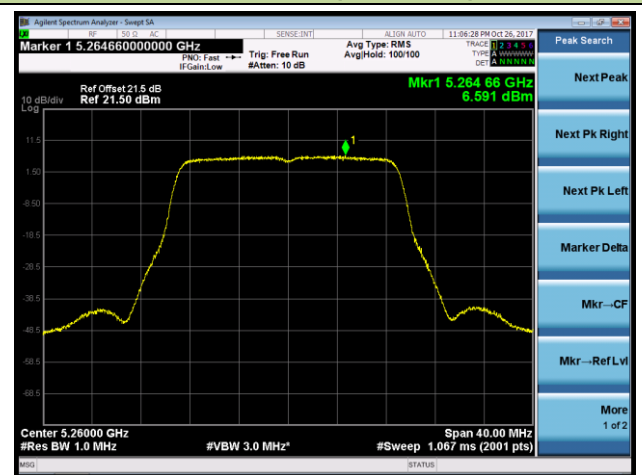
Channel 44 (5220MHz)



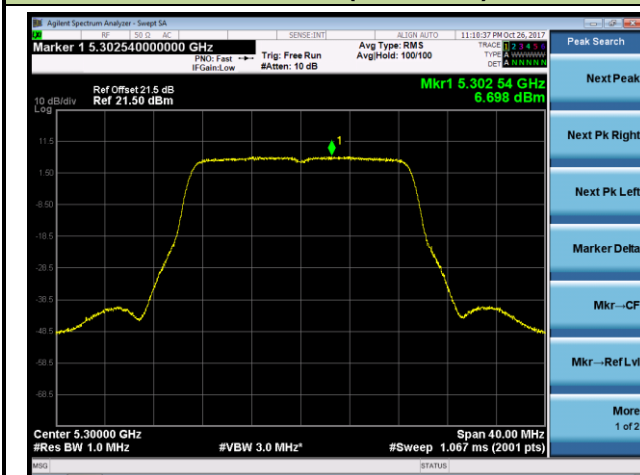
Channel 48 (5240MHz)



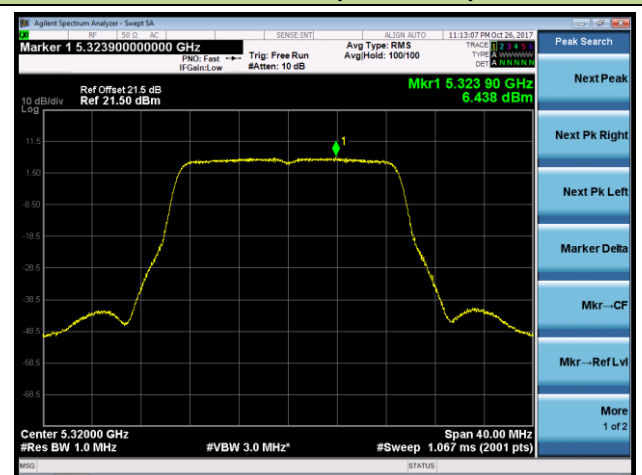
Channel 52 (5260MHz)



Channel 60 (5300MHz)

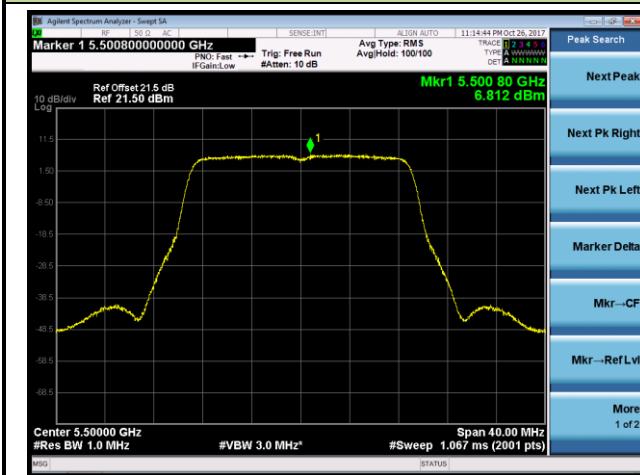


Channel 64 (5320MHz)

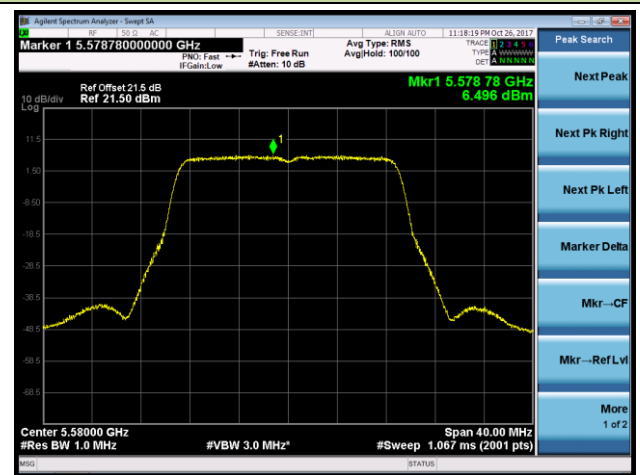


802.11ac-VHT20 Power Spectral Density - Ant 1

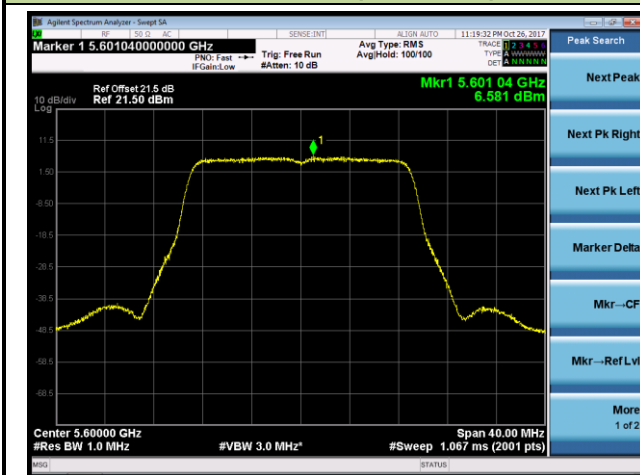
Channel 100 (5500MHz)



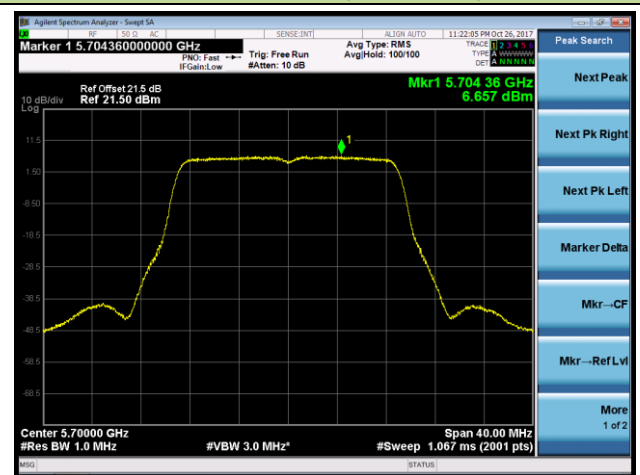
Channel 116 (5580MHz)



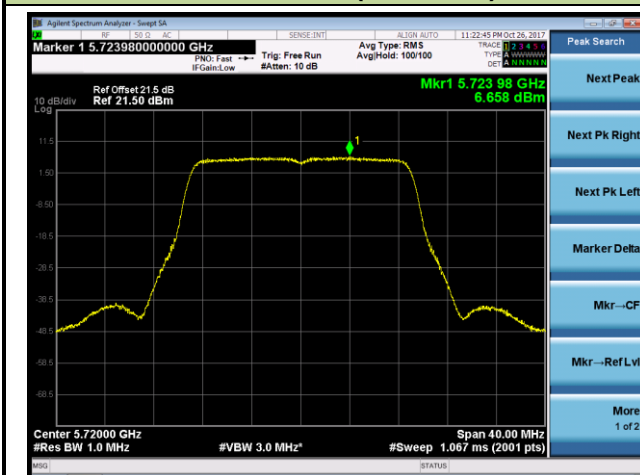
Channel 120 (5600MHz)



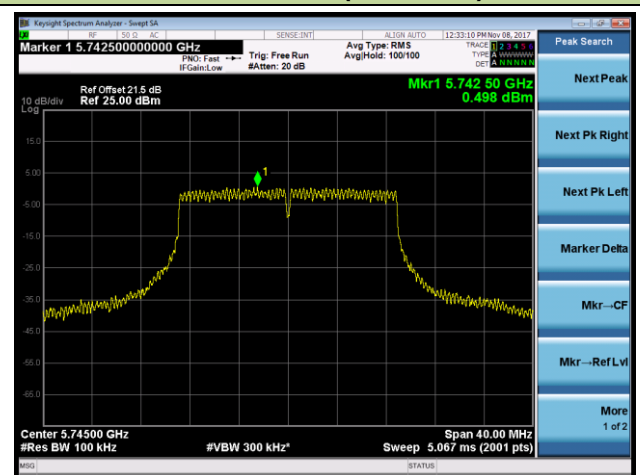
Channel 140 (5700MHz)



Channel 144 (5720MHz)

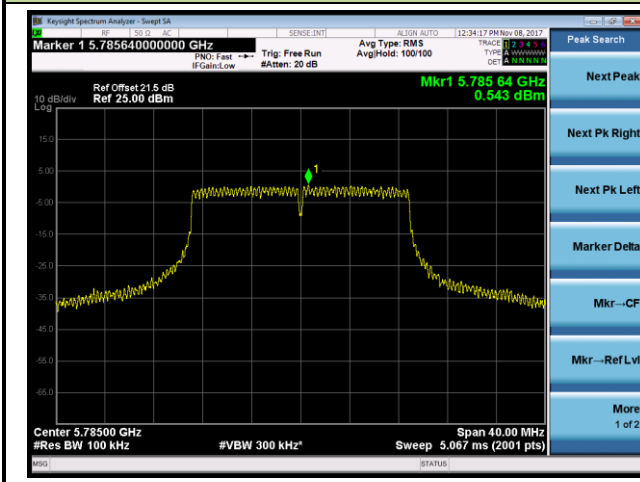


Channel 149 (5745MHz)

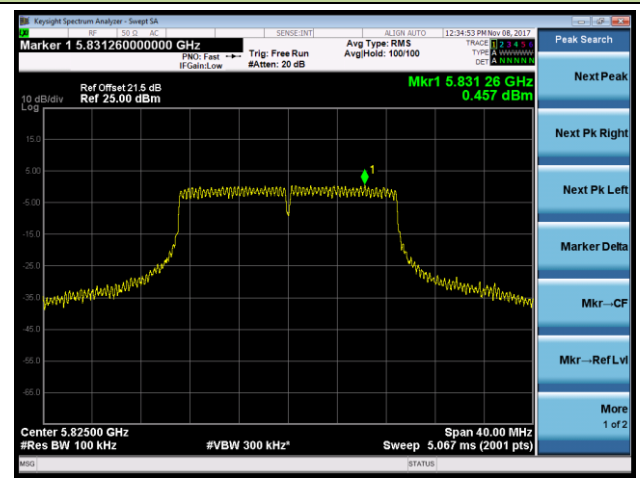


802.11ac-VHT20 Power Spectral Density - Ant 1

Channel 157 (5785MHz)

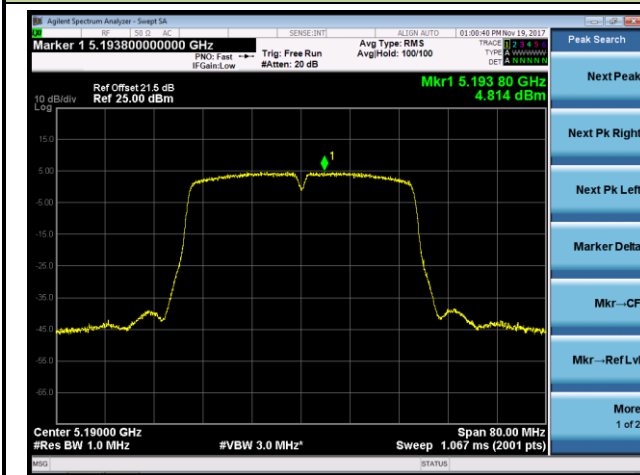


Channel 165 (5825MHz)

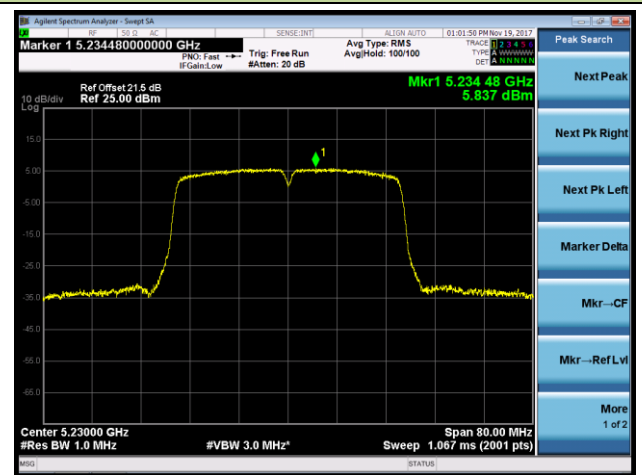


802.11ac-VHT40 Power Spectral Density - Ant 1

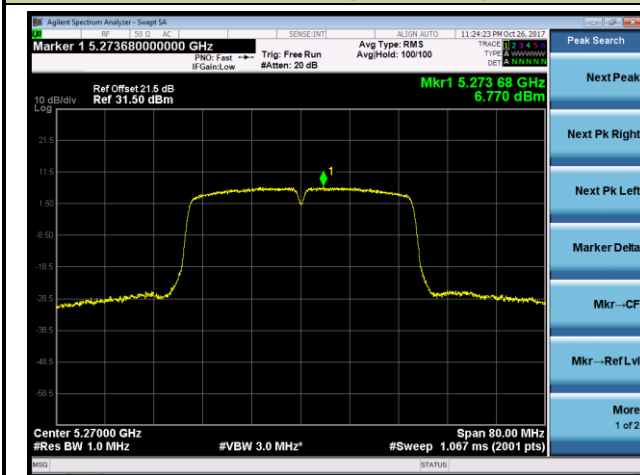
Channel 38 (5190MHz)



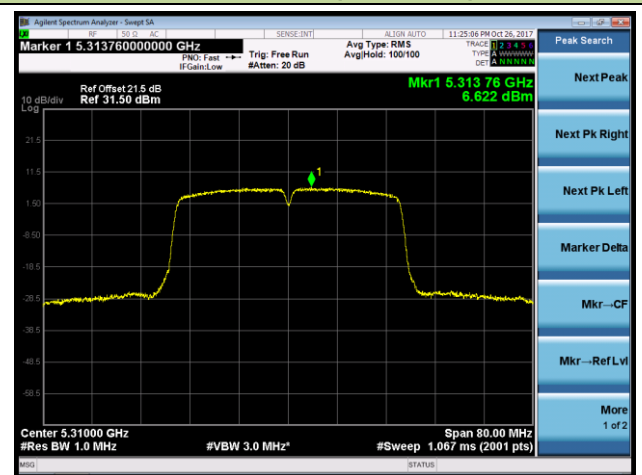
Channel 46 (5230MHz)



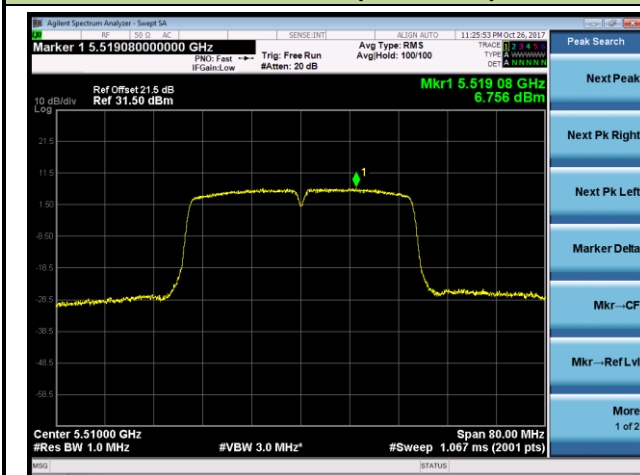
Channel 54 (5270MHz)



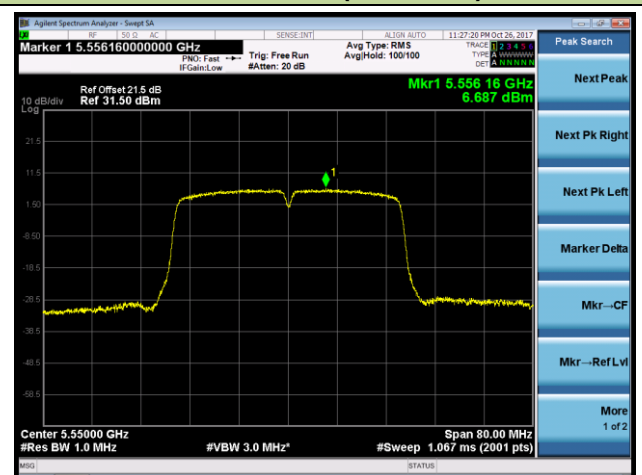
Channel 62 (5310MHz)



Channel 102 (5510MHz)

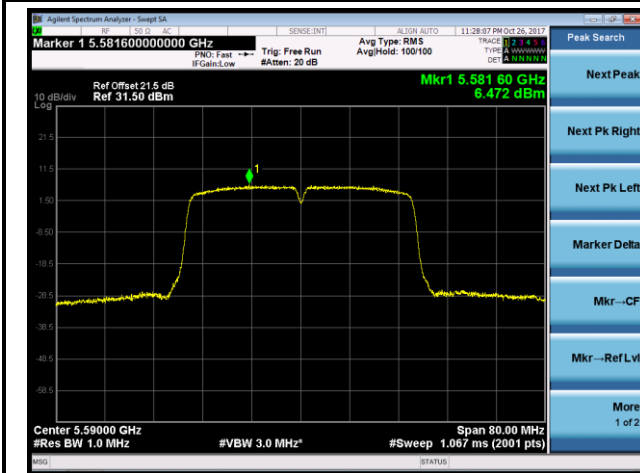


Channel 110 (5550MHz)

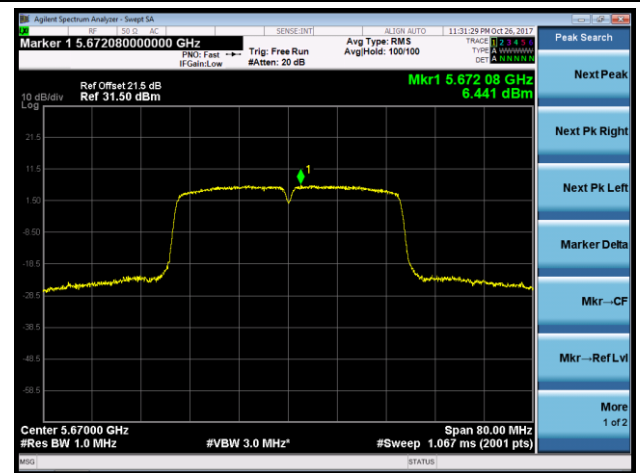


802.11ac-VHT40 Power Spectral Density - Ant 1

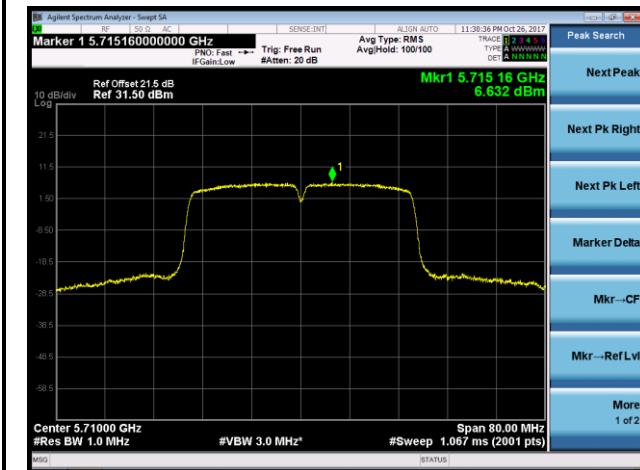
Channel 118 (5590MHz)



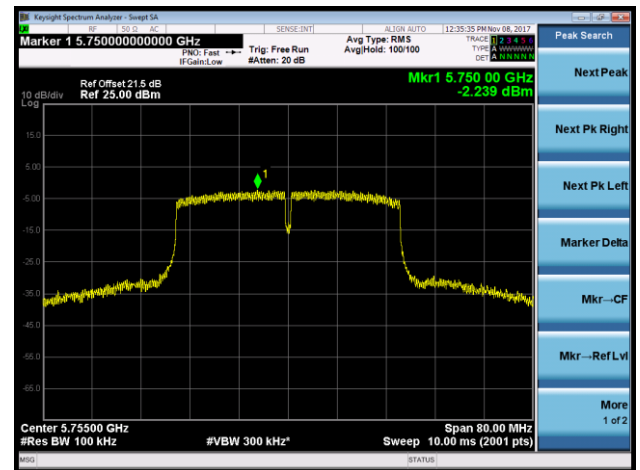
Channel 134 (5670MHz)



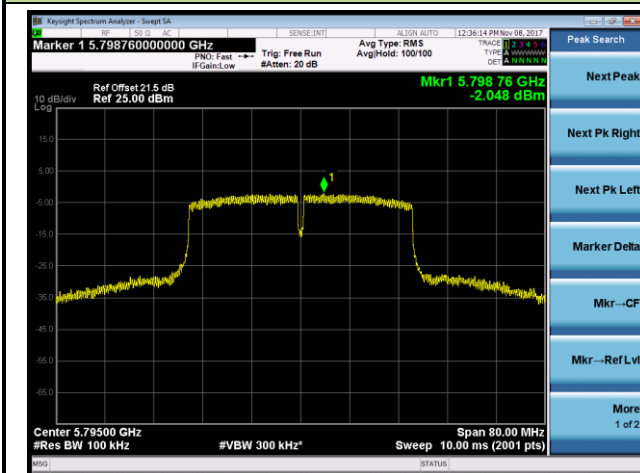
Channel 142 (5710MHz)



Channel 151 (5755MHz)

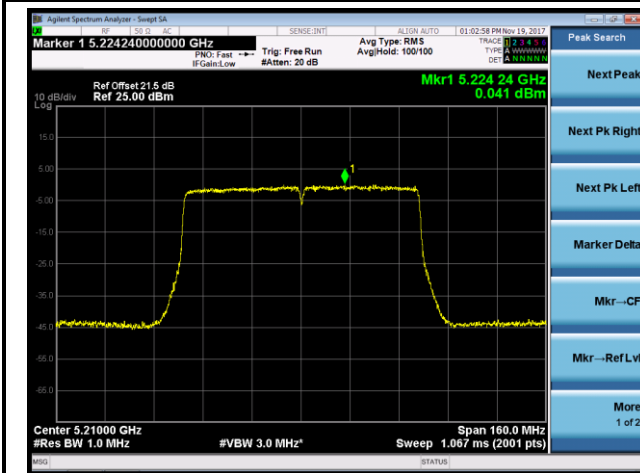


Channel 159 (5795MHz)

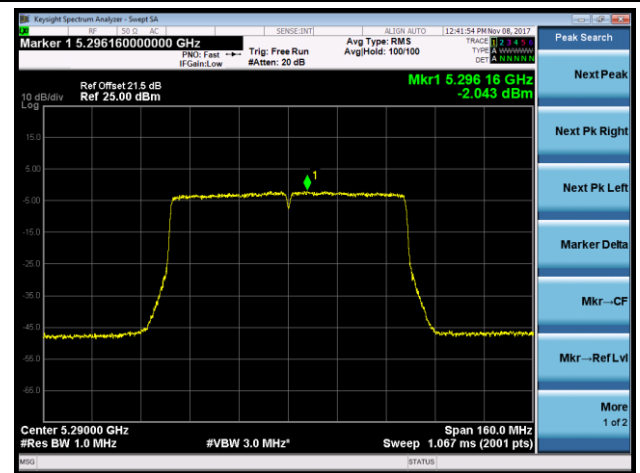


802.11ac-VHT80 Power Spectral Density - Ant 1

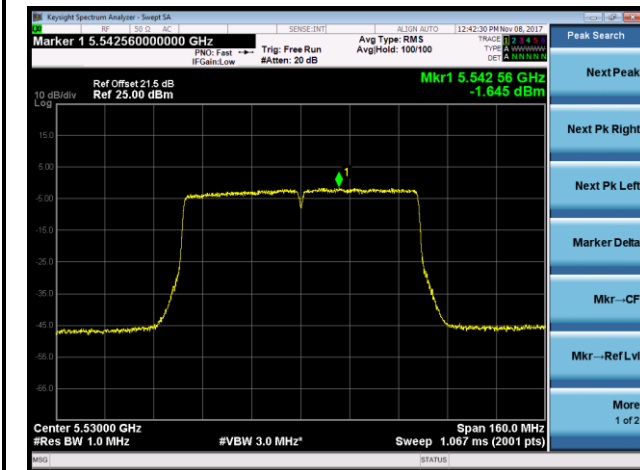
Channel 42 (5210MHz)



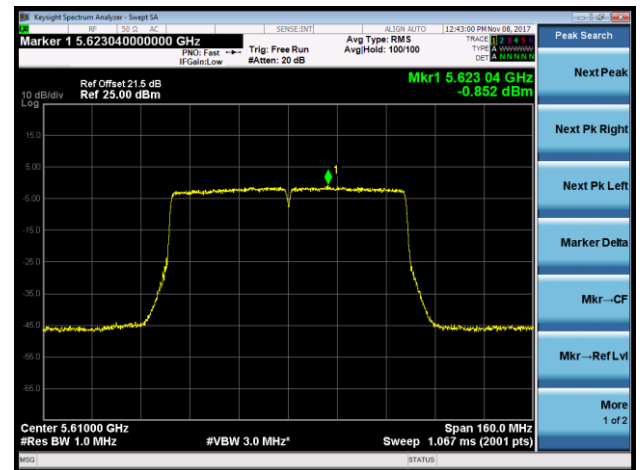
Channel 58 (5290MHz)



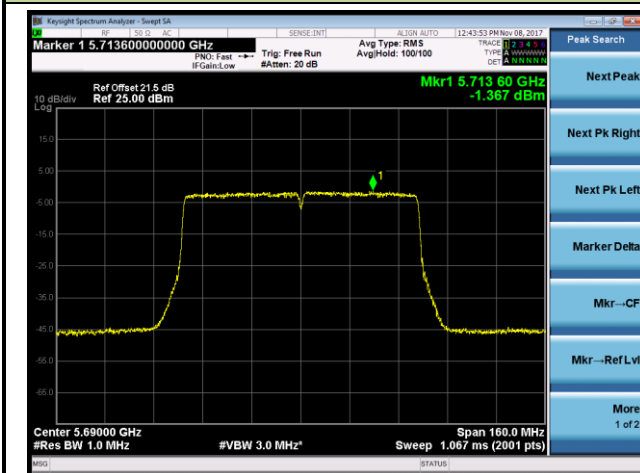
Channel 106 (5530MHz)



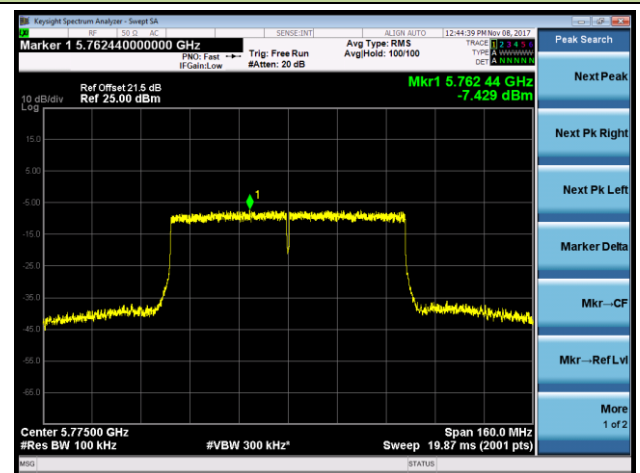
Channel 122 (5610MHz)



Channel 138 (5690MHz)

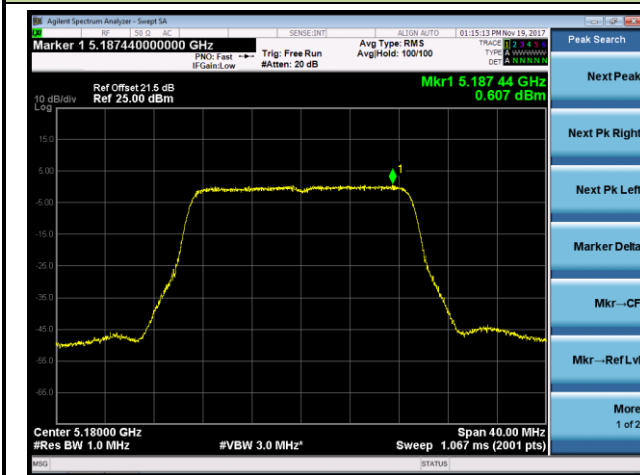


Channel 155 (5775MHz)

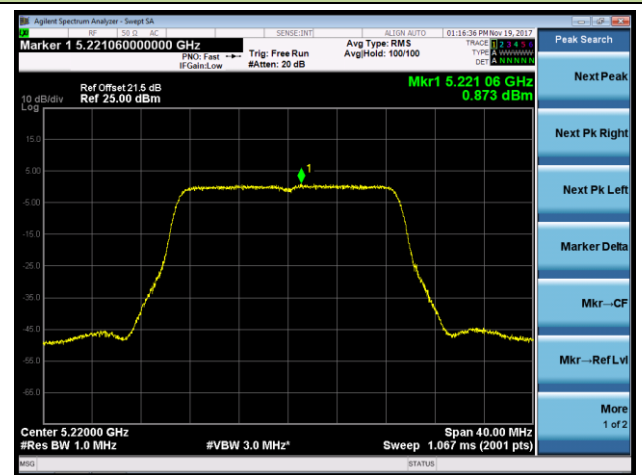


802.11n-HT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

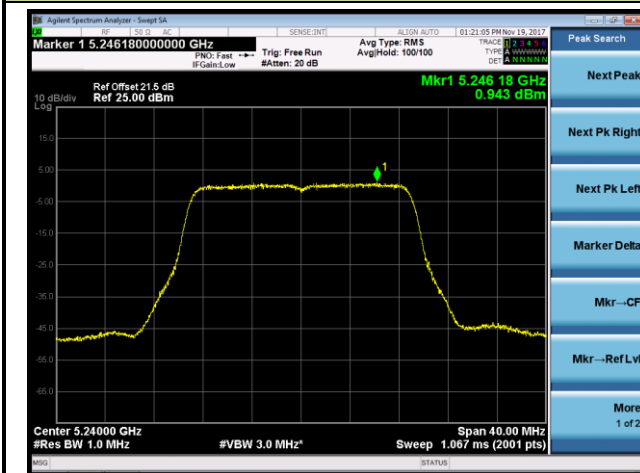
Channel 36 (5180MHz)



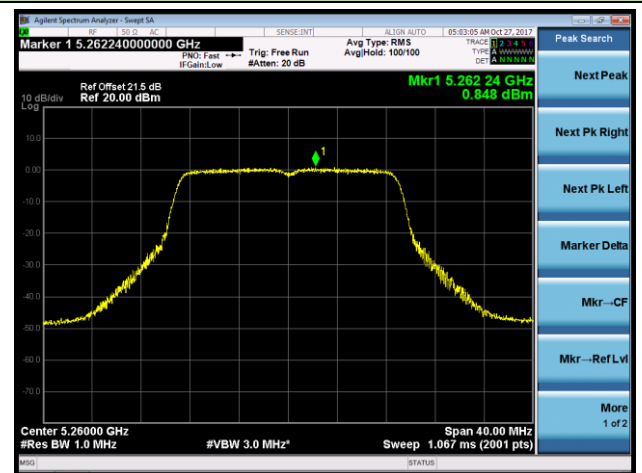
Channel 44 (5220MHz)



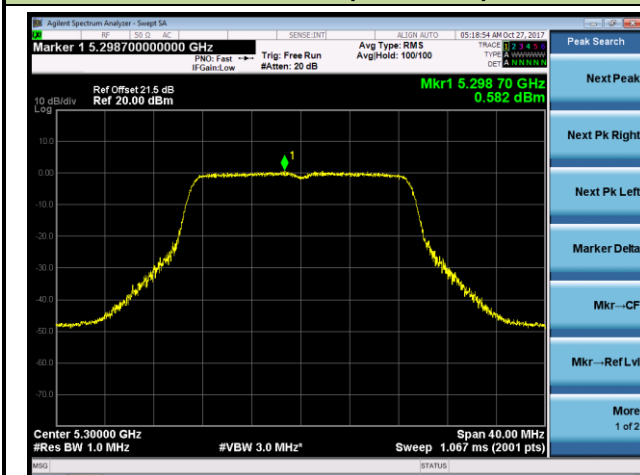
Channel 48 (5240MHz)



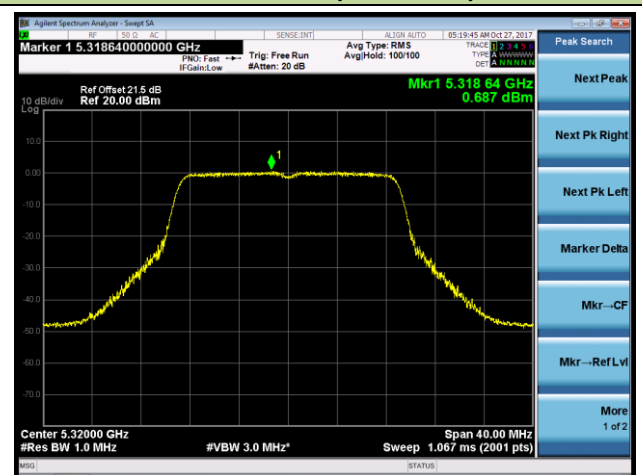
Channel 52 (5260MHz)



Channel 60 (5300MHz)

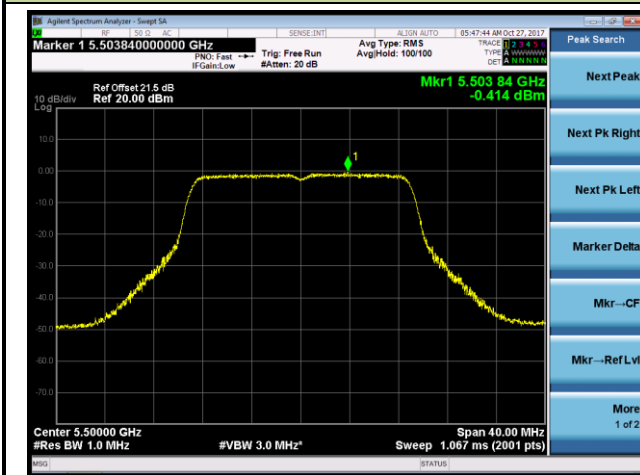


Channel 64 (5320MHz)

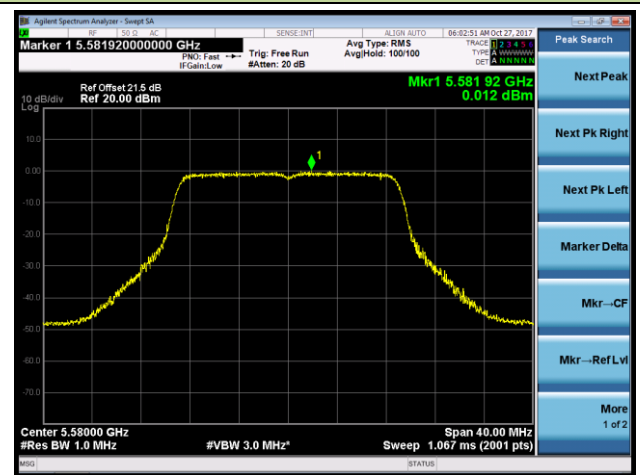


802.11n-HT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

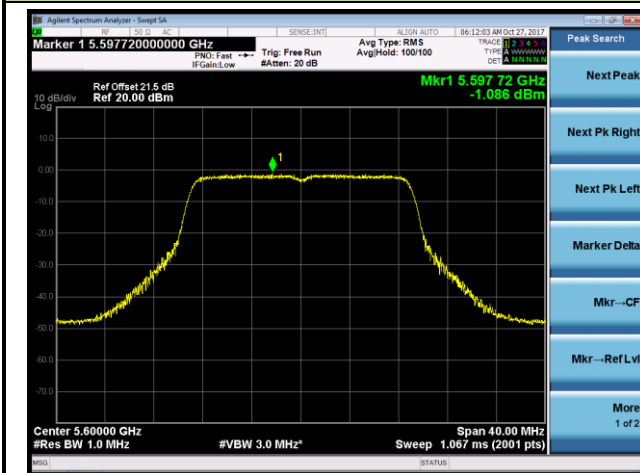
Channel 100 (5500MHz)



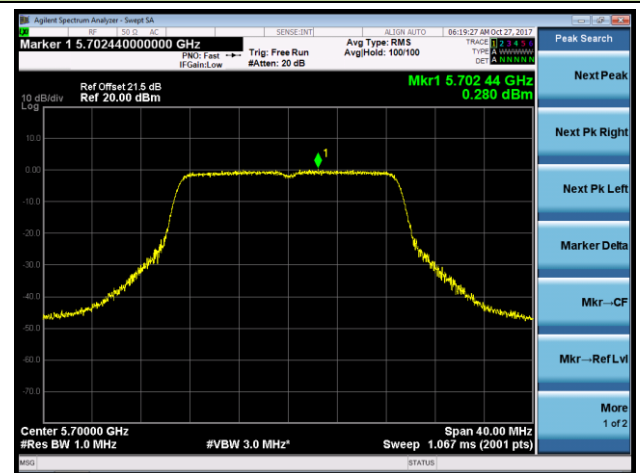
Channel 116 (5580MHz)



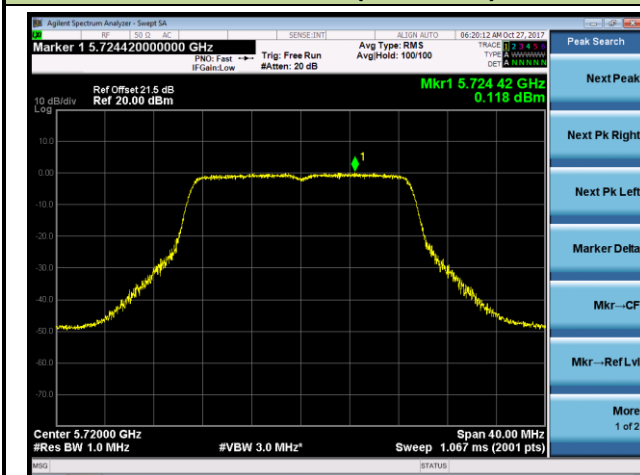
Channel 120 (5600MHz)



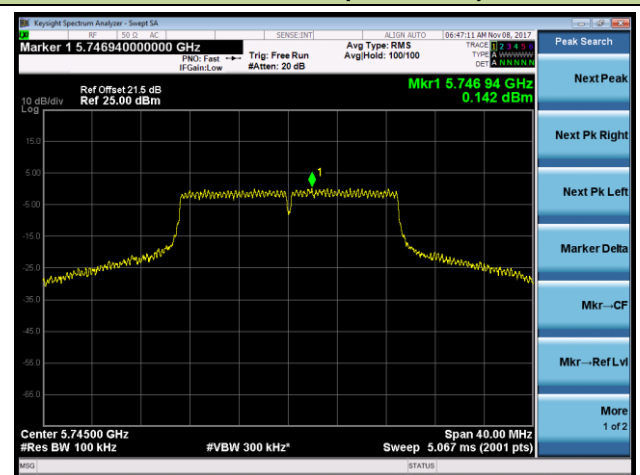
Channel 140 (5700MHz)



Channel 144 (5720MHz)

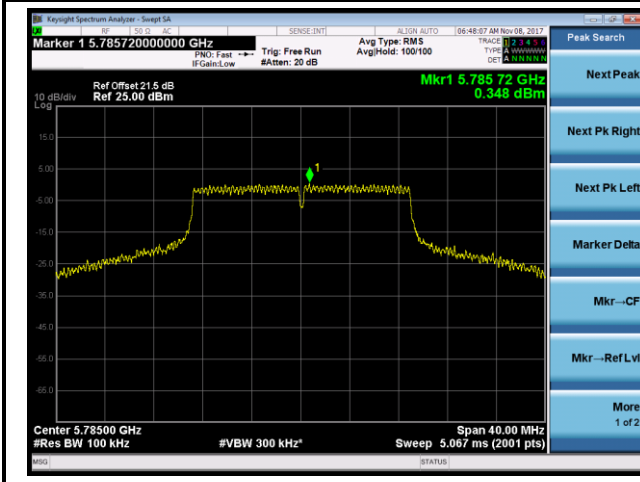


Channel 149 (5745MHz)

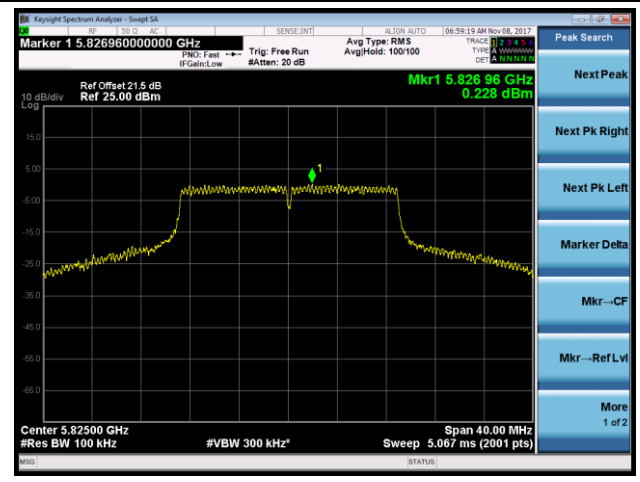


802.11n-HT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

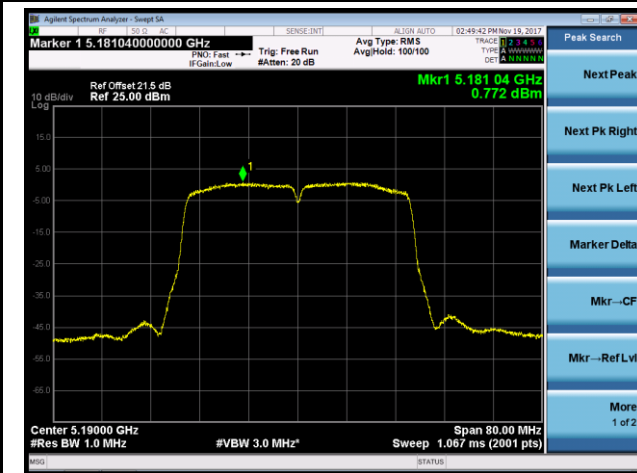


Channel 165 (5825MHz)

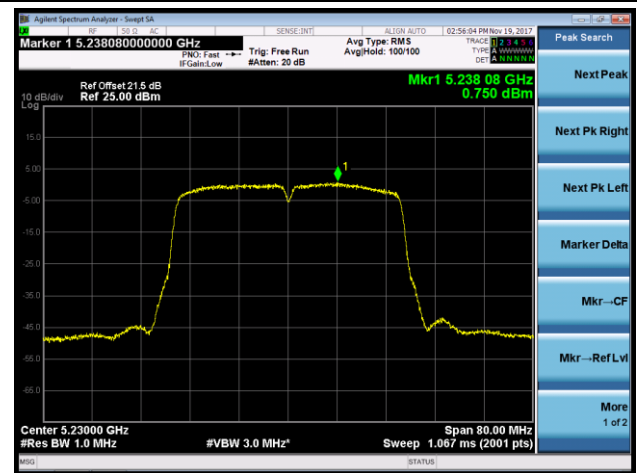


802.11n-HT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

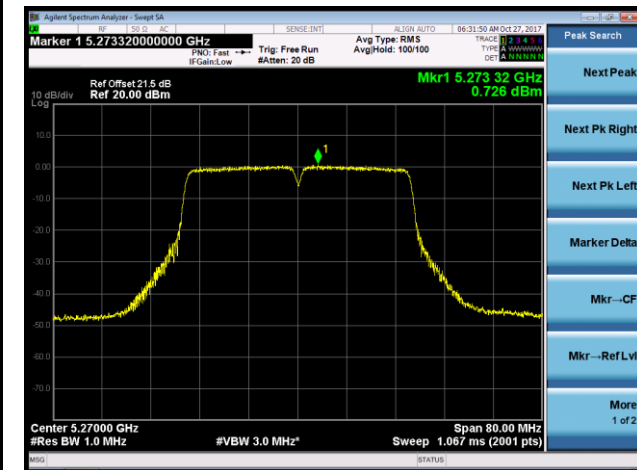
Channel 38 (5190MHz)



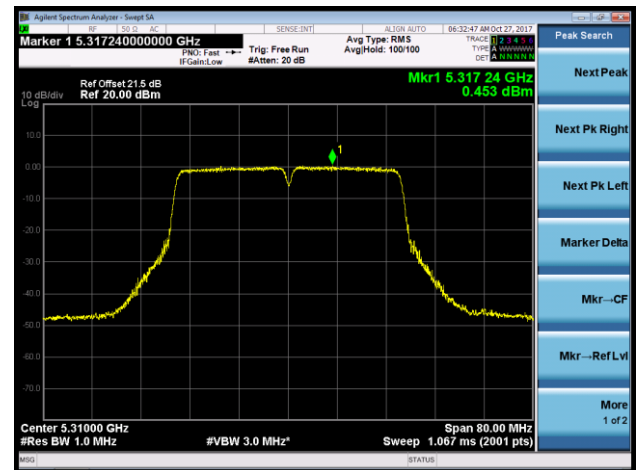
Channel 46 (5230MHz)



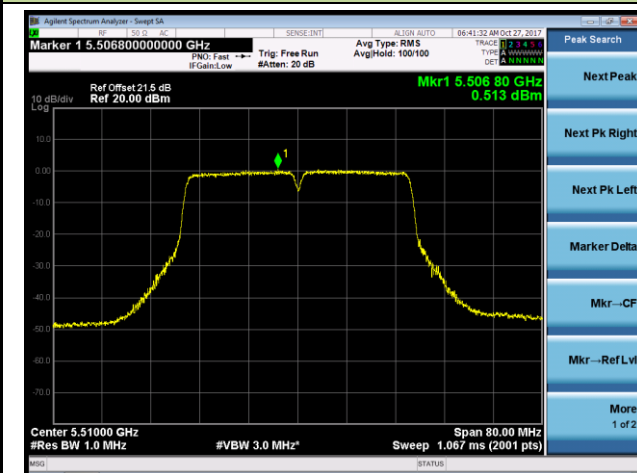
Channel 54 (5270MHz)



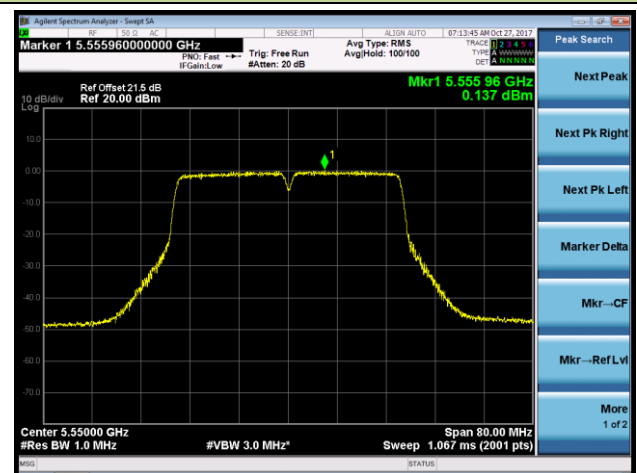
Channel 62 (5310MHz)



Channel 102 (5510MHz)

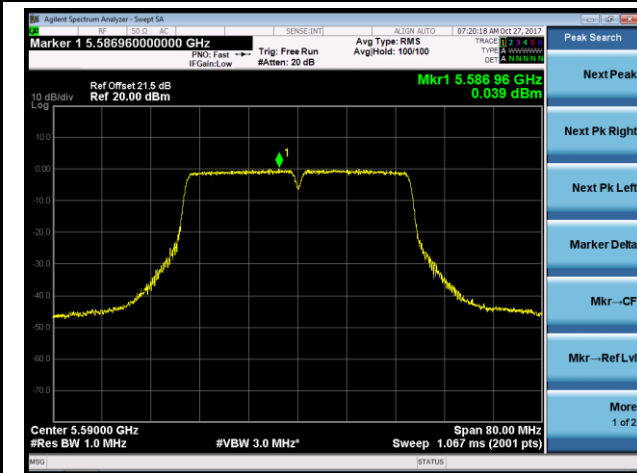


Channel 110 (5550MHz)

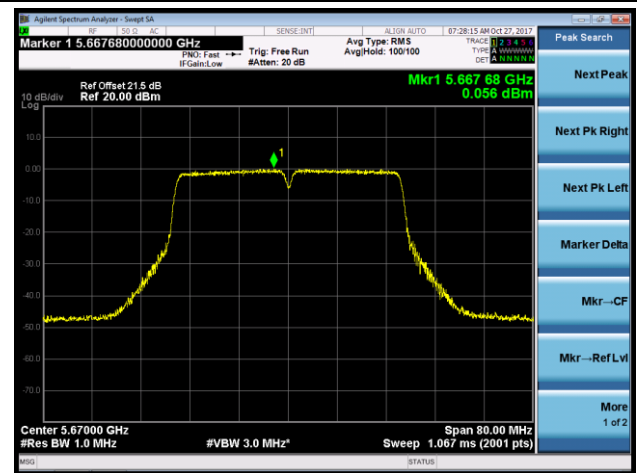


802.11n-HT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

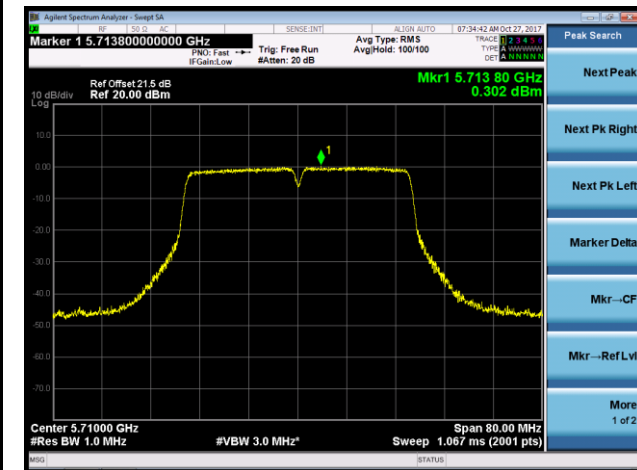
Channel 118 (5590MHz)



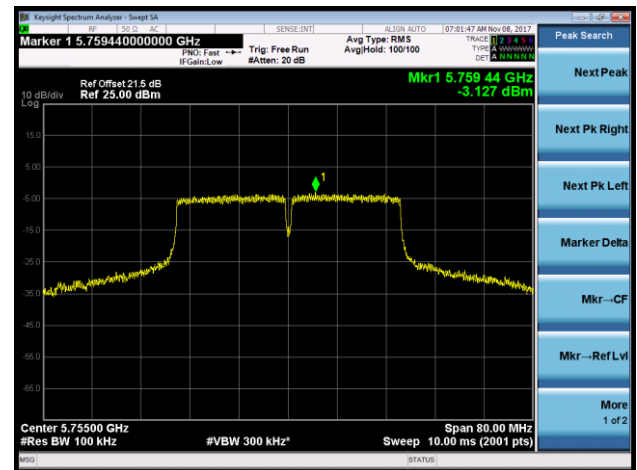
Channel 134 (5670MHz)



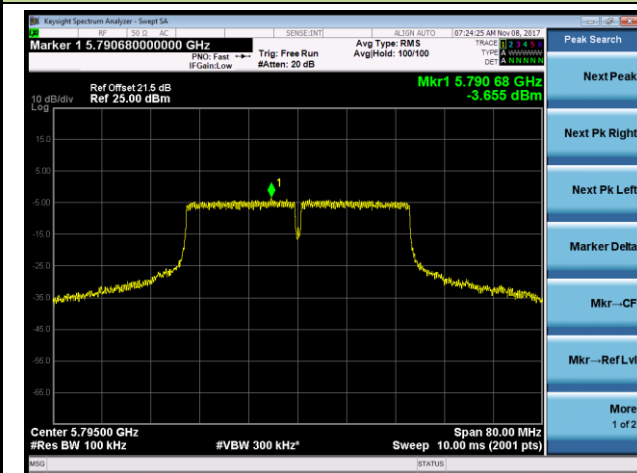
Channel 142 (5710MHz)



Channel 151 (5755MHz)

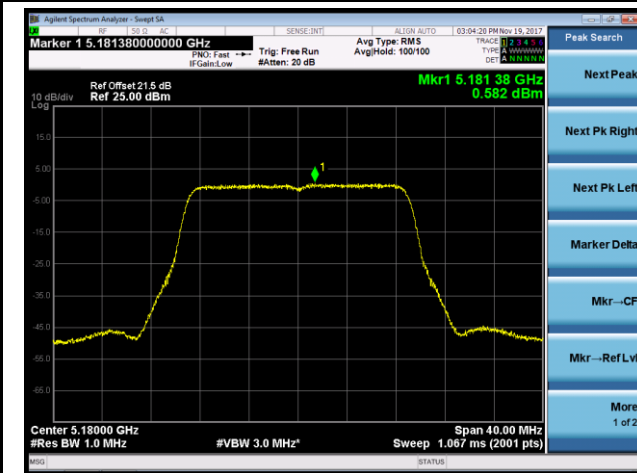


Channel 159 (5795MHz)

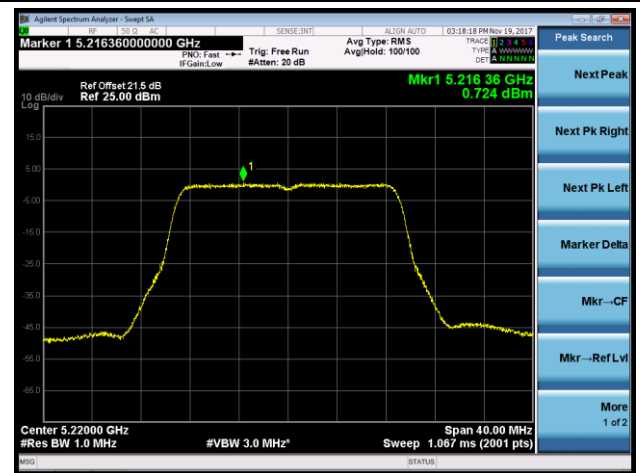


802.11ac-VHT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

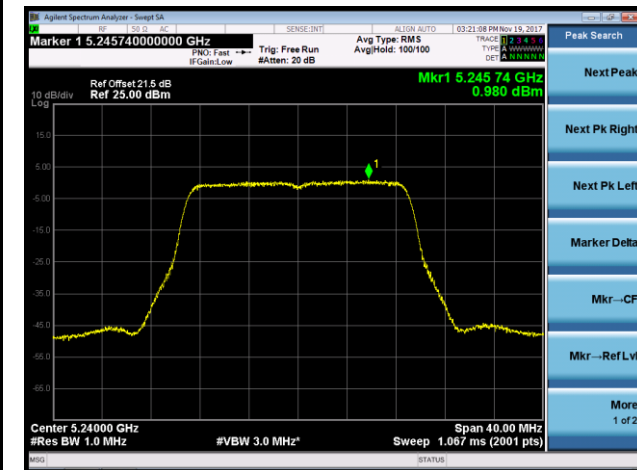
Channel 36 (5180MHz)



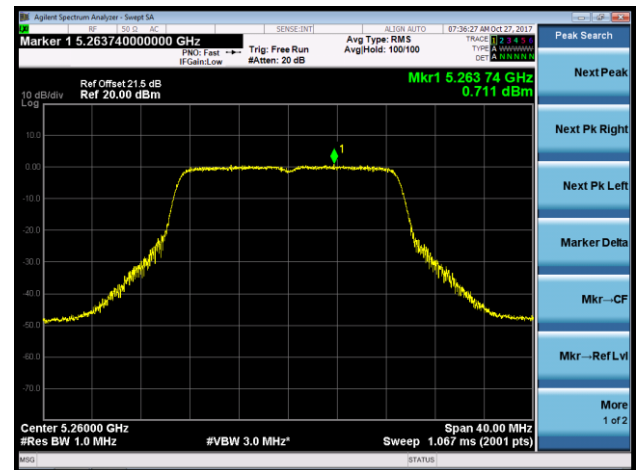
Channel 44 (5220MHz)



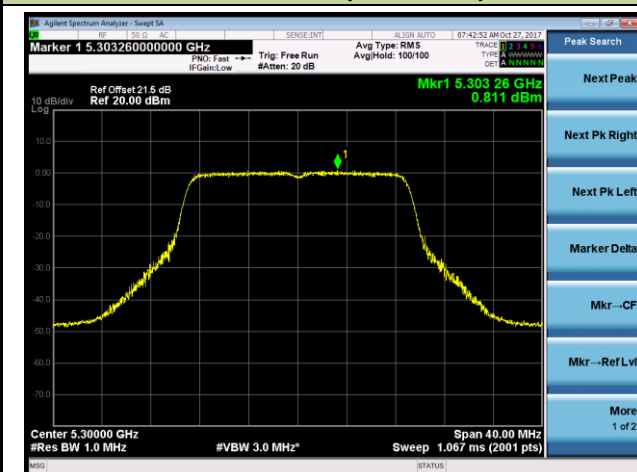
Channel 48 (5240MHz)



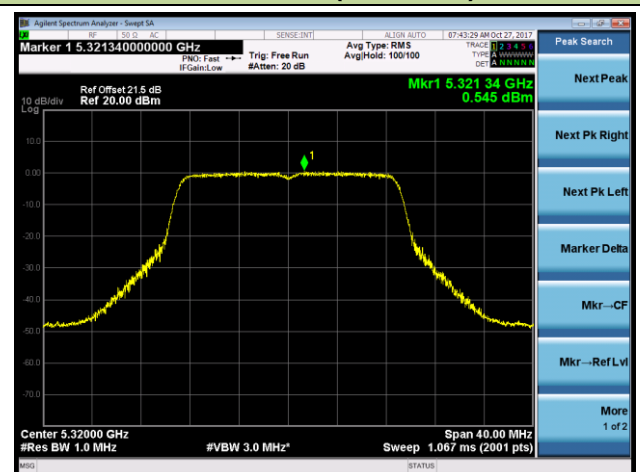
Channel 52 (5260MHz)



Channel 60 (5300MHz)

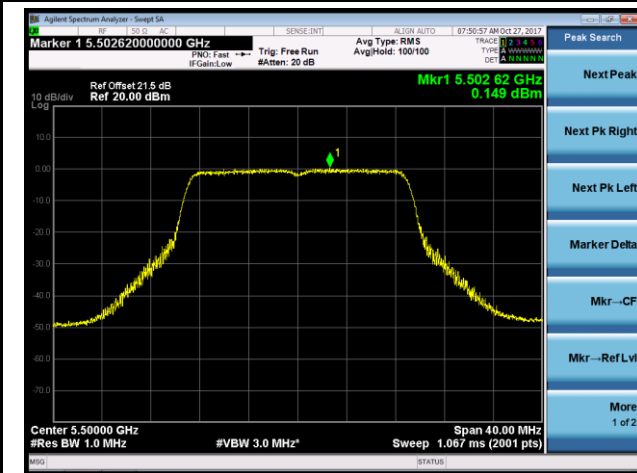


Channel 64 (5320MHz)

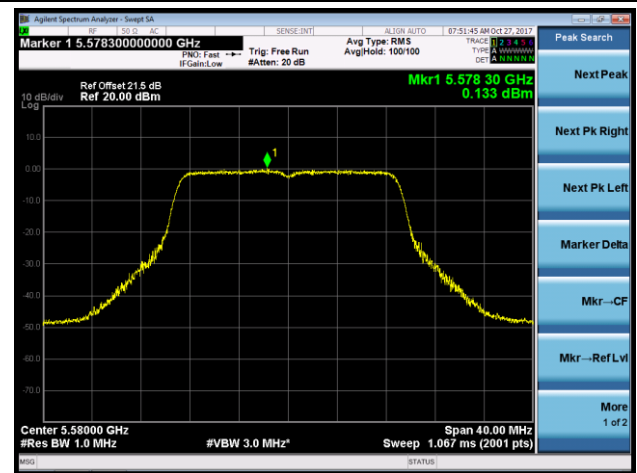


802.11ac-VHT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

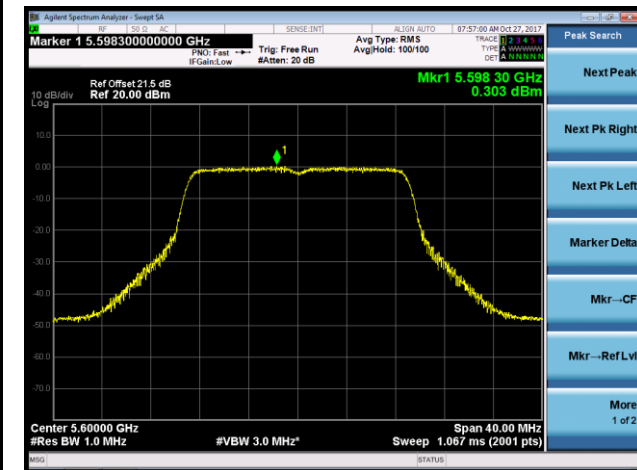
Channel 100 (5500MHz)



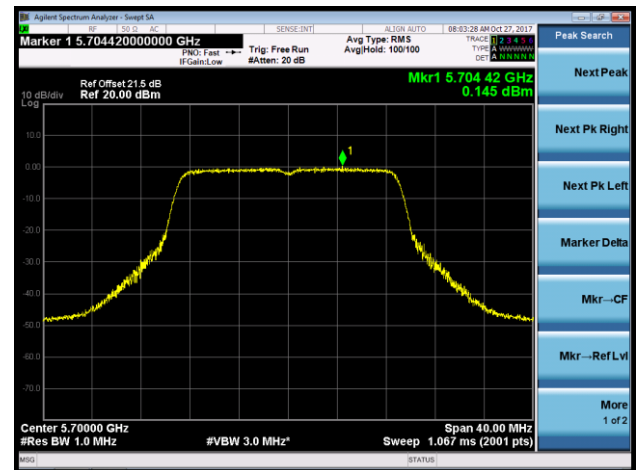
Channel 116 (5580MHz)



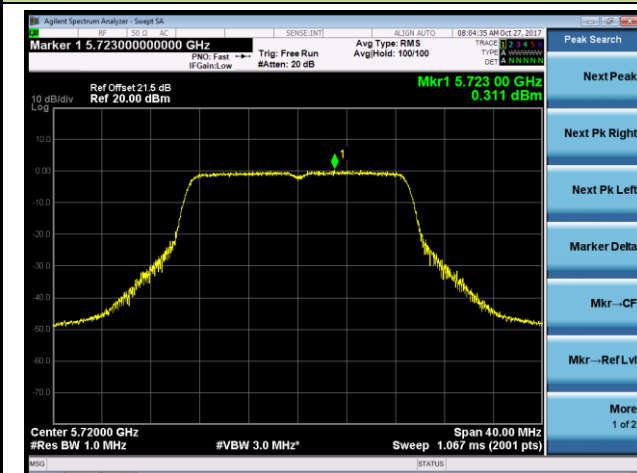
Channel 120 (5600MHz)



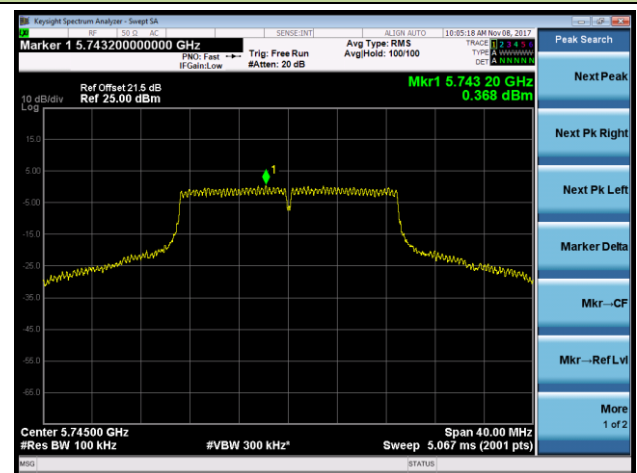
Channel 140 (5700MHz)



Channel 144 (5720MHz)

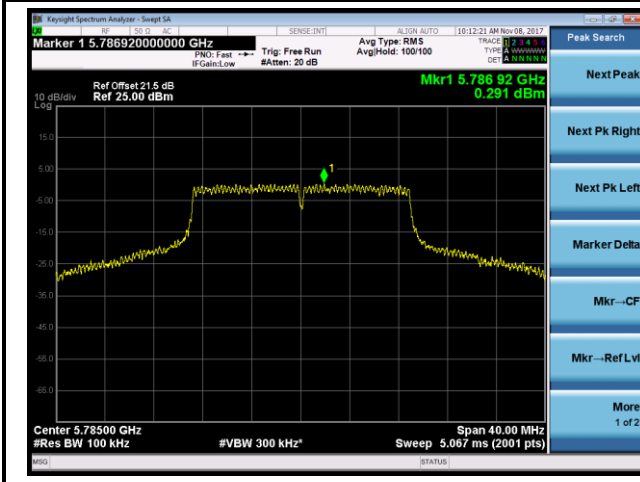


Channel 149 (5745MHz)

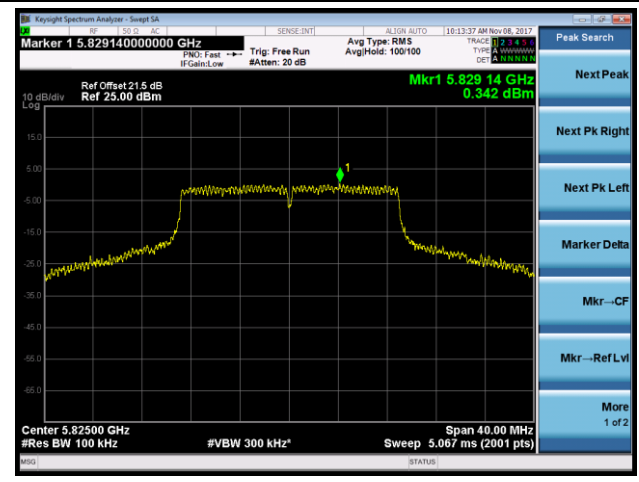


802.11ac-VHT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

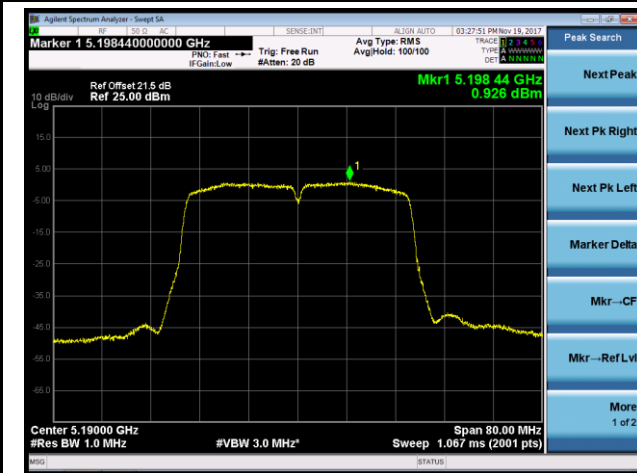


Channel 165 (5825MHz)

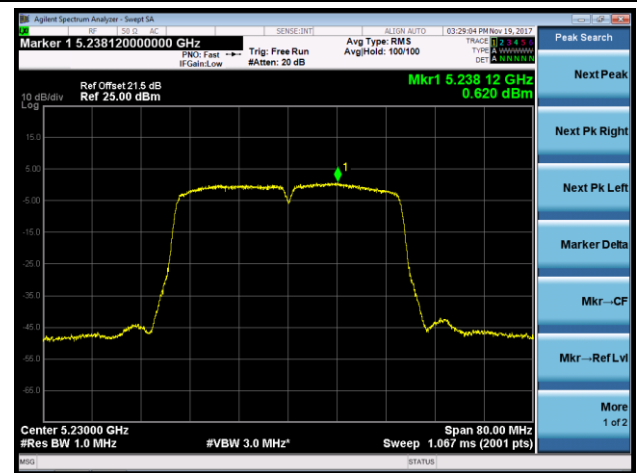


802.11ac-VHT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

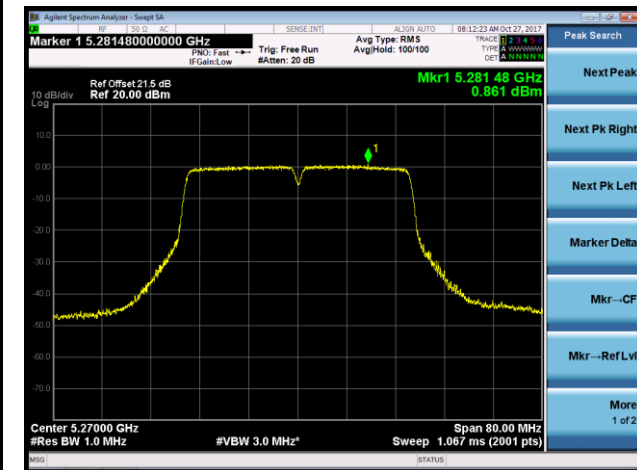
Channel 38 (5190MHz)



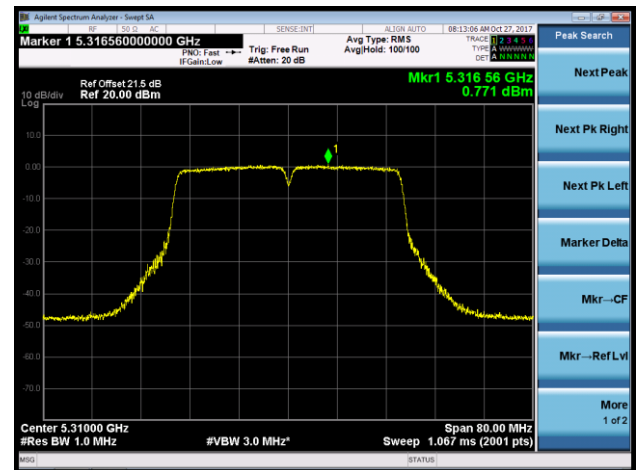
Channel 46 (5230MHz)



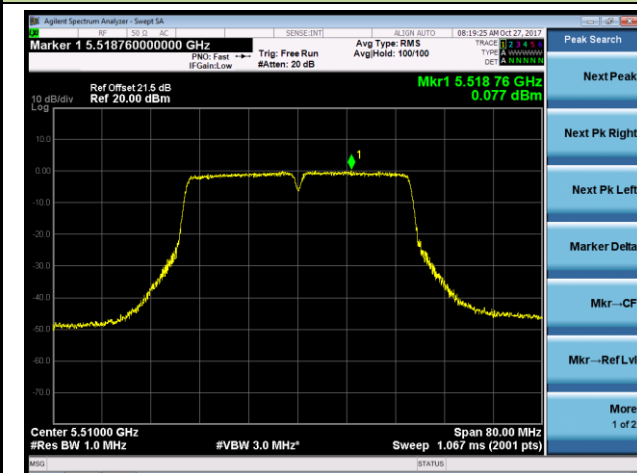
Channel 54 (5270MHz)



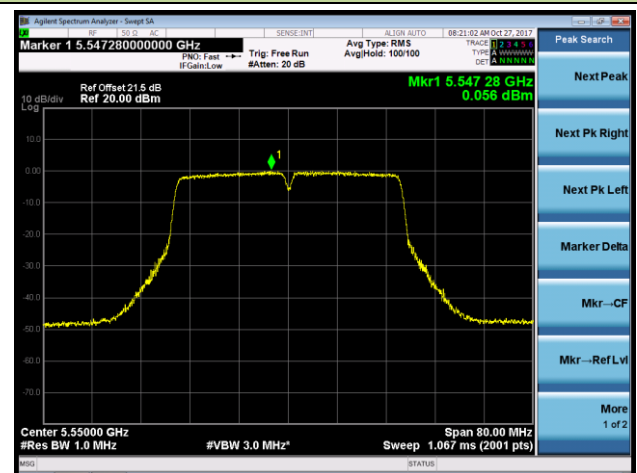
Channel 62 (5310MHz)



Channel 102 (5510MHz)

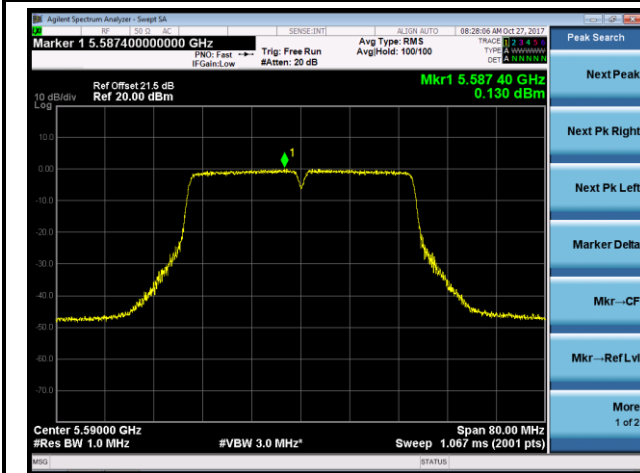


Channel 110 (5550MHz)

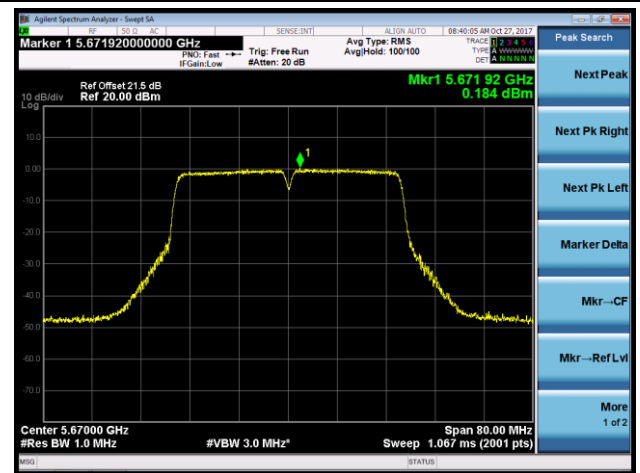


802.11ac-VHT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

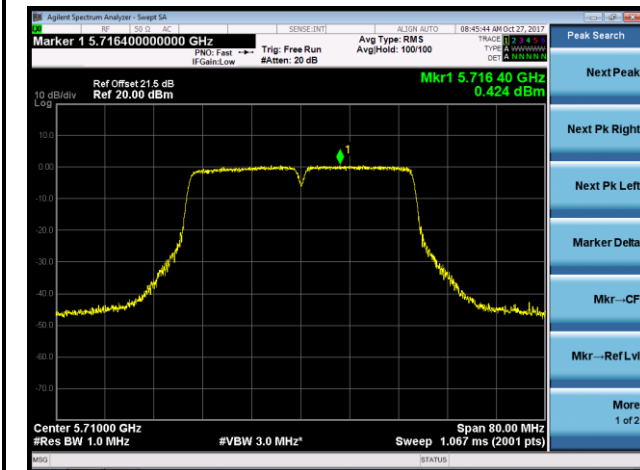
Channel 118 (5590MHz)



Channel 134 (5670MHz)



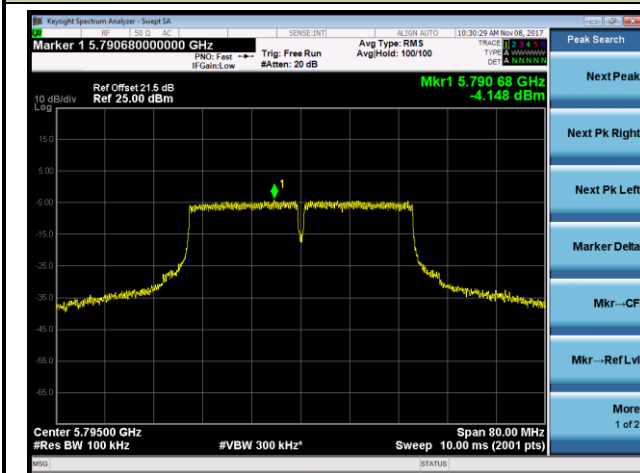
Channel 142 (5710MHz)



Channel 151 (5755MHz)

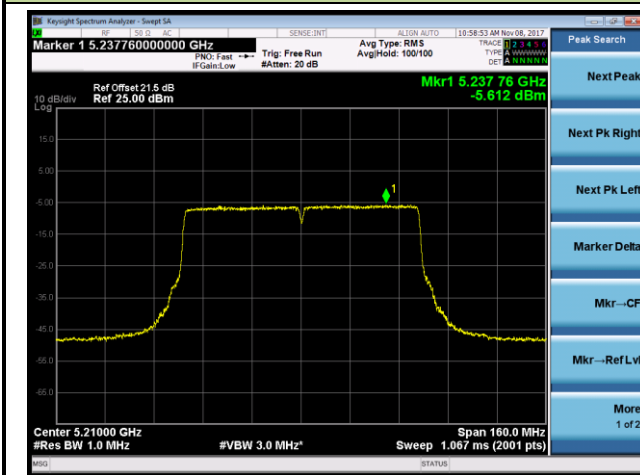


Channel 159 (5795MHz)

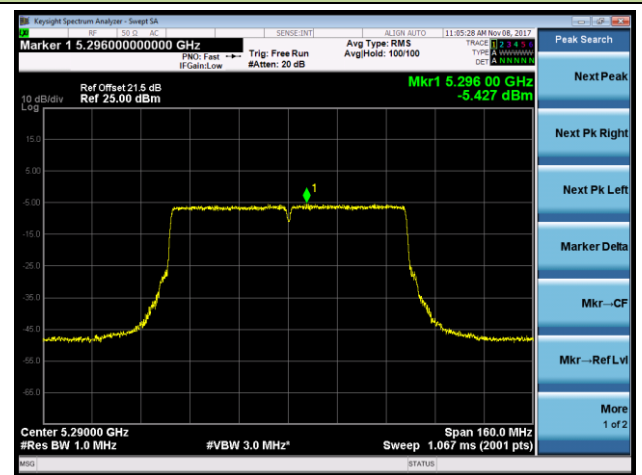


802.11ac-VHT80 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

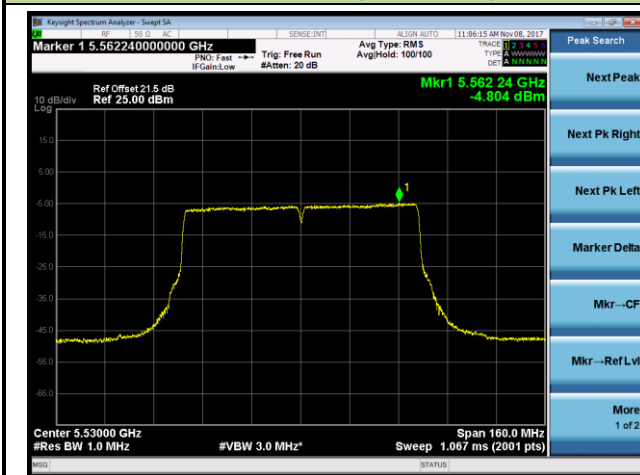
Channel 42 (5210MHz)



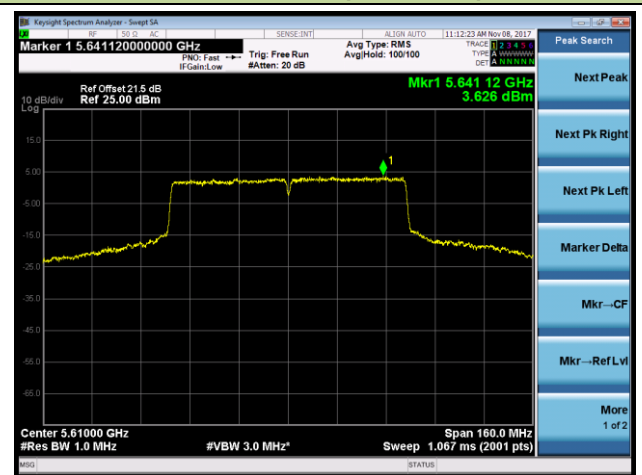
Channel 58 (5290MHz)



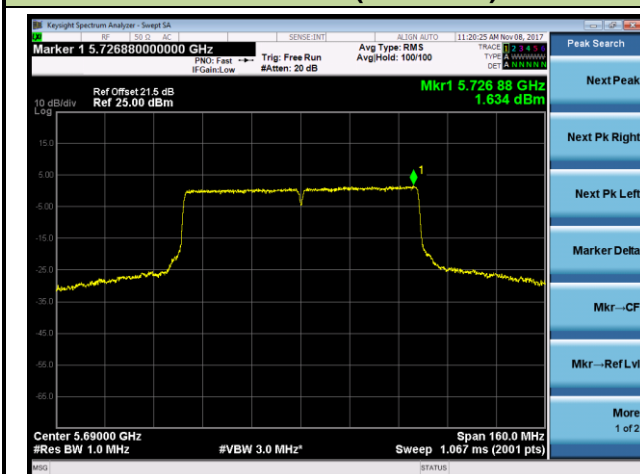
Channel 106 (5530MHz)



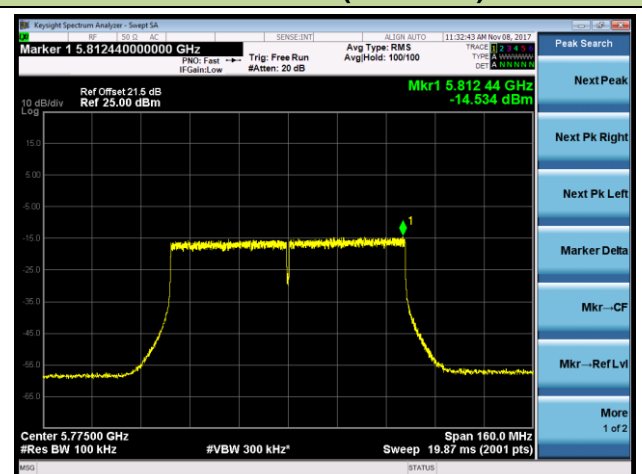
Channel 122 (5610MHz)



Channel 138 (5690MHz)

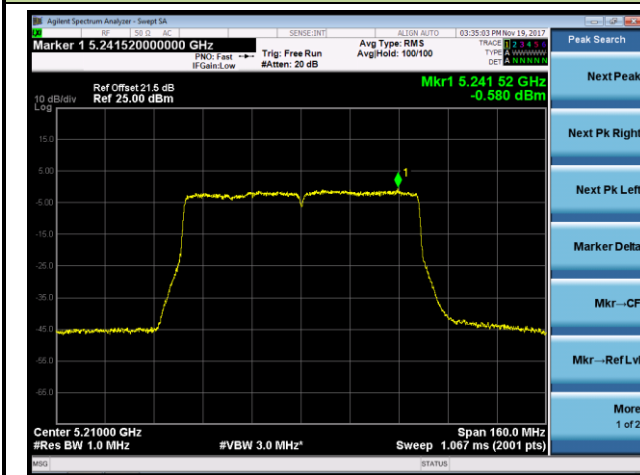


Channel 155 (5775MHz)

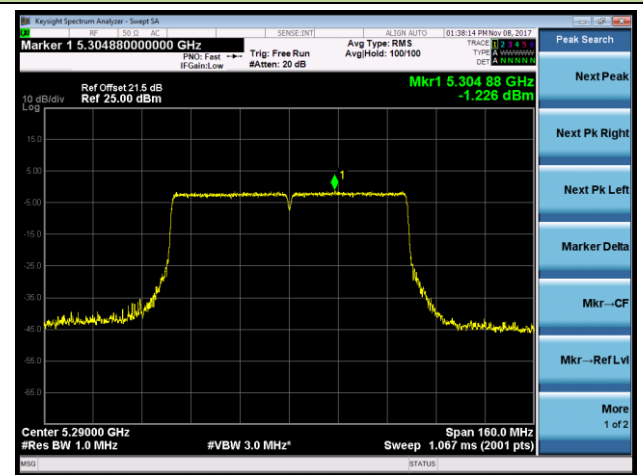


802.11ac-VHT80+80 Power Spectral Density - Ant 0 / Ant 0 + 1 (Ant 0 + 1 + 2 + 3)

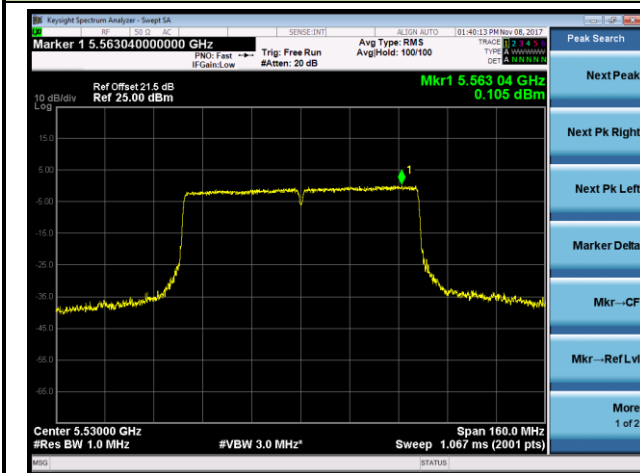
Channel 42 (5210MHz)



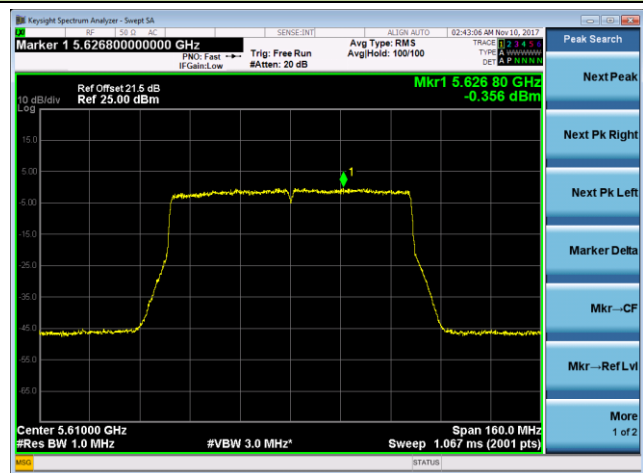
Channel 58 (5290MHz)



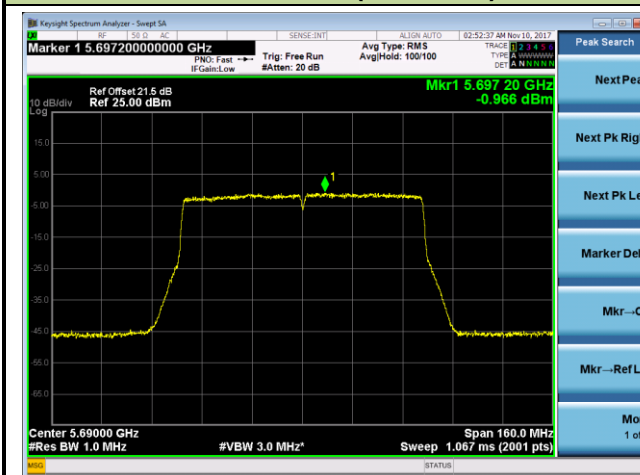
Channel 106 (5530MHz)



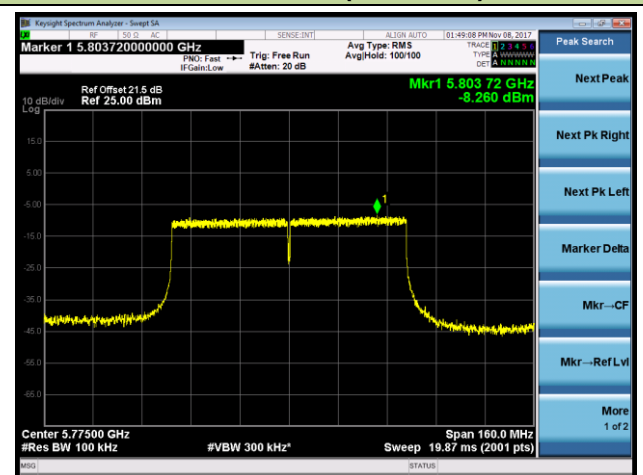
Channel 122 (5610MHz)



Channel 138 (5690MHz)



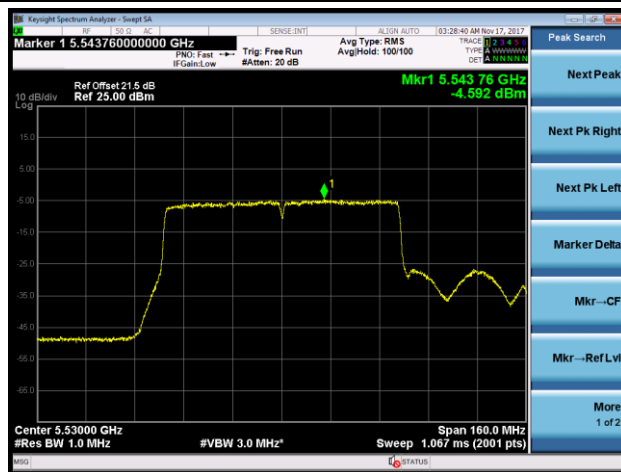
Channel 155 (5775MHz)



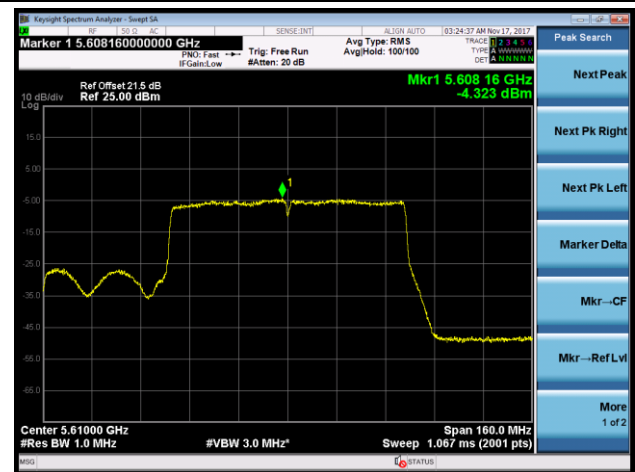
For the Emission Bandwidth Contained within the Same Band:

802.11ac-VHT80+80 Power Spectral Density - Ant 0 / Ant 0 + 1 (Ant 0 + 1 + 2 + 3) (CDD Mode)

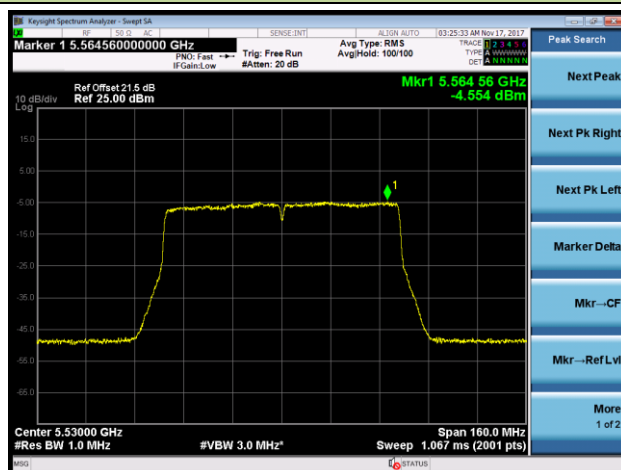
Group 1_Channel 106 (5530MHz)



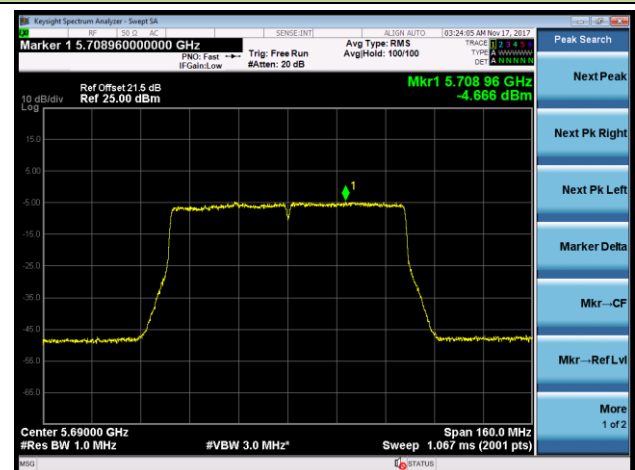
Group 2_Channel 122 (5610MHz)



Group 3_Channel 106 (5530MHz)

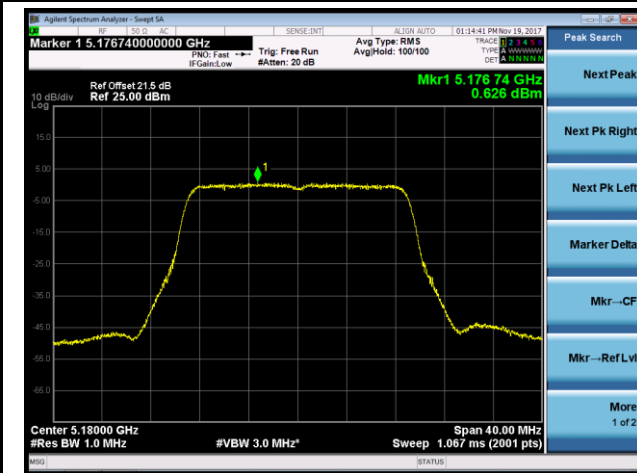


Group 4_Channel 138 (5690MHz)

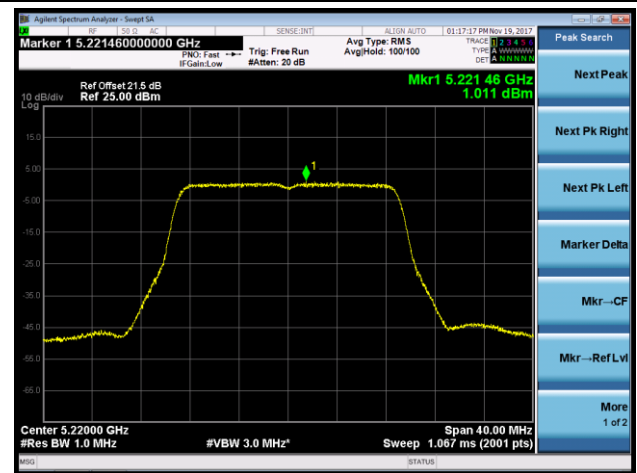


802.11n-HT20 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

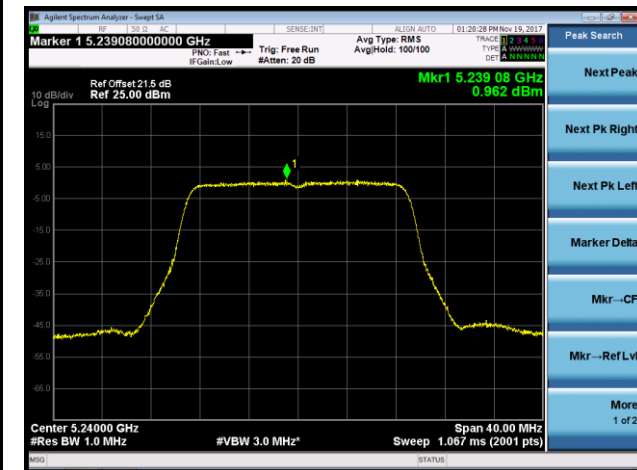
Channel 36 (5180MHz)



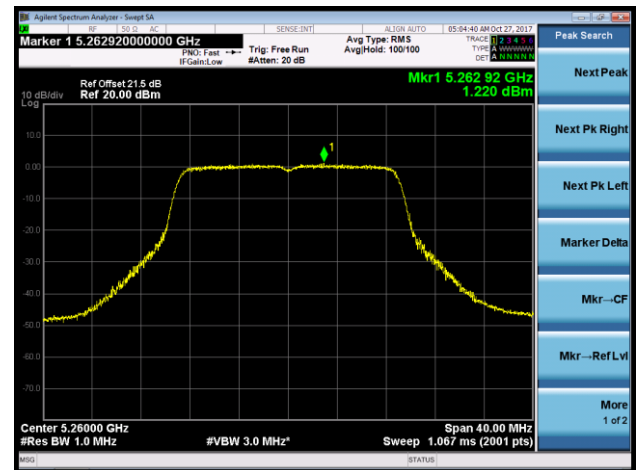
Channel 44 (5220MHz)



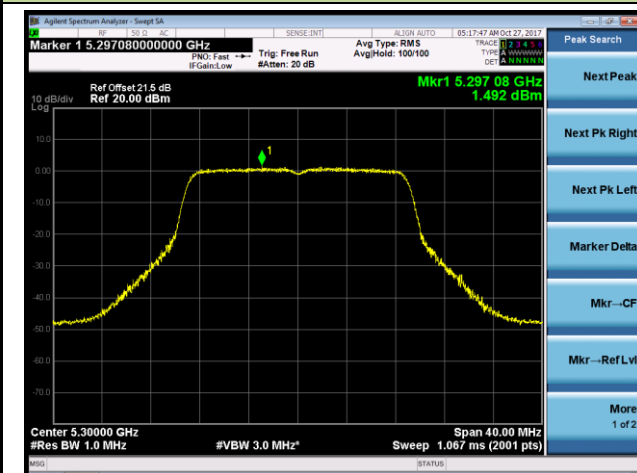
Channel 48 (5240MHz)



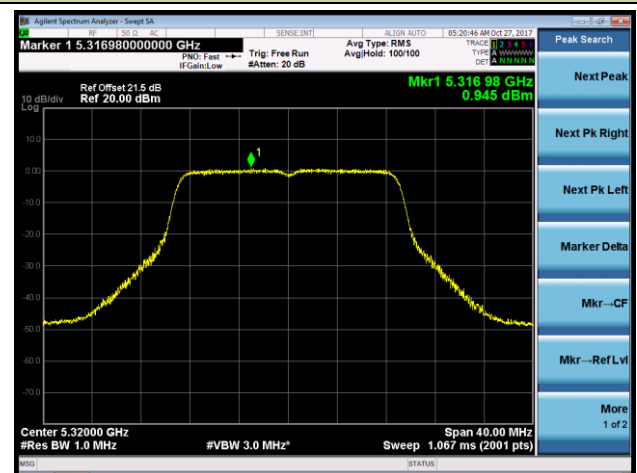
Channel 52 (5260MHz)



Channel 60 (5300MHz)

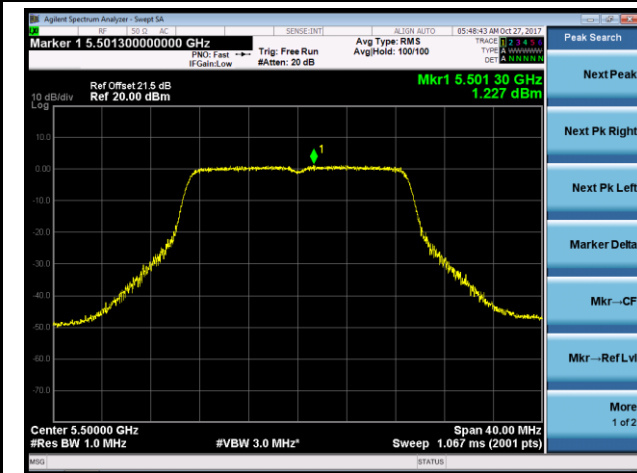


Channel 64 (5320MHz)

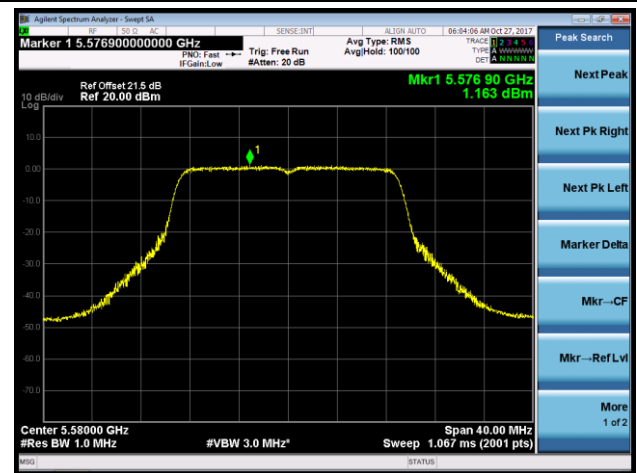


802.11n-HT20 Power Spectral Density - Ant 0 + 1 + 2 + 3

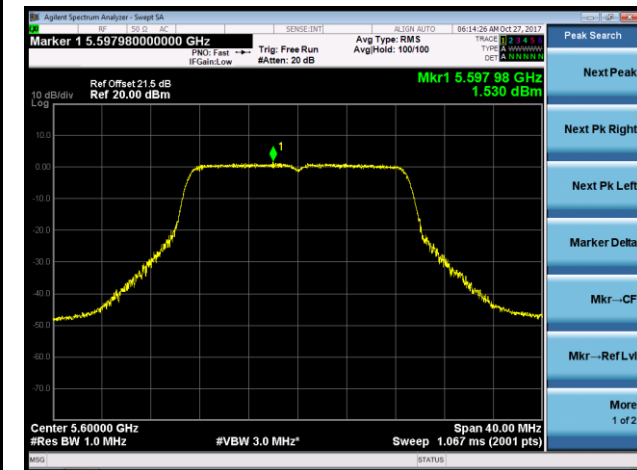
Channel 100 (5500MHz)



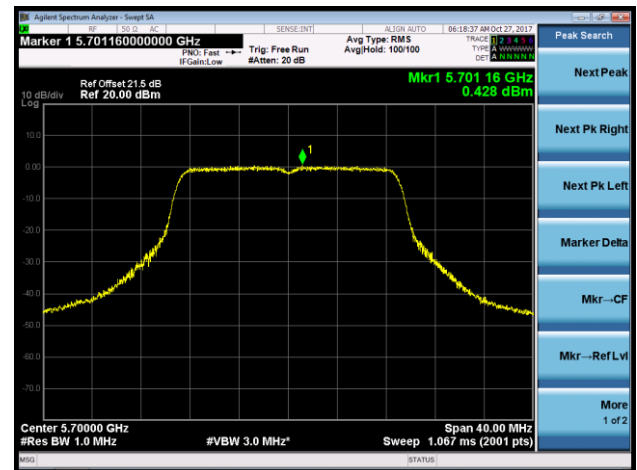
Channel 116 (5580MHz)



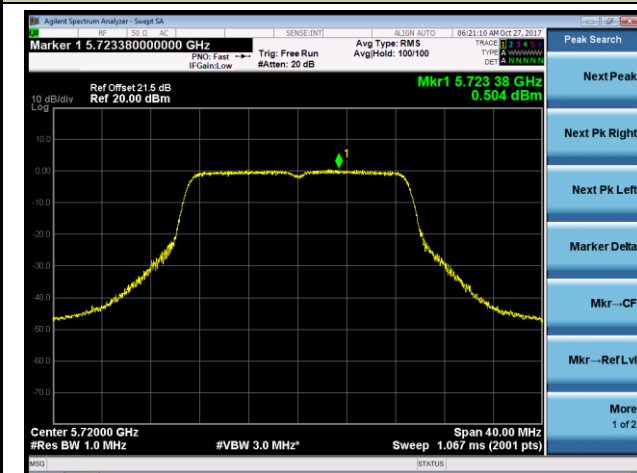
Channel 120 (5600MHz)



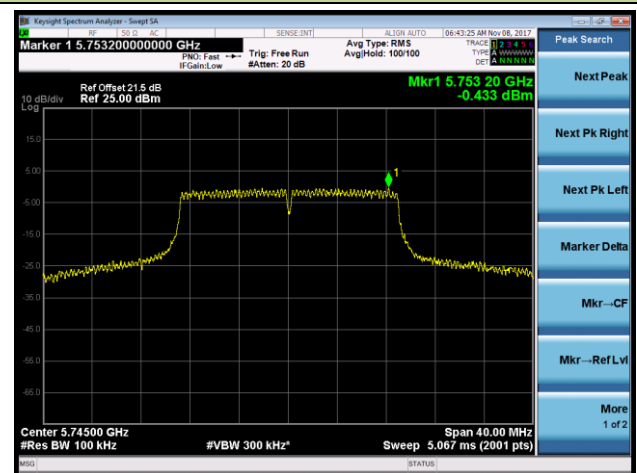
Channel 140 (5700MHz)



Channel 144 (5720MHz)

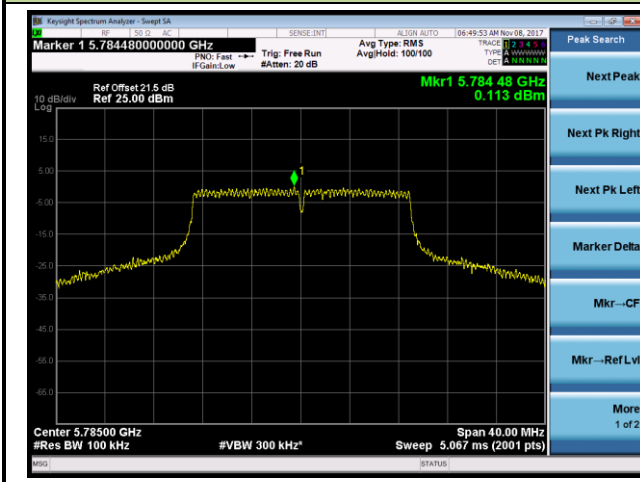


Channel 149 (5745MHz)

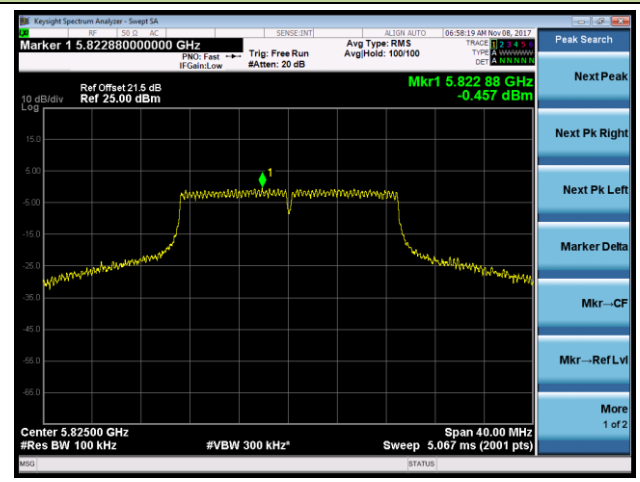


802.11n-HT20 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

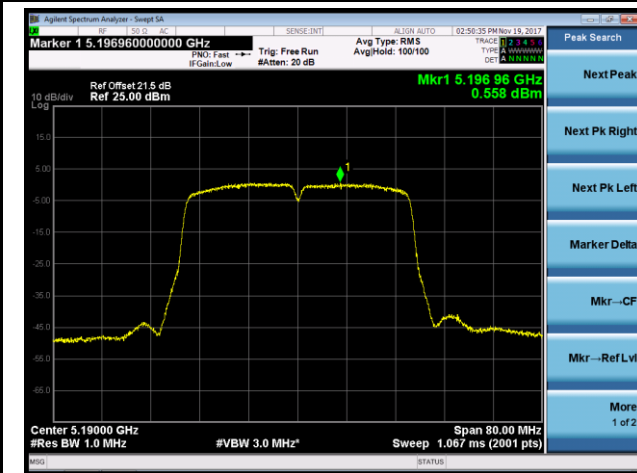


Channel 165 (5825MHz)

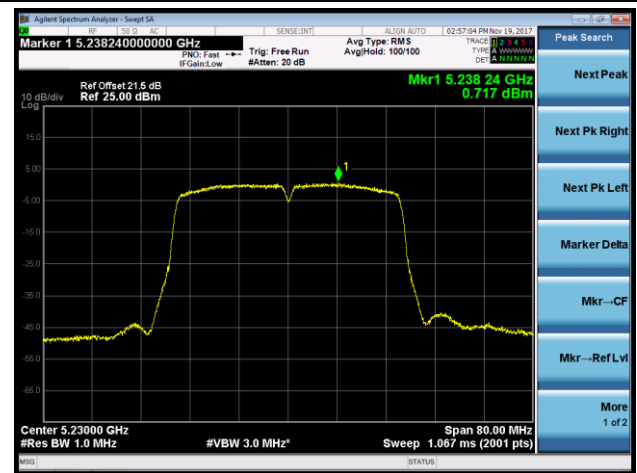


802.11n-HT40 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

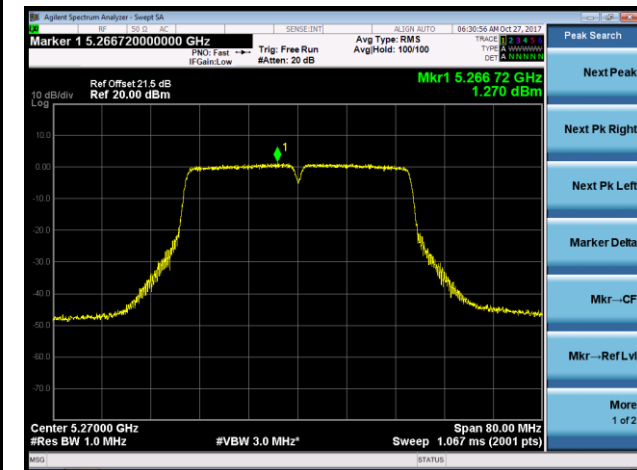
Channel 38 (5190MHz)



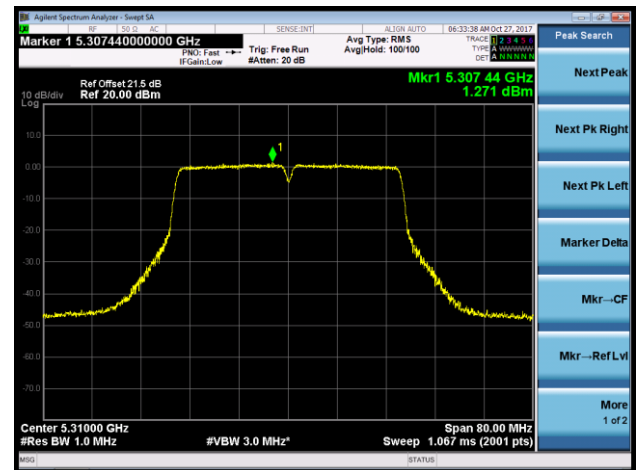
Channel 46 (5230MHz)



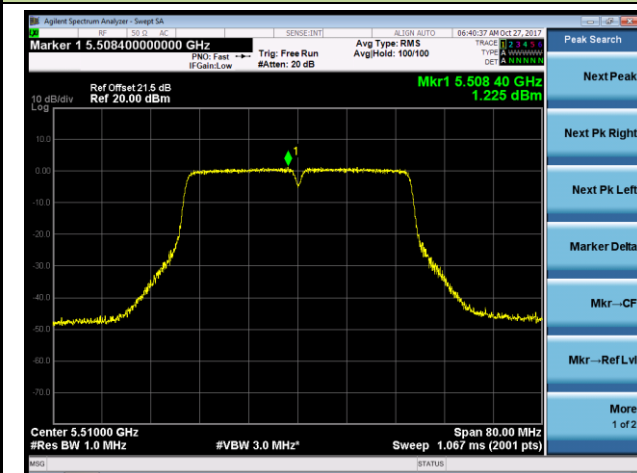
Channel 54 (5270MHz)



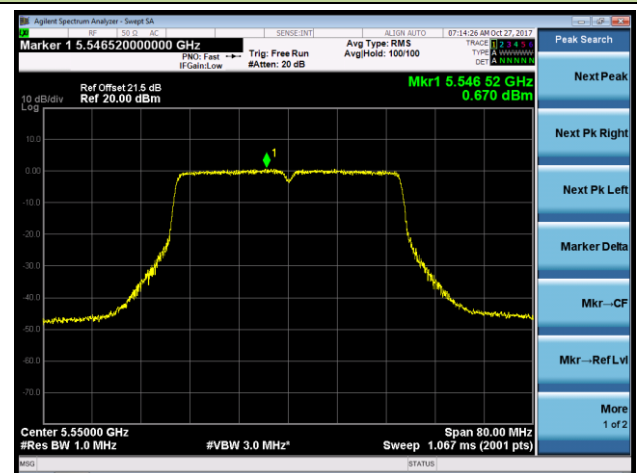
Channel 62 (5310MHz)



Channel 102 (5510MHz)

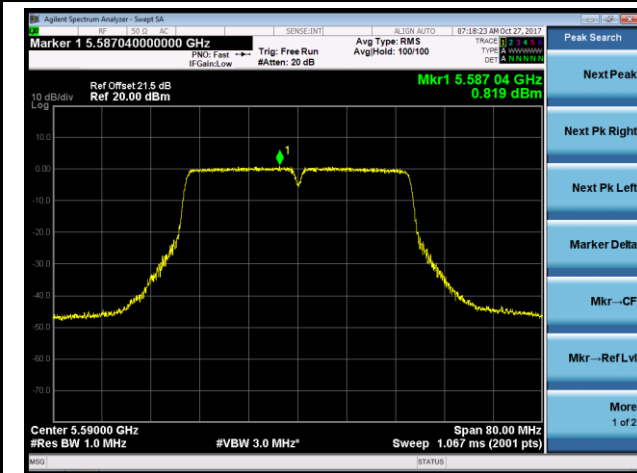


Channel 110 (5550MHz)

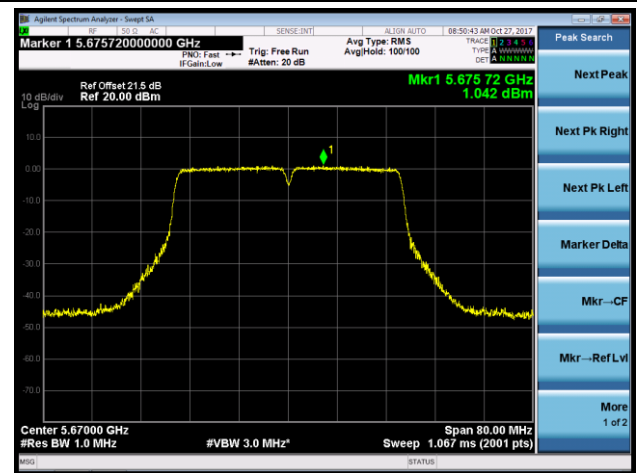


802.11n-HT40 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

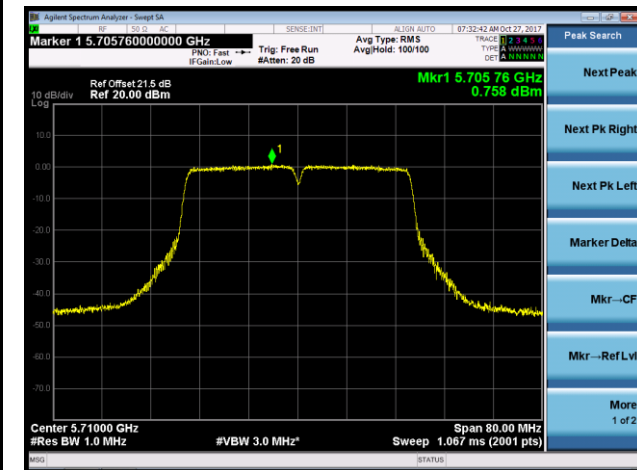
Channel 118 (5590MHz)



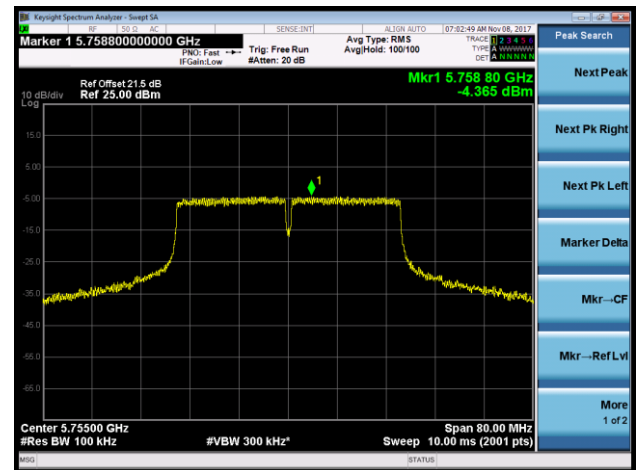
Channel 134 (5670MHz)



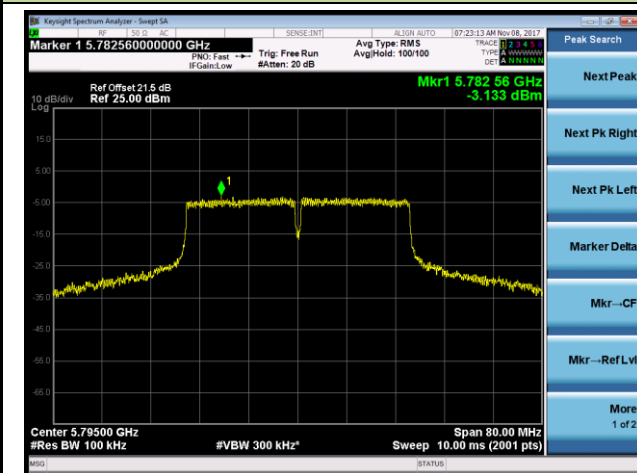
Channel 142 (5710MHz)



Channel 151 (5755MHz)

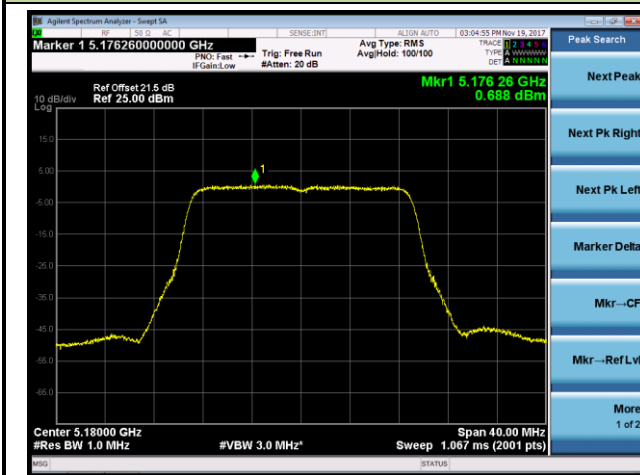


Channel 159 (5795MHz)

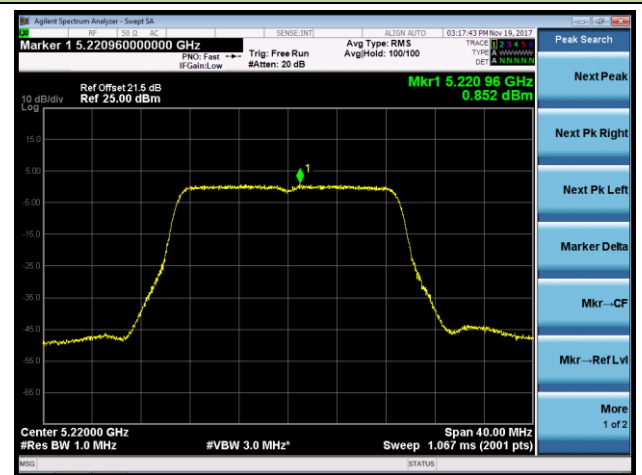


802.11ac-VHT20 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

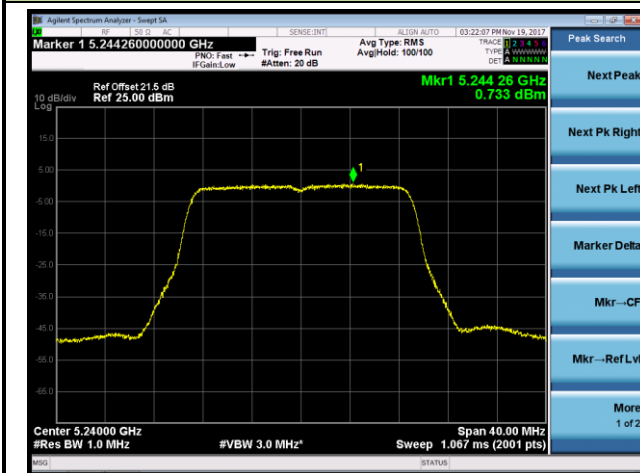
Channel 36 (5180MHz)



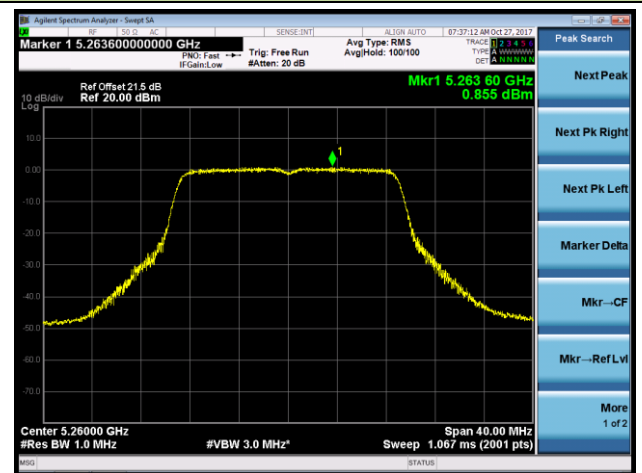
Channel 44 (5220MHz)



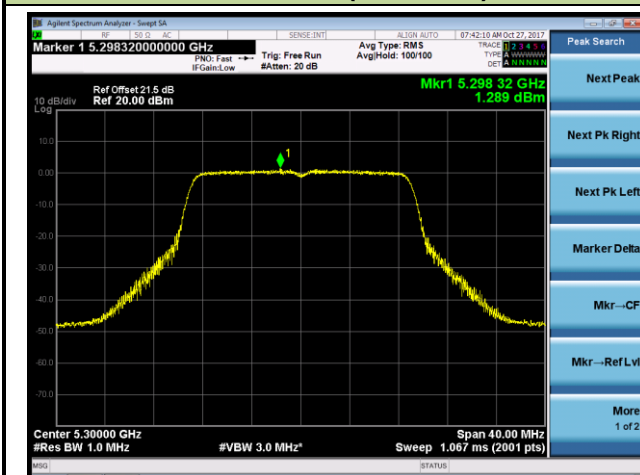
Channel 48 (5240MHz)



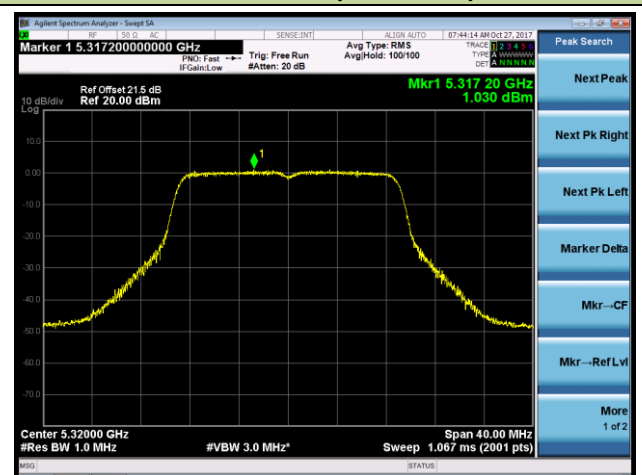
Channel 52 (5260MHz)



Channel 60 (5300MHz)

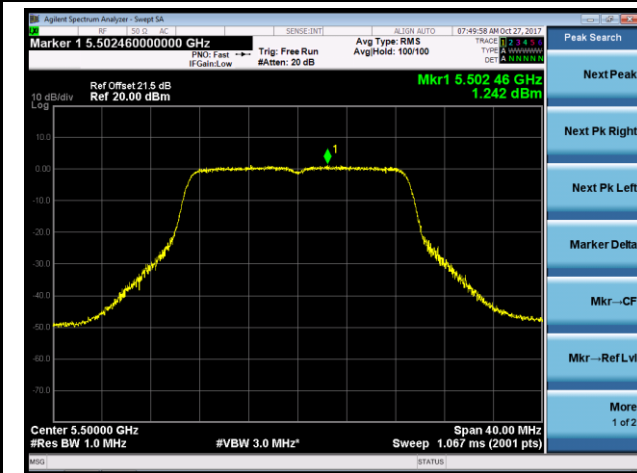


Channel 64 (5320MHz)

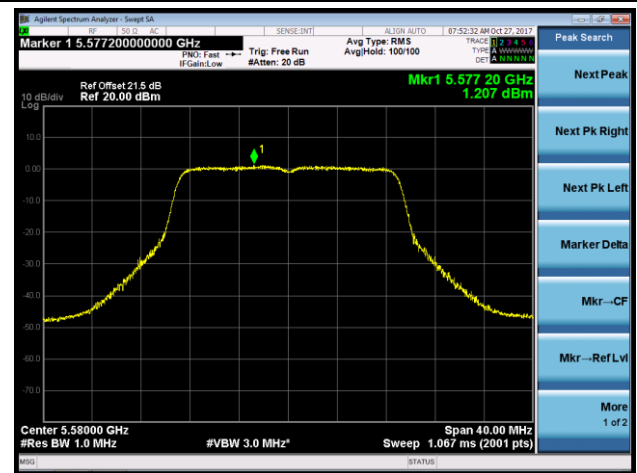


802.11ac-VHT20 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

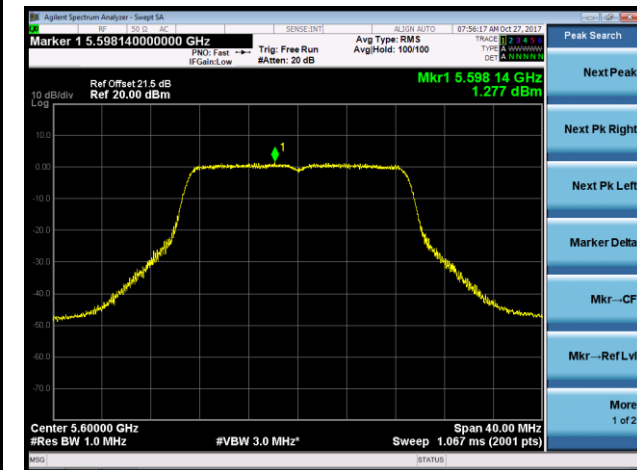
Channel 100 (5500MHz)



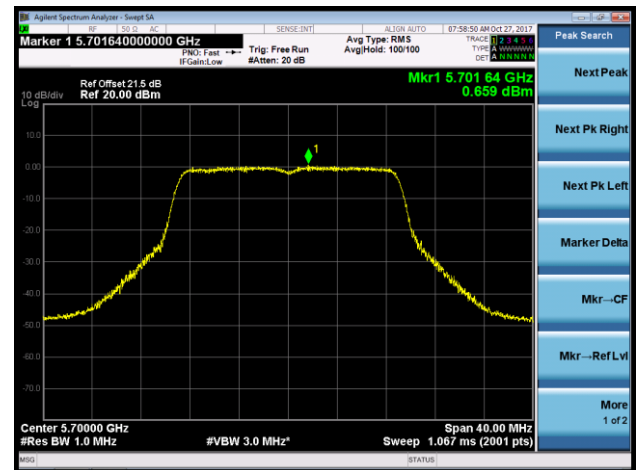
Channel 116 (5580MHz)



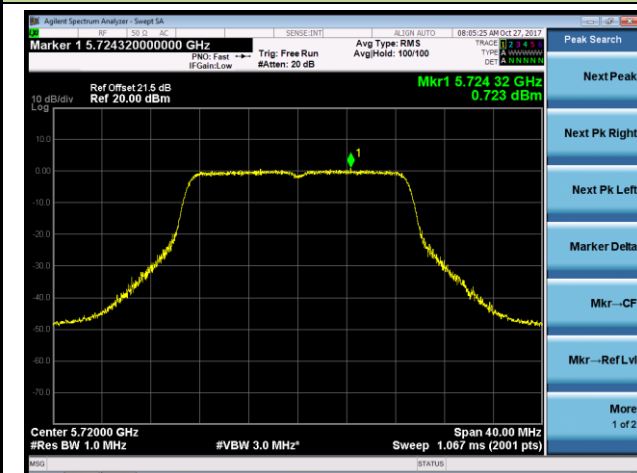
Channel 120 (5600MHz)



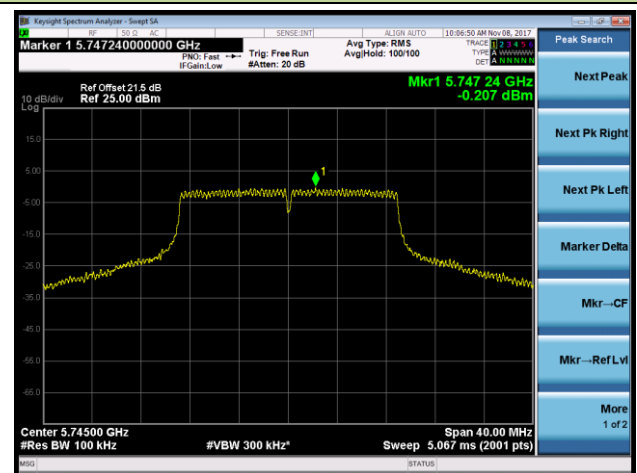
Channel 140 (5700MHz)



Channel 144 (5720MHz)

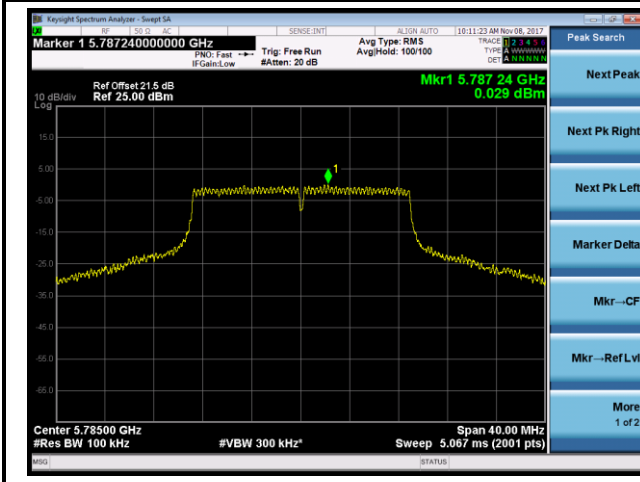


Channel 149 (5745MHz)

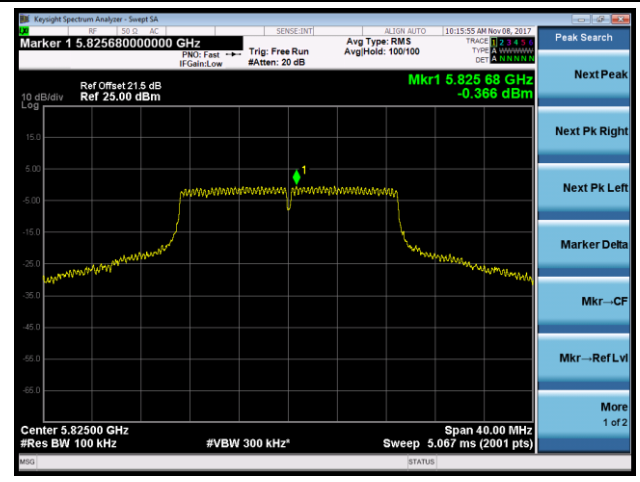


802.11ac-VHT20 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

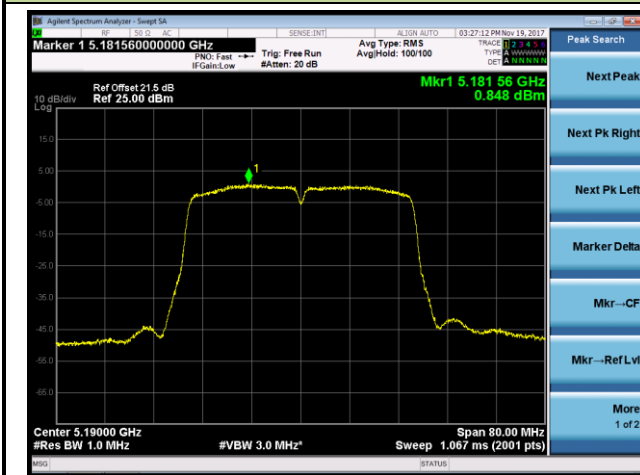


Channel 165 (5825MHz)

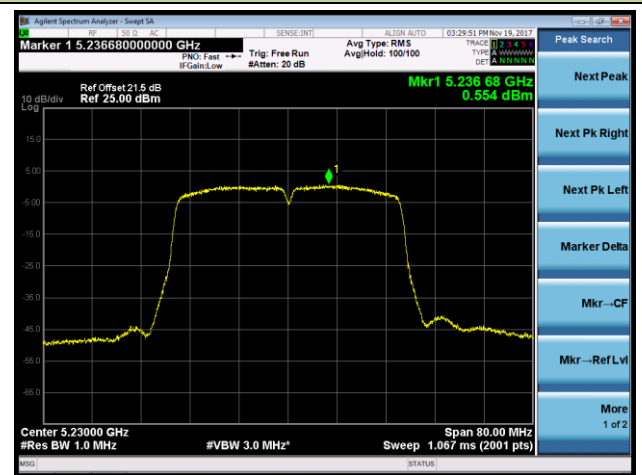


802.11ac-VHT40 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

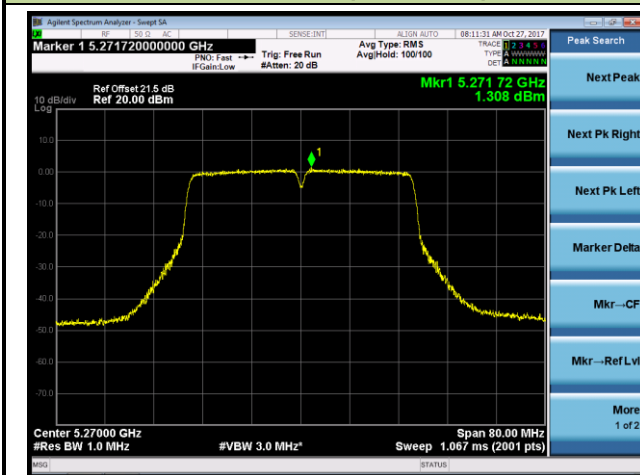
Channel 38 (5190MHz)



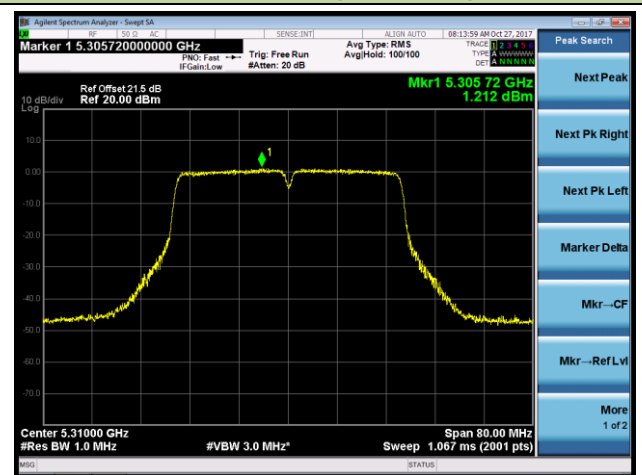
Channel 46 (5230MHz)



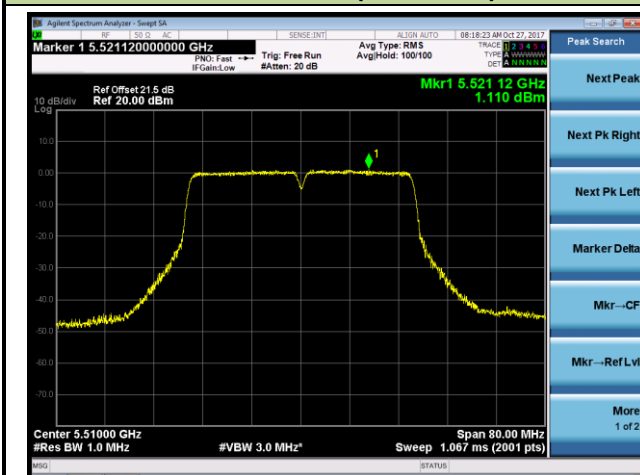
Channel 54 (5270MHz)



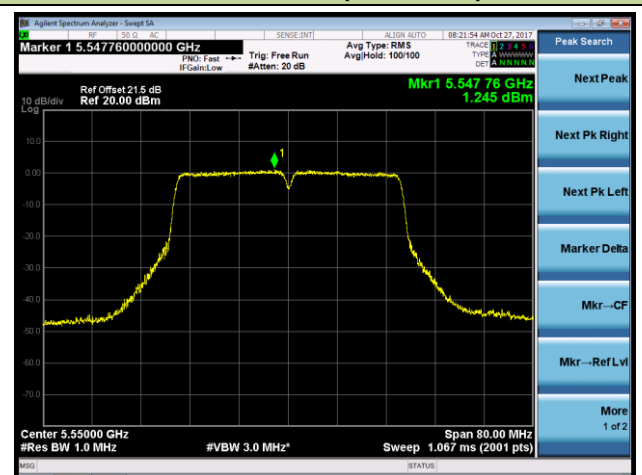
Channel 62 (5310MHz)



Channel 102 (5510MHz)

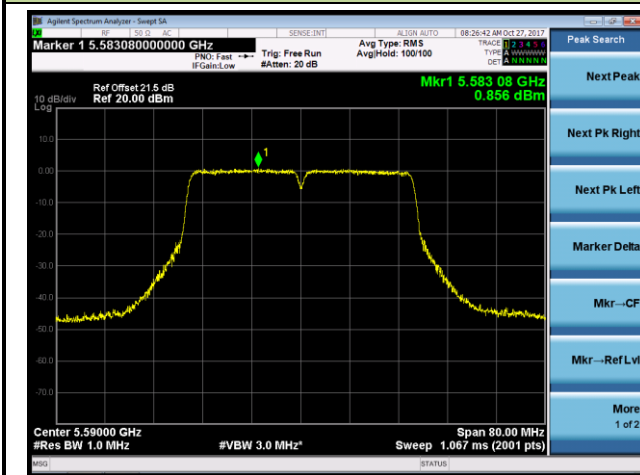


Channel 110 (5550MHz)

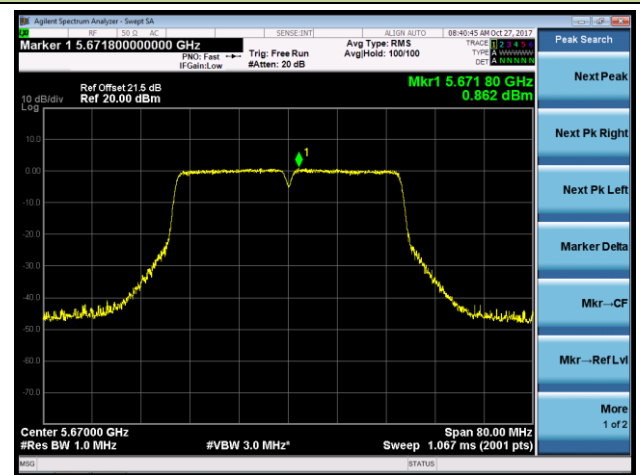


802.11ac-VHT40 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

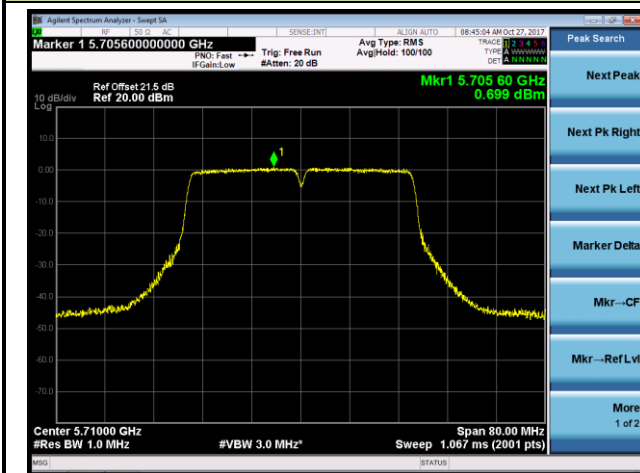
Channel 118 (5590MHz)



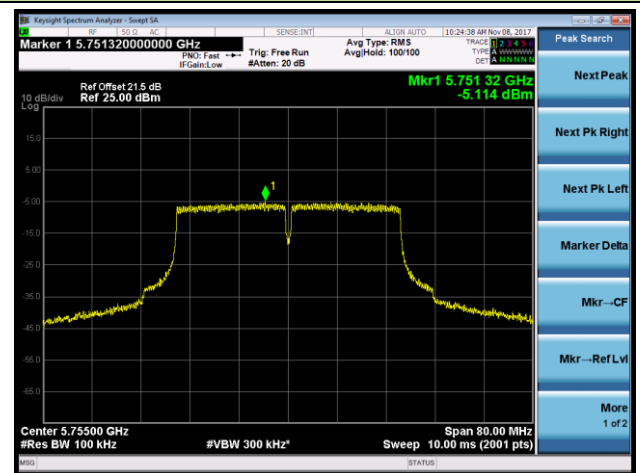
Channel 134 (5670MHz)



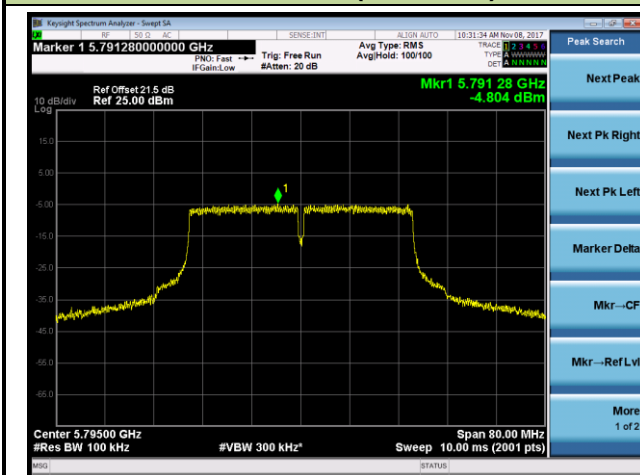
Channel 142 (5710MHz)



Channel 151 (5755MHz)

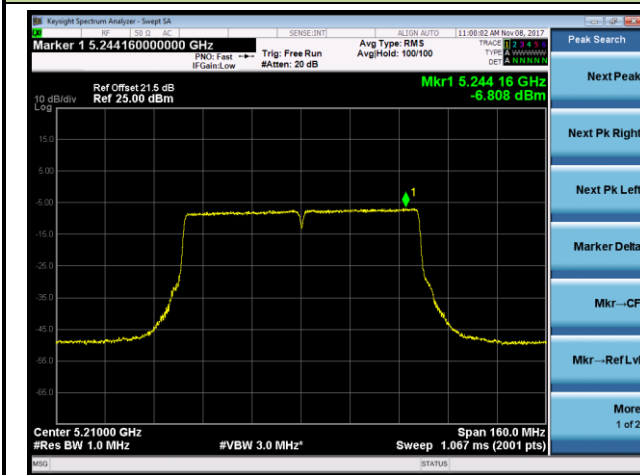


Channel 159 (5795MHz)

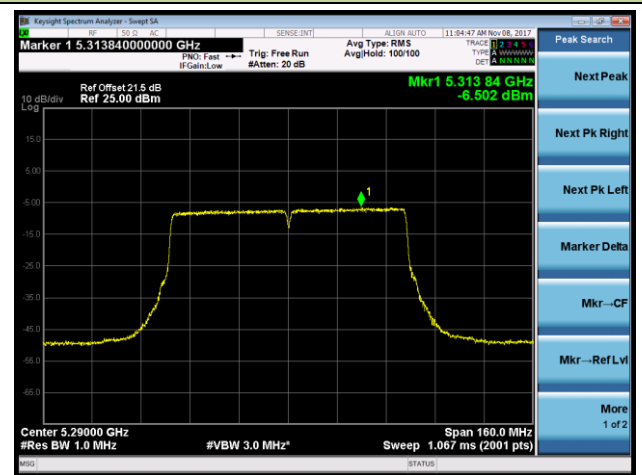


802.11ac-VHT80 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3

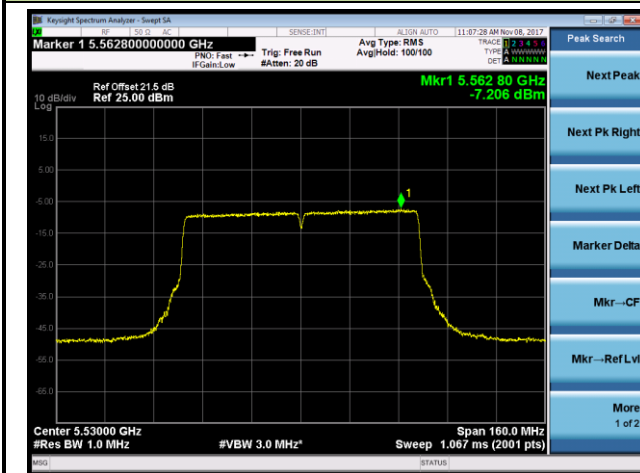
Channel 42 (5210MHz)



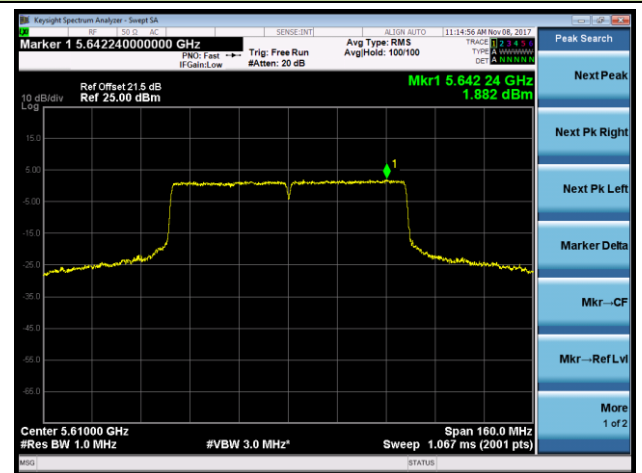
Channel 58 (5290MHz)



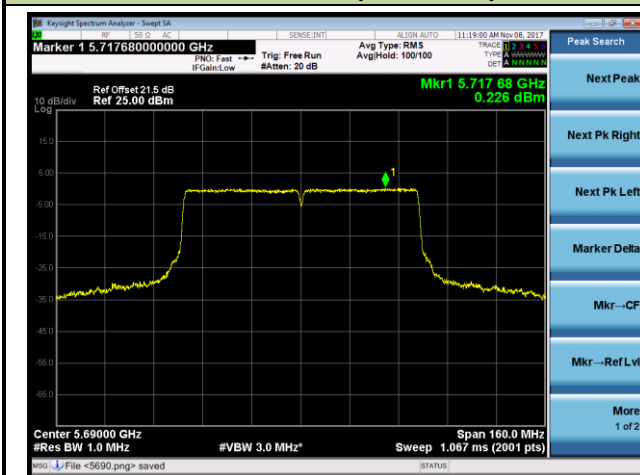
Channel 106 (5530MHz)



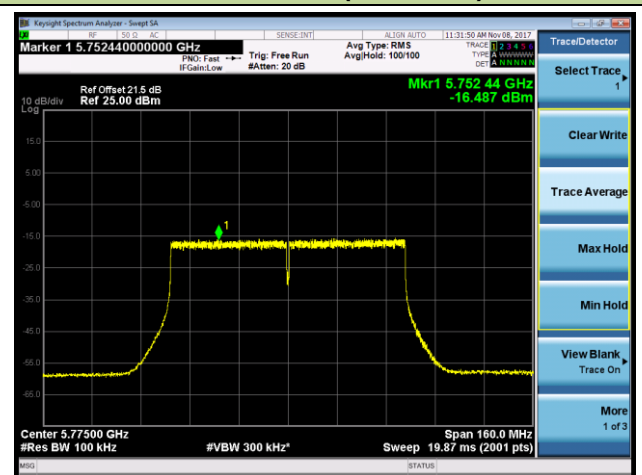
Channel 122 (5610MHz)



Channel 138 (5690MHz)

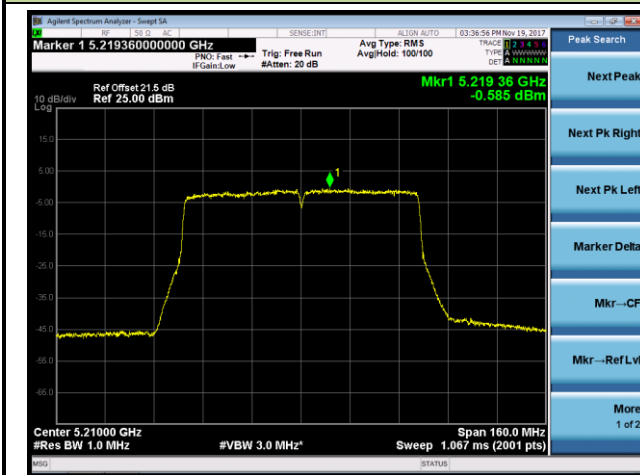


Channel 155 (5775MHz)

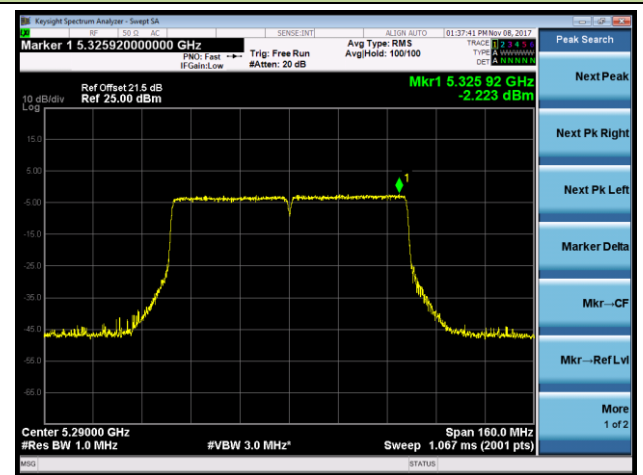


802.11ac-VHT80+80 Power Spectral Density - Ant 1 / Ant 0 + 1 (Ant 0 + 1 + 2 + 3)

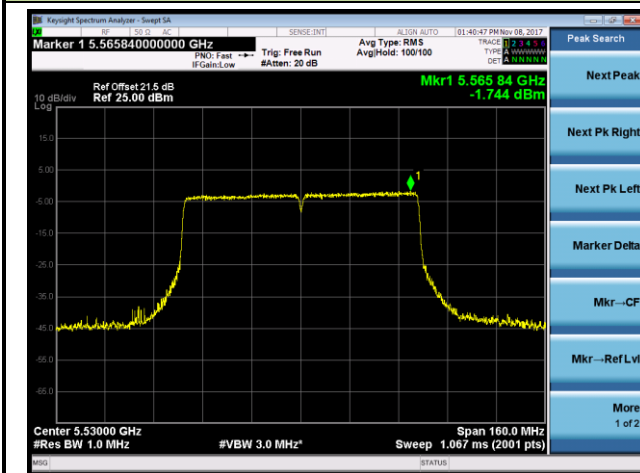
Channel 42 (5210MHz)



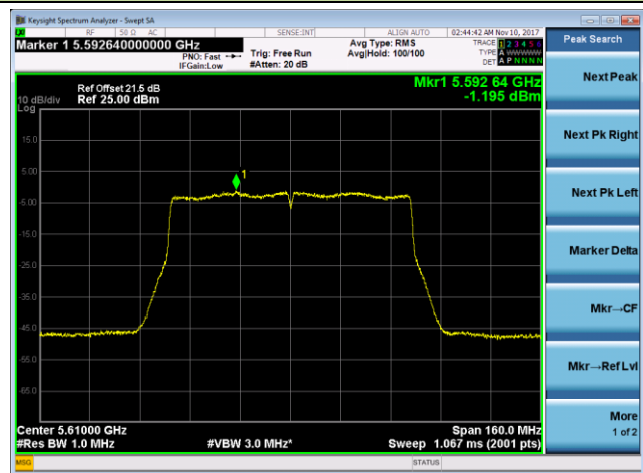
Channel 58 (5290MHz)



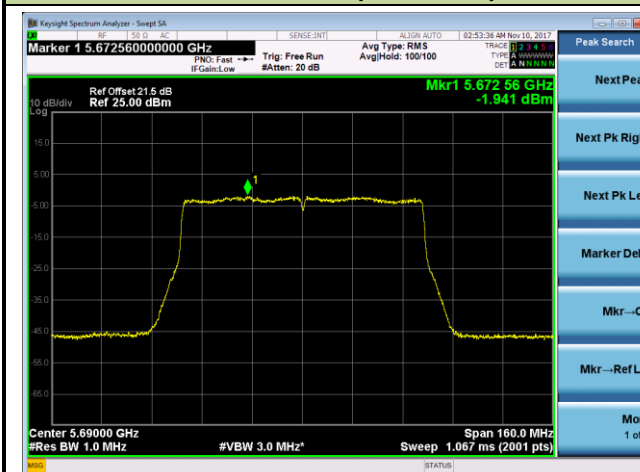
Channel 106 (5530MHz)



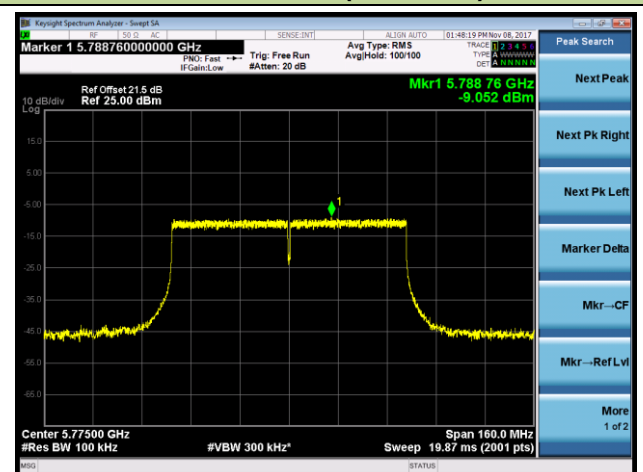
Channel 122 (5610MHz)



Channel 138 (5690MHz)



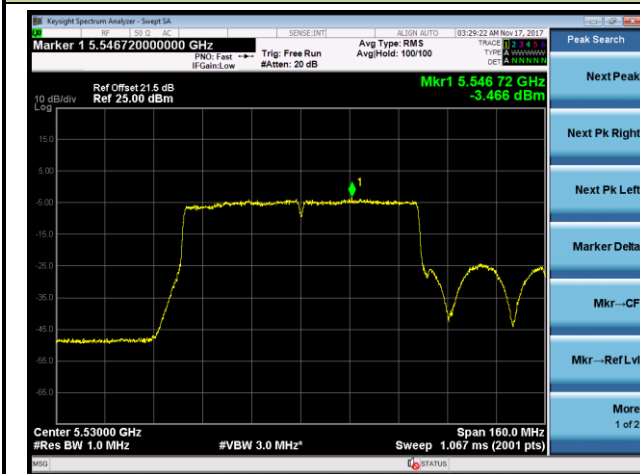
Channel 155 (5775MHz)



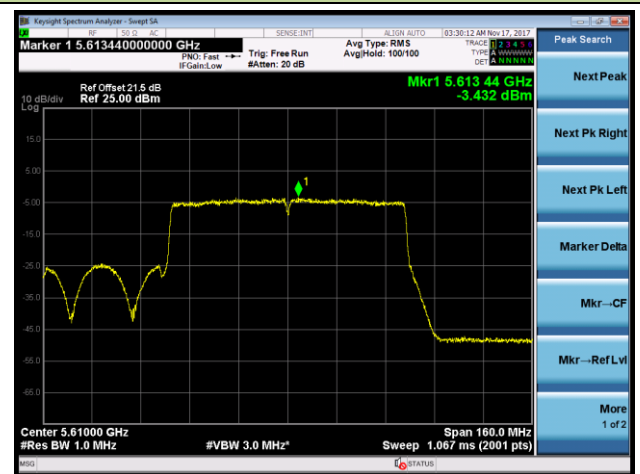
For the Emission Bandwidth Contained within the Same Band:

802.11ac-VHT80+80 Power Spectral Density - Ant 1 / Ant 0 + 1 (Ant 0 + 1 + 2 + 3) (CDD Mode)

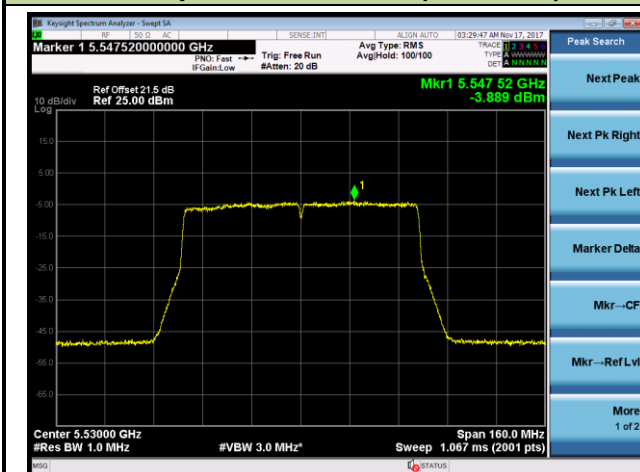
Group 1_Channel 106 (5530MHz)



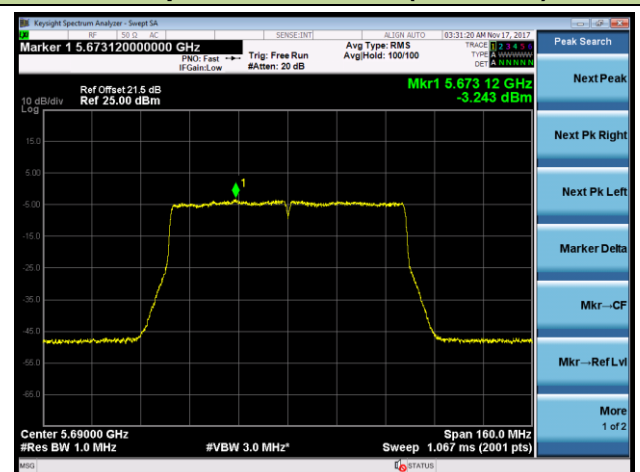
Group 2_Channel 122 (5610MHz)



Group 3_Channel 106 (5530MHz)

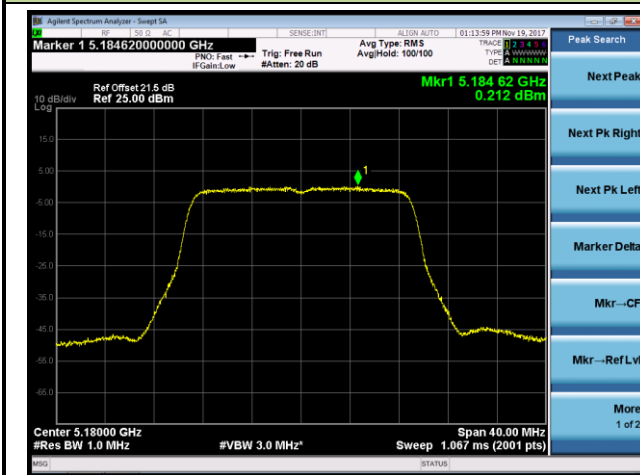


Group 4_Channel 138 (5690MHz)

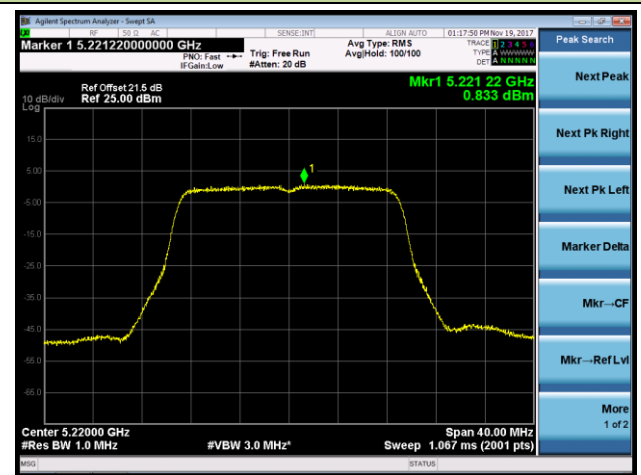


802.11n-HT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

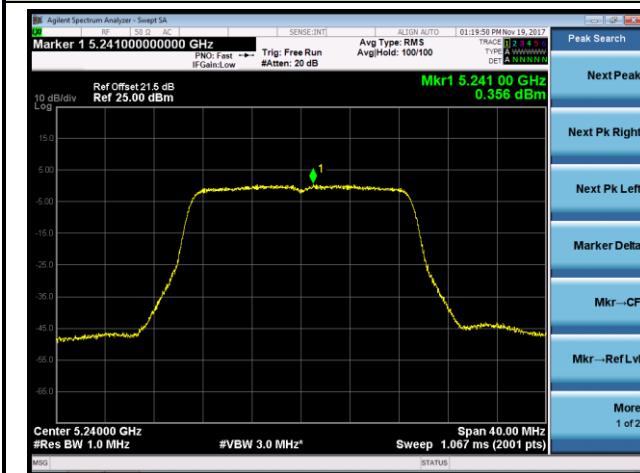
Channel 36 (5180MHz)



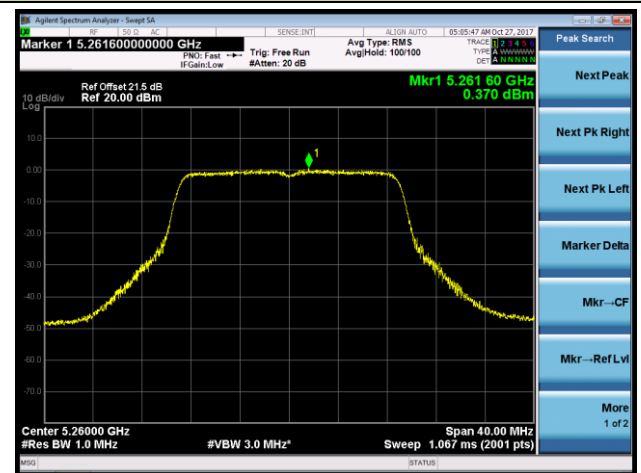
Channel 44 (5220MHz)



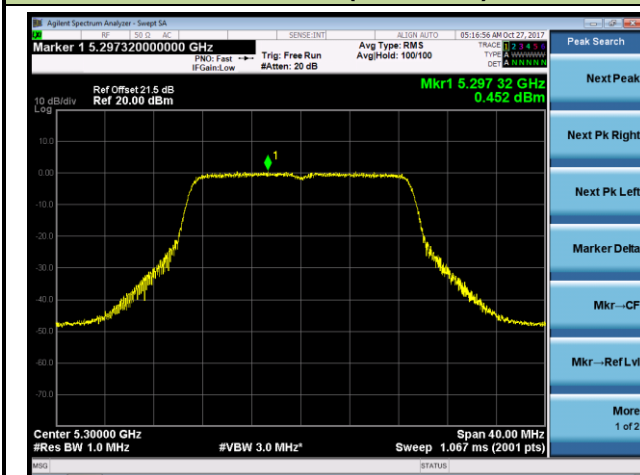
Channel 48 (5240MHz)



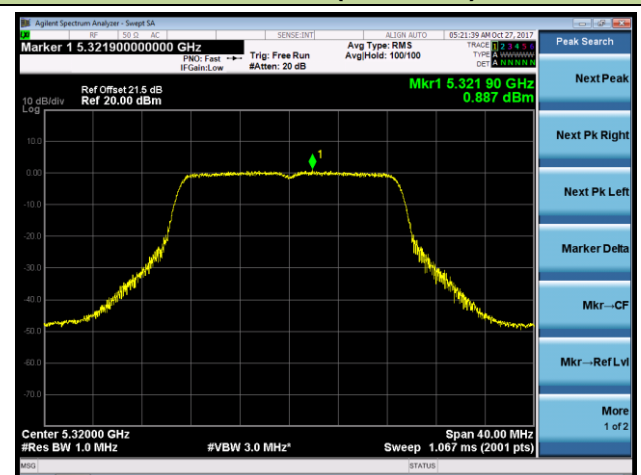
Channel 52 (5260MHz)



Channel 60 (5300MHz)

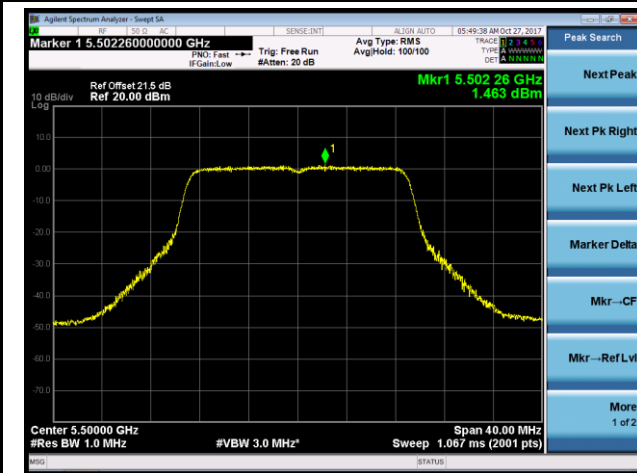


Channel 64 (5320MHz)

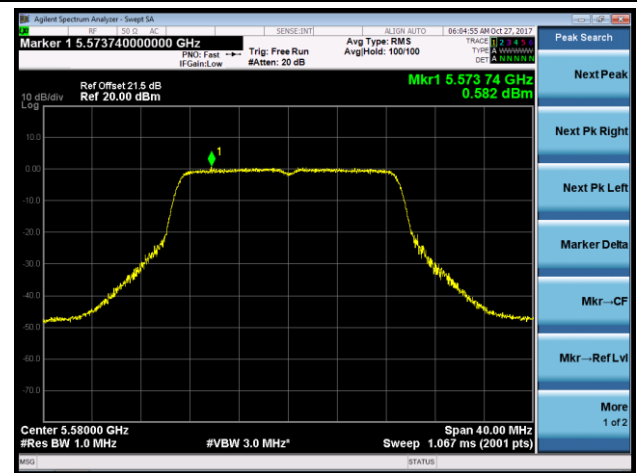


802.11n-HT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

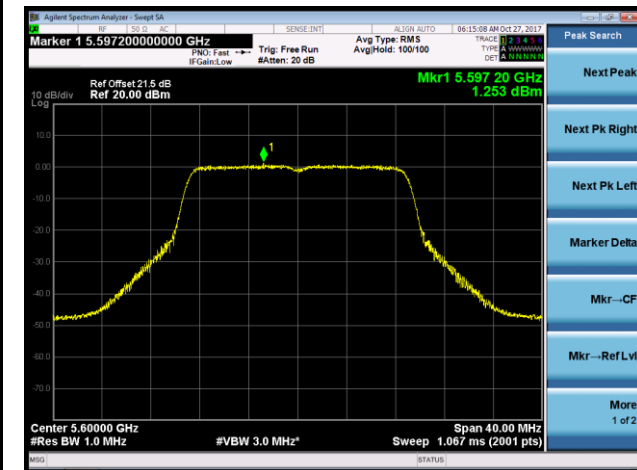
Channel 100 (5500MHz)



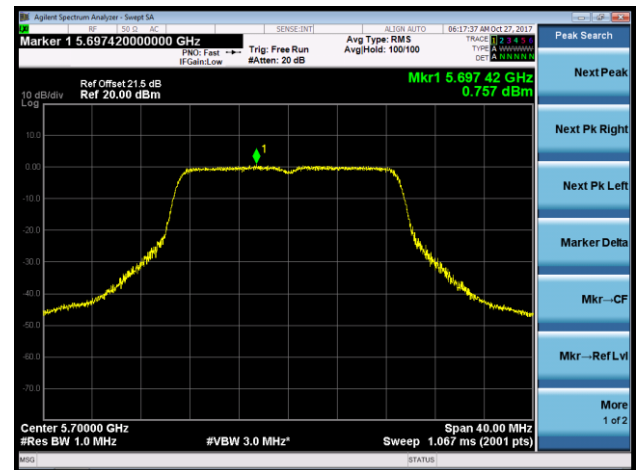
Channel 116 (5580MHz)



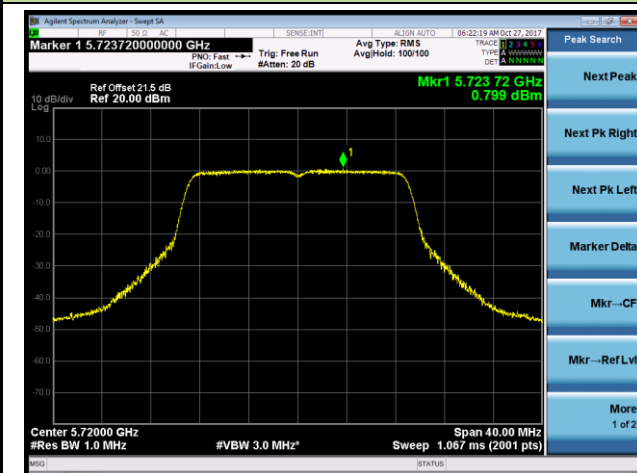
Channel 120 (5600MHz)



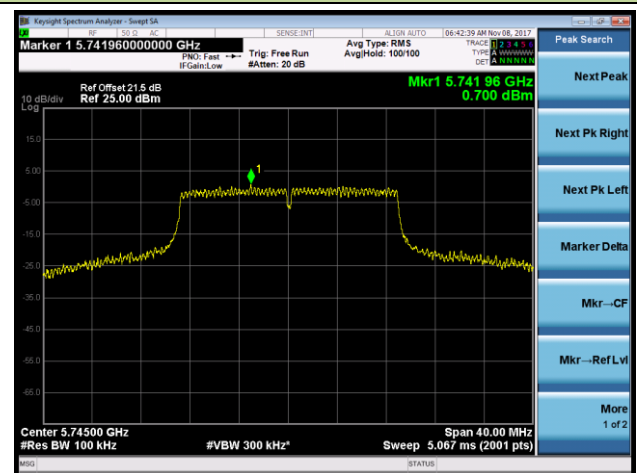
Channel 140 (5700MHz)



Channel 144 (5720MHz)

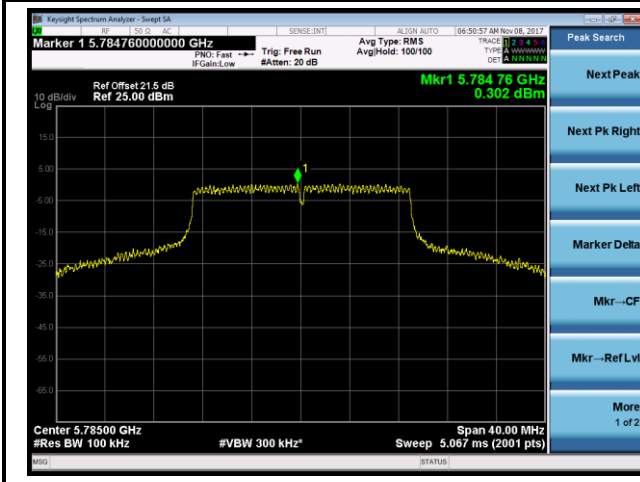


Channel 149 (5745MHz)

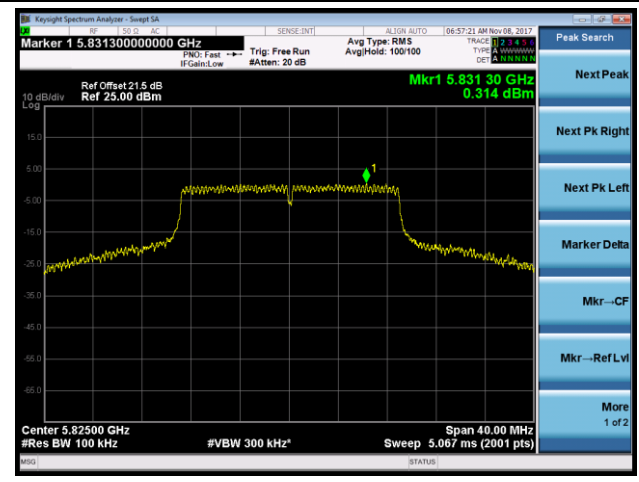


802.11n-HT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

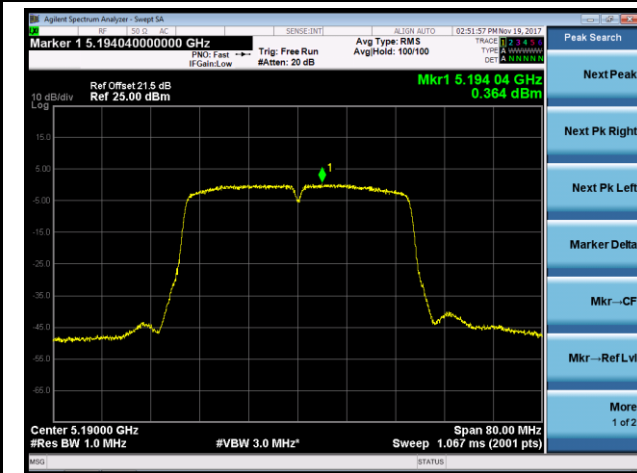


Channel 165 (5825MHz)

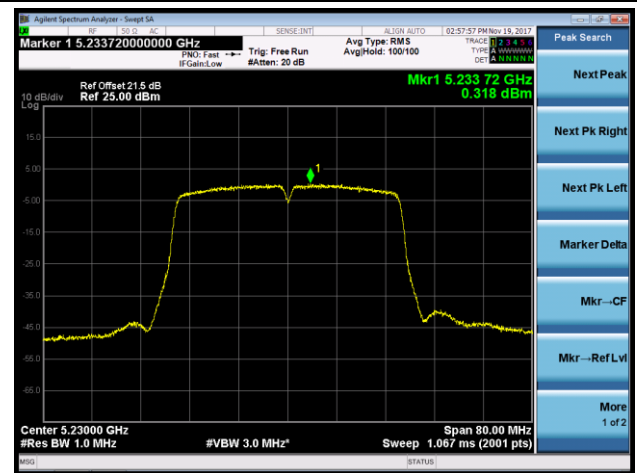


802.11n-HT40 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

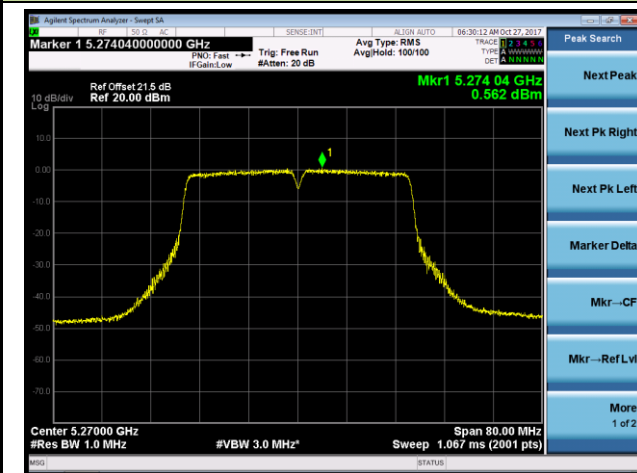
Channel 38 (5190MHz)



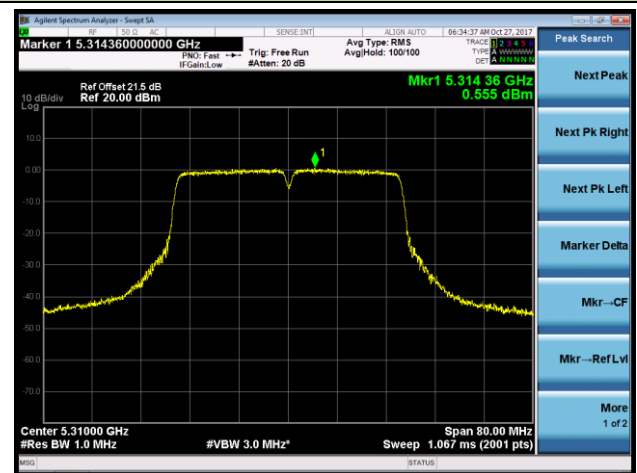
Channel 46 (5230MHz)



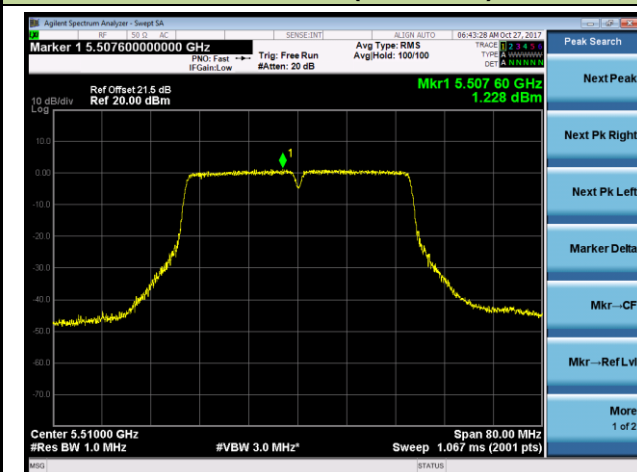
Channel 54 (5270MHz)



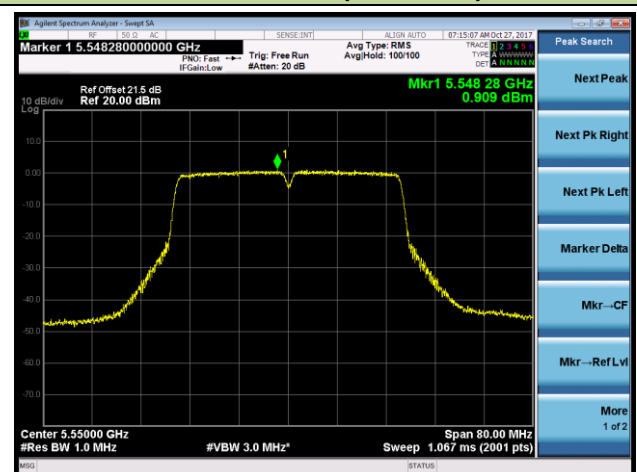
Channel 62 (5310MHz)



Channel 102 (5510MHz)

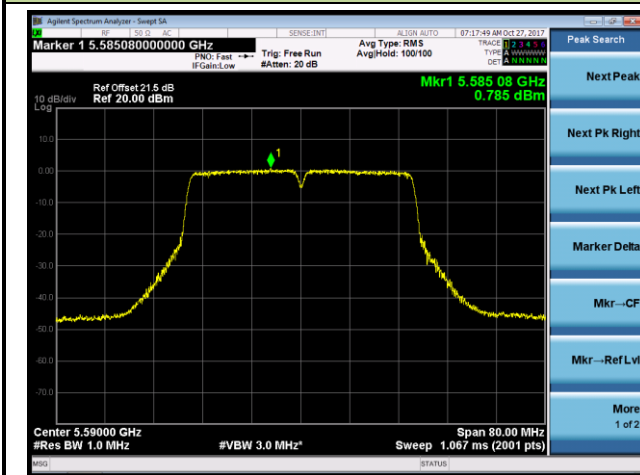


Channel 110 (5550MHz)

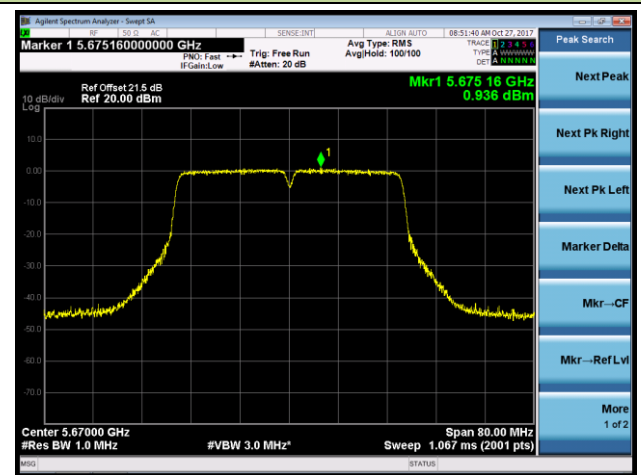


802.11n-HT40 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

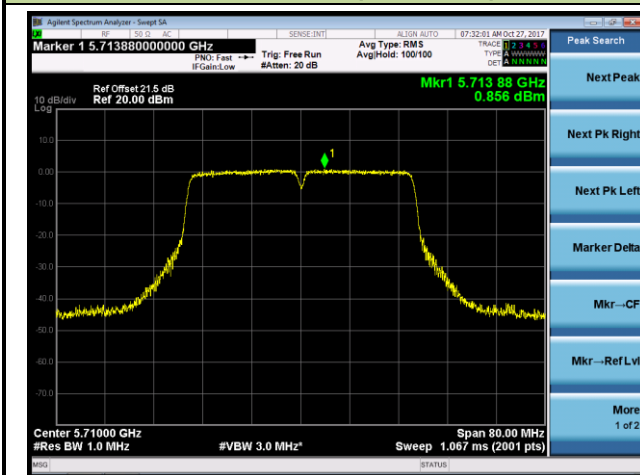
Channel 118 (5590MHz)



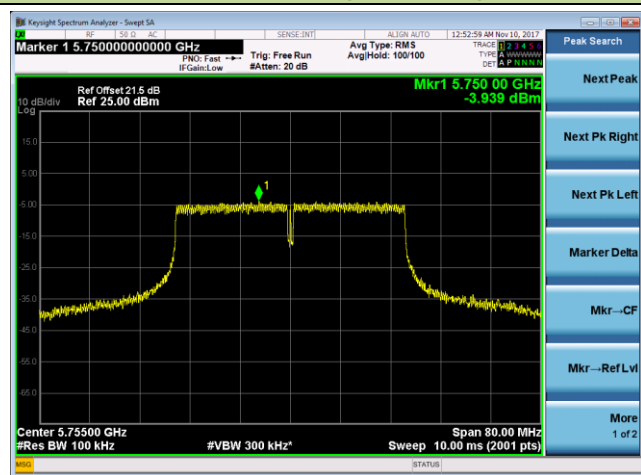
Channel 134 (5670MHz)



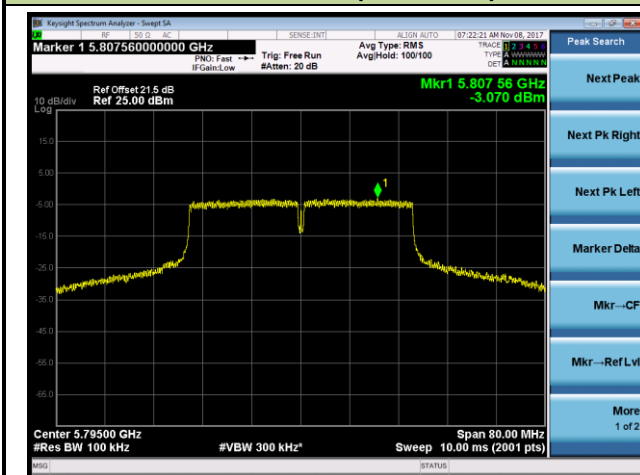
Channel 142 (5710MHz)



Channel 151 (5755MHz)

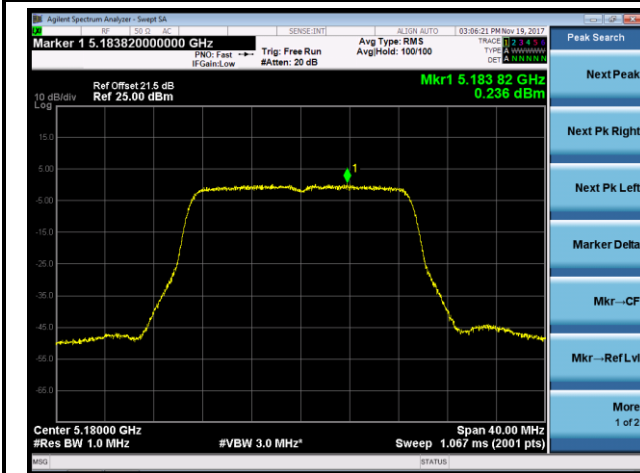


Channel 159 (5795MHz)

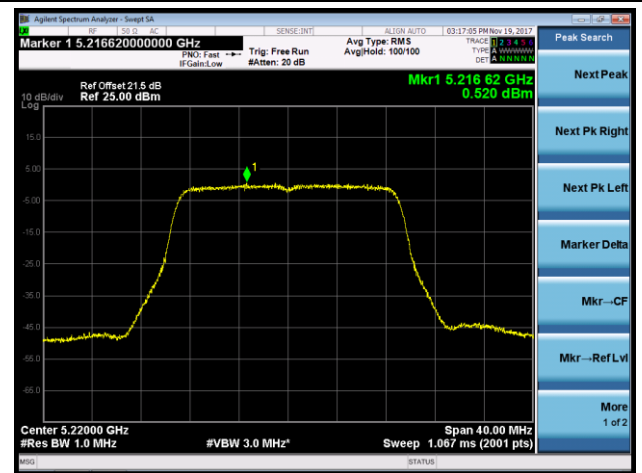


802.11ac-VHT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

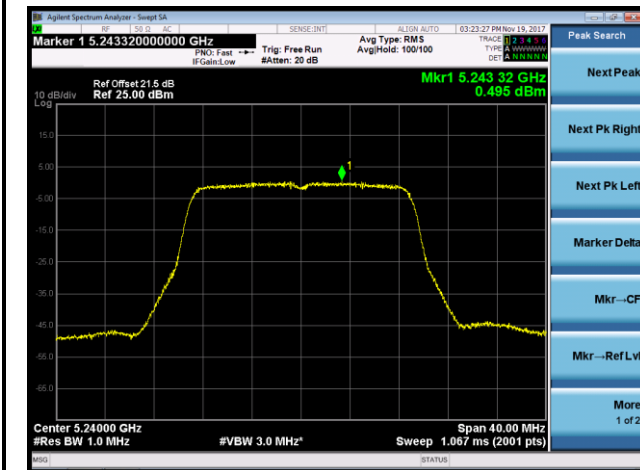
Channel 36 (5180MHz)



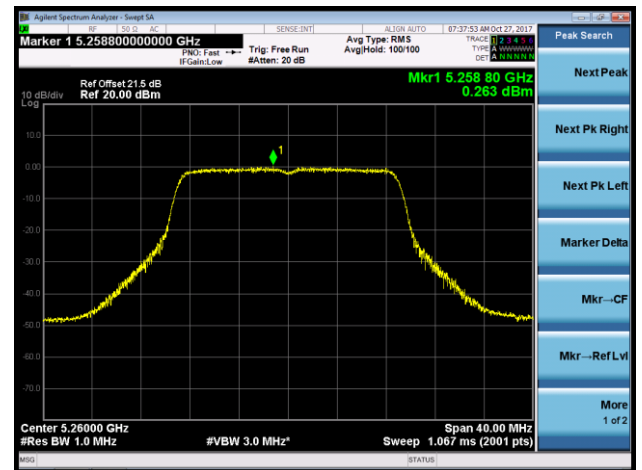
Channel 44 (5220MHz)



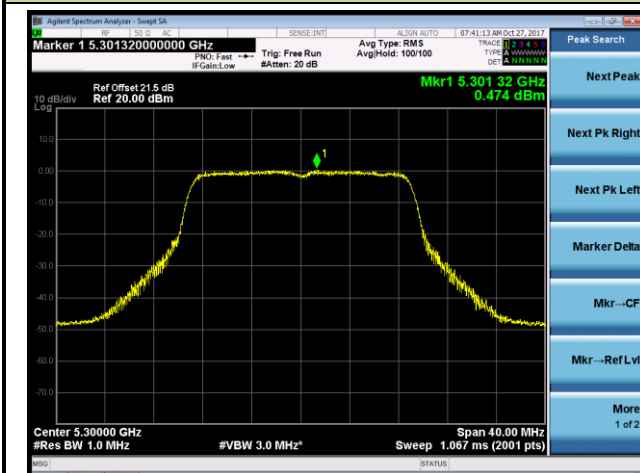
Channel 48 (5240MHz)



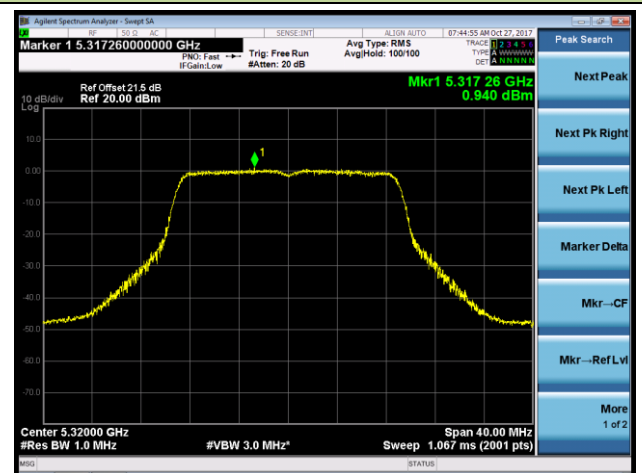
Channel 52 (5260MHz)



Channel 60 (5300MHz)

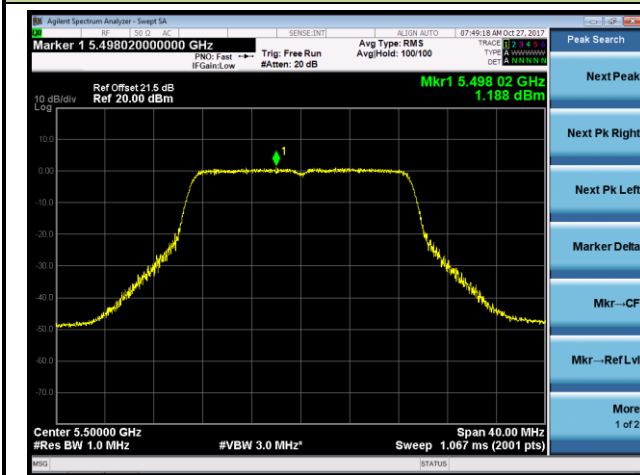


Channel 64 (5320MHz)

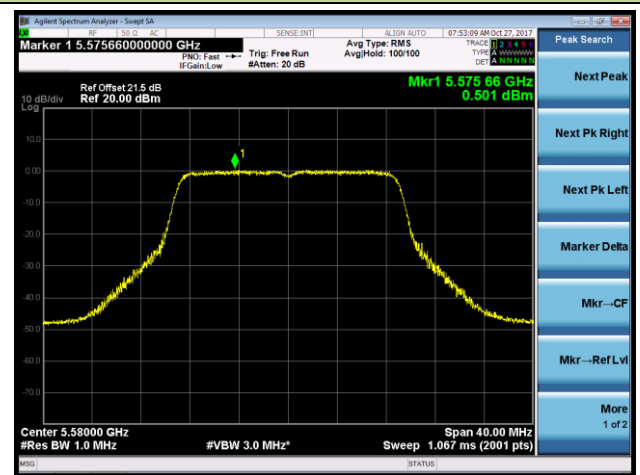


802.11ac-VHT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

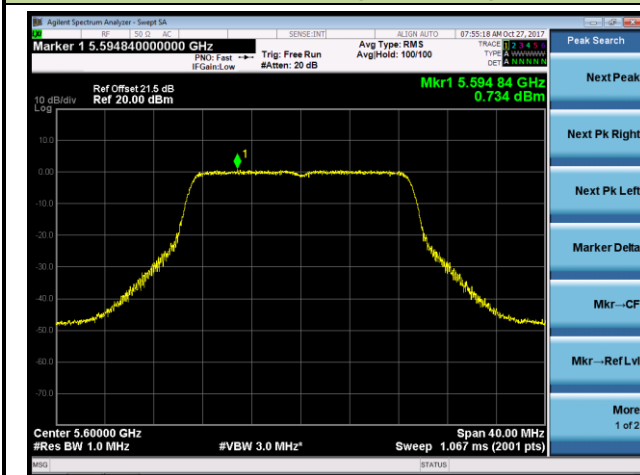
Channel 100 (5500MHz)



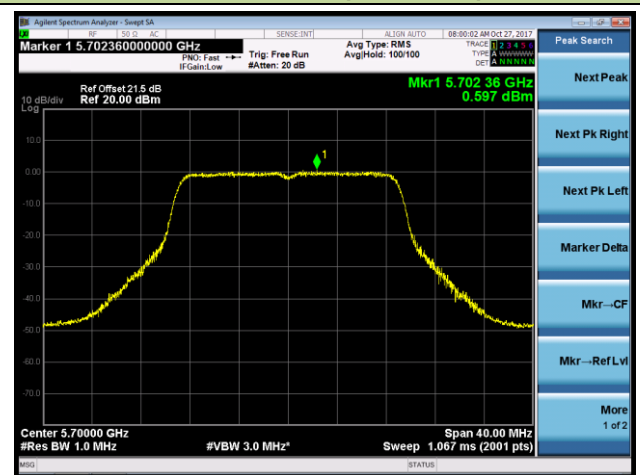
Channel 116 (5580MHz)



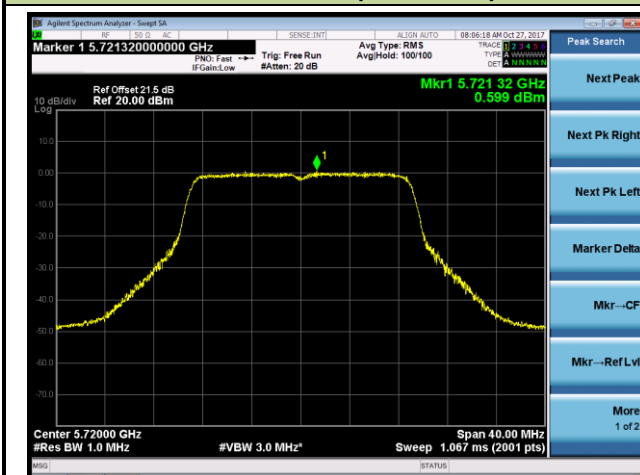
Channel 120 (5600MHz)



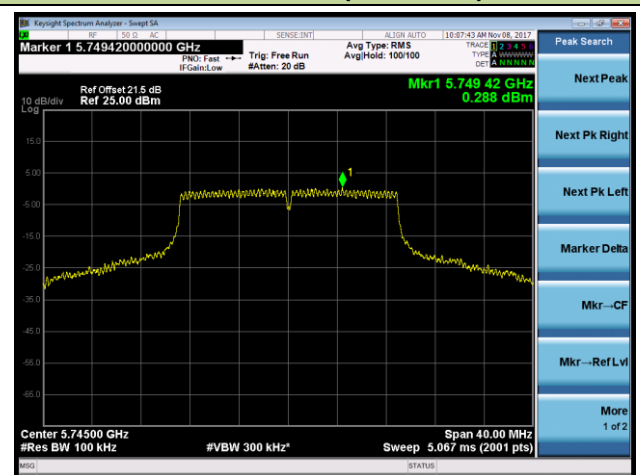
Channel 140 (5700MHz)



Channel 144 (5720MHz)

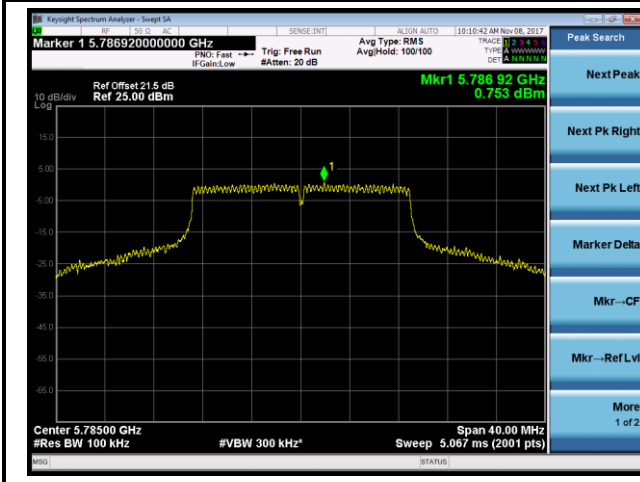


Channel 149 (5745MHz)

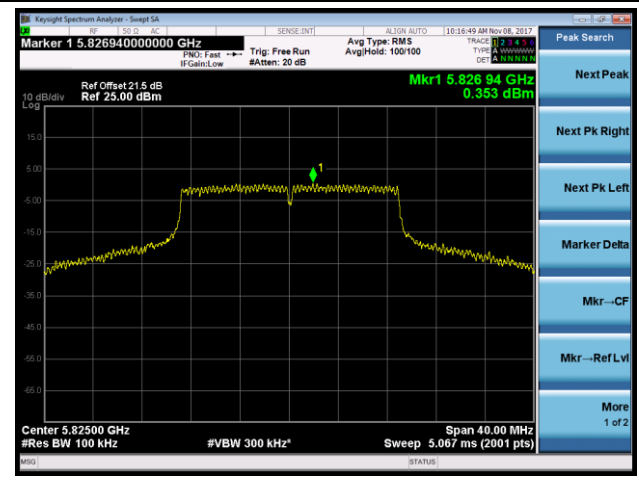


802.11ac-VHT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

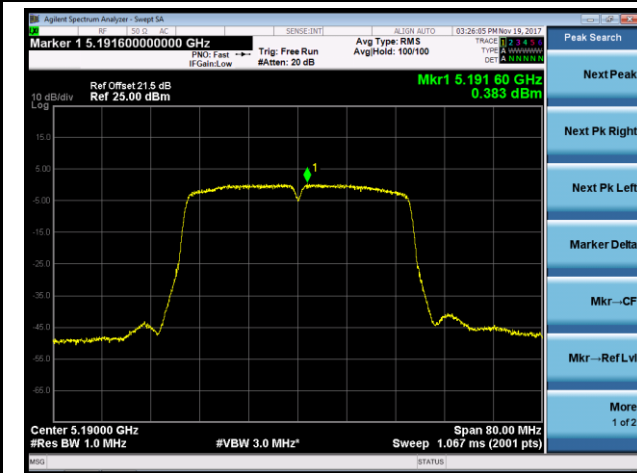


Channel 165 (5825MHz)

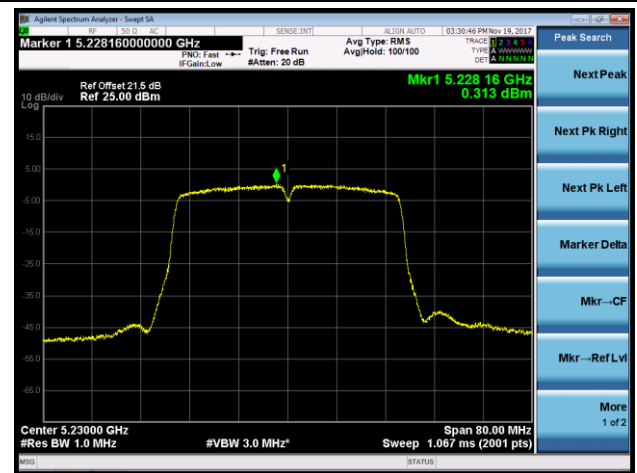


802.11ac-VHT40 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

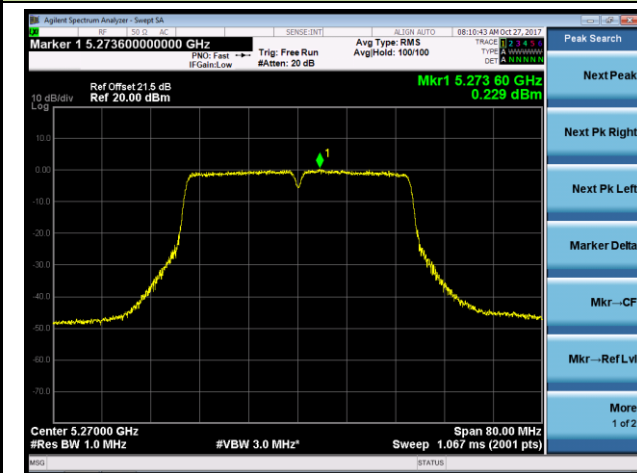
Channel 38 (5190MHz)



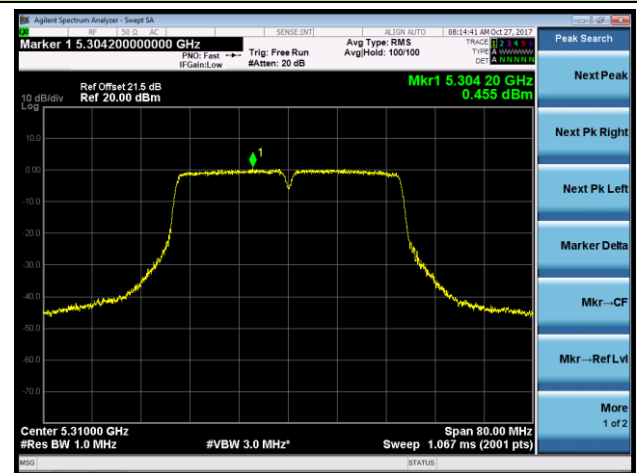
Channel 46 (5230MHz)



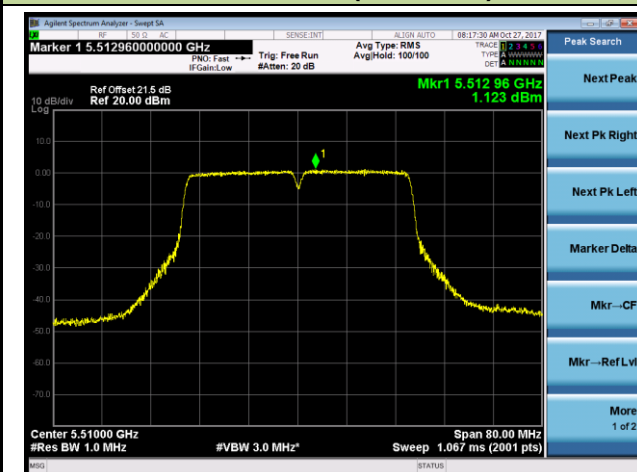
Channel 54 (5270MHz)



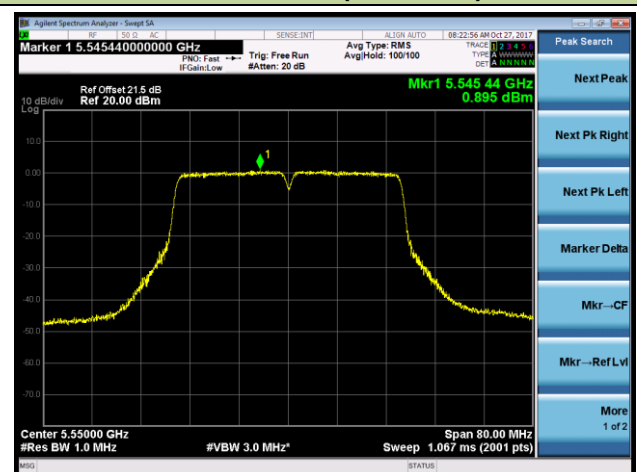
Channel 62 (5310MHz)



Channel 102 (5510MHz)

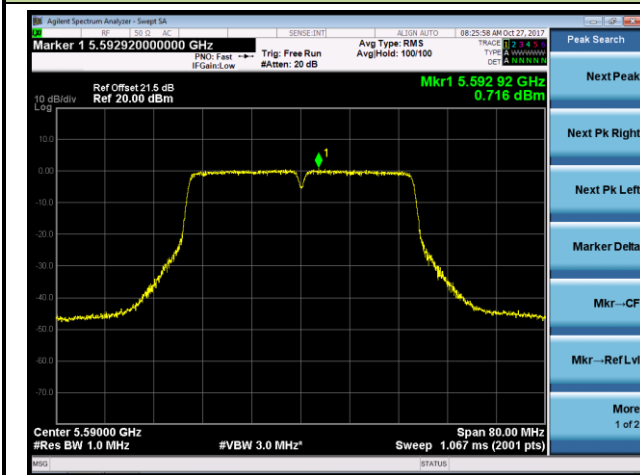


Channel 110 (5550MHz)

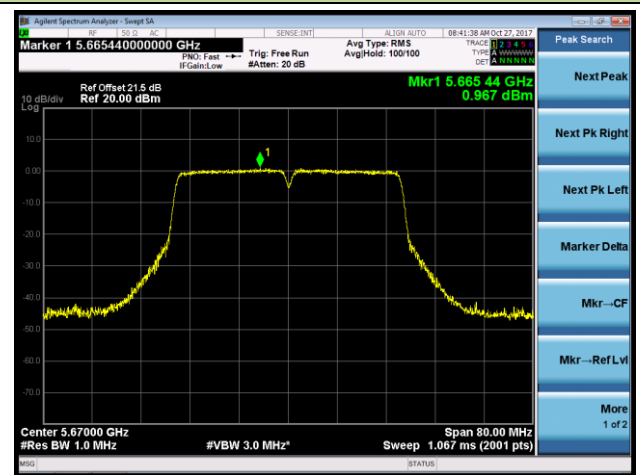


802.11ac-VHT40 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

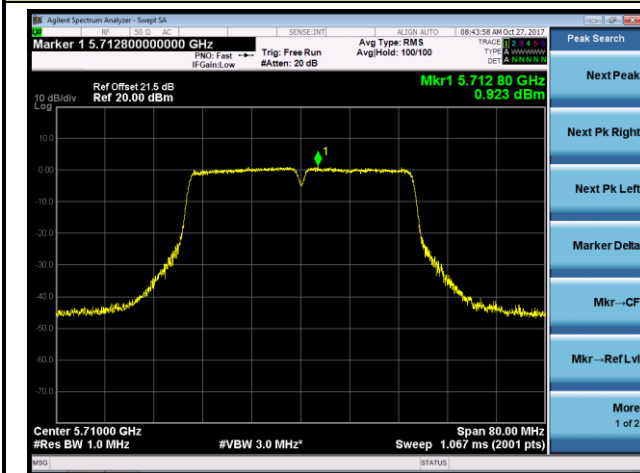
Channel 118 (5590MHz)



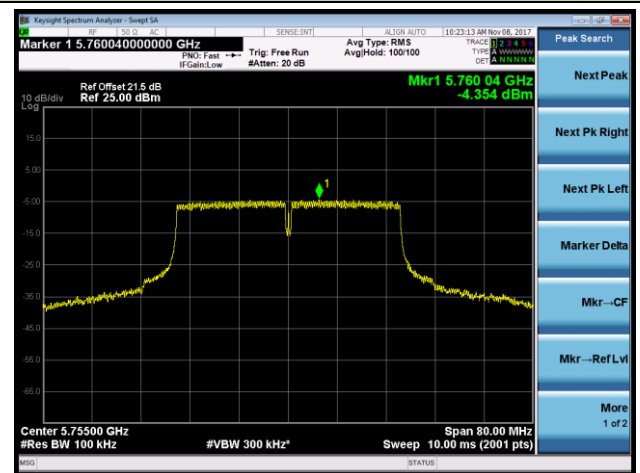
Channel 134 (5670MHz)



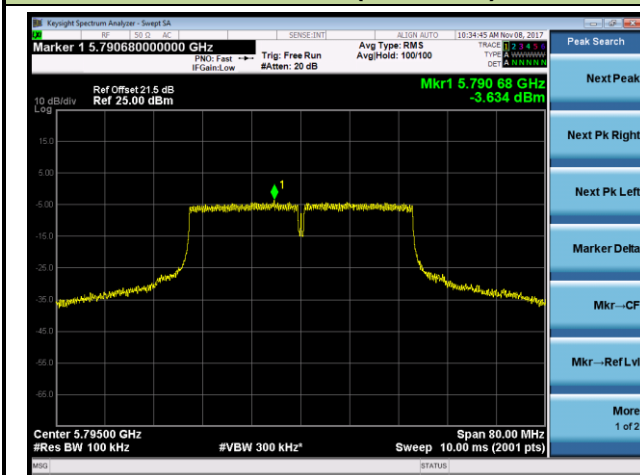
Channel 142 (5710MHz)



Channel 151 (5755MHz)

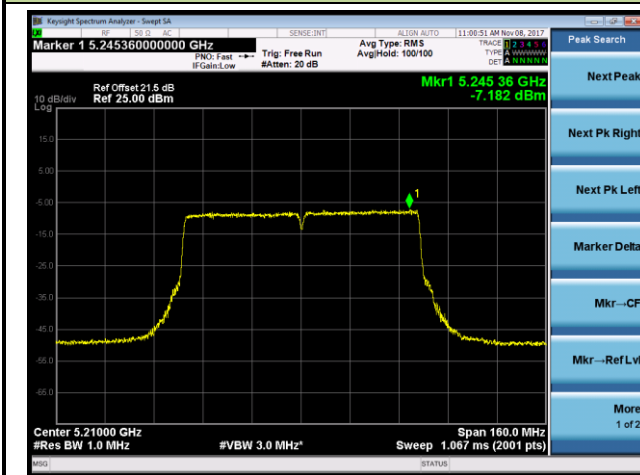


Channel 159 (5795MHz)

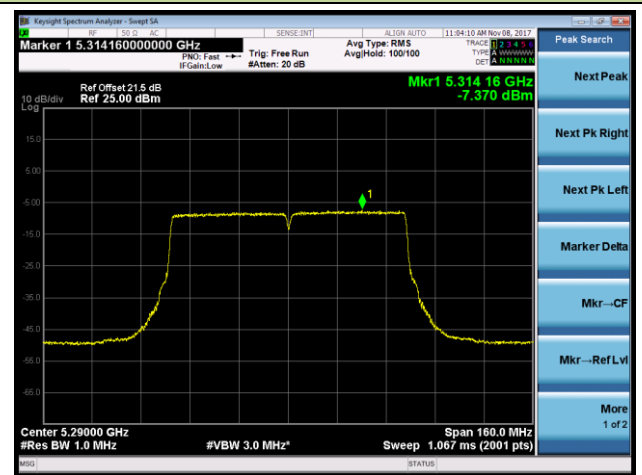


802.11ac-VHT80 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3

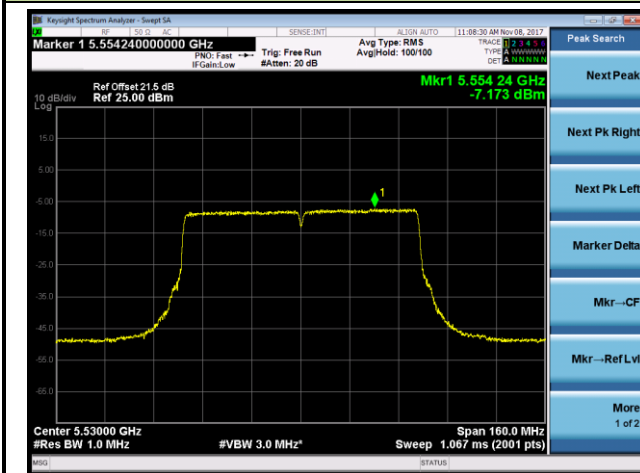
Channel 42 (5210MHz)



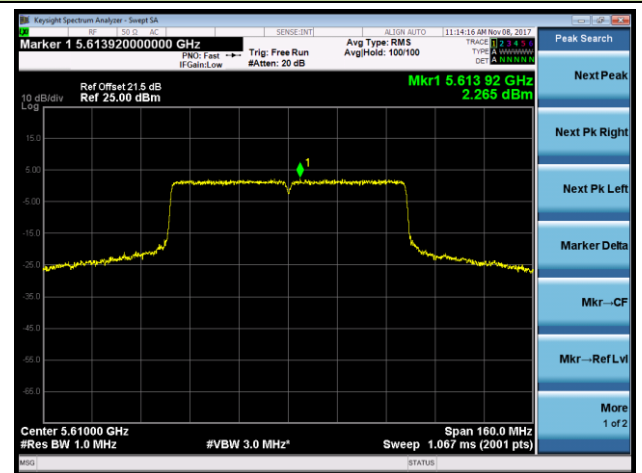
Channel 58 (5290MHz)



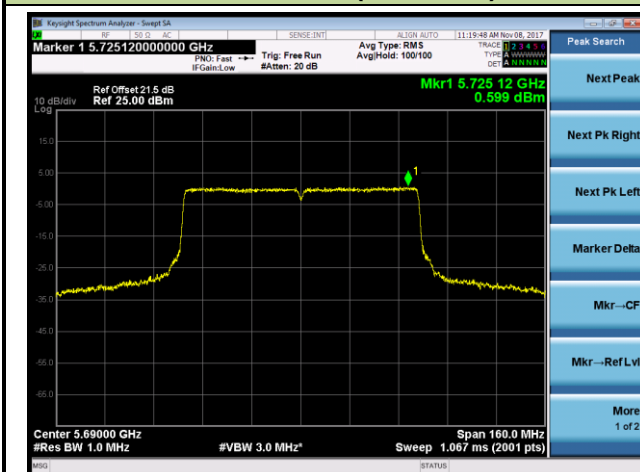
Channel 106 (5530MHz)



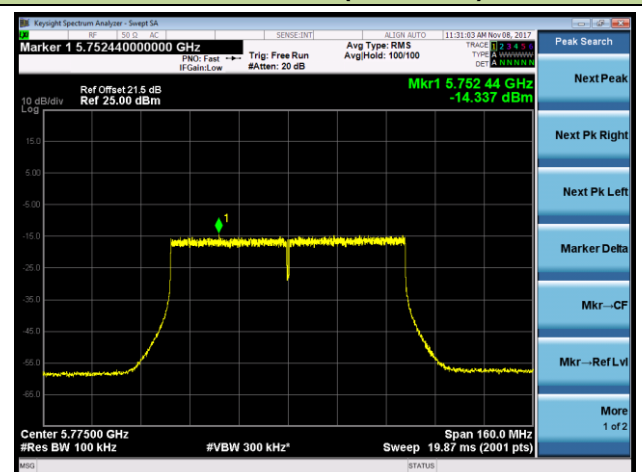
Channel 122 (5610MHz)



Channel 138 (5690MHz)

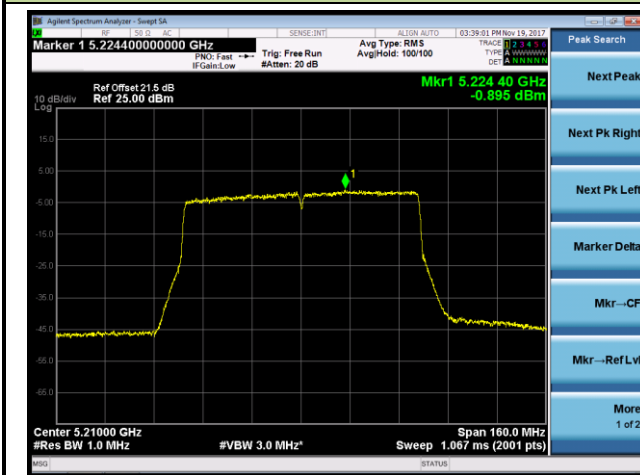


Channel 155 (5775MHz)

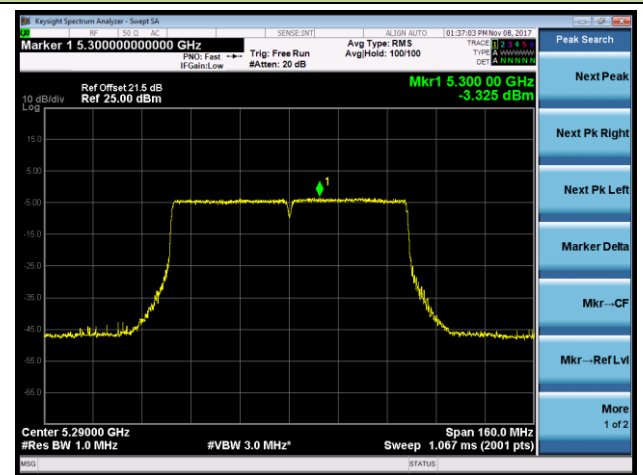


802.11ac-VHT80+80 Power Spectral Density - Ant 2 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3)

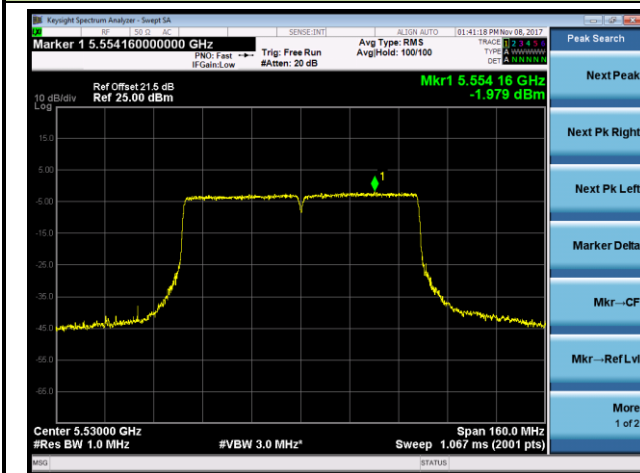
Channel 42 (5210MHz)



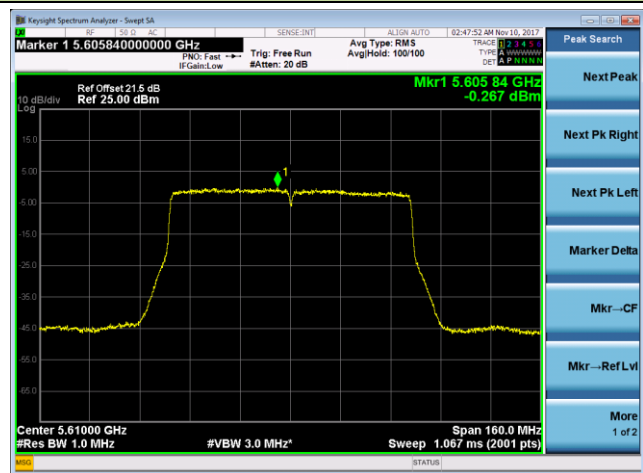
Channel 58 (5290MHz)



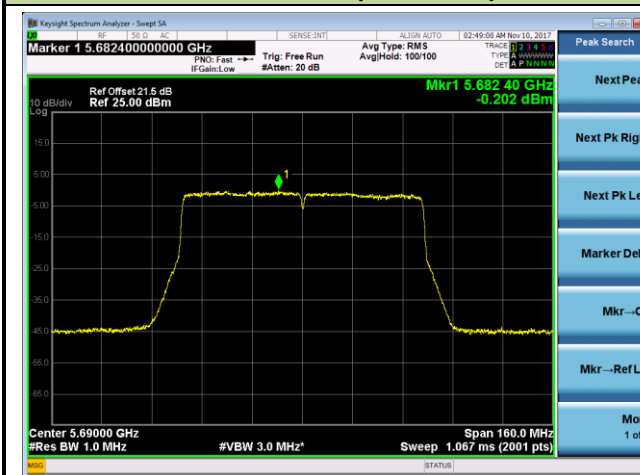
Channel 106 (5530MHz)



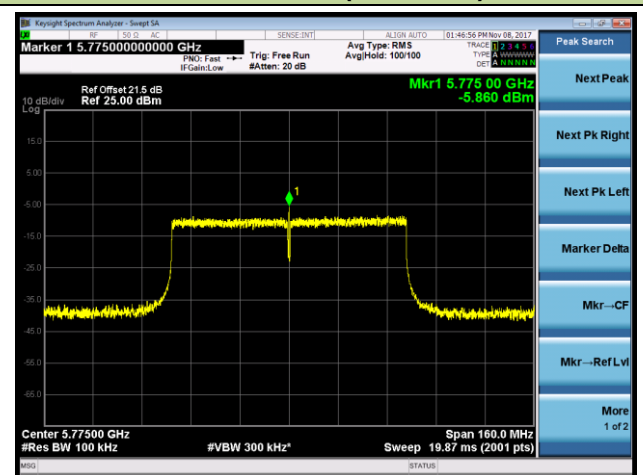
Channel 122 (5610MHz)



Channel 138 (5690MHz)



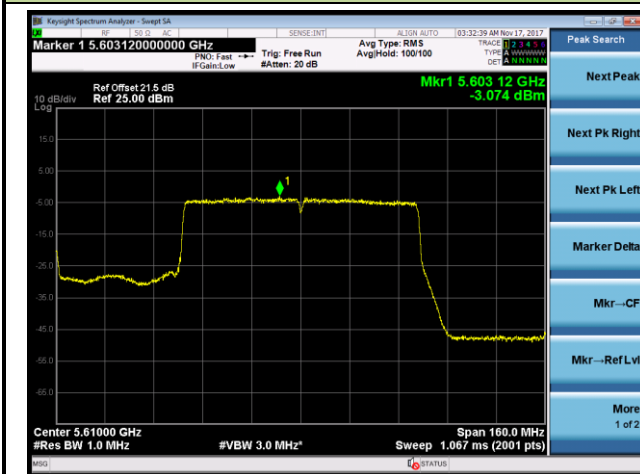
Channel 155 (5775MHz)



For the Emission Bandwidth Contained within the Same Band:

802.11ac-VHT80+80 Power Spectral Density - Ant 2 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3) (CDD Mode)

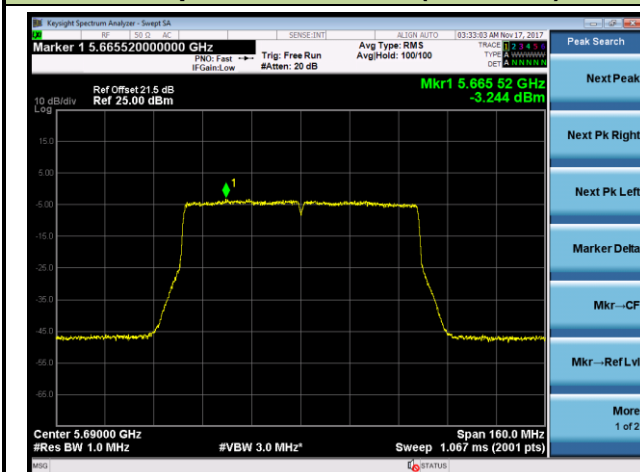
Group 1_Channel 122 (5610MHz)



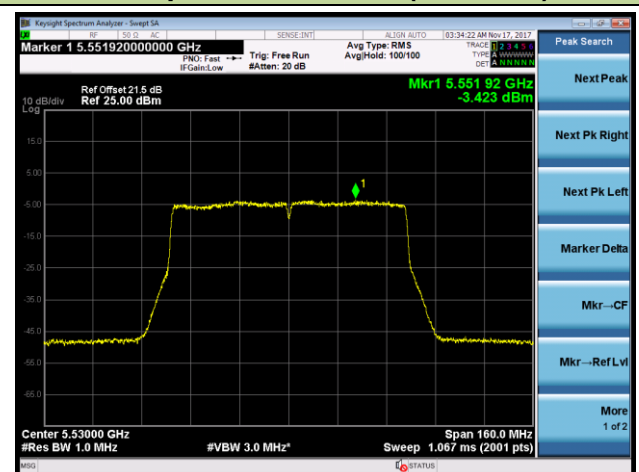
Group 2_Channel 106 (5530MHz)



Group 3_Channel 138 (5690MHz)

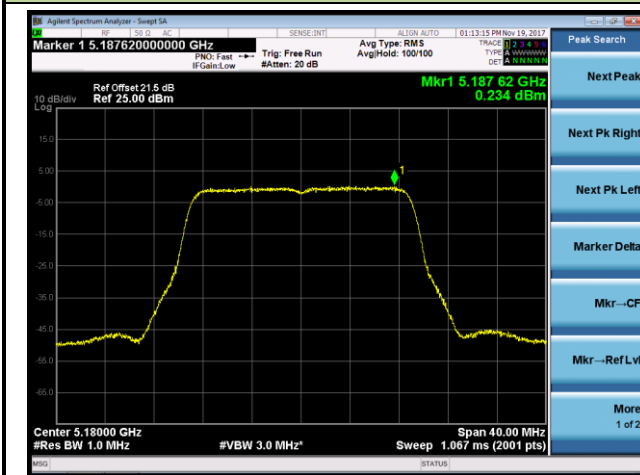


Group 4_Channel 106 (5530MHz)

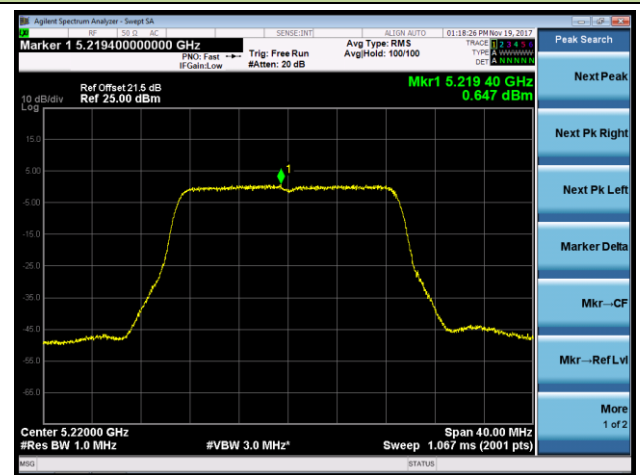


802.11n-HT20 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

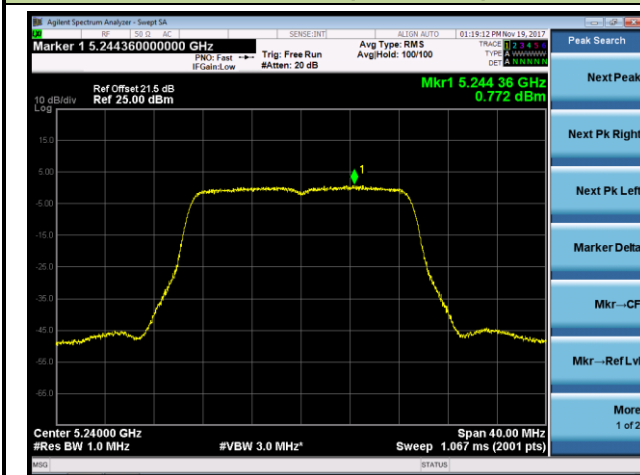
Channel 36 (5180MHz)



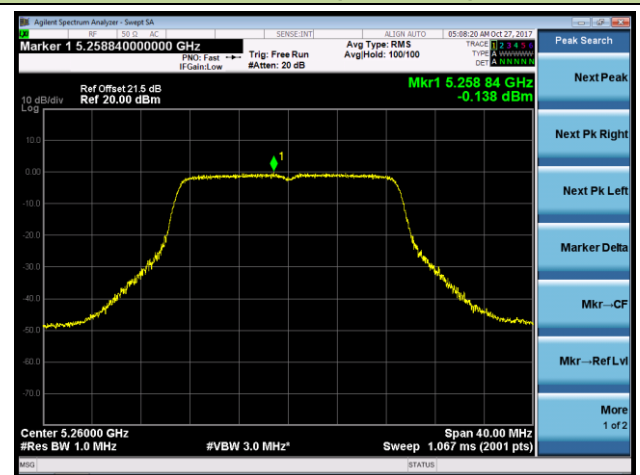
Channel 44 (5220MHz)



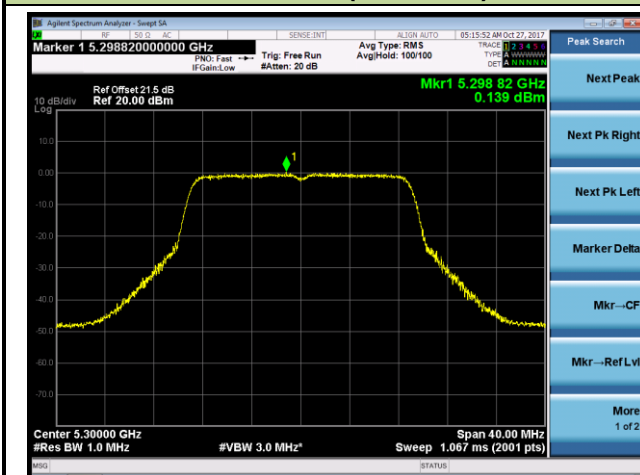
Channel 48 (5240MHz)



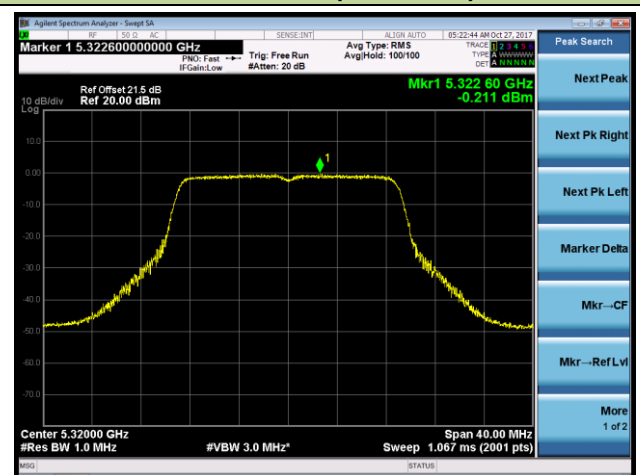
Channel 52 (5260MHz)



Channel 60 (5300MHz)

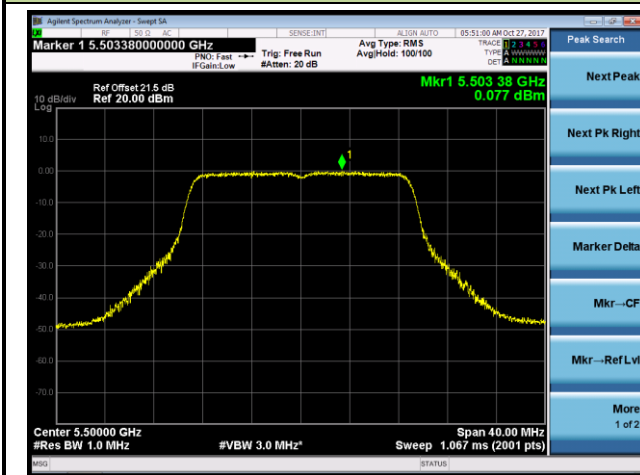


Channel 64 (5320MHz)

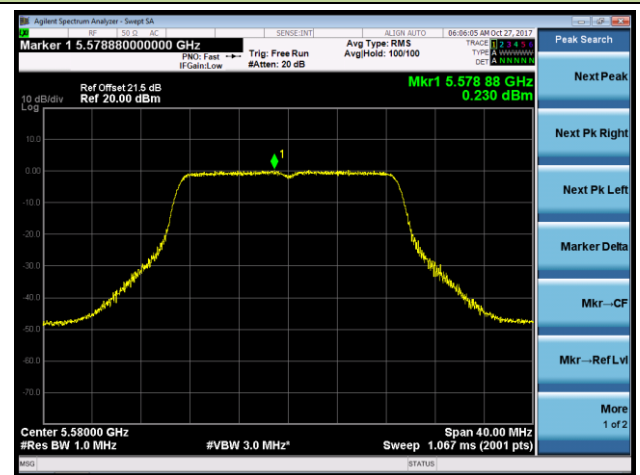


802.11n-HT20 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

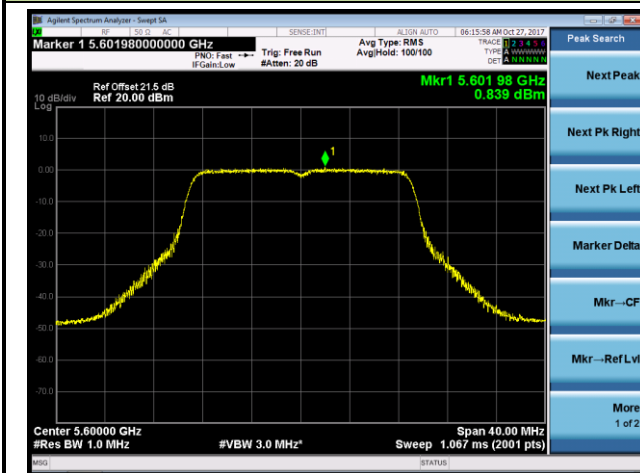
Channel 100 (5500MHz)



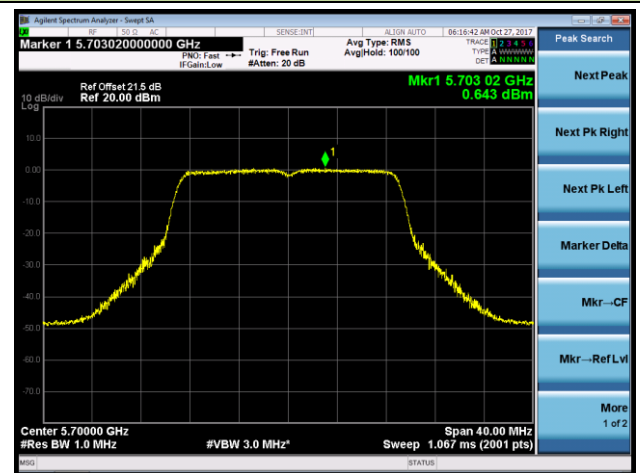
Channel 116 (5580MHz)



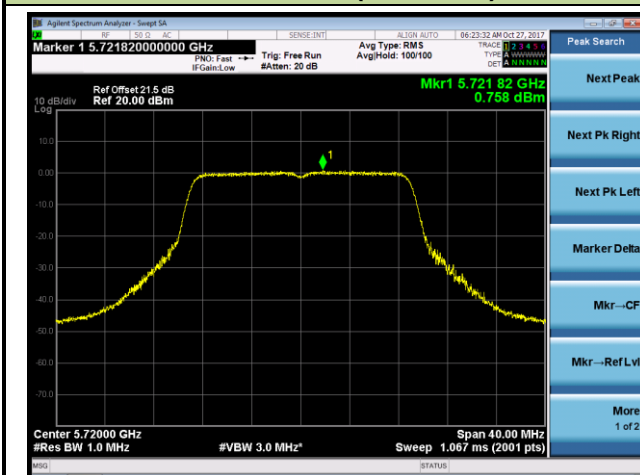
Channel 120 (5600MHz)



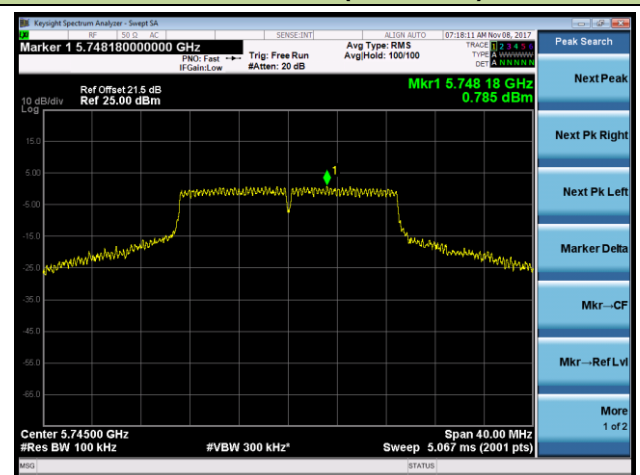
Channel 140 (5700MHz)



Channel 144 (5720MHz)

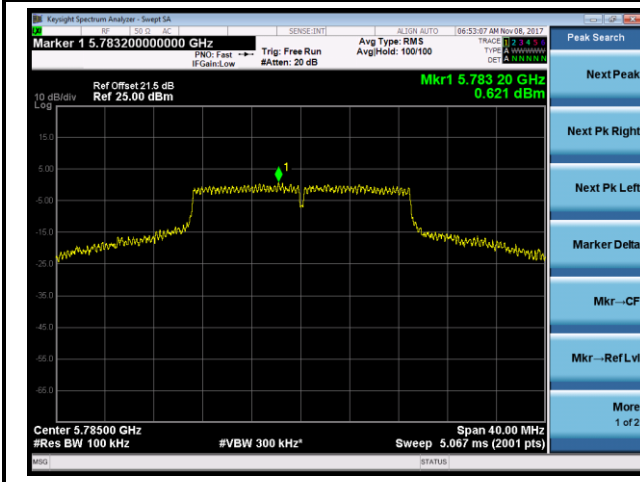


Channel 149 (5745MHz)

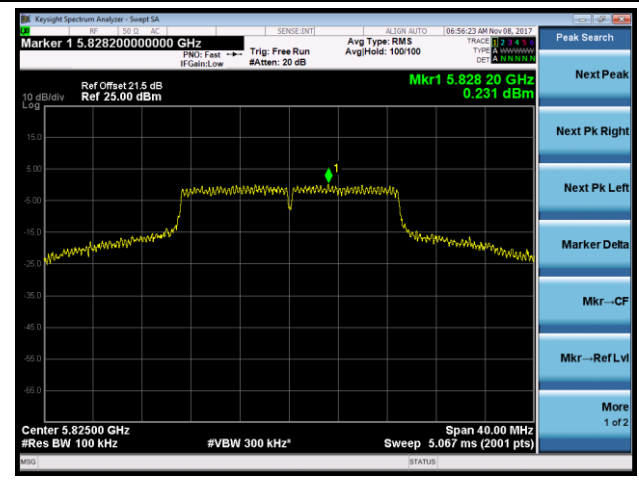


802.11n-HT20 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

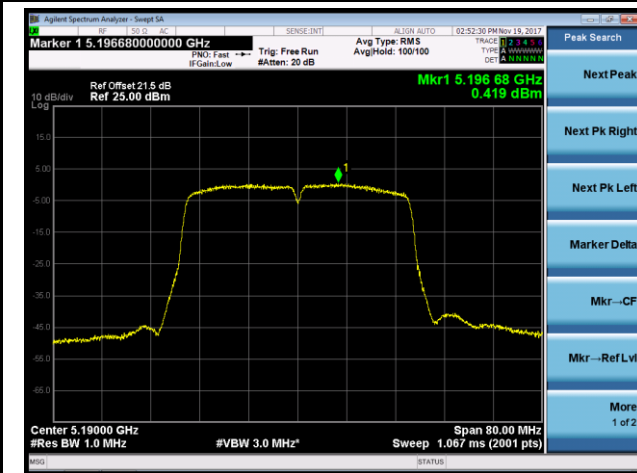


Channel 165 (5825MHz)

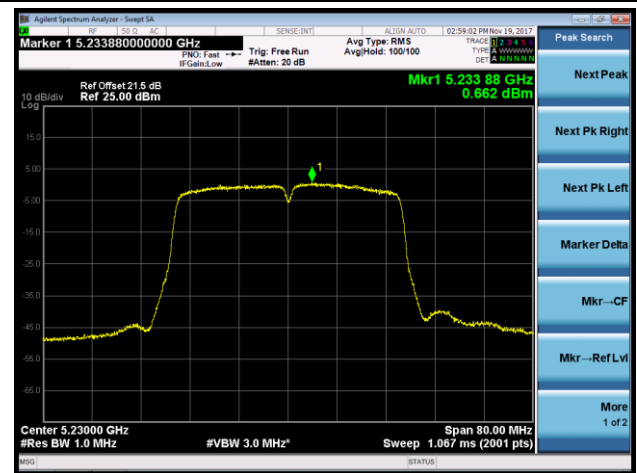


802.11n-HT40 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

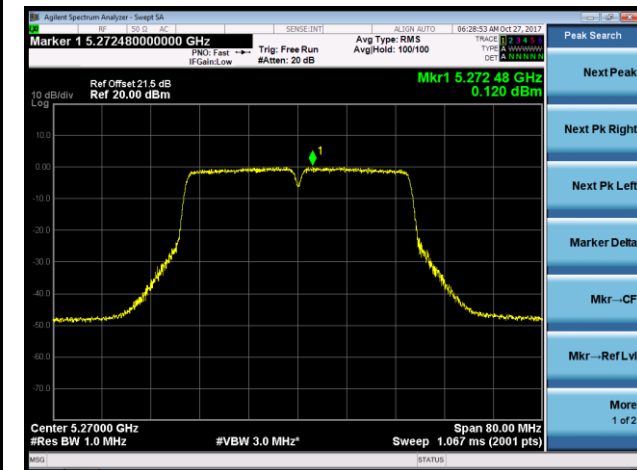
Channel 38 (5190MHz)



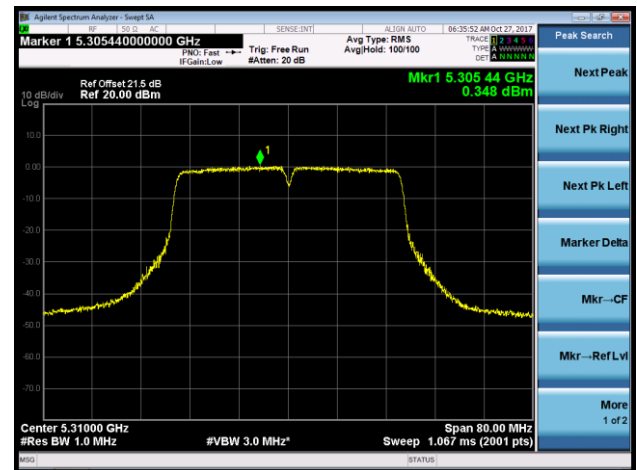
Channel 46 (5230MHz)



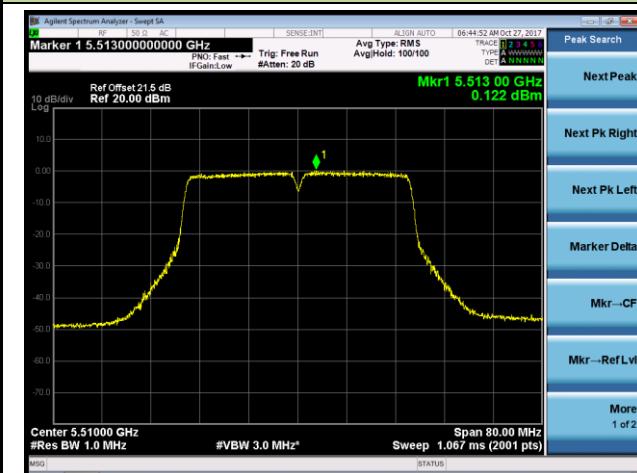
Channel 54 (5270MHz)



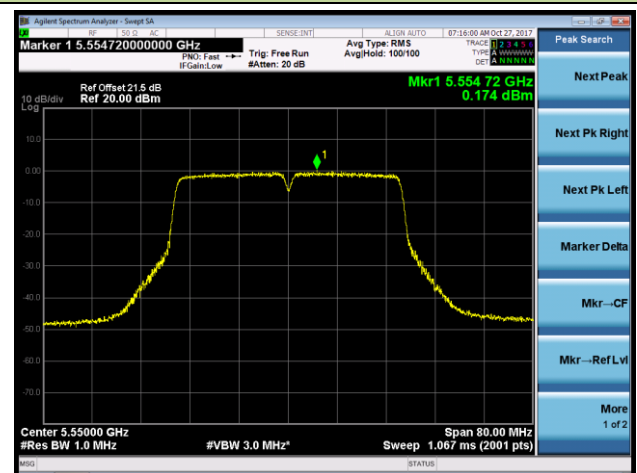
Channel 62 (5310MHz)



Channel 102 (5510MHz)

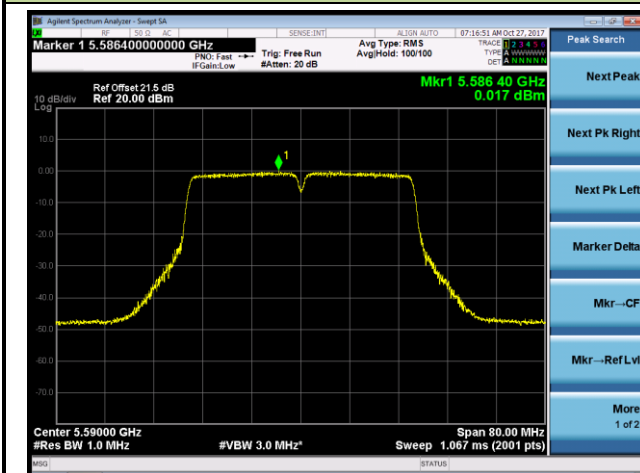


Channel 110 (5550MHz)

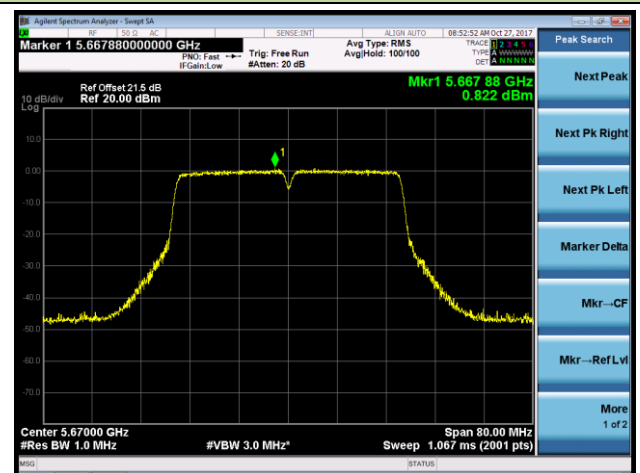


802.11n-HT40 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

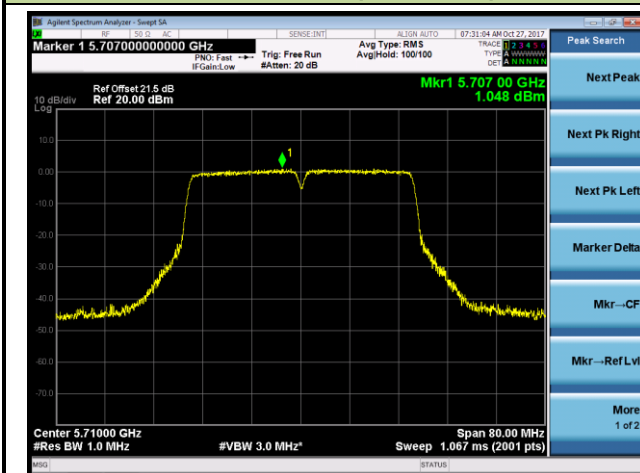
Channel 118 (5590MHz)



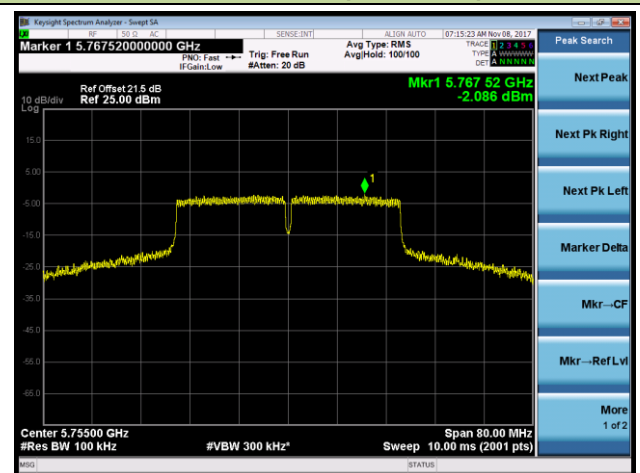
Channel 134 (5670MHz)



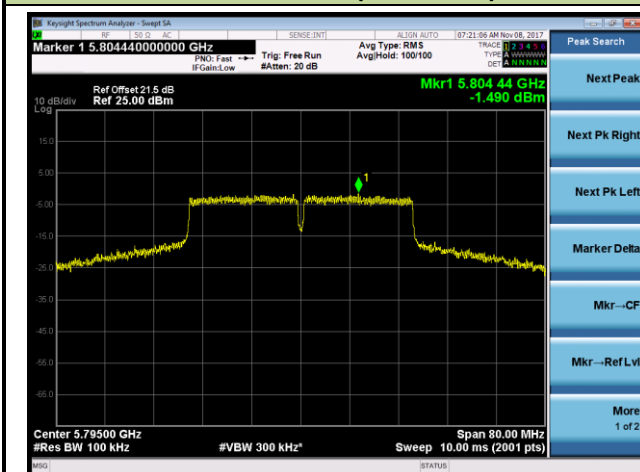
Channel 142 (5710MHz)



Channel 151 (5755MHz)

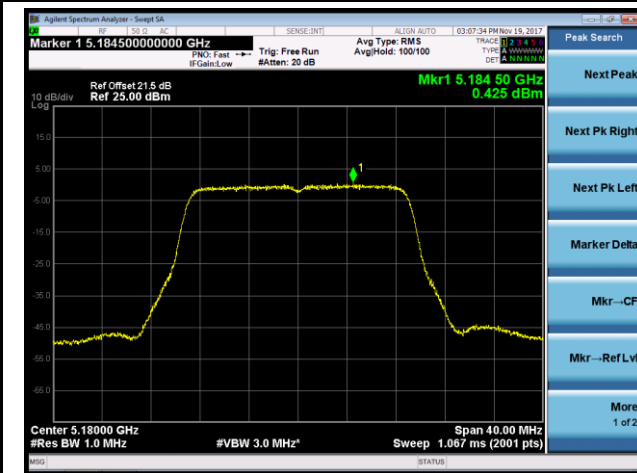


Channel 159 (5795MHz)

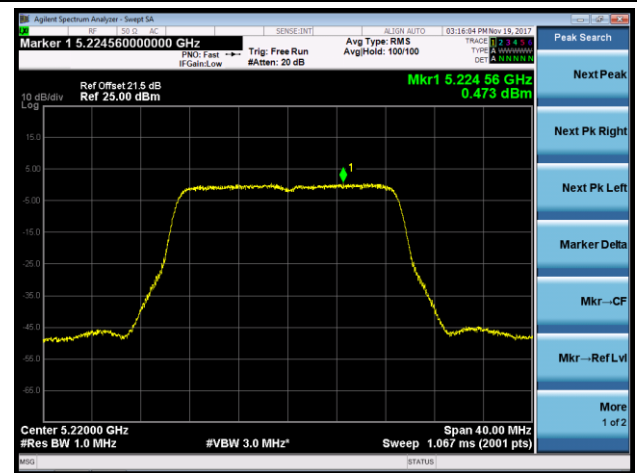


802.11ac-VHT20 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

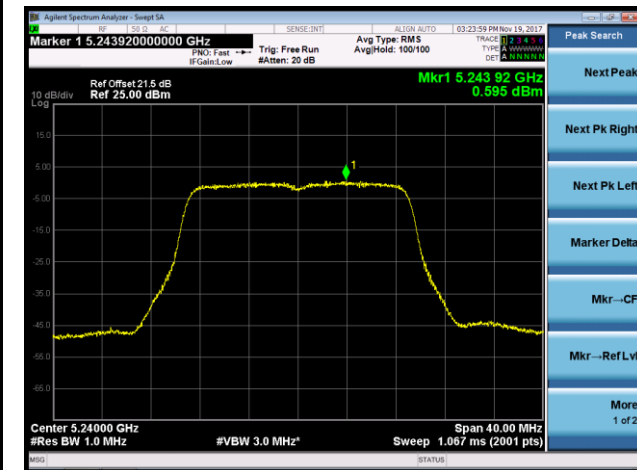
Channel 36 (5180MHz)



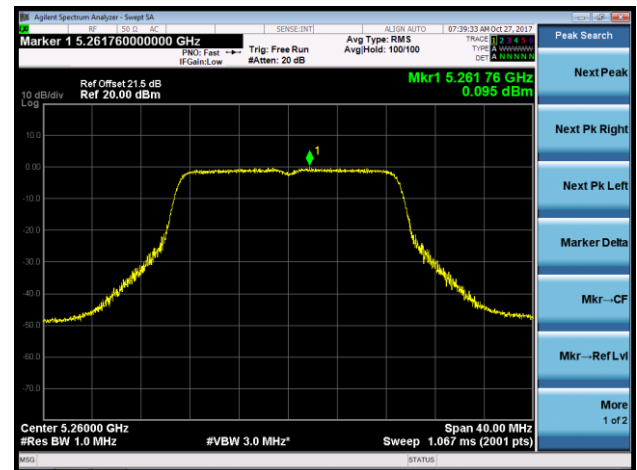
Channel 44 (5220MHz)



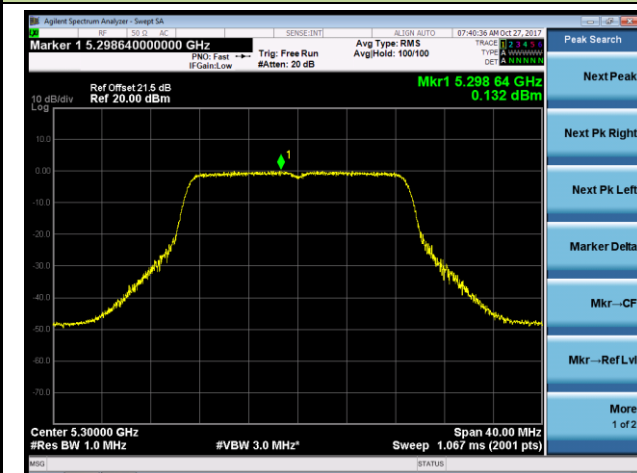
Channel 48 (5240MHz)



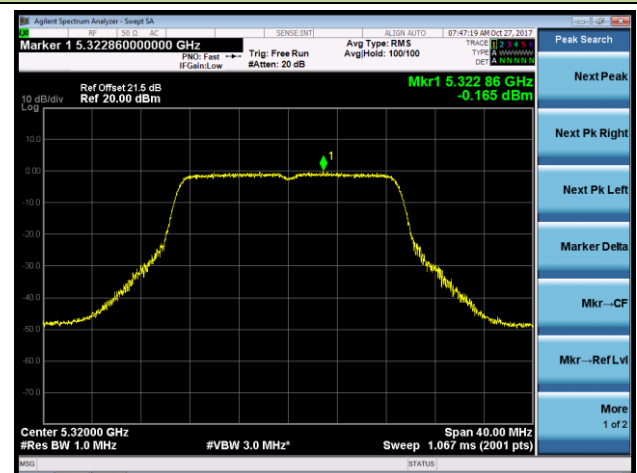
Channel 52 (5260MHz)



Channel 60 (5300MHz)

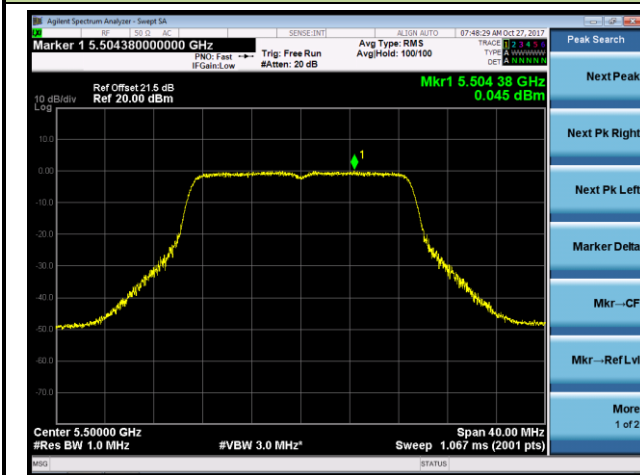


Channel 64 (5320MHz)

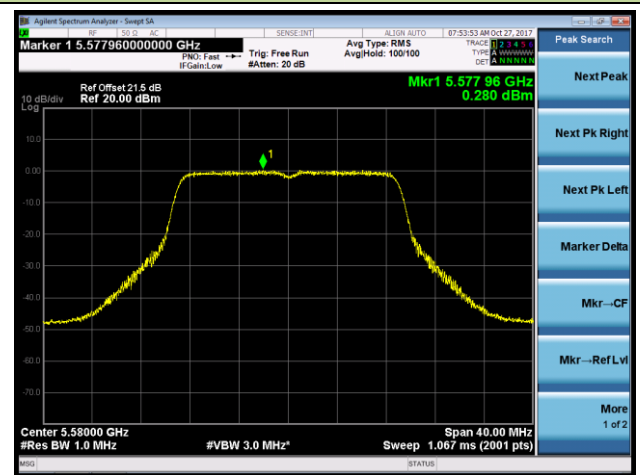


802.11ac-VHT20 Power Spectral Density - Ant 0 + 1 + 2 + 3

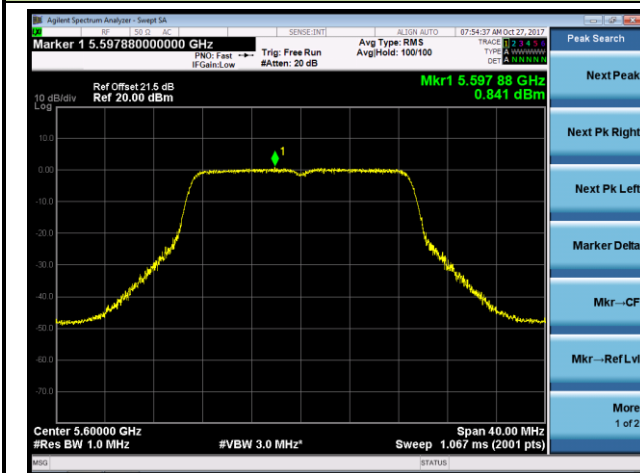
Channel 100 (5500MHz)



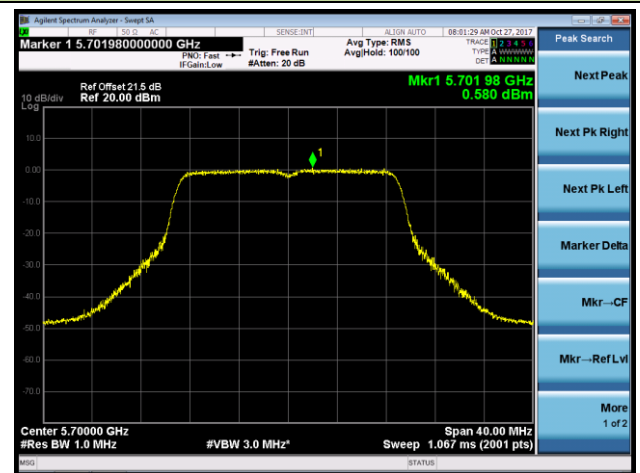
Channel 116 (5580MHz)



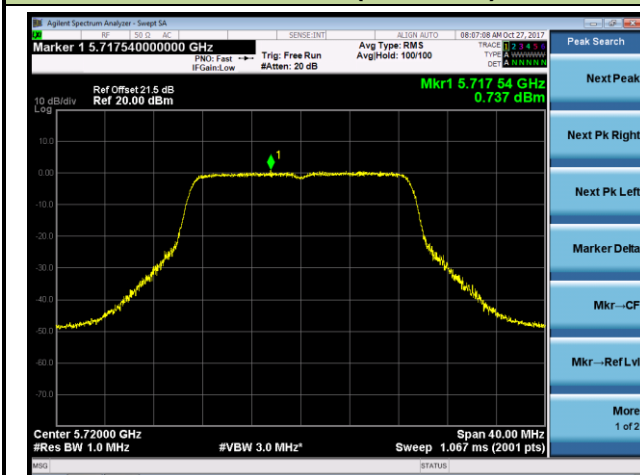
Channel 120 (5600MHz)



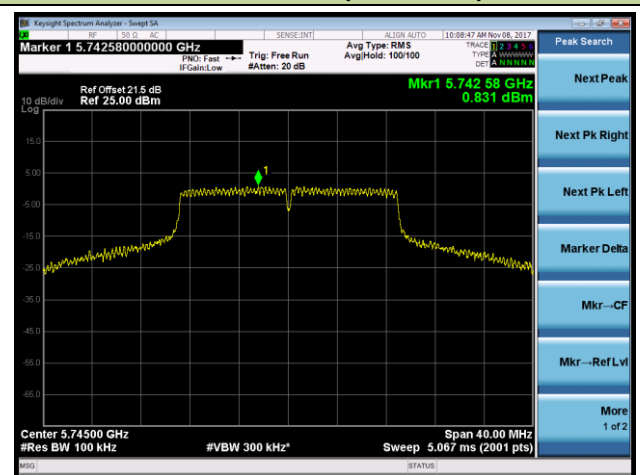
Channel 140 (5700MHz)



Channel 144 (5720MHz)

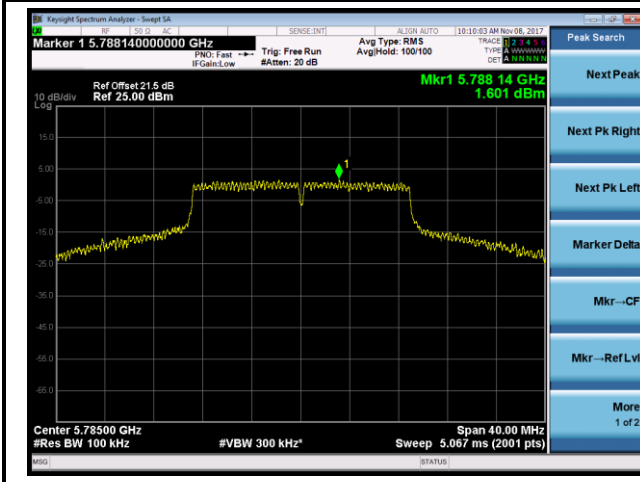


Channel 149 (5745MHz)

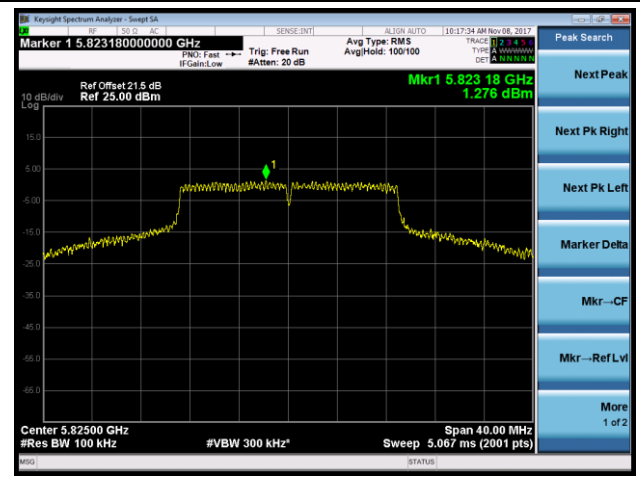


802.11ac-VHT20 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

Channel 157 (5785MHz)

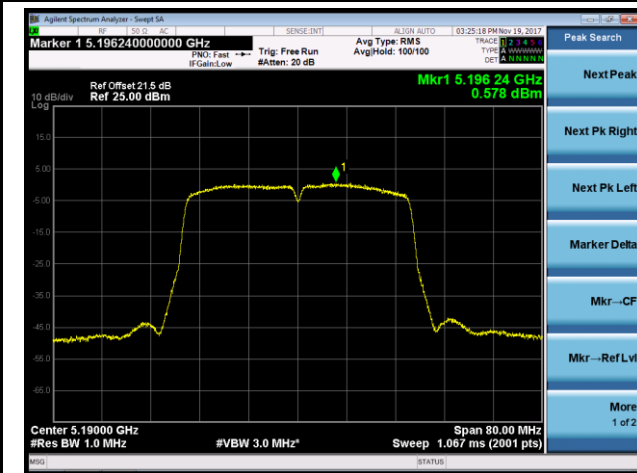


Channel 165 (5825MHz)

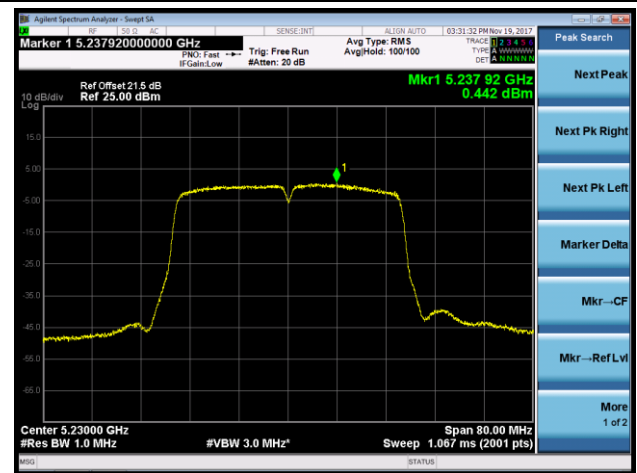


802.11ac-VHT40 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

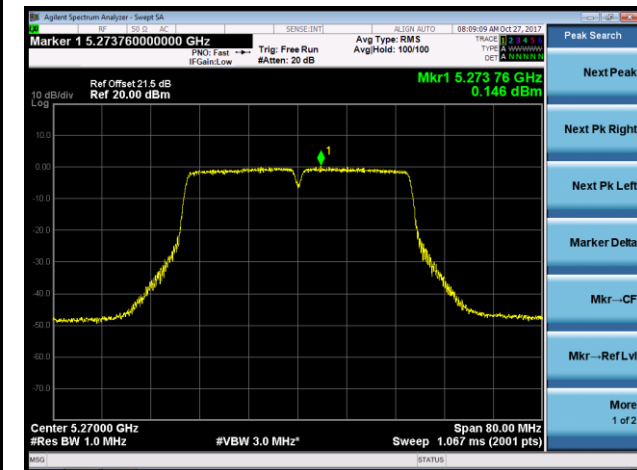
Channel 38 (5190MHz)



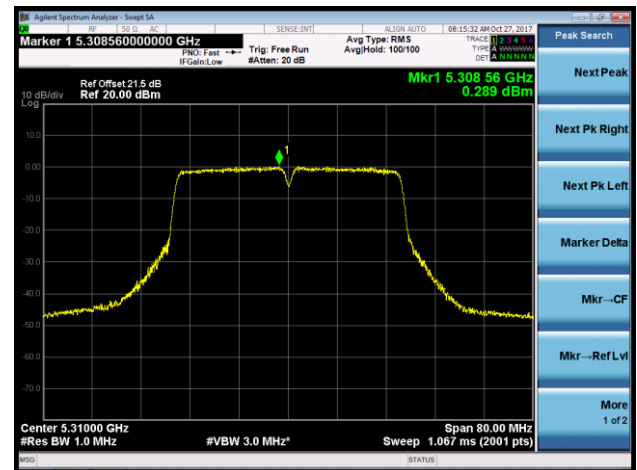
Channel 46 (5230MHz)



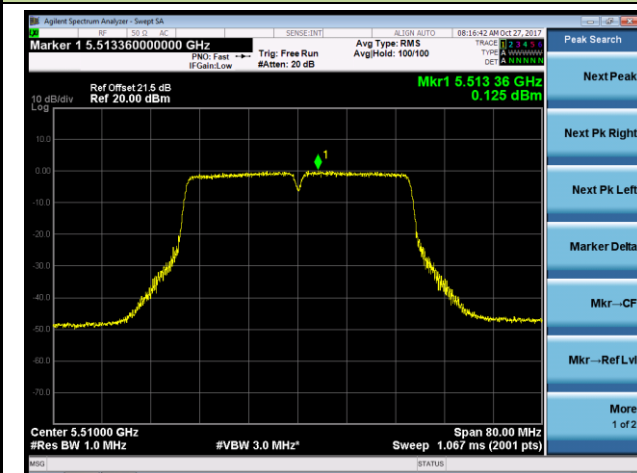
Channel 54 (5270MHz)



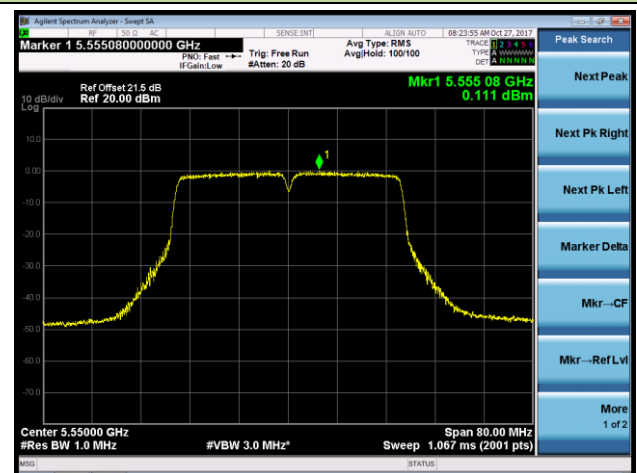
Channel 62 (5310MHz)



Channel 102 (5510MHz)

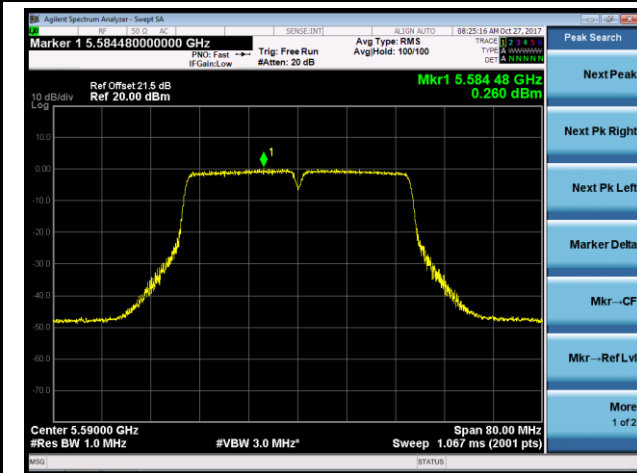


Channel 110 (5550MHz)

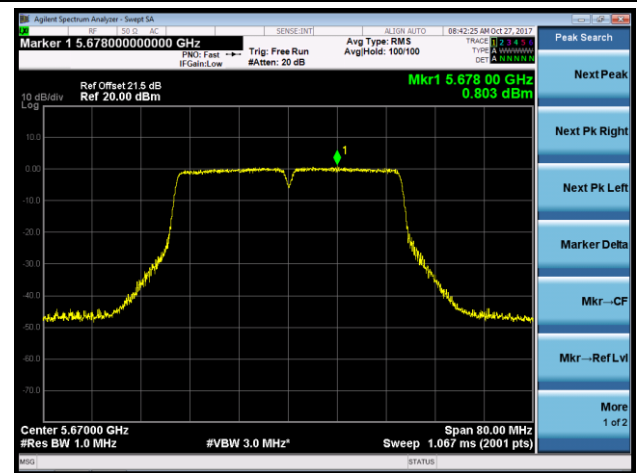


802.11ac-VHT40 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

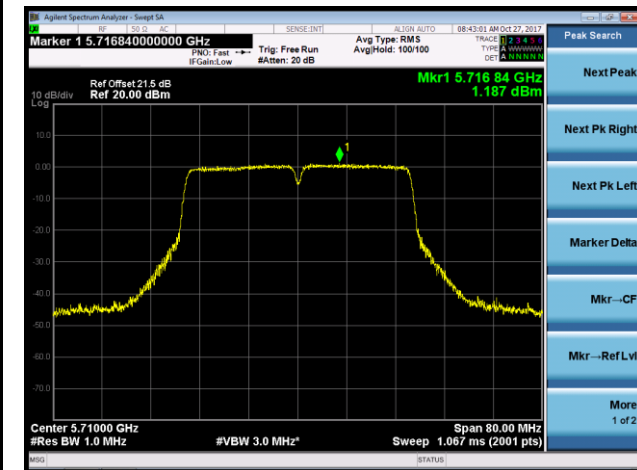
Channel 118 (5590MHz)



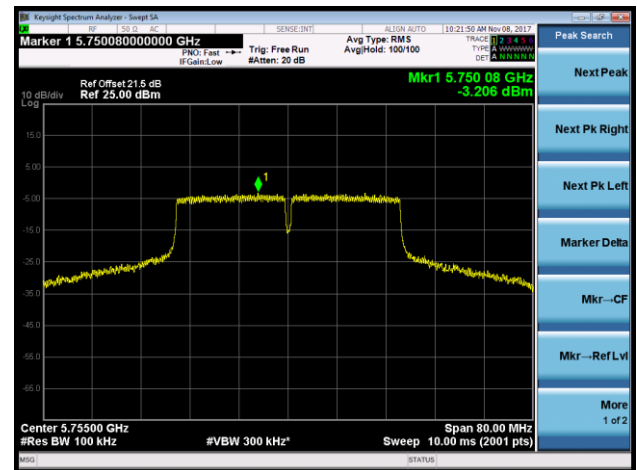
Channel 134 (5670MHz)



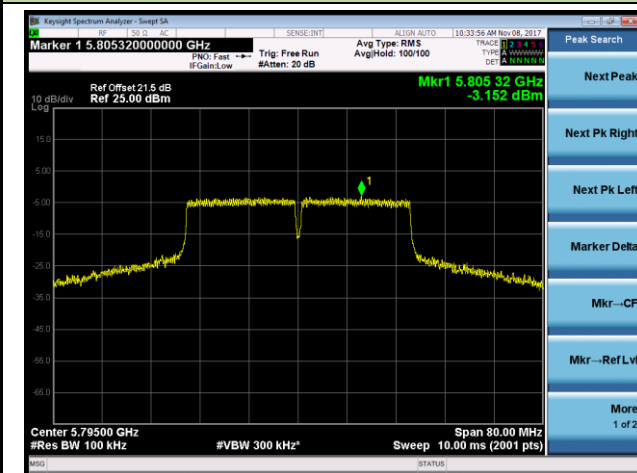
Channel 142 (5710MHz)



Channel 151 (5755MHz)

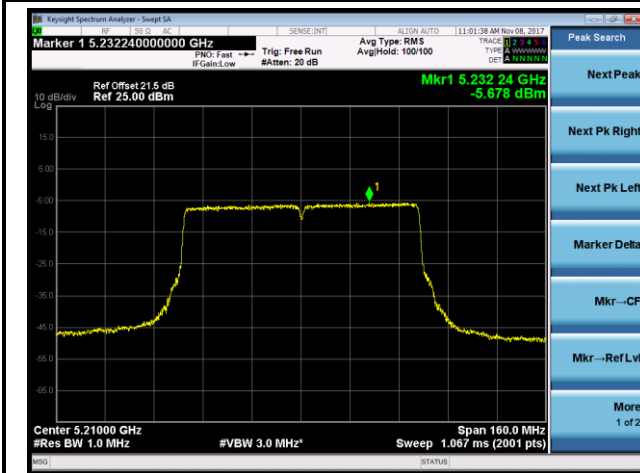


Channel 159 (5795MHz)

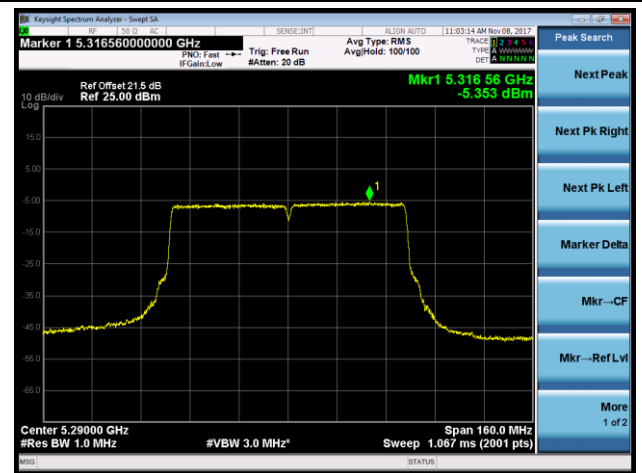


802.11ac-VHT80 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3

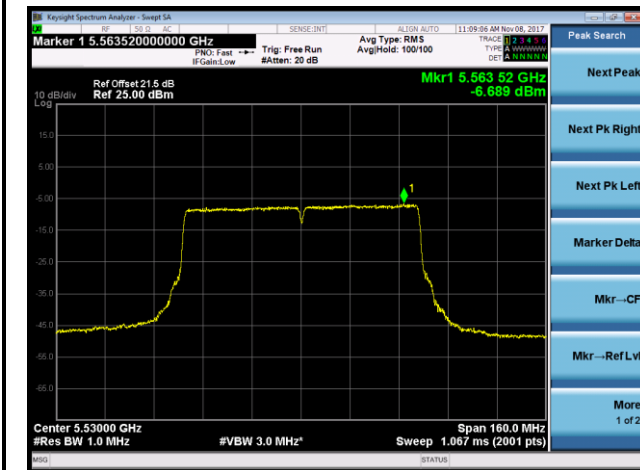
Channel 42 (5210MHz)



Channel 58 (5290MHz)



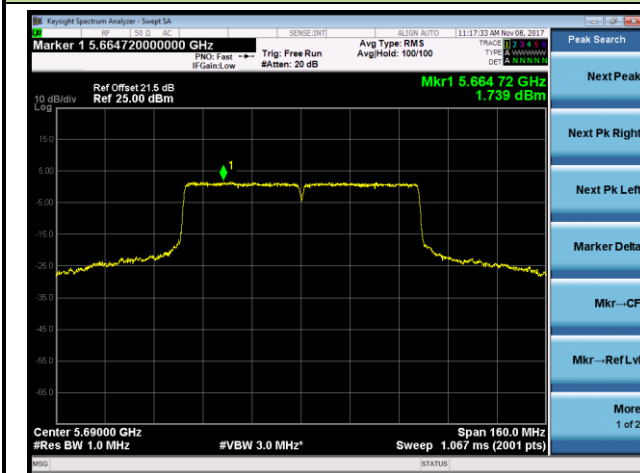
Channel 106 (5530MHz)



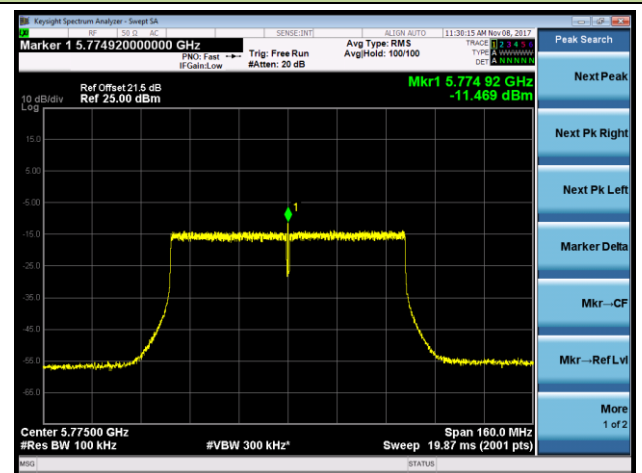
Channel 122 (5610MHz)



Channel 138 (5690MHz)

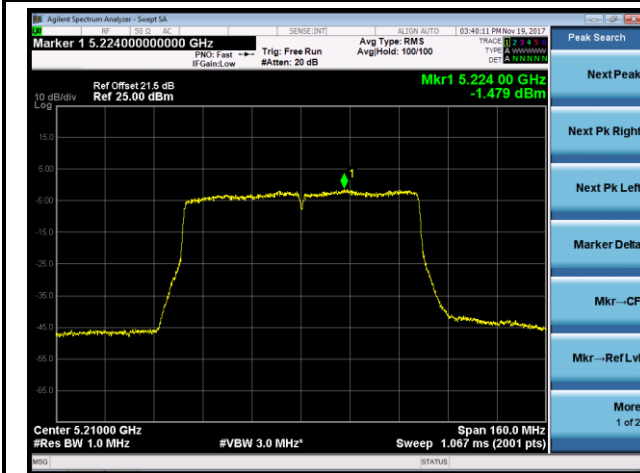


Channel 155 (5775MHz)

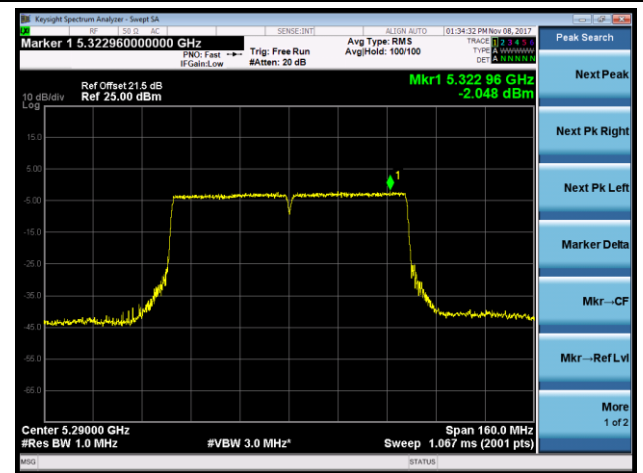


802.11ac-VHT80+80 Power Spectral Density - Ant 3 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3)

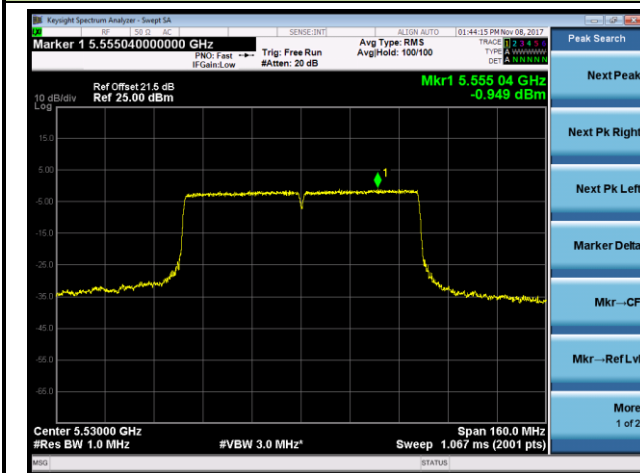
Channel 42 (5210MHz)



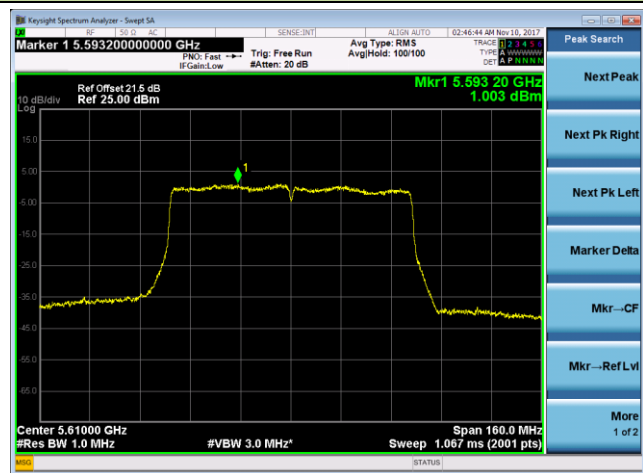
Channel 58 (5290MHz)



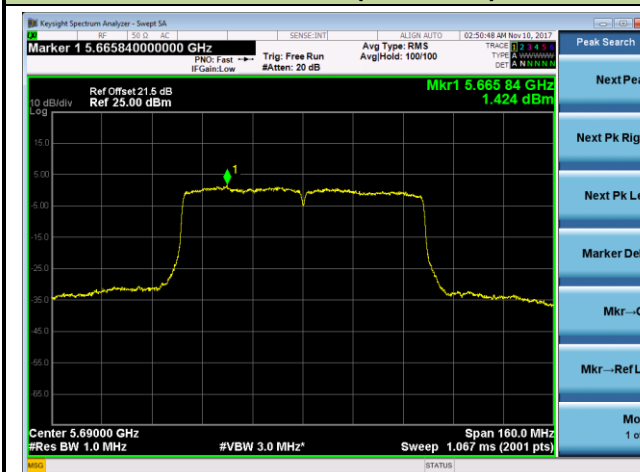
Channel 106 (5530MHz)



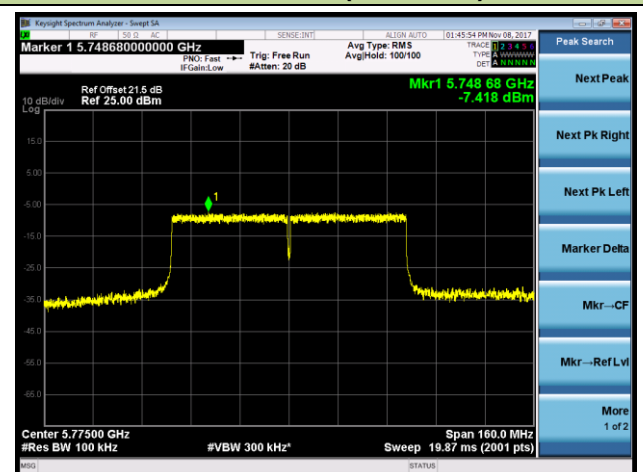
Channel 122 (5610MHz)



Channel 138 (5690MHz)



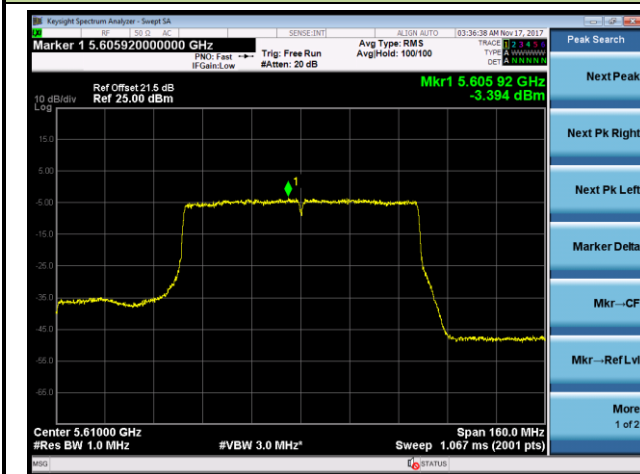
Channel 155 (5775MHz)



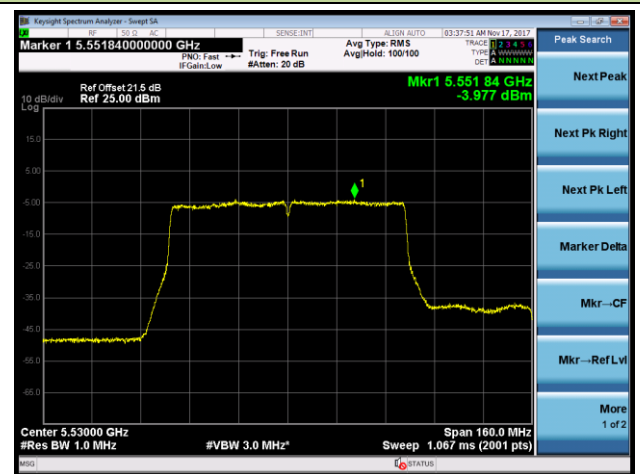
For the Emission Bandwidth Contained within the Same Band:

802.11ac-VHT80+80 Power Spectral Density - Ant 3 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3) (CDD Mode)

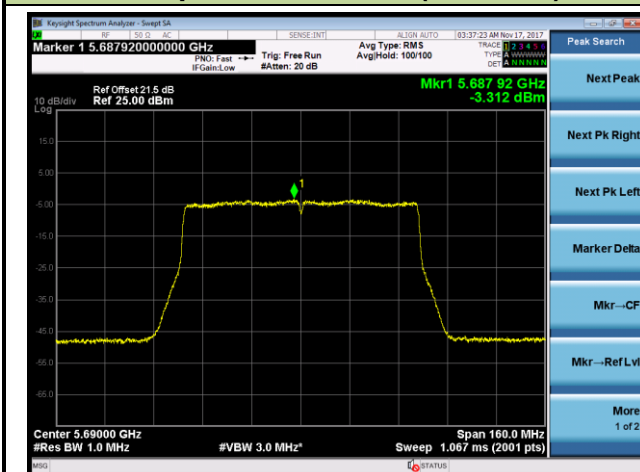
Group 1_Channel 122 (5610MHz)



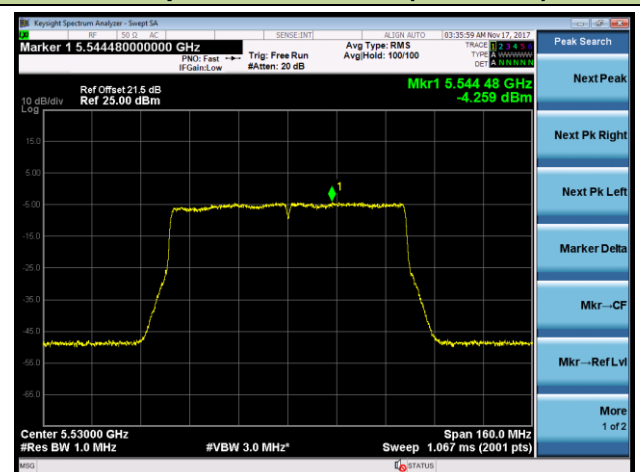
Group 2_Channel 106 (5530MHz)



Group 3_Channel 138 (5690MHz)



Group 4_Channel 106 (5530MHz)



7.7. Frequency Stability Measurement

7.7.1. Test Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5GHz band (IEEE 802.11 specification).

7.7.2. Test Procedure Used

Frequency Stability Under Temperature Variations:

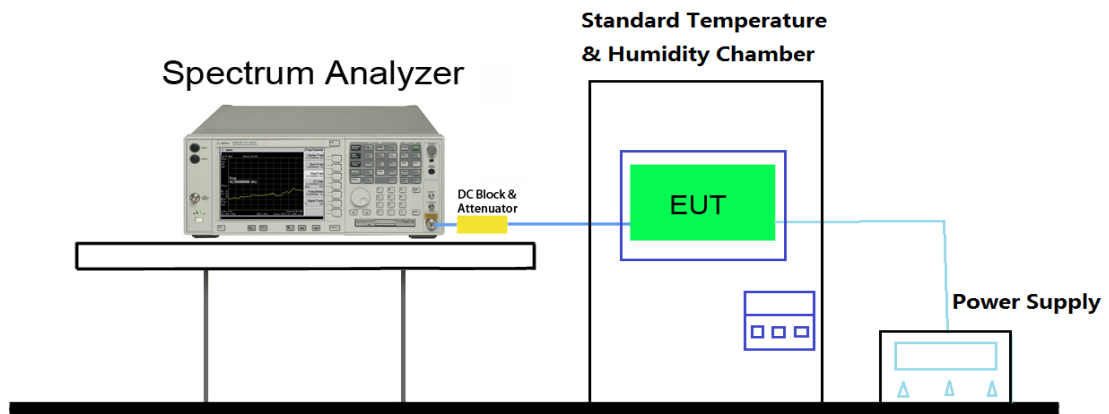
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

7.7.3. Test Setup



7.7.4. Test Result

Test Engineer	Lewis Huang	Temperature	-30 ~ 50°C
Test Time	2017/11/03	Relative Humidity	55%RH
Test Mode	5180MHz (Carrier Mode)	Test Site	TR3

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 30	-2.96	-3.17	-3.97	-3.76
		- 20	-3.79	-2.46	-3.52	-3.59
		- 10	-3.10	-2.56	-3.10	-2.09
		0	-3.10	-4.21	-1.68	-1.80
		+ 10	-1.95	-4.35	-2.57	-2.21
		+ 20 (Ref)	-1.41	-1.85	-1.79	-2.06
		+ 30	-3.31	-2.39	-2.29	-1.97
		+ 40	-2.33	-2.58	-3.30	-4.96
		+ 50	-2.98	-4.73	-1.91	-1.44
115%	138	+ 20	-1.56	-2.48	-2.44	-1.63
85%	102	+ 20	-2.90	-3.11	-2.99	-2.58

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} * 10⁶.

7.8. Radiated Spurious Emission Measurement

7.8.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.8.2. Test Procedure Used

KDB 789033 D02v01r04 - Section G

7.8.3. Test Setting

Quasi-Peak & Average Measurements below 30MHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 200Hz for 9kHz to 150kHz frequency; RBW = 9kHz for 0.15MHz to 30MHz frequency
4. Detector = CISPR quasi-peak or power average (Average)
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

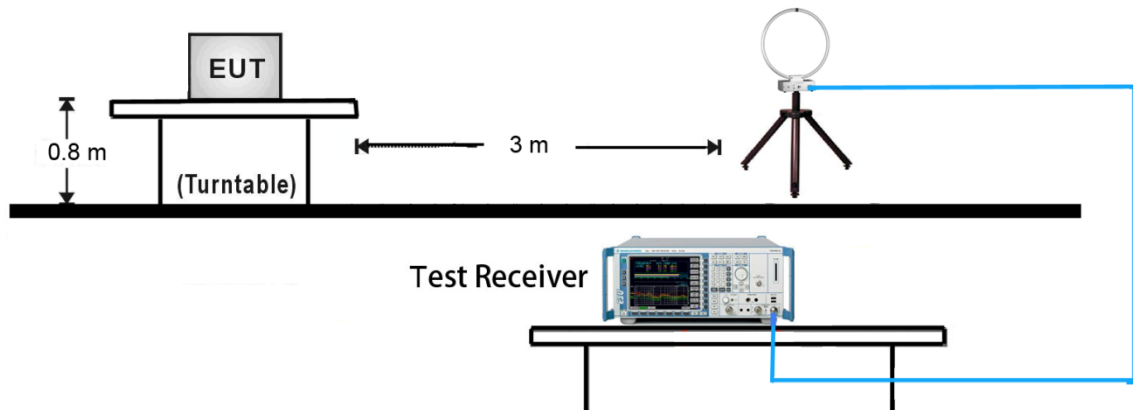
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

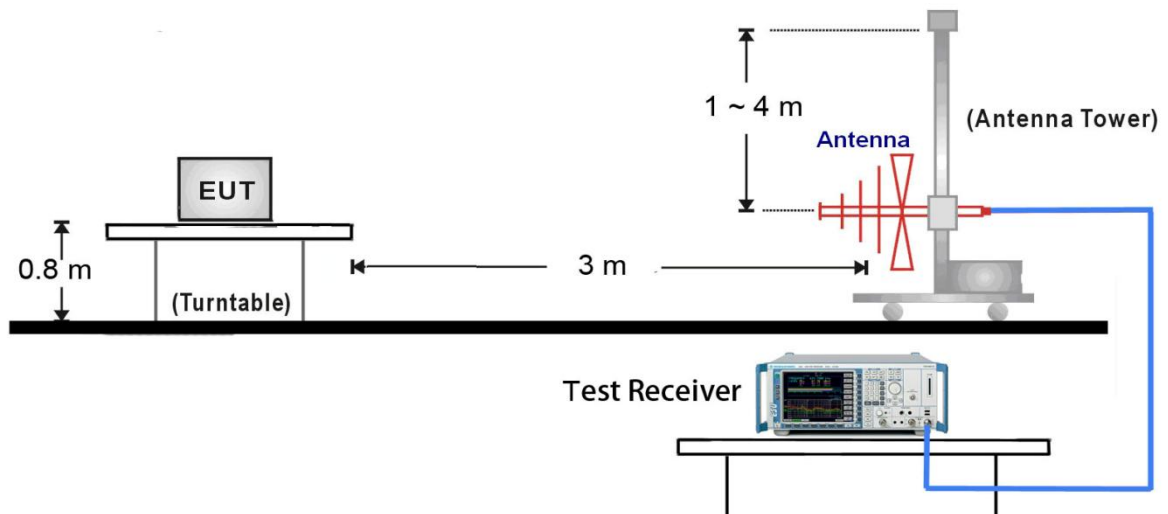
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW If the EUT is configured to transmit with duty cycle $\geq 98\%$, set $VBW \leq RBW/100$ (i.e., 10 kHz) but not less than 10 Hz. If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$.
4. Detector = Peak
5. Sweep time = auto
6. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where x is the duty cycle.

7.8.4. Test Setup

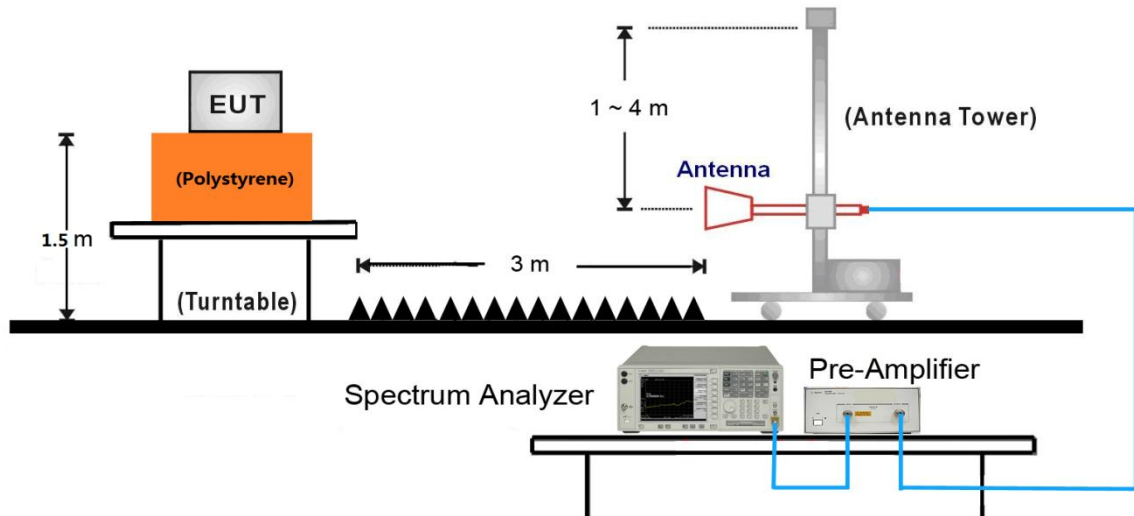
9kHz ~30MHz Test Setup:



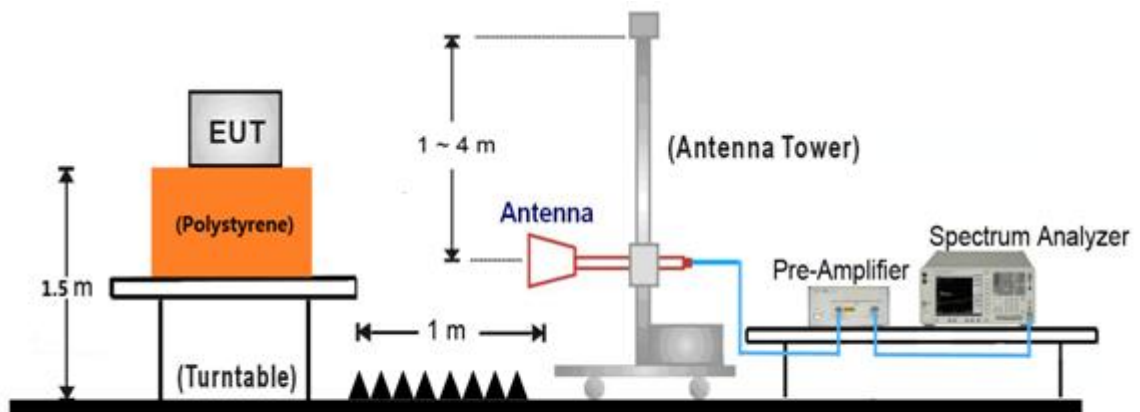
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:



18GHz ~40GHz Test Setup:



7.8.5. Test Result

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8896.5	37.3	9.2	46.5	68.2	-21.7	Peak	Horizontal
*	9755.0	35.9	11.4	47.3	68.2	-20.9	Peak	Horizontal
	10996.0	36.8	13.0	49.8	74.0	-24.2	Peak	Horizontal
	11565.5	35.9	12.7	48.6	74.0	-25.4	Peak	Horizontal
*	8811.5	36.6	9.0	45.6	68.2	-22.6	Peak	Vertical
*	9814.5	36.2	11.6	47.8	68.2	-20.4	Peak	Vertical
	10911.0	36.0	13.0	49.0	74.0	-25.0	Peak	Vertical
	15543.5	39.4	12.2	51.6	74.0	-22.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8879.5	36.5	9.2	45.7	68.2	-22.5	Peak	Horizontal
*	9874.0	35.5	11.6	47.1	68.2	-21.1	Peak	Horizontal
	10987.5	36.0	13.0	49.0	74.0	-25.0	Peak	Horizontal
	12101.0	35.8	12.0	47.8	74.0	-26.2	Peak	Horizontal
*	8828.5	35.8	9.1	44.9	68.2	-23.3	Peak	Vertical
*	10324.5	36.4	12.1	48.5	68.2	-19.7	Peak	Vertical
	12237.0	36.3	11.8	48.1	74.0	-25.9	Peak	Vertical
	15662.0	42.6	12.0	54.6	74.0	-19.4	Peak	Vertical
	15662.0	30.1	12.0	42.1	54.0	-11.9	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8854.0	36.1	9.1	45.2	68.2	-23.0	Peak	Horizontal
*	9840.0	35.3	11.6	46.9	68.2	-21.3	Peak	Horizontal
	10749.5	35.9	12.5	48.4	74.0	-25.6	Peak	Horizontal
	11582.5	35.9	12.6	48.5	74.0	-25.5	Peak	Horizontal
*	8837.0	36.3	9.1	45.4	68.2	-22.8	Peak	Vertical
*	9882.5	35.7	11.6	47.3	68.2	-20.9	Peak	Vertical
	11514.5	35.5	12.8	48.3	74.0	-25.7	Peak	Vertical
	15713.5	40.1	11.8	51.9	74.0	-22.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8718.0	36.0	9.0	45.0	68.2	-23.2	Peak	Horizontal
*	9755.0	35.6	11.4	47.0	68.2	-21.2	Peak	Horizontal
	11353.0	36.0	12.5	48.5	74.0	-25.5	Peak	Horizontal
	12135.0	35.4	11.9	47.3	74.0	-26.7	Peak	Horizontal
*	8599.0	36.2	8.7	44.9	68.2	-23.3	Peak	Vertical
*	9746.5	35.4	11.3	46.7	68.2	-21.5	Peak	Vertical
	11251.0	35.9	12.4	48.3	74.0	-25.7	Peak	Vertical
	11837.5	35.5	11.9	47.4	74.0	-26.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8905.0	35.8	9.2	45.0	68.2	-23.2	Peak	Horizontal
*	9772.0	34.9	11.4	46.3	68.2	-21.9	Peak	Horizontal
	11072.5	35.1	12.8	47.9	74.0	-26.1	Peak	Horizontal
	11514.5	36.3	12.8	49.1	74.0	-24.9	Peak	Horizontal
*	8692.5	35.8	9.0	44.8	68.2	-23.4	Peak	Vertical
*	9865.5	35.3	11.6	46.9	68.2	-21.3	Peak	Vertical
	10979.0	35.7	13.0	48.7	74.0	-25.3	Peak	Vertical
	11548.5	35.6	12.7	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8862.5	36.6	9.1	45.7	68.2	-22.5	Peak	Horizontal
*	9670.0	35.7	10.9	46.6	68.2	-21.6	Peak	Horizontal
	10851.5	36.2	12.8	49.0	74.0	-25.0	Peak	Horizontal
	12084.0	36.1	12.0	48.1	74.0	-25.9	Peak	Horizontal
*	8854.0	35.9	9.1	45.0	68.2	-23.2	Peak	Vertical
*	9729.5	35.8	11.1	46.9	68.2	-21.3	Peak	Vertical
	10945.0	35.7	13.1	48.8	74.0	-25.2	Peak	Vertical
	11540.0	35.2	12.7	47.9	74.0	-26.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8828.5	36.0	9.1	45.1	68.2	-23.1	Peak	Horizontal
*	9797.5	35.0	11.5	46.5	68.2	-21.7	Peak	Horizontal
	10902.5	36.3	13.0	49.3	74.0	-24.7	Peak	Horizontal
	11472.0	35.6	12.7	48.3	74.0	-25.7	Peak	Horizontal
*	8616.0	37.0	8.8	45.8	68.2	-22.4	Peak	Vertical
*	9814.5	34.6	11.6	46.2	68.2	-22.0	Peak	Vertical
	10851.5	35.2	12.8	48.0	74.0	-26.0	Peak	Vertical
	11523.0	35.6	12.7	48.3	74.0	-25.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	36.4	9.0	45.4	68.2	-22.8	Peak	Horizontal
*	9806.0	34.6	11.5	46.1	68.2	-22.1	Peak	Horizontal
	10800.5	36.0	12.6	48.6	74.0	-25.4	Peak	Horizontal
	11650.5	35.9	12.3	48.2	74.0	-25.8	Peak	Horizontal
*	8726.5	35.8	9.0	44.8	68.2	-23.4	Peak	Vertical
*	9882.5	35.2	11.6	46.8	68.2	-21.4	Peak	Vertical
	10894.0	35.3	12.9	48.2	74.0	-25.8	Peak	Vertical
	12058.5	35.6	12.0	47.6	74.0	-26.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8565.0	36.1	8.7	44.8	68.2	-23.4	Peak	Horizontal
*	9848.5	35.3	11.6	46.9	68.2	-21.3	Peak	Horizontal
	10894.0	35.3	12.9	48.2	74.0	-25.8	Peak	Horizontal
	11540.0	35.7	12.7	48.4	74.0	-25.6	Peak	Horizontal
*	8675.5	36.0	8.9	44.9	68.2	-23.3	Peak	Vertical
*	9721.0	33.8	11.1	44.9	68.2	-23.3	Peak	Vertical
	11064.0	35.3	12.8	48.1	74.0	-25.9	Peak	Vertical
	11548.5	35.7	12.7	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	35.8	8.8	44.6	68.2	-23.6	Peak	Horizontal
*	9755.0	35.1	11.4	46.5	68.2	-21.7	Peak	Horizontal
	10843.0	35.9	12.7	48.6	74.0	-25.4	Peak	Horizontal
	11625.0	36.2	12.5	48.7	74.0	-25.3	Peak	Horizontal
*	8633.0	37.0	8.8	45.8	68.2	-22.4	Peak	Vertical
*	9874.0	34.8	11.6	46.4	68.2	-21.8	Peak	Vertical
	11089.5	36.7	12.8	49.5	74.0	-24.5	Peak	Vertical
	12084.0	35.5	12.0	47.5	74.0	-26.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8769.0	36.3	8.9	45.2	68.2	-23.0	Peak	Horizontal
*	9831.5	35.4	11.6	47.0	68.2	-21.2	Peak	Horizontal
	10936.5	35.6	13.0	48.6	74.0	-25.4	Peak	Horizontal
	11557.0	35.9	12.7	48.6	74.0	-25.4	Peak	Horizontal
*	8896.5	35.7	9.2	44.9	68.2	-23.3	Peak	Vertical
*	9882.5	35.0	11.6	46.6	68.2	-21.6	Peak	Vertical
	10979.0	36.3	13.0	49.3	74.0	-24.7	Peak	Vertical
	12033.0	35.4	12.0	47.4	74.0	-26.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8871.0	36.1	9.1	45.2	68.2	-23.0	Peak	Horizontal
*	9806.0	35.5	11.5	47.0	68.2	-21.2	Peak	Horizontal
	11004.5	35.3	13.0	48.3	74.0	-25.7	Peak	Horizontal
	11812.0	35.7	11.9	47.6	74.0	-26.4	Peak	Horizontal
*	8692.5	36.7	9.0	45.7	68.2	-22.5	Peak	Vertical
	10979.0	35.0	13.0	48.0	74.0	-26.0	Peak	Vertical
	12313.5	35.7	11.6	47.3	74.0	-26.7	Peak	Vertical
*	17226.5	43.2	16.0	59.2	68.2	-9.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	35.0	9.0	44.0	68.2	-24.2	Peak	Horizontal
*	9653.0	35.0	11.0	46.0	68.2	-22.2	Peak	Horizontal
	10877.0	35.2	12.9	48.1	74.0	-25.9	Peak	Horizontal
	11557.0	35.6	12.7	48.3	74.0	-25.7	Peak	Horizontal
*	8803.0	35.9	8.9	44.8	68.2	-23.4	Peak	Vertical
	11565.5	36.6	12.7	49.3	74.0	-24.7	Peak	Vertical
	12152.0	35.4	11.8	47.2	74.0	-26.8	Peak	Vertical
*	17345.5	38.0	16.8	54.8	68.2	-13.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 0	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	36.0	8.8	44.8	68.2	-23.4	Peak	Horizontal
*	9831.5	35.9	11.6	47.5	68.2	-20.7	Peak	Horizontal
	11013.0	35.1	13.0	48.1	74.0	-25.9	Peak	Horizontal
	11540.0	35.2	12.7	47.9	74.0	-26.1	Peak	Horizontal
*	8905.0	36.3	9.2	45.5	68.2	-22.7	Peak	Vertical
	11650.5	37.1	12.3	49.4	74.0	-24.6	Peak	Vertical
	12288.0	35.1	11.7	46.8	74.0	-27.2	Peak	Vertical
*	17473.0	38.8	17.2	56.0	68.2	-12.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8871.0	36.2	9.1	45.3	68.2	-22.9	Peak	Horizontal
*	9984.5	35.4	11.4	46.8	68.2	-21.4	Peak	Horizontal
	10834.5	35.9	12.7	48.6	74.0	-25.4	Peak	Horizontal
	11523.0	35.6	12.7	48.3	74.0	-25.7	Peak	Horizontal
*	8930.5	36.8	9.0	45.8	68.2	-22.4	Peak	Vertical
*	9857.0	35.5	11.6	47.1	68.2	-21.1	Peak	Vertical
	11064.0	36.3	12.8	49.1	74.0	-24.9	Peak	Vertical
	11514.5	35.7	12.8	48.5	74.0	-25.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8556.5	36.2	8.6	44.8	68.2	-23.4	Peak	Horizontal
*	9687.0	35.8	10.9	46.7	68.2	-21.5	Peak	Horizontal
	11234.0	35.8	12.4	48.2	74.0	-25.8	Peak	Horizontal
	12050.0	35.2	12.0	47.2	74.0	-26.8	Peak	Horizontal
*	8607.5	36.6	8.8	45.4	68.2	-22.8	Peak	Vertical
*	9602.0	35.5	10.9	46.4	68.2	-21.8	Peak	Vertical
	10834.5	37.1	12.7	49.8	74.0	-24.2	Peak	Vertical
	15662.5	38.0	12.0	50.0	74.0	-24.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8548.0	35.9	8.6	44.5	68.2	-23.7	Peak	Horizontal
*	9636.0	35.4	11.0	46.4	68.2	-21.8	Peak	Horizontal
	10860.0	36.4	12.8	49.2	74.0	-24.8	Peak	Horizontal
	11565.5	35.3	12.7	48.0	74.0	-26.0	Peak	Horizontal
*	8641.5	35.8	8.8	44.6	68.2	-23.6	Peak	Vertical
*	9763.5	34.6	11.4	46.0	68.2	-22.2	Peak	Vertical
	11157.5	36.2	12.6	48.8	74.0	-25.2	Peak	Vertical
	15722.0	40.5	11.8	52.3	74.0	-21.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	36.0	8.8	44.8	68.2	-23.4	Peak	Horizontal
*	9806.0	35.0	11.5	46.5	68.2	-21.7	Peak	Horizontal
	10834.5	35.8	12.7	48.5	74.0	-25.5	Peak	Horizontal
	12101.0	35.6	12.0	47.6	74.0	-26.4	Peak	Horizontal
*	8845.5	36.3	9.1	45.4	68.2	-22.8	Peak	Vertical
*	9780.5	34.7	11.4	46.1	68.2	-22.1	Peak	Vertical
	11149.0	35.3	12.6	47.9	74.0	-26.1	Peak	Vertical
	12058.5	35.8	12.0	47.8	74.0	-26.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8709.5	36.2	9.0	45.2	68.2	-23.0	Peak	Horizontal
*	9763.5	35.1	11.4	46.5	68.2	-21.7	Peak	Horizontal
	10962.0	35.3	13.1	48.4	74.0	-25.6	Peak	Horizontal
	11633.5	36.0	12.4	48.4	74.0	-25.6	Peak	Horizontal
*	8871.0	35.8	9.1	44.9	68.2	-23.3	Peak	Vertical
*	9636.0	36.0	11.0	47.0	68.2	-21.2	Peak	Vertical
	11013.0	35.0	13.0	48.0	74.0	-26.0	Peak	Vertical
	11948.0	35.2	11.9	47.1	74.0	-26.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8905.0	35.9	9.2	45.1	68.2	-23.1	Peak	Horizontal
*	9814.5	35.6	11.6	47.2	68.2	-21.0	Peak	Horizontal
	11013.0	36.7	13.0	49.7	74.0	-24.3	Peak	Horizontal
	12024.5	35.5	12.0	47.5	74.0	-26.5	Peak	Horizontal
*	8794.5	35.6	8.9	44.5	68.2	-23.7	Peak	Vertical
*	9721.0	35.2	11.1	46.3	68.2	-21.9	Peak	Vertical
	11047.0	35.3	12.9	48.2	74.0	-25.8	Peak	Vertical
	12024.5	36.5	12.0	48.5	74.0	-25.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	36.4	8.9	45.3	68.2	-22.9	Peak	Horizontal
	10953.5	35.1	13.1	48.2	74.0	-25.8	Peak	Horizontal
	11472.0	35.7	12.7	48.4	74.0	-25.6	Peak	Horizontal
*	16691.0	36.7	14.4	51.1	68.2	-17.1	Peak	Horizontal
*	8922.0	37.2	9.1	46.3	68.2	-21.9	Peak	Vertical
*	9916.5	35.0	11.5	46.5	68.2	-21.7	Peak	Vertical
	11285.0	35.9	12.4	48.3	74.0	-25.7	Peak	Vertical
	11727.0	35.7	11.9	47.6	74.0	-26.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	36.2	8.8	45.0	68.2	-23.2	Peak	Horizontal
*	9823.0	34.9	11.6	46.5	68.2	-21.7	Peak	Horizontal
	11013.0	35.7	13.0	48.7	74.0	-25.3	Peak	Horizontal
	11531.5	35.4	12.7	48.1	74.0	-25.9	Peak	Horizontal
*	8862.5	36.1	9.1	45.2	68.2	-23.0	Peak	Vertical
*	9772.0	35.4	11.4	46.8	68.2	-21.4	Peak	Vertical
	11293.5	35.8	12.5	48.3	74.0	-25.7	Peak	Vertical
	12007.5	35.2	11.9	47.1	74.0	-26.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8675.5	36.3	8.9	45.2	68.2	-23.0	Peak	Horizontal
*	9687.0	35.7	10.9	46.6	68.2	-21.6	Peak	Horizontal
	10945.0	36.0	13.1	49.1	74.0	-24.9	Peak	Horizontal
	11608.0	35.8	12.5	48.3	74.0	-25.7	Peak	Horizontal
*	8735.0	36.7	8.9	45.6	68.2	-22.6	Peak	Vertical
*	9797.5	34.6	11.5	46.1	68.2	-22.1	Peak	Vertical
	10936.5	34.9	13.0	47.9	74.0	-26.1	Peak	Vertical
	11557.0	34.8	12.7	47.5	74.0	-26.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	35.9	8.8	44.7	68.2	-23.5	Peak	Horizontal
*	9746.5	35.3	11.3	46.6	68.2	-21.6	Peak	Horizontal
	11166.0	36.2	12.6	48.8	74.0	-25.2	Peak	Horizontal
	11803.5	35.3	11.8	47.1	74.0	-26.9	Peak	Horizontal
*	8888.0	36.0	9.2	45.2	68.2	-23.0	Peak	Vertical
*	9848.5	34.7	11.6	46.3	68.2	-21.9	Peak	Vertical
	10817.5	36.0	12.7	48.7	74.0	-25.3	Peak	Vertical
	11880.0	35.3	11.8	47.1	74.0	-26.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8582.0	36.3	8.6	44.9	68.2	-23.3	Peak	Horizontal
*	9755.0	35.1	11.4	46.5	68.2	-21.7	Peak	Horizontal
	10860.0	36.3	12.8	49.1	74.0	-24.9	Peak	Horizontal
	11540.0	34.6	12.7	47.3	74.0	-26.7	Peak	Horizontal
*	8616.0	36.0	8.8	44.8	68.2	-23.4	Peak	Vertical
*	9814.5	36.1	11.6	47.7	68.2	-20.5	Peak	Vertical
	10996.0	35.4	13.0	48.4	74.0	-25.6	Peak	Vertical
	11438.0	35.8	12.6	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8726.5	35.8	9.0	44.8	68.2	-23.4	Peak	Horizontal
*	9772.0	34.9	11.4	46.3	68.2	-21.9	Peak	Horizontal
	10987.5	35.1	13.0	48.1	74.0	-25.9	Peak	Horizontal
	11820.5	35.5	11.9	47.4	74.0	-26.6	Peak	Horizontal
*	8845.5	36.7	9.1	45.8	68.2	-22.4	Peak	Vertical
	10800.5	35.8	12.6	48.4	74.0	-25.6	Peak	Vertical
	11489.0	40.5	12.8	53.3	74.0	-20.7	Peak	Vertical
*	17243.5	42.8	16.0	58.8	68.2	-9.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9593.5	35.0	10.9	45.9	68.2	-22.3	Peak	Horizontal
	10894.0	35.5	12.9	48.4	74.0	-25.6	Peak	Horizontal
	11922.5	34.9	11.8	46.7	74.0	-27.3	Peak	Horizontal
*	17354.0	36.6	16.9	53.5	68.2	-14.7	Peak	Horizontal
*	8803.0	34.7	8.9	43.6	68.2	-24.6	Peak	Vertical
	11574.0	39.1	12.6	51.7	74.0	-22.3	Peak	Vertical
	12313.5	35.5	11.6	47.1	74.0	-26.9	Peak	Vertical
*	17354.0	46.9	16.9	63.8	68.2	-4.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 1	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	35.6	8.8	44.4	68.2	-23.8	Peak	Horizontal
*	9916.5	34.6	11.5	46.1	68.2	-22.1	Peak	Horizontal
	10860.0	35.9	12.8	48.7	74.0	-25.3	Peak	Horizontal
	11531.5	35.0	12.7	47.7	74.0	-26.3	Peak	Horizontal
*	8845.5	35.1	9.1	44.2	68.2	-24.0	Peak	Vertical
	10945.0	35.3	13.1	48.4	74.0	-25.6	Peak	Vertical
	11650.5	39.1	12.3	51.4	74.0	-22.6	Peak	Vertical
*	17473.0	39.0	17.2	56.2	68.2	-12.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8828.5	36.4	9.1	45.5	68.2	-22.7	Peak	Horizontal
*	9797.5	34.9	11.5	46.4	68.2	-21.8	Peak	Horizontal
	11531.5	36.4	12.7	49.1	74.0	-24.9	Peak	Horizontal
	15543.5	39.2	12.2	51.4	74.0	-22.6	Peak	Horizontal
*	8905.0	36.1	9.2	45.3	68.2	-22.9	Peak	Vertical
*	9848.5	35.7	11.6	47.3	68.2	-20.9	Peak	Vertical
	11157.5	36.1	12.6	48.7	74.0	-25.3	Peak	Vertical
	15543.5	41.5	12.2	53.7	74.0	-20.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8769.0	33.9	8.9	42.8	68.2	-25.4	Peak	Horizontal
*	9857.0	35.4	11.6	47.0	68.2	-21.2	Peak	Horizontal
	11540.0	35.3	12.7	48.0	74.0	-26.0	Peak	Horizontal
	15662.5	39.8	12.0	51.8	74.0	-22.2	Peak	Horizontal
*	8658.5	35.9	8.8	44.7	68.2	-23.5	Peak	Vertical
*	9619.0	35.4	10.9	46.3	68.2	-21.9	Peak	Vertical
	10953.5	36.2	13.1	49.3	74.0	-24.7	Peak	Vertical
	15660.1	46.6	12.0	58.6	74.0	-15.4	Peak	Vertical
	15660.1	34.4	12.0	46.4	54.0	-7.6	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8701.0	36.1	9.0	45.1	68.2	-23.1	Peak	Horizontal
*	9661.5	35.7	11.0	46.7	68.2	-21.5	Peak	Horizontal
	10834.5	36.6	12.7	49.3	74.0	-24.7	Peak	Horizontal
	15730.5	39.3	11.8	51.1	74.0	-22.9	Peak	Horizontal
*	8675.5	36.2	8.9	45.1	68.2	-23.1	Peak	Vertical
*	9806.0	35.6	11.5	47.1	68.2	-21.1	Peak	Vertical
	11004.5	36.0	13.0	49.0	74.0	-25.0	Peak	Vertical
	15720.0	48.0	11.8	59.8	74.0	-14.2	Peak	Vertical
	15720.0	34.8	11.8	46.6	54.0	-7.4	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	36.3	9.0	45.3	68.2	-22.9	Peak	Horizontal
*	9916.5	34.6	11.5	46.1	68.2	-22.1	Peak	Horizontal
	11021.5	35.2	13.0	48.2	74.0	-25.8	Peak	Horizontal
	11888.5	35.2	11.8	47.0	74.0	-27.0	Peak	Horizontal
*	8828.5	35.8	9.1	44.9	68.2	-23.3	Peak	Vertical
*	9865.5	34.6	11.6	46.2	68.2	-22.0	Peak	Vertical
	11055.5	35.4	12.9	48.3	74.0	-25.7	Peak	Vertical
	11531.5	35.7	12.7	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8684.0	35.7	9.0	44.7	68.2	-23.5	Peak	Horizontal
*	9814.5	34.9	11.6	46.5	68.2	-21.7	Peak	Horizontal
	10868.5	35.4	12.8	48.2	74.0	-25.8	Peak	Horizontal
	11540.0	35.6	12.7	48.3	74.0	-25.7	Peak	Horizontal
*	8684.0	35.4	9.0	44.4	68.2	-23.8	Peak	Vertical
*	9806.0	34.9	11.5	46.4	68.2	-21.8	Peak	Vertical
	11013.0	35.6	13.0	48.6	74.0	-25.4	Peak	Vertical
	15892.0	39.7	11.7	51.4	74.0	-22.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8879.5	35.8	9.2	45.0	68.2	-23.2	Peak	Horizontal
*	9763.5	34.6	11.4	46.0	68.2	-22.2	Peak	Horizontal
	10996.0	35.2	13.0	48.2	74.0	-25.8	Peak	Horizontal
	12135.0	35.6	11.9	47.5	74.0	-26.5	Peak	Horizontal
*	8905.0	35.1	9.2	44.3	68.2	-23.9	Peak	Vertical
*	9780.5	34.7	11.4	46.1	68.2	-22.1	Peak	Vertical
	11557.0	35.0	12.7	47.7	74.0	-26.3	Peak	Vertical
	15959.7	41.8	11.7	53.5	74.0	-20.5	Peak	Vertical
	15959.7	28.2	11.7	39.9	54.0	-14.1	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8743.5	34.7	9.0	43.7	68.2	-24.5	Peak	Horizontal
*	9857.0	34.0	11.6	45.6	68.2	-22.6	Peak	Horizontal
	11574.0	34.7	12.6	47.3	74.0	-26.7	Peak	Horizontal
	12551.5	35.4	11.3	46.7	74.0	-27.3	Peak	Horizontal
*	8922.0	35.8	9.1	44.9	68.2	-23.3	Peak	Vertical
*	9721.0	34.3	11.1	45.4	68.2	-22.8	Peak	Vertical
	10894.0	34.1	12.9	47.0	74.0	-27.0	Peak	Vertical
	11735.5	35.9	11.9	47.8	74.0	-26.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8769.0	34.4	8.9	43.3	68.2	-24.9	Peak	Horizontal
*	9755.0	33.5	11.4	44.9	68.2	-23.3	Peak	Horizontal
	10902.5	34.9	13.0	47.9	74.0	-26.1	Peak	Horizontal
	11446.5	34.3	12.7	47.0	74.0	-27.0	Peak	Horizontal
*	8675.5	34.7	8.9	43.6	68.2	-24.6	Peak	Vertical
*	9704.0	34.2	11.0	45.2	68.2	-23.0	Peak	Vertical
	11038.5	35.4	12.9	48.3	74.0	-25.7	Peak	Vertical
	11531.5	32.8	12.7	45.5	74.0	-28.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8752.0	35.0	9.0	44.0	68.2	-24.2	Peak	Horizontal
*	9814.5	34.5	11.6	46.1	68.2	-22.1	Peak	Horizontal
	11004.5	34.2	13.0	47.2	74.0	-26.8	Peak	Horizontal
	11387.0	34.8	12.6	47.4	74.0	-26.6	Peak	Horizontal
*	8709.5	35.6	9.0	44.6	68.2	-23.6	Peak	Vertical
*	9755.0	33.7	11.4	45.1	68.2	-23.1	Peak	Vertical
	10800.5	34.5	12.6	47.1	74.0	-26.9	Peak	Vertical
	11701.5	34.7	12.0	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8828.5	35.4	9.1	44.5	68.2	-23.7	Peak	Horizontal
*	9738.0	34.7	11.2	45.9	68.2	-22.3	Peak	Horizontal
	11021.5	35.1	13.0	48.1	74.0	-25.9	Peak	Horizontal
	12092.5	34.4	12.0	46.4	74.0	-27.6	Peak	Horizontal
*	8879.5	34.3	9.2	43.5	68.2	-24.7	Peak	Vertical
*	9848.5	34.3	11.6	45.9	68.2	-22.3	Peak	Vertical
	10962.0	34.9	13.1	48.0	74.0	-26.0	Peak	Vertical
	12075.5	34.2	12.0	46.2	74.0	-27.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8803.0	35.1	8.9	44.0	68.2	-24.2	Peak	Horizontal
*	9848.5	34.8	11.6	46.4	68.2	-21.8	Peak	Horizontal
	11064.0	34.6	12.8	47.4	74.0	-26.6	Peak	Horizontal
	11540.0	34.0	12.7	46.7	74.0	-27.3	Peak	Horizontal
*	8896.5	35.0	9.2	44.2	68.2	-24.0	Peak	Vertical
*	9806.0	34.4	11.5	45.9	68.2	-22.3	Peak	Vertical
	10962.0	35.4	13.1	48.5	74.0	-25.5	Peak	Vertical
	11829.0	35.6	11.9	47.5	74.0	-26.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8845.5	34.9	9.1	44.0	68.2	-24.2	Peak	Horizontal
*	9831.5	34.2	11.6	45.8	68.2	-22.4	Peak	Horizontal
	11565.5	34.6	12.7	47.3	74.0	-26.7	Peak	Horizontal
	12118.0	34.5	11.9	46.4	74.0	-27.6	Peak	Horizontal
*	9806.0	34.9	11.5	46.4	68.2	-21.8	Peak	Vertical
	11489.0	36.2	12.8	49.0	74.0	-25.0	Peak	Vertical
	12551.5	34.8	11.3	46.1	74.0	-27.9	Peak	Vertical
*	17243.5	37.6	16.0	53.6	68.2	-14.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8871.0	34.6	9.1	43.7	68.2	-24.5	Peak	Horizontal
*	9619.0	33.6	10.9	44.5	68.2	-23.7	Peak	Horizontal
	11259.5	35.9	12.4	48.3	74.0	-25.7	Peak	Horizontal
	12092.5	34.1	12.0	46.1	74.0	-27.9	Peak	Horizontal
*	8803.0	35.2	8.9	44.1	68.2	-24.1	Peak	Vertical
*	9959.0	34.6	11.4	46.0	68.2	-22.2	Peak	Vertical
	11571.8	40.0	12.6	52.6	74.0	-21.4	Peak	Vertical
	11571.8	27.2	12.6	39.8	54.0	-14.2	Average	Vertical
	12220.0	35.0	11.7	46.7	74.0	-27.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 2	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8803.0	34.2	8.9	43.1	68.2	-25.1	Peak	Horizontal
*	9636.0	34.9	11.0	45.9	68.2	-22.3	Peak	Horizontal
	10987.5	34.8	13.0	47.8	74.0	-26.2	Peak	Horizontal
	11744.0	35.7	11.9	47.6	74.0	-26.4	Peak	Horizontal
*	8820.0	34.4	9.0	43.4	68.2	-24.8	Peak	Vertical
*	9857.0	34.2	11.6	45.8	68.2	-22.4	Peak	Vertical
	11072.5	35.9	12.8	48.7	74.0	-25.3	Peak	Vertical
	11650.0	42.4	12.3	54.7	74.0	-19.3	Peak	Vertical
	11650.0	30.3	12.3	42.6	54.0	-11.4	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8573.5	36.3	8.7	45.0	68.2	-23.2	Peak	Horizontal
*	9585.0	35.0	10.9	45.9	68.2	-22.3	Peak	Horizontal
	10817.5	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
	15535.0	38.0	12.2	50.2	74.0	-23.8	Peak	Horizontal
*	8811.5	35.6	9.0	44.6	68.2	-23.6	Peak	Vertical
*	9848.5	34.7	11.6	46.3	68.2	-21.9	Peak	Vertical
	10911.0	34.7	13.0	47.7	74.0	-26.3	Peak	Vertical
	15539.4	44.4	12.2	56.6	74.0	-17.4	Peak	Vertical
	15539.4	30.4	12.2	42.6	54.0	-11.4	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8845.5	35.5	9.1	44.6	68.2	-23.6	Peak	Horizontal
*	9848.5	34.2	11.6	45.8	68.2	-22.4	Peak	Horizontal
	11531.5	35.1	12.7	47.8	74.0	-26.2	Peak	Horizontal
	15654.0	38.6	12.0	50.6	74.0	-23.4	Peak	Horizontal
*	8675.5	33.8	8.9	42.7	68.2	-25.5	Peak	Vertical
*	9746.5	34.5	11.3	45.8	68.2	-22.4	Peak	Vertical
	11616.5	34.7	12.5	47.2	74.0	-26.8	Peak	Vertical
	15655.2	45.9	12.0	57.9	74.0	-16.1	Peak	Vertical
	15655.2	31.7	12.0	43.7	54.0	-10.3	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8607.5	34.6	8.8	43.4	68.2	-24.8	Peak	Horizontal
*	9636.0	34.2	11.0	45.2	68.2	-23.0	Peak	Horizontal
	10996.0	34.9	13.0	47.9	74.0	-26.1	Peak	Horizontal
	15721.2	41.6	11.8	53.4	74.0	-20.6	Peak	Horizontal
	15721.2	29.0	11.8	40.8	54.0	-13.2	Average	Horizontal
*	8811.5	34.7	9.0	43.7	68.2	-24.5	Peak	Vertical
*	9840.0	34.1	11.6	45.7	68.2	-22.5	Peak	Vertical
	11200.0	35.1	12.5	47.6	74.0	-26.4	Peak	Vertical
	15721.3	43.9	11.8	55.7	74.0	-18.3	Peak	Vertical
	15721.3	30.5	11.8	42.3	54.0	-11.7	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	34.6	9.0	43.6	68.2	-24.6	Peak	Horizontal
*	9644.5	34.5	11.0	45.5	68.2	-22.7	Peak	Horizontal
	10775.0	34.6	12.5	47.1	74.0	-26.9	Peak	Horizontal
	11506.0	34.9	12.8	47.7	74.0	-26.3	Peak	Horizontal
*	8828.5	34.4	9.1	43.5	68.2	-24.7	Peak	Vertical
*	9814.5	34.3	11.6	45.9	68.2	-22.3	Peak	Vertical
	10953.5	34.8	13.1	47.9	74.0	-26.1	Peak	Vertical
	12041.5	34.4	12.0	46.4	74.0	-27.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8573.5	35.1	8.7	43.8	68.2	-24.4	Peak	Horizontal
*	9823.0	34.0	11.6	45.6	68.2	-22.6	Peak	Horizontal
	10987.5	34.8	13.0	47.8	74.0	-26.2	Peak	Horizontal
	11591.0	34.5	12.6	47.1	74.0	-26.9	Peak	Horizontal
*	8616.0	35.0	8.8	43.8	68.2	-24.4	Peak	Vertical
*	9874.0	33.3	11.6	44.9	68.2	-23.3	Peak	Vertical
	10868.5	34.7	12.8	47.5	74.0	-26.5	Peak	Vertical
	11514.5	34.4	12.8	47.2	74.0	-26.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	35.0	8.8	43.8	68.2	-24.4	Peak	Horizontal
*	9814.5	33.3	11.6	44.9	68.2	-23.3	Peak	Horizontal
	11047.0	34.2	12.9	47.1	74.0	-26.9	Peak	Horizontal
	11582.5	34.6	12.6	47.2	74.0	-26.8	Peak	Horizontal
*	8633.0	35.5	8.8	44.3	68.2	-23.9	Peak	Vertical
*	9840.0	33.4	11.6	45.0	68.2	-23.2	Peak	Vertical
	11123.5	34.0	12.7	46.7	74.0	-27.3	Peak	Vertical
	12220.0	35.0	11.7	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8531.0	35.2	8.4	43.6	68.2	-24.6	Peak	Horizontal
*	9823.0	33.8	11.6	45.4	68.2	-22.8	Peak	Horizontal
	11004.5	34.7	13.0	47.7	74.0	-26.3	Peak	Horizontal
	12254.0	35.0	11.7	46.7	74.0	-27.3	Peak	Horizontal
*	8845.5	35.1	9.1	44.2	68.2	-24.0	Peak	Vertical
*	9797.5	34.9	11.5	46.4	68.2	-21.8	Peak	Vertical
	10945.0	34.4	13.1	47.5	74.0	-26.5	Peak	Vertical
	12067.0	33.9	12.0	45.9	74.0	-28.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8879.5	34.8	9.2	44.0	68.2	-24.2	Peak	Horizontal
*	9746.5	34.4	11.3	45.7	68.2	-22.5	Peak	Horizontal
	11021.5	34.2	13.0	47.2	74.0	-26.8	Peak	Horizontal
	11761.0	34.5	11.9	46.4	74.0	-27.6	Peak	Horizontal
*	8828.5	35.2	9.1	44.3	68.2	-23.9	Peak	Vertical
*	9823.0	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	10826.0	34.2	12.7	46.9	74.0	-27.1	Peak	Vertical
	11531.5	33.9	12.7	46.6	74.0	-27.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	33.3	9.0	42.3	68.2	-25.9	Peak	Horizontal
*	9823.0	35.2	11.6	46.8	68.2	-21.4	Peak	Horizontal
	10885.5	34.3	12.9	47.2	74.0	-26.8	Peak	Horizontal
	11854.5	35.0	11.9	46.9	74.0	-27.1	Peak	Horizontal
*	8845.5	34.7	9.1	43.8	68.2	-24.4	Peak	Vertical
*	9619.0	33.6	10.9	44.5	68.2	-23.7	Peak	Vertical
	10851.5	34.0	12.8	46.8	74.0	-27.2	Peak	Vertical
	11659.0	34.5	12.3	46.8	74.0	-27.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8879.5	34.5	9.2	43.7	68.2	-24.5	Peak	Horizontal
*	9806.0	34.1	11.5	45.6	68.2	-22.6	Peak	Horizontal
	10885.5	34.1	12.9	47.0	74.0	-27.0	Peak	Horizontal
	11684.5	33.4	12.1	45.5	74.0	-28.5	Peak	Horizontal
*	8845.5	35.1	9.1	44.2	68.2	-24.0	Peak	Vertical
*	9687.0	34.7	10.9	45.6	68.2	-22.6	Peak	Vertical
	10936.5	34.5	13.0	47.5	74.0	-26.5	Peak	Vertical
	11531.5	35.2	12.7	47.9	74.0	-26.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	34.6	8.8	43.4	68.2	-24.8	Peak	Horizontal
*	9789.0	34.1	11.4	45.5	68.2	-22.7	Peak	Horizontal
	10673.0	35.2	12.3	47.5	74.0	-26.5	Peak	Horizontal
	11574.0	34.4	12.6	47.0	74.0	-27.0	Peak	Horizontal
*	8709.5	34.8	9.0	43.8	68.2	-24.4	Peak	Vertical
*	9797.5	33.9	11.5	45.4	68.2	-22.8	Peak	Vertical
	10783.5	34.8	12.6	47.4	74.0	-26.6	Peak	Vertical
	11506.0	34.1	12.8	46.9	74.0	-27.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8675.5	35.6	8.9	44.5	68.2	-23.7	Peak	Horizontal
*	9755.0	35.2	11.4	46.6	68.2	-21.6	Peak	Horizontal
	10885.5	34.6	12.9	47.5	74.0	-26.5	Peak	Horizontal
	11795.0	35.9	11.8	47.7	74.0	-26.3	Peak	Horizontal
*	8845.5	35.3	9.1	44.4	68.2	-23.8	Peak	Vertical
*	9687.0	34.3	10.9	45.2	68.2	-23.0	Peak	Vertical
	11055.5	34.5	12.9	47.4	74.0	-26.6	Peak	Vertical
	12101.0	34.2	12.0	46.2	74.0	-27.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8539.5	33.0	8.5	41.5	68.2	-26.7	Peak	Horizontal
*	10851.5	34.1	12.8	46.9	68.2	-21.3	Peak	Horizontal
	11548.5	35.9	12.7	48.6	74.0	-25.4	Peak	Horizontal
	17158.5	35.7	15.7	51.4	74.0	-22.6	Peak	Horizontal
*	9806.0	35.0	11.5	46.5	68.2	-21.7	Peak	Vertical
	10996.0	34.0	13.0	47.0	74.0	-27.0	Peak	Vertical
	11914.0	34.7	11.8	46.5	74.0	-27.5	Peak	Vertical
*	17362.5	38.4	16.9	55.3	68.2	-12.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11a - Ant 3	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8701.0	34.0	9.0	43.0	68.2	-25.2	Peak	Horizontal
*	9899.5	33.0	11.6	44.6	68.2	-23.6	Peak	Horizontal
	11251.0	35.1	12.4	47.5	74.0	-26.5	Peak	Horizontal
	12203.0	34.4	11.7	46.1	74.0	-27.9	Peak	Horizontal
*	8726.5	35.0	9.0	44.0	68.2	-24.2	Peak	Vertical
	11251.0	34.6	12.4	47.0	74.0	-27.0	Peak	Vertical
	12067.0	35.8	12.0	47.8	74.0	-26.2	Peak	Vertical
*	17473.0	37.4	17.2	54.6	68.2	-13.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	35.2	8.8	44.0	68.2	-24.2	Peak	Horizontal
*	9806.0	34.4	11.5	45.9	68.2	-22.3	Peak	Horizontal
	11004.5	34.5	13.0	47.5	74.0	-26.5	Peak	Horizontal
	11812.0	34.5	11.9	46.4	74.0	-27.6	Peak	Horizontal
*	8684.0	35.0	9.0	44.0	68.2	-24.2	Peak	Vertical
*	9797.5	33.7	11.5	45.2	68.2	-23.0	Peak	Vertical
	10911.0	34.2	13.0	47.2	74.0	-26.8	Peak	Vertical
	11548.5	34.6	12.7	47.3	74.0	-26.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	34.9	8.9	43.8	68.2	-24.4	Peak	Horizontal
*	9763.5	33.7	11.4	45.1	68.2	-23.1	Peak	Horizontal
	11089.5	34.6	12.8	47.4	74.0	-26.6	Peak	Horizontal
	11854.5	34.2	11.9	46.1	74.0	-27.9	Peak	Horizontal
*	8624.5	35.1	8.8	43.9	68.2	-24.3	Peak	Vertical
*	9925.0	34.8	11.5	46.3	68.2	-21.9	Peak	Vertical
	11242.5	35.7	12.4	48.1	74.0	-25.9	Peak	Vertical
	15662.5	38.0	12.0	50.0	74.0	-24.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8786.0	33.3	8.9	42.2	68.2	-26.0	Peak	Horizontal
*	9636.0	32.9	11.0	43.9	68.2	-24.3	Peak	Horizontal
	10945.0	34.5	13.1	47.6	74.0	-26.4	Peak	Horizontal
	11616.5	34.7	12.5	47.2	74.0	-26.8	Peak	Horizontal
*	8658.5	33.6	8.8	42.4	68.2	-25.8	Peak	Vertical
*	9721.0	31.9	11.1	43.0	68.2	-25.2	Peak	Vertical
	11523.0	34.7	12.7	47.4	74.0	-26.6	Peak	Vertical
	15771.1	41.1	11.7	52.8	74.0	-21.2	Peak	Vertical
	15771.1	28.9	11.7	40.6	54.0	-13.4	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8650.0	35.2	8.8	44.0	68.2	-24.2	Peak	Horizontal
*	9585.0	34.4	10.9	45.3	68.2	-22.9	Peak	Horizontal
	10851.5	34.6	12.8	47.4	74.0	-26.6	Peak	Horizontal
	11506.0	34.5	12.8	47.3	74.0	-26.7	Peak	Horizontal
*	8845.5	34.8	9.1	43.9	68.2	-24.3	Peak	Vertical
*	9882.5	34.4	11.6	46.0	68.2	-22.2	Peak	Vertical
	11013.0	34.9	13.0	47.9	74.0	-26.1	Peak	Vertical
	12084.0	34.8	12.0	46.8	74.0	-27.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8862.5	35.5	9.1	44.6	68.2	-23.6	Peak	Horizontal
*	9772.0	33.6	11.4	45.0	68.2	-23.2	Peak	Horizontal
	10885.5	34.7	12.9	47.6	74.0	-26.4	Peak	Horizontal
	12075.5	35.3	12.0	47.3	74.0	-26.7	Peak	Horizontal
*	8896.5	34.8	9.2	44.0	68.2	-24.2	Peak	Vertical
*	9814.5	33.9	11.6	45.5	68.2	-22.7	Peak	Vertical
	10928.0	35.1	13.0	48.1	74.0	-25.9	Peak	Vertical
	12177.5	34.7	11.8	46.5	74.0	-27.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8701.0	34.3	9.0	43.3	68.2	-24.9	Peak	Horizontal
*	9857.0	34.1	11.6	45.7	68.2	-22.5	Peak	Horizontal
	10885.5	35.0	12.9	47.9	74.0	-26.1	Peak	Horizontal
	11718.5	34.9	12.0	46.9	74.0	-27.1	Peak	Horizontal
*	8769.0	34.0	8.9	42.9	68.2	-25.3	Peak	Vertical
*	9678.5	32.4	10.9	43.3	68.2	-24.9	Peak	Vertical
	10928.0	34.0	13.0	47.0	74.0	-27.0	Peak	Vertical
	11540.0	34.4	12.7	47.1	74.0	-26.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8718.0	34.7	9.0	43.7	68.2	-24.5	Peak	Horizontal
*	9636.0	33.9	11.0	44.9	68.2	-23.3	Peak	Horizontal
	10817.5	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
	11540.0	34.5	12.7	47.2	74.0	-26.8	Peak	Horizontal
*	8743.5	34.4	9.0	43.4	68.2	-24.8	Peak	Vertical
*	9602.0	34.4	10.9	45.3	68.2	-22.9	Peak	Vertical
	11055.5	34.5	12.9	47.4	74.0	-26.6	Peak	Vertical
	11523.0	34.5	12.7	47.2	74.0	-26.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	35.3	8.8	44.1	68.2	-24.1	Peak	Horizontal
*	9619.0	33.6	10.9	44.5	68.2	-23.7	Peak	Horizontal
	11055.5	35.0	12.9	47.9	74.0	-26.1	Peak	Horizontal
	11778.0	34.9	11.9	46.8	74.0	-27.2	Peak	Horizontal
*	8633.0	35.5	8.8	44.3	68.2	-23.9	Peak	Vertical
*	9721.0	33.7	11.1	44.8	68.2	-23.4	Peak	Vertical
	11055.5	34.5	12.9	47.4	74.0	-26.6	Peak	Vertical
	11718.5	34.7	12.0	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8650.0	34.5	8.8	43.3	68.2	-24.9	Peak	Horizontal
*	9823.0	34.8	11.6	46.4	68.2	-21.8	Peak	Horizontal
	11055.5	34.2	12.9	47.1	74.0	-26.9	Peak	Horizontal
	11854.5	34.8	11.9	46.7	74.0	-27.3	Peak	Horizontal
*	8794.5	34.6	8.9	43.5	68.2	-24.7	Peak	Vertical
*	9806.0	33.4	11.5	44.9	68.2	-23.3	Peak	Vertical
	11021.5	33.8	13.0	46.8	74.0	-27.2	Peak	Vertical
	12016.0	34.5	11.9	46.4	74.0	-27.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8820.0	34.3	9.0	43.3	68.2	-24.9	Peak	Horizontal
*	9806.0	33.5	11.5	45.0	68.2	-23.2	Peak	Horizontal
	11463.5	34.9	12.7	47.6	74.0	-26.4	Peak	Horizontal
	12169.0	34.2	11.8	46.0	74.0	-28.0	Peak	Horizontal
*	8862.5	34.9	9.1	44.0	68.2	-24.2	Peak	Vertical
*	9840.0	33.6	11.6	45.2	68.2	-23.0	Peak	Vertical
	10928.0	33.2	13.0	46.2	74.0	-27.8	Peak	Vertical
	12305.0	34.6	11.6	46.2	74.0	-27.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	35.2	8.8	44.0	68.2	-24.2	Peak	Horizontal
*	9840.0	33.7	11.6	45.3	68.2	-22.9	Peak	Horizontal
	10860.0	34.8	12.8	47.6	74.0	-26.4	Peak	Horizontal
	11625.0	34.1	12.5	46.6	74.0	-27.4	Peak	Horizontal
*	8641.5	34.6	8.8	43.4	68.2	-24.8	Peak	Vertical
*	9814.5	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	11438.0	34.5	12.6	47.1	74.0	-26.9	Peak	Vertical
	12118.0	34.4	11.9	46.3	74.0	-27.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8726.5	34.6	9.0	43.6	68.2	-24.6	Peak	Horizontal
	11081.0	34.4	12.9	47.3	74.0	-26.7	Peak	Horizontal
	12092.5	34.5	12.0	46.5	74.0	-27.5	Peak	Horizontal
*	17226.5	36.8	16.0	52.8	68.2	-15.4	Peak	Horizontal
*	8794.5	34.1	8.9	43.0	68.2	-25.2	Peak	Vertical
	10826.0	34.2	12.7	46.9	74.0	-27.1	Peak	Vertical
	11489.0	37.3	12.8	50.1	74.0	-23.9	Peak	Vertical
*	17235.0	40.2	15.9	56.1	68.2	-12.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	35.5	8.8	44.3	68.2	-23.9	Peak	Horizontal
*	9636.0	34.9	11.0	45.9	68.2	-22.3	Peak	Horizontal
	10936.5	34.3	13.0	47.3	74.0	-26.7	Peak	Horizontal
	11497.5	34.2	12.8	47.0	74.0	-27.0	Peak	Horizontal
*	9772.0	32.4	11.4	43.8	68.2	-24.4	Peak	Vertical
	10843.0	34.5	12.7	47.2	74.0	-26.8	Peak	Vertical
	11565.5	36.9	12.7	49.6	74.0	-24.4	Peak	Vertical
*	17362.5	43.0	16.9	59.9	68.2	-8.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8633.0	35.2	8.8	44.0	68.2	-24.2	Peak	Horizontal
*	9823.0	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	10970.5	33.6	13.1	46.7	74.0	-27.3	Peak	Horizontal
	11642.0	35.0	12.4	47.4	74.0	-26.6	Peak	Horizontal
*	9831.5	33.9	11.6	45.5	68.2	-22.7	Peak	Vertical
	11106.5	34.1	12.8	46.9	74.0	-27.1	Peak	Vertical
	11659.0	37.9	12.3	50.2	74.0	-23.8	Peak	Vertical
*	17464.5	38.4	17.2	55.6	68.2	-12.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	38
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8709.5	34.6	9.0	43.6	68.2	-24.6	Peak	Horizontal
*	9746.5	33.8	11.3	45.1	68.2	-23.1	Peak	Horizontal
	11472.0	34.8	12.7	47.5	74.0	-26.5	Peak	Horizontal
	11761.0	35.3	11.9	47.2	74.0	-26.8	Peak	Horizontal
*	8828.5	34.5	9.1	43.6	68.2	-24.6	Peak	Vertical
*	9806.0	33.7	11.5	45.2	68.2	-23.0	Peak	Vertical
	11004.5	34.2	13.0	47.2	74.0	-26.8	Peak	Vertical
	11803.5	35.4	11.8	47.2	74.0	-26.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	46
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	35.1	8.8	43.9	68.2	-24.3	Peak	Horizontal
*	9695.5	35.3	10.9	46.2	68.2	-22.0	Peak	Horizontal
	10936.5	34.4	13.0	47.4	74.0	-26.6	Peak	Horizontal
	15705.0	36.9	11.8	48.7	74.0	-25.3	Peak	Horizontal
*	8888.0	34.6	9.2	43.8	68.2	-24.4	Peak	Vertical
*	9831.5	33.5	11.6	45.1	68.2	-23.1	Peak	Vertical
	11395.5	34.4	12.6	47.0	74.0	-27.0	Peak	Vertical
	15705.0	36.0	11.8	47.8	74.0	-26.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	54
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8590.5	35.7	8.7	44.4	68.2	-23.8	Peak	Horizontal
*	9755.0	34.3	11.4	45.7	68.2	-22.5	Peak	Horizontal
	11548.5	34.9	12.7	47.6	74.0	-26.4	Peak	Horizontal
	12279.5	34.7	11.7	46.4	74.0	-27.6	Peak	Horizontal
*	8811.5	35.2	9.0	44.2	68.2	-24.0	Peak	Vertical
*	9789.0	34.4	11.4	45.8	68.2	-22.4	Peak	Vertical
	12041.5	34.7	12.0	46.7	74.0	-27.3	Peak	Vertical
	15824.0	38.6	11.7	50.3	74.0	-23.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	62
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	35.1	8.9	44.0	68.2	-24.2	Peak	Horizontal
*	9823.0	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	10979.0	34.1	13.0	47.1	74.0	-26.9	Peak	Horizontal
	11540.0	33.9	12.7	46.6	74.0	-27.4	Peak	Horizontal
*	8667.0	34.7	8.9	43.6	68.2	-24.6	Peak	Vertical
*	9636.0	34.2	11.0	45.2	68.2	-23.0	Peak	Vertical
	11157.5	33.5	12.6	46.1	74.0	-27.9	Peak	Vertical
	11735.5	34.7	11.9	46.6	74.0	-27.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	102
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8726.5	34.3	9.0	43.3	68.2	-24.9	Peak	Horizontal
*	9814.5	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	10962.0	34.5	13.1	47.6	74.0	-26.4	Peak	Horizontal
	11497.5	34.2	12.8	47.0	74.0	-27.0	Peak	Horizontal
*	8667.0	34.6	8.9	43.5	68.2	-24.7	Peak	Vertical
*	9848.5	33.6	11.6	45.2	68.2	-23.0	Peak	Vertical
	10953.5	34.7	13.1	47.8	74.0	-26.2	Peak	Vertical
	11489.0	34.4	12.8	47.2	74.0	-26.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	110
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8735.0	34.0	8.9	42.9	68.2	-25.3	Peak	Horizontal
*	9797.5	33.7	11.5	45.2	68.2	-23.0	Peak	Horizontal
	11123.5	32.7	12.7	45.4	74.0	-28.6	Peak	Horizontal
	12322.0	35.1	11.6	46.7	74.0	-27.3	Peak	Horizontal
*	8854.0	34.2	9.1	43.3	68.2	-24.9	Peak	Vertical
*	9763.5	34.7	11.4	46.1	68.2	-22.1	Peak	Vertical
	10800.5	34.7	12.6	47.3	74.0	-26.7	Peak	Vertical
	12033.0	34.3	12.0	46.3	74.0	-27.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	118
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8735.0	34.8	8.9	43.7	68.2	-24.5	Peak	Horizontal
*	9789.0	34.1	11.4	45.5	68.2	-22.7	Peak	Horizontal
	10834.5	34.4	12.7	47.1	74.0	-26.9	Peak	Horizontal
	11531.5	33.9	12.7	46.6	74.0	-27.4	Peak	Horizontal
*	8837.0	34.4	9.1	43.5	68.2	-24.7	Peak	Vertical
*	9789.0	33.9	11.4	45.3	68.2	-22.9	Peak	Vertical
	10613.5	34.8	12.4	47.2	74.0	-26.8	Peak	Vertical
	11574.0	34.4	12.6	47.0	74.0	-27.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	134
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8633.0	35.2	8.8	44.0	68.2	-24.2	Peak	Horizontal
*	9925.0	34.2	11.5	45.7	68.2	-22.5	Peak	Horizontal
	10868.5	34.9	12.8	47.7	74.0	-26.3	Peak	Horizontal
	11489.0	34.0	12.8	46.8	74.0	-27.2	Peak	Horizontal
*	8854.0	34.6	9.1	43.7	68.2	-24.5	Peak	Vertical
*	9755.0	33.7	11.4	45.1	68.2	-23.1	Peak	Vertical
	10970.5	34.0	13.1	47.1	74.0	-26.9	Peak	Vertical
	12033.0	34.4	12.0	46.4	74.0	-27.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	142
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8539.5	34.7	8.5	43.2	68.2	-25.0	Peak	Horizontal
*	9636.0	34.5	11.0	45.5	68.2	-22.7	Peak	Horizontal
	10613.5	34.5	12.4	46.9	74.0	-27.1	Peak	Horizontal
	11472.0	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
*	8624.5	35.6	8.8	44.4	68.2	-23.8	Peak	Vertical
*	9831.5	33.7	11.6	45.3	68.2	-22.9	Peak	Vertical
	10851.5	34.3	12.8	47.1	74.0	-26.9	Peak	Vertical
	11548.5	34.7	12.7	47.4	74.0	-26.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	151
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	34.9	8.8	43.7	68.2	-24.5	Peak	Horizontal
*	9840.0	34.1	11.6	45.7	68.2	-22.5	Peak	Horizontal
	10928.0	32.8	13.0	45.8	74.0	-28.2	Peak	Horizontal
	11514.5	35.6	12.8	48.4	74.0	-25.6	Peak	Horizontal
*	9627.5	34.2	11.0	45.2	68.2	-23.0	Peak	Vertical
	11514.5	35.8	12.8	48.6	74.0	-25.4	Peak	Vertical
	12492.0	34.7	11.4	46.1	74.0	-27.9	Peak	Vertical
*	17269.0	40.6	16.1	56.7	68.2	-11.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	159
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8752.0	34.9	9.0	43.9	68.2	-24.3	Peak	Horizontal
*	9797.5	34.6	11.5	46.1	68.2	-22.1	Peak	Horizontal
	11548.5	35.2	12.7	47.9	74.0	-26.1	Peak	Horizontal
	12007.5	34.3	11.9	46.2	74.0	-27.8	Peak	Horizontal
*	9823.0	34.8	11.6	46.4	68.2	-21.8	Peak	Vertical
	11565.5	35.3	12.7	48.0	74.0	-26.0	Peak	Vertical
	12288.0	34.5	11.7	46.2	74.0	-27.8	Peak	Vertical
*	17379.5	39.1	17.0	56.1	68.2	-12.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8845.5	34.2	9.1	43.3	68.2	-24.9	Peak	Horizontal
*	9763.5	33.8	11.4	45.2	68.2	-23.0	Peak	Horizontal
	10979.0	34.6	13.0	47.6	74.0	-26.4	Peak	Horizontal
	11591.0	34.2	12.6	46.8	74.0	-27.2	Peak	Horizontal
*	8718.0	34.6	9.0	43.6	68.2	-24.6	Peak	Vertical
*	9772.0	33.7	11.4	45.1	68.2	-23.1	Peak	Vertical
	11072.5	34.3	12.8	47.1	74.0	-26.9	Peak	Vertical
	12101.0	34.3	12.0	46.3	74.0	-27.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8726.5	34.1	9.0	43.1	68.2	-25.1	Peak	Horizontal
*	9619.0	33.8	10.9	44.7	68.2	-23.5	Peak	Horizontal
	10919.5	35.1	13.0	48.1	74.0	-25.9	Peak	Horizontal
	11540.0	35.8	12.7	48.5	74.0	-25.5	Peak	Horizontal
*	8871.0	35.2	9.1	44.3	68.2	-23.9	Peak	Vertical
*	9619.0	34.5	10.9	45.4	68.2	-22.8	Peak	Vertical
	11021.5	34.4	13.0	47.4	74.0	-26.6	Peak	Vertical
	15645.5	35.6	12.0	47.6	74.0	-26.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	34.1	8.8	42.9	68.2	-25.3	Peak	Horizontal
*	9636.0	33.7	11.0	44.7	68.2	-23.5	Peak	Horizontal
	10894.0	34.1	12.9	47.0	74.0	-27.0	Peak	Horizontal
	11659.0	34.4	12.3	46.7	74.0	-27.3	Peak	Horizontal
*	8658.5	32.7	8.8	41.5	68.2	-26.7	Peak	Vertical
*	9593.5	35.0	10.9	45.9	68.2	-22.3	Peak	Vertical
	11183.0	33.9	12.6	46.5	74.0	-27.5	Peak	Vertical
	15722.0	38.1	11.8	49.9	74.0	-24.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8684.0	34.1	9.0	43.1	68.2	-25.1	Peak	Horizontal
*	9610.5	34.2	10.9	45.1	68.2	-23.1	Peak	Horizontal
	10970.5	32.8	13.1	45.9	74.0	-28.1	Peak	Horizontal
	12084.0	35.1	12.0	47.1	74.0	-26.9	Peak	Horizontal
*	8633.0	34.8	8.8	43.6	68.2	-24.6	Peak	Vertical
*	9695.5	34.3	10.9	45.2	68.2	-23.0	Peak	Vertical
	11013.0	34.7	13.0	47.7	74.0	-26.3	Peak	Vertical
	11548.5	34.6	12.7	47.3	74.0	-26.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	34.3	8.8	43.1	68.2	-25.1	Peak	Horizontal
*	9755.0	34.3	11.4	45.7	68.2	-22.5	Peak	Horizontal
	10945.0	34.5	13.1	47.6	74.0	-26.4	Peak	Horizontal
	11540.0	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
*	8641.5	34.8	8.8	43.6	68.2	-24.6	Peak	Vertical
*	9806.0	34.3	11.5	45.8	68.2	-22.4	Peak	Vertical
	10987.5	34.8	13.0	47.8	74.0	-26.2	Peak	Vertical
	11582.5	32.5	12.6	45.1	74.0	-28.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8701.0	34.6	9.0	43.6	68.2	-24.6	Peak	Horizontal
*	9602.0	35.3	10.9	46.2	68.2	-22.0	Peak	Horizontal
	11055.5	34.7	12.9	47.6	74.0	-26.4	Peak	Horizontal
	11540.0	34.3	12.7	47.0	74.0	-27.0	Peak	Horizontal
*	8692.5	34.3	9.0	43.3	68.2	-24.9	Peak	Vertical
*	9780.5	34.0	11.4	45.4	68.2	-22.8	Peak	Vertical
	10792.0	34.7	12.6	47.3	74.0	-26.7	Peak	Vertical
	11506.0	35.1	12.8	47.9	74.0	-26.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	35.6	8.8	44.4	68.2	-23.8	Peak	Horizontal
*	9772.0	34.0	11.4	45.4	68.2	-22.8	Peak	Horizontal
	10979.0	34.1	13.0	47.1	74.0	-26.9	Peak	Horizontal
	11548.5	34.0	12.7	46.7	74.0	-27.3	Peak	Horizontal
*	8641.5	34.5	8.8	43.3	68.2	-24.9	Peak	Vertical
*	9593.5	34.4	10.9	45.3	68.2	-22.9	Peak	Vertical
	10843.0	34.3	12.7	47.0	74.0	-27.0	Peak	Vertical
	11803.5	34.8	11.8	46.6	74.0	-27.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	34.5	9.0	43.5	68.2	-24.7	Peak	Horizontal
*	9780.5	33.5	11.4	44.9	68.2	-23.3	Peak	Horizontal
	10843.0	35.1	12.7	47.8	74.0	-26.2	Peak	Horizontal
	11710.0	34.9	12.0	46.9	74.0	-27.1	Peak	Horizontal
*	8616.0	34.6	8.8	43.4	68.2	-24.8	Peak	Vertical
*	9840.0	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	11030.0	34.0	13.0	47.0	74.0	-27.0	Peak	Vertical
	11693.0	34.7	12.0	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8633.0	34.6	8.8	43.4	68.2	-24.8	Peak	Horizontal
*	9797.5	34.0	11.5	45.5	68.2	-22.7	Peak	Horizontal
	11514.5	35.5	12.8	48.3	74.0	-25.7	Peak	Horizontal
	12364.5	34.7	11.5	46.2	74.0	-27.8	Peak	Horizontal
*	8641.5	34.7	8.8	43.5	68.2	-24.7	Peak	Vertical
*	9882.5	34.3	11.6	45.9	68.2	-22.3	Peak	Vertical
	10987.5	34.5	13.0	47.5	74.0	-26.5	Peak	Vertical
	11684.5	32.5	12.1	44.6	74.0	-29.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8837.0	34.8	9.1	43.9	68.2	-24.3	Peak	Horizontal
*	9763.5	33.6	11.4	45.0	68.2	-23.2	Peak	Horizontal
	11055.5	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	11735.5	34.3	11.9	46.2	74.0	-27.8	Peak	Horizontal
*	8803.0	34.4	8.9	43.3	68.2	-24.9	Peak	Vertical
*	9704.0	33.7	11.0	44.7	68.2	-23.5	Peak	Vertical
	11225.5	33.8	12.4	46.2	74.0	-27.8	Peak	Vertical
	11846.0	34.4	11.9	46.3	74.0	-27.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8650.0	35.6	8.8	44.4	68.2	-23.8	Peak	Horizontal
*	9831.5	34.5	11.6	46.1	68.2	-22.1	Peak	Horizontal
	11013.0	33.8	13.0	46.8	74.0	-27.2	Peak	Horizontal
	11497.5	34.4	12.8	47.2	74.0	-26.8	Peak	Horizontal
*	8684.0	34.9	9.0	43.9	68.2	-24.3	Peak	Vertical
*	9772.0	32.7	11.4	44.1	68.2	-24.1	Peak	Vertical
	10868.5	34.9	12.8	47.7	74.0	-26.3	Peak	Vertical
	11472.0	35.1	12.7	47.8	74.0	-26.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8599.0	34.8	8.7	43.5	68.2	-24.7	Peak	Horizontal
*	9636.0	34.1	11.0	45.1	68.2	-23.1	Peak	Horizontal
	10639.0	35.1	12.3	47.4	74.0	-26.6	Peak	Horizontal
	11531.5	33.9	12.7	46.6	74.0	-27.4	Peak	Horizontal
*	8786.0	33.9	8.9	42.8	68.2	-25.4	Peak	Vertical
	11013.0	33.2	13.0	46.2	74.0	-27.8	Peak	Vertical
	11497.5	36.3	12.8	49.1	74.0	-24.9	Peak	Vertical
*	17226.5	41.2	16.0	57.2	68.2	-11.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8913.5	34.8	9.1	43.9	68.2	-24.3	Peak	Horizontal
*	9772.0	33.8	11.4	45.2	68.2	-23.0	Peak	Horizontal
	10945.0	33.7	13.1	46.8	74.0	-27.2	Peak	Horizontal
	11565.5	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
*	9789.0	32.8	11.4	44.2	68.2	-24.0	Peak	Vertical
	11565.5	37.0	12.7	49.7	74.0	-24.3	Peak	Vertical
	12458.0	34.5	11.5	46.0	74.0	-28.0	Peak	Vertical
*	17354.0	42.2	16.9	59.1	68.2	-9.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8803.0	35.2	8.9	44.1	68.2	-24.1	Peak	Horizontal
*	9644.5	34.3	11.0	45.3	68.2	-22.9	Peak	Horizontal
	10945.0	34.3	13.1	47.4	74.0	-26.6	Peak	Horizontal
	11905.5	35.2	11.8	47.0	74.0	-27.0	Peak	Horizontal
*	8616.0	34.6	8.8	43.4	68.2	-24.8	Peak	Vertical
	10843.0	35.1	12.7	47.8	74.0	-26.2	Peak	Vertical
	11650.5	37.0	12.3	49.3	74.0	-24.7	Peak	Vertical
*	17490.0	36.9	17.4	54.3	68.2	-13.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	38
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8888.0	35.9	9.2	45.1	68.2	-23.1	Peak	Horizontal
*	9823.0	34.9	11.6	46.5	68.2	-21.7	Peak	Horizontal
	11123.5	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
	12058.5	34.7	12.0	46.7	74.0	-27.3	Peak	Horizontal
*	8667.0	35.2	8.9	44.1	68.2	-24.1	Peak	Vertical
*	9814.5	33.3	11.6	44.9	68.2	-23.3	Peak	Vertical
	11021.5	35.5	13.0	48.5	74.0	-25.5	Peak	Vertical
	11999.0	35.4	11.9	47.3	74.0	-26.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	46
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8862.5	34.5	9.1	43.6	68.2	-24.6	Peak	Horizontal
*	9746.5	33.9	11.3	45.2	68.2	-23.0	Peak	Horizontal
	11055.5	35.5	12.9	48.4	74.0	-25.6	Peak	Horizontal
	11531.5	33.7	12.7	46.4	74.0	-27.6	Peak	Horizontal
*	8658.5	34.8	8.8	43.6	68.2	-24.6	Peak	Vertical
*	9636.0	33.8	11.0	44.8	68.2	-23.4	Peak	Vertical
	11582.5	34.5	12.6	47.1	74.0	-26.9	Peak	Vertical
	15696.5	36.1	11.9	48.0	74.0	-26.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	54
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8641.5	35.4	8.8	44.2	68.2	-24.0	Peak	Horizontal
*	9712.5	34.6	11.0	45.6	68.2	-22.6	Peak	Horizontal
	11098.0	33.9	12.8	46.7	74.0	-27.3	Peak	Horizontal
	11718.5	34.7	12.0	46.7	74.0	-27.3	Peak	Horizontal
*	8582.0	34.7	8.6	43.3	68.2	-24.9	Peak	Vertical
*	9840.0	33.6	11.6	45.2	68.2	-23.0	Peak	Vertical
	11752.5	34.5	11.9	46.4	74.0	-27.6	Peak	Vertical
	15807.0	35.9	11.7	47.6	74.0	-26.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	62
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	35.1	9.0	44.1	68.2	-24.1	Peak	Horizontal
*	9823.0	33.8	11.6	45.4	68.2	-22.8	Peak	Horizontal
	11302.0	34.8	12.5	47.3	74.0	-26.7	Peak	Horizontal
	12041.5	34.3	12.0	46.3	74.0	-27.7	Peak	Horizontal
*	8616.0	34.6	8.8	43.4	68.2	-24.8	Peak	Vertical
*	9831.5	34.3	11.6	45.9	68.2	-22.3	Peak	Vertical
	10911.0	33.8	13.0	46.8	74.0	-27.2	Peak	Vertical
	11633.5	34.4	12.4	46.8	74.0	-27.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	102
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	35.2	8.9	44.1	68.2	-24.1	Peak	Horizontal
*	9848.5	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	10877.0	33.9	12.9	46.8	74.0	-27.2	Peak	Horizontal
	11735.5	34.6	11.9	46.5	74.0	-27.5	Peak	Horizontal
*	8675.5	34.2	8.9	43.1	68.2	-25.1	Peak	Vertical
*	9729.5	34.4	11.1	45.5	68.2	-22.7	Peak	Vertical
	11047.0	33.8	12.9	46.7	74.0	-27.3	Peak	Vertical
	11565.5	33.8	12.7	46.5	74.0	-27.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	110
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	34.1	9.0	43.1	68.2	-25.1	Peak	Horizontal
*	9814.5	33.7	11.6	45.3	68.2	-22.9	Peak	Horizontal
	10860.0	34.5	12.8	47.3	74.0	-26.7	Peak	Horizontal
	11480.5	33.2	12.7	45.9	74.0	-28.1	Peak	Horizontal
*	8735.0	35.1	8.9	44.0	68.2	-24.2	Peak	Vertical
*	9695.5	33.9	10.9	44.8	68.2	-23.4	Peak	Vertical
	10945.0	35.2	13.1	48.3	74.0	-25.7	Peak	Vertical
	12118.0	34.2	11.9	46.1	74.0	-27.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	118
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	36.2	8.9	45.1	68.2	-23.1	Peak	Horizontal
*	9840.0	33.5	11.6	45.1	68.2	-23.1	Peak	Horizontal
	10877.0	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	11591.0	34.1	12.6	46.7	74.0	-27.3	Peak	Horizontal
*	8828.5	34.6	9.1	43.7	68.2	-24.5	Peak	Vertical
*	9865.5	33.1	11.6	44.7	68.2	-23.5	Peak	Vertical
	11013.0	33.8	13.0	46.8	74.0	-27.2	Peak	Vertical
	11676.0	35.1	12.1	47.2	74.0	-26.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	134
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8650.0	35.0	8.8	43.8	68.2	-24.4	Peak	Horizontal
*	9848.5	34.6	11.6	46.2	68.2	-22.0	Peak	Horizontal
	10996.0	34.5	13.0	47.5	74.0	-26.5	Peak	Horizontal
	11786.5	34.7	11.9	46.6	74.0	-27.4	Peak	Horizontal
*	8658.5	33.1	8.8	41.9	68.2	-26.3	Peak	Vertical
*	9823.0	33.5	11.6	45.1	68.2	-23.1	Peak	Vertical
	11276.5	35.4	12.4	47.8	74.0	-26.2	Peak	Vertical
	12228.5	36.7	11.7	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	142
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	34.9	9.0	43.9	68.2	-24.3	Peak	Horizontal
*	9814.5	35.1	11.6	46.7	68.2	-21.5	Peak	Horizontal
	11081.0	34.3	12.9	47.2	74.0	-26.8	Peak	Horizontal
	11829.0	34.9	11.9	46.8	74.0	-27.2	Peak	Horizontal
*	8658.5	33.3	8.8	42.1	68.2	-26.1	Peak	Vertical
*	9678.5	32.9	10.9	43.8	68.2	-24.4	Peak	Vertical
	10996.0	34.6	13.0	47.6	74.0	-26.4	Peak	Vertical
	11531.5	34.2	12.7	46.9	74.0	-27.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	151
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8675.5	35.5	8.9	44.4	68.2	-23.8	Peak	Horizontal
*	9874.0	34.3	11.6	45.9	68.2	-22.3	Peak	Horizontal
	11293.5	34.5	12.5	47.0	74.0	-27.0	Peak	Horizontal
	12288.0	34.4	11.7	46.1	74.0	-27.9	Peak	Horizontal
*	8658.5	34.2	8.8	43.0	68.2	-25.2	Peak	Vertical
	10766.5	34.0	12.5	46.5	74.0	-27.5	Peak	Vertical
	11514.5	35.4	12.8	48.2	74.0	-25.8	Peak	Vertical
*	17269.0	40.4	16.1	56.5	68.2	-11.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	159
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8709.5	34.9	9.0	43.9	68.2	-24.3	Peak	Horizontal
*	9814.5	34.0	11.6	45.6	68.2	-22.6	Peak	Horizontal
	11064.0	34.8	12.8	47.6	74.0	-26.4	Peak	Horizontal
	11829.0	35.0	11.9	46.9	74.0	-27.1	Peak	Horizontal
*	8675.5	34.5	8.9	43.4	68.2	-24.8	Peak	Vertical
	10868.5	35.6	12.8	48.4	74.0	-25.6	Peak	Vertical
	11514.5	34.7	12.8	47.5	74.0	-26.5	Peak	Vertical
*	17379.5	38.1	17.0	55.1	68.2	-13.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	42
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8871.0	35.3	9.1	44.4	68.2	-23.8	Peak	Horizontal
*	9823.0	33.5	11.6	45.1	68.2	-23.1	Peak	Horizontal
	10843.0	34.6	12.7	47.3	74.0	-26.7	Peak	Horizontal
	11540.0	34.4	12.7	47.1	74.0	-26.9	Peak	Horizontal
*	8871.0	34.6	9.1	43.7	68.2	-24.5	Peak	Vertical
*	9831.5	35.3	11.6	46.9	68.2	-21.3	Peak	Vertical
	10987.5	34.1	13.0	47.1	74.0	-26.9	Peak	Vertical
	11531.5	33.8	12.7	46.5	74.0	-27.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	58
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8820.0	35.3	9.0	44.3	68.2	-23.9	Peak	Horizontal
*	9687.0	33.9	10.9	44.8	68.2	-23.4	Peak	Horizontal
	11132.0	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
	11829.0	34.6	11.9	46.5	74.0	-27.5	Peak	Horizontal
*	8803.0	34.5	8.9	43.4	68.2	-24.8	Peak	Vertical
*	9542.5	34.4	10.8	45.2	68.2	-23.0	Peak	Vertical
	10902.5	34.4	13.0	47.4	74.0	-26.6	Peak	Vertical
	11846.0	35.1	11.9	47.0	74.0	-27.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	106
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8675.5	34.4	8.9	43.3	68.2	-24.9	Peak	Horizontal
*	9661.5	34.0	11.0	45.0	68.2	-23.2	Peak	Horizontal
	10843.0	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
	11480.5	33.5	12.7	46.2	74.0	-27.8	Peak	Horizontal
*	8735.0	34.0	8.9	42.9	68.2	-25.3	Peak	Vertical
*	9823.0	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	10868.5	35.3	12.8	48.1	74.0	-25.9	Peak	Vertical
	11582.5	34.1	12.6	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	122
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8769.0	35.5	8.9	44.4	68.2	-23.8	Peak	Horizontal
*	9755.0	34.3	11.4	45.7	68.2	-22.5	Peak	Horizontal
	11055.5	34.1	12.9	47.0	74.0	-27.0	Peak	Horizontal
	11854.5	34.7	11.9	46.6	74.0	-27.4	Peak	Horizontal
*	8684.0	34.8	9.0	43.8	68.2	-24.4	Peak	Vertical
*	9559.5	33.8	10.9	44.7	68.2	-23.5	Peak	Vertical
	11183.0	35.0	12.6	47.6	74.0	-26.4	Peak	Vertical
	12118.0	34.7	11.9	46.6	74.0	-27.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	138
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8854.0	35.7	9.1	44.8	68.2	-23.4	Peak	Horizontal
*	9772.0	32.4	11.4	43.8	68.2	-24.4	Peak	Horizontal
	11089.5	34.0	12.8	46.8	74.0	-27.2	Peak	Horizontal
	11650.5	34.8	12.3	47.1	74.0	-26.9	Peak	Horizontal
*	9644.5	34.5	11.0	45.5	68.2	-22.7	Peak	Vertical
	11404.0	34.9	12.6	47.5	74.0	-26.5	Peak	Vertical
	12271.0	35.1	11.7	46.8	74.0	-27.2	Peak	Vertical
*	17065.0	39.7	15.6	55.3	68.2	-12.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	155
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8743.5	34.4	9.0	43.4	68.2	-24.8	Peak	Horizontal
*	9814.5	33.6	11.6	45.2	68.2	-23.0	Peak	Horizontal
	11582.5	34.8	12.6	47.4	74.0	-26.6	Peak	Horizontal
	12211.5	34.5	11.7	46.2	74.0	-27.8	Peak	Horizontal
*	8548.0	35.1	8.6	43.7	68.2	-24.5	Peak	Vertical
*	9644.5	35.6	11.0	46.6	68.2	-21.6	Peak	Vertical
	11072.5	34.9	12.8	47.7	74.0	-26.3	Peak	Vertical
	11548.5	35.2	12.7	47.9	74.0	-26.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8828.5	35.2	9.1	44.3	68.2	-23.9	Peak	Horizontal
*	9823.0	33.8	11.6	45.4	68.2	-22.8	Peak	Horizontal
	10885.5	34.7	12.9	47.6	74.0	-26.4	Peak	Horizontal
	11625.0	34.4	12.5	46.9	74.0	-27.1	Peak	Horizontal
*	8522.5	36.1	8.4	44.5	68.2	-23.7	Peak	Vertical
*	10596.5	36.0	12.4	48.4	68.2	-19.8	Peak	Vertical
	11540.0	34.4	12.7	47.1	74.0	-26.9	Peak	Vertical
	12407.0	35.0	11.5	46.5	74.0	-27.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8675.5	34.9	8.9	43.8	68.2	-24.4	Peak	Horizontal
*	9806.0	34.8	11.5	46.3	68.2	-21.9	Peak	Horizontal
	11948.0	35.0	11.9	46.9	74.0	-27.1	Peak	Horizontal
	15661.1	42.0	11.9	53.9	74.0	-20.1	Peak	Horizontal
	15661.1	29.3	12.0	41.3	54.0	-12.7	Average	Horizontal
*	8862.5	35.8	9.1	44.9	68.2	-23.3	Peak	Vertical
*	9857.0	34.2	11.6	45.8	68.2	-22.4	Peak	Vertical
	10877.0	33.0	12.9	45.9	74.0	-28.1	Peak	Vertical
	15661.1	50.6	11.9	62.5	74.0	-11.5	Peak	Vertical
	15661.1	37.1	12.0	49.1	54.0	-4.9	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8582.0	34.7	8.6	43.3	68.2	-24.9	Peak	Horizontal
*	9814.5	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	11574.0	34.8	12.6	47.4	74.0	-26.6	Peak	Horizontal
	15715.7	44.1	11.8	55.9	74.0	-18.1	Peak	Horizontal
	15715.7	33.0	11.8	44.8	54.0	-9.2	Average	Horizontal
*	8616.0	35.5	8.8	44.3	68.2	-23.9	Peak	Vertical
*	9585.0	35.2	10.9	46.1	68.2	-22.1	Peak	Vertical
	11565.5	35.5	12.7	48.2	74.0	-25.8	Peak	Vertical
	15715.7	48.5	11.8	60.3	74.0	-13.7	Peak	Vertical
	15715.7	39.4	11.8	51.2	54.0	-2.8	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8607.5	34.6	8.8	43.4	68.2	-24.8	Peak	Horizontal
*	9814.5	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	11404.0	35.5	12.6	48.1	74.0	-25.9	Peak	Horizontal
	12084.0	35.3	12.0	47.3	74.0	-26.7	Peak	Horizontal
*	8548.0	35.8	8.6	44.4	68.2	-23.8	Peak	Vertical
*	9840.0	34.8	11.6	46.4	68.2	-21.8	Peak	Vertical
	11523.0	34.7	12.7	47.4	74.0	-26.6	Peak	Vertical
	12254.0	34.8	11.7	46.5	74.0	-27.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	34.1	8.8	42.9	68.2	-25.3	Peak	Horizontal
*	9763.5	34.8	11.4	46.2	68.2	-22.0	Peak	Horizontal
	11429.5	35.1	12.6	47.7	74.0	-26.3	Peak	Horizontal
	12296.5	35.0	11.6	46.6	74.0	-27.4	Peak	Horizontal
*	8675.5	34.5	8.9	43.4	68.2	-24.8	Peak	Vertical
*	9772.0	34.6	11.4	46.0	68.2	-22.2	Peak	Vertical
	10911.0	34.3	13.0	47.3	74.0	-26.7	Peak	Vertical
	11514.5	34.1	12.8	46.9	74.0	-27.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	32.6	8.8	41.4	68.2	-26.8	Peak	Horizontal
*	9814.5	31.7	11.6	43.3	68.2	-24.9	Peak	Horizontal
	10928.0	33.6	13.0	46.6	74.0	-27.4	Peak	Horizontal
	11557.0	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
*	8514.0	34.3	8.4	42.7	68.2	-25.5	Peak	Vertical
*	9831.5	33.9	11.6	45.5	68.2	-22.7	Peak	Vertical
	11098.0	34.5	12.8	47.3	74.0	-26.7	Peak	Vertical
	11846.0	33.3	11.9	45.2	74.0	-28.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8862.5	35.0	9.1	44.1	68.2	-24.1	Peak	Horizontal
*	9857.0	33.5	11.6	45.1	68.2	-23.1	Peak	Horizontal
	11140.5	34.0	12.6	46.6	74.0	-27.4	Peak	Horizontal
	12373.0	35.0	11.5	46.5	74.0	-27.5	Peak	Horizontal
*	8692.5	34.0	9.0	43.0	68.2	-25.2	Peak	Vertical
*	9891.0	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	11200.0	34.5	12.5	47.0	74.0	-27.0	Peak	Vertical
	12228.5	35.2	11.7	46.9	74.0	-27.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8837.0	34.8	9.1	43.9	68.2	-24.3	Peak	Horizontal
*	9797.5	34.0	11.5	45.5	68.2	-22.7	Peak	Horizontal
	10970.5	33.8	13.1	46.9	74.0	-27.1	Peak	Horizontal
	11531.5	34.0	12.7	46.7	74.0	-27.3	Peak	Horizontal
*	8794.5	34.6	8.9	43.5	68.2	-24.7	Peak	Vertical
*	9840.0	34.2	11.6	45.8	68.2	-22.4	Peak	Vertical
	10851.5	35.0	12.8	47.8	74.0	-26.2	Peak	Vertical
	11531.5	34.1	12.7	46.8	74.0	-27.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	35.1	8.9	44.0	68.2	-24.2	Peak	Horizontal
*	9831.5	33.6	11.6	45.2	68.2	-23.0	Peak	Horizontal
	11174.5	34.3	12.6	46.9	74.0	-27.1	Peak	Horizontal
	11531.5	34.2	12.7	46.9	74.0	-27.1	Peak	Horizontal
*	8658.5	34.8	8.8	43.6	68.2	-24.6	Peak	Vertical
*	9891.0	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	11004.5	33.9	13.0	46.9	74.0	-27.1	Peak	Vertical
	11531.5	34.4	12.7	47.1	74.0	-26.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8837.0	34.5	9.1	43.6	68.2	-24.6	Peak	Horizontal
*	9772.0	33.5	11.4	44.9	68.2	-23.3	Peak	Horizontal
	10877.0	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	12092.5	34.7	12.0	46.7	74.0	-27.3	Peak	Horizontal
*	8854.0	34.2	9.1	43.3	68.2	-24.9	Peak	Vertical
*	9823.0	33.2	11.6	44.8	68.2	-23.4	Peak	Vertical
	10843.0	34.6	12.7	47.3	74.0	-26.7	Peak	Vertical
	11574.0	34.7	12.6	47.3	74.0	-26.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8794.5	34.1	8.9	43.0	68.2	-25.2	Peak	Horizontal
*	9704.0	33.8	11.0	44.8	68.2	-23.4	Peak	Horizontal
	10800.5	33.4	12.6	46.0	74.0	-28.0	Peak	Horizontal
	11327.5	33.1	12.5	45.6	74.0	-28.4	Peak	Horizontal
*	8658.5	35.0	8.8	43.8	68.2	-24.4	Peak	Vertical
*	9585.0	34.0	10.9	44.9	68.2	-23.3	Peak	Vertical
	10588.0	35.4	12.4	47.8	74.0	-26.2	Peak	Vertical
	11531.5	33.8	12.7	46.5	74.0	-27.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9738.0	33.3	11.2	44.5	68.2	-23.7	Peak	Horizontal
	11497.5	34.4	12.8	47.2	74.0	-26.8	Peak	Horizontal
	12271.0	35.0	11.7	46.7	74.0	-27.3	Peak	Horizontal
*	17252.0	43.1	16.1	59.2	68.2	-9.0	Peak	Horizontal
*	9542.5	33.7	10.8	44.5	68.2	-23.7	Peak	Vertical
	10877.0	33.0	12.9	45.9	74.0	-28.1	Peak	Vertical
	11489.0	39.4	12.8	52.2	74.0	-21.8	Peak	Vertical
*	17243.5	50.4	16.0	66.4	68.2	-1.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8743.5	35.1	9.0	44.1	68.2	-24.1	Peak	Horizontal
	11565.5	36.9	12.7	49.6	74.0	-24.4	Peak	Horizontal
	12424.0	35.6	11.5	47.1	74.0	-26.9	Peak	Horizontal
*	17345.5	44.9	16.8	61.7	68.2	-6.5	Peak	Horizontal
*	8837.0	35.3	9.1	44.4	68.2	-23.8	Peak	Vertical
	11038.5	37.2	12.9	50.1	74.0	-23.9	Peak	Vertical
	11573.1	41.2	12.6	53.8	74.0	-20.2	Peak	Vertical
	11573.1	29.7	12.6	42.3	54.0	-11.7	Average	Vertical
*	17345.5	47.9	16.8	64.7	68.2	-3.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8769.0	34.4	8.9	43.3	68.2	-24.9	Peak	Horizontal
	10834.5	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
	11650.5	36.6	12.3	48.9	74.0	-25.1	Peak	Horizontal
*	17481.5	42.5	17.3	59.8	68.2	-8.4	Peak	Horizontal
*	8862.5	34.7	9.1	43.8	68.2	-24.4	Peak	Vertical
	10834.5	34.0	12.7	46.7	74.0	-27.3	Peak	Vertical
	11658.4	43.8	12.3	56.1	74.0	-17.9	Peak	Vertical
	11658.4	32.1	12.3	44.4	54.0	-9.6	Average	Vertical
*	17456.0	48.5	17.1	65.6	68.2	-2.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	38
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8854.0	32.9	9.1	42.0	68.2	-26.2	Peak	Horizontal
*	9806.0	34.6	11.5	46.1	68.2	-22.1	Peak	Horizontal
	11684.5	35.6	12.1	47.7	74.0	-26.3	Peak	Horizontal
	12517.5	34.1	11.4	45.5	74.0	-28.5	Peak	Horizontal
*	8675.5	34.9	8.9	43.8	68.2	-24.4	Peak	Vertical
*	9687.0	34.2	10.9	45.1	68.2	-23.1	Peak	Vertical
	11132.0	34.2	12.7	46.9	74.0	-27.1	Peak	Vertical
	11914.0	34.9	11.8	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	46
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8837.0	34.4	9.1	43.5	68.2	-24.7	Peak	Horizontal
*	9823.0	34.8	11.6	46.4	68.2	-21.8	Peak	Horizontal
	11132.0	34.9	12.7	47.6	74.0	-26.4	Peak	Horizontal
	15671.0	36.7	11.9	48.6	74.0	-25.4	Peak	Horizontal
*	8811.5	34.6	9.0	43.6	68.2	-24.6	Peak	Vertical
*	9636.0	34.4	11.0	45.4	68.2	-22.8	Peak	Vertical
	11259.5	35.0	12.4	47.4	74.0	-26.6	Peak	Vertical
	15680.2	41.3	11.9	53.2	74.0	-20.8	Peak	Vertical
	15680.2	29.5	11.9	41.4	54.0	-12.6	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	54
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8735.0	33.1	8.9	42.0	68.2	-26.2	Peak	Horizontal
*	9806.0	34.6	11.5	46.1	68.2	-22.1	Peak	Horizontal
	10894.0	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	11548.5	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
*	8582.0	35.5	8.6	44.1	68.2	-24.1	Peak	Vertical
*	9814.5	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	11395.5	35.1	12.6	47.7	74.0	-26.3	Peak	Vertical
	12271.0	34.1	11.7	45.8	74.0	-28.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	62
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8862.5	36.0	9.1	45.1	68.2	-23.1	Peak	Horizontal
*	9814.5	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	11055.5	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	11565.5	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
*	8854.0	34.5	9.1	43.6	68.2	-24.6	Peak	Vertical
*	9840.0	34.5	11.6	46.1	68.2	-22.1	Peak	Vertical
	11531.5	35.2	12.7	47.9	74.0	-26.1	Peak	Vertical
	12126.5	34.4	11.9	46.3	74.0	-27.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	102
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8675.5	35.3	8.9	44.2	68.2	-24.0	Peak	Horizontal
*	9865.5	33.6	11.6	45.2	68.2	-23.0	Peak	Horizontal
	10928.0	34.0	13.0	47.0	74.0	-27.0	Peak	Horizontal
	11786.5	35.4	11.9	47.3	74.0	-26.7	Peak	Horizontal
*	8862.5	34.3	9.1	43.4	68.2	-24.8	Peak	Vertical
*	9678.5	34.0	10.9	44.9	68.2	-23.3	Peak	Vertical
	11064.0	34.3	12.8	47.1	74.0	-26.9	Peak	Vertical
	11608.0	34.7	12.5	47.2	74.0	-26.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	110
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8769.0	34.0	8.9	42.9	68.2	-25.3	Peak	Horizontal
*	9933.5	34.1	11.5	45.6	68.2	-22.6	Peak	Horizontal
	10826.0	34.5	12.7	47.2	74.0	-26.8	Peak	Horizontal
	11514.5	34.4	12.8	47.2	74.0	-26.8	Peak	Horizontal
*	8650.0	34.8	8.8	43.6	68.2	-24.6	Peak	Vertical
*	9644.5	34.6	11.0	45.6	68.2	-22.6	Peak	Vertical
	10996.0	33.4	13.0	46.4	74.0	-27.6	Peak	Vertical
	11888.5	35.2	11.8	47.0	74.0	-27.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	118
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8862.5	34.6	9.1	43.7	68.2	-24.5	Peak	Horizontal
*	9746.5	35.3	11.3	46.6	68.2	-21.6	Peak	Horizontal
	10851.5	34.7	12.8	47.5	74.0	-26.5	Peak	Horizontal
	11548.5	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
*	8582.0	35.1	8.6	43.7	68.2	-24.5	Peak	Vertical
*	9687.0	34.1	10.9	45.0	68.2	-23.2	Peak	Vertical
	10928.0	34.1	13.0	47.1	74.0	-26.9	Peak	Vertical
	11514.5	34.5	12.8	47.3	74.0	-26.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	134
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	35.6	9.0	44.6	68.2	-23.6	Peak	Horizontal
*	9653.0	34.5	11.0	45.5	68.2	-22.7	Peak	Horizontal
	10970.5	33.9	13.1	47.0	74.0	-27.0	Peak	Horizontal
	11506.0	34.2	12.8	47.0	74.0	-27.0	Peak	Horizontal
*	8692.5	33.9	9.0	42.9	68.2	-25.3	Peak	Vertical
*	9806.0	34.5	11.5	46.0	68.2	-22.2	Peak	Vertical
	10970.5	34.0	13.1	47.1	74.0	-26.9	Peak	Vertical
	12101.0	34.9	12.0	46.9	74.0	-27.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	142
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8820.0	35.5	9.0	44.5	68.2	-23.7	Peak	Horizontal
*	9831.5	33.7	11.6	45.3	68.2	-22.9	Peak	Horizontal
	10860.0	34.3	12.8	47.1	74.0	-26.9	Peak	Horizontal
	11812.0	35.1	11.9	47.0	74.0	-27.0	Peak	Horizontal
*	8667.0	35.5	8.9	44.4	68.2	-23.8	Peak	Vertical
*	9738.0	33.9	11.2	45.1	68.2	-23.1	Peak	Vertical
	11395.5	34.7	12.6	47.3	74.0	-26.7	Peak	Vertical
	12016.0	35.3	11.9	47.2	74.0	-26.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	151
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8820.0	34.3	9.0	43.3	68.2	-24.9	Peak	Horizontal
*	9840.0	34.0	11.6	45.6	68.2	-22.6	Peak	Horizontal
	11064.0	34.7	12.8	47.5	74.0	-26.5	Peak	Horizontal
	12135.0	35.5	11.9	47.4	74.0	-26.6	Peak	Horizontal
*	8871.0	35.2	9.1	44.3	68.2	-23.9	Peak	Vertical
	10911.0	34.4	13.0	47.4	74.0	-26.6	Peak	Vertical
	11523.0	38.4	12.7	51.1	74.0	-22.9	Peak	Vertical
*	17260.5	40.7	16.1	56.8	68.2	-11.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	159
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9865.5	34.9	11.6	46.5	68.2	-21.7	Peak	Horizontal
	11030.0	34.1	13.0	47.1	74.0	-26.9	Peak	Horizontal
	11693.0	35.4	12.0	47.4	74.0	-26.6	Peak	Horizontal
*	17362.5	38.9	16.9	55.8	68.2	-12.4	Peak	Horizontal
*	9797.5	34.7	11.5	46.2	68.2	-22.0	Peak	Vertical
	11599.5	39.3	12.6	51.9	74.0	-22.1	Peak	Vertical
	12118.0	32.9	11.9	44.8	74.0	-29.2	Peak	Vertical
*	17379.5	45.0	17.0	62.0	68.2	-6.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8582.0	34.6	8.6	43.2	68.2	-25.0	Peak	Horizontal
*	9840.0	34.0	11.6	45.6	68.2	-22.6	Peak	Horizontal
	11225.5	35.3	12.4	47.7	74.0	-26.3	Peak	Horizontal
	12050.0	34.3	12.0	46.3	74.0	-27.7	Peak	Horizontal
*	8675.5	34.8	8.9	43.7	68.2	-24.5	Peak	Vertical
*	9857.0	34.5	11.6	46.1	68.2	-22.1	Peak	Vertical
	11548.5	34.7	12.7	47.4	74.0	-26.6	Peak	Vertical
	12160.5	34.5	11.8	46.3	74.0	-27.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	34.9	8.8	43.7	68.2	-24.5	Peak	Horizontal
*	9585.0	34.6	10.9	45.5	68.2	-22.7	Peak	Horizontal
	12126.5	34.2	11.9	46.1	74.0	-27.9	Peak	Horizontal
	15662.1	45.9	12.0	57.9	74.0	-16.1	Peak	Horizontal
	15662.1	33.3	12.0	45.3	54.0	-8.7	Average	Horizontal
*	8641.5	34.6	8.8	43.4	68.2	-24.8	Peak	Vertical
*	9772.0	33.1	11.4	44.5	68.2	-23.7	Peak	Vertical
	11302.0	35.0	12.5	47.5	74.0	-26.5	Peak	Vertical
	15655.6	49.0	12.0	61.0	74.0	-13.0	Peak	Vertical
	15655.6	37.8	12.0	49.8	54.0	-4.2	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8641.5	35.0	8.8	43.8	68.2	-24.4	Peak	Horizontal
*	9721.0	33.4	11.1	44.5	68.2	-23.7	Peak	Horizontal
	11574.0	34.4	12.6	47.0	74.0	-27.0	Peak	Horizontal
	15731.0	45.0	11.8	56.8	74.0	-17.2	Peak	Horizontal
	15731.0	32.1	11.8	43.9	54.0	-10.1	Average	Horizontal
*	8862.5	35.1	9.1	44.2	68.2	-24.0	Peak	Vertical
*	9678.5	33.4	10.9	44.3	68.2	-23.9	Peak	Vertical
	10953.5	33.6	13.1	46.7	74.0	-27.3	Peak	Vertical
	15714.2	52.0	11.8	63.8	74.0	-10.2	Peak	Vertical
	15714.2	40.1	11.8	51.9	54.0	-2.1	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	34.3	9.0	43.3	68.2	-24.9	Peak	Horizontal
*	9738.0	33.3	11.2	44.5	68.2	-23.7	Peak	Horizontal
	10843.0	34.2	12.7	46.9	74.0	-27.1	Peak	Horizontal
	11548.5	34.9	12.7	47.6	74.0	-26.4	Peak	Horizontal
*	8633.0	34.7	8.8	43.5	68.2	-24.7	Peak	Vertical
*	9763.5	34.2	11.4	45.6	68.2	-22.6	Peak	Vertical
	11038.5	34.7	12.9	47.6	74.0	-26.4	Peak	Vertical
	11565.5	34.7	12.7	47.4	74.0	-26.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8803.0	35.0	8.9	43.9	68.2	-24.3	Peak	Horizontal
*	9772.0	32.3	11.4	43.7	68.2	-24.5	Peak	Horizontal
	10970.5	33.9	13.1	47.0	74.0	-27.0	Peak	Horizontal
	11633.5	34.5	12.4	46.9	74.0	-27.1	Peak	Horizontal
*	8769.0	32.5	8.9	41.4	68.2	-26.8	Peak	Vertical
*	9814.5	34.0	11.6	45.6	68.2	-22.6	Peak	Vertical
	11106.5	33.6	12.8	46.4	74.0	-27.6	Peak	Vertical
	11667.5	34.5	12.2	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8607.5	35.5	8.8	44.3	68.2	-23.9	Peak	Horizontal
*	9874.0	34.0	11.6	45.6	68.2	-22.6	Peak	Horizontal
	10885.5	35.0	12.9	47.9	74.0	-26.1	Peak	Horizontal
	11531.5	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
*	8811.5	33.8	9.0	42.8	68.2	-25.4	Peak	Vertical
*	9636.0	33.0	11.0	44.0	68.2	-24.2	Peak	Vertical
	10877.0	32.8	12.9	45.7	74.0	-28.3	Peak	Vertical
	11548.5	34.0	12.7	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	34.2	9.0	43.2	68.2	-25.0	Peak	Horizontal
*	9780.5	33.8	11.4	45.2	68.2	-23.0	Peak	Horizontal
	10970.5	32.8	13.1	45.9	74.0	-28.1	Peak	Horizontal
	11574.0	34.7	12.6	47.3	74.0	-26.7	Peak	Horizontal
*	8837.0	34.0	9.1	43.1	68.2	-25.1	Peak	Vertical
*	9823.0	33.8	11.6	45.4	68.2	-22.8	Peak	Vertical
	10979.0	34.6	13.0	47.6	74.0	-26.4	Peak	Vertical
	11880.0	34.9	11.8	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	116
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8726.5	33.6	9.0	42.6	68.2	-25.6	Peak	Horizontal
*	9780.5	32.1	11.4	43.5	68.2	-24.7	Peak	Horizontal
	11021.5	32.6	13.0	45.6	74.0	-28.4	Peak	Horizontal
	11531.5	33.6	12.7	46.3	74.0	-27.7	Peak	Horizontal
*	8633.0	34.6	8.8	43.4	68.2	-24.8	Peak	Vertical
*	9602.0	34.6	10.9	45.5	68.2	-22.7	Peak	Vertical
	10953.5	34.2	13.1	47.3	74.0	-26.7	Peak	Vertical
	11752.5	34.3	11.9	46.2	74.0	-27.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	34.0	9.0	43.0	68.2	-25.2	Peak	Horizontal
*	9797.5	33.6	11.5	45.1	68.2	-23.1	Peak	Horizontal
	11106.5	34.1	12.8	46.9	74.0	-27.1	Peak	Horizontal
	11642.0	35.5	12.4	47.9	74.0	-26.1	Peak	Horizontal
*	8828.5	35.1	9.1	44.2	68.2	-24.0	Peak	Vertical
*	9806.0	34.3	11.5	45.8	68.2	-22.4	Peak	Vertical
	10979.0	34.3	13.0	47.3	74.0	-26.7	Peak	Vertical
	11540.0	34.9	12.7	47.6	74.0	-26.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8599.0	34.9	8.7	43.6	68.2	-24.6	Peak	Horizontal
*	9789.0	32.9	11.4	44.3	68.2	-23.9	Peak	Horizontal
	10834.5	33.9	12.7	46.6	74.0	-27.4	Peak	Horizontal
	11531.5	34.6	12.7	47.3	74.0	-26.7	Peak	Horizontal
*	8650.0	34.8	8.8	43.6	68.2	-24.6	Peak	Vertical
*	9831.5	35.1	11.6	46.7	68.2	-21.5	Peak	Vertical
	11268.0	36.2	12.4	48.6	74.0	-25.4	Peak	Vertical
	11837.5	35.0	11.9	46.9	74.0	-27.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8701.0	33.9	9.0	42.9	68.2	-25.3	Peak	Horizontal
*	9772.0	33.2	11.4	44.6	68.2	-23.6	Peak	Horizontal
	10834.5	34.5	12.7	47.2	74.0	-26.8	Peak	Horizontal
	11497.5	34.7	12.8	47.5	74.0	-26.5	Peak	Horizontal
*	8837.0	35.3	9.1	44.4	68.2	-23.8	Peak	Vertical
*	9721.0	33.9	11.1	45.0	68.2	-23.2	Peak	Vertical
	10911.0	33.8	13.0	46.8	74.0	-27.2	Peak	Vertical
	11667.5	34.2	12.2	46.4	74.0	-27.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	33.7	9.0	42.7	68.2	-25.5	Peak	Horizontal
	10817.5	34.9	12.7	47.6	74.0	-26.4	Peak	Horizontal
	11489.0	39.6	12.8	52.4	74.0	-21.6	Peak	Horizontal
	11489.0	28.0	12.8	40.8	54.0	-13.2	Average	Horizontal
*	17226.5	48.1	16.0	64.1	68.2	-4.1	Peak	Horizontal
*	8633.0	34.3	8.8	43.1	68.2	-25.1	Peak	Vertical
	10792.0	34.0	12.6	46.6	74.0	-27.4	Peak	Vertical
	11498.0	41.2	12.8	54.0	74.0	-20.0	Peak	Vertical
	11498.0	30.7	12.8	43.5	54.0	-10.5	Average	Vertical
*	17243.5	49.4	16.0	65.4	68.2	-2.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8616.0	35.1	8.8	43.9	68.2	-24.3	Peak	Horizontal
	10826.0	34.5	12.7	47.2	74.0	-26.8	Peak	Horizontal
	11744.0	34.5	11.9	46.4	74.0	-27.6	Peak	Horizontal
*	17371.0	37.1	17.0	54.1	68.2	-14.1	Peak	Horizontal
*	9772.0	34.3	11.4	45.7	68.2	-22.5	Peak	Vertical
	10834.5	33.7	12.7	46.4	74.0	-27.6	Peak	Vertical
	11574.6	41.4	12.6	54.0	74.0	-20.0	Peak	Vertical
	11574.6	30.0	12.6	42.6	54.0	-11.4	Average	Vertical
*	17354.0	43.9	16.9	60.8	68.2	-7.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9746.5	33.6	11.3	44.9	68.2	-23.3	Peak	Horizontal
	11344.5	34.6	12.5	47.1	74.0	-26.9	Peak	Horizontal
	11642.0	34.7	12.4	47.1	74.0	-26.9	Peak	Horizontal
*	17473.0	37.9	17.2	55.1	68.2	-13.1	Peak	Horizontal
*	9653.0	33.8	11.0	44.8	68.2	-23.4	Peak	Vertical
	10919.5	33.8	13.0	46.8	74.0	-27.2	Peak	Vertical
	11653.7	45.1	12.3	57.4	74.0	-16.6	Peak	Vertical
	11653.7	30.7	12.3	43.0	54.0	-11.0	Average	Vertical
*	17481.5	46.5	17.3	63.8	68.2	-4.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	38
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	35.1	8.8	43.9	68.2	-24.3	Peak	Horizontal
*	9814.5	35.9	11.6	47.5	68.2	-20.7	Peak	Horizontal
	10792.0	35.4	12.6	48.0	74.0	-26.0	Peak	Horizontal
	11846.0	34.5	11.9	46.4	74.0	-27.6	Peak	Horizontal
*	8658.5	34.5	8.8	43.3	68.2	-24.9	Peak	Vertical
*	9772.0	34.2	11.4	45.6	68.2	-22.6	Peak	Vertical
	10792.0	35.8	12.6	48.4	74.0	-25.6	Peak	Vertical
	11548.5	34.9	12.7	47.6	74.0	-26.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	46
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8590.5	34.5	8.7	43.2	68.2	-25.0	Peak	Horizontal
*	9831.5	35.5	11.6	47.1	68.2	-21.1	Peak	Horizontal
	11497.5	34.3	12.8	47.1	74.0	-26.9	Peak	Horizontal
	15696.5	38.2	11.9	50.1	74.0	-23.9	Peak	Horizontal
*	8845.5	34.8	9.1	43.9	68.2	-24.3	Peak	Vertical
*	9729.5	35.6	11.1	46.7	68.2	-21.5	Peak	Vertical
	11157.5	35.7	12.6	48.3	74.0	-25.7	Peak	Vertical
	15679.9	43.1	11.9	55.0	74.0	-19.0	Peak	Vertical
	15679.9	30.1	11.9	42.0	54.0	-12.0	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	54
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8718.0	36.2	9.0	45.2	68.2	-23.0	Peak	Horizontal
*	9814.5	34.7	11.6	46.3	68.2	-21.9	Peak	Horizontal
	10800.5	34.8	12.6	47.4	74.0	-26.6	Peak	Horizontal
	11557.0	34.8	12.7	47.5	74.0	-26.5	Peak	Horizontal
*	8582.0	34.6	8.6	43.2	68.2	-25.0	Peak	Vertical
*	9738.0	34.0	11.2	45.2	68.2	-23.0	Peak	Vertical
	10809.0	34.5	12.7	47.2	74.0	-26.8	Peak	Vertical
	11514.5	34.3	12.8	47.1	74.0	-26.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	62
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	34.7	8.8	43.5	68.2	-24.7	Peak	Horizontal
*	9959.0	35.7	11.4	47.1	68.2	-21.1	Peak	Horizontal
	11183.0	34.8	12.6	47.4	74.0	-26.6	Peak	Horizontal
	11812.0	34.8	11.9	46.7	74.0	-27.3	Peak	Horizontal
*	8811.5	34.9	9.0	43.9	68.2	-24.3	Peak	Vertical
*	9814.5	34.3	11.6	45.9	68.2	-22.3	Peak	Vertical
	10630.5	34.7	12.4	47.1	74.0	-26.9	Peak	Vertical
	11574.0	34.9	12.6	47.5	74.0	-26.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	102
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8633.0	34.7	8.8	43.5	68.2	-24.7	Peak	Horizontal
*	9797.5	34.1	11.5	45.6	68.2	-22.6	Peak	Horizontal
	10741.0	35.5	12.5	48.0	74.0	-26.0	Peak	Horizontal
	11472.0	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
*	8692.5	34.3	9.0	43.3	68.2	-24.9	Peak	Vertical
*	9678.5	34.0	10.9	44.9	68.2	-23.3	Peak	Vertical
	11072.5	35.2	12.8	48.0	74.0	-26.0	Peak	Vertical
	11574.0	34.9	12.6	47.5	74.0	-26.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	110
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8828.5	35.6	9.1	44.7	68.2	-23.5	Peak	Horizontal
*	9772.0	33.9	11.4	45.3	68.2	-22.9	Peak	Horizontal
	10622.0	35.4	12.4	47.8	74.0	-26.2	Peak	Horizontal
	11497.5	35.8	12.8	48.6	74.0	-25.4	Peak	Horizontal
*	8684.0	35.3	9.0	44.3	68.2	-23.9	Peak	Vertical
*	9840.0	34.8	11.6	46.4	68.2	-21.8	Peak	Vertical
	10860.0	35.5	12.8	48.3	74.0	-25.7	Peak	Vertical
	11531.5	34.3	12.7	47.0	74.0	-27.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	118
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	34.0	9.0	43.0	68.2	-25.2	Peak	Horizontal
*	9806.0	33.9	11.5	45.4	68.2	-22.8	Peak	Horizontal
	10987.5	34.7	13.0	47.7	74.0	-26.3	Peak	Horizontal
	11531.5	34.3	12.7	47.0	74.0	-27.0	Peak	Horizontal
*	8837.0	36.0	9.1	45.1	68.2	-23.1	Peak	Vertical
*	9789.0	34.7	11.4	46.1	68.2	-22.1	Peak	Vertical
	11004.5	34.8	13.0	47.8	74.0	-26.2	Peak	Vertical
	11523.0	34.7	12.7	47.4	74.0	-26.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	134
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8871.0	34.6	9.1	43.7	68.2	-24.5	Peak	Horizontal
*	9772.0	34.6	11.4	46.0	68.2	-22.2	Peak	Horizontal
	11072.5	35.2	12.8	48.0	74.0	-26.0	Peak	Horizontal
	11735.5	36.0	11.9	47.9	74.0	-26.1	Peak	Horizontal
*	8701.0	35.0	9.0	44.0	68.2	-24.2	Peak	Vertical
*	9763.5	34.6	11.4	46.0	68.2	-22.2	Peak	Vertical
	10902.5	35.1	13.0	48.1	74.0	-25.9	Peak	Vertical
	11531.5	34.0	12.7	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	142
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	35.3	9.0	44.3	68.2	-23.9	Peak	Horizontal
*	9772.0	34.1	11.4	45.5	68.2	-22.7	Peak	Horizontal
	10562.5	35.2	12.5	47.7	74.0	-26.3	Peak	Horizontal
	11353.0	35.6	12.5	48.1	74.0	-25.9	Peak	Horizontal
*	8658.5	35.6	8.8	44.4	68.2	-23.8	Peak	Vertical
*	9831.5	33.9	11.6	45.5	68.2	-22.7	Peak	Vertical
	10987.5	34.7	13.0	47.7	74.0	-26.3	Peak	Vertical
	11659.0	34.9	12.3	47.2	74.0	-26.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	151
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8726.5	34.7	9.0	43.7	68.2	-24.5	Peak	Horizontal
*	9840.0	34.6	11.6	46.2	68.2	-22.0	Peak	Horizontal
	11055.5	35.4	12.9	48.3	74.0	-25.7	Peak	Horizontal
	11540.0	34.6	12.7	47.3	74.0	-26.7	Peak	Horizontal
*	8675.5	34.7	8.9	43.6	68.2	-24.6	Peak	Vertical
	10843.0	34.7	12.7	47.4	74.0	-26.6	Peak	Vertical
	11514.5	39.5	12.8	52.3	74.0	-21.7	Peak	Vertical
*	17277.5	41.0	16.2	57.2	68.2	-11.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	159
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8947.5	35.6	9.0	44.6	68.2	-23.6	Peak	Horizontal
*	9831.5	33.9	11.6	45.5	68.2	-22.7	Peak	Horizontal
	10877.0	33.7	12.9	46.6	74.0	-27.4	Peak	Horizontal
	11540.0	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
*	8667.0	34.0	8.9	42.9	68.2	-25.3	Peak	Vertical
	11030.0	34.3	13.0	47.3	74.0	-26.7	Peak	Vertical
	11599.5	38.3	12.6	50.9	74.0	-23.1	Peak	Vertical
*	17396.5	39.1	17.1	56.2	68.2	-12.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	42
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	32.9	9.0	41.9	68.2	-26.3	Peak	Horizontal
*	9695.5	33.7	10.9	44.6	68.2	-23.6	Peak	Horizontal
	10843.0	33.7	12.7	46.4	74.0	-27.6	Peak	Horizontal
	11625.0	34.6	12.5	47.1	74.0	-26.9	Peak	Horizontal
*	8565.0	34.2	8.7	42.9	68.2	-25.3	Peak	Vertical
*	9653.0	34.3	11.0	45.3	68.2	-22.9	Peak	Vertical
	10885.5	34.2	12.9	47.1	74.0	-26.9	Peak	Vertical
	11531.5	34.2	12.7	46.9	74.0	-27.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	58
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8633.0	34.3	8.8	43.1	68.2	-25.1	Peak	Horizontal
*	9772.0	33.1	11.4	44.5	68.2	-23.7	Peak	Horizontal
	10885.5	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	11540.0	33.5	12.7	46.2	74.0	-27.8	Peak	Horizontal
*	8845.5	35.4	9.1	44.5	68.2	-23.7	Peak	Vertical
*	9678.5	32.8	10.9	43.7	68.2	-24.5	Peak	Vertical
	10877.0	34.7	12.9	47.6	74.0	-26.4	Peak	Vertical
	11557.0	34.4	12.7	47.1	74.0	-26.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	106
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	33.7	9.0	42.7	68.2	-25.5	Peak	Horizontal
*	9593.5	32.6	10.9	43.5	68.2	-24.7	Peak	Horizontal
	10834.5	34.1	12.7	46.8	74.0	-27.2	Peak	Horizontal
	11514.5	34.4	12.8	47.2	74.0	-26.8	Peak	Horizontal
*	8684.0	34.6	9.0	43.6	68.2	-24.6	Peak	Vertical
*	9797.5	33.8	11.5	45.3	68.2	-22.9	Peak	Vertical
	11055.5	33.5	12.9	46.4	74.0	-27.6	Peak	Vertical
	11531.5	34.0	12.7	46.7	74.0	-27.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	122
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9780.5	32.3	11.4	43.7	68.2	-24.5	Peak	Horizontal
*	11081.0	33.5	12.9	46.4	68.2	-21.8	Peak	Horizontal
	12075.5	34.1	12.0	46.1	74.0	-27.9	Peak	Horizontal
	16861.0	37.9	15.2	53.1	74.0	-20.9	Peak	Horizontal
*	9593.5	33.0	10.9	43.9	68.2	-24.3	Peak	Vertical
	11030.0	34.8	13.0	47.8	74.0	-26.2	Peak	Vertical
	11684.5	34.5	12.1	46.6	74.0	-27.4	Peak	Vertical
*	16844.0	41.6	15.0	56.6	68.2	-11.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	138
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8735.0	33.1	8.9	42.0	68.2	-26.2	Peak	Horizontal
*	9814.5	31.9	11.6	43.5	68.2	-24.7	Peak	Horizontal
	10996.0	34.4	13.0	47.4	74.0	-26.6	Peak	Horizontal
	12356.0	35.0	11.5	46.5	74.0	-27.5	Peak	Horizontal
*	8582.0	33.8	8.6	42.4	68.2	-25.8	Peak	Vertical
	10902.5	34.4	13.0	47.4	74.0	-26.6	Peak	Vertical
	12092.5	33.8	12.0	45.8	74.0	-28.2	Peak	Vertical
*	17082.0	37.5	15.7	53.2	68.2	-15.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	155
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8624.5	34.4	8.8	43.2	68.2	-25.0	Peak	Horizontal
*	9780.5	35.1	11.4	46.5	68.2	-21.7	Peak	Horizontal
	10834.5	35.2	12.7	47.9	74.0	-26.1	Peak	Horizontal
	11557.0	34.6	12.7	47.3	74.0	-26.7	Peak	Horizontal
*	8905.0	34.8	9.2	44.0	68.2	-24.2	Peak	Vertical
*	9746.5	33.7	11.3	45.0	68.2	-23.2	Peak	Vertical
	11336.0	34.5	12.5	47.0	74.0	-27.0	Peak	Vertical
	12313.5	34.6	11.6	46.2	74.0	-27.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	42
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8828.5	33.8	9.1	42.9	68.2	-25.3	Peak	Horizontal
*	9840.0	33.7	11.6	45.3	68.2	-22.9	Peak	Horizontal
	10987.5	34.0	13.0	47.0	74.0	-27.0	Peak	Horizontal
	11599.5	33.8	12.6	46.4	74.0	-27.6	Peak	Horizontal
*	8811.5	34.2	9.0	43.2	68.2	-25.0	Peak	Vertical
*	9857.0	33.8	11.6	45.4	68.2	-22.8	Peak	Vertical
	11081.0	34.6	12.9	47.5	74.0	-26.5	Peak	Vertical
	11531.5	34.4	12.7	47.1	74.0	-26.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	58
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	34.7	8.8	43.5	68.2	-24.7	Peak	Horizontal
*	9806.0	34.0	11.5	45.5	68.2	-22.7	Peak	Horizontal
	11234.0	34.7	12.4	47.1	74.0	-26.9	Peak	Horizontal
	11829.0	34.6	11.9	46.5	74.0	-27.5	Peak	Horizontal
*	8845.5	34.5	9.1	43.6	68.2	-24.6	Peak	Vertical
*	9568.0	34.2	10.9	45.1	68.2	-23.1	Peak	Vertical
	10639.0	33.1	12.3	45.4	74.0	-28.6	Peak	Vertical
	11055.5	35.4	12.9	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	106
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	33.3	9.0	42.3	68.2	-25.9	Peak	Horizontal
*	9882.5	34.8	11.6	46.4	68.2	-21.8	Peak	Horizontal
	10766.5	35.2	12.5	47.7	74.0	-26.3	Peak	Horizontal
	11633.5	34.7	12.4	47.1	74.0	-26.9	Peak	Horizontal
*	8684.0	35.2	9.0	44.2	68.2	-24.0	Peak	Vertical
*	9814.5	34.1	11.6	45.7	68.2	-22.5	Peak	Vertical
	10894.0	35.2	12.9	48.1	74.0	-25.9	Peak	Vertical
	11565.5	35.0	12.7	47.7	74.0	-26.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	122
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	33.5	9.0	42.5	68.2	-25.7	Peak	Horizontal
*	9687.0	32.2	10.9	43.1	68.2	-25.1	Peak	Horizontal
	11540.0	33.7	12.7	46.4	74.0	-27.6	Peak	Horizontal
	12356.0	35.3	11.5	46.8	74.0	-27.2	Peak	Horizontal
*	8862.5	34.5	9.1	43.6	68.2	-24.6	Peak	Vertical
	11557.0	35.5	12.7	48.2	74.0	-25.8	Peak	Vertical
	12330.5	34.2	11.6	45.8	74.0	-28.2	Peak	Vertical
*	16878.0	38.8	15.2	54.0	68.2	-14.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	138
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8879.5	34.5	9.2	43.7	68.2	-24.5	Peak	Horizontal
*	9687.0	32.7	10.9	43.6	68.2	-24.6	Peak	Horizontal
	10987.5	33.6	13.0	46.6	74.0	-27.4	Peak	Horizontal
	11531.5	33.9	12.7	46.6	74.0	-27.4	Peak	Horizontal
	11353.0	36.1	12.5	48.6	74.0	-25.4	Peak	Vertical
	11565.5	37.0	12.7	49.7	74.0	-24.3	Peak	Vertical
*	17107.5	40.4	15.6	56.0	68.2	-12.2	Peak	Vertical
*	17345.5	36.4	16.8	53.2	68.2	-15.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	155
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8752.0	33.6	9.0	42.6	68.2	-25.6	Peak	Horizontal
*	9823.0	32.8	11.6	44.4	68.2	-23.8	Peak	Horizontal
	11047.0	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	12007.5	33.9	11.9	45.8	74.0	-28.2	Peak	Horizontal
*	8607.5	35.0	8.8	43.8	68.2	-24.4	Peak	Vertical
*	9814.5	33.8	11.6	45.4	68.2	-22.8	Peak	Vertical
	11140.5	34.2	12.6	46.8	74.0	-27.2	Peak	Vertical
	12288.0	34.2	11.7	45.9	74.0	-28.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	42
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8820.0	34.0	9.0	43.0	68.2	-25.2	Peak	Horizontal
*	9772.0	34.6	11.4	46.0	68.2	-22.2	Peak	Horizontal
	11523.0	35.1	12.7	47.8	74.0	-26.2	Peak	Horizontal
	12067.0	34.3	12.0	46.3	74.0	-27.7	Peak	Horizontal
	11548.5	34.1	12.7	46.8	74.0	-27.2	Peak	Vertical
	12152.0	34.3	11.8	46.1	74.0	-27.9	Peak	Vertical
*	16861.0	38.6	15.2	53.8	68.2	-14.4	Peak	Vertical
*	17371.0	41.4	17.0	58.4	68.2	-9.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	58
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8862.5	35.0	9.1	44.1	68.2	-24.1	Peak	Horizontal
*	9916.5	34.6	11.5	46.1	68.2	-22.1	Peak	Horizontal
	10630.5	34.8	12.4	47.2	74.0	-26.8	Peak	Horizontal
	11548.5	34.8	12.7	47.5	74.0	-26.5	Peak	Horizontal
*	8862.5	35.0	9.1	44.1	68.2	-24.1	Peak	Vertical
*	9772.0	32.3	11.4	43.7	68.2	-24.5	Peak	Vertical
	10885.5	34.4	12.9	47.3	74.0	-26.7	Peak	Vertical
	12092.5	34.8	12.0	46.8	74.0	-27.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	106
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8752.0	33.6	9.0	42.6	68.2	-25.6	Peak	Horizontal
*	9823.0	32.8	11.6	44.4	68.2	-23.8	Peak	Horizontal
	11047.0	34.5	12.9	47.4	74.0	-26.6	Peak	Horizontal
	12007.5	33.9	11.9	45.8	74.0	-28.2	Peak	Horizontal
*	8607.5	35.0	8.8	43.8	68.2	-24.4	Peak	Vertical
*	9814.5	33.8	11.6	45.4	68.2	-22.8	Peak	Vertical
	11140.5	34.2	12.6	46.8	74.0	-27.2	Peak	Vertical
	12288.0	34.2	11.7	45.9	74.0	-28.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	122
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8845.5	34.5	9.1	43.6	68.2	-24.6	Peak	Horizontal
*	9857.0	33.8	11.6	45.4	68.2	-22.8	Peak	Horizontal
	10868.5	34.2	12.8	47.0	74.0	-27.0	Peak	Horizontal
	11565.5	34.5	12.7	47.2	74.0	-26.8	Peak	Horizontal
*	8820.0	34.0	9.0	43.0	68.2	-25.2	Peak	Vertical
*	9823.0	34.2	11.6	45.8	68.2	-22.4	Peak	Vertical
	11064.0	34.1	12.8	46.9	74.0	-27.1	Peak	Vertical
	11888.5	34.6	11.8	46.4	74.0	-27.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	138
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	34.2	8.8	43.0	68.2	-25.2	Peak	Horizontal
*	9763.5	33.9	11.4	45.3	68.2	-22.9	Peak	Horizontal
	10945.0	34.5	13.1	47.6	74.0	-26.4	Peak	Horizontal
	12041.5	34.2	12.0	46.2	74.0	-27.8	Peak	Horizontal
	11591.0	34.2	12.6	46.8	74.0	-27.2	Peak	Vertical
	12135.0	34.2	11.9	46.1	74.0	-27.9	Peak	Vertical
*	17082.0	38.9	15.7	54.6	68.2	-13.6	Peak	Vertical
*	17328.5	41.6	16.7	58.3	68.2	-9.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Temperature	26°C
Test Engineer	Alex Ma	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/11/10
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	155
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8854.0	34.4	9.1	43.5	68.2	-24.7	Peak	Horizontal
*	9814.5	33.5	11.6	45.1	68.2	-23.1	Peak	Horizontal
	11004.5	34.9	13.0	47.9	74.0	-26.1	Peak	Horizontal
	12033.0	34.6	12.0	46.6	74.0	-27.4	Peak	Horizontal
*	8658.5	33.7	8.8	42.5	68.2	-25.7	Peak	Vertical
*	9670.0	34.4	10.9	45.3	68.2	-22.9	Peak	Vertical
	10979.0	34.7	13.0	47.7	74.0	-26.3	Peak	Vertical
	11582.5	34.6	12.6	47.2	74.0	-26.8	Peak	Vertical

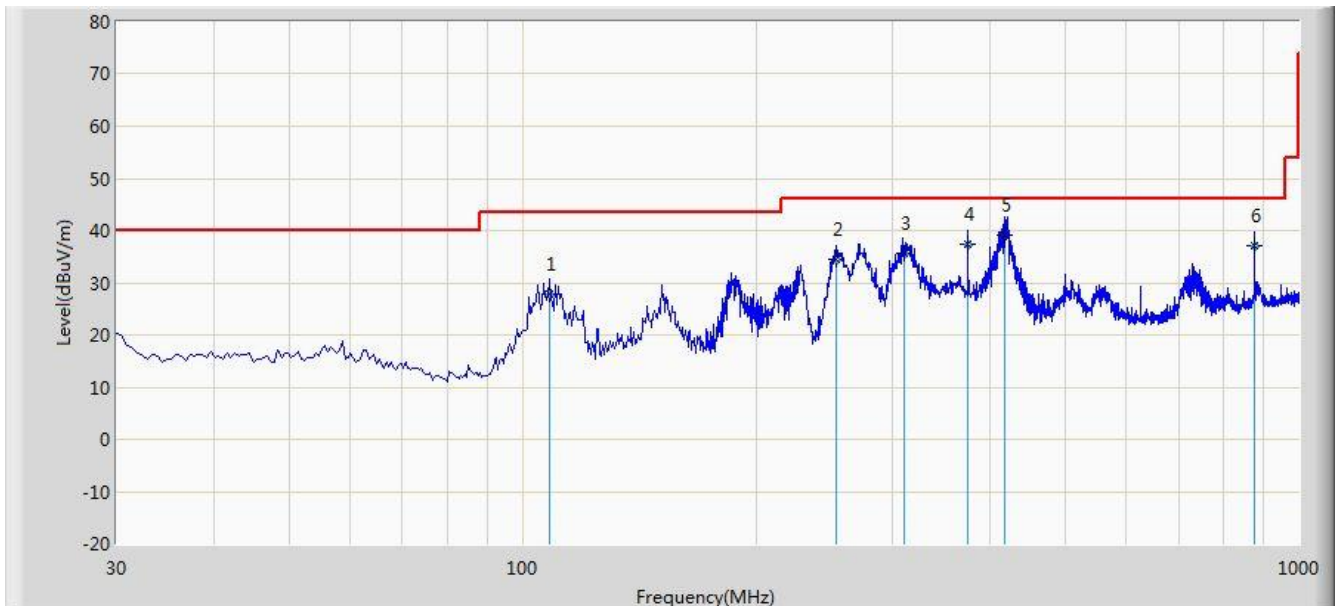
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Worst Case of Radiated Emission below 1GHz:

Site: AC1	Time: 2017/11/16 - 00:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Alex Ma
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Worst Case Mode: Transmit by 802.11n-HT20 at Channel 5785MHz	



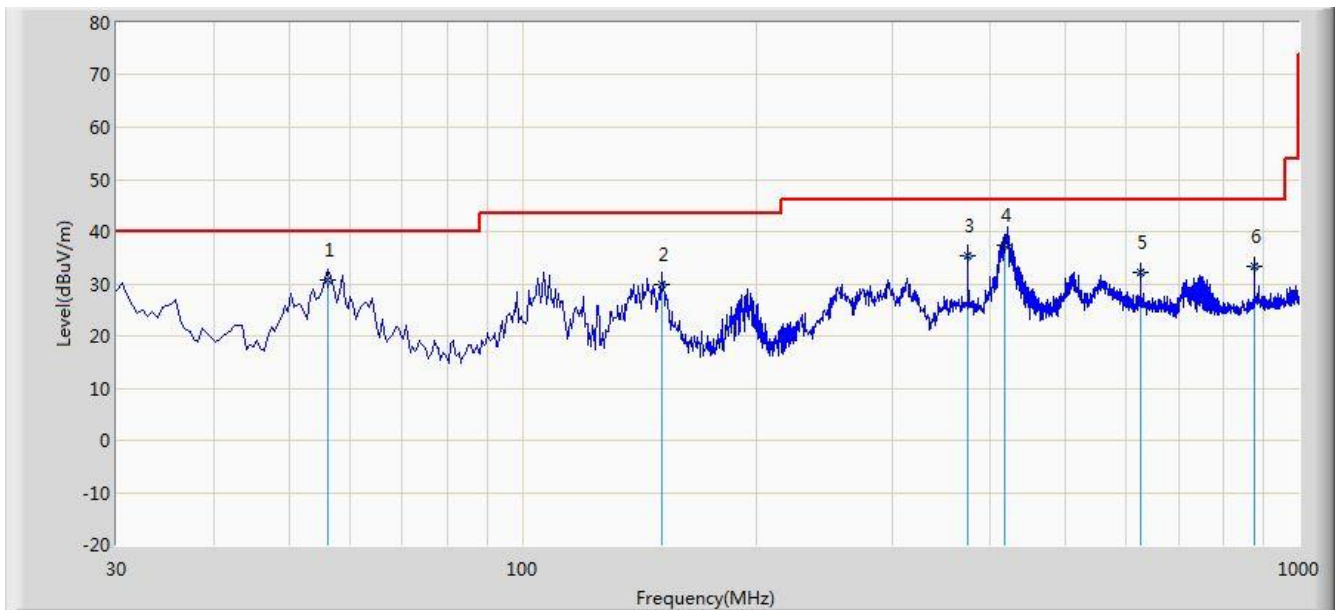
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			108.570	27.860	16.020	-15.640	43.500	11.840	QP
2			253.140	34.453	21.450	-11.547	46.000	13.003	QP
3			309.600	35.607	21.050	-10.393	46.000	14.557	QP
4			374.587	37.256	21.260	-8.744	46.000	15.996	QP
5			417.515	39.200	22.240	-6.800	46.000	16.959	QP
6			875.460	37.074	13.060	-8.926	46.000	24.014	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

Site: AC1	Time: 2017/11/16 - 00:37
Limit: FCC_Part15.109_RE(3m)_Class B	Engineer: Alex Ma
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Worst Case Mode: Transmit by 802.11n-HT20 at Channel 5785MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			56.190	30.653	17.020	-9.347	40.000	13.633	QP
2			151.220	29.814	14.630	-13.686	43.500	15.184	QP
3			374.560	35.355	19.360	-10.645	46.000	15.995	QP
4			418.250	37.452	20.470	-8.548	46.000	16.982	QP
5			625.150	32.047	11.020	-13.953	46.000	21.027	QP
6			875.630	33.269	9.250	-12.731	46.000	24.019	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

7.9. Radiated Restricted Band Edge Measurement

7.9.1. Test Limit

For 15.205 Requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

For 15.407(b) Requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

Refer to KDB 789033 D02v01r04 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with

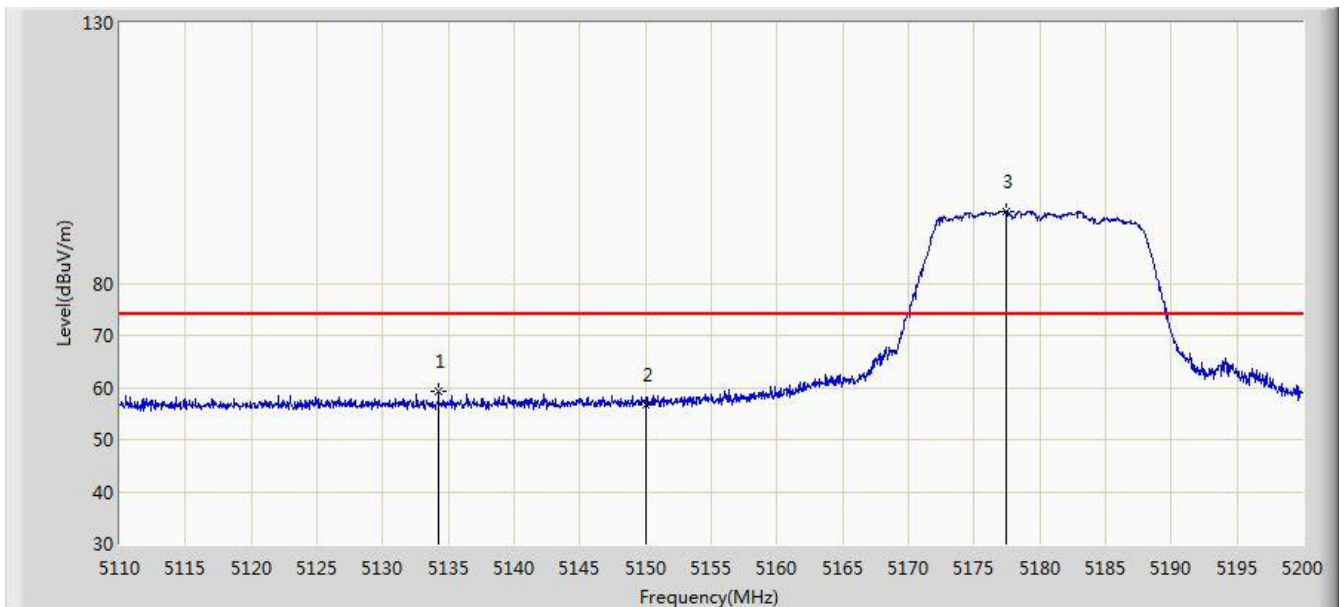
both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.9.2.Test Result

Site: AC1	Time: 2017/11/03 - 03:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

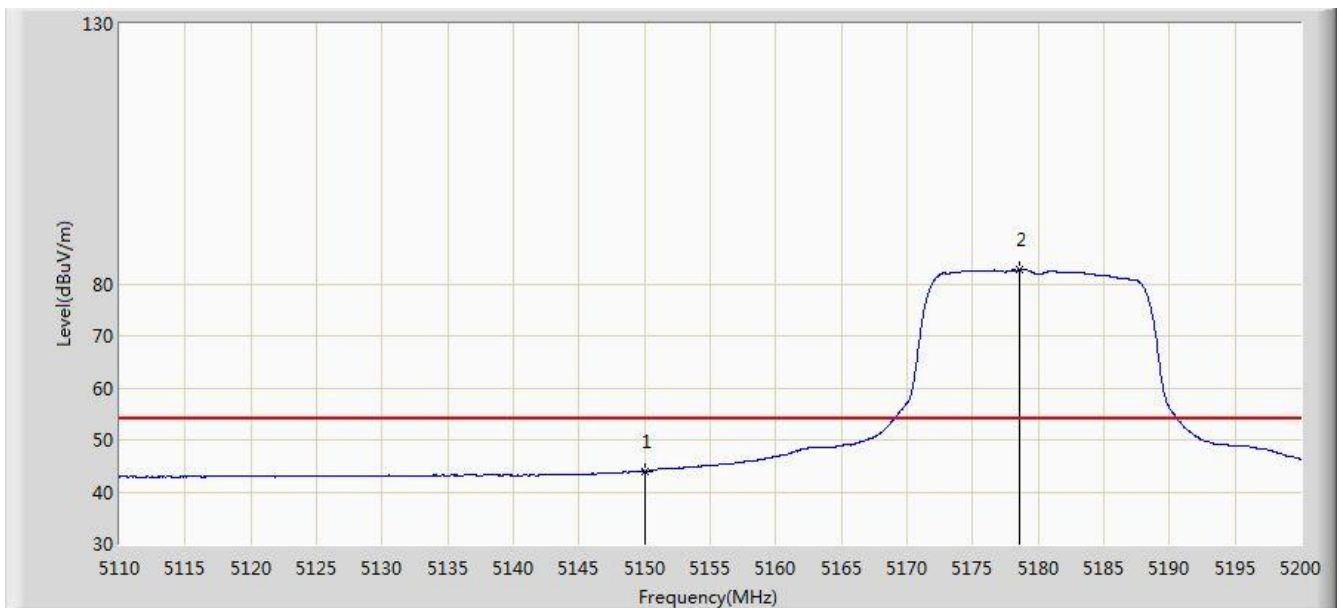


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5134.255	59.184	55.875	-14.816	74.000	3.309	PK
2			5150.000	56.794	53.485	-17.206	74.000	3.309	PK
3		*	5177.410	93.901	90.626	N/A	N/A	3.276	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 03:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

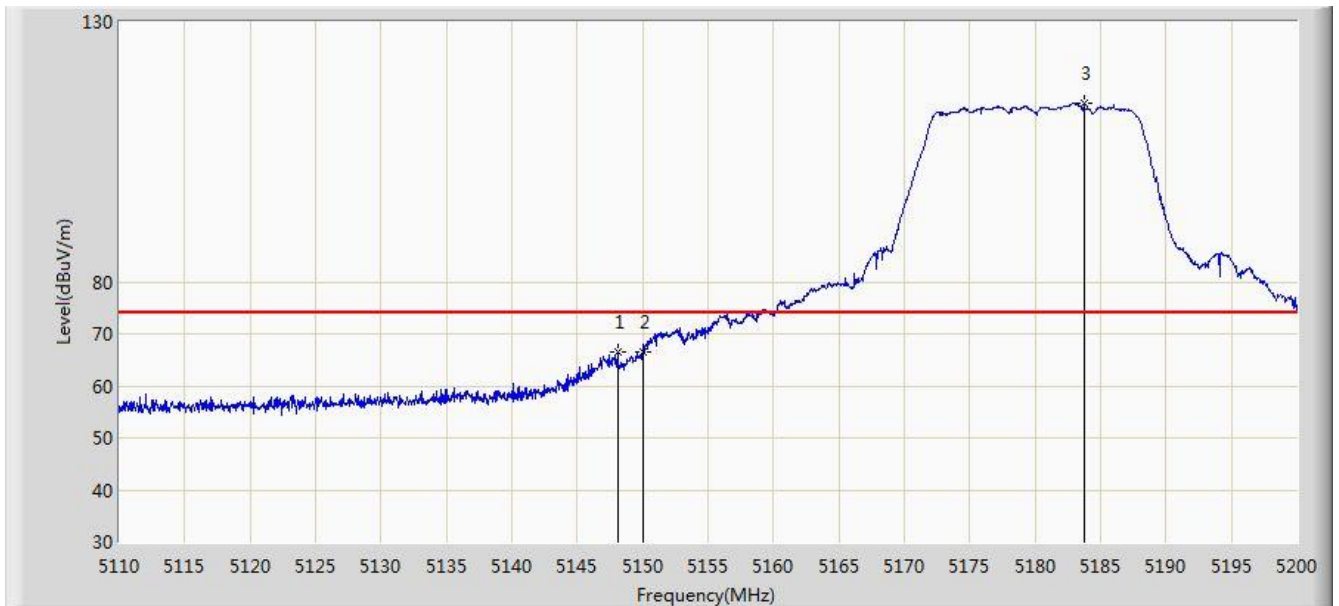


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	44.025	40.716	-9.975	54.000	3.309	AV
2		*	5178.535	82.662	79.388	N/A	N/A	3.274	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 03:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

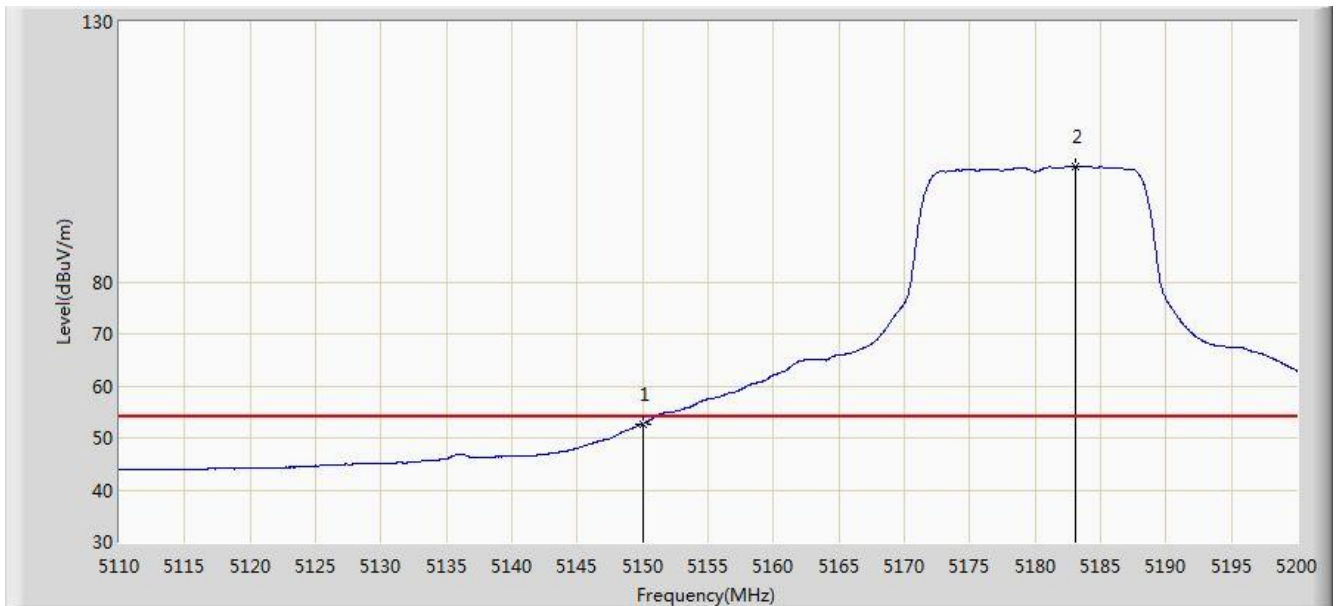


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.070	66.483	63.174	-7.517	74.000	3.309	PK
2			5150.000	66.466	63.157	-7.534	74.000	3.309	PK
3		*	5183.710	114.489	111.220	N/A	N/A	3.269	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 03:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

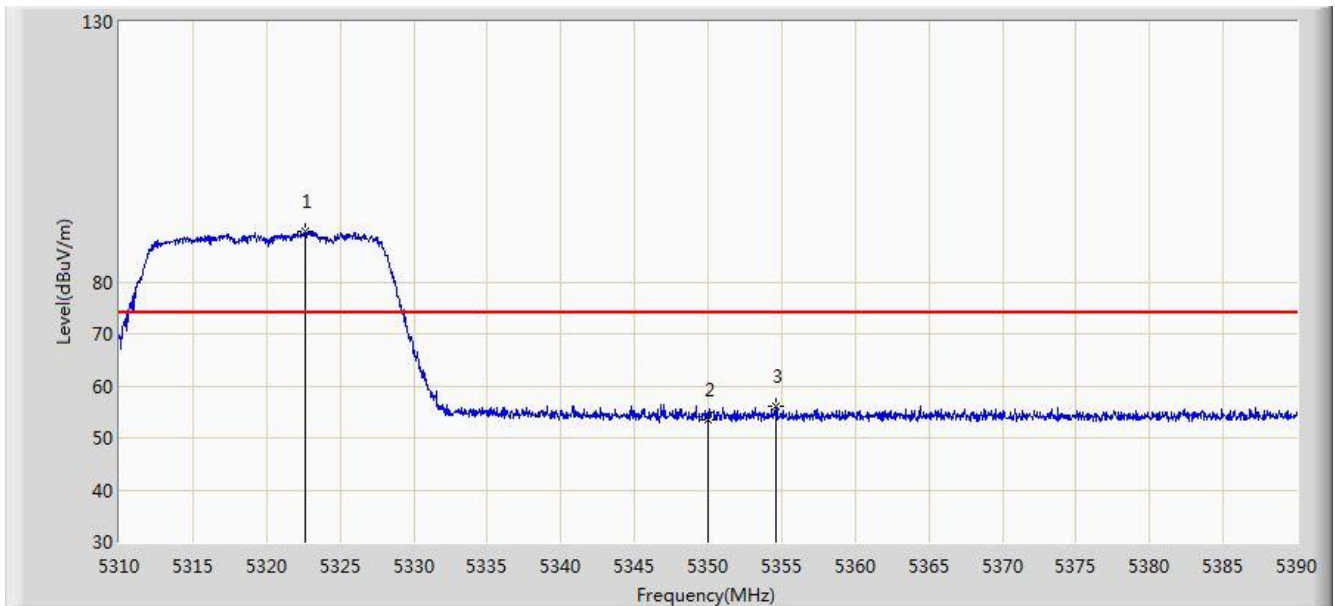


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.684	49.375	-1.316	54.000	3.309	AV
2		*	5183.125	102.210	98.940	N/A	N/A	3.269	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 0	

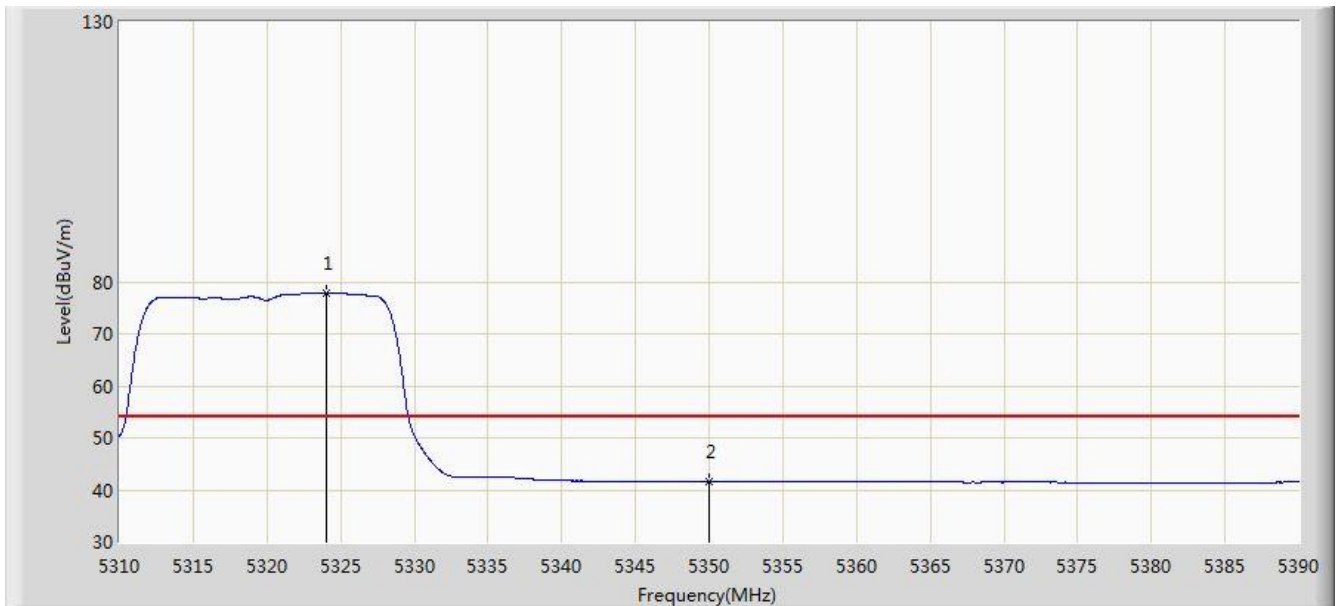


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5322.600	89.581	86.513	N/A	N/A	3.068	PK
2			5350.000	53.490	50.458	-20.510	74.000	3.032	PK
3			5354.600	56.021	52.993	-17.979	74.000	3.027	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 0	

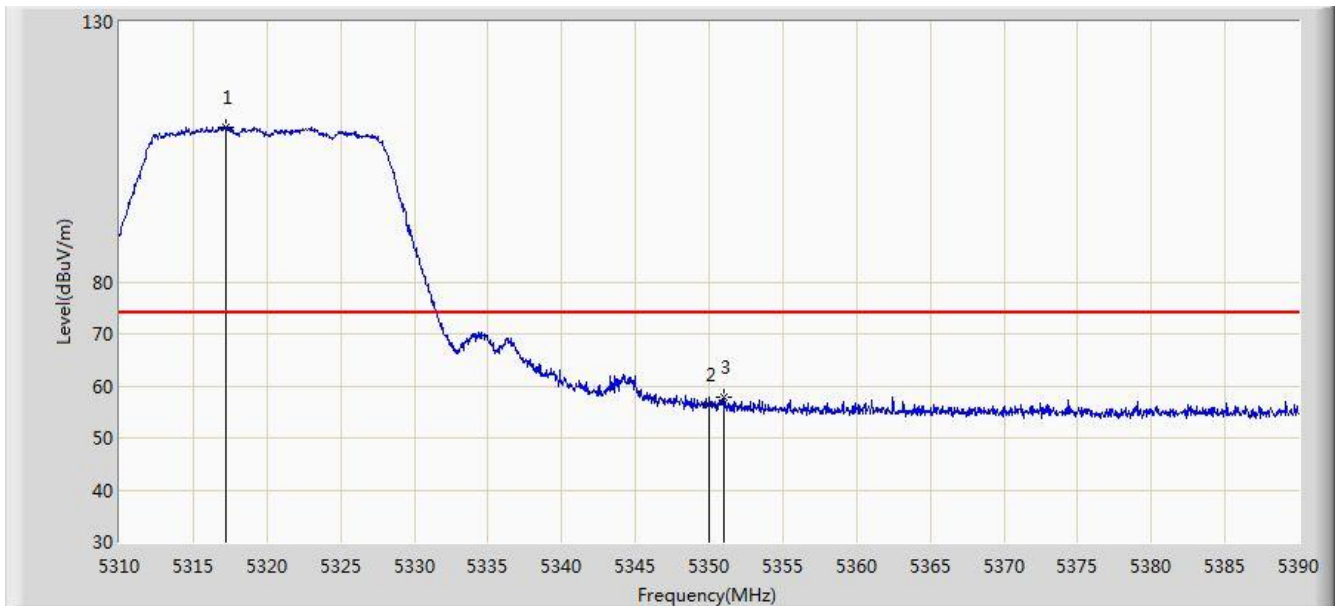


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5324.000	77.800	74.735	N/A	N/A	3.065	AV
2			5350.000	41.611	38.579	-12.389	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 0	

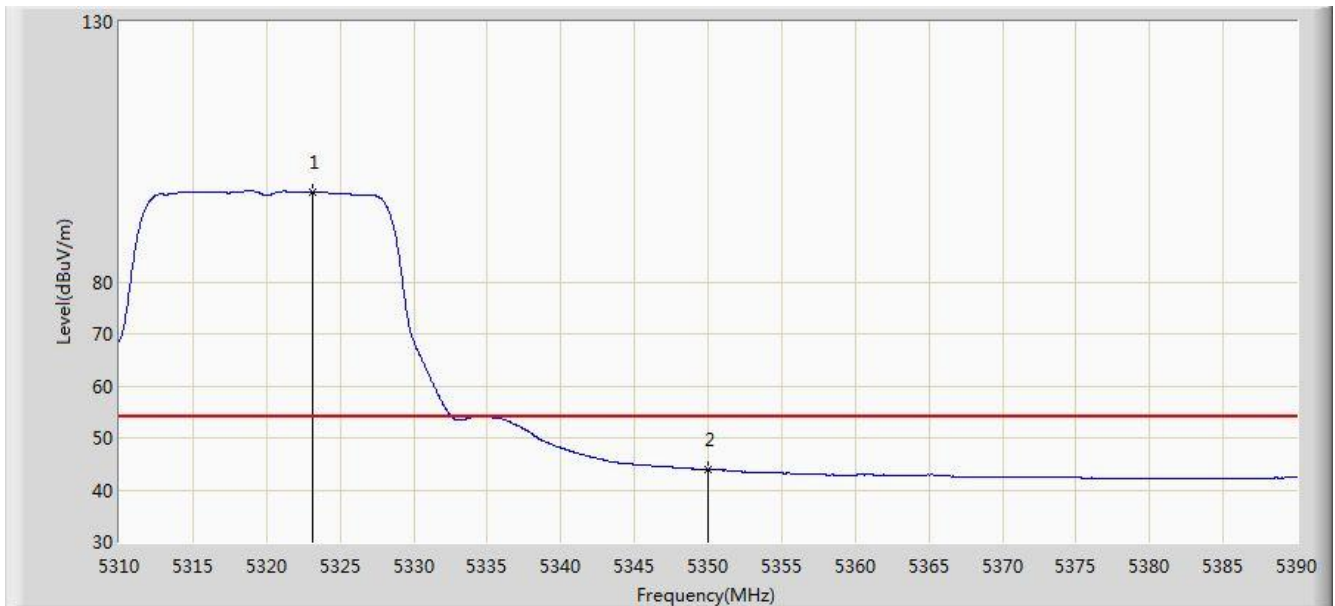


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5317.240	109.693	106.614	N/A	N/A	3.079	PK
2			5350.000	56.313	53.281	-17.687	74.000	3.032	PK
3			5351.000	57.707	54.676	-16.293	74.000	3.032	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 0	

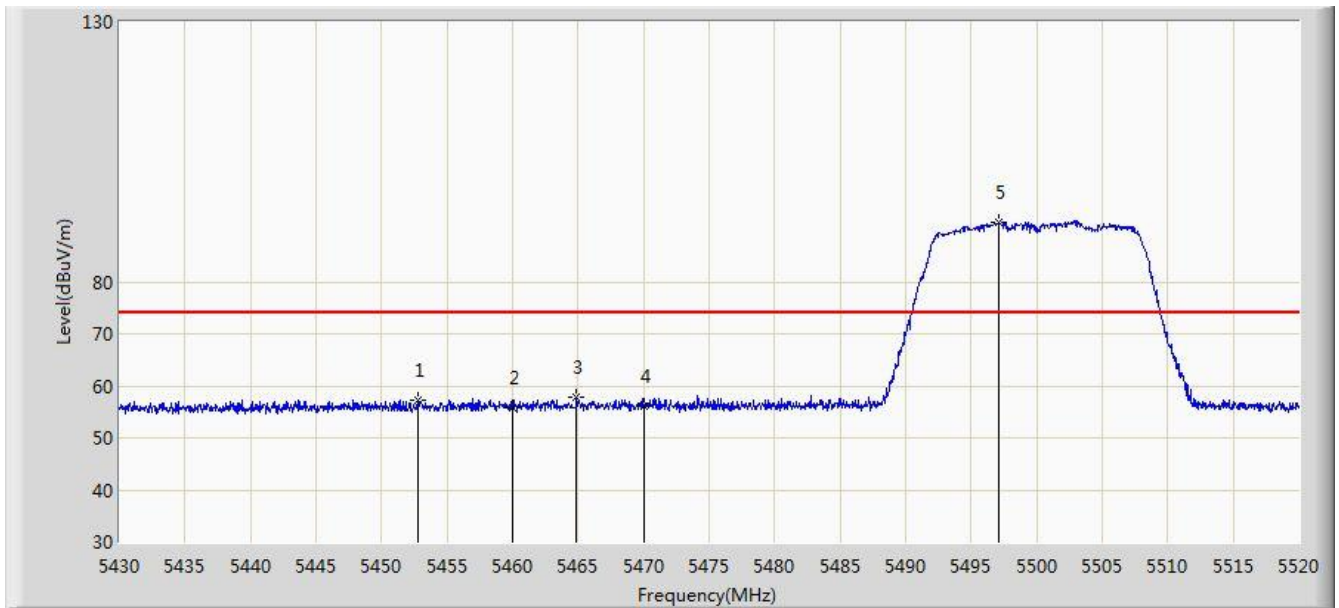


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5323.160	97.357	94.290	N/A	N/A	3.067	AV
2			5350.000	43.920	40.888	-10.080	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:08
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 0	

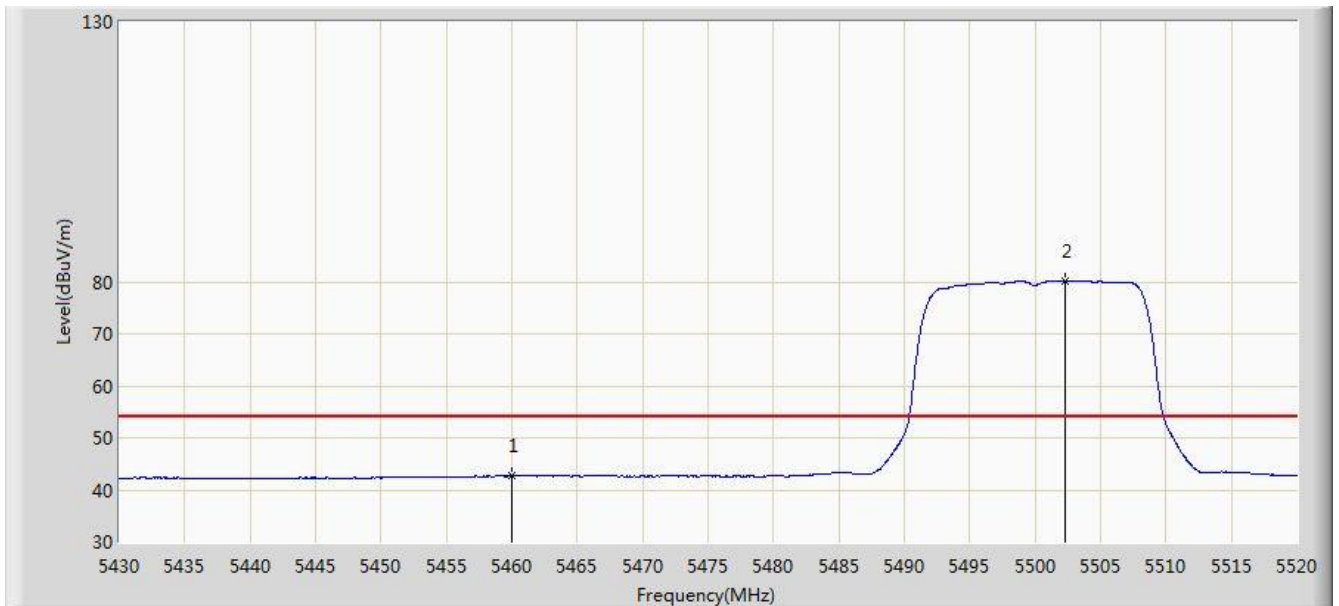


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5452.815	57.238	53.798	-16.762	74.000	3.440	PK
2			5460.000	55.913	52.431	-18.087	74.000	3.482	PK
3			5464.875	57.714	54.204	-16.286	74.000	3.510	PK
4			5470.000	56.059	52.520	-17.941	74.000	3.539	PK
5		*	5497.050	91.395	87.866	N/A	N/A	3.530	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 0	

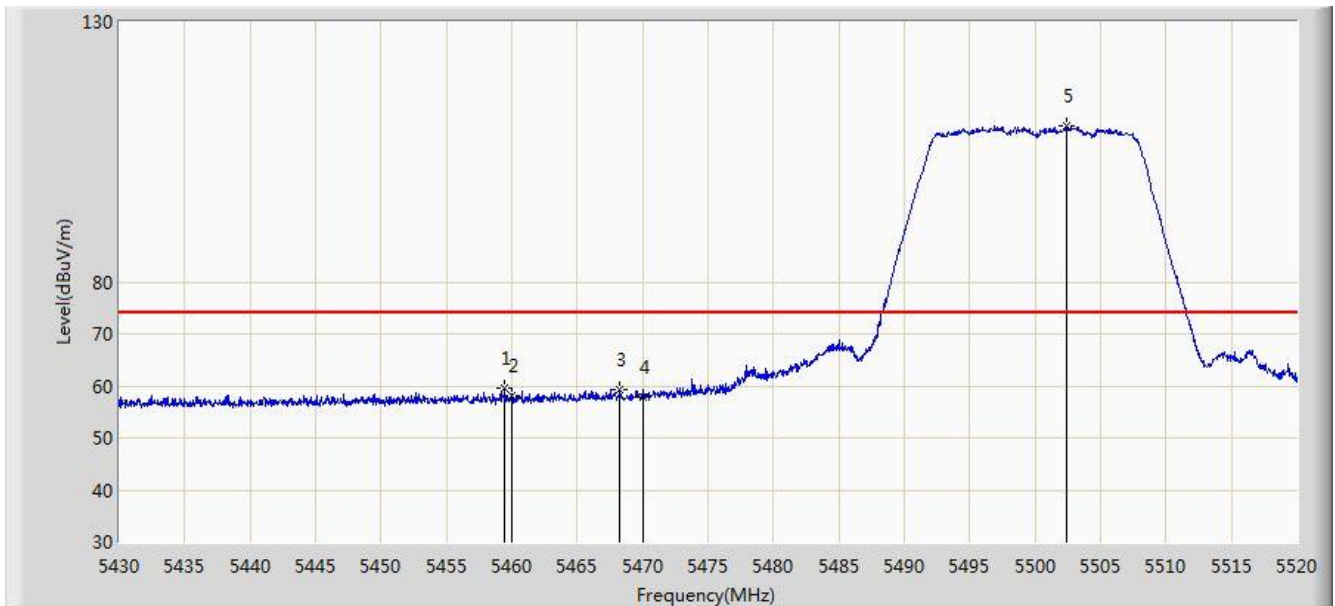


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.655	39.173	-11.345	54.000	3.482	AV
2		*	5502.315	80.176	76.652	N/A	N/A	3.524	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 0	

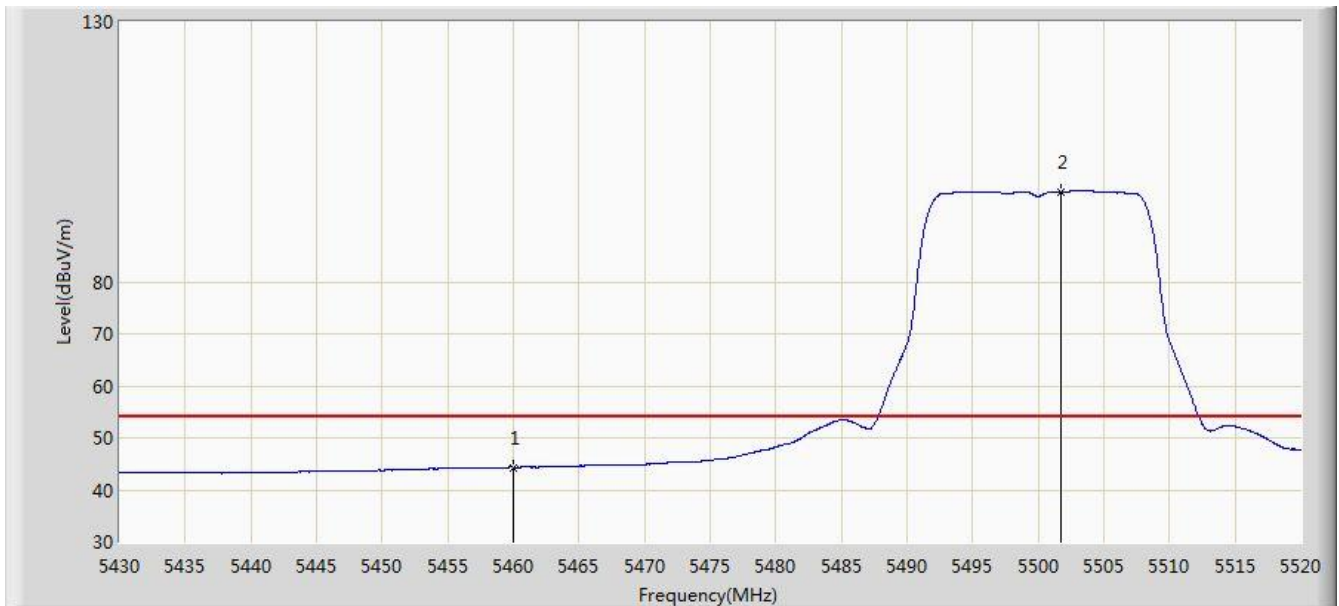


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5459.475	59.562	56.083	-14.438	74.000	3.478	PK
2			5460.000	58.099	54.617	-15.901	74.000	3.482	PK
3			5468.250	59.365	55.836	-14.635	74.000	3.529	PK
4			5470.000	57.952	54.413	-16.048	74.000	3.539	PK
5		*	5502.405	109.953	106.429	N/A	N/A	3.524	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 0	

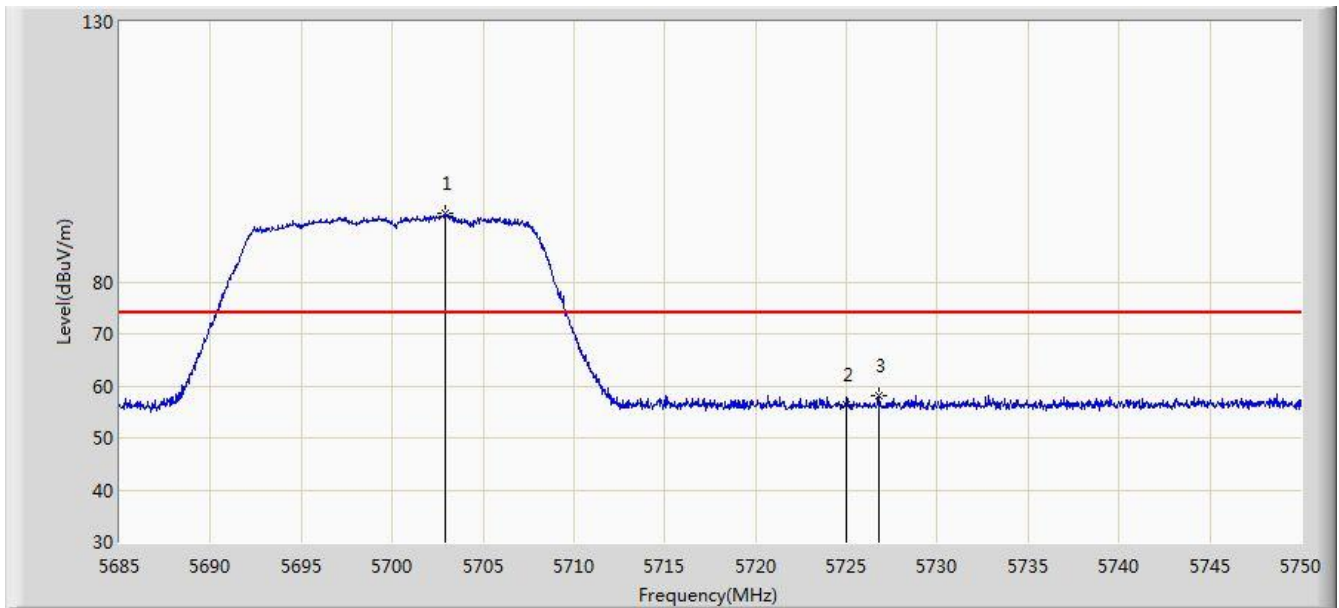


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	44.340	40.858	-9.660	54.000	3.482	AV
2		*	5501.775	97.255	93.731	N/A	N/A	3.524	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 0	

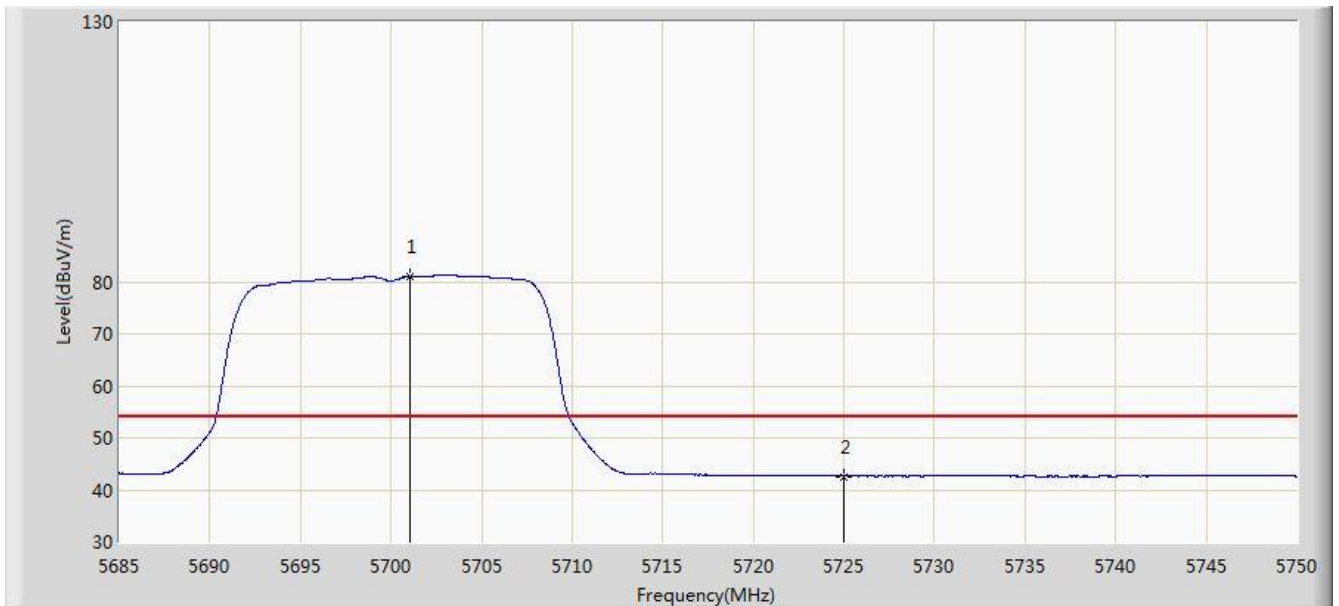


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5702.940	93.254	89.531	N/A	N/A	3.723	PK
2			5725.000	56.329	52.538	-17.671	74.000	3.791	PK
3			5726.763	58.130	54.334	-15.870	74.000	3.796	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 0	

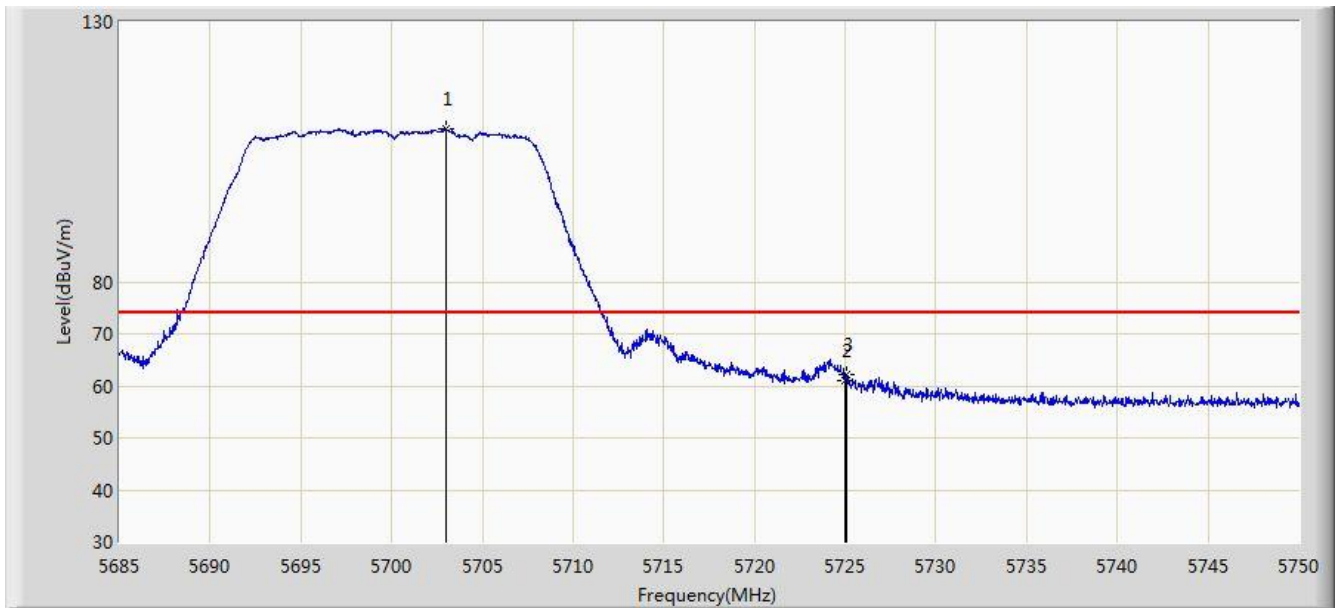


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.055	81.092	77.371	N/A	N/A	3.720	AV
2			5725.000	42.605	38.814	-11.395	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 0	

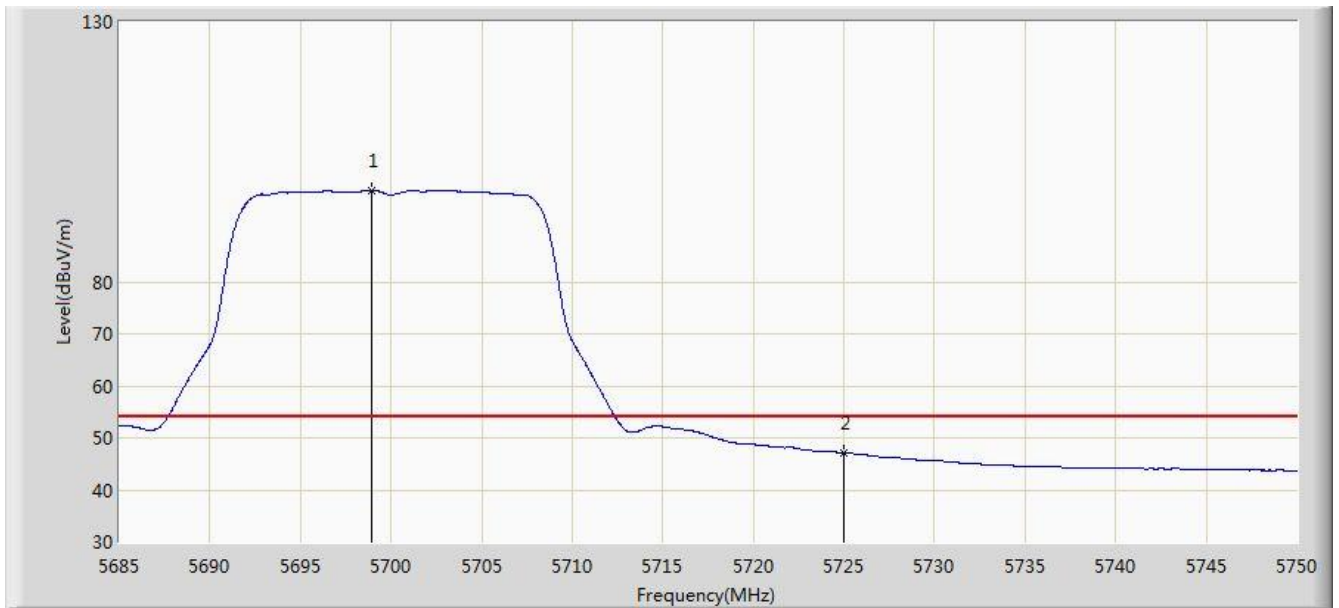


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5703.005	109.356	105.632	N/A	N/A	3.723	PK
2			5725.000	61.102	57.311	-12.898	74.000	3.791	PK
3			5725.040	62.105	58.314	-11.895	74.000	3.791	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 0	

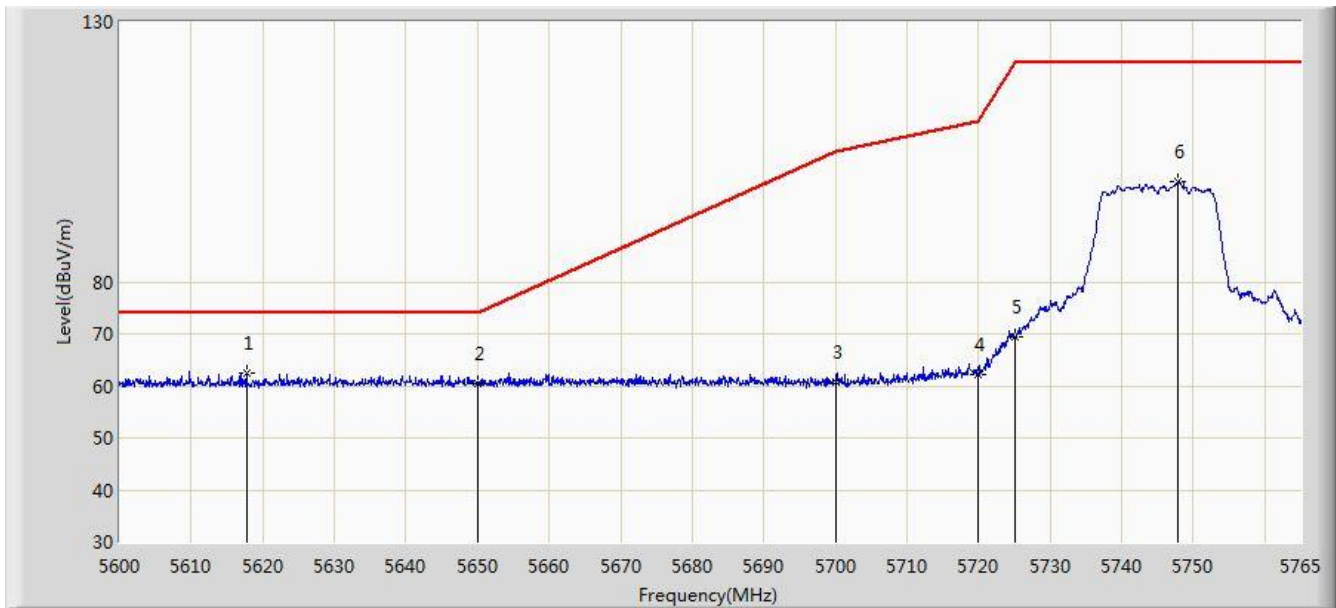


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5698.910	97.592	93.875	N/A	N/A	3.717	AV
2			5725.000	47.086	43.295	-6.914	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:05
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 0	

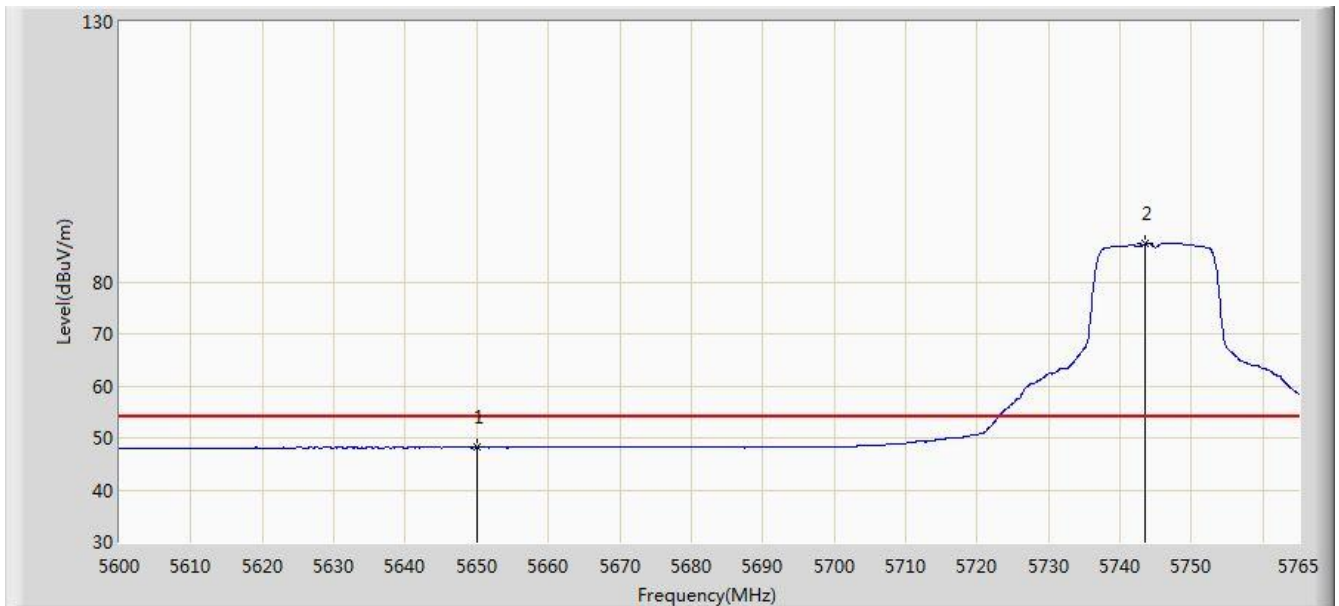


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5617.737	62.531	58.996	-11.469	74.000	3.534	PK
2			5650.000	60.370	56.743	-13.630	74.000	3.627	PK
3			5700.000	60.658	56.939	-44.542	105.200	3.719	PK
4			5720.000	62.104	58.328	-48.696	110.800	3.776	PK
5			5725.000	69.499	65.708	-52.701	122.200	3.791	PK
6			5747.840	99.215	95.352	N/A	N/A	3.864	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:08
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 0	

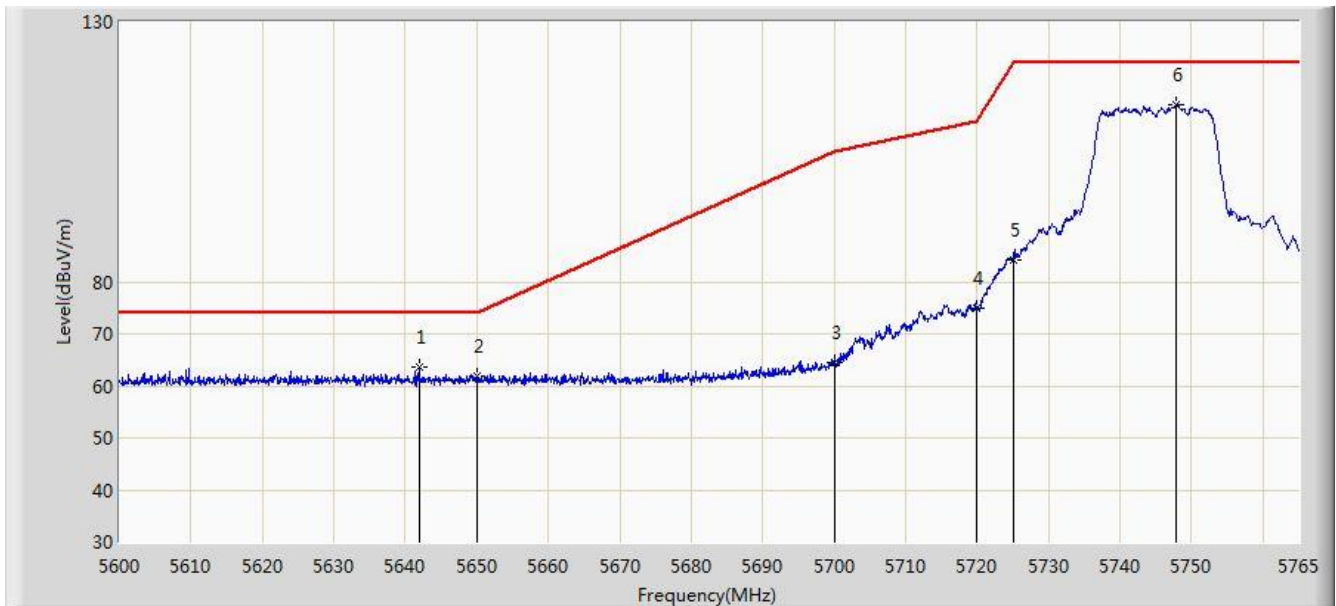


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	48.189	44.562	-5.811	54.000	3.627	AV
2		*	5743.550	87.310	83.463	N/A	N/A	3.847	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:04
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 0	

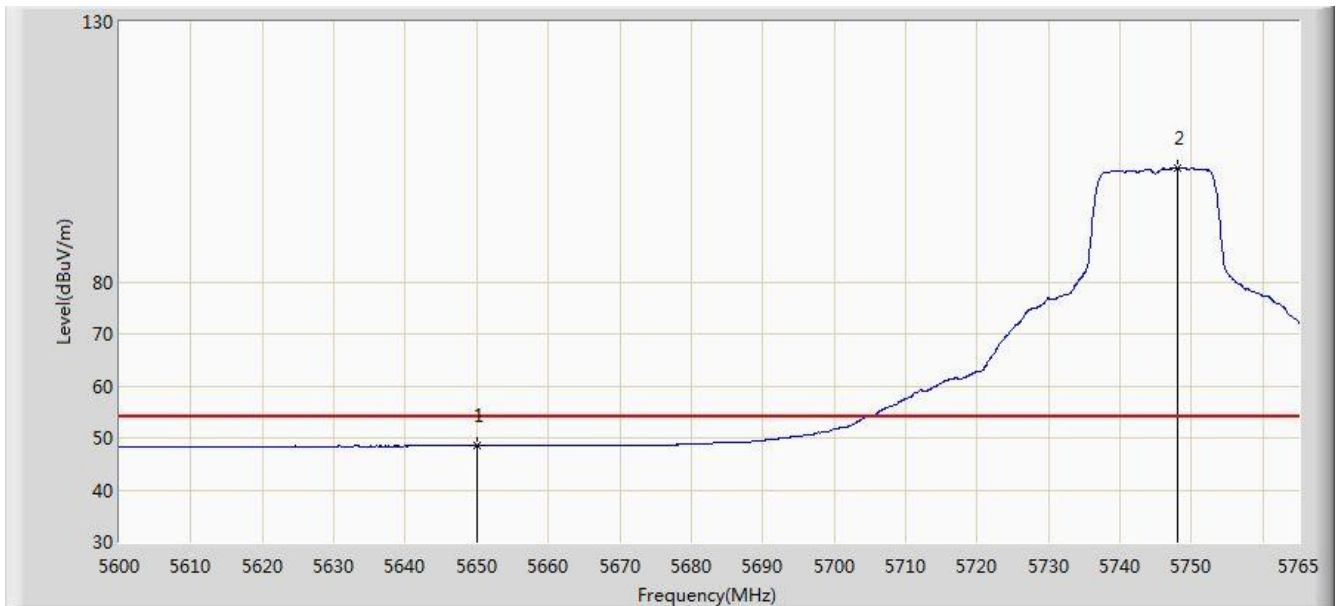


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5641.910	63.738	60.122	-10.262	74.000	3.616	PK
2			5650.000	61.840	58.213	-12.160	74.000	3.627	PK
3			5700.000	64.367	60.648	-40.833	105.200	3.719	PK
4			5720.000	74.987	71.211	-35.813	110.800	3.776	PK
5			5725.000	84.297	80.506	-37.903	122.200	3.791	PK
6		*	5747.757	114.190	110.327	N/A	N/A	3.863	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 0	

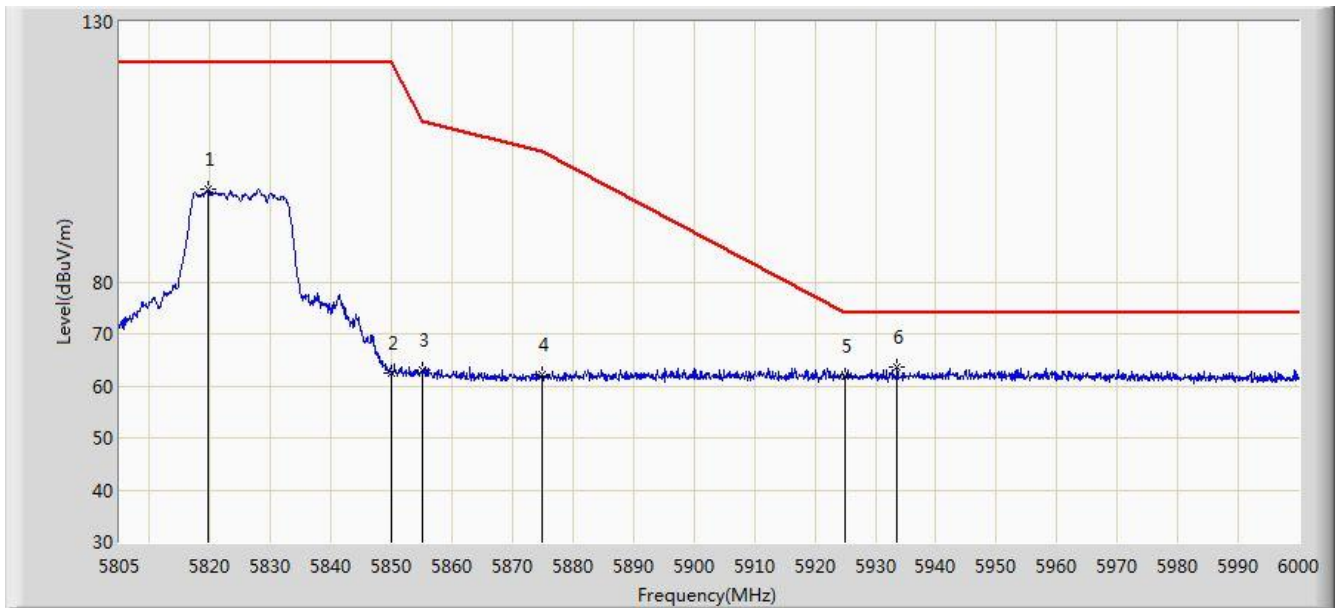


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	48.500	44.873	-5.500	54.000	3.627	AV
2		*	5748.005	101.935	98.071	N/A	N/A	3.864	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:13
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 0	

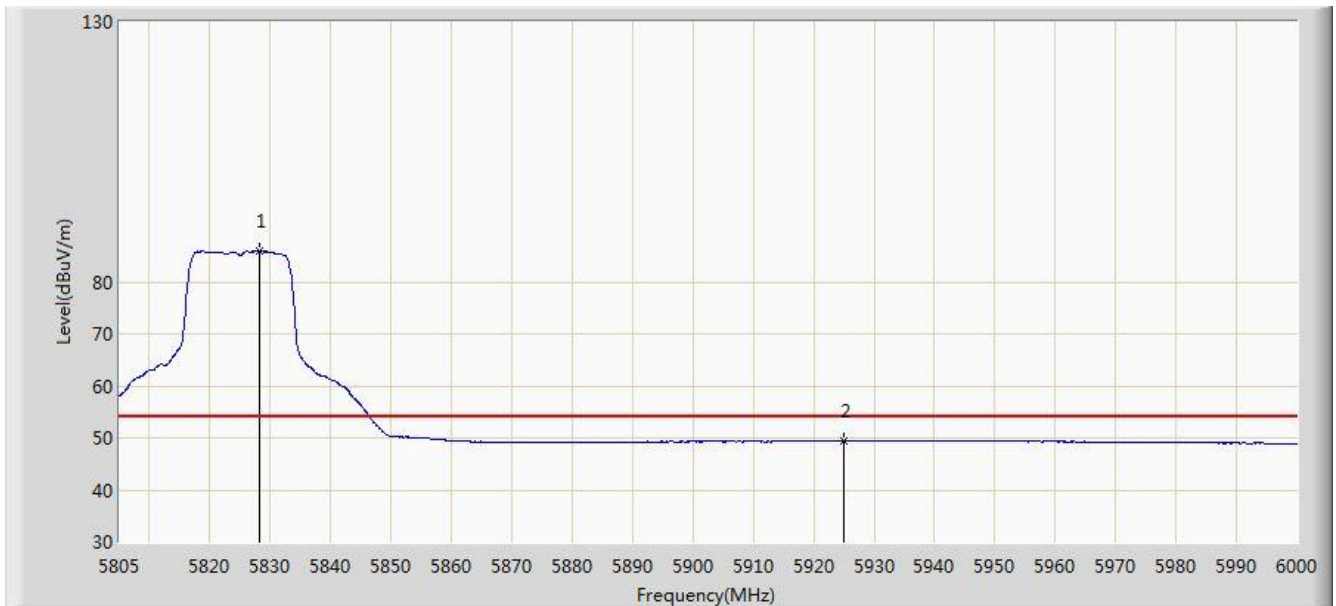


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5819.723	97.886	93.893	N/A	N/A	3.994	PK
2			5850.000	62.455	58.398	-59.745	122.200	4.058	PK
3			5855.000	62.974	58.914	-47.826	110.800	4.060	PK
4			5875.000	62.094	57.989	-43.106	105.200	4.105	PK
5			5925.000	61.826	57.573	-12.174	74.000	4.254	PK
6		*	5933.603	63.571	59.303	-10.429	74.000	4.267	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 0	

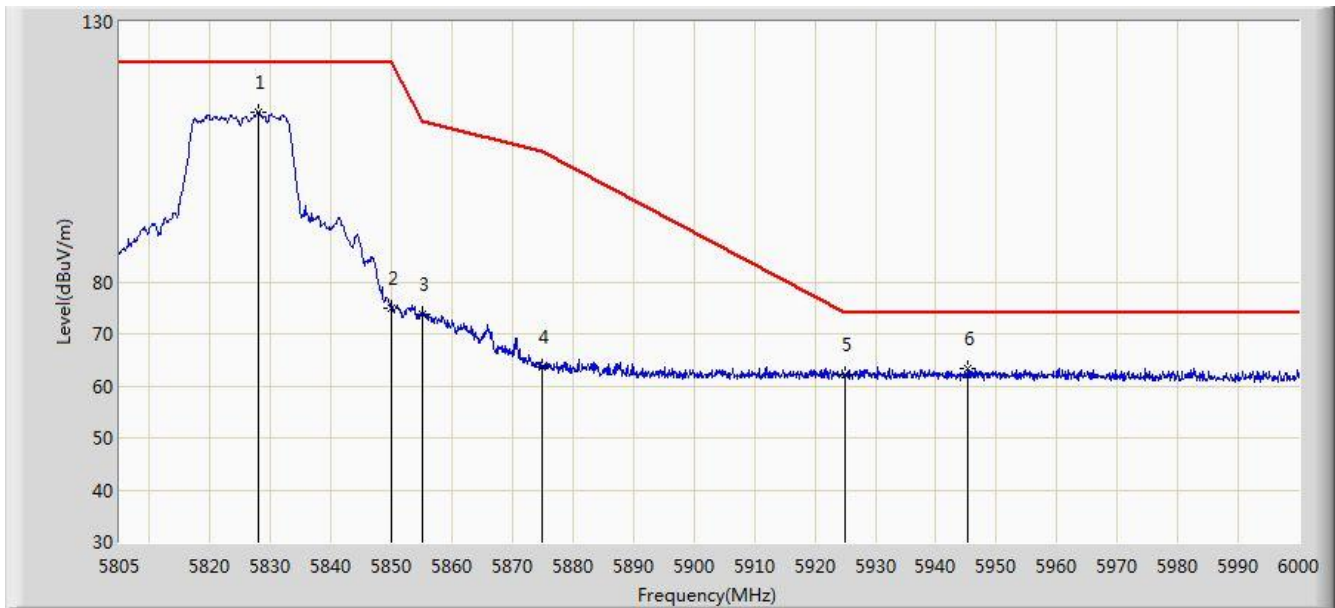


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5828.205	86.017	82.004	N/A	N/A	4.013	AV
2			5925.000	49.332	45.079	-4.668	54.000	4.254	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:09
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 0	

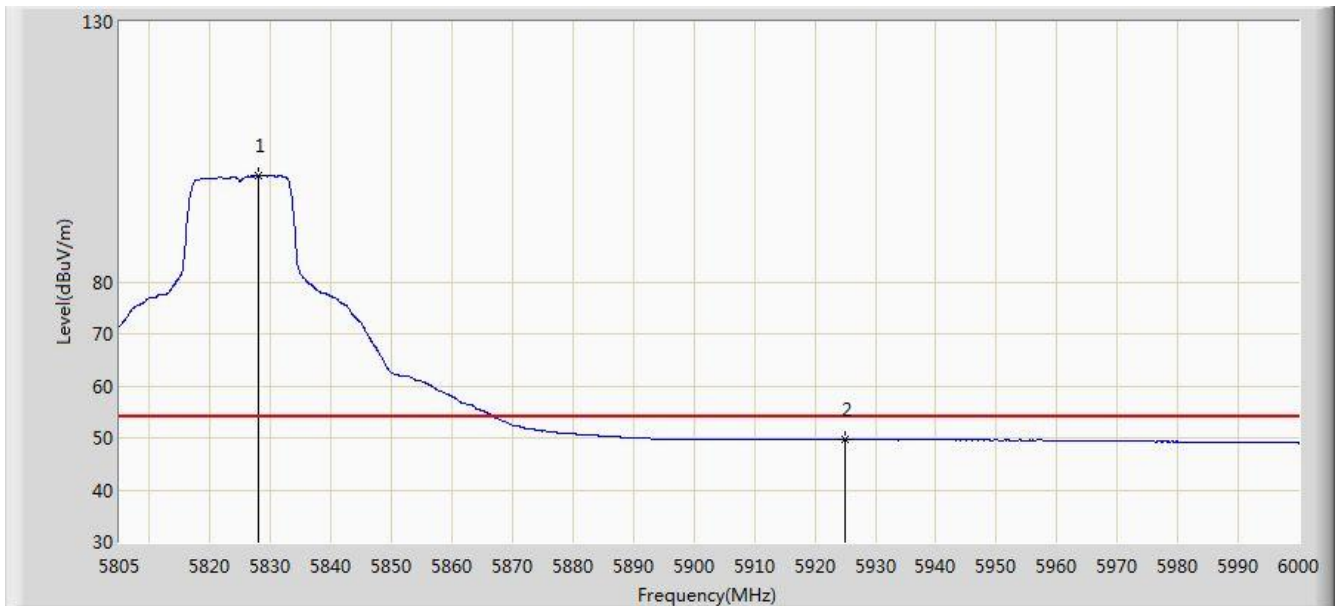


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5828.010	112.672	108.660	N/A	N/A	4.012	PK
2			5850.000	75.035	70.978	-47.165	122.200	4.058	PK
3			5855.000	73.812	69.752	-36.988	110.800	4.060	PK
4			5875.000	63.480	59.375	-41.720	105.200	4.105	PK
5			5925.000	62.044	57.791	-11.956	74.000	4.254	PK
6			5945.303	63.399	59.127	-10.601	74.000	4.272	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 0	

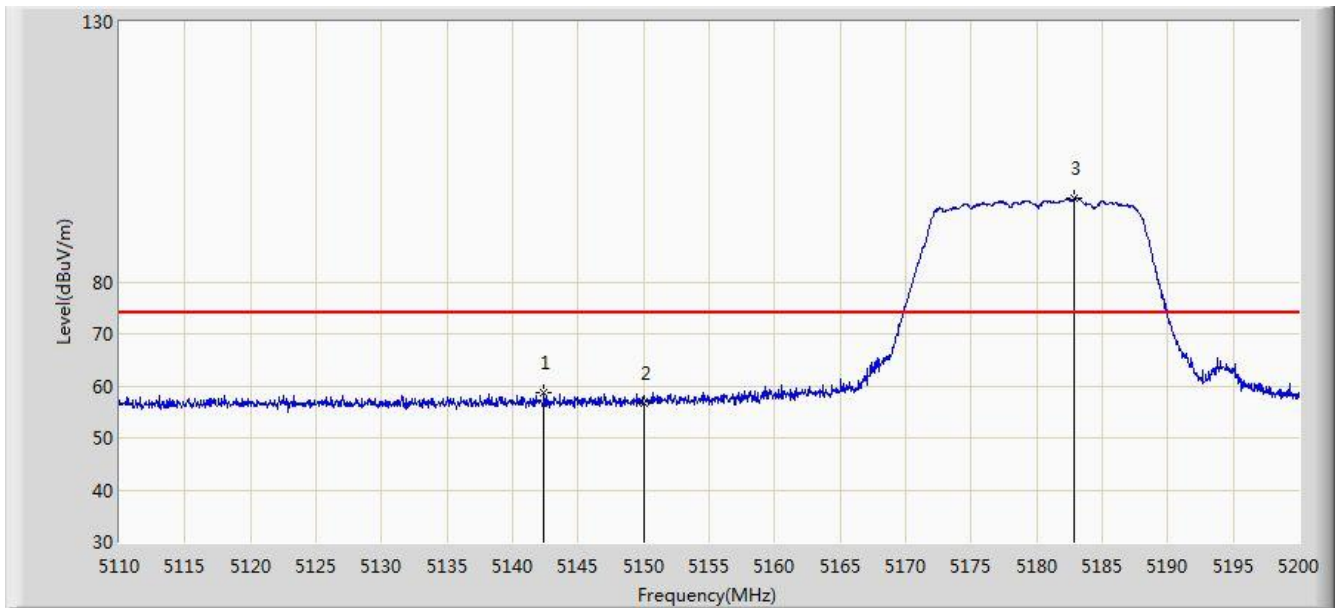


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5828.010	100.519	96.507	N/A	N/A	4.012	AV
2			5925.000	49.665	45.412	-4.335	54.000	4.254	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

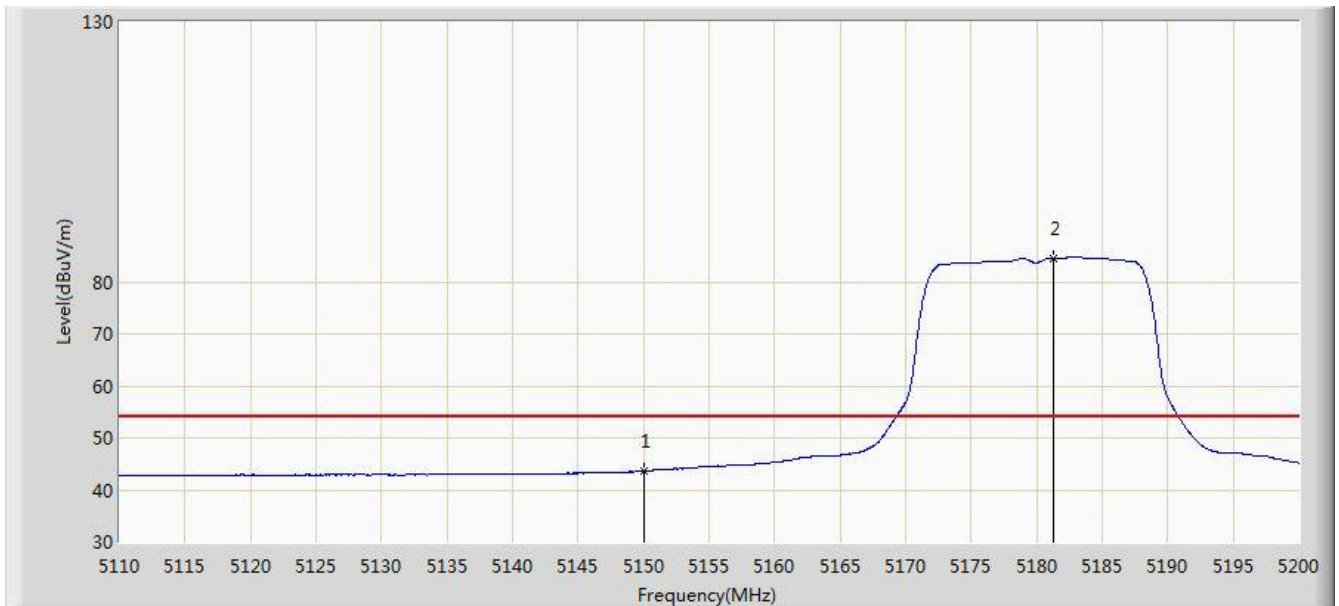


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5142.400	58.826	55.517	-15.174	74.000	3.310	PK
2			5150.000	56.786	53.477	-17.214	74.000	3.309	PK
3		*	5182.855	96.177	92.907	N/A	N/A	3.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

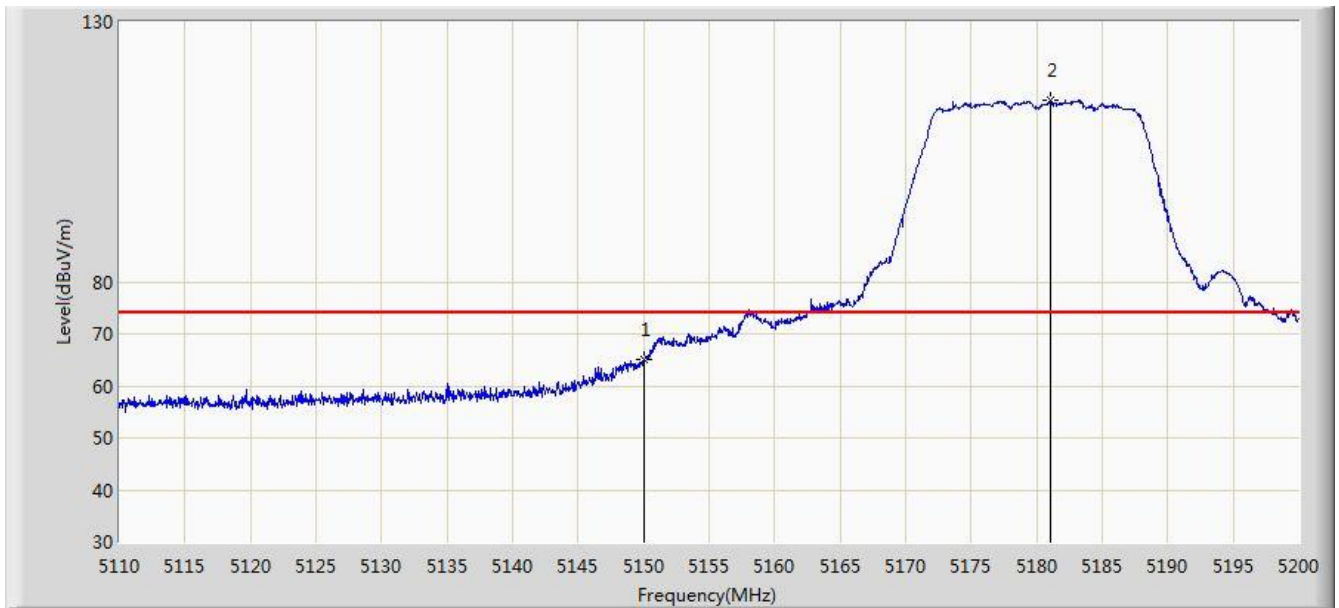


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.658	40.349	-10.342	54.000	3.309	AV
2		*	5181.325	84.606	81.334	N/A	N/A	3.272	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

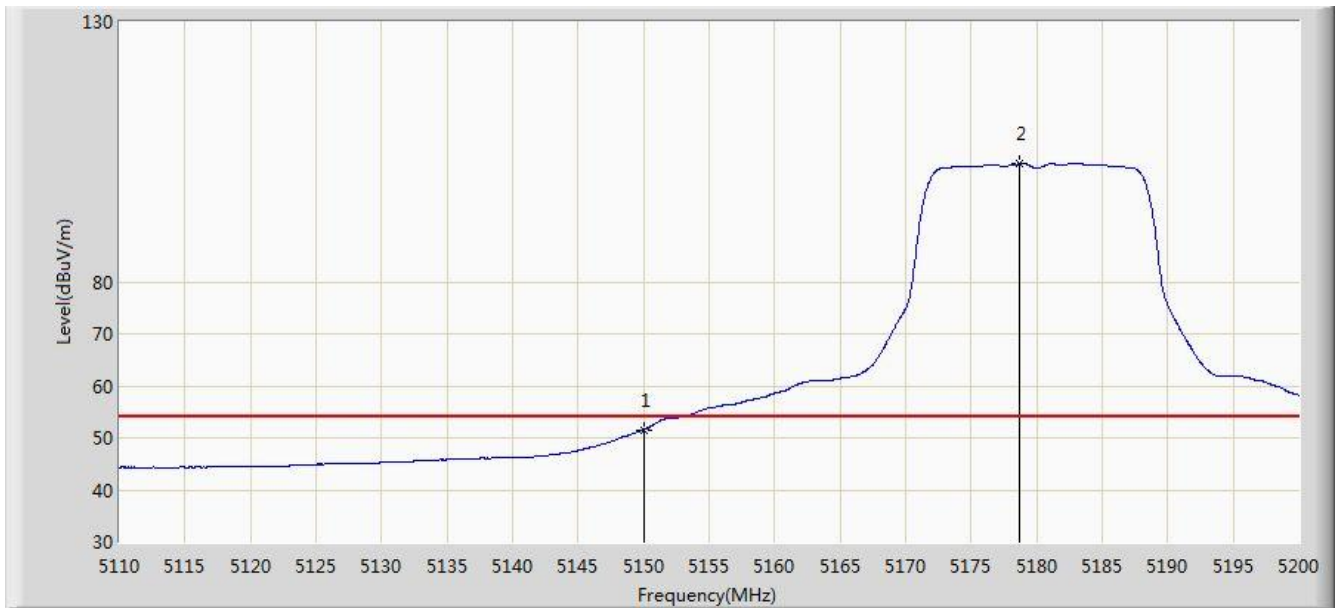


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	65.119	61.810	-8.881	74.000	3.309	PK
2		*	5181.055	114.963	111.691	N/A	N/A	3.272	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

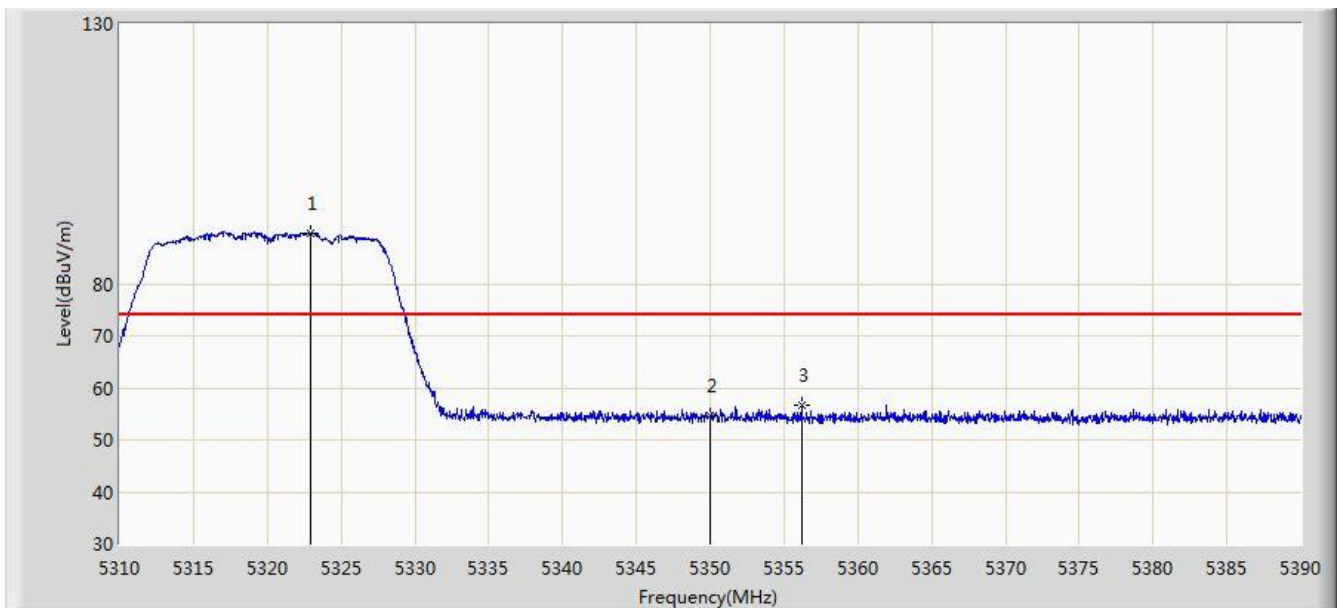


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	51.592	48.283	-2.408	54.000	3.309	AV
2		*	5178.670	102.673	99.399	N/A	N/A	3.274	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1	

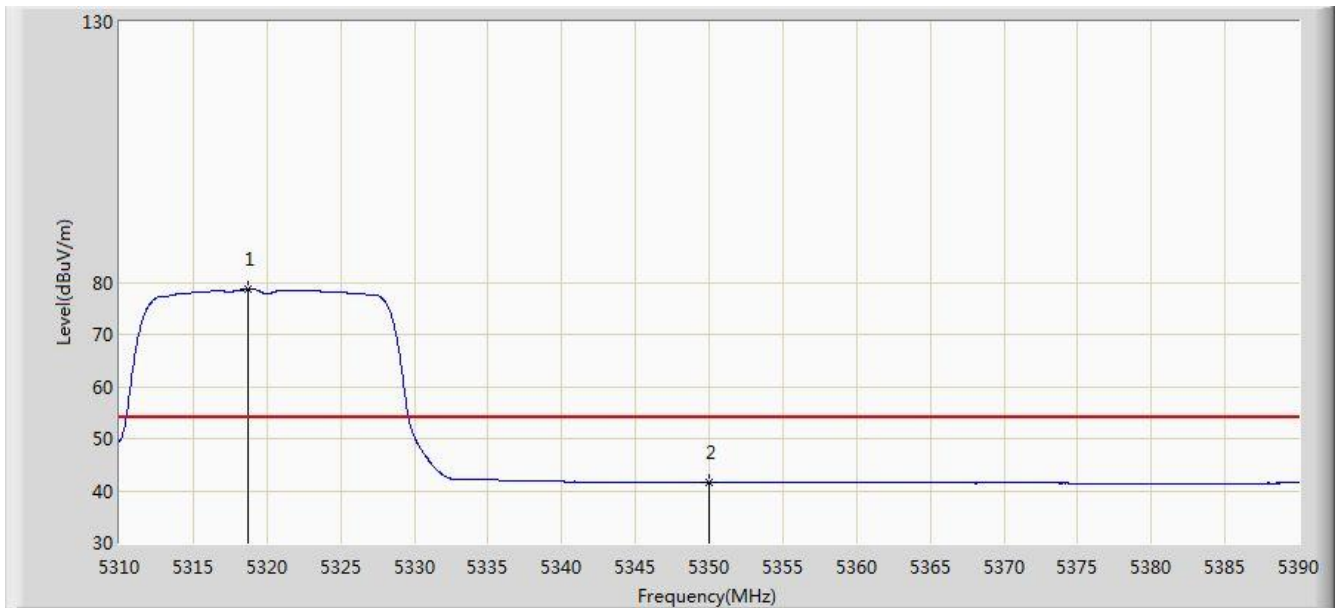


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5322.920	89.848	86.781	N/A	N/A	3.067	PK
2			5350.000	54.761	51.729	-19.239	74.000	3.032	PK
3			5356.200	56.622	53.596	-17.378	74.000	3.026	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1	

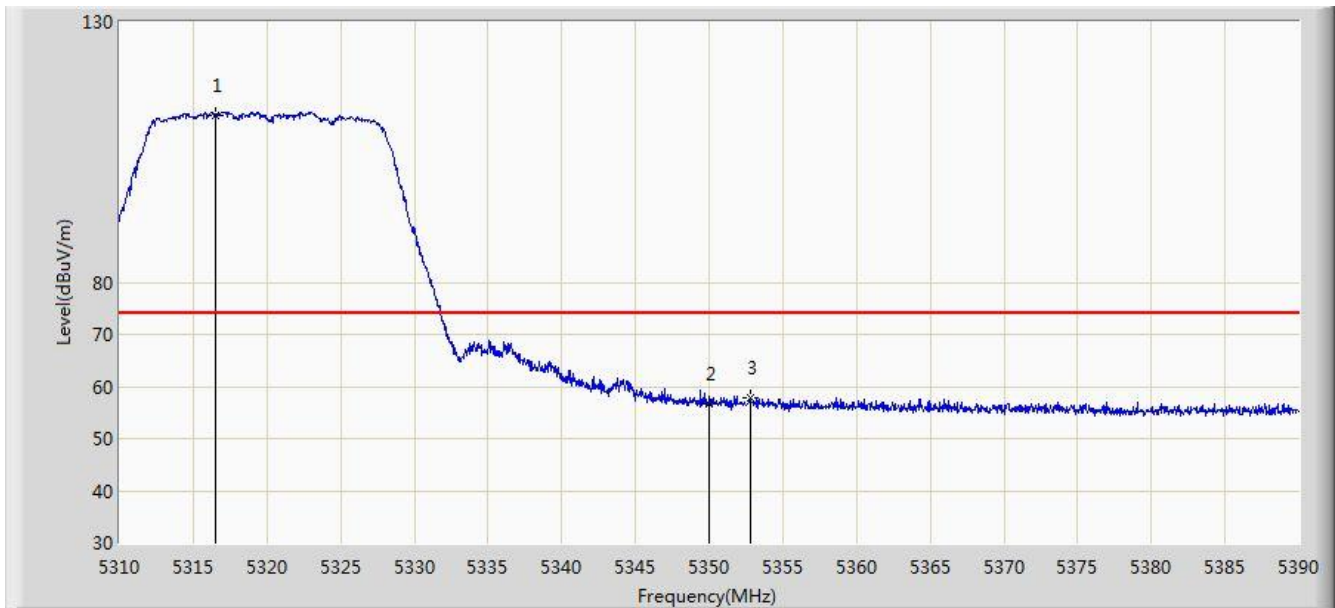


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5318.680	78.674	75.598	N/A	N/A	3.075	AV
2			5350.000	41.634	38.602	-12.366	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1	

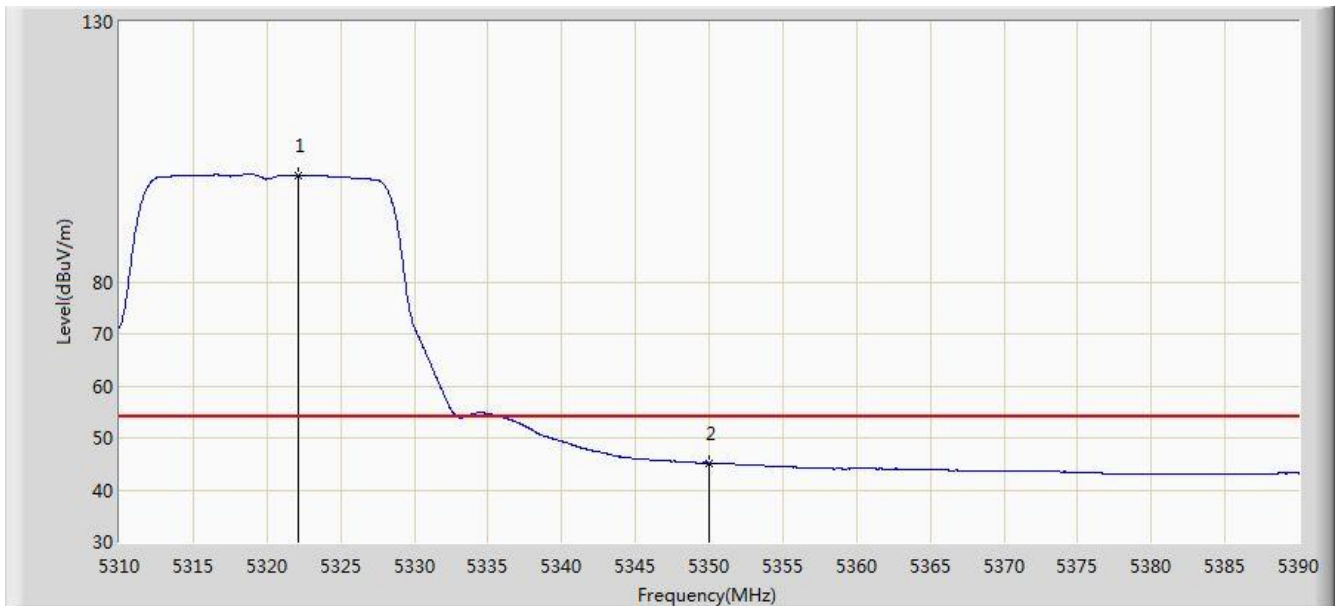


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5316.560	112.092	109.012	N/A	N/A	3.081	PK
2			5350.000	56.703	53.671	-17.297	74.000	3.032	PK
3			5352.760	57.815	54.785	-16.185	74.000	3.030	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1	

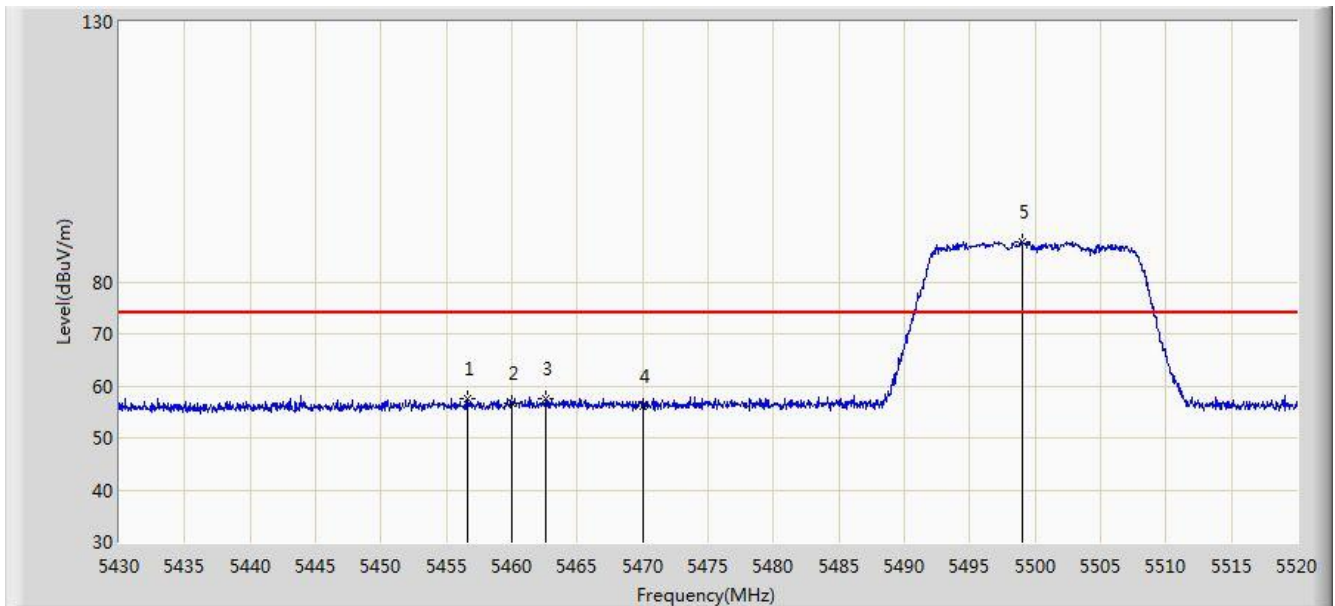


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5322.160	100.469	97.400	N/A	N/A	3.069	AV
2			5350.000	45.165	42.133	-8.835	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:25
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1	

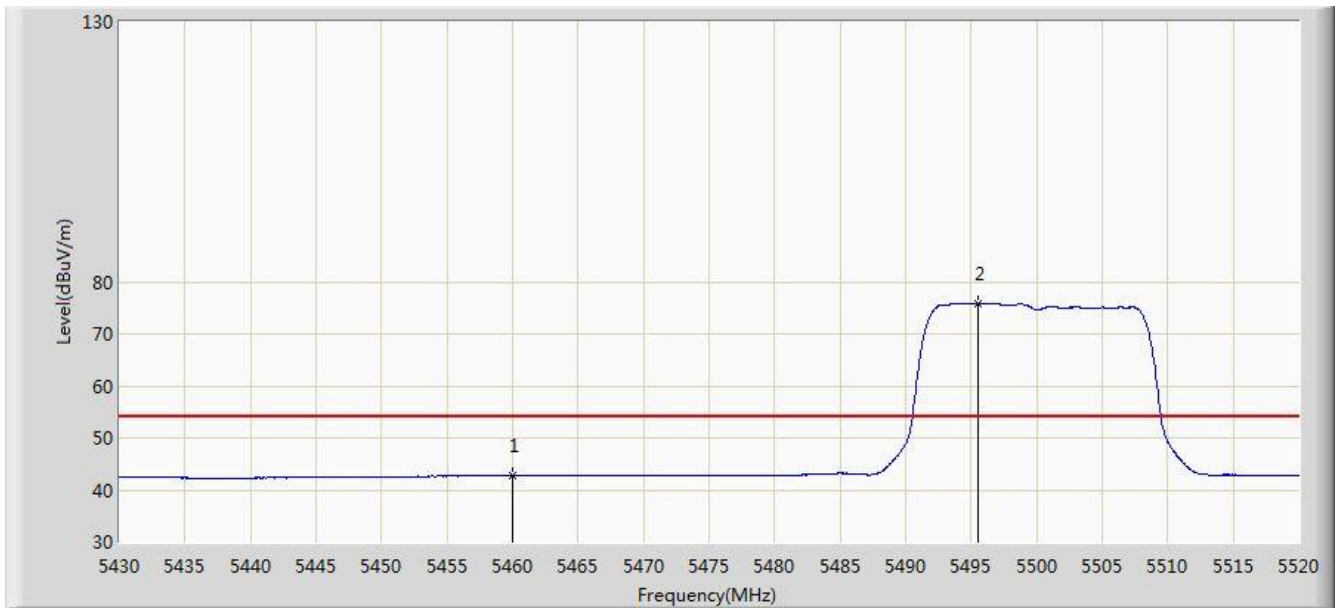


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5456.640	57.656	54.194	-16.344	74.000	3.462	PK
2			5460.000	56.756	53.274	-17.244	74.000	3.482	PK
3			5462.625	57.647	54.150	-16.353	74.000	3.497	PK
4			5470.000	56.154	52.615	-17.846	74.000	3.539	PK
5		*	5499.030	87.642	84.115	N/A	N/A	3.528	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1	

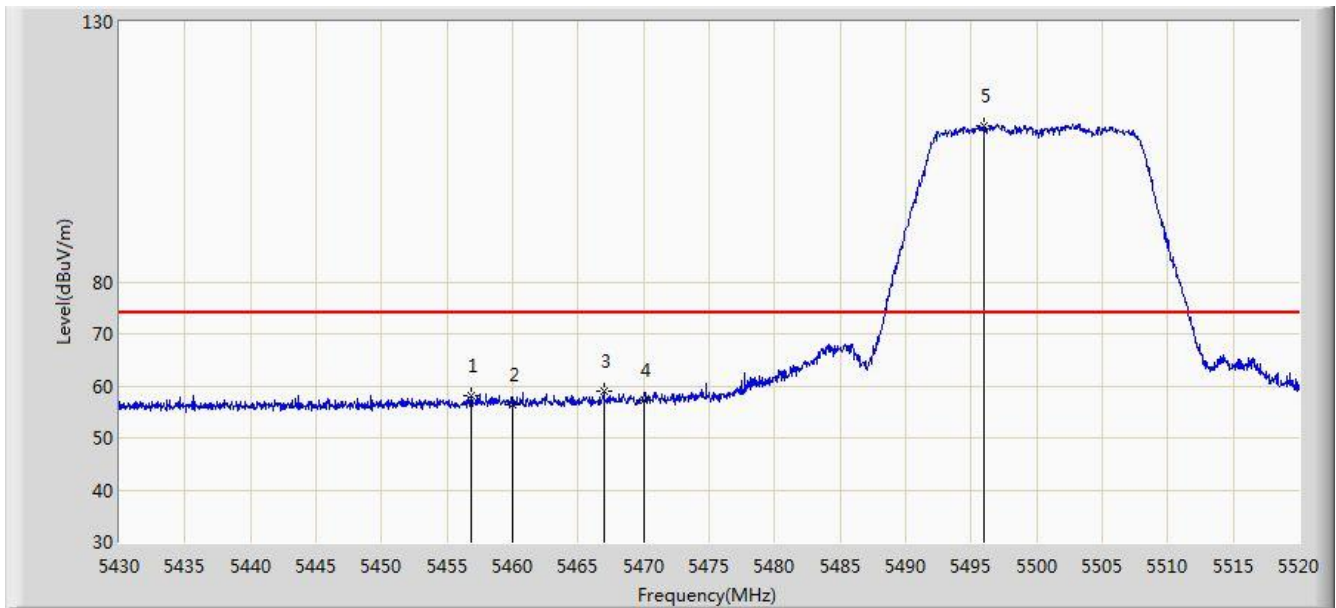


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.749	39.267	-11.251	54.000	3.482	AV
2		*	5495.475	75.823	72.292	N/A	N/A	3.531	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1	

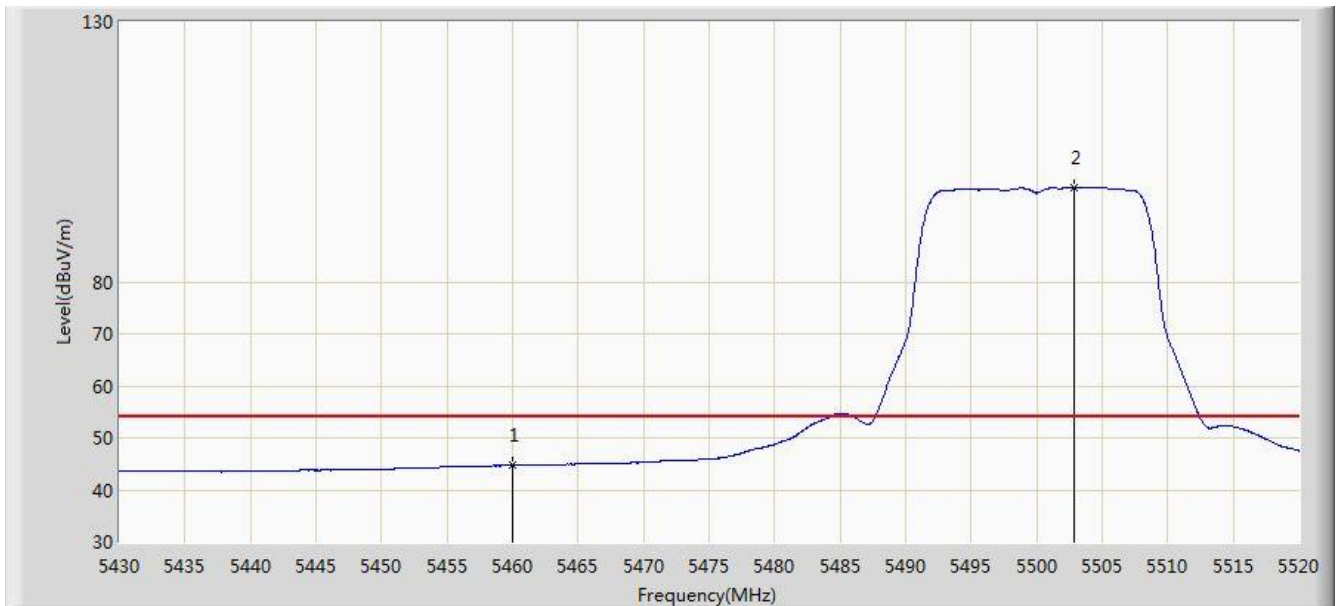


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5456.865	58.181	54.718	-15.819	74.000	3.464	PK
2			5460.000	56.458	52.976	-17.542	74.000	3.482	PK
3			5466.945	58.921	55.399	-15.079	74.000	3.522	PK
4			5470.000	57.244	53.705	-16.756	74.000	3.539	PK
5		*	5495.970	110.062	106.531	N/A	N/A	3.531	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1	

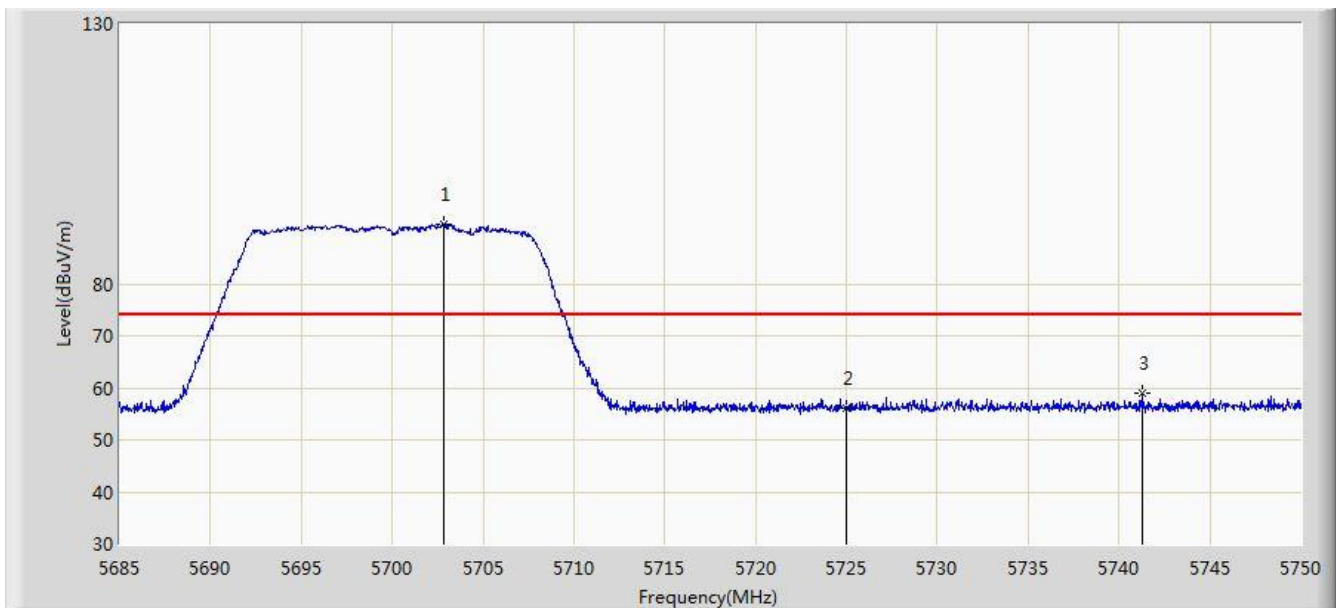


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	44.756	41.274	-9.244	54.000	3.482	AV
2		*	5502.855	98.187	94.664	N/A	N/A	3.524	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1	

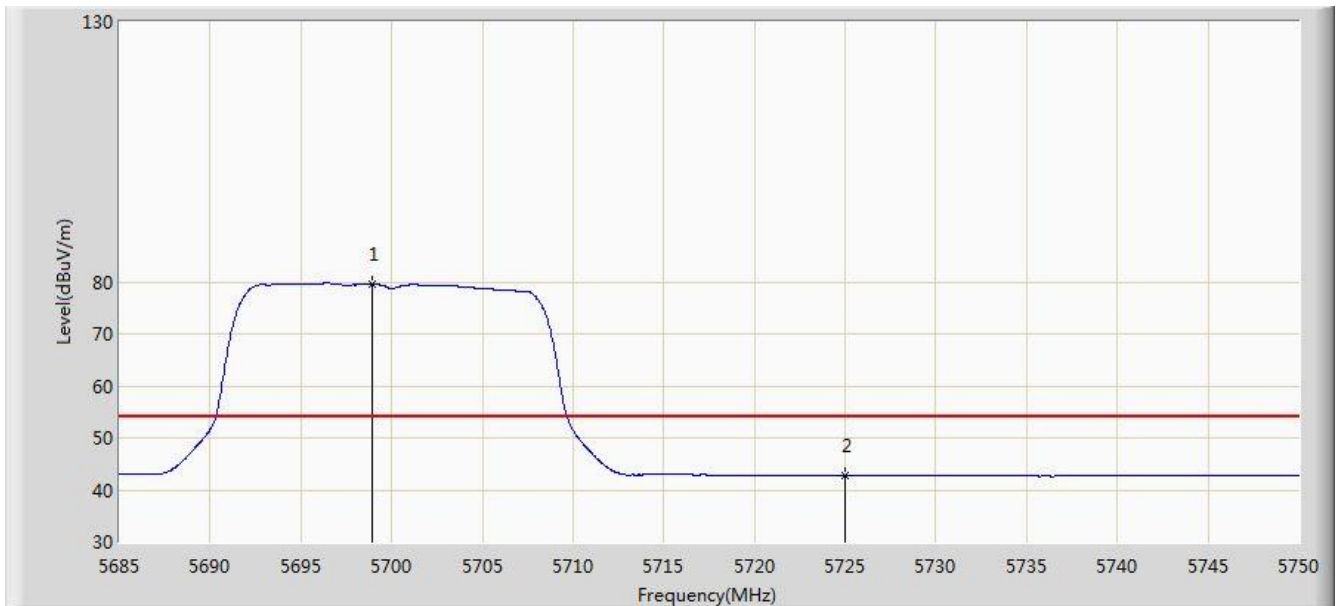


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5702.842	91.565	87.842	N/A	N/A	3.723	PK
2			5725.000	56.208	52.417	-17.792	74.000	3.791	PK
3			5741.257	59.087	55.247	-14.913	74.000	3.840	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1	

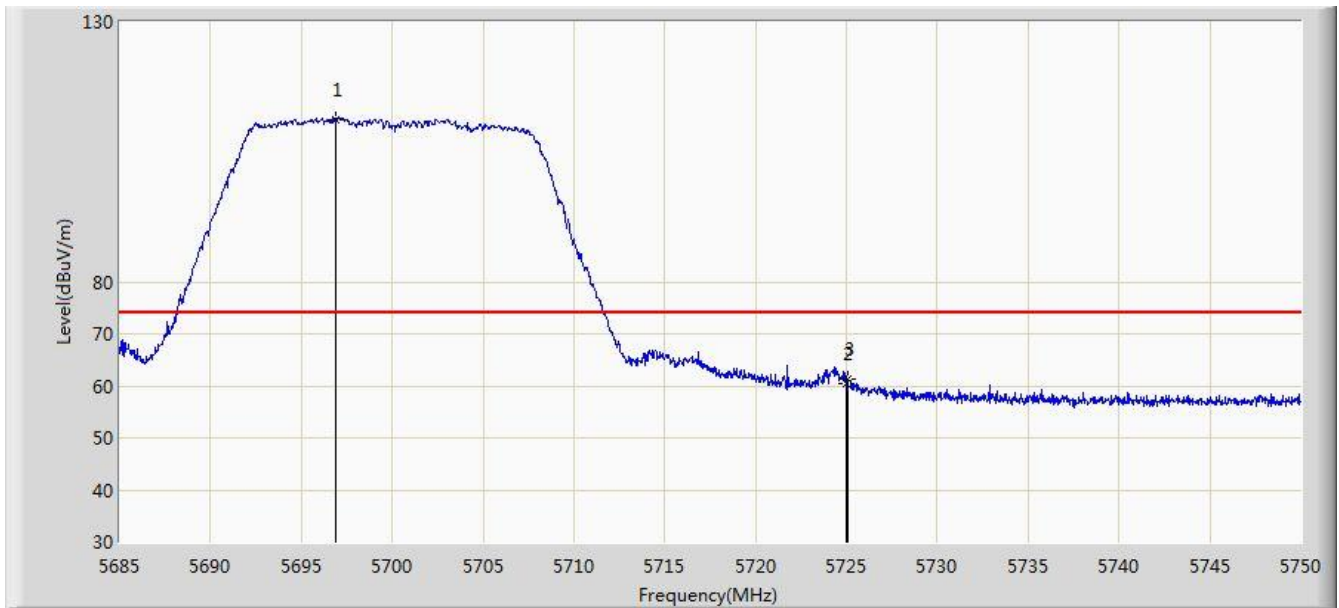


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5698.910	79.651	75.934	N/A	N/A	3.717	AV
2			5725.000	42.737	38.946	-11.263	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1	

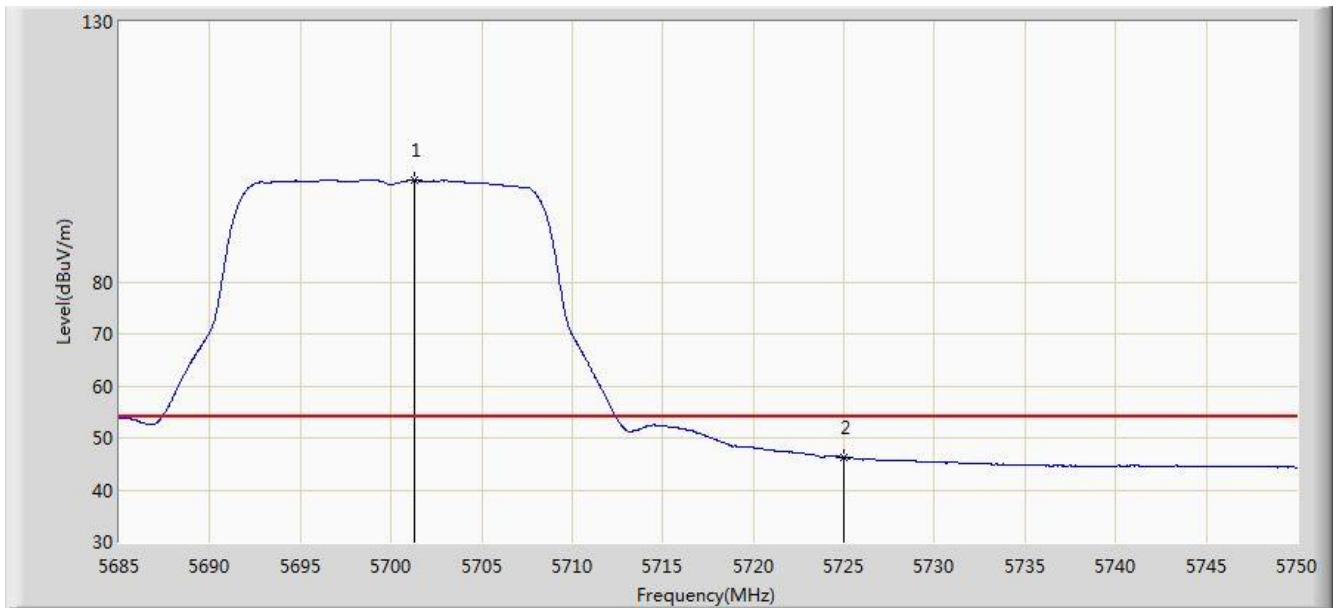


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5696.895	111.250	107.535	N/A	N/A	3.714	PK
2			5725.000	60.575	56.784	-13.425	74.000	3.791	PK
3			5725.072	61.428	57.637	-12.572	74.000	3.791	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1	

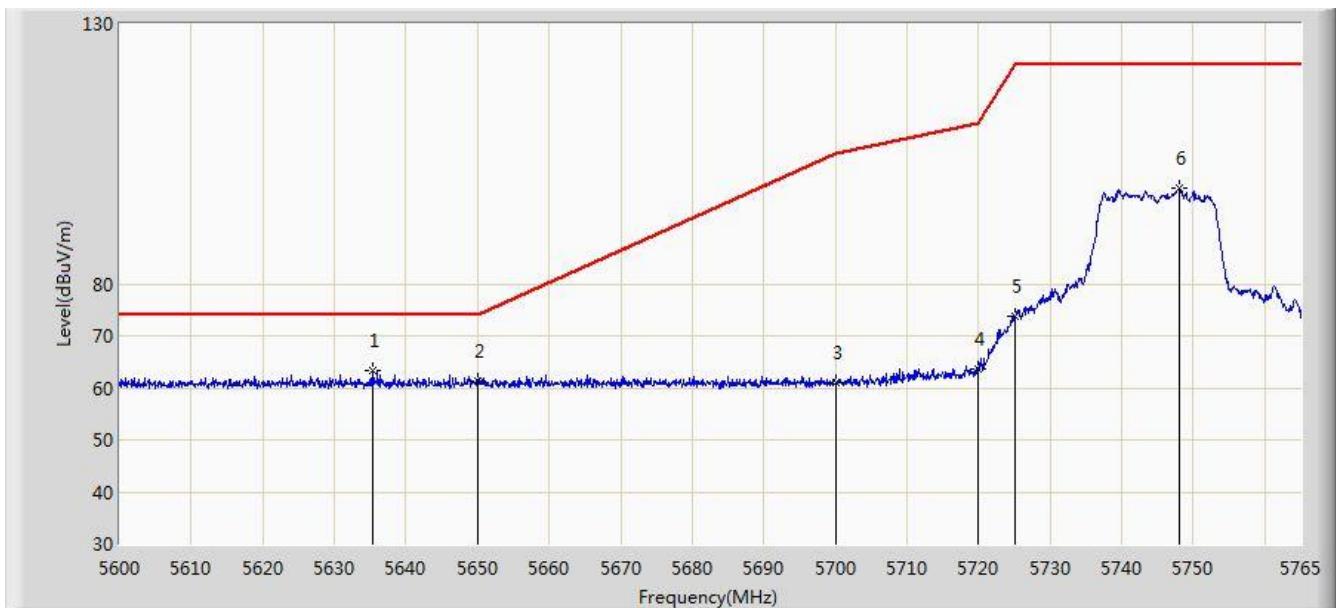


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.250	99.551	95.830	N/A	N/A	3.721	AV
2			5725.000	46.292	42.501	-7.708	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:26
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 1	

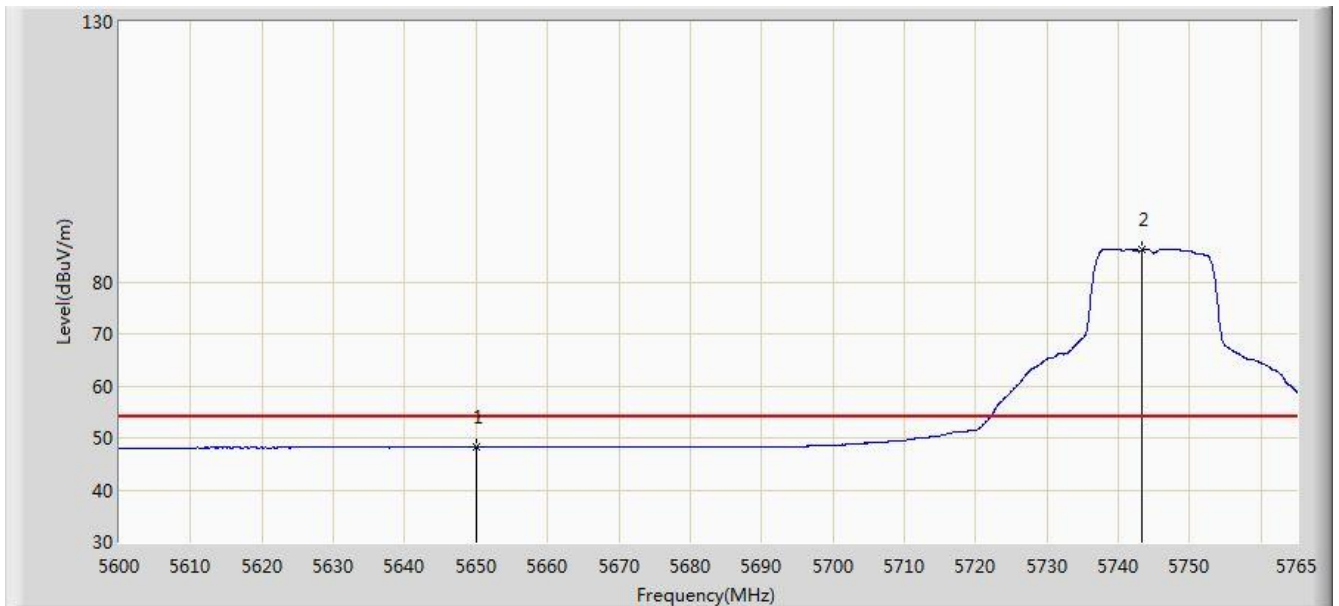


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5635.310	63.382	59.788	-10.618	74.000	3.594	PK
2			5650.000	61.206	57.579	-12.794	74.000	3.627	PK
3			5700.000	61.027	57.308	-44.173	105.200	3.719	PK
4			5720.000	63.527	59.751	-47.273	110.800	3.776	PK
5			5725.000	73.674	69.883	-48.526	122.200	3.791	PK
6			5748.005	98.466	94.602	N/A	N/A	3.864	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 1	

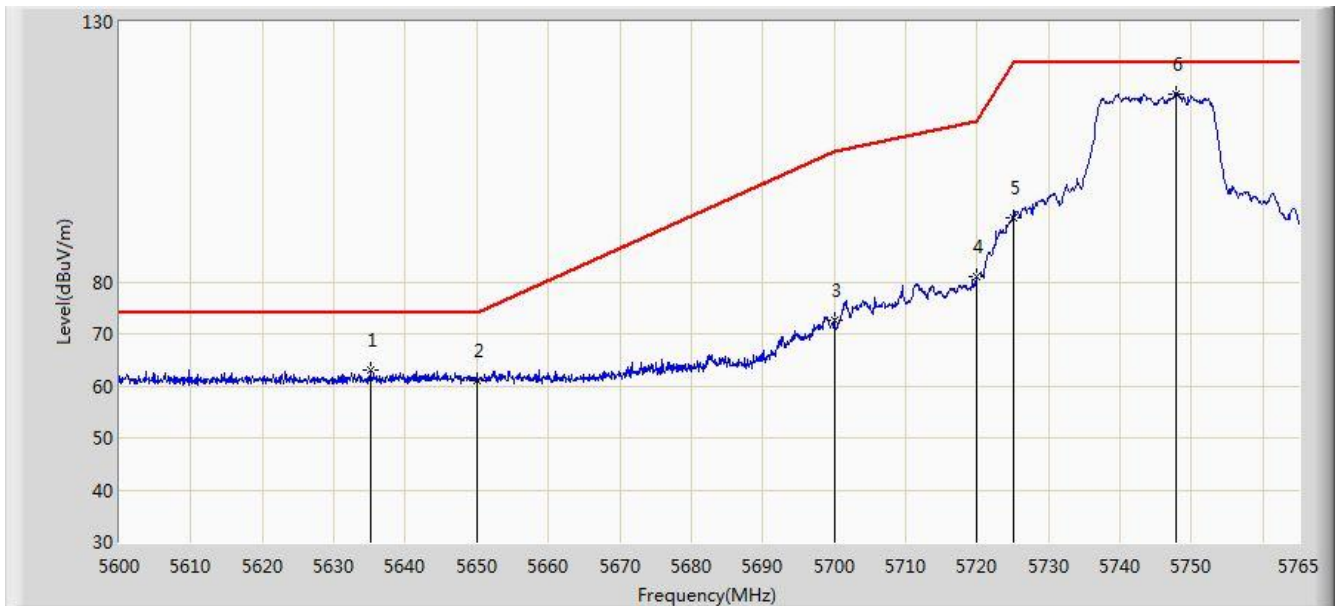


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	48.183	44.556	-5.817	54.000	3.627	AV
2		*	5743.303	86.095	82.249	N/A	N/A	3.846	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:23
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 1	

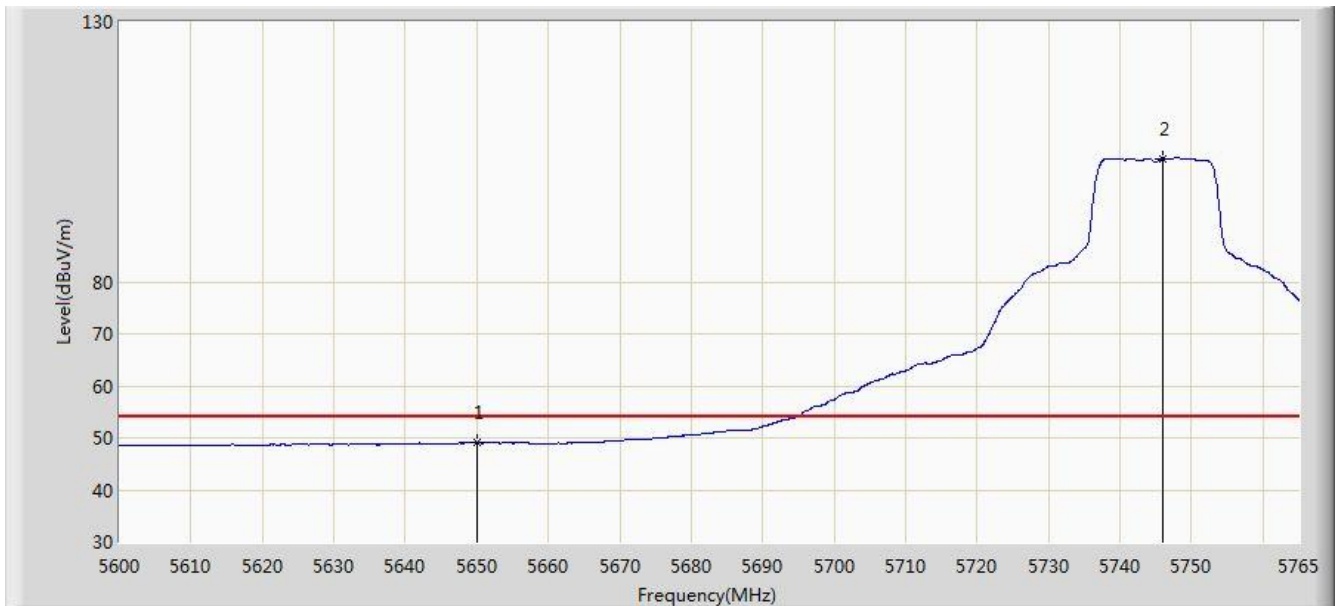


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5635.062	62.958	59.365	-11.042	74.000	3.593	PK
2			5650.000	60.966	57.339	-13.034	74.000	3.627	PK
3			5700.000	72.634	68.915	-32.566	105.200	3.719	PK
4			5720.000	80.976	77.200	-29.824	110.800	3.776	PK
5			5725.000	92.426	88.635	-29.774	122.200	3.791	PK
6		*	5747.757	116.221	112.358	N/A	N/A	3.863	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 1	

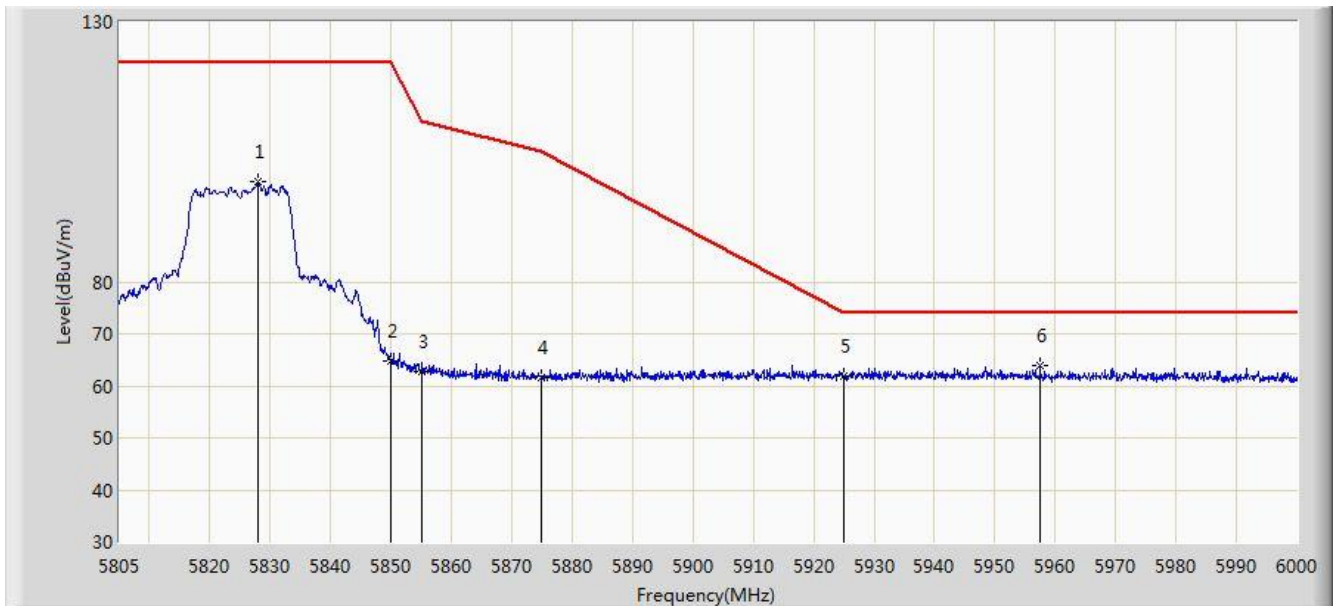


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	49.026	45.399	-4.974	54.000	3.627	AV
2		*	5745.942	103.761	99.905	N/A	N/A	3.856	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:20
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 1	

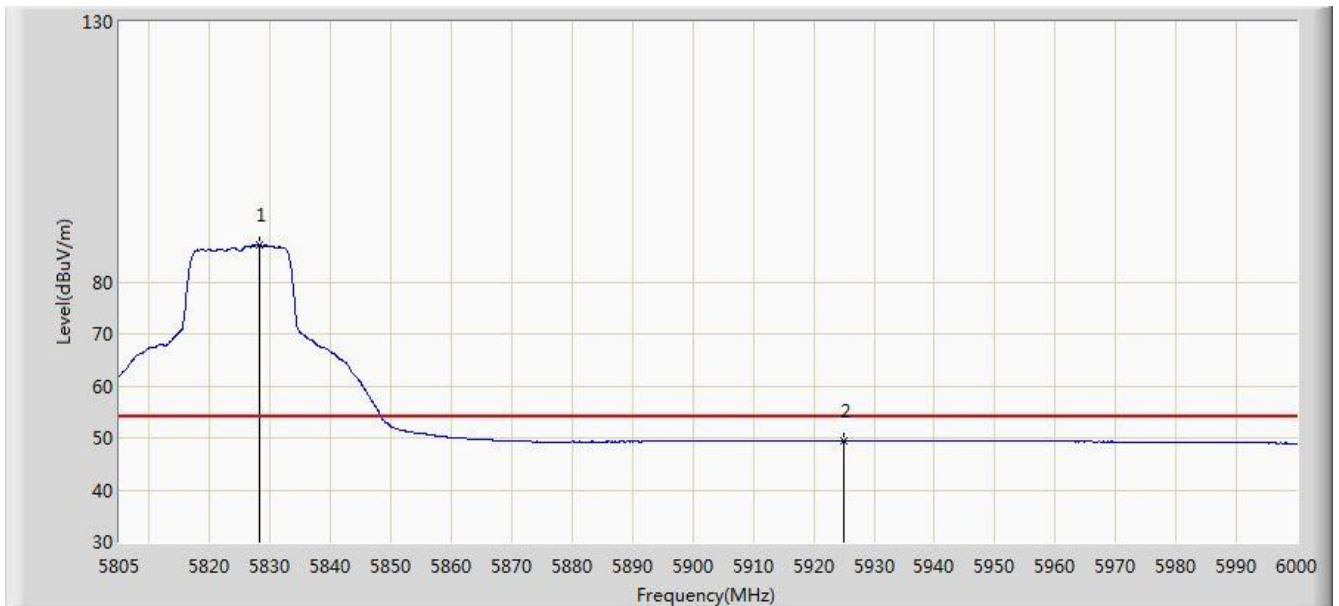


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5828.010	99.246	95.234	N/A	N/A	4.012	PK
2			5850.000	64.726	60.669	-57.474	122.200	4.058	PK
3			5855.000	62.898	58.838	-47.902	110.800	4.060	PK
4			5875.000	61.583	57.478	-43.617	105.200	4.105	PK
5			5925.000	61.959	57.706	-12.041	74.000	4.254	PK
6		*	5957.490	64.029	59.737	-9.971	74.000	4.293	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 1	

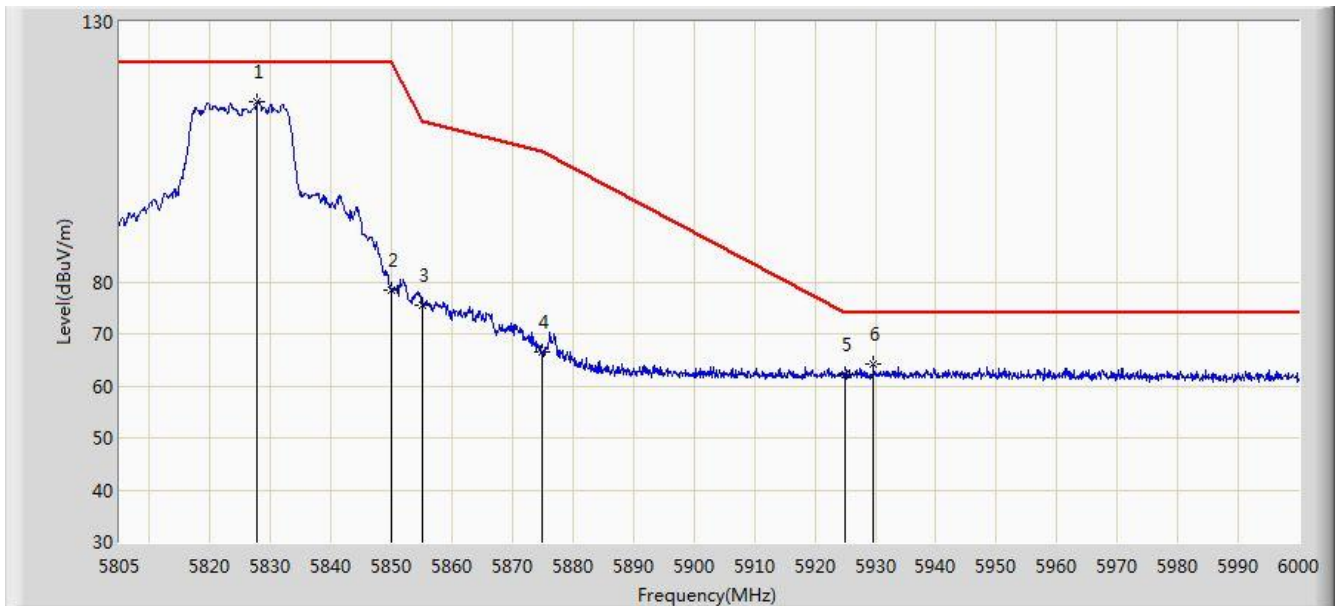


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5828.205	87.078	83.065	N/A	N/A	4.013	AV
2			5925.000	49.389	45.136	-4.611	54.000	4.254	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:17
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 1	

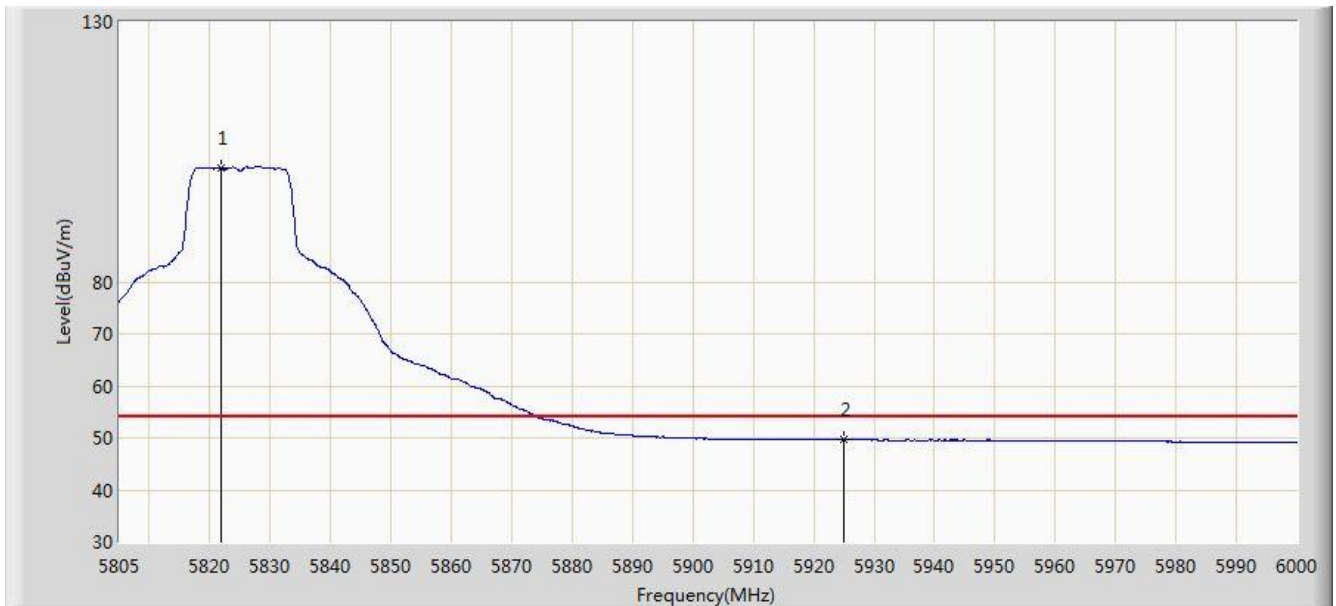


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5827.815	114.559	110.547	N/A	N/A	4.011	PK
2			5850.000	78.437	74.380	-43.763	122.200	4.058	PK
3			5855.000	75.520	71.460	-35.280	110.800	4.060	PK
4			5875.000	66.511	62.406	-38.689	105.200	4.105	PK
5			5925.000	62.262	58.009	-11.738	74.000	4.254	PK
6			5929.605	64.320	60.054	-9.680	74.000	4.265	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 1	

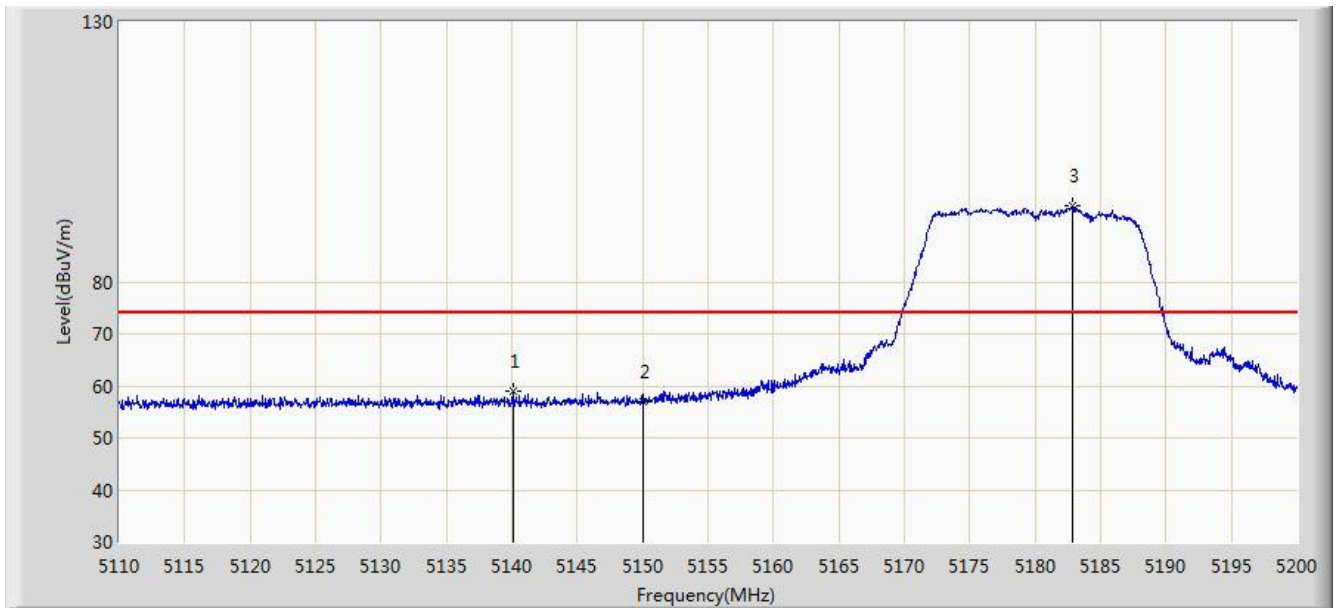


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5821.868	101.985	97.987	N/A	N/A	3.998	AV
2			5925.000	49.638	45.385	-4.362	54.000	4.254	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

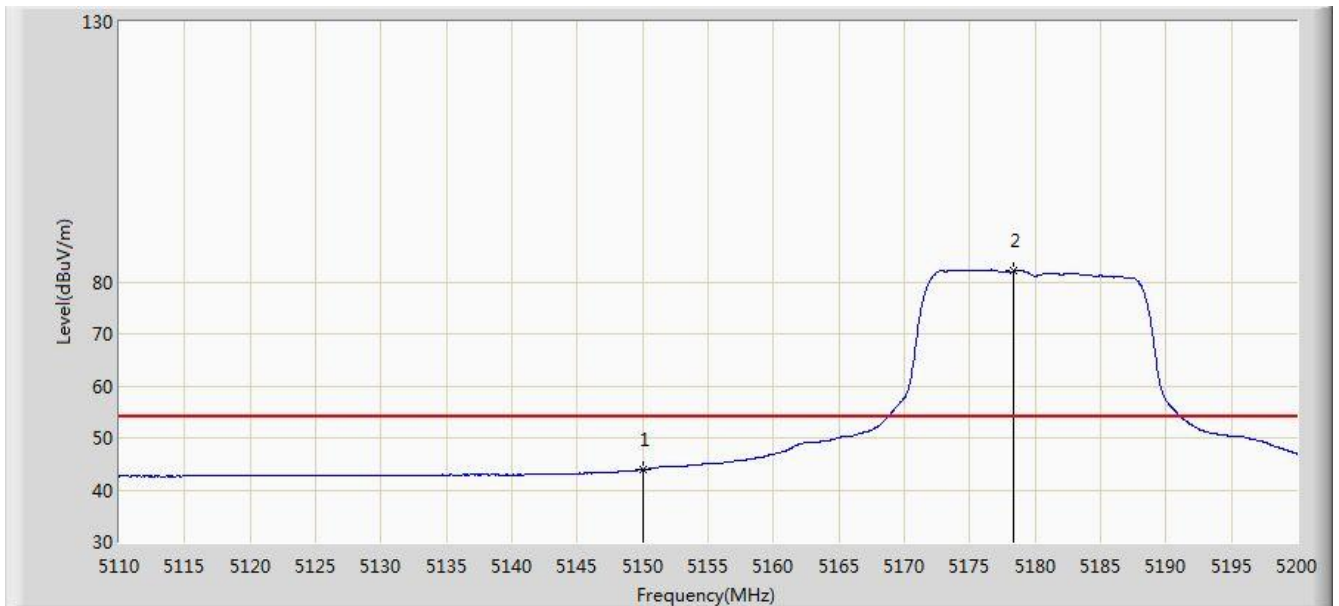


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5140.060	58.918	55.608	-15.082	74.000	3.309	PK
2			5150.000	56.843	53.534	-17.157	74.000	3.309	PK
3		*	5182.855	94.494	91.224	N/A	N/A	3.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

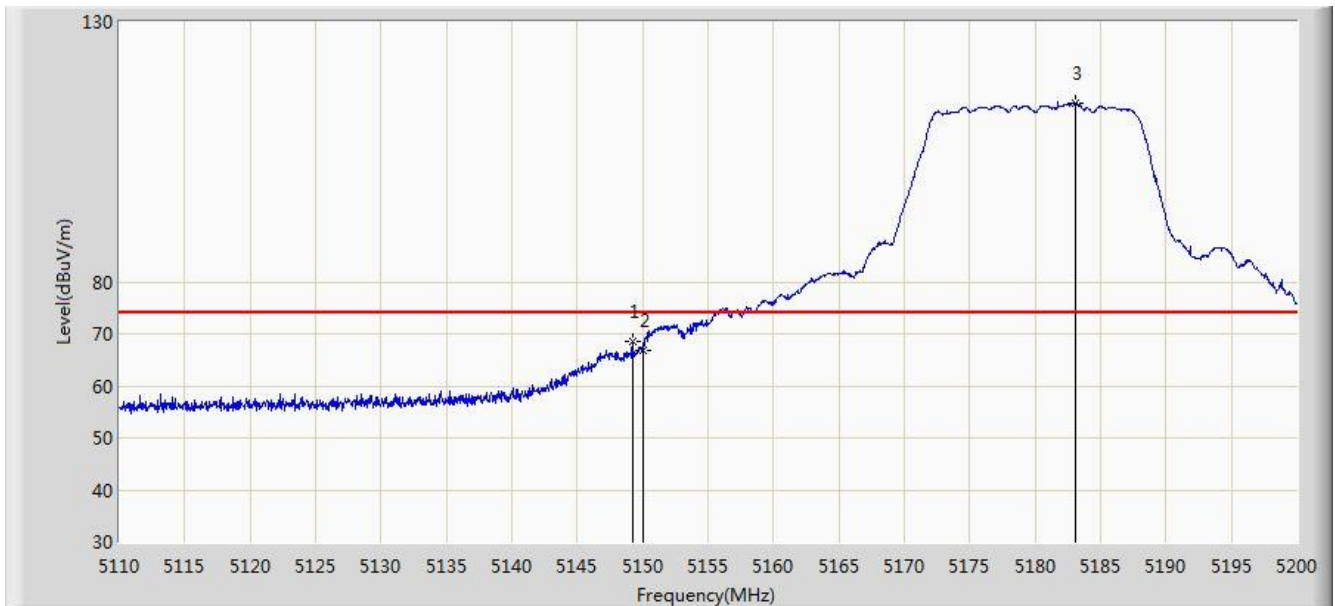


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.912	40.603	-10.088	54.000	3.309	AV
2		*	5178.400	82.036	78.762	N/A	N/A	3.275	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

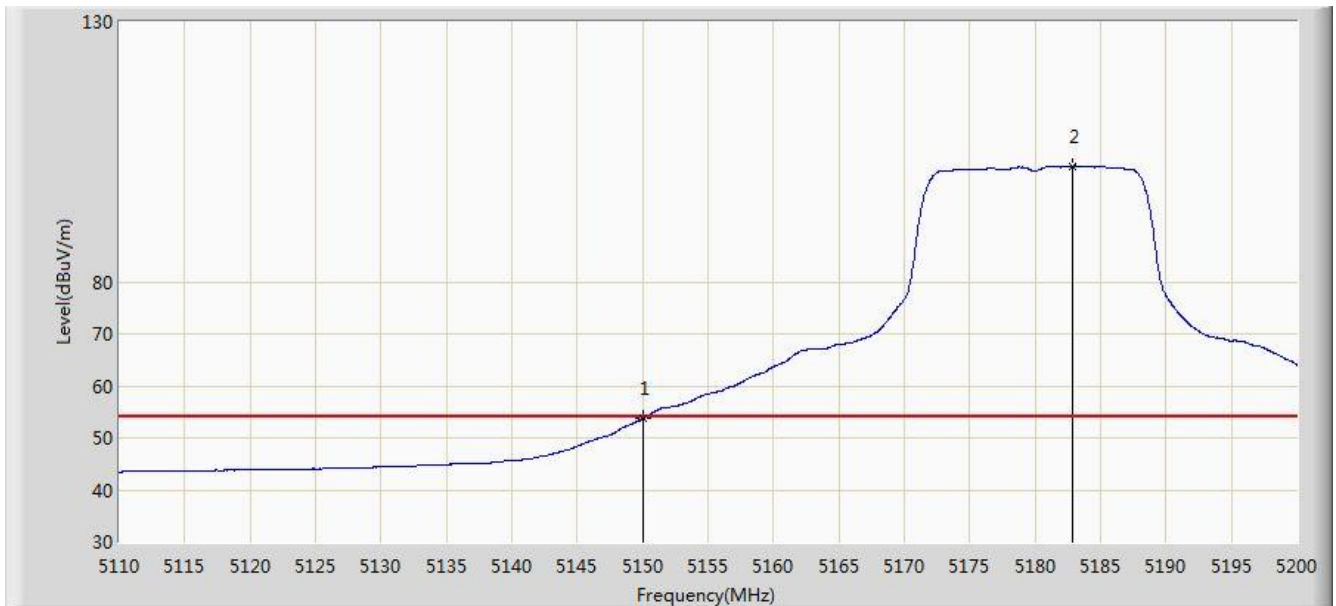


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.195	68.634	65.325	-5.366	74.000	3.309	PK
2			5150.000	66.932	63.623	-7.068	74.000	3.309	PK
3		*	5183.035	114.451	111.181	N/A	N/A	3.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 04:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

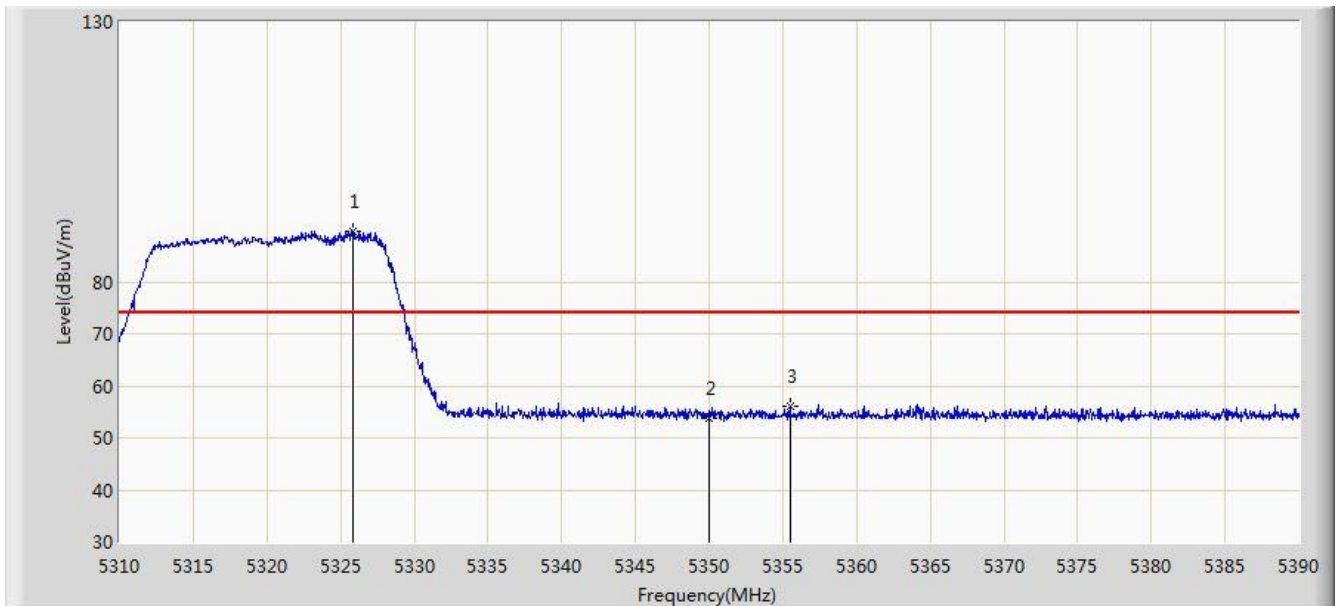


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	53.735	50.426	-0.265	54.000	3.309	AV
2		*	5182.855	102.273	99.003	N/A	N/A	3.270	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 2	

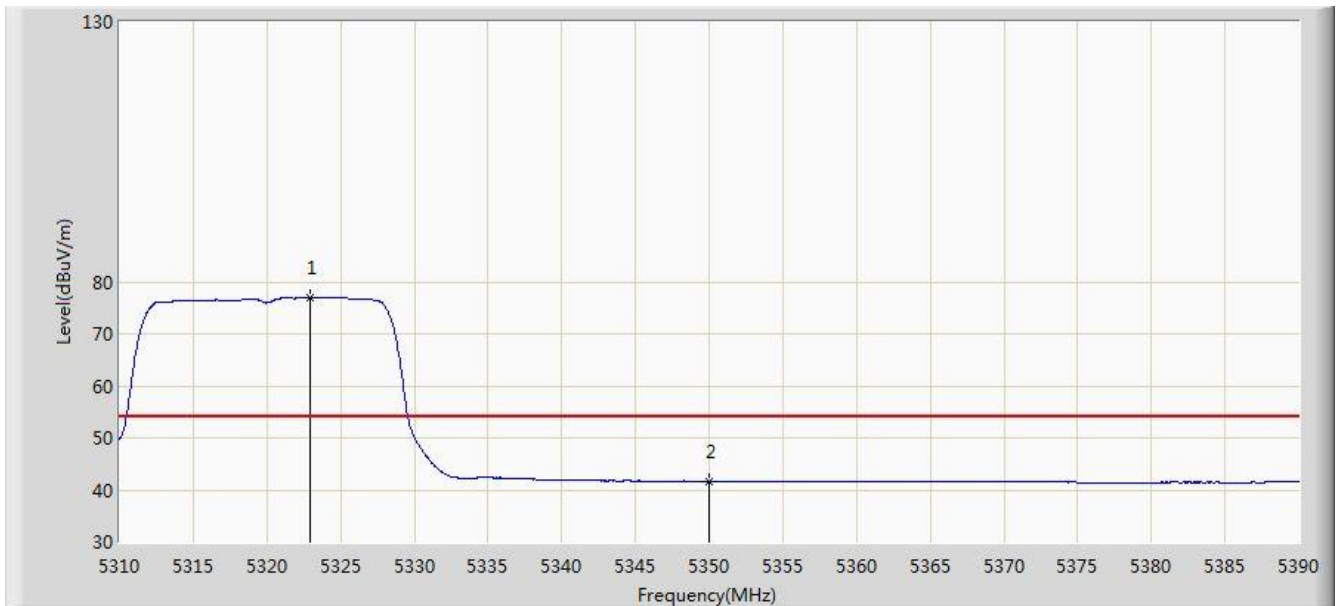


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5325.800	89.645	86.584	N/A	N/A	3.062	PK
2			5350.000	53.715	50.683	-20.285	74.000	3.032	PK
3			5355.480	56.008	52.981	-17.992	74.000	3.027	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 2	

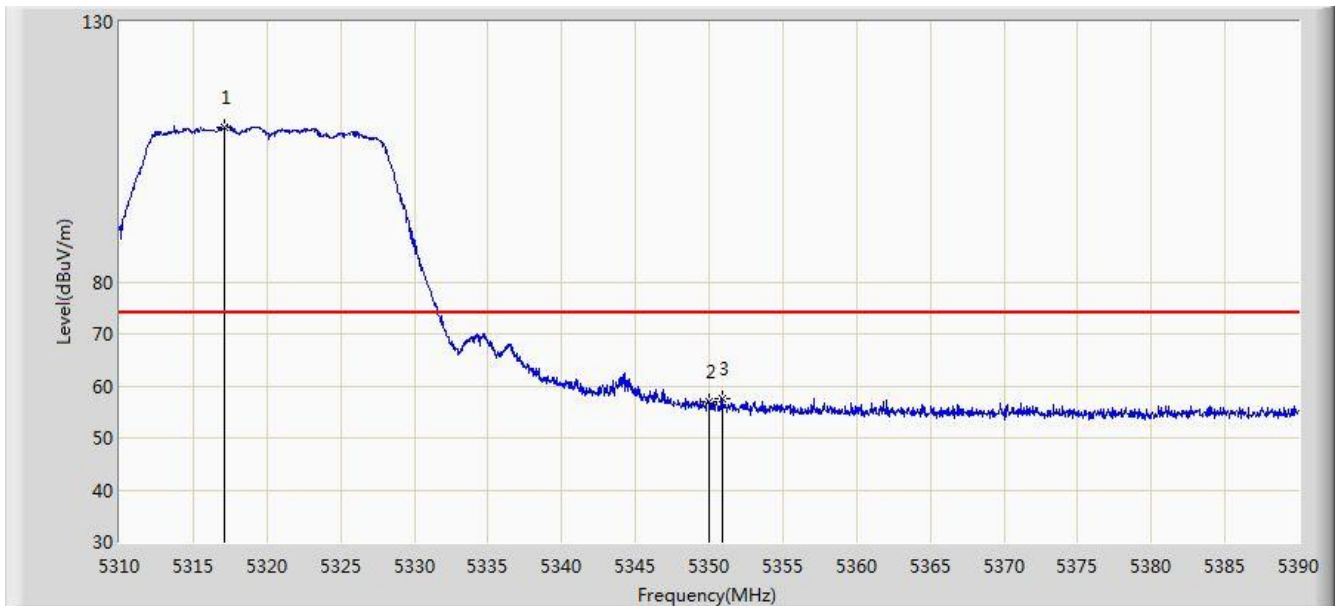


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5322.920	77.054	73.987	N/A	N/A	3.067	AV
2			5350.000	41.683	38.651	-12.317	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 2	

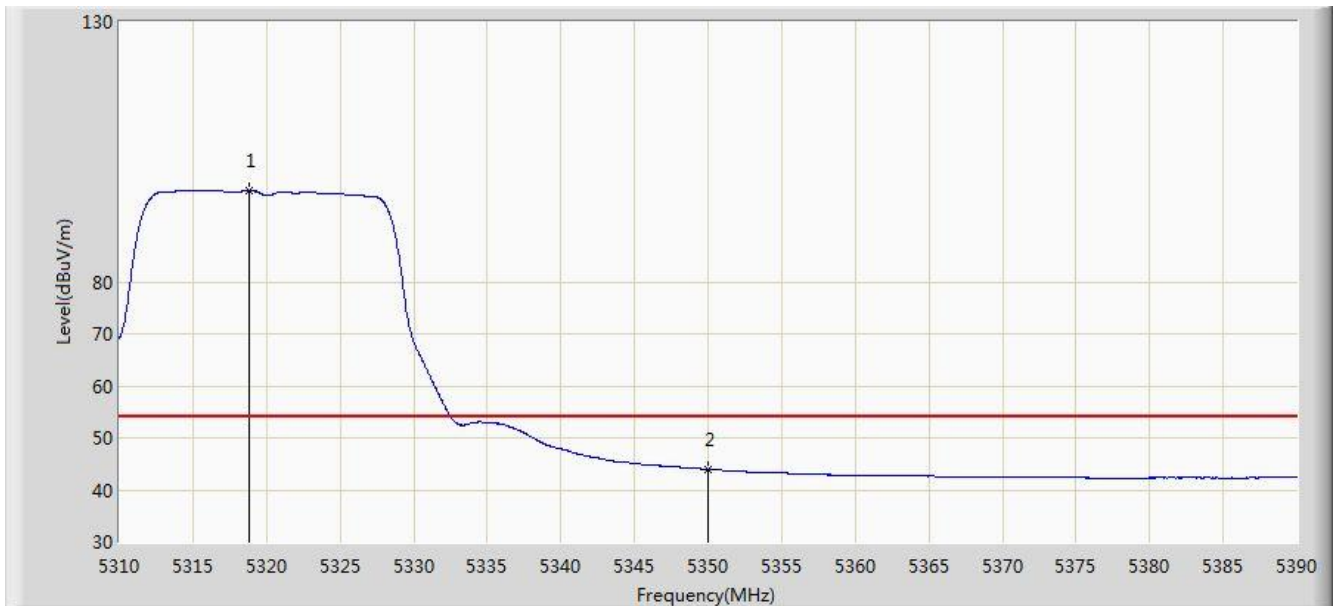


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5317.120	109.777	106.698	N/A	N/A	3.079	PK
2			5350.000	56.826	53.794	-17.174	74.000	3.032	PK
3			5350.880	57.664	54.633	-16.336	74.000	3.032	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 2	

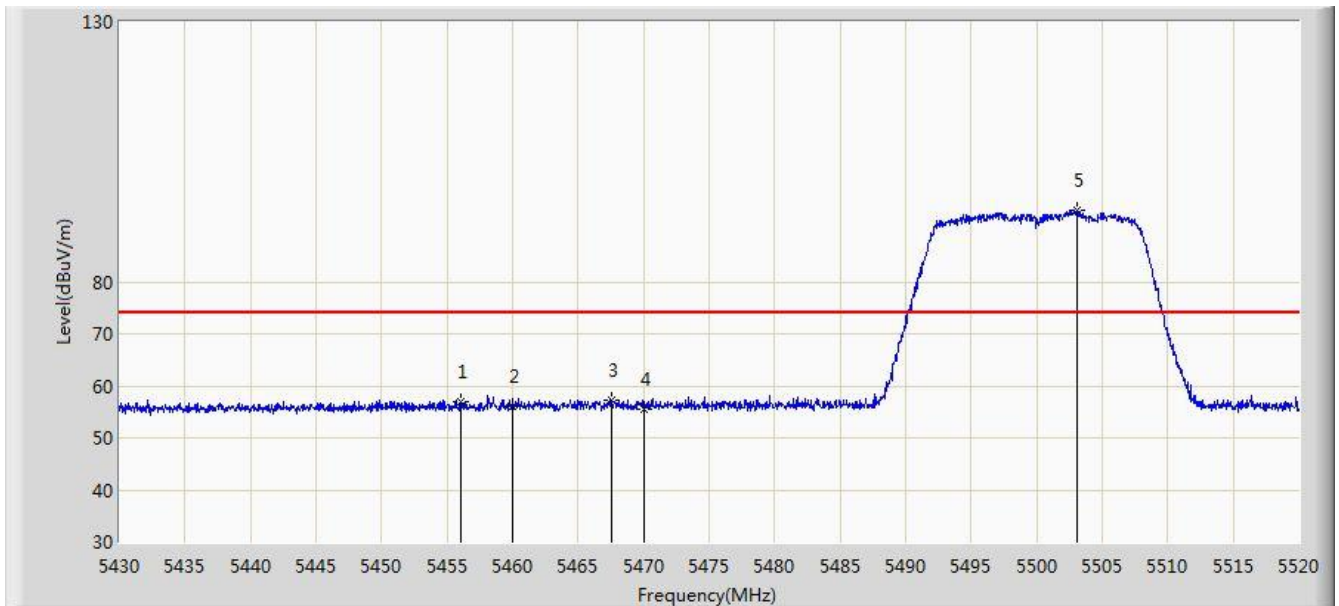


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5318.800	97.568	94.492	N/A	N/A	3.076	AV
2			5350.000	43.971	40.939	-10.029	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 2	

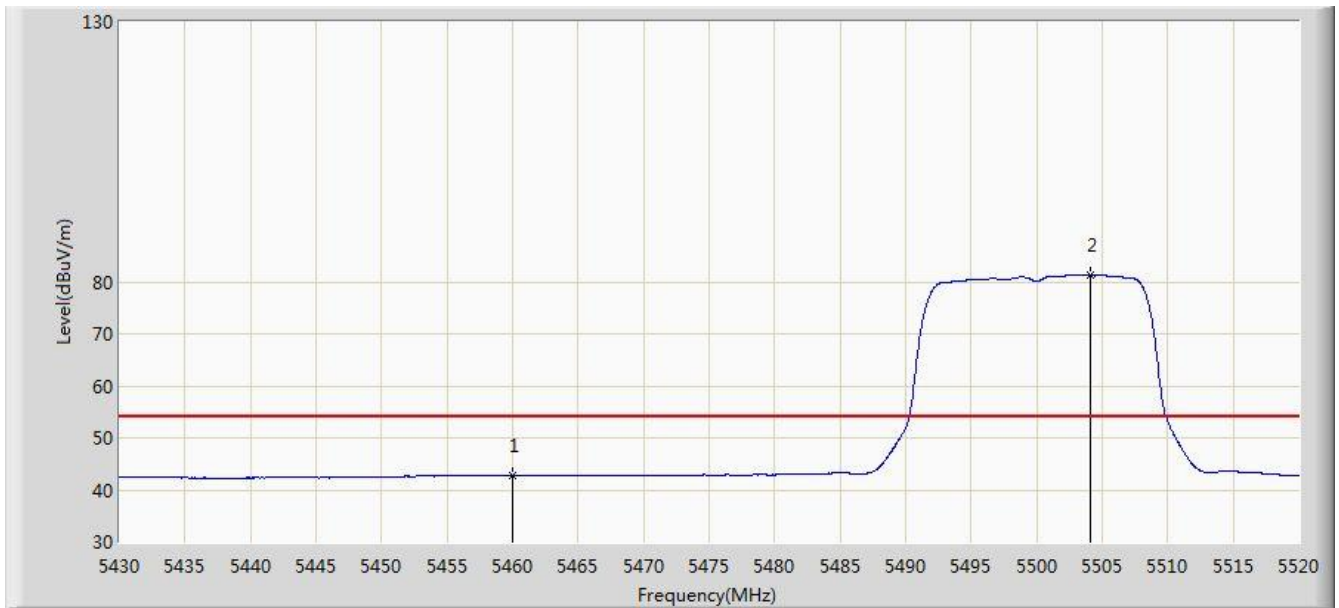


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5456.010	56.941	53.482	-17.059	74.000	3.458	PK
2			5460.000	56.226	52.744	-17.774	74.000	3.482	PK
3			5467.575	57.310	53.785	-16.690	74.000	3.526	PK
4			5470.000	55.601	52.062	-18.399	74.000	3.539	PK
5		*	5503.035	93.625	90.102	N/A	N/A	3.523	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 2	

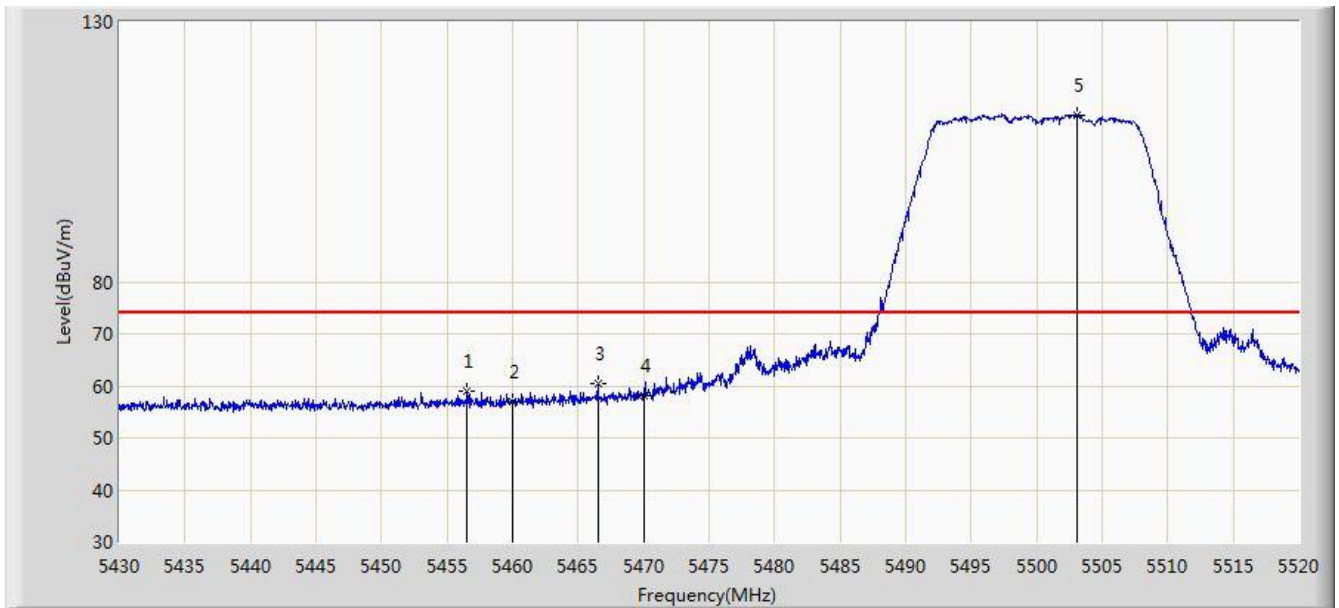


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.792	39.310	-11.208	54.000	3.482	AV
2		*	5504.115	81.247	77.725	N/A	N/A	3.522	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 2	

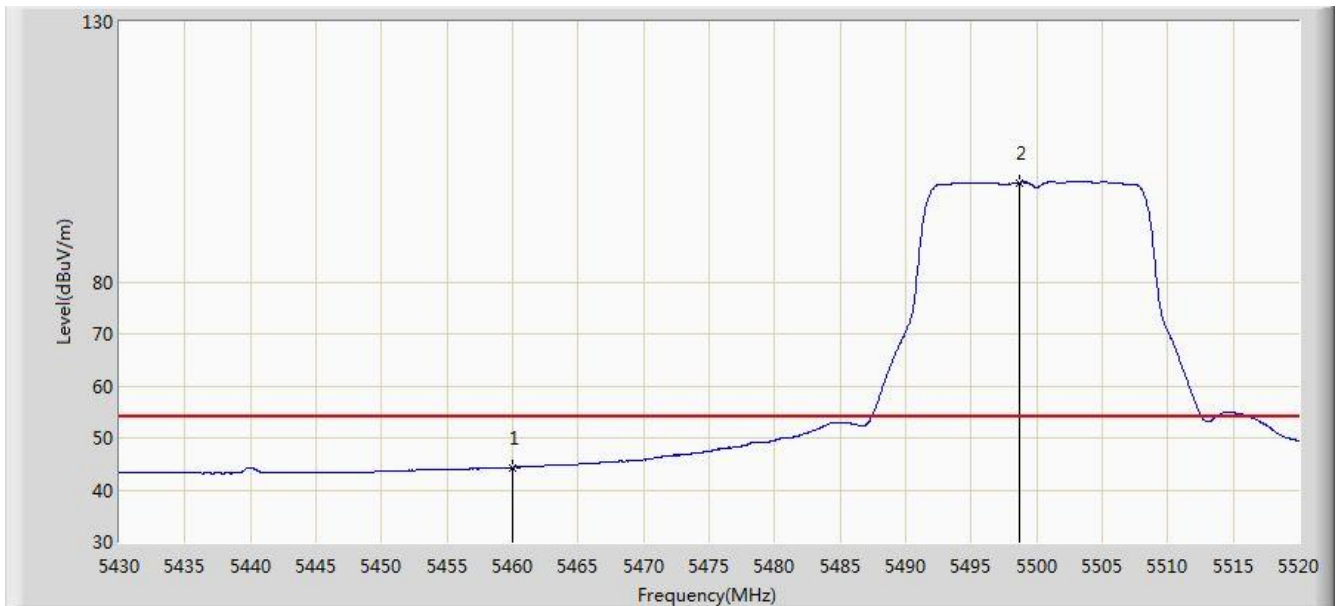


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5456.505	58.990	55.529	-15.010	74.000	3.461	PK
2			5460.000	56.860	53.378	-17.140	74.000	3.482	PK
3			5466.540	60.422	56.903	-13.578	74.000	3.520	PK
4			5470.000	58.164	54.625	-15.836	74.000	3.539	PK
5		*	5503.035	112.145	108.622	N/A	N/A	3.523	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 2	

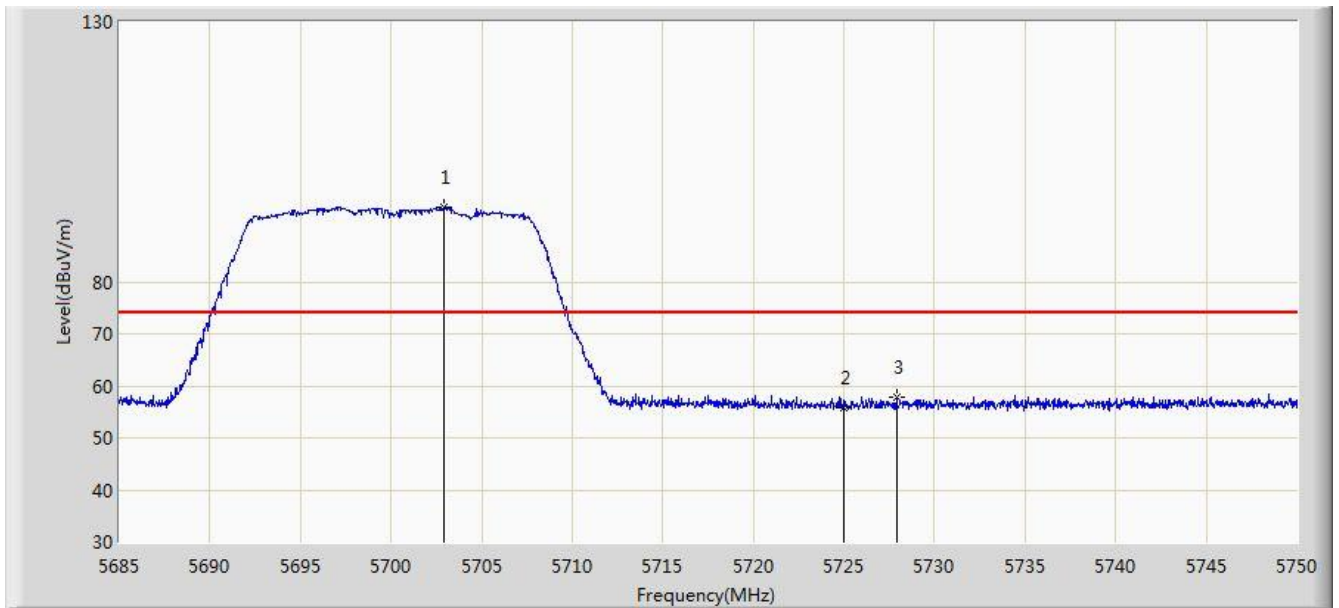


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	44.321	40.839	-9.679	54.000	3.482	AV
2		*	5498.715	99.115	95.587	N/A	N/A	3.528	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 2	

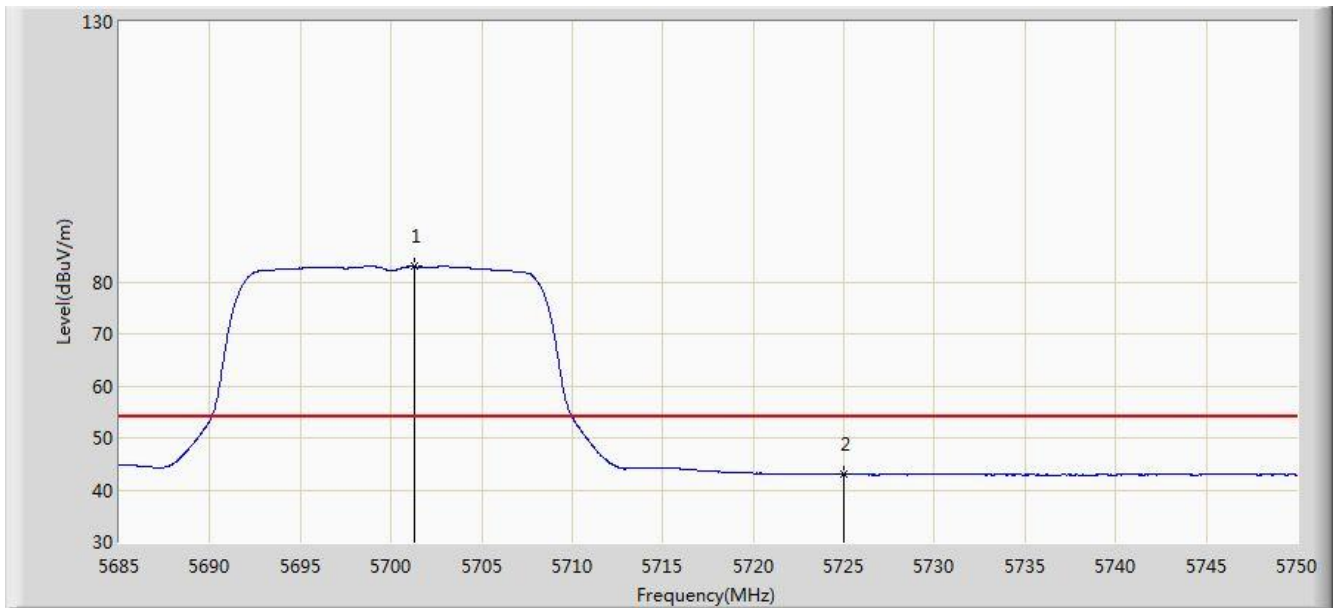


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5702.908	94.344	90.621	N/A	N/A	3.723	PK
2			5725.000	55.933	52.142	-18.067	74.000	3.791	PK
3			5727.900	57.927	54.127	-16.073	74.000	3.800	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 2	

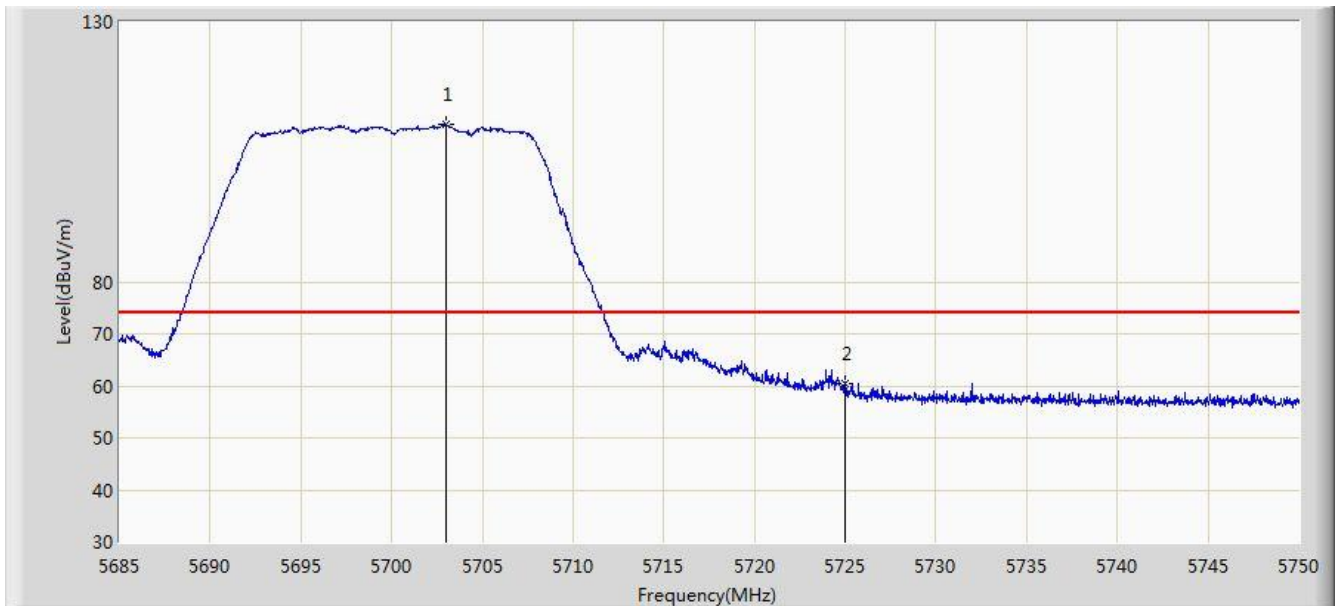


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.250	82.966	79.245	N/A	N/A	3.721	AV
2			5725.000	43.003	39.212	-10.997	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 2	

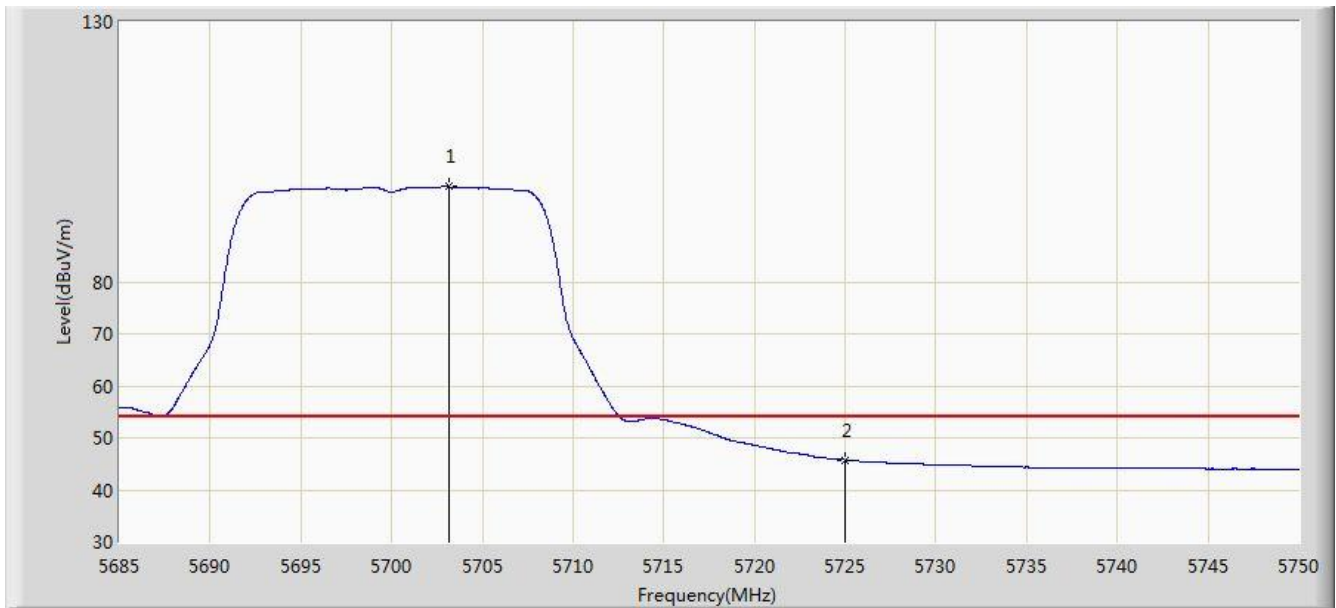


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5702.973	110.167	106.444	N/A	N/A	3.723	PK
2			5725.000	60.461	56.670	-13.539	74.000	3.791	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 2	

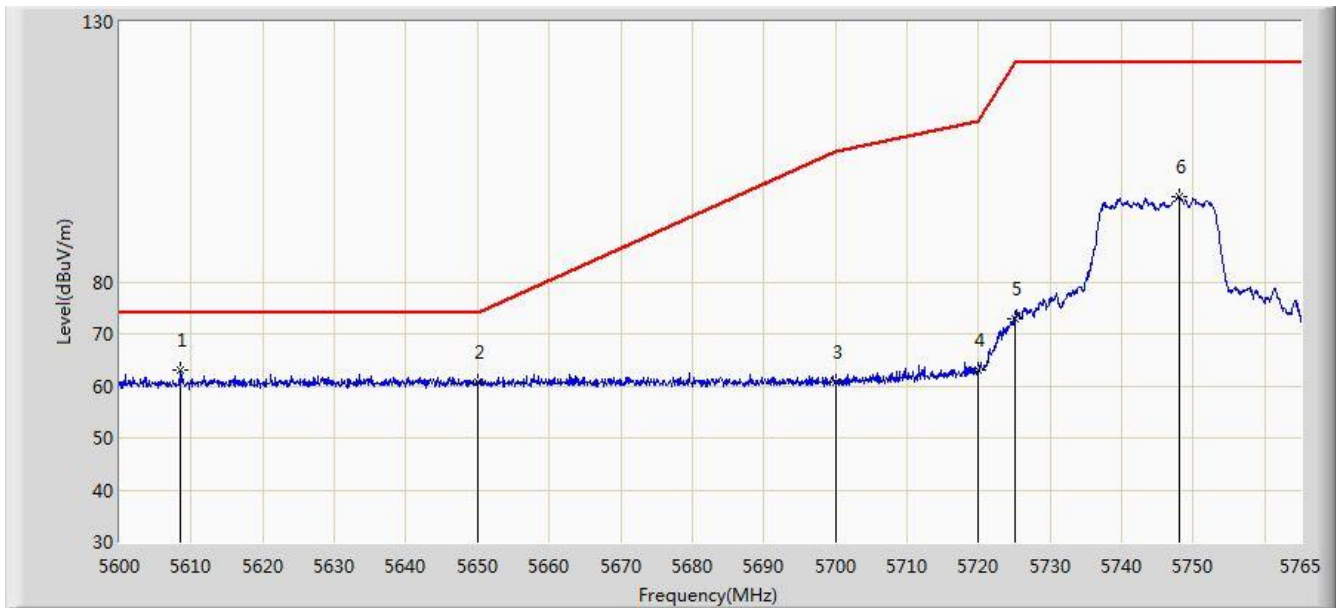


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5703.167	98.261	94.537	N/A	N/A	3.724	AV
2			5725.000	45.780	41.989	-8.220	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:10
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 2	

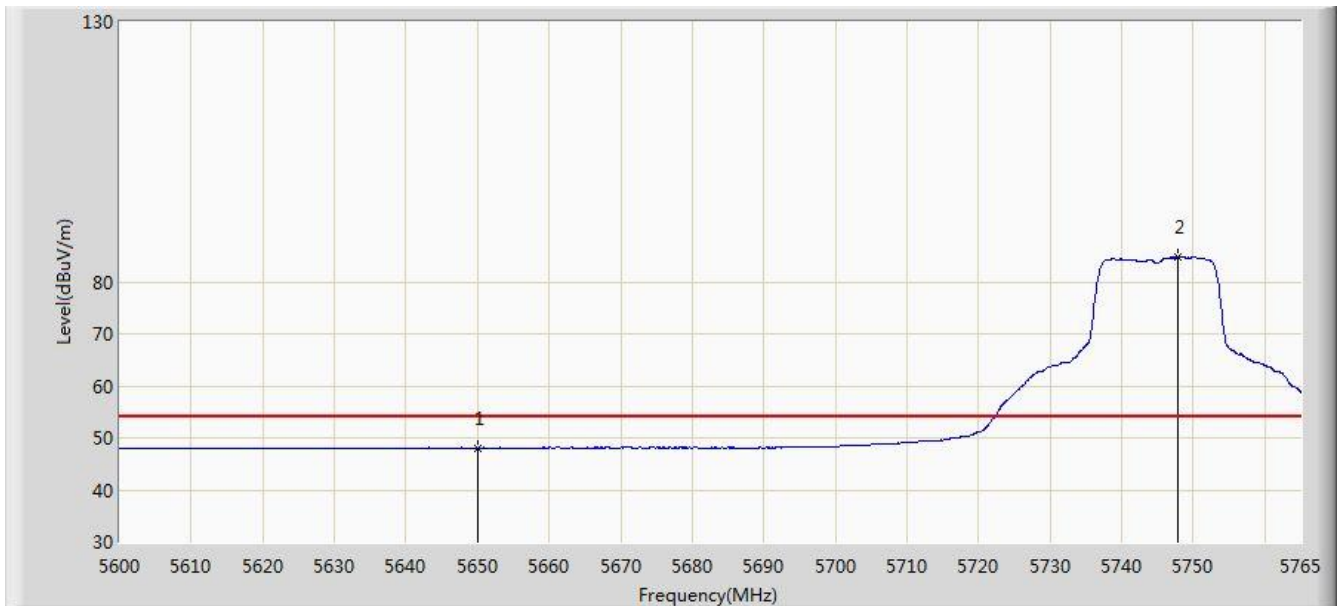


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5608.498	63.186	59.677	-10.814	74.000	3.510	PK
2			5650.000	60.813	57.186	-13.187	74.000	3.627	PK
3			5700.000	60.669	56.950	-44.531	105.200	3.719	PK
4			5720.000	63.046	59.270	-47.754	110.800	3.776	PK
5			5725.000	72.905	69.114	-49.295	122.200	3.791	PK
6			5748.005	96.495	92.631	N/A	N/A	3.864	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 2	

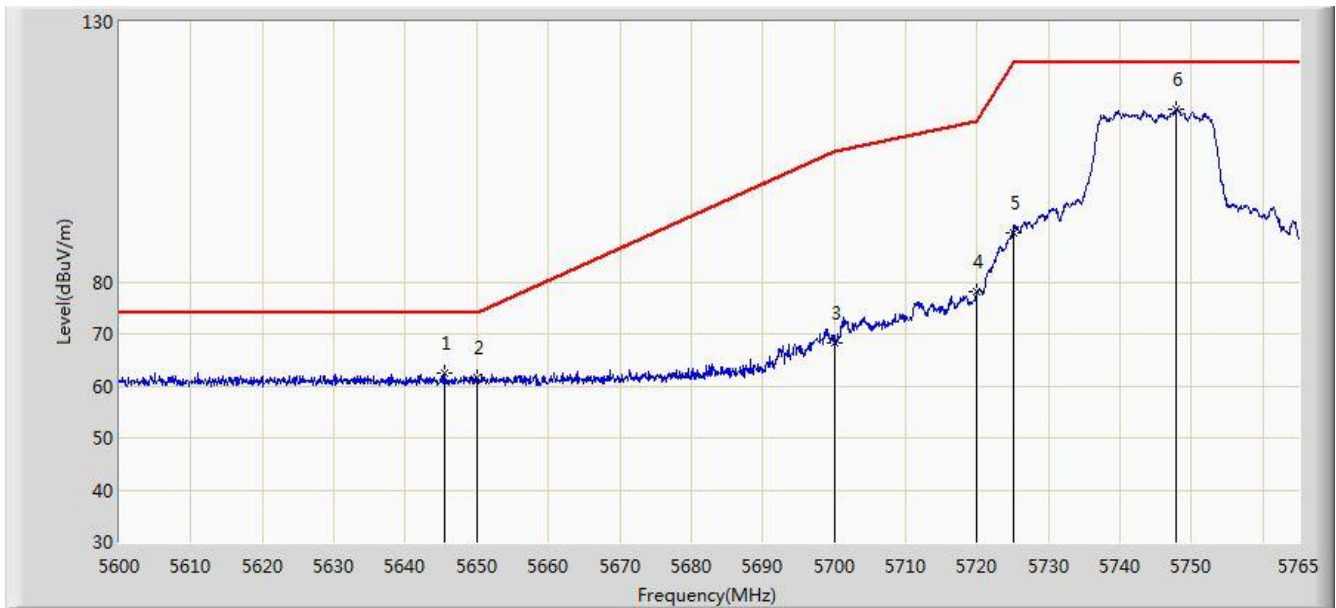


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	48.079	44.452	-5.921	54.000	3.627	AV
2		*	5747.840	84.817	80.954	N/A	N/A	3.864	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:06
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 2	

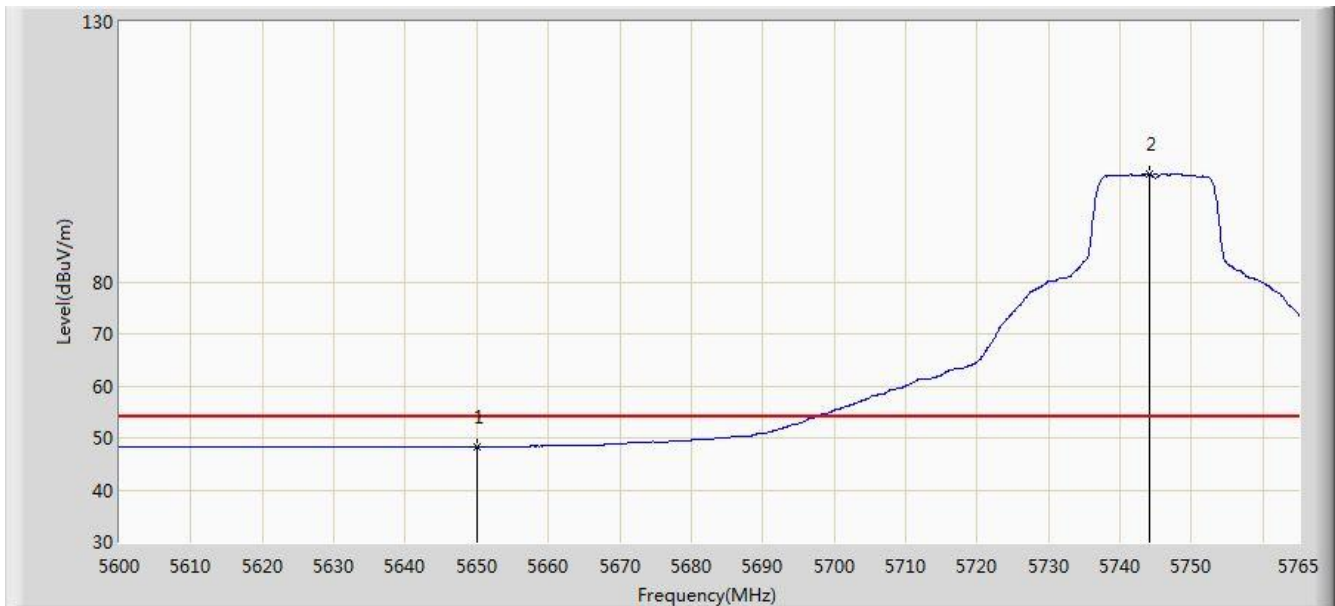


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5645.540	62.516	58.895	-11.484	74.000	3.622	PK
2			5650.000	61.591	57.964	-12.409	74.000	3.627	PK
3			5700.000	68.200	64.481	-37.000	105.200	3.719	PK
4			5720.000	77.992	74.216	-32.808	110.800	3.776	PK
5			5725.000	89.421	85.630	-32.779	122.200	3.791	PK
6		*	5747.757	113.131	109.268	N/A	N/A	3.863	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 2	

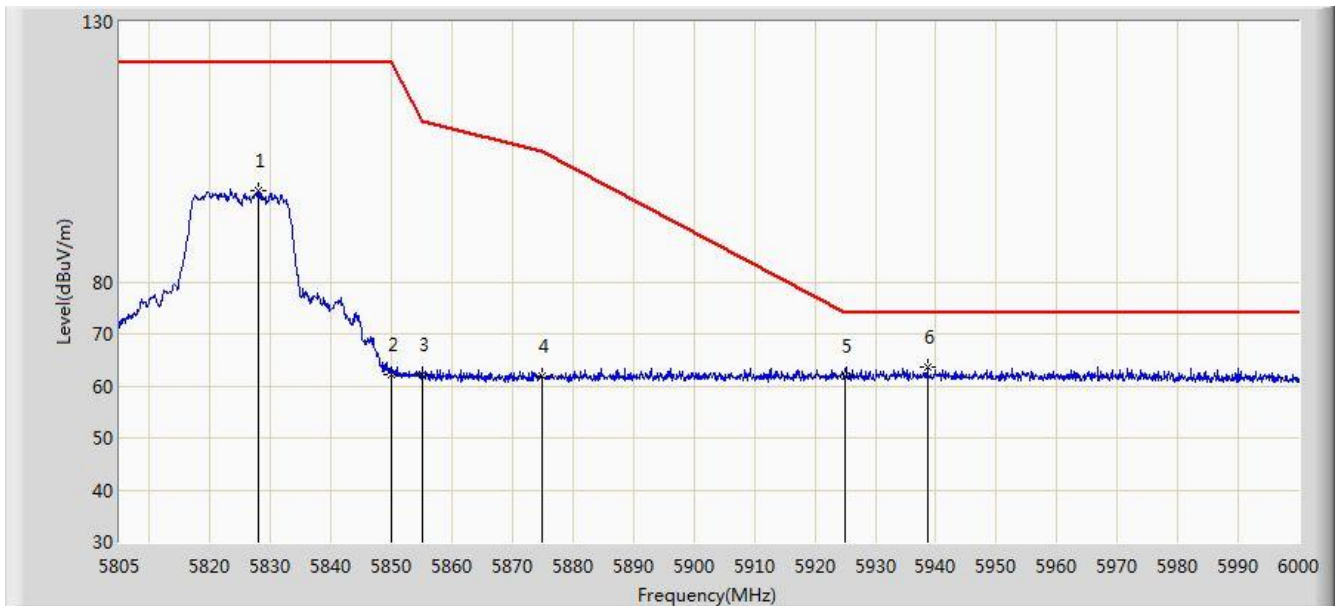


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	48.350	44.723	-5.650	54.000	3.627	AV
2		*	5744.127	100.667	96.818	N/A	N/A	3.850	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:15
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 2	

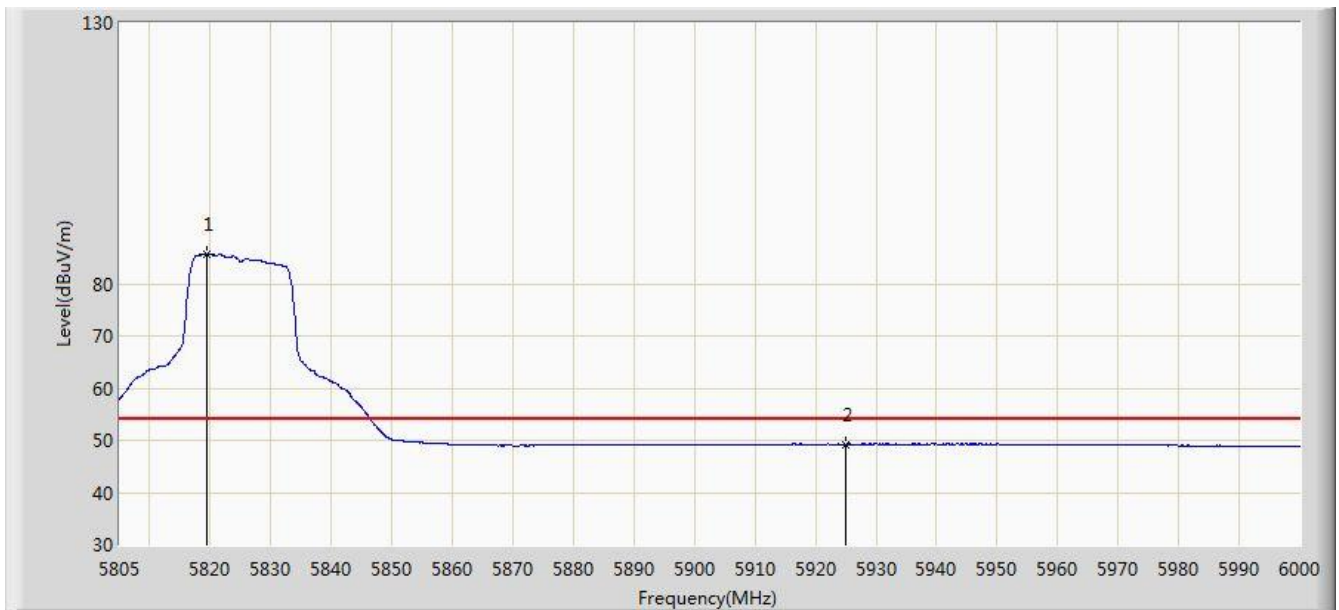


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5827.913	97.607	93.595	N/A	N/A	4.012	PK
2			5850.000	62.259	58.202	-59.941	122.200	4.058	PK
3			5855.000	62.147	58.087	-48.653	110.800	4.060	PK
4			5875.000	61.744	57.639	-43.456	105.200	4.105	PK
5			5925.000	61.843	57.590	-12.157	74.000	4.254	PK
6		*	5938.575	63.711	59.441	-10.289	74.000	4.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 2	

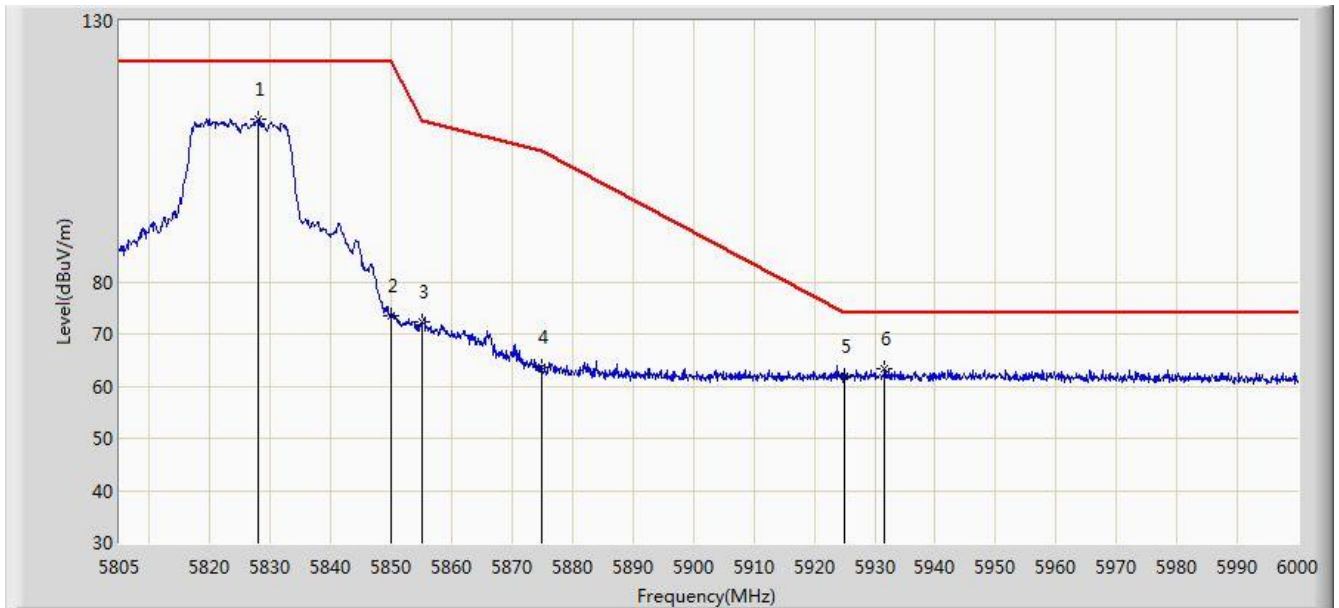


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5819.430	85.550	81.557	N/A	N/A	3.992	AV
2			5925.000	49.256	45.003	-4.744	54.000	4.254	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:13
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 2	

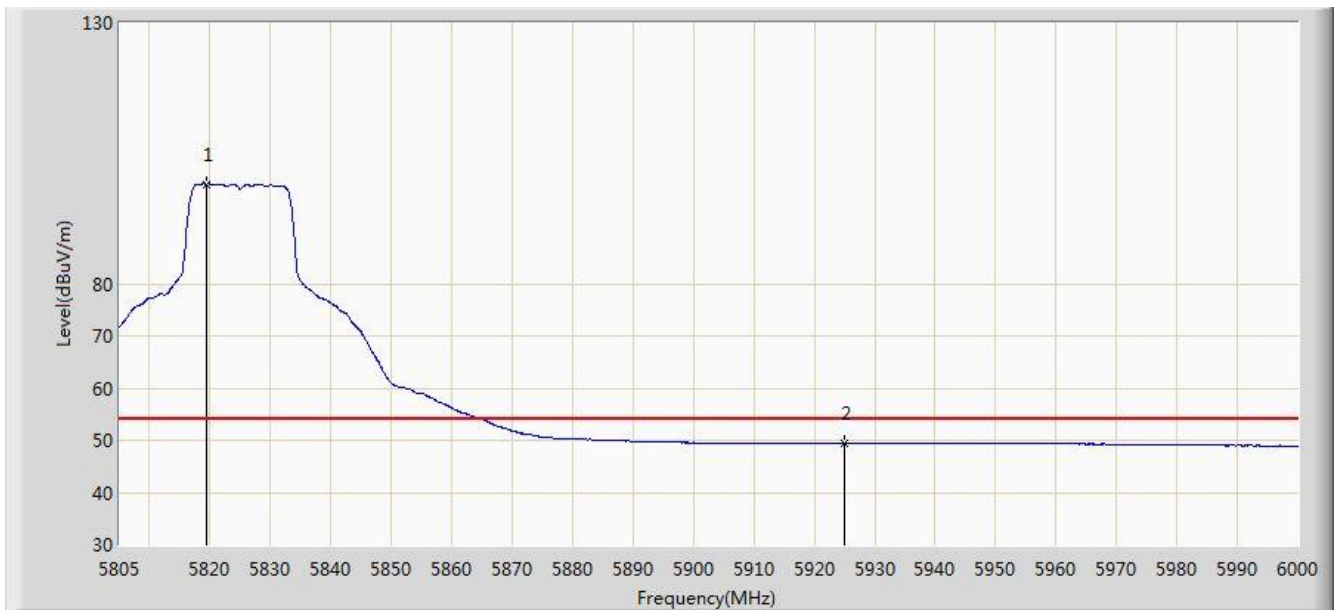


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5827.913	111.223	107.211	N/A	N/A	4.012	PK
2			5850.000	73.553	69.496	-48.647	122.200	4.058	PK
3			5855.000	72.233	68.173	-38.567	110.800	4.060	PK
4			5875.000	63.538	59.433	-41.662	105.200	4.105	PK
5			5925.000	61.996	57.743	-12.004	74.000	4.254	PK
6		*	5931.555	63.195	58.928	-10.805	74.000	4.268	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:14
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 2	

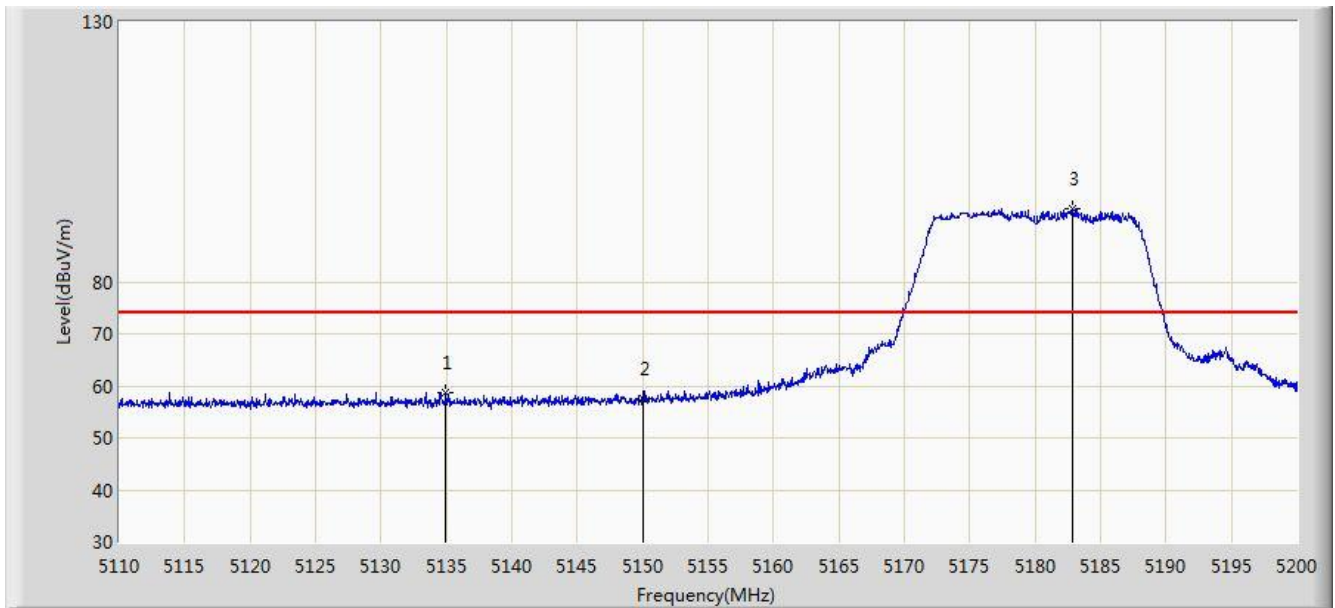


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5819.430	99.112	95.119	N/A	N/A	3.992	AV
2			5925.000	49.406	45.153	-4.594	54.000	4.254	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3	

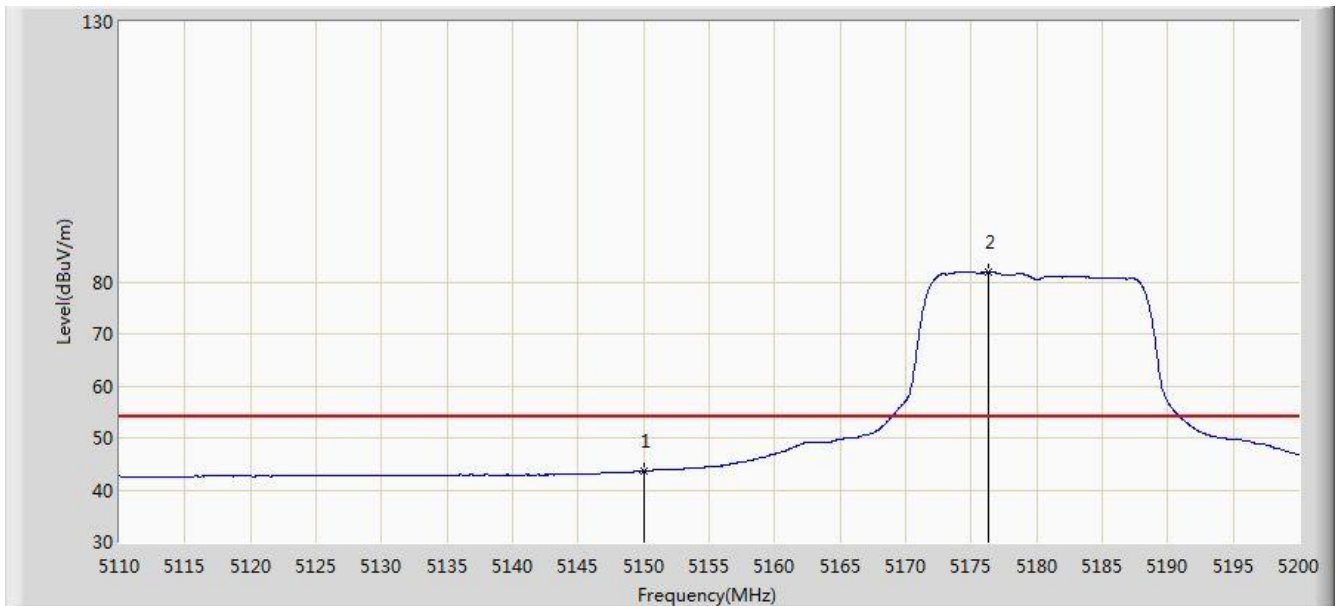


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5134.975	58.569	55.260	-15.431	74.000	3.309	PK
2			5150.000	57.652	54.343	-16.348	74.000	3.309	PK
3		*	5182.810	94.001	90.731	N/A	N/A	3.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3	

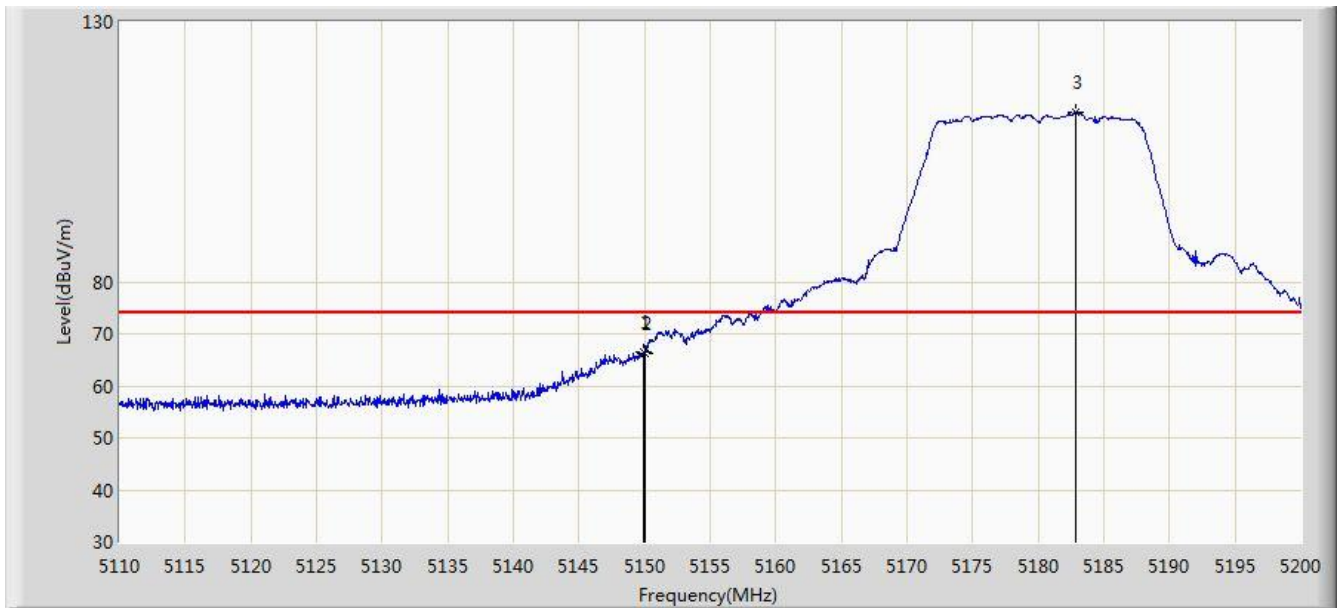


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.571	40.262	-10.429	54.000	3.309	AV
2		*	5176.285	81.757	78.481	N/A	N/A	3.276	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3	

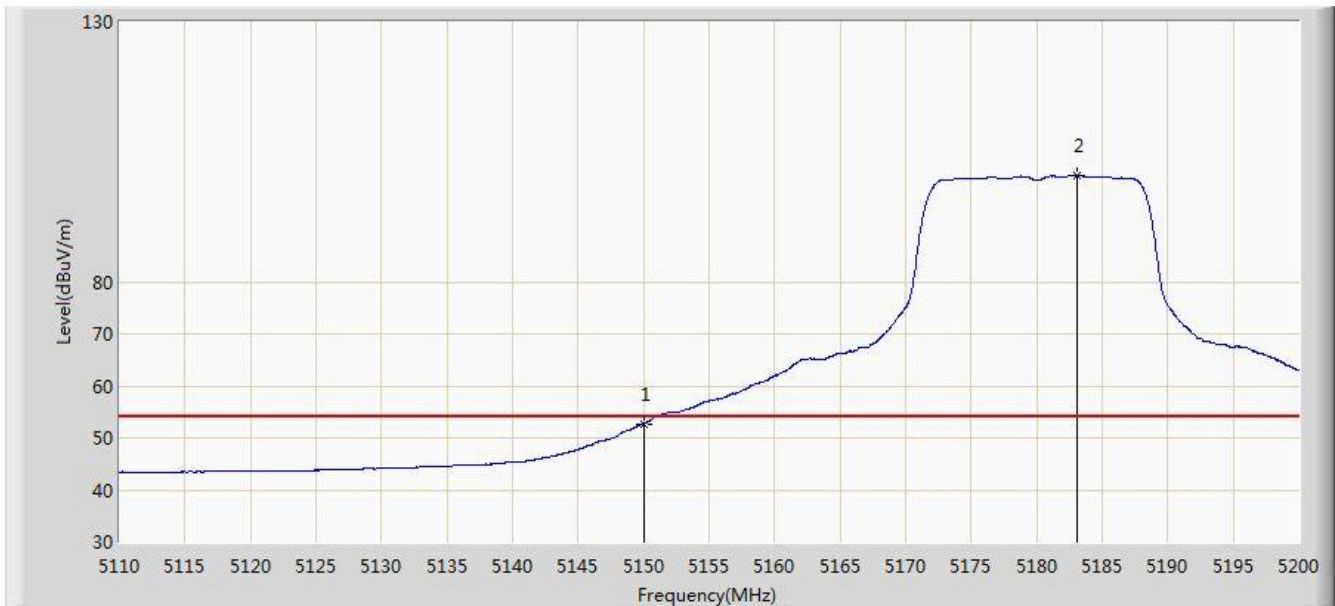


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.870	66.468	63.159	-7.532	74.000	3.309	PK
2			5150.000	66.347	63.038	-7.653	74.000	3.309	PK
3		*	5182.855	112.490	109.220	N/A	N/A	3.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 3	

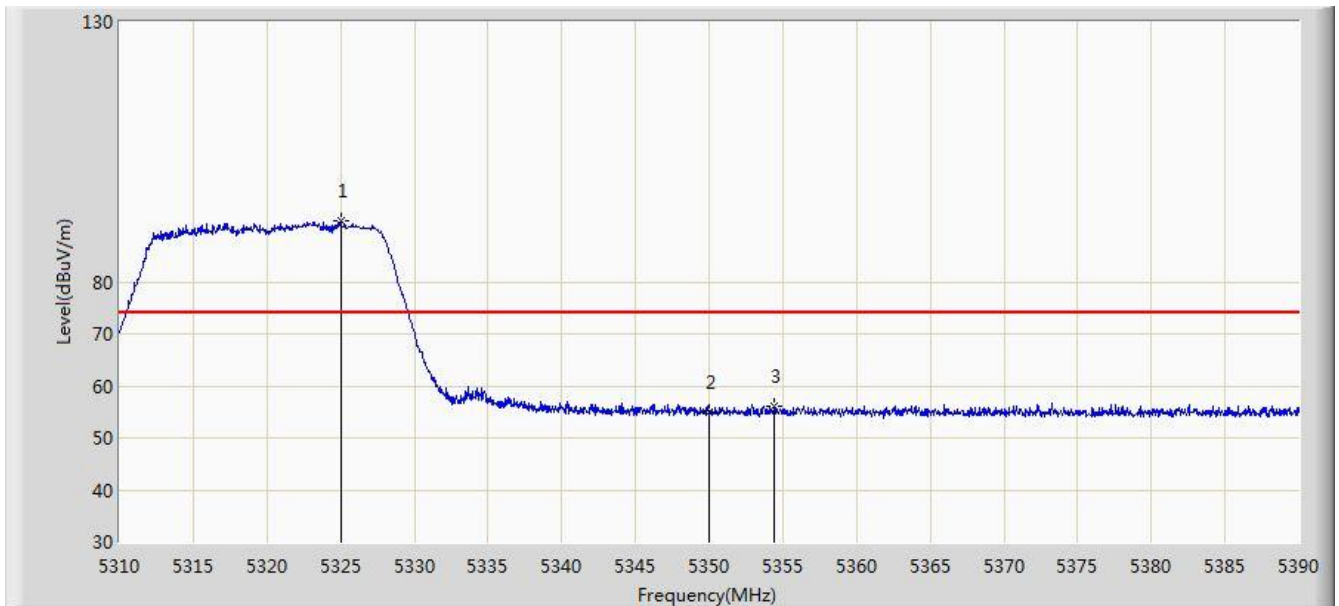


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.740	49.431	-1.260	54.000	3.309	AV
2		*	5183.035	100.389	97.119	N/A	N/A	3.270	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 3	

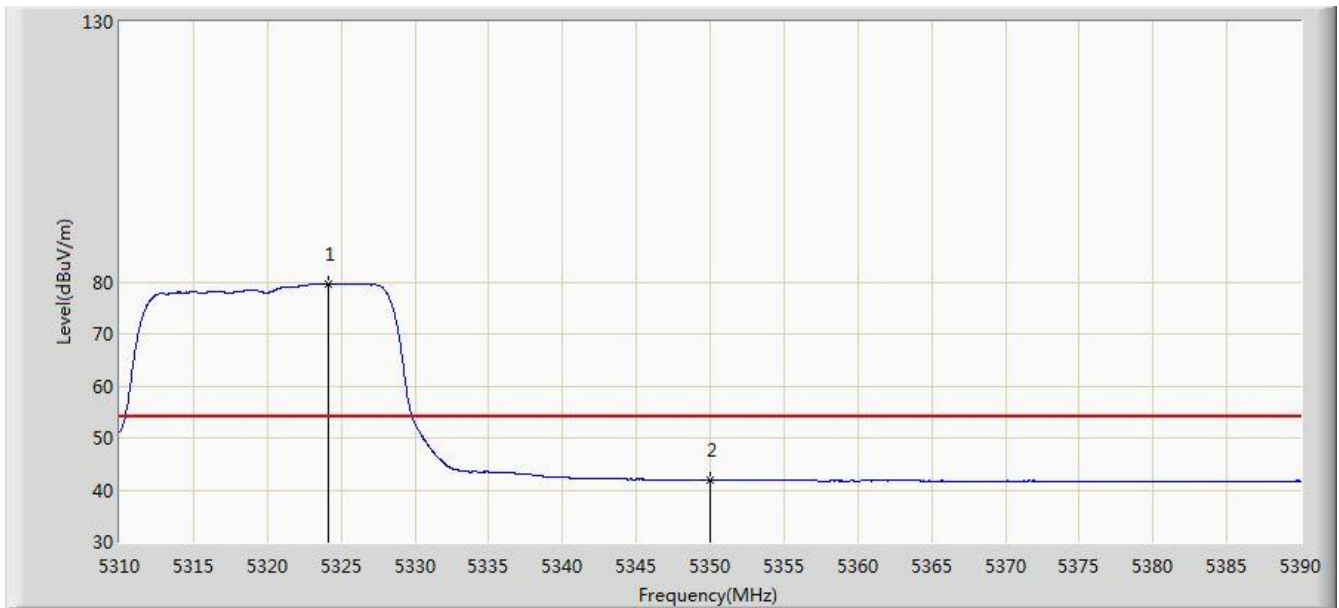


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5325.000	91.647	88.584	N/A	N/A	3.064	PK
2			5350.000	54.886	51.854	-19.114	74.000	3.032	PK
3			5354.400	56.083	53.055	-17.917	74.000	3.028	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 23:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 3	

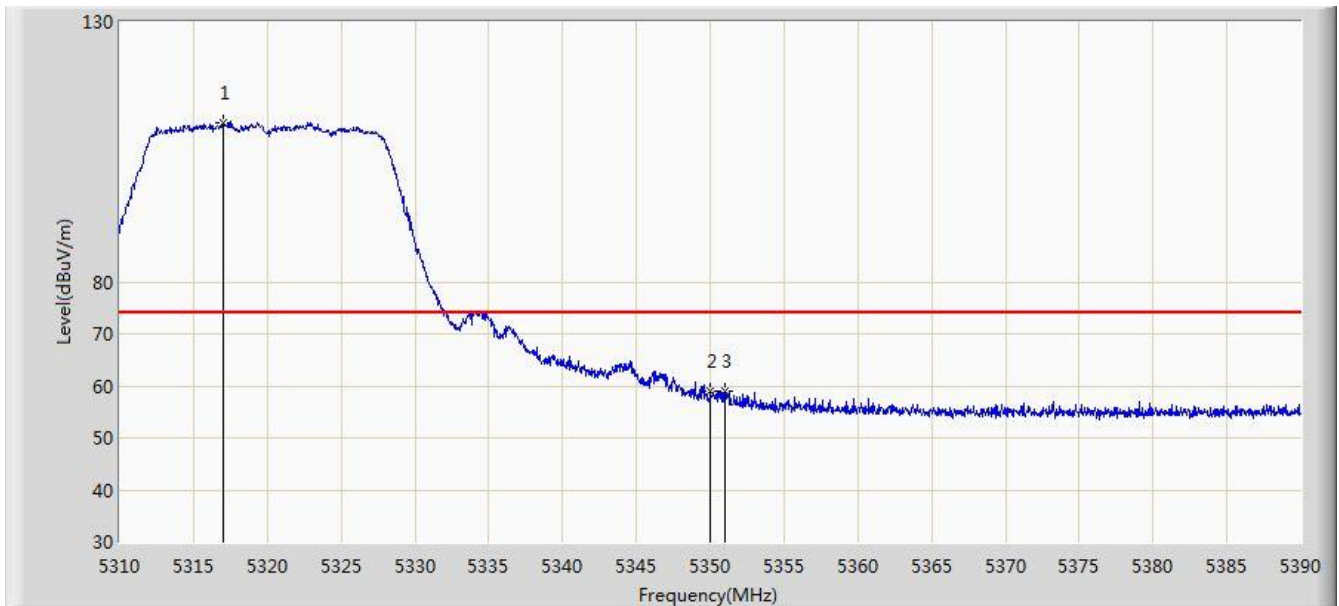


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5324.160	79.582	76.517	N/A	N/A	3.065	AV
2			5350.000	41.950	38.918	-12.050	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 3	

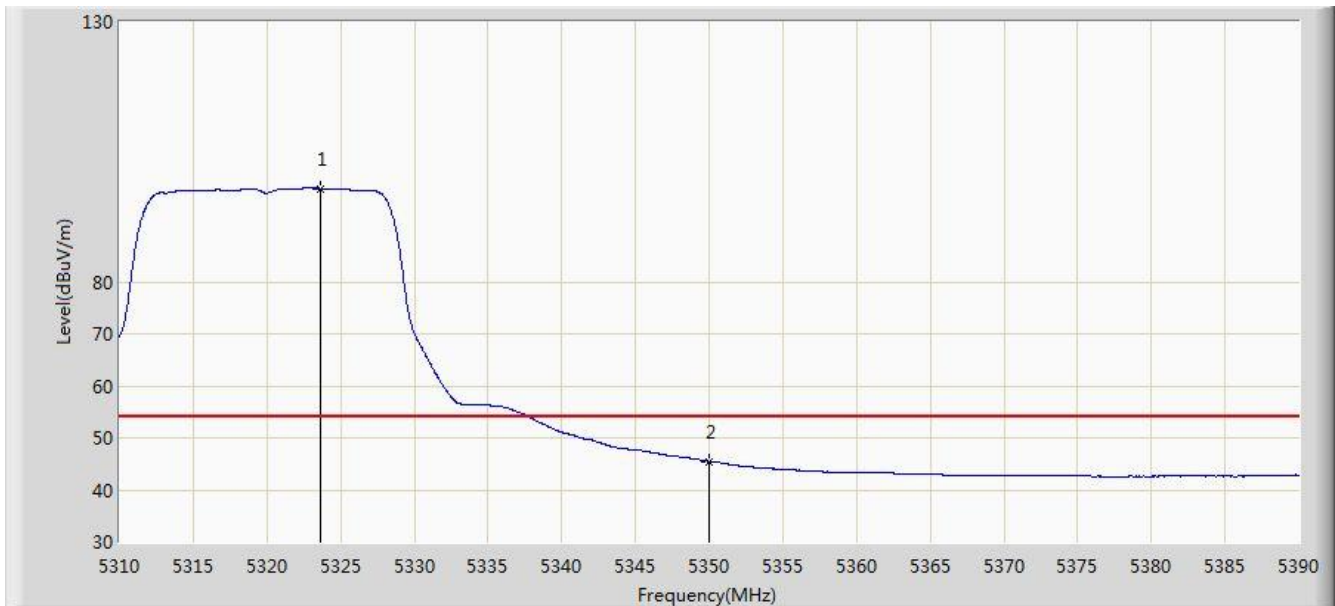


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5317.000	110.615	107.536	N/A	N/A	3.079	PK
2			5350.000	58.993	55.961	-15.007	74.000	3.032	PK
3			5351.000	59.093	56.062	-14.907	74.000	3.032	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 3	

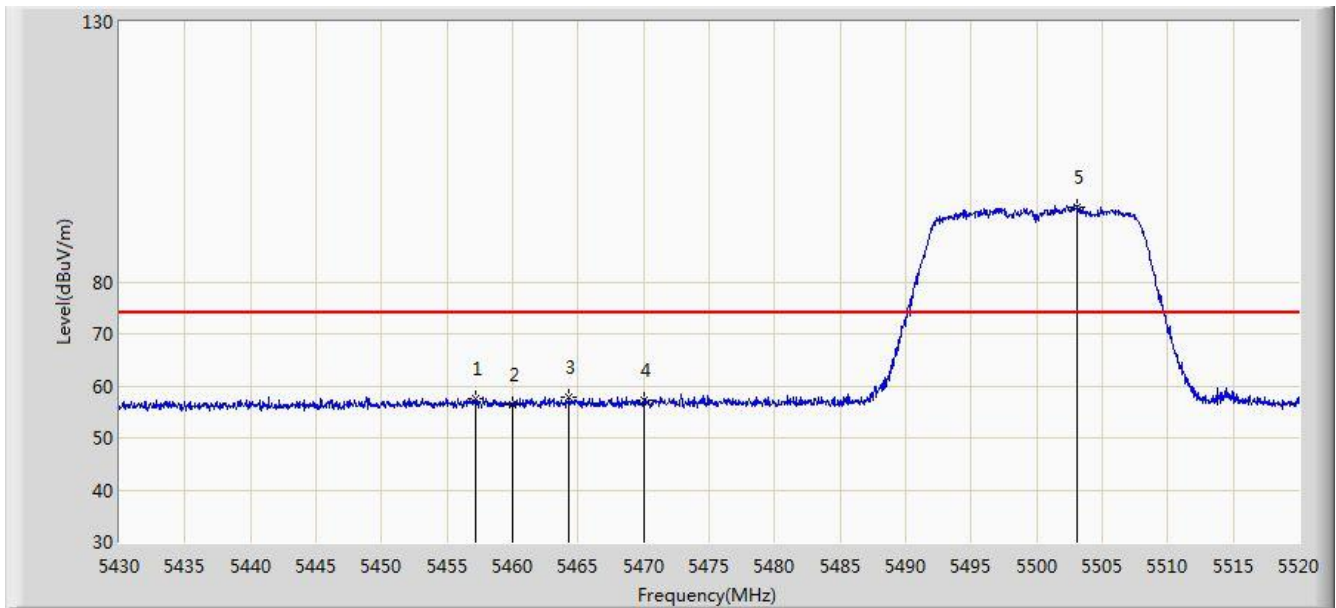


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5323.640	97.941	94.875	N/A	N/A	3.066	AV
2			5350.000	45.478	42.446	-8.522	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 3	

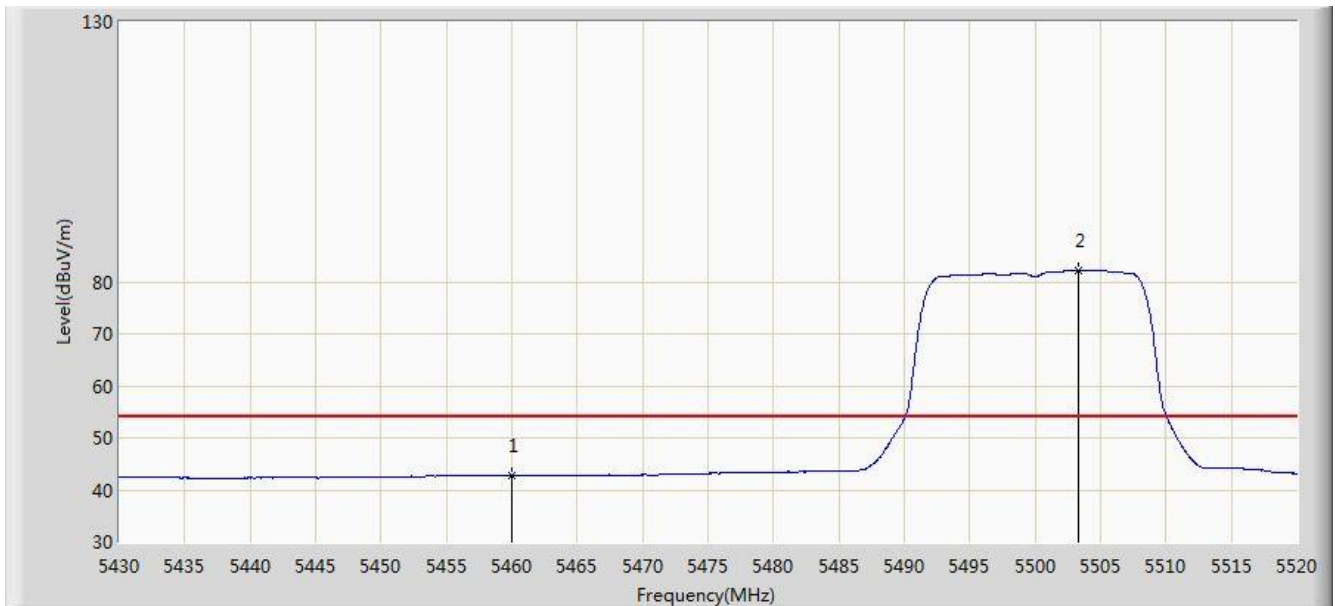


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5457.135	57.534	54.069	-16.466	74.000	3.465	PK
2			5460.000	56.399	52.917	-17.601	74.000	3.482	PK
3			5464.335	57.909	54.402	-16.091	74.000	3.506	PK
4			5470.000	57.293	53.754	-16.707	74.000	3.539	PK
5		*	5503.035	94.445	90.922	N/A	N/A	3.523	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 3	

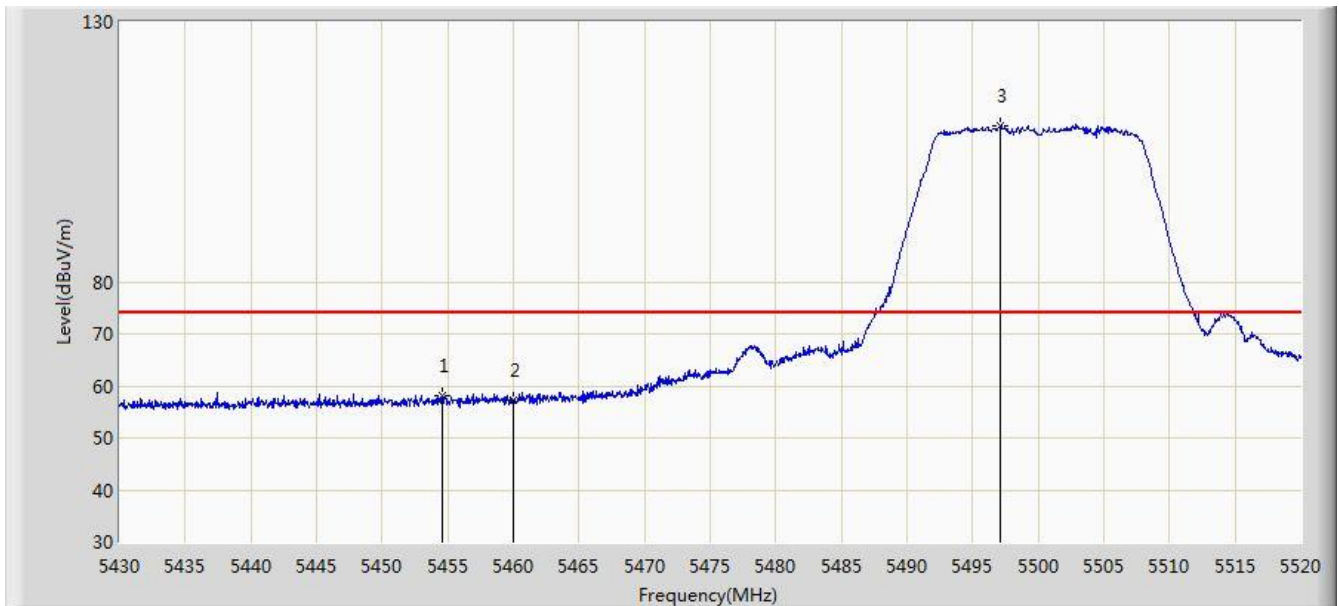


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.753	39.271	-11.247	54.000	3.482	AV
2		*	5503.305	82.268	78.745	N/A	N/A	3.523	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 3	

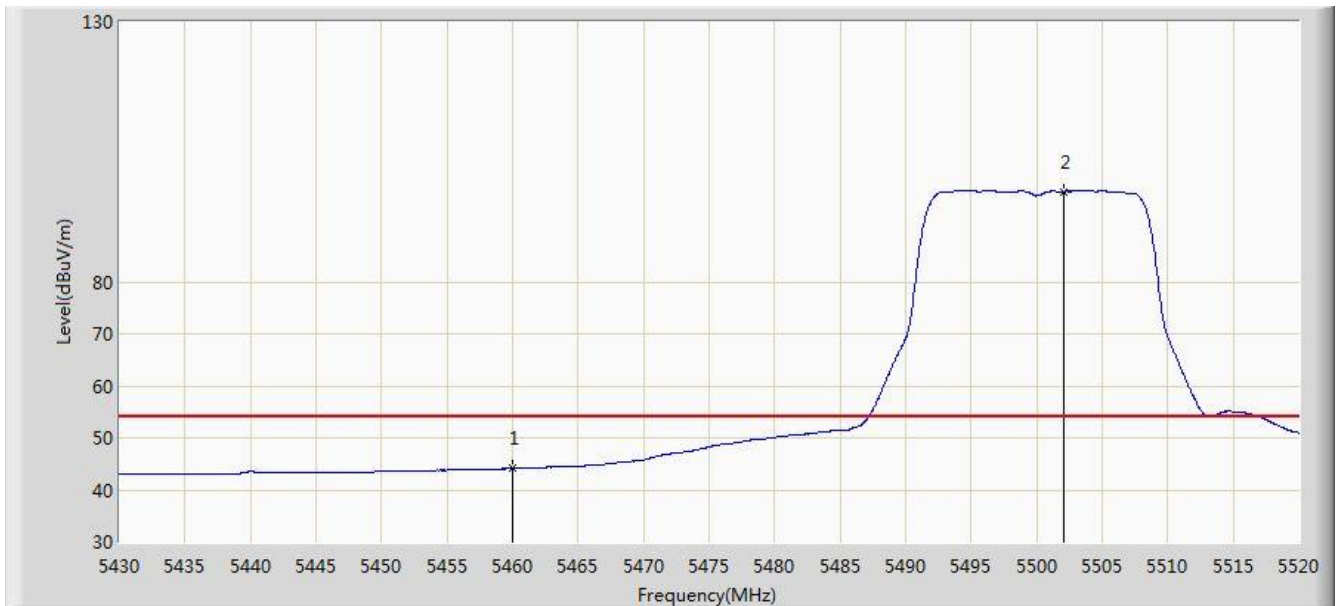


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5454.615	58.134	54.684	-15.866	74.000	3.450	PK
2			5460.000	57.276	53.794	-16.724	74.000	3.482	PK
3		*	5497.050	110.031	106.502	N/A	N/A	3.530	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 3	

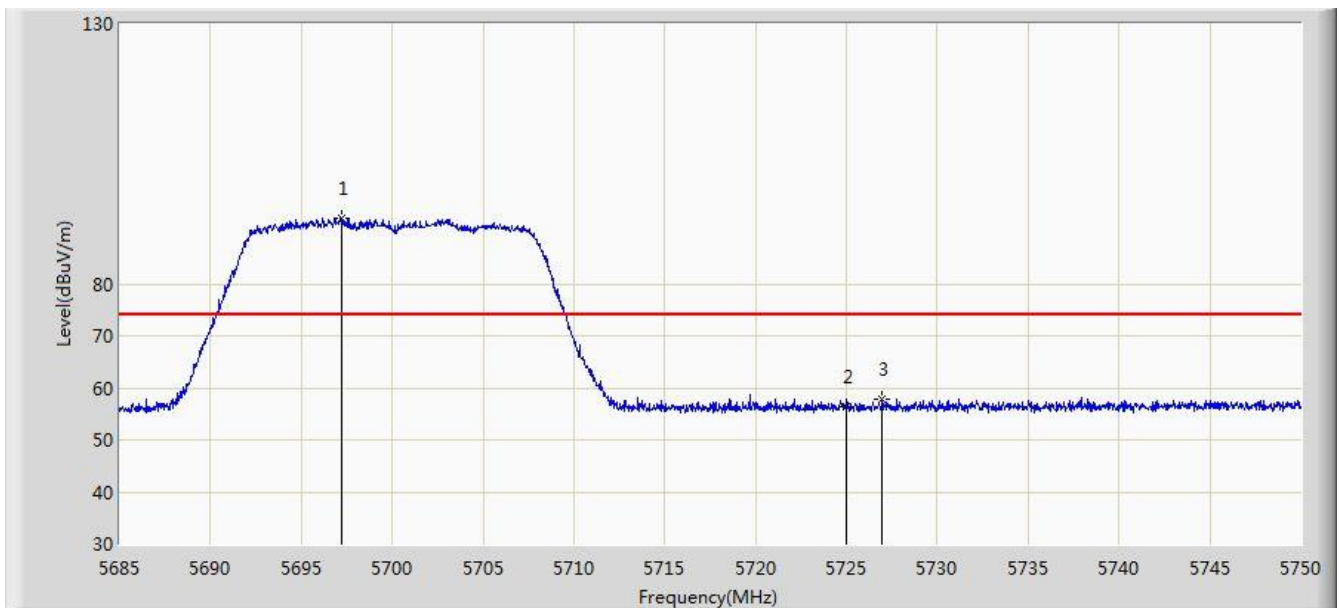


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	44.124	40.642	-9.876	54.000	3.482	AV
2		*	5502.045	97.345	93.821	N/A	N/A	3.524	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 3	

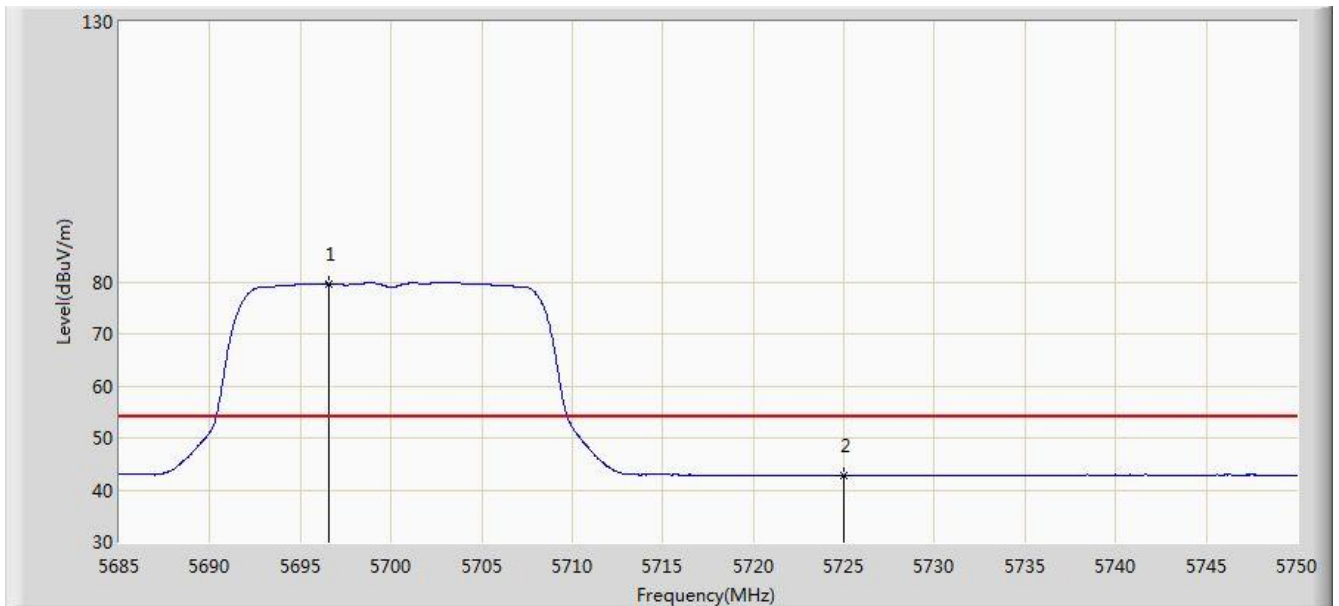


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5697.187	92.637	88.922	N/A	N/A	3.715	PK
2			5725.000	56.351	52.560	-17.649	74.000	3.791	PK
3			5726.958	57.915	54.118	-16.085	74.000	3.796	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 3	

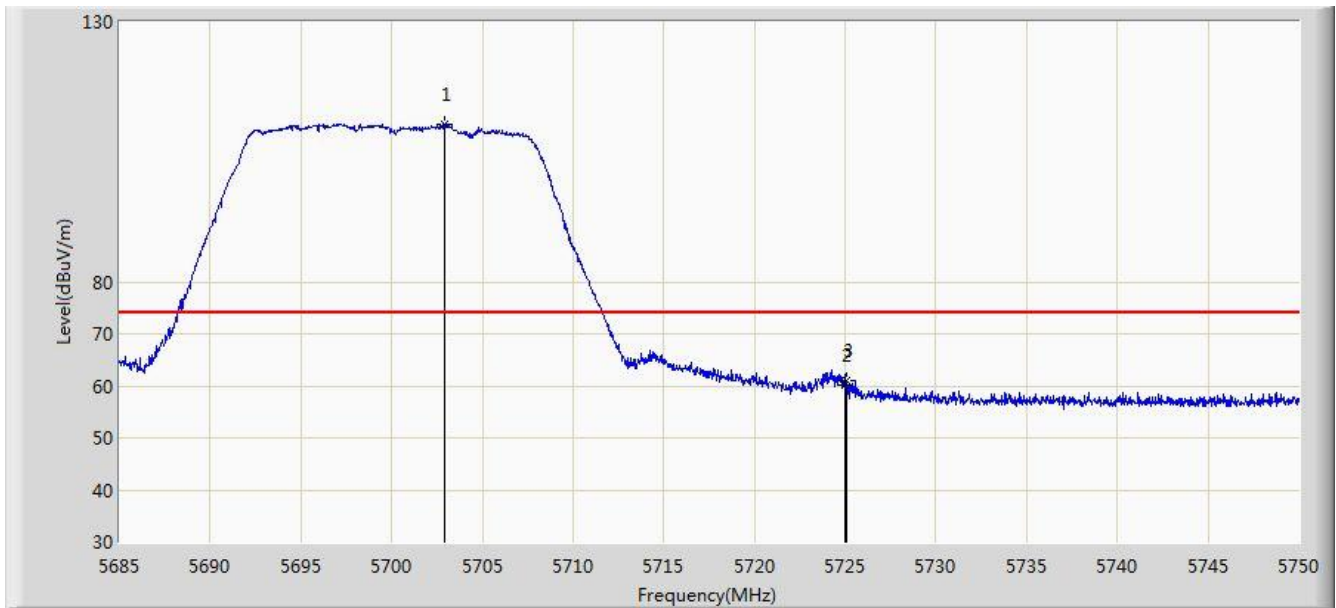


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5696.603	79.691	75.977	N/A	N/A	3.714	AV
2			5725.000	42.827	39.036	-11.173	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 3	

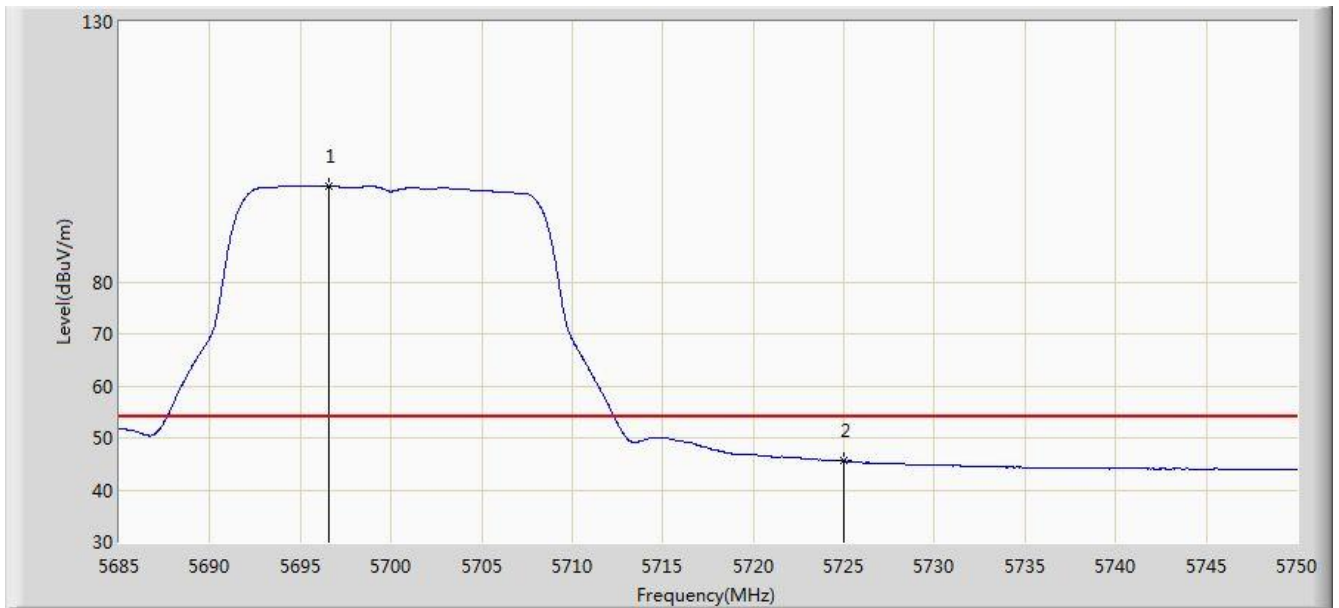


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5702.908	110.372	106.649	N/A	N/A	3.723	PK
2			5725.000	60.162	56.371	-13.838	74.000	3.791	PK
3			5725.040	60.989	57.198	-13.011	74.000	3.791	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 3	

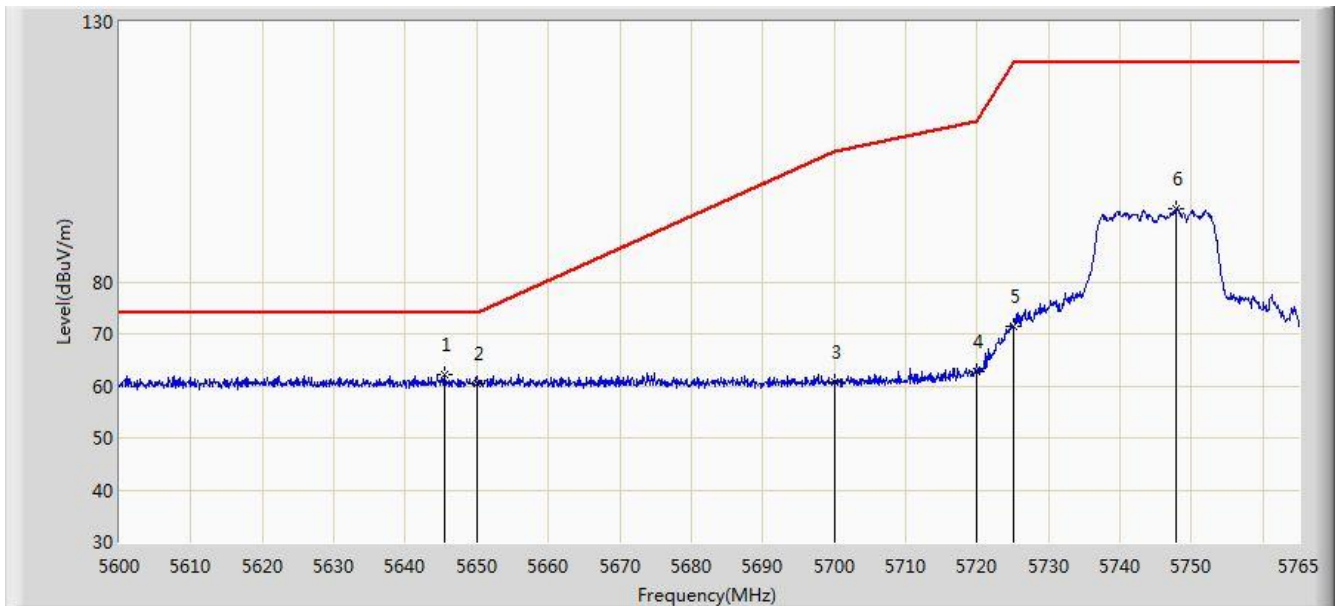


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5696.538	98.484	94.770	N/A	N/A	3.713	AV
2			5725.000	45.559	41.768	-8.441	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:30
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 3	

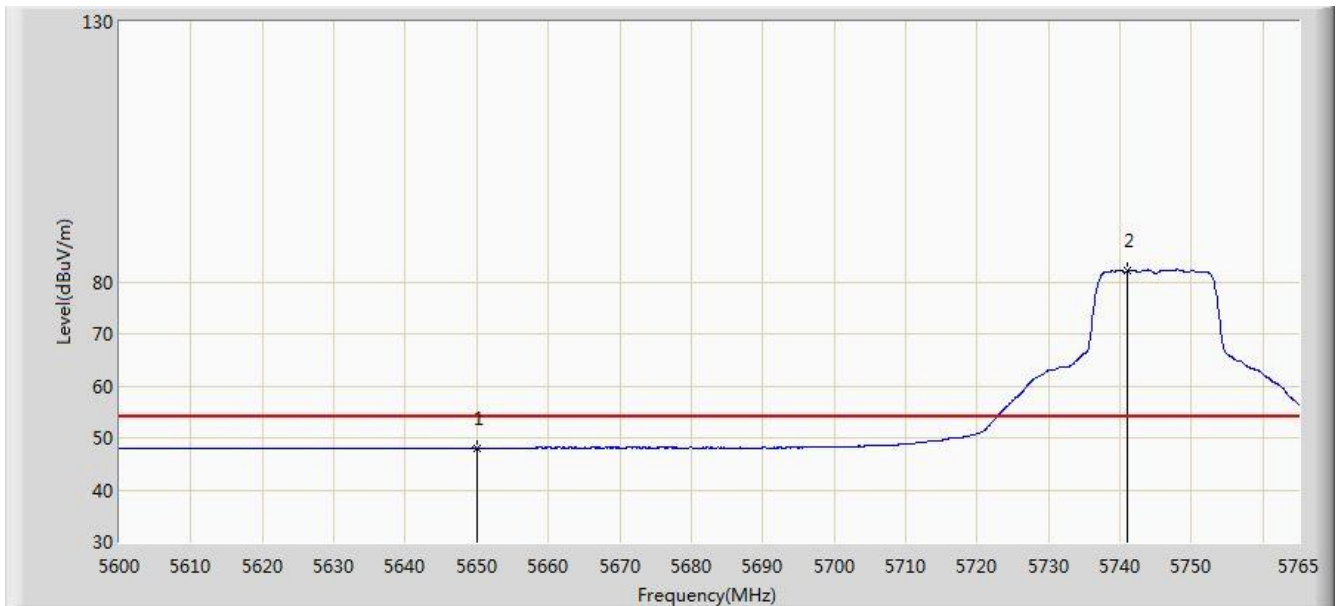


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5645.458	62.280	58.659	-11.720	74.000	3.622	PK
2			5650.000	60.371	56.744	-13.629	74.000	3.627	PK
3			5700.000	60.850	57.131	-44.350	105.200	3.719	PK
4			5720.000	62.781	59.005	-48.019	110.800	3.776	PK
5			5725.000	71.531	67.740	-50.669	122.200	3.791	PK
6			5747.840	94.154	90.291	N/A	N/A	3.864	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 3	

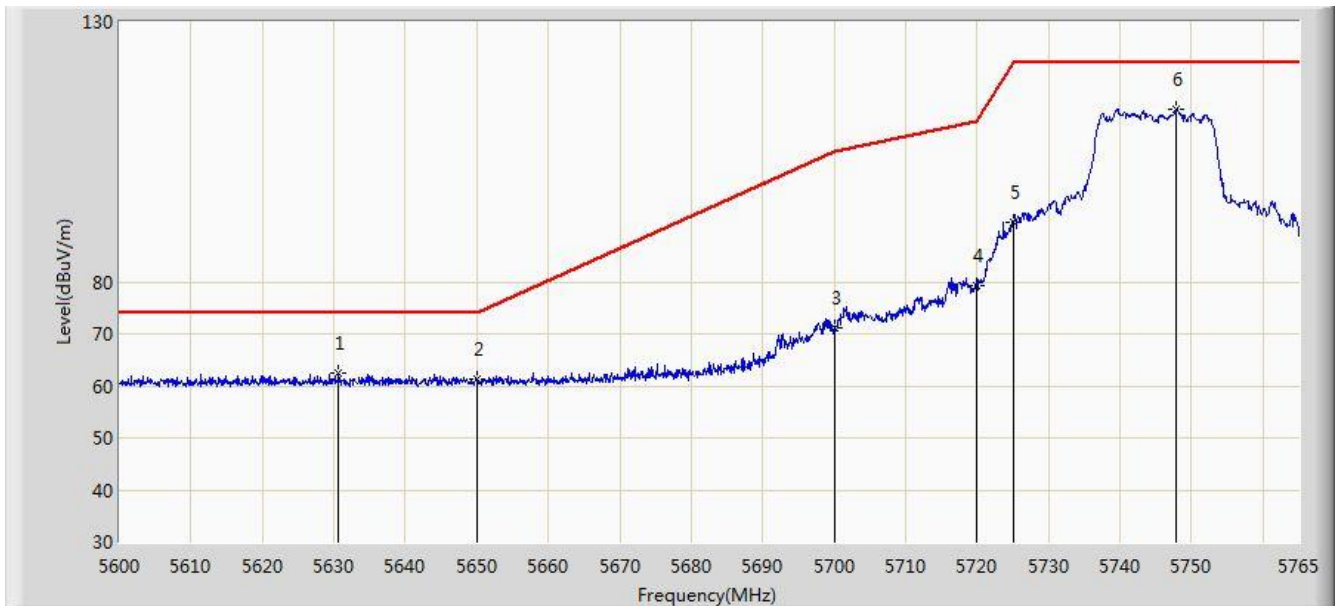


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	48.066	44.439	-5.934	54.000	3.627	AV
2		*	5741.075	82.081	78.241	N/A	N/A	3.840	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:27
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 3	

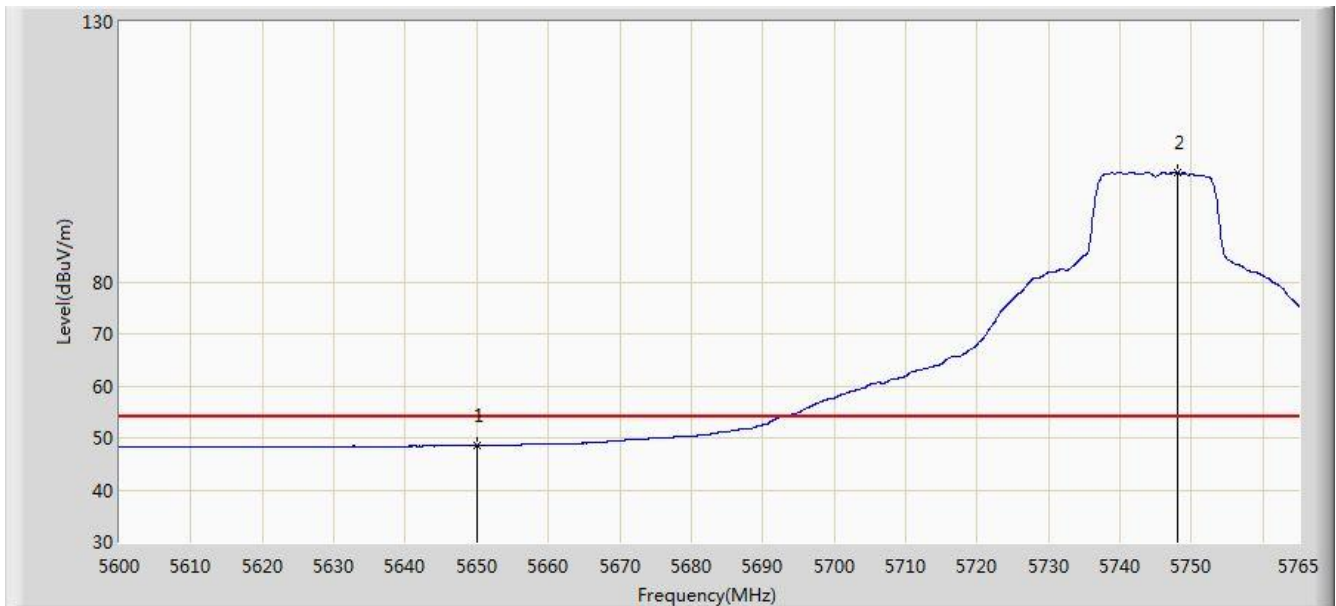


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5630.690	62.525	58.948	-11.475	74.000	3.577	PK
2			5650.000	61.272	57.645	-12.728	74.000	3.627	PK
3			5700.000	71.260	67.541	-33.940	105.200	3.719	PK
4			5720.000	79.300	75.524	-31.500	110.800	3.776	PK
5			5725.000	91.449	87.658	-30.751	122.200	3.791	PK
6		*	5747.922	113.201	109.337	N/A	N/A	3.864	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 3	

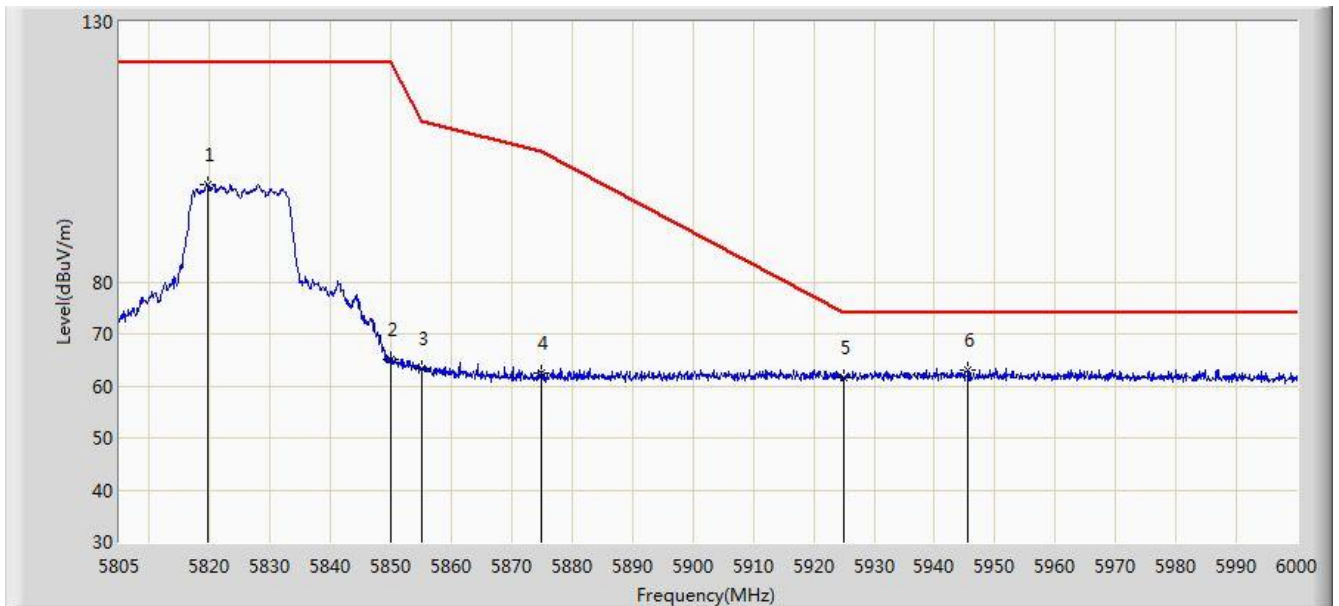


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5650.000	48.519	44.892	-5.481	54.000	3.627	AV
2		*	5748.005	101.005	97.141	N/A	N/A	3.864	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:36
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 3	

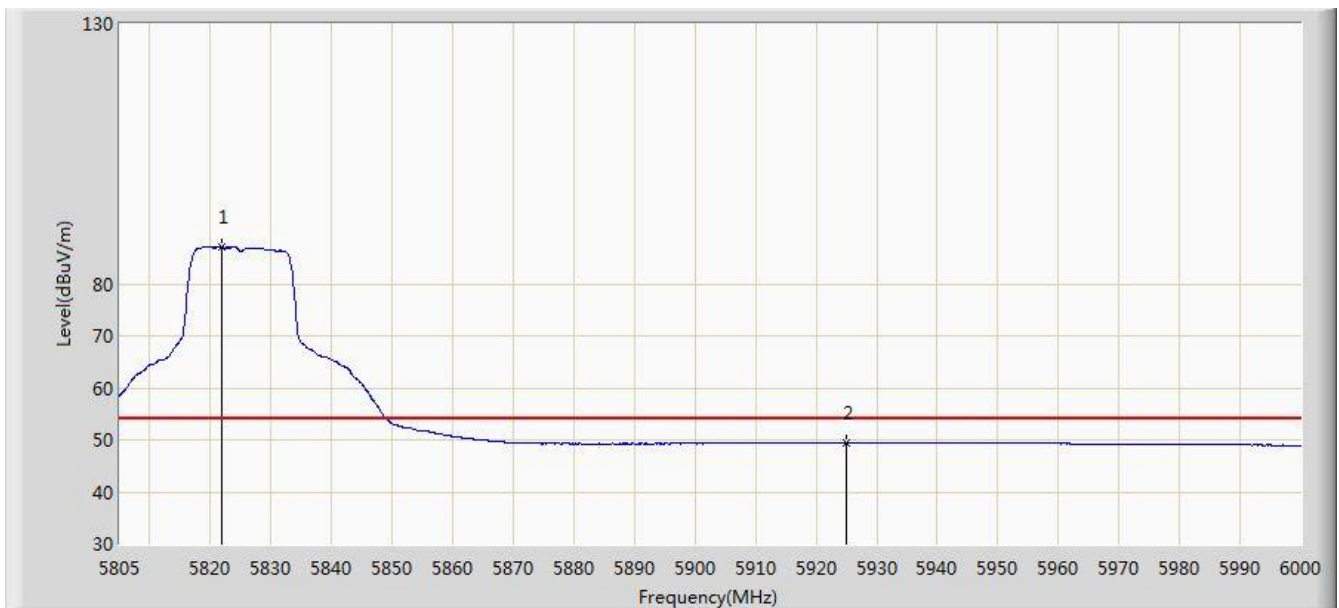


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5819.625	98.721	94.728	N/A	N/A	3.994	PK
2			5850.000	65.178	61.121	-57.022	122.200	4.058	PK
3			5855.000	63.349	59.289	-47.451	110.800	4.060	PK
4			5875.000	62.457	58.352	-42.743	105.200	4.105	PK
5			5925.000	61.614	57.361	-12.386	74.000	4.254	PK
6		*	5945.595	63.081	58.809	-10.919	74.000	4.272	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 3	

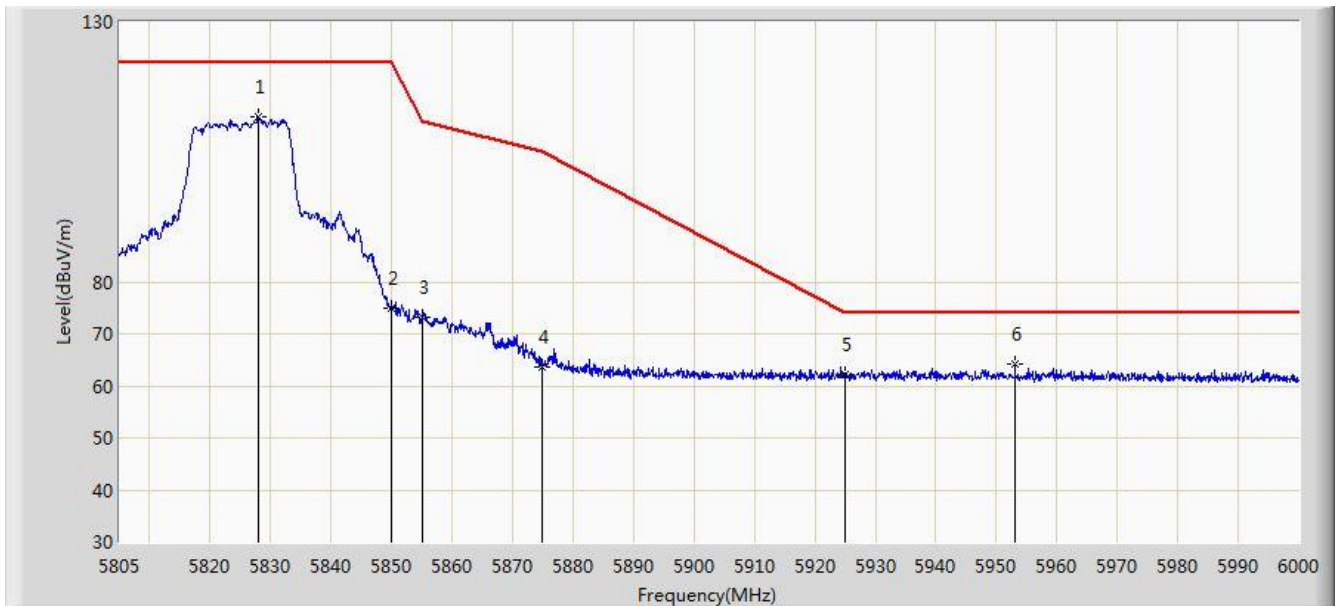


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5821.868	87.115	83.117	N/A	N/A	3.998	AV
2			5925.000	49.341	45.088	-4.659	54.000	4.254	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:33
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 3	

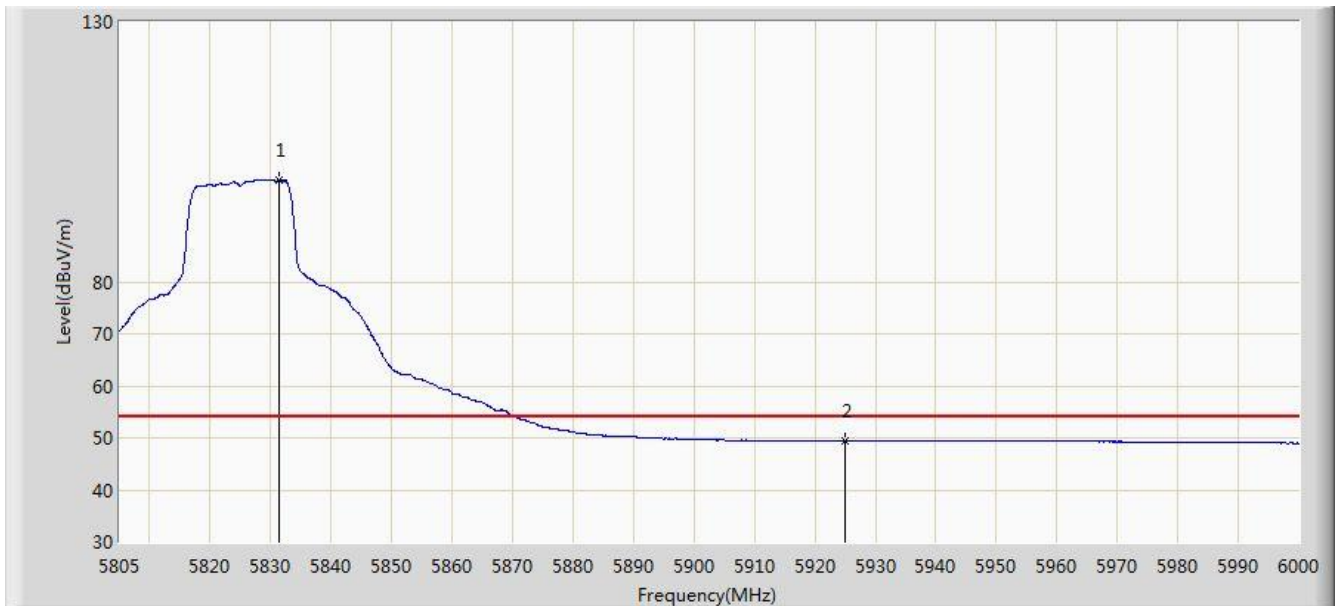


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5827.913	111.608	107.596	N/A	N/A	4.012	PK
2			5850.000	74.911	70.854	-47.289	122.200	4.058	PK
3			5855.000	73.055	68.995	-37.745	110.800	4.060	PK
4			5875.000	63.537	59.432	-41.663	105.200	4.105	PK
5			5925.000	62.268	58.015	-11.732	74.000	4.254	PK
6		*	5953.103	64.119	59.838	-9.881	74.000	4.281	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 3	

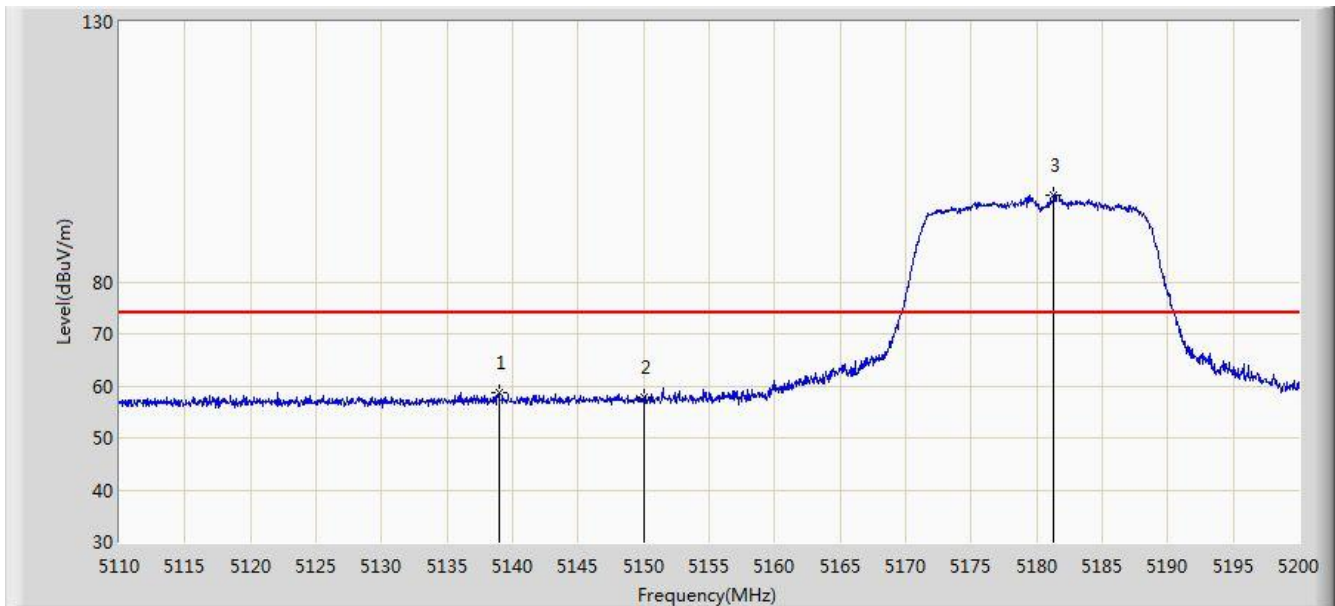


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5831.325	99.507	95.487	N/A	N/A	4.020	AV
2			5925.000	49.460	45.207	-4.540	54.000	4.254	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 1	

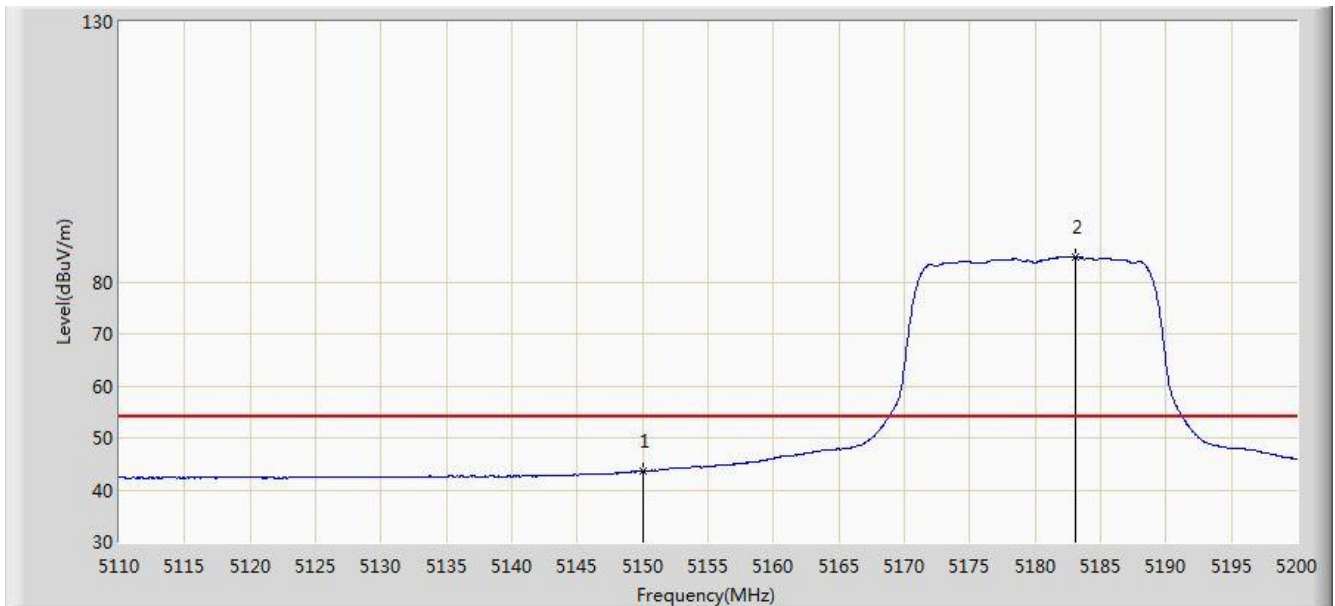


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5138.935	58.833	55.523	-15.167	74.000	3.311	PK
2			5150.000	57.795	54.486	-16.205	74.000	3.309	PK
3		*	5181.325	96.670	93.398	N/A	N/A	3.272	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 1	

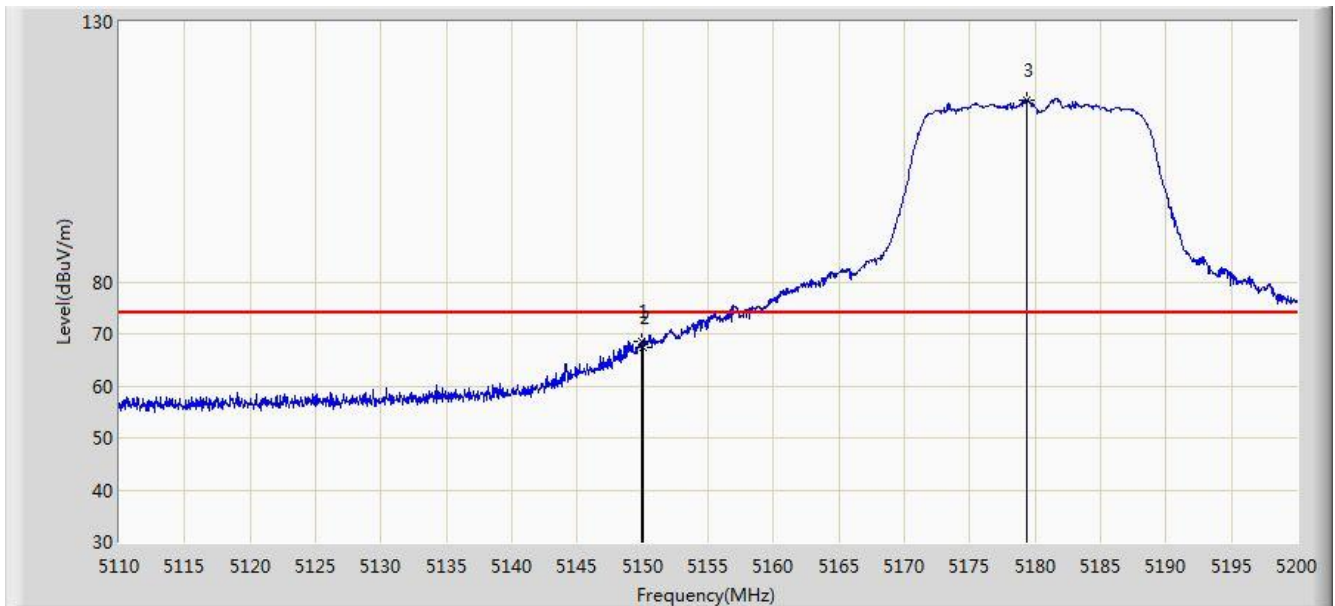


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.653	40.344	-10.347	54.000	3.309	AV
2		*	5183.035	84.866	81.596	N/A	N/A	3.270	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 1	

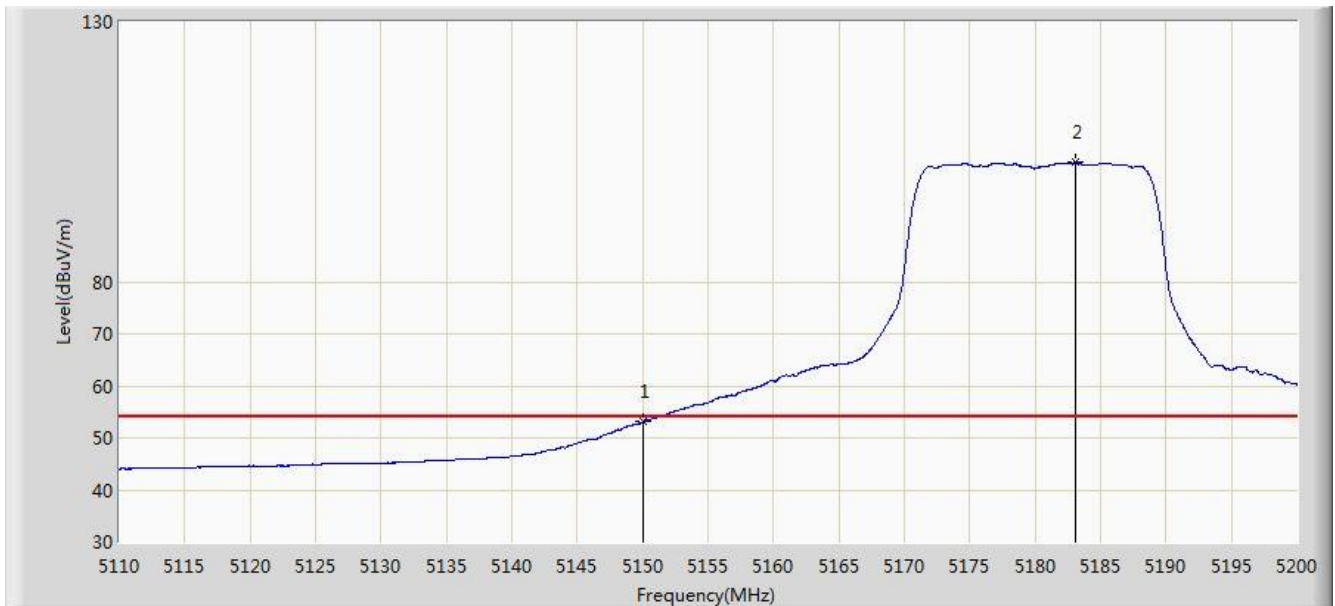


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.870	68.636	65.327	-5.364	74.000	3.309	PK
2			5150.000	67.402	64.093	-6.598	74.000	3.309	PK
3		*	5179.390	115.018	111.745	N/A	N/A	3.273	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 1	

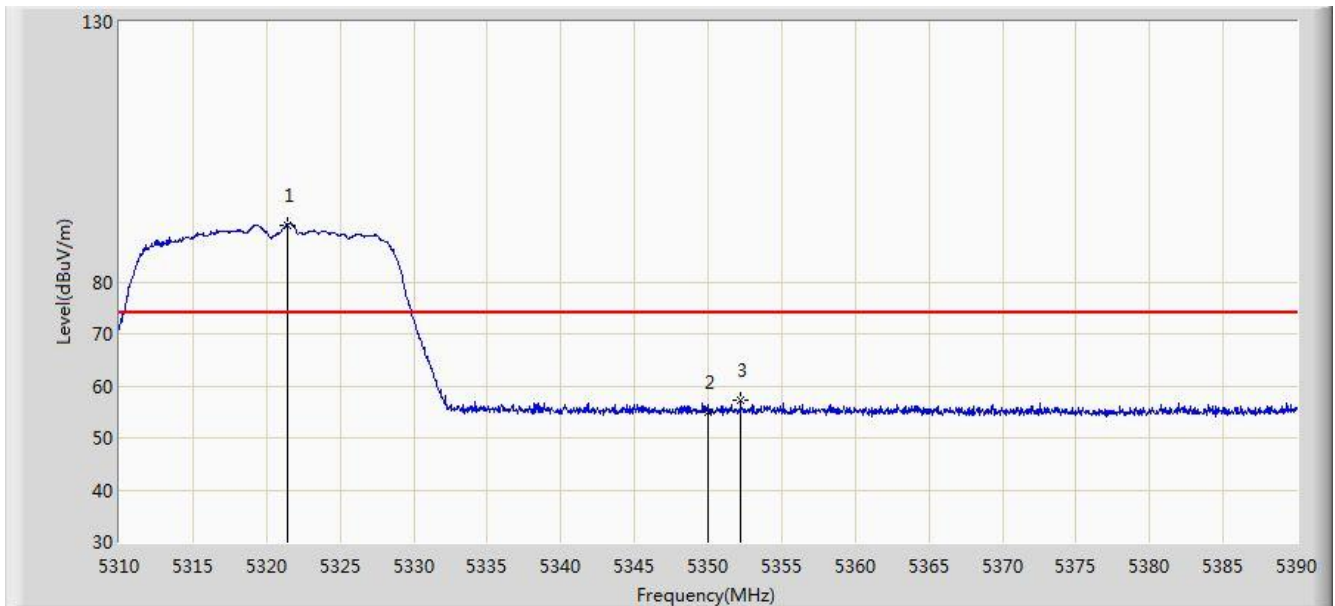


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	53.060	49.751	-0.940	54.000	3.309	AV
2		*	5183.035	102.935	99.665	N/A	N/A	3.270	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1	

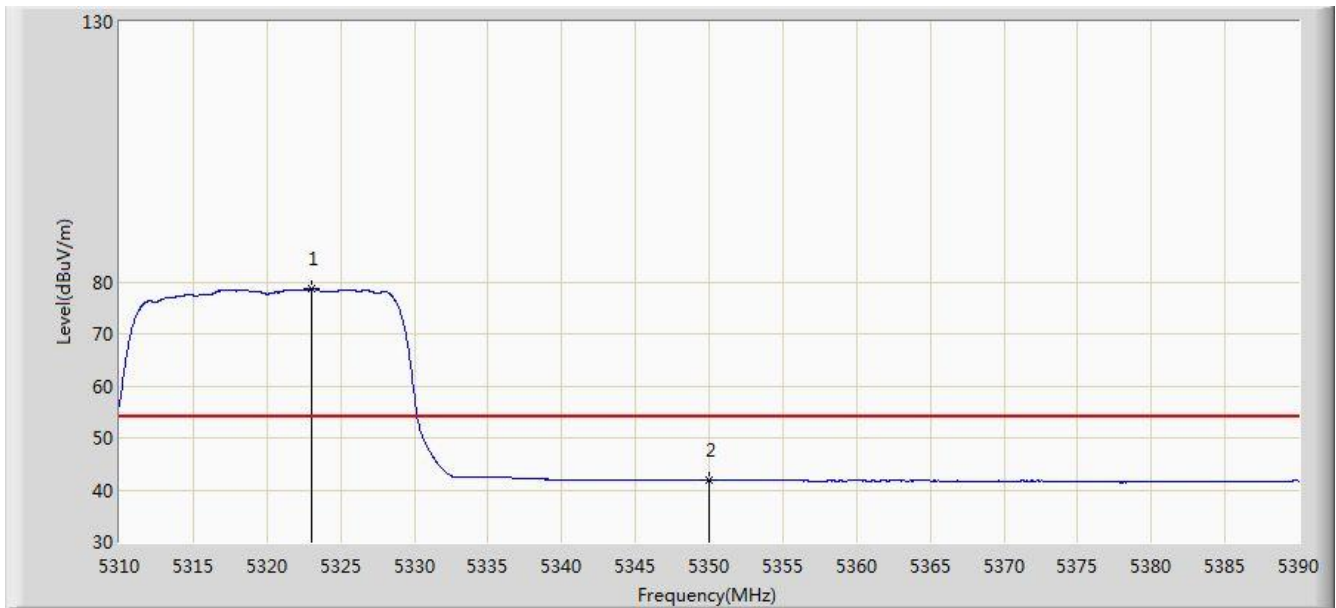


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5321.400	90.997	87.927	N/A	N/A	3.070	PK
2			5350.000	54.965	51.933	-19.035	74.000	3.032	PK
3			5352.200	57.378	54.348	-16.622	74.000	3.030	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1	

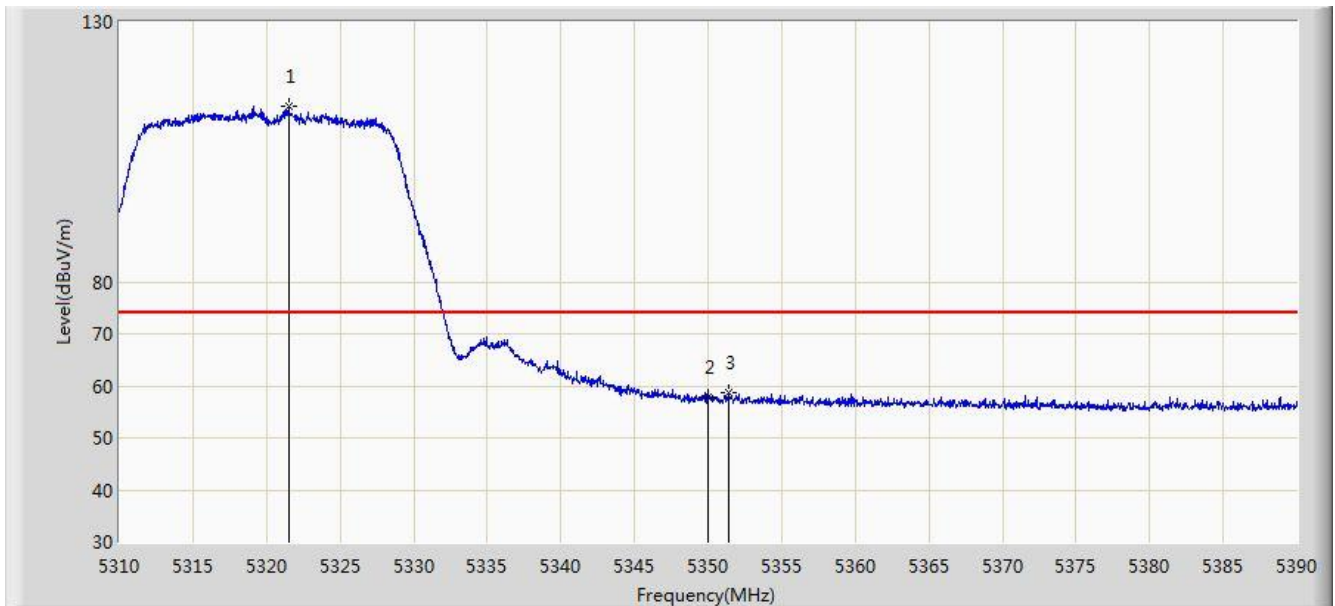


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5323.040	78.642	75.575	N/A	N/A	3.067	AV
2			5350.000	41.786	38.754	-12.214	54.000	3.032	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1	

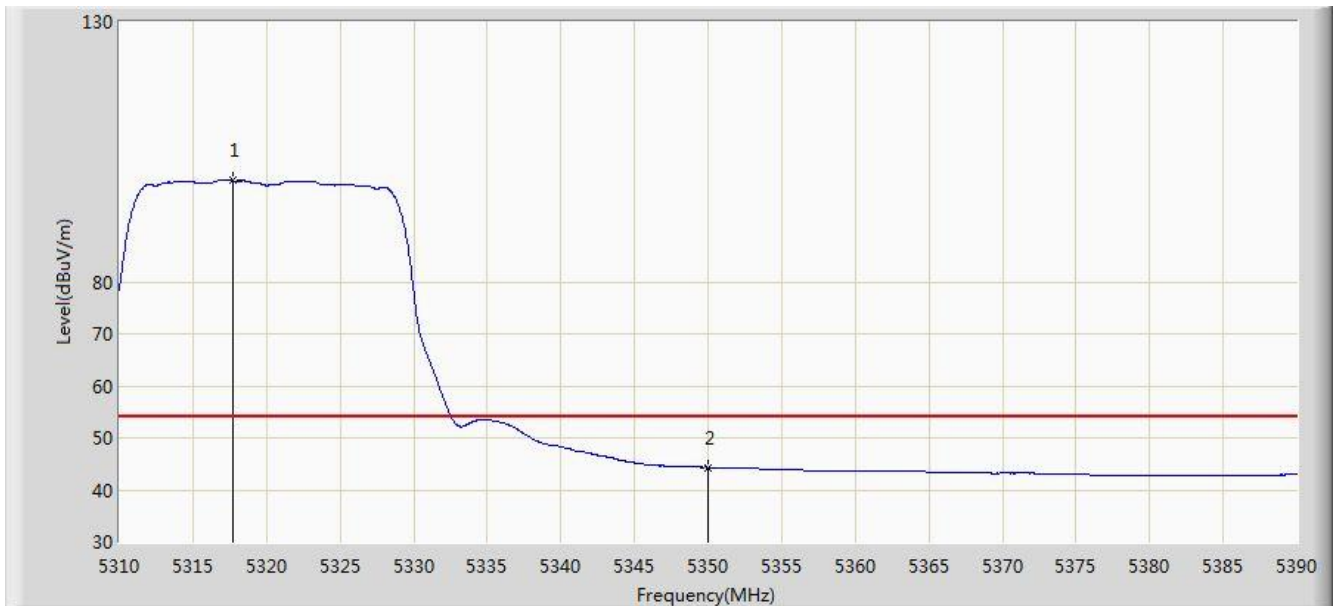


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5321.480	113.883	110.813	N/A	N/A	3.070	PK
2			5350.000	57.790	54.758	-16.210	74.000	3.032	PK
3			5351.360	58.806	55.775	-15.194	74.000	3.030	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 00:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1	

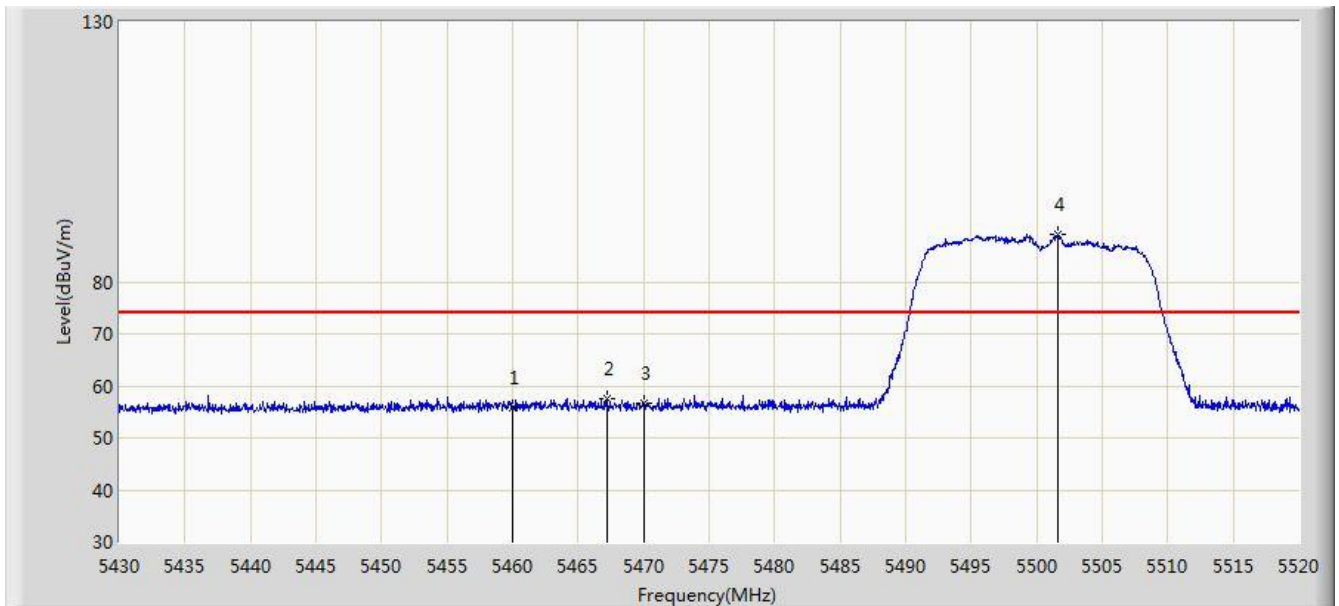


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5317.720	99.426	96.348	N/A	N/A	3.078	AV
2			5350.000	44.280	41.248	-9.720	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1	

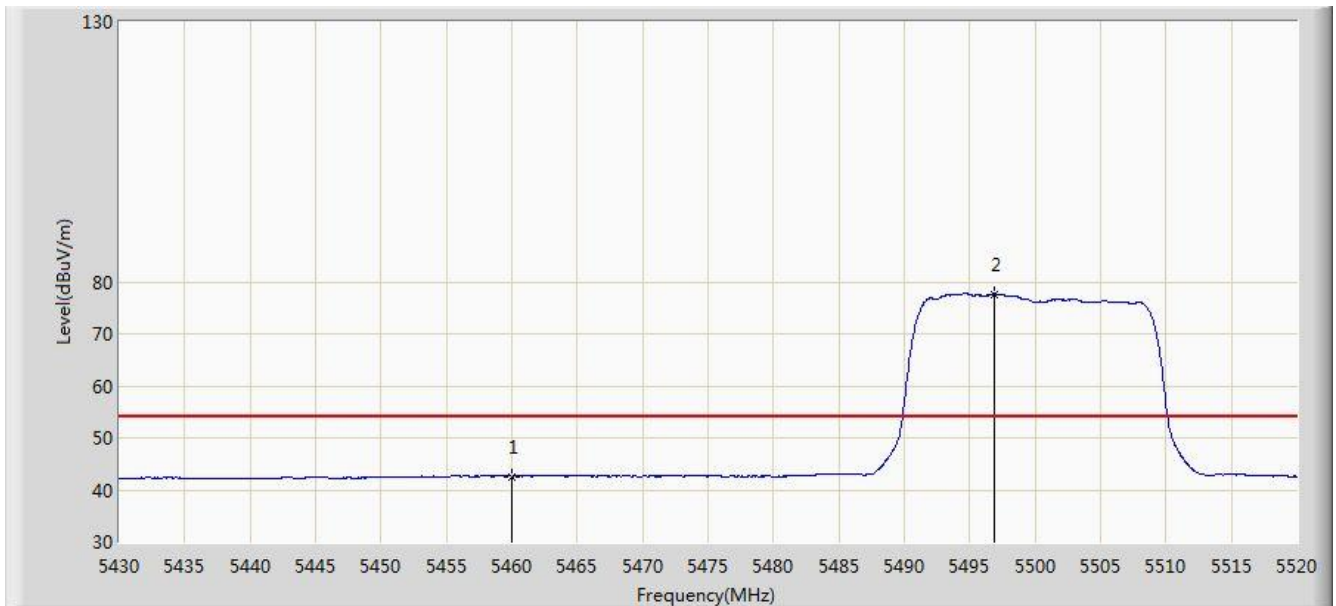


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	55.741	52.259	-18.259	74.000	3.482	PK
2			5467.260	57.608	54.084	-16.392	74.000	3.523	PK
3			5470.000	56.598	53.059	-17.402	74.000	3.539	PK
4		*	5501.595	89.033	85.509	N/A	N/A	3.524	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1	

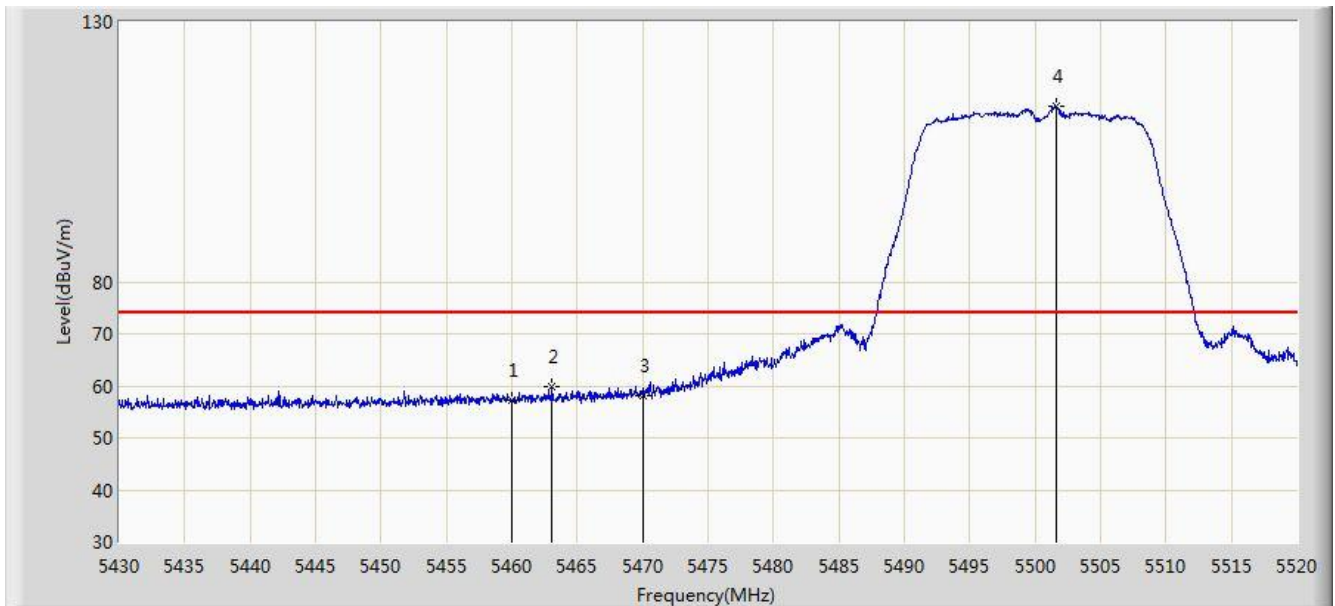


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.600	39.118	-11.400	54.000	3.482	AV
2		*	5496.870	77.681	74.151	N/A	N/A	3.530	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 04:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1	

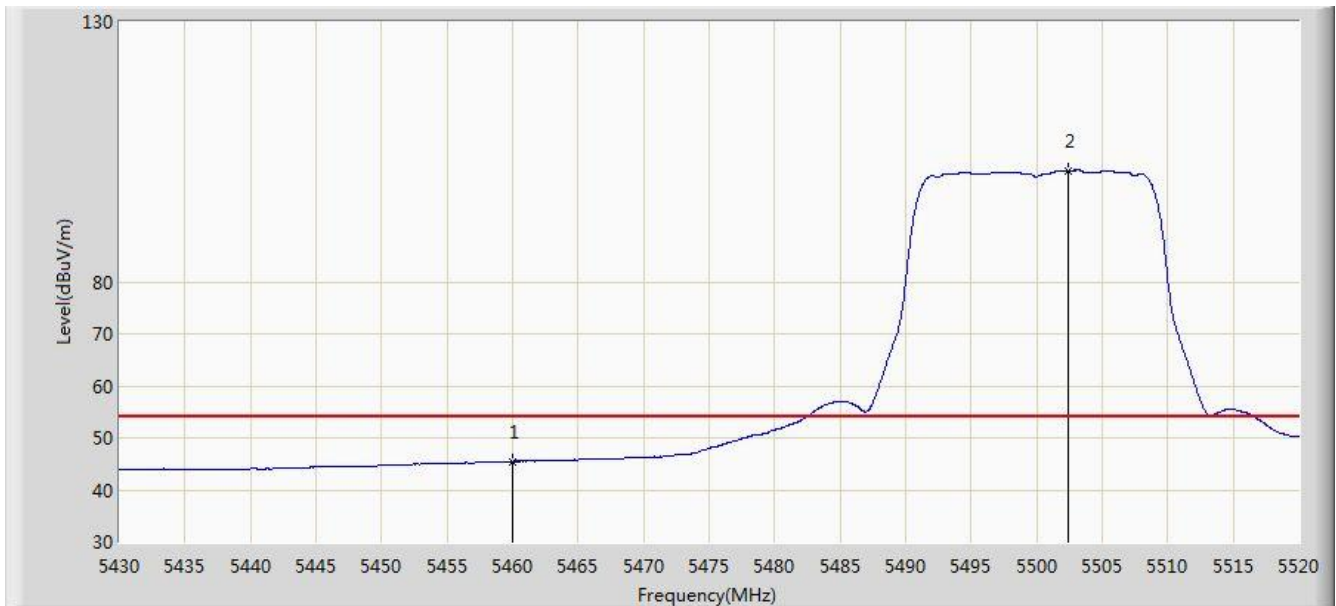


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	57.301	53.819	-16.699	74.000	3.482	PK
2			5463.075	59.763	56.264	-14.237	74.000	3.499	PK
3			5470.000	58.068	54.529	-15.932	74.000	3.539	PK
4		*	5501.595	113.811	110.287	N/A	N/A	3.524	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1	

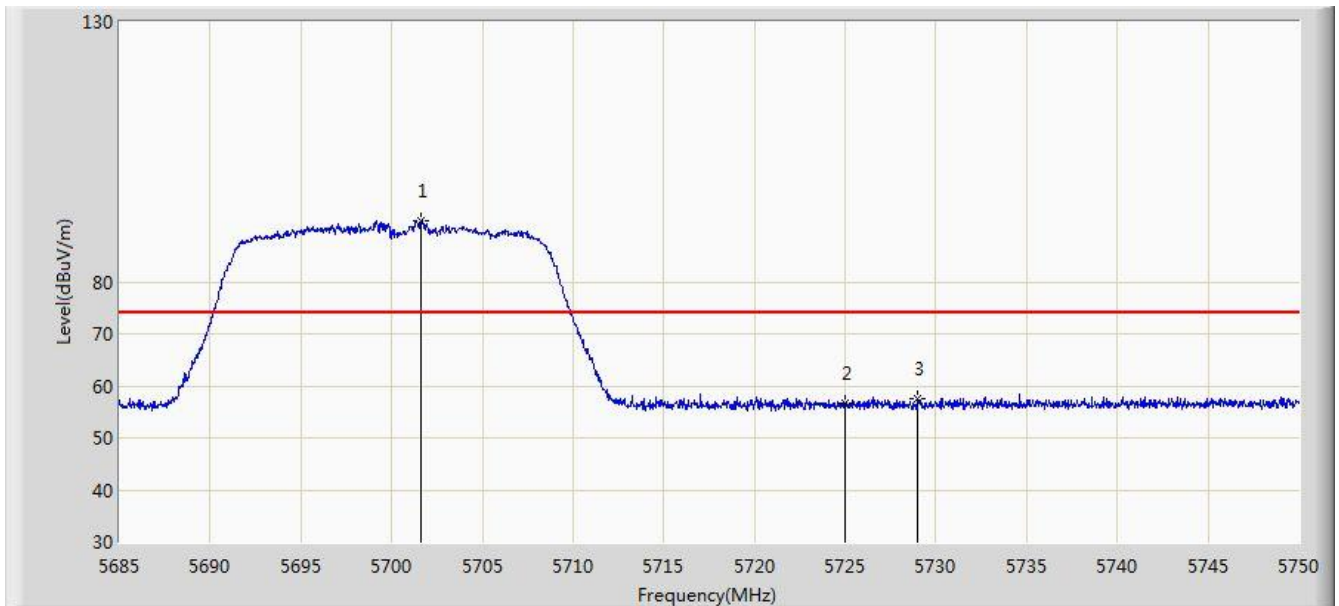


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	45.504	42.022	-8.496	54.000	3.482	AV
2		*	5502.450	101.339	97.815	N/A	N/A	3.524	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1	

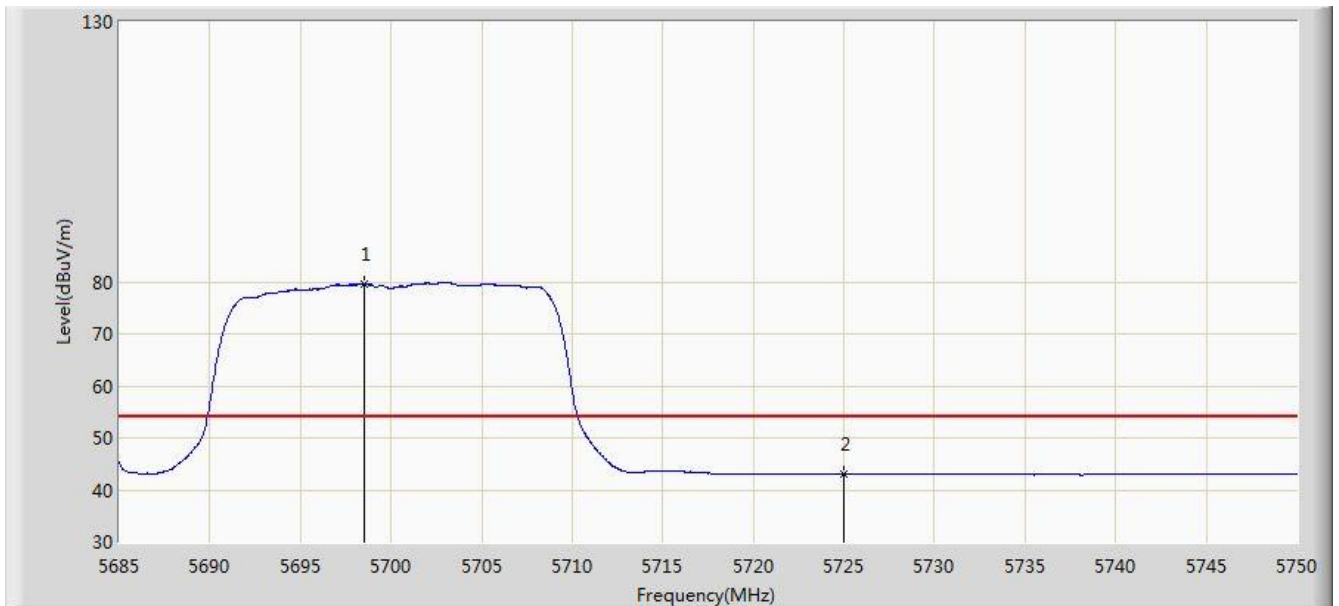


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.607	91.877	88.156	N/A	N/A	3.721	PK
2			5725.000	56.635	52.844	-17.365	74.000	3.791	PK
3			5729.005	57.491	53.688	-16.509	74.000	3.803	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1	

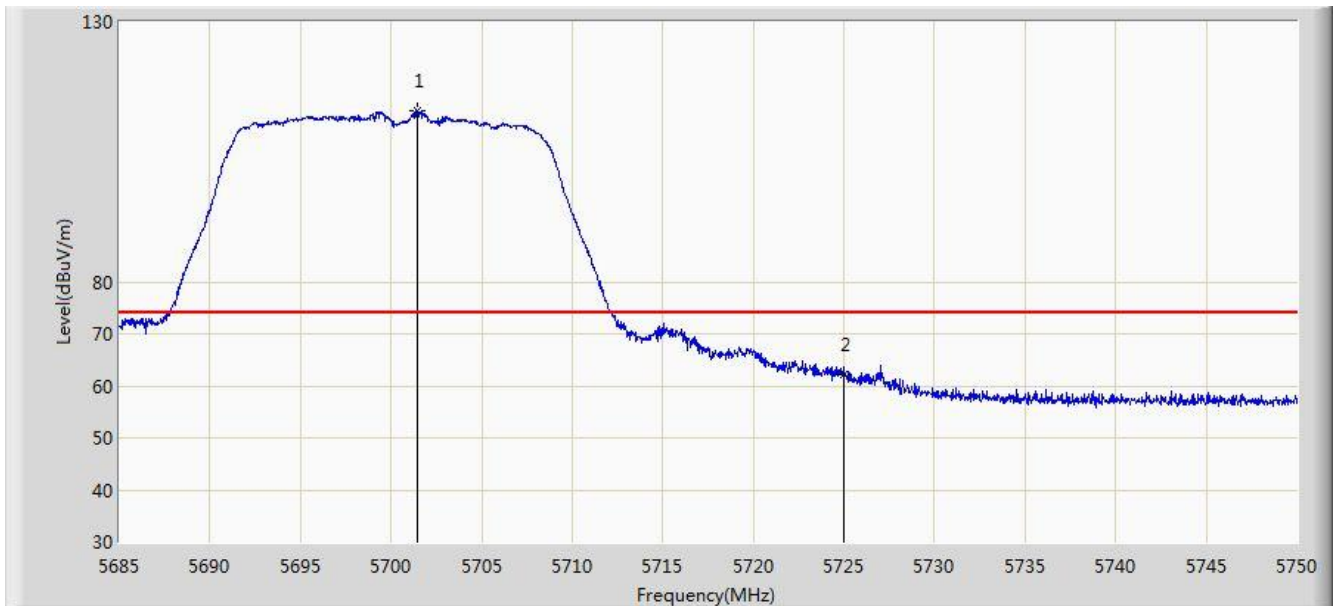


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5698.520	79.537	75.820	N/A	N/A	3.716	AV
2			5725.000	42.988	39.197	-11.012	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1	

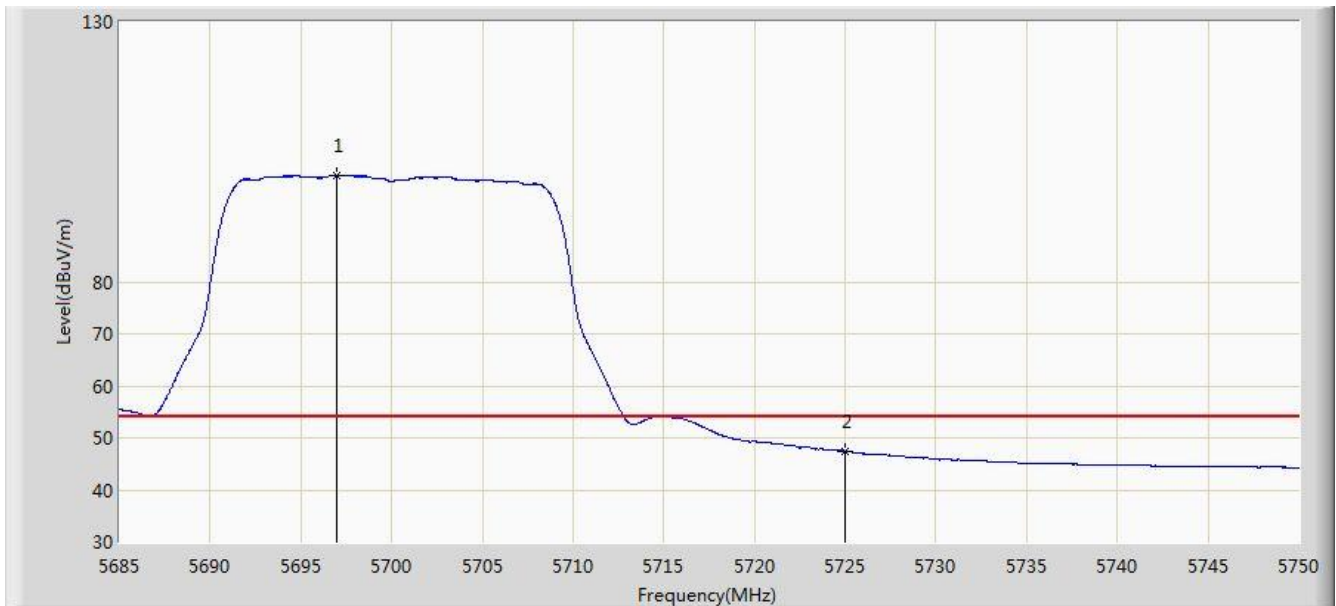


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.413	112.760	109.039	N/A	N/A	3.721	PK
2			5725.000	62.220	58.429	-11.780	74.000	3.791	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1	

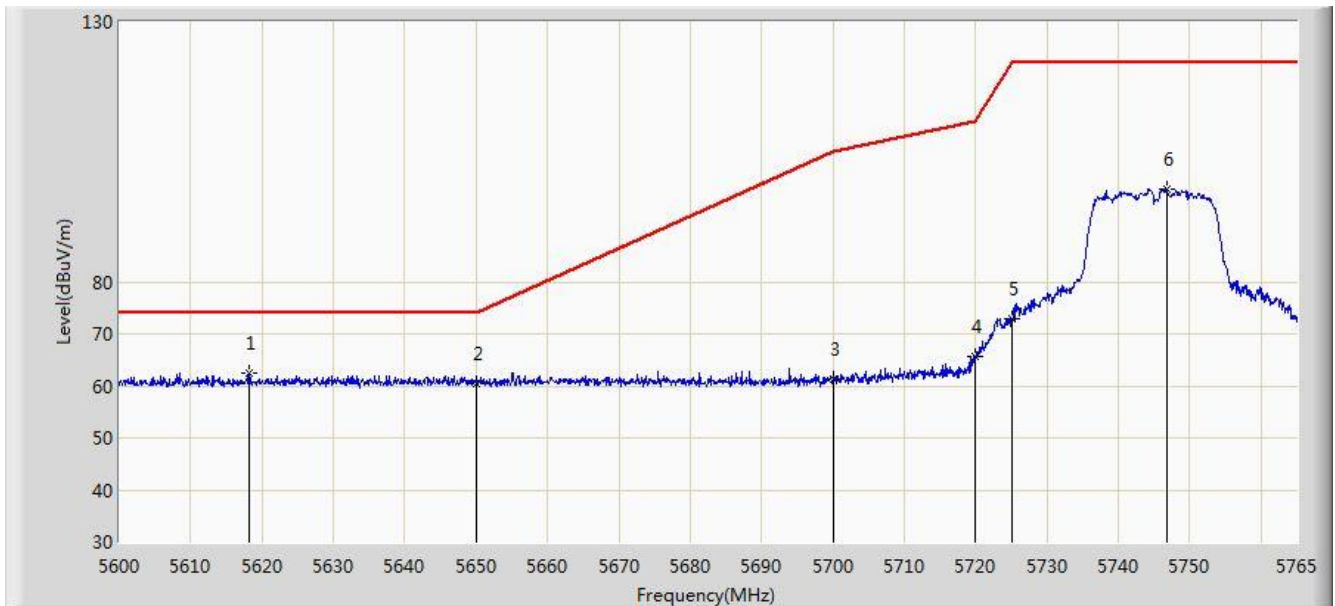


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5696.993	100.563	96.848	N/A	N/A	3.714	AV
2			5725.000	47.450	43.659	-6.550	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:53
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant 1	

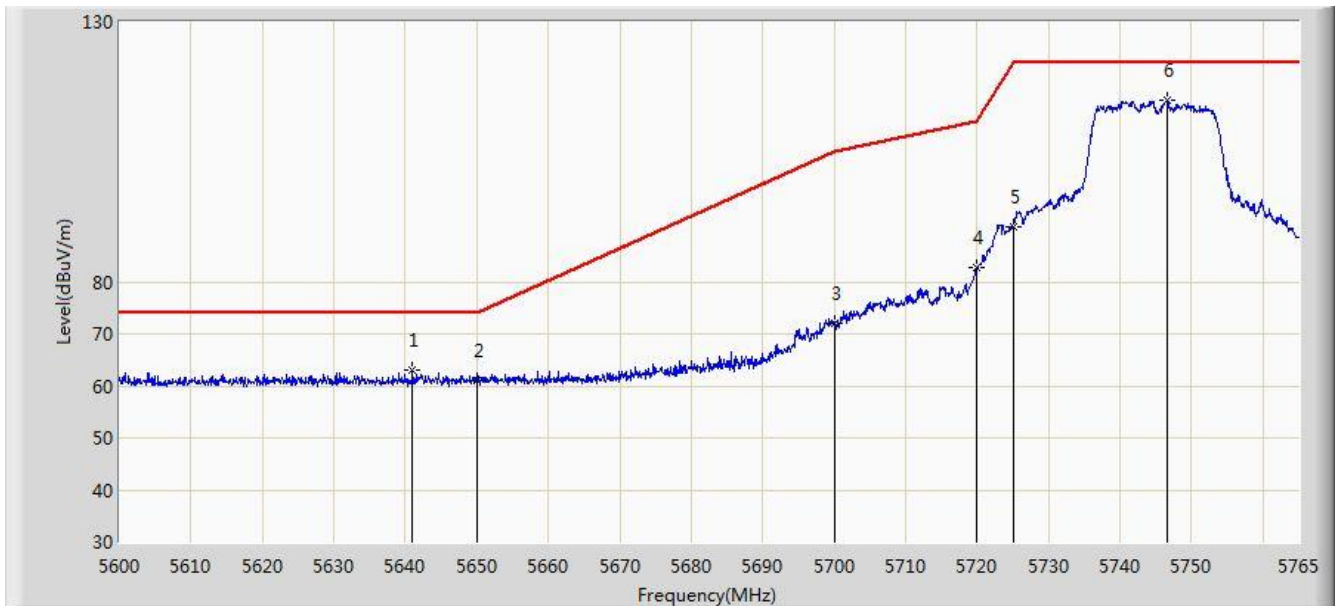


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5618.150	62.552	59.016	-11.448	74.000	3.536	PK
2			5650.000	60.405	56.778	-13.595	74.000	3.627	PK
3			5700.000	61.431	57.712	-43.769	105.200	3.719	PK
4			5720.000	65.557	61.781	-45.243	110.800	3.776	PK
5			5725.000	73.020	69.229	-49.180	122.200	3.791	PK
6			5746.768	97.915	94.056	N/A	N/A	3.859	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:57
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant 1	

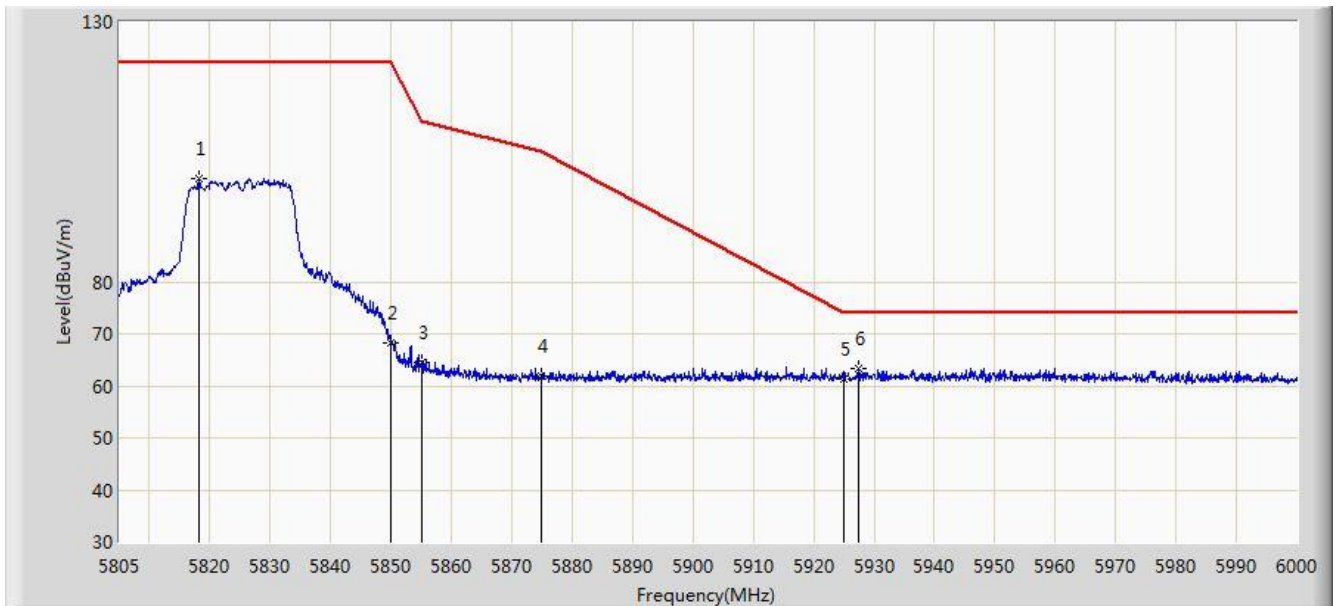


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5640.920	63.089	59.474	-10.911	74.000	3.615	PK
2			5650.000	60.948	57.321	-13.052	74.000	3.627	PK
3			5700.000	72.110	68.391	-33.090	105.200	3.719	PK
4			5720.000	82.751	78.975	-28.049	110.800	3.776	PK
5			5725.000	90.564	86.773	-31.636	122.200	3.791	PK
6		*	5746.603	114.879	111.020	N/A	N/A	3.859	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 05:59
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant 1	

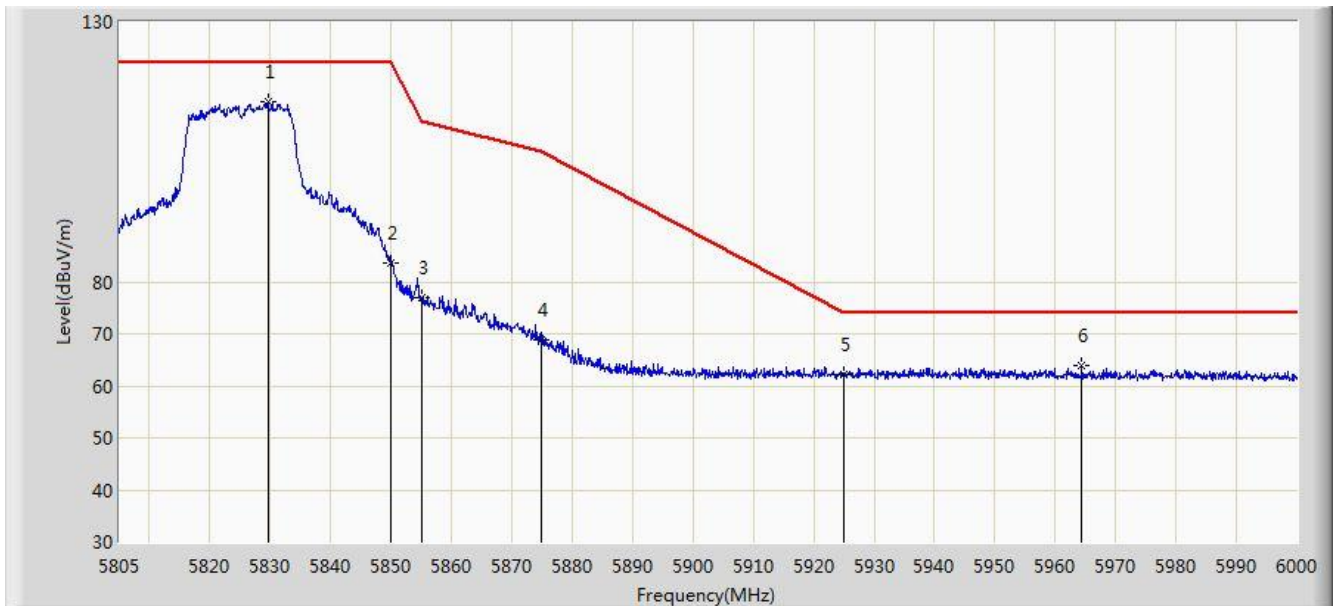


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5818.163	99.989	95.999	N/A	N/A	3.990	PK
2			5850.000	68.152	64.095	-54.048	122.200	4.058	PK
3			5855.000	64.506	60.446	-46.294	110.800	4.060	PK
4			5875.000	61.757	57.652	-43.443	105.200	4.105	PK
5			5925.000	61.280	57.027	-12.720	74.000	4.254	PK
6		*	5927.460	63.314	59.054	-10.686	74.000	4.260	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:01
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant 1	

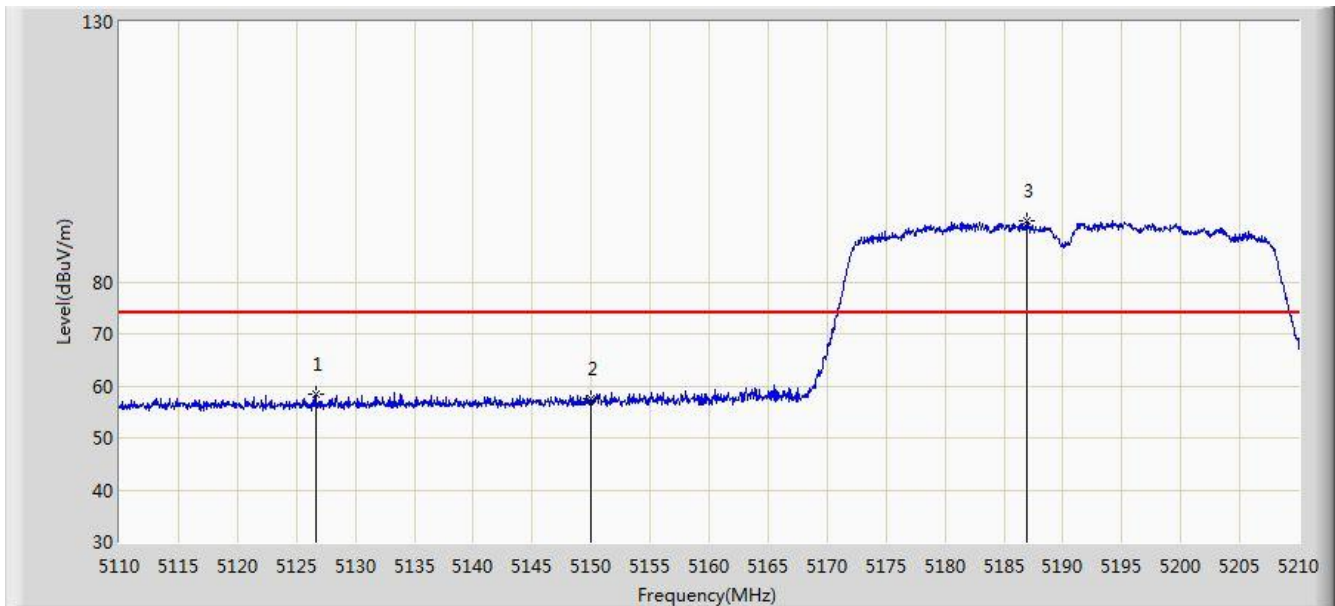


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5829.570	114.580	110.564	N/A	N/A	4.015	PK
2			5850.000	83.640	79.583	-38.560	122.200	4.058	PK
3			5855.000	76.928	72.868	-33.872	110.800	4.060	PK
4			5875.000	68.771	64.666	-36.429	105.200	4.105	PK
5			5925.000	62.295	58.042	-11.705	74.000	4.254	PK
6			5964.413	63.786	59.478	-10.214	74.000	4.307	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 1	

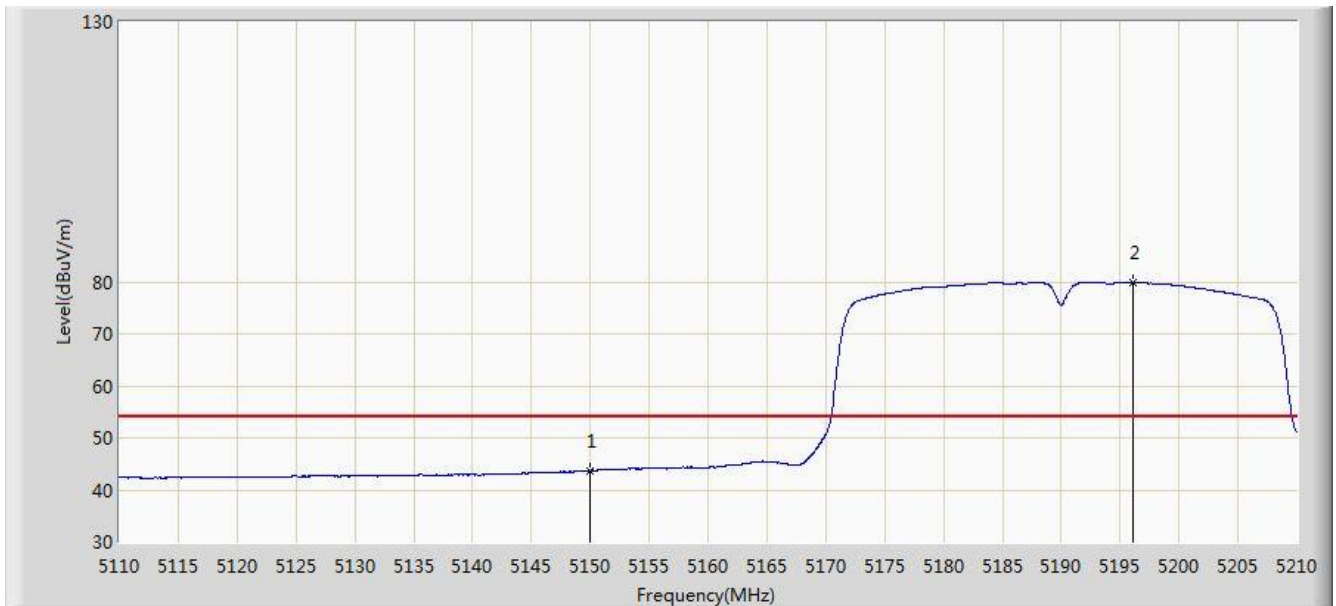


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5126.650	58.542	55.241	-15.458	74.000	3.301	PK
2			5150.000	57.576	54.267	-16.424	74.000	3.309	PK
3		*	5186.900	91.748	88.483	N/A	N/A	3.264	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 1	

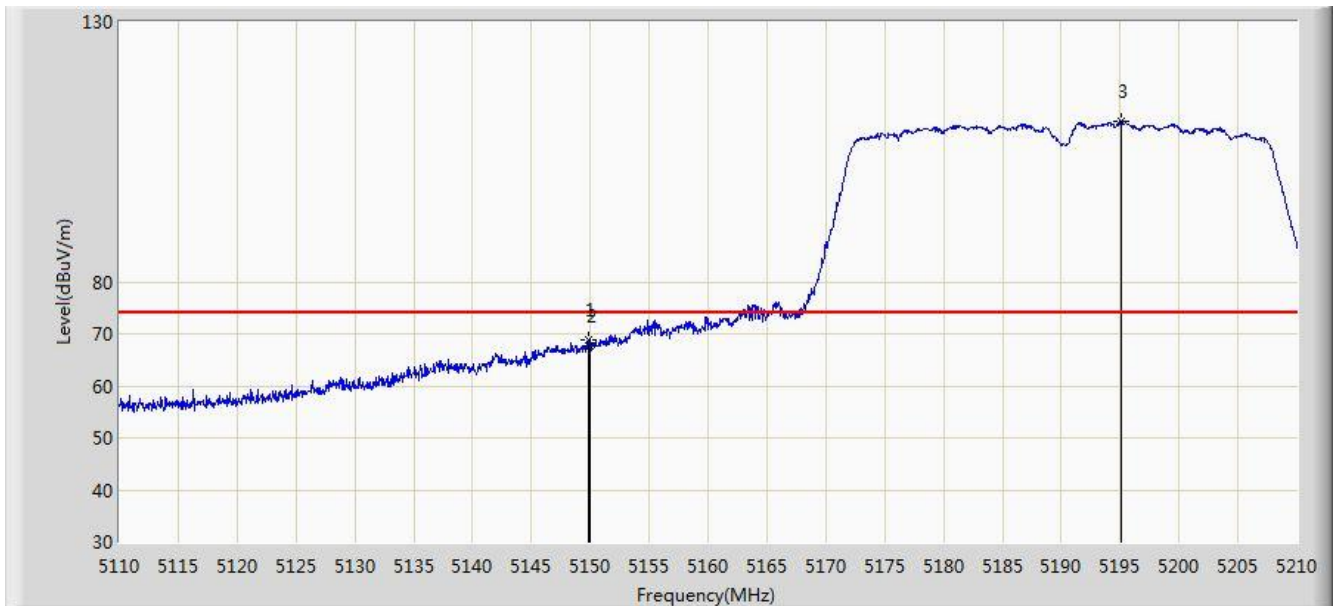


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.714	40.405	-10.286	54.000	3.309	AV
2		*	5196.050	79.860	76.606	N/A	N/A	3.253	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 1	

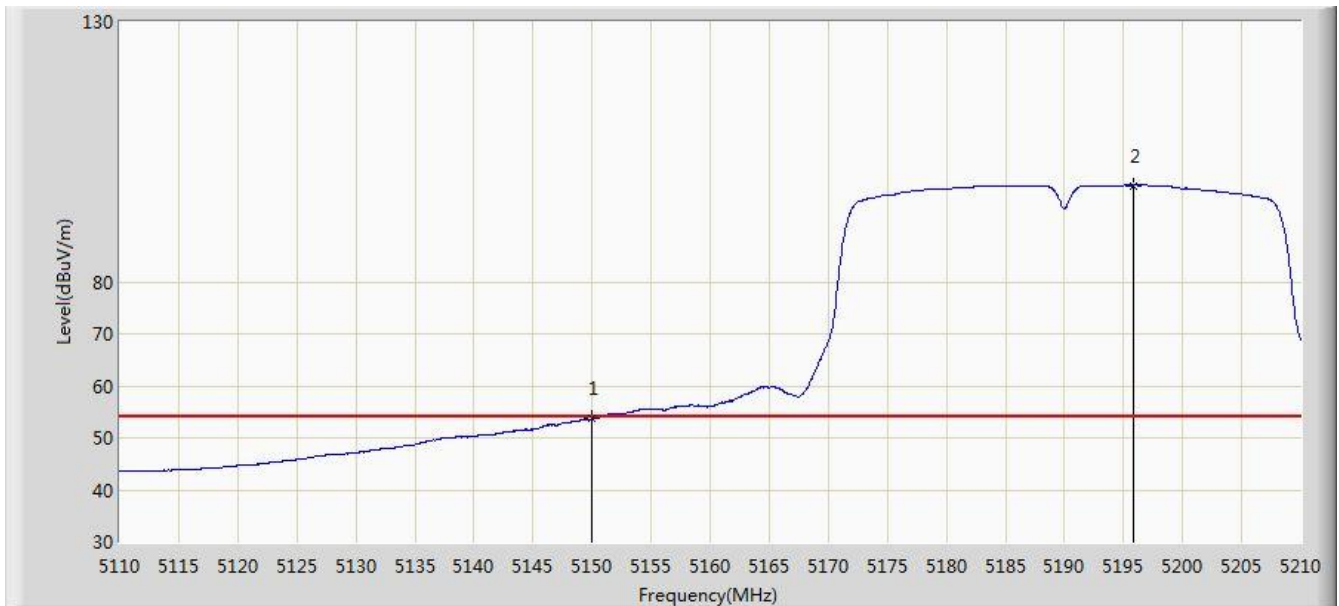


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.900	68.764	65.455	-5.236	74.000	3.309	PK
2			5150.000	67.806	64.497	-6.194	74.000	3.309	PK
3		*	5195.100	110.928	107.673	N/A	N/A	3.255	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 1	

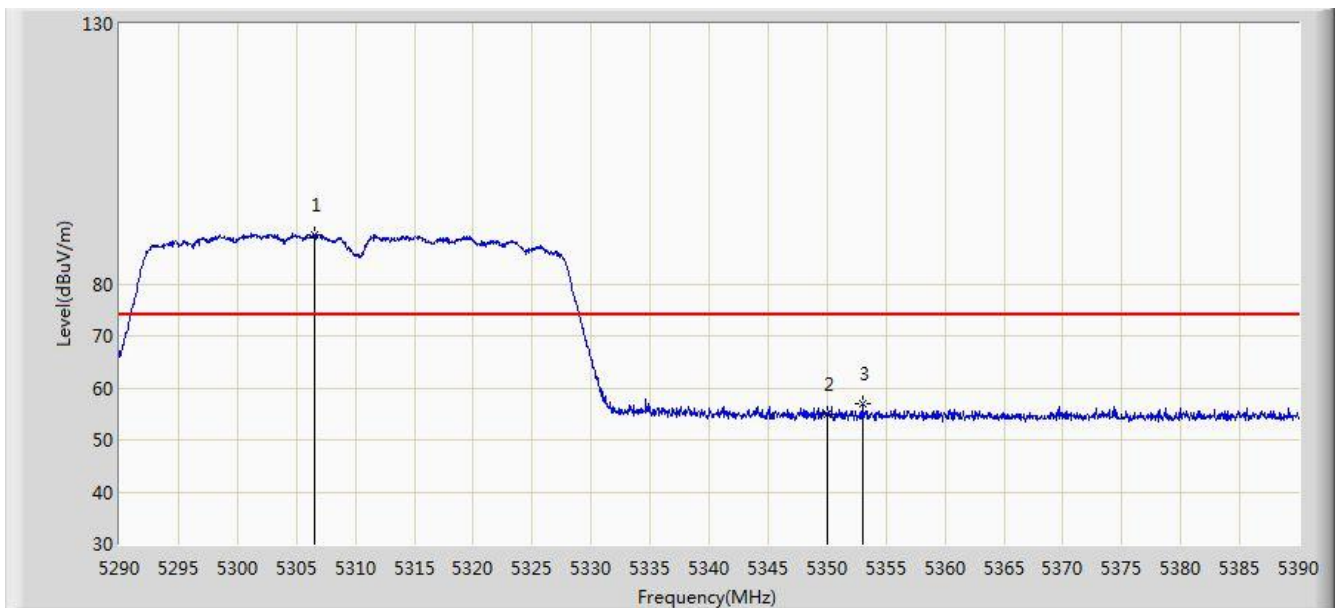


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	53.665	50.356	-0.335	54.000	3.309	AV
2		*	5195.800	98.543	95.289	N/A	N/A	3.254	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1	

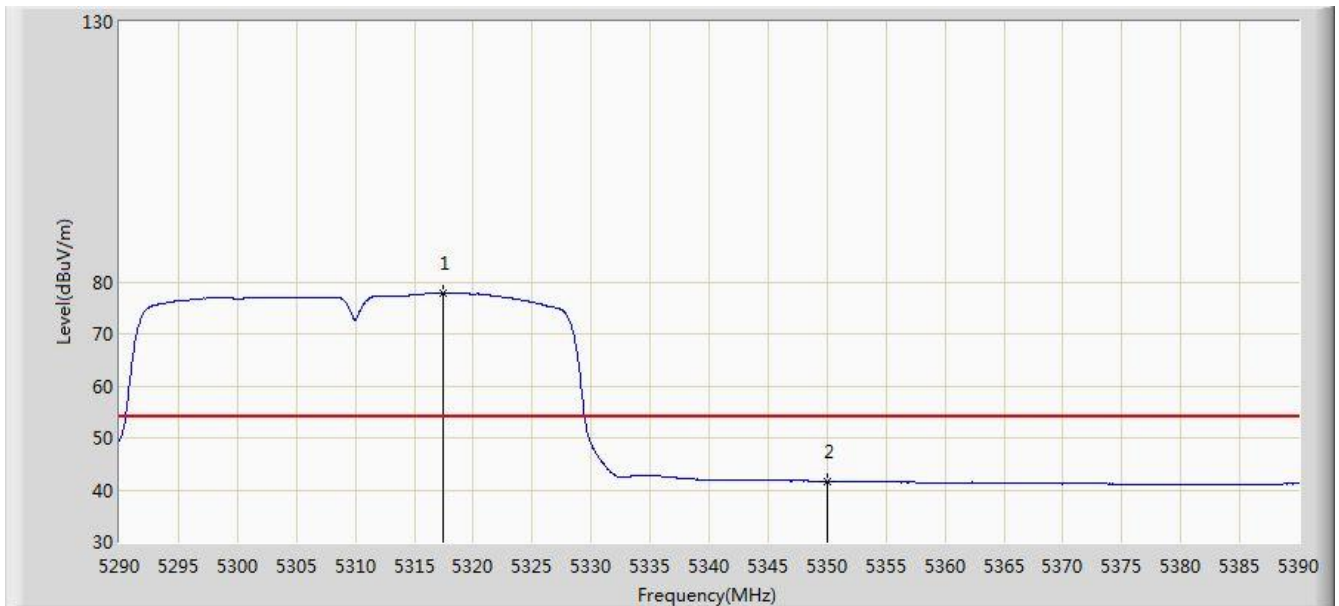


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5306.600	89.526	86.421	N/A	N/A	3.105	PK
2			5350.000	55.018	51.986	-18.982	74.000	3.032	PK
3			5353.000	56.875	53.846	-17.125	74.000	3.029	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1	

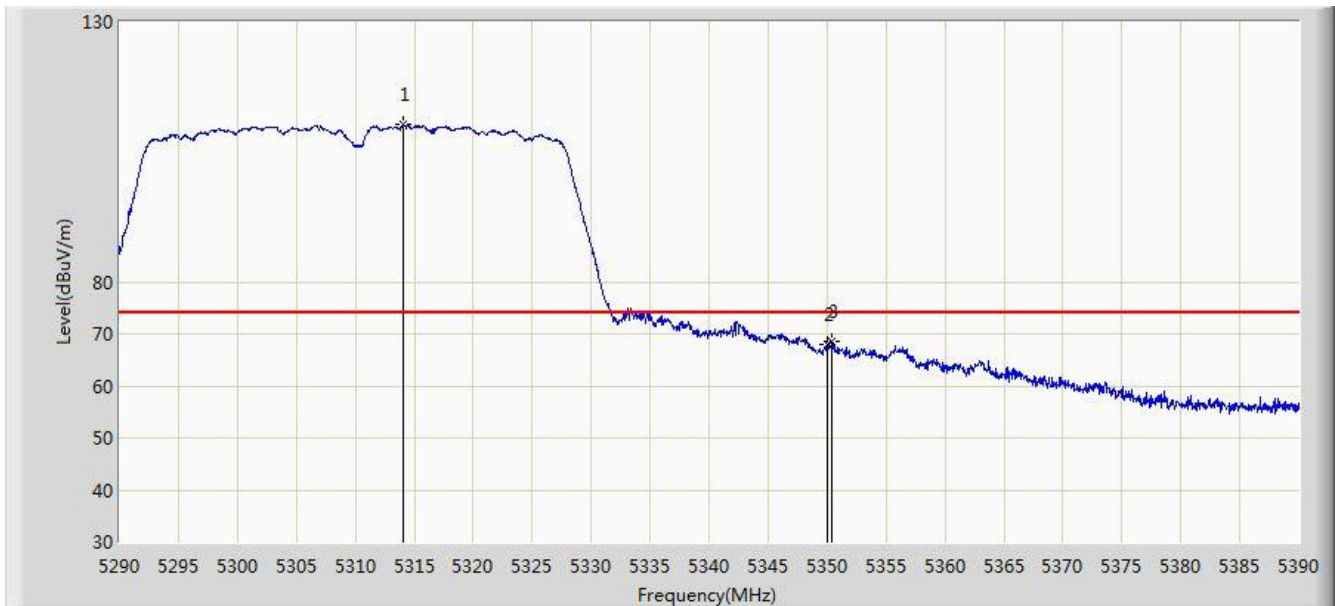


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5317.450	77.799	74.721	N/A	N/A	3.078	AV
2			5350.000	41.678	38.646	-12.322	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1	

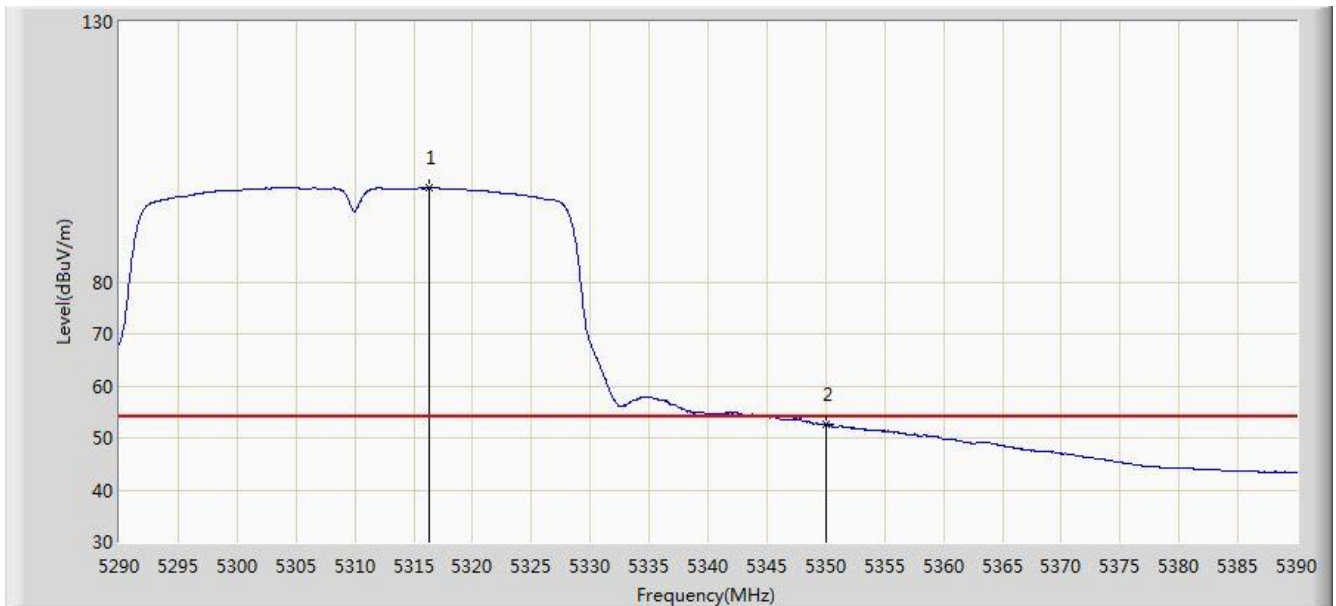


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5314.000	110.148	107.063	N/A	N/A	3.085	PK
2			5350.000	68.030	64.998	-5.970	74.000	3.032	PK
3			5350.450	68.481	65.449	-5.519	74.000	3.032	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1	

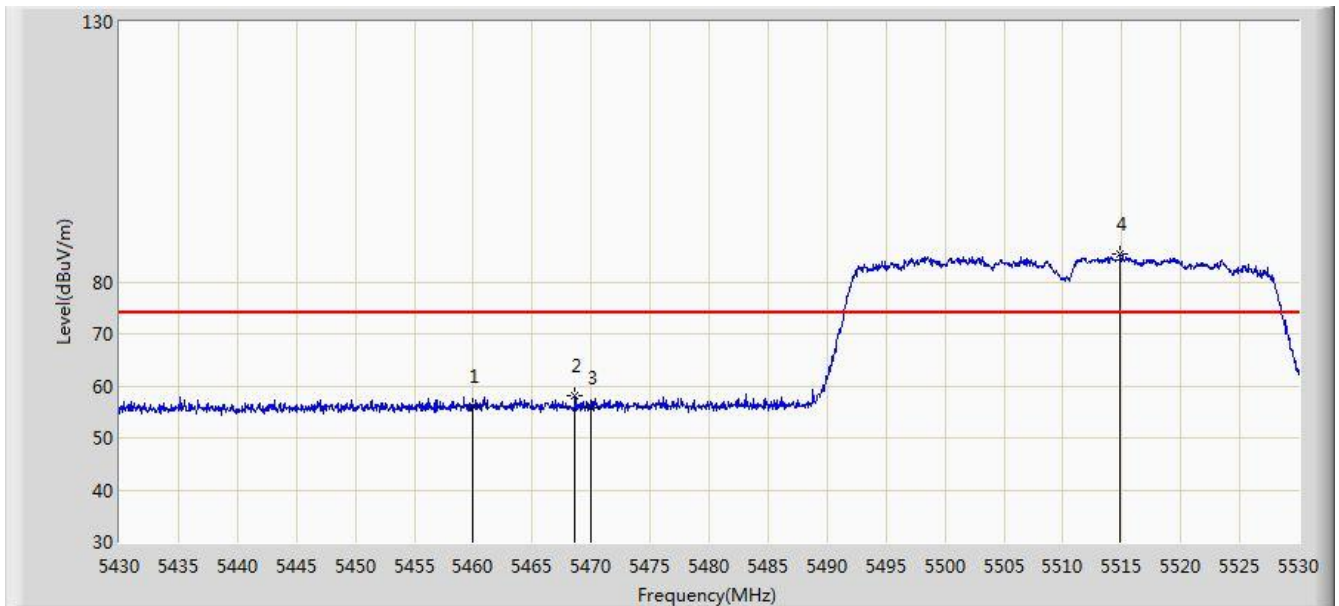


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5316.300	98.049	94.969	N/A	N/A	3.080	AV
2			5350.000	52.623	49.591	-1.377	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1	

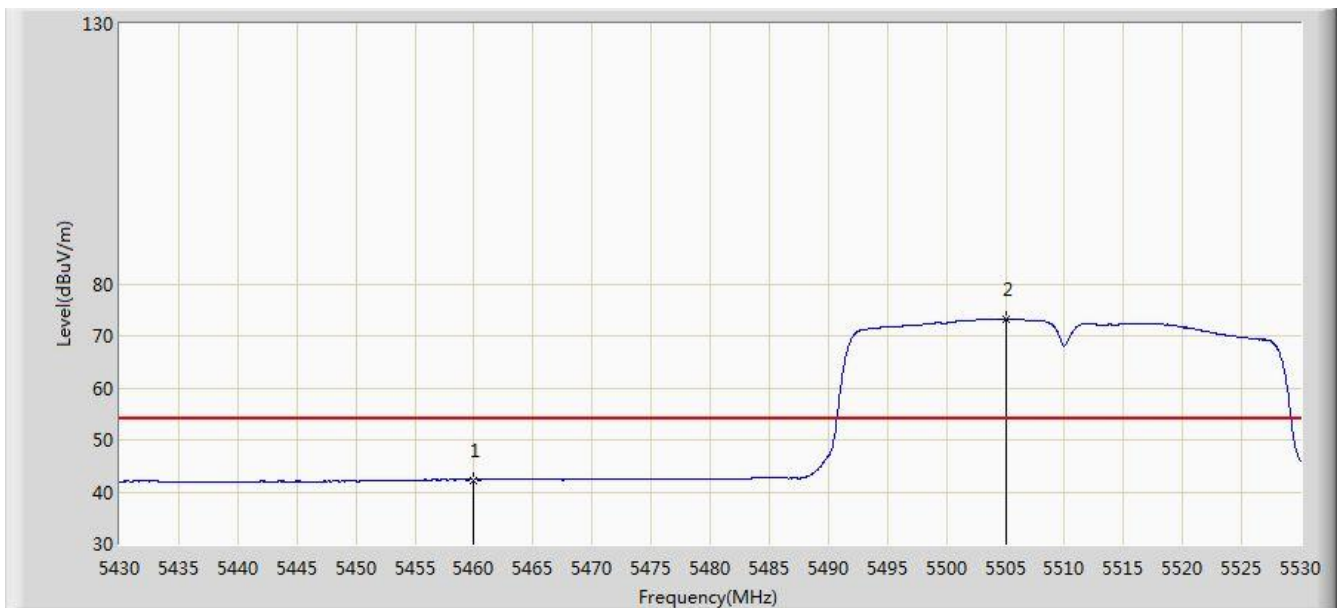


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	56.145	52.663	-17.855	74.000	3.482	PK
2			5468.600	58.033	54.502	-15.967	74.000	3.531	PK
3			5470.000	55.670	52.131	-18.330	74.000	3.539	PK
4		*	5514.850	85.230	81.720	N/A	N/A	3.511	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1	

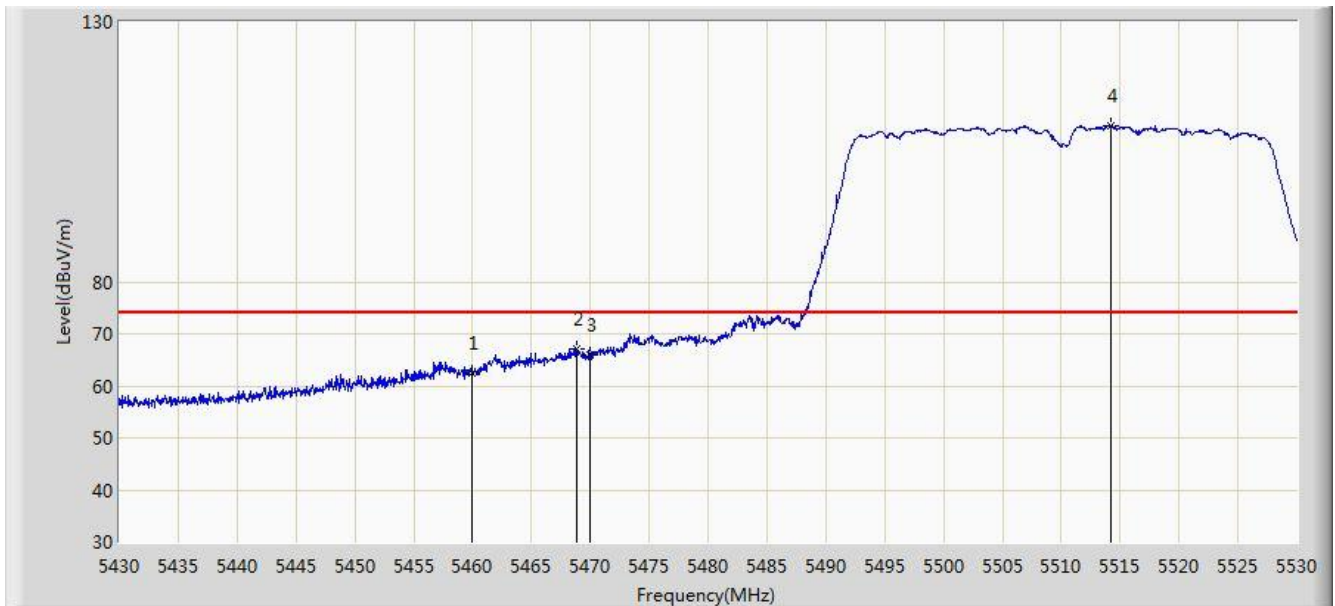


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.315	38.833	-11.685	54.000	3.482	AV
2		*	5505.050	73.222	69.701	N/A	N/A	3.521	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1	

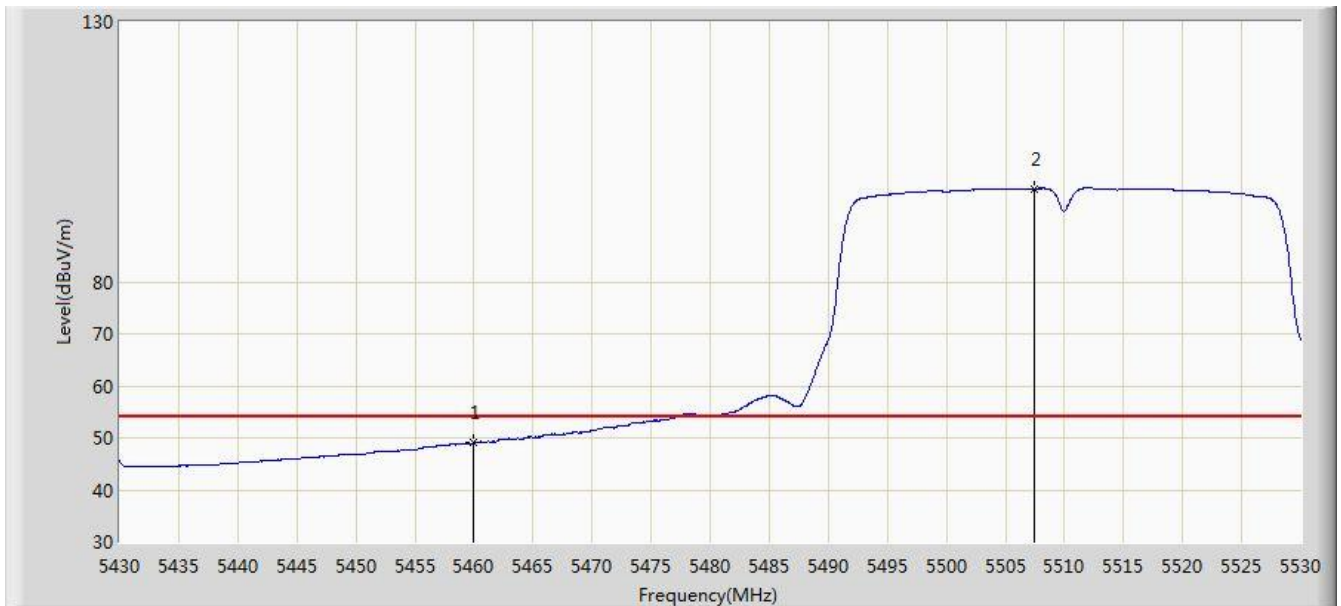


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	62.516	59.034	-11.484	74.000	3.482	PK
2			5468.800	67.192	63.660	-6.808	74.000	3.533	PK
3			5470.000	65.957	62.418	-8.043	74.000	3.539	PK
4		*	5514.200	110.027	106.516	N/A	N/A	3.511	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1	

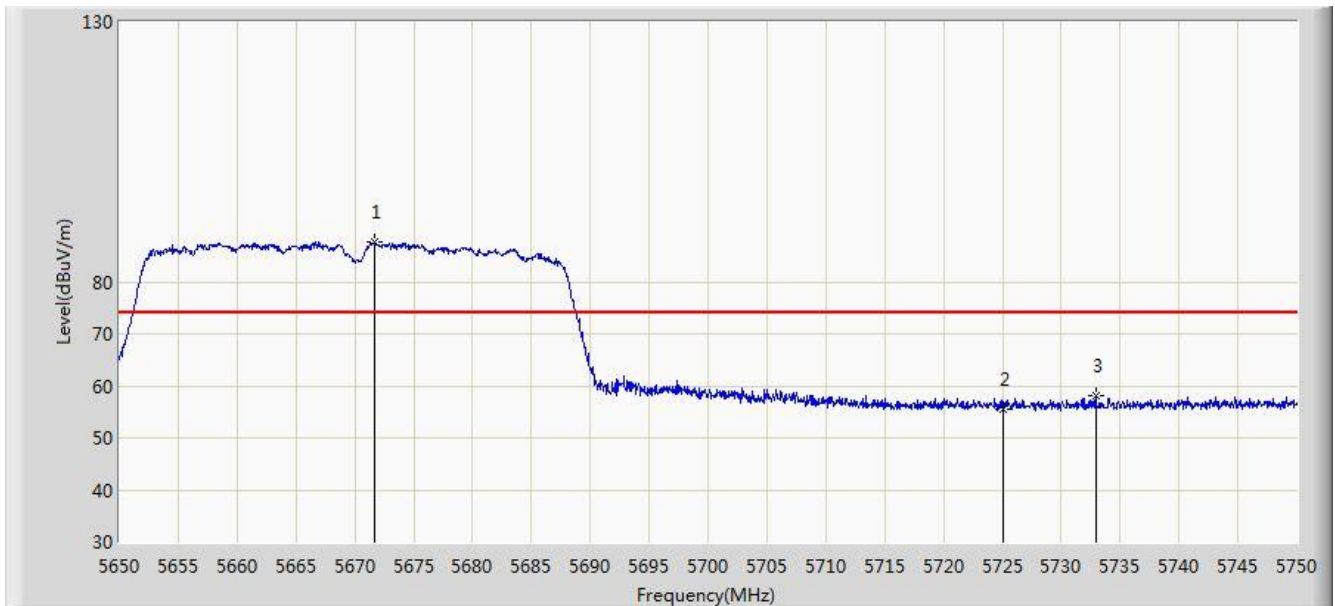


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	49.041	45.559	-4.959	54.000	3.482	AV
2		*	5507.400	97.940	94.422	N/A	N/A	3.518	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1	

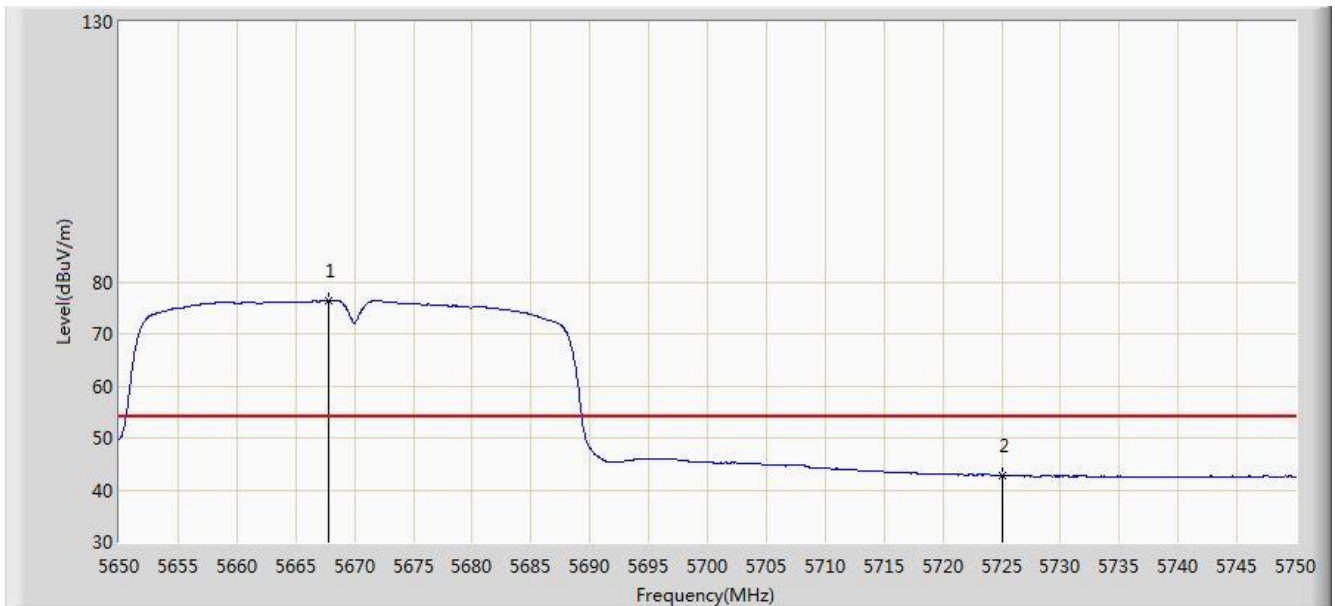


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5671.650	87.710	84.046	N/A	N/A	3.664	PK
2			5725.000	55.367	51.576	-18.633	74.000	3.791	PK
3			5732.900	58.216	54.401	-15.784	74.000	3.815	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1	

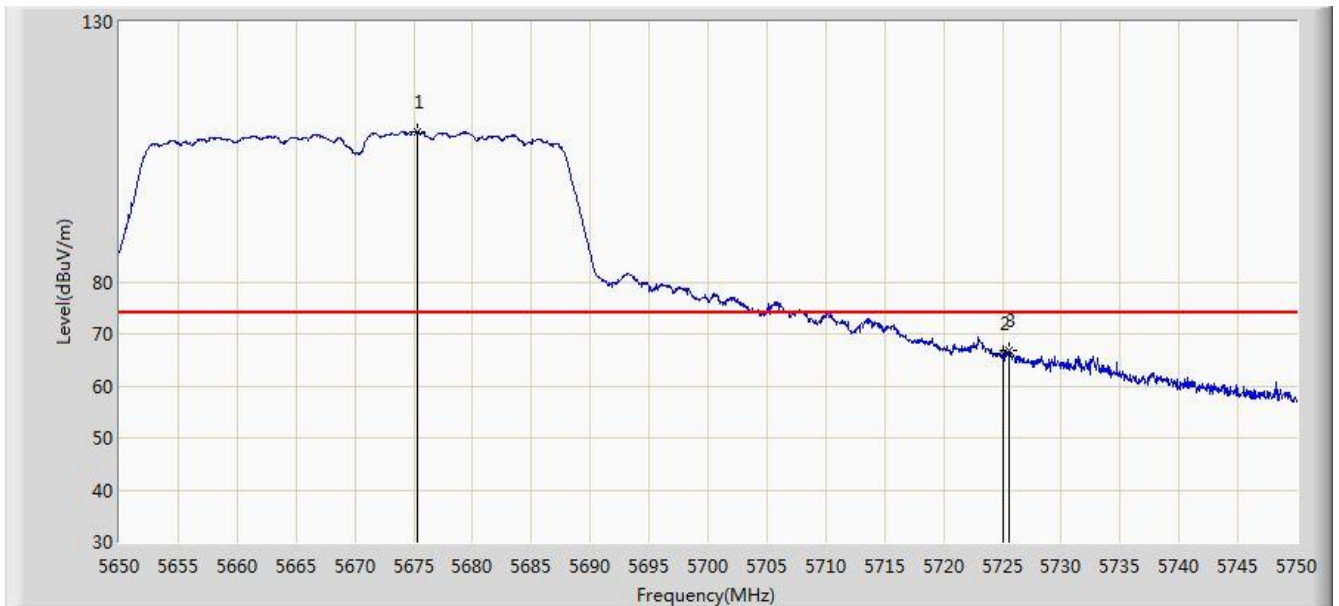


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5667.850	76.444	72.786	N/A	N/A	3.658	AV
2			5725.000	42.791	39.000	-11.209	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1	

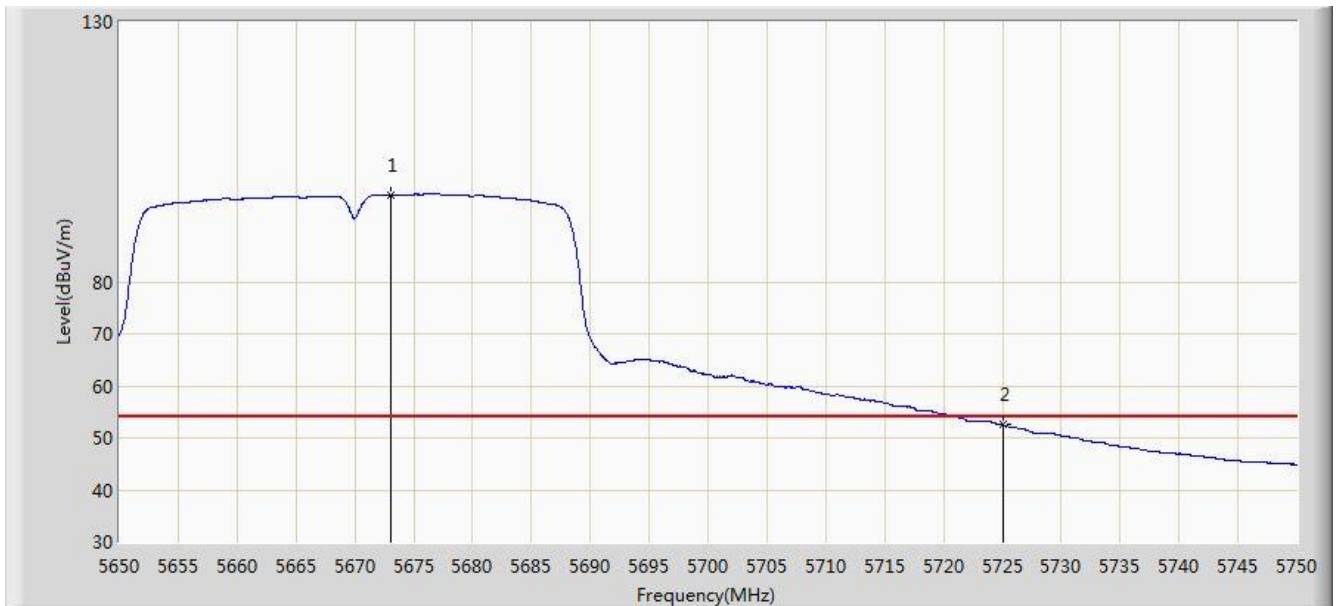


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5675.350	108.927	105.257	N/A	N/A	3.670	PK
2			5725.000	66.324	62.533	-7.676	74.000	3.791	PK
3			5725.550	66.844	63.052	-7.156	74.000	3.792	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1	

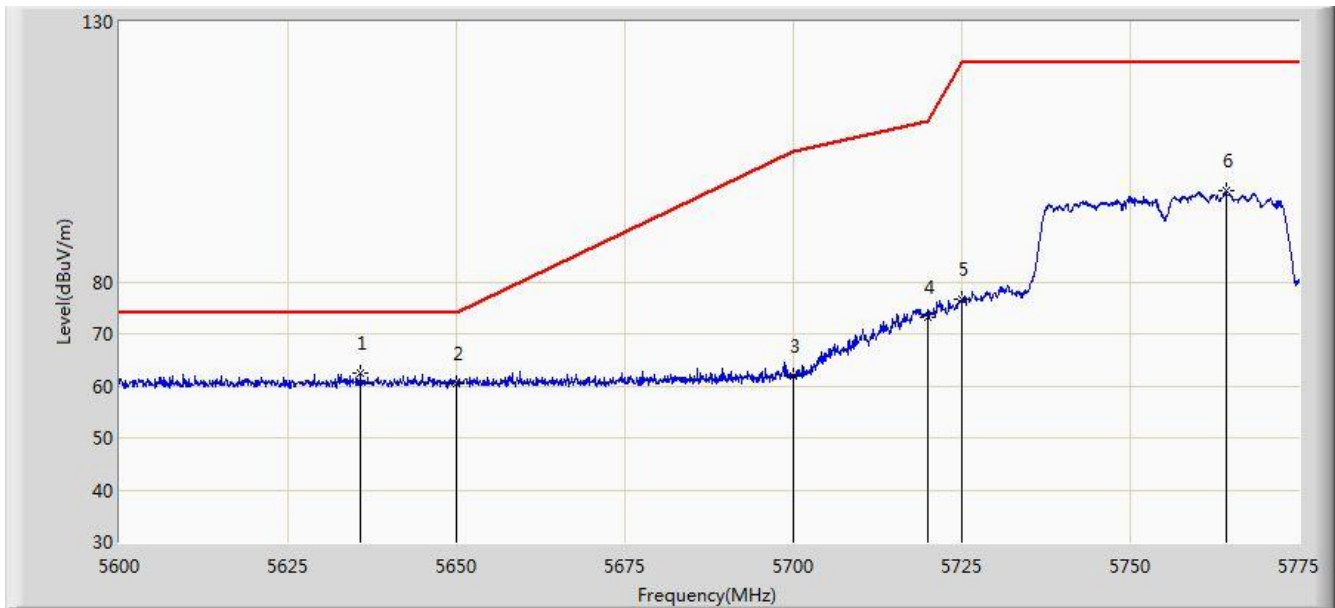


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5673.100	96.675	93.009	N/A	N/A	3.667	AV
2			5725.000	52.475	48.684	-1.525	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:15
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant 1	

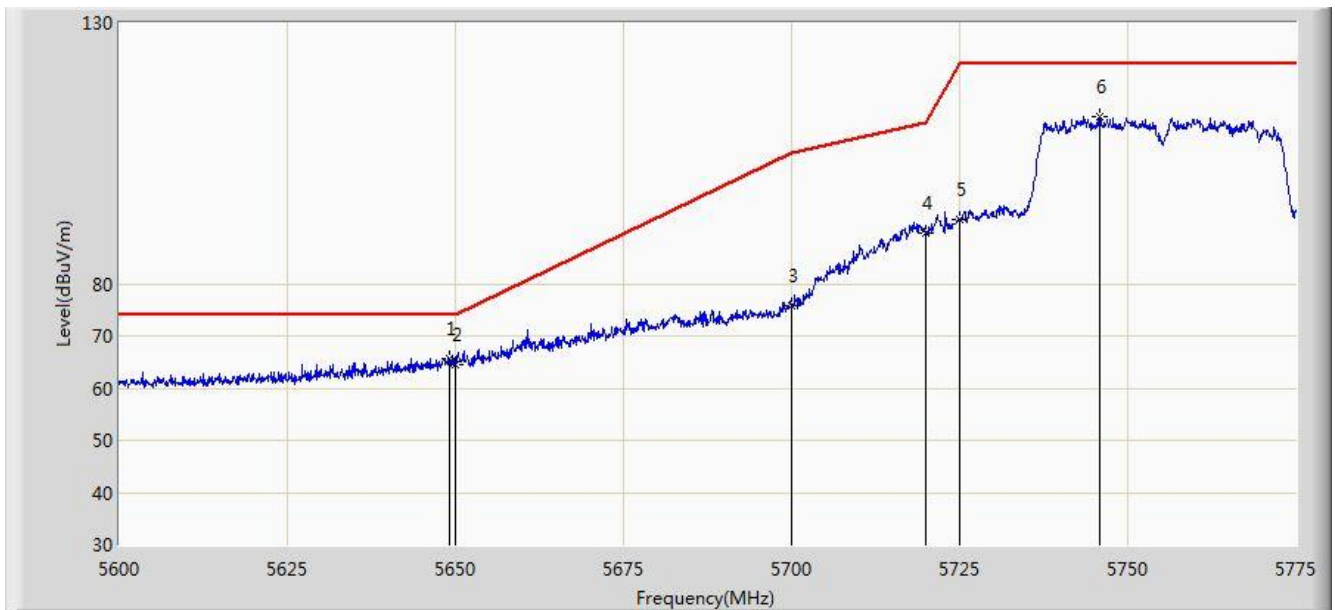


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5635.788	62.375	58.779	-11.625	74.000	3.596	PK
2			5650.000	60.393	56.766	-13.607	74.000	3.627	PK
3			5700.000	61.968	58.249	-43.232	105.200	3.719	PK
4			5720.000	73.237	69.461	-37.563	110.800	3.776	PK
5			5725.000	76.577	72.786	-45.623	122.200	3.791	PK
6			5764.237	97.411	93.501	N/A	N/A	3.910	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:17
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant 1	

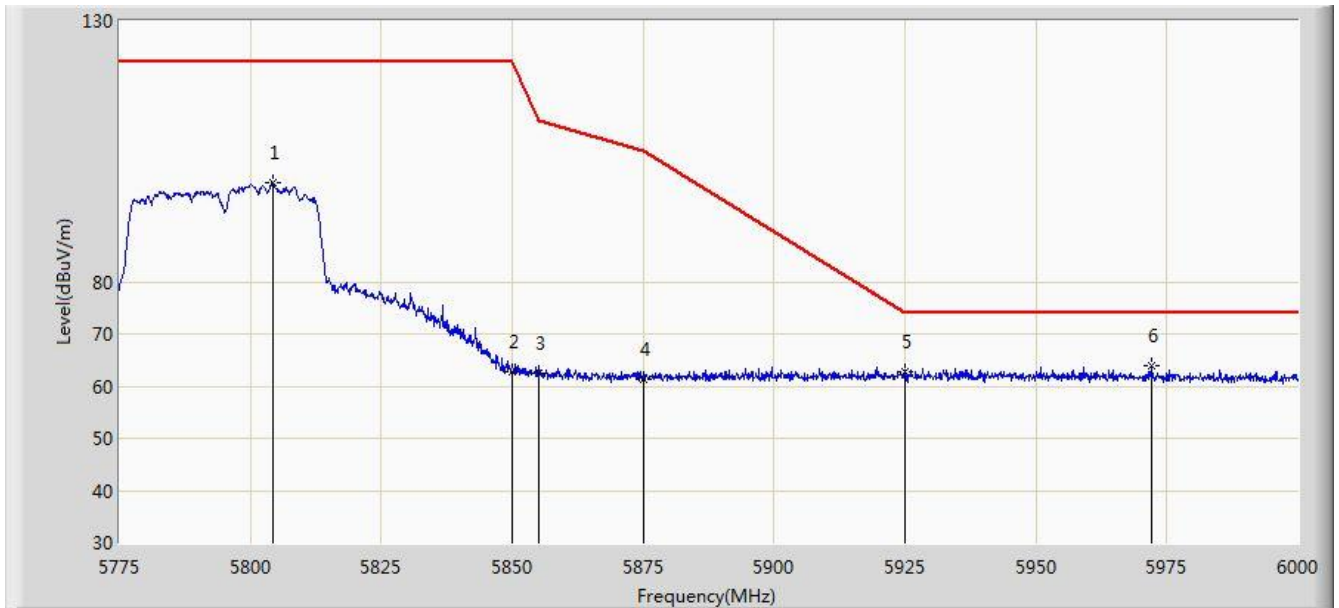


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5649.175	65.783	62.157	-8.217	74.000	3.626	PK
2			5650.000	64.489	60.862	-9.511	74.000	3.627	PK
3			5700.000	75.694	71.975	-29.506	105.200	3.719	PK
4			5720.000	89.795	86.019	-21.005	110.800	3.776	PK
5			5725.000	92.179	88.388	-30.021	122.200	3.791	PK
6			5745.862	111.919	108.063	N/A	N/A	3.856	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:19
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5795MHz Ant 1	

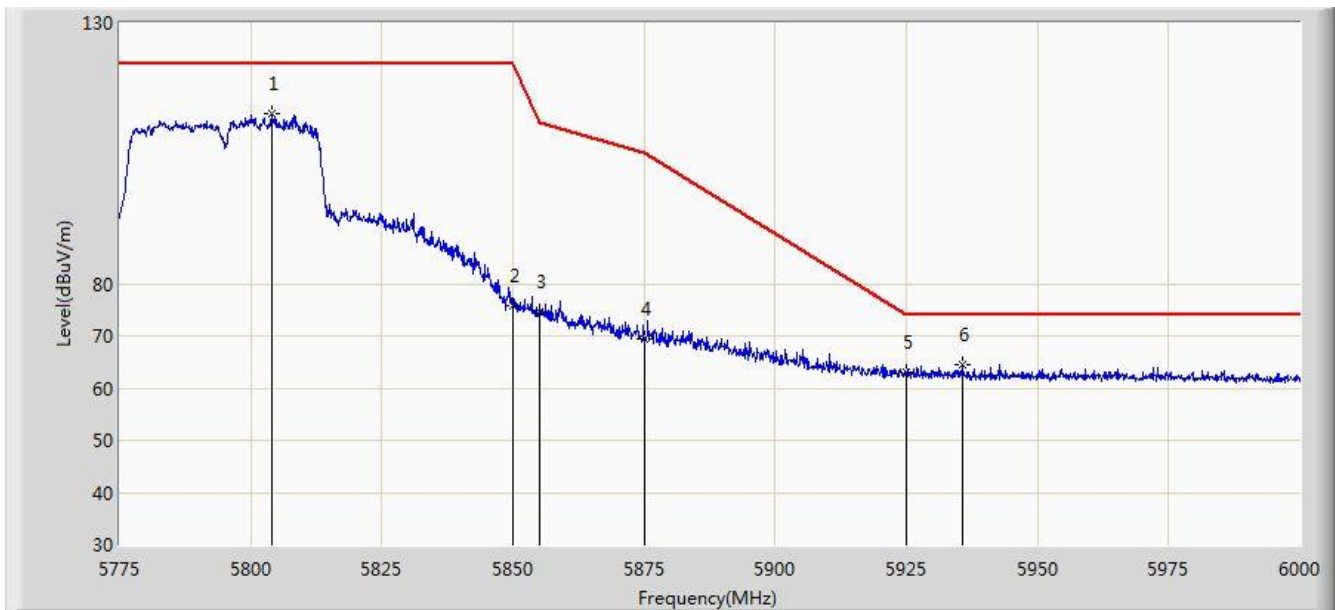


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5804.250	98.886	94.921	N/A	N/A	3.965	PK
2			5850.000	62.888	58.831	-59.312	122.200	4.058	PK
3			5855.000	62.399	58.339	-48.401	110.800	4.060	PK
4			5875.000	61.322	57.217	-43.878	105.200	4.105	PK
5			5925.000	62.805	58.552	-11.195	74.000	4.254	PK
6		*	5971.987	64.031	59.736	-9.969	74.000	4.296	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:22
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5795MHz Ant 1	

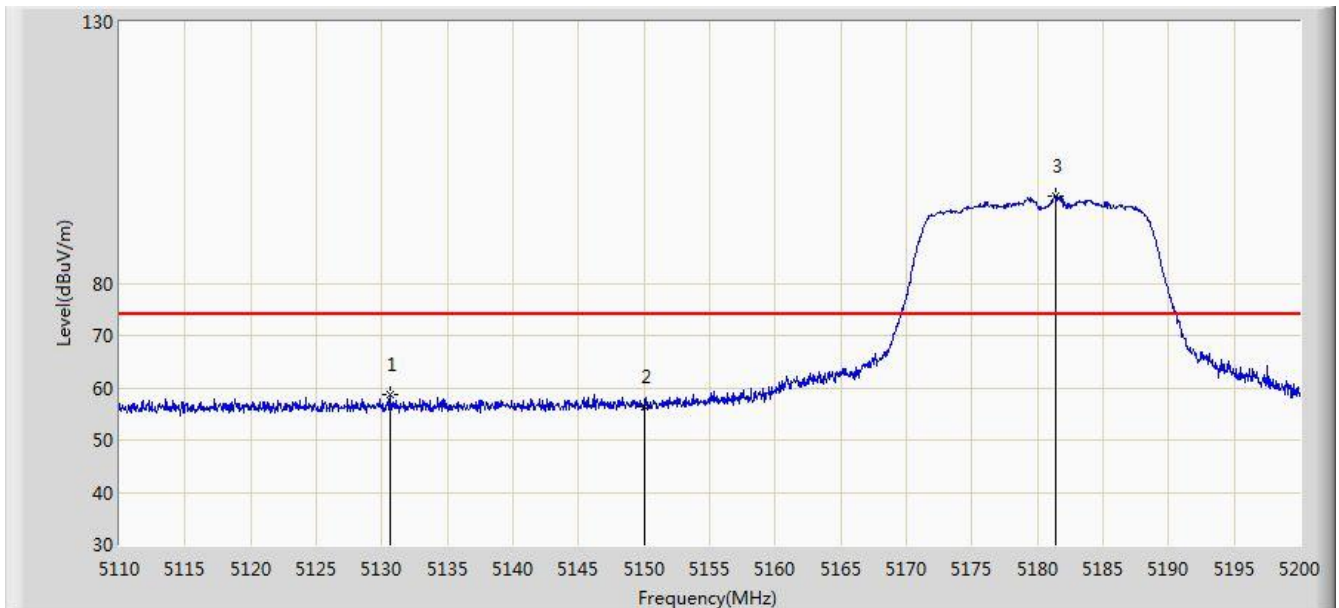


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5804.138	112.474	108.509	N/A	N/A	3.966	PK
2			5850.000	75.850	71.793	-46.350	122.200	4.058	PK
3			5855.000	74.689	70.629	-36.111	110.800	4.060	PK
4			5875.000	69.407	65.302	-35.793	105.200	4.105	PK
5			5925.000	62.949	58.696	-11.051	74.000	4.254	PK
6		*	5935.650	64.517	60.249	-9.483	74.000	4.268	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 1	

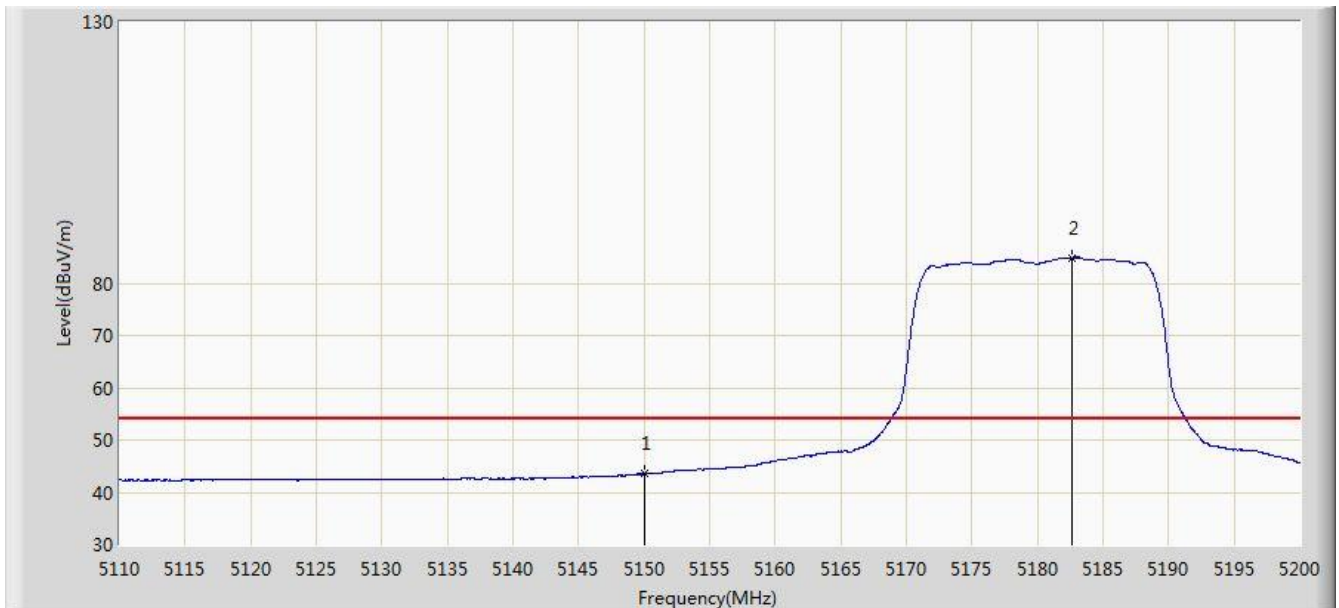


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5130.655	58.833	55.526	-15.167	74.000	3.308	PK
2			5150.000	56.476	53.167	-17.524	74.000	3.309	PK
3		*	5181.415	96.697	93.425	N/A	N/A	3.271	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 1	

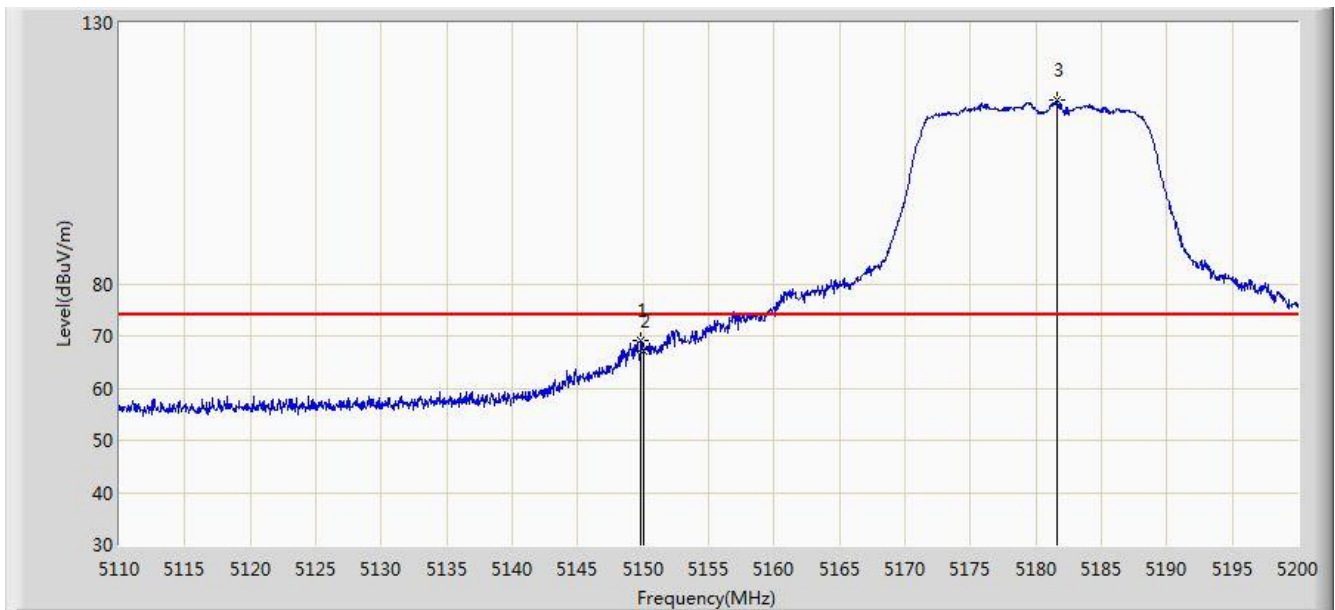


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.631	40.322	-10.369	54.000	3.309	AV
2		*	5182.585	84.908	81.638	N/A	N/A	3.271	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 1	

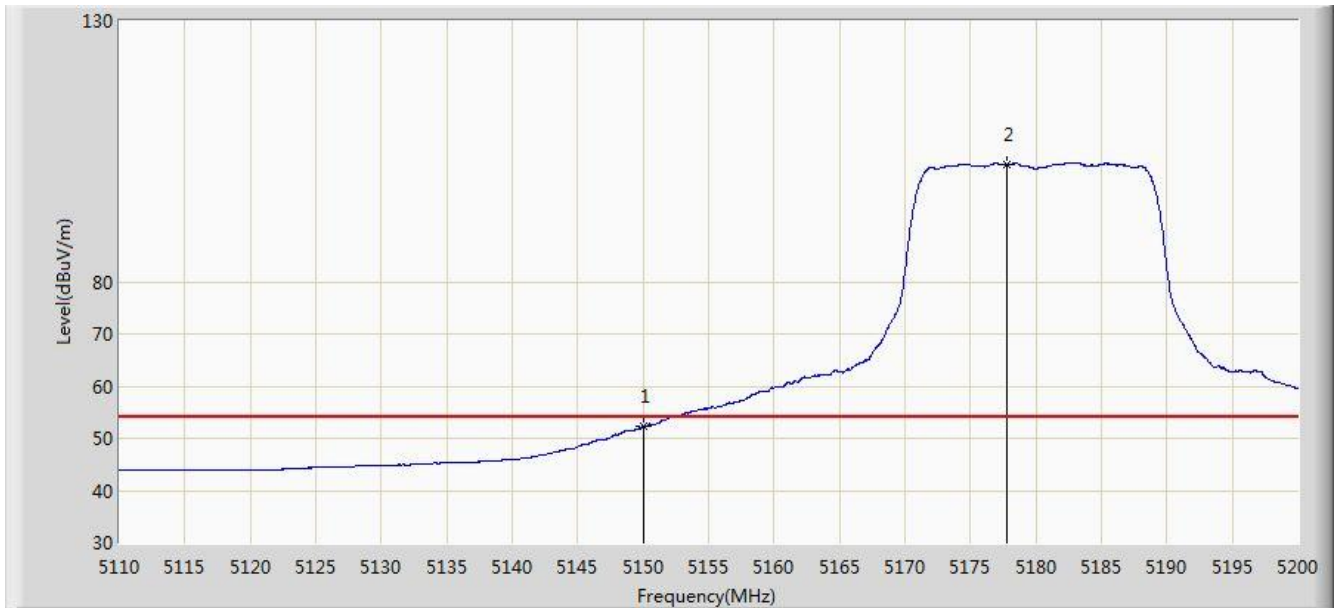


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.825	69.152	65.843	-4.848	74.000	3.309	PK
2			5150.000	67.057	63.748	-6.943	74.000	3.309	PK
3		*	5181.595	115.096	111.824	N/A	N/A	3.272	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 1	

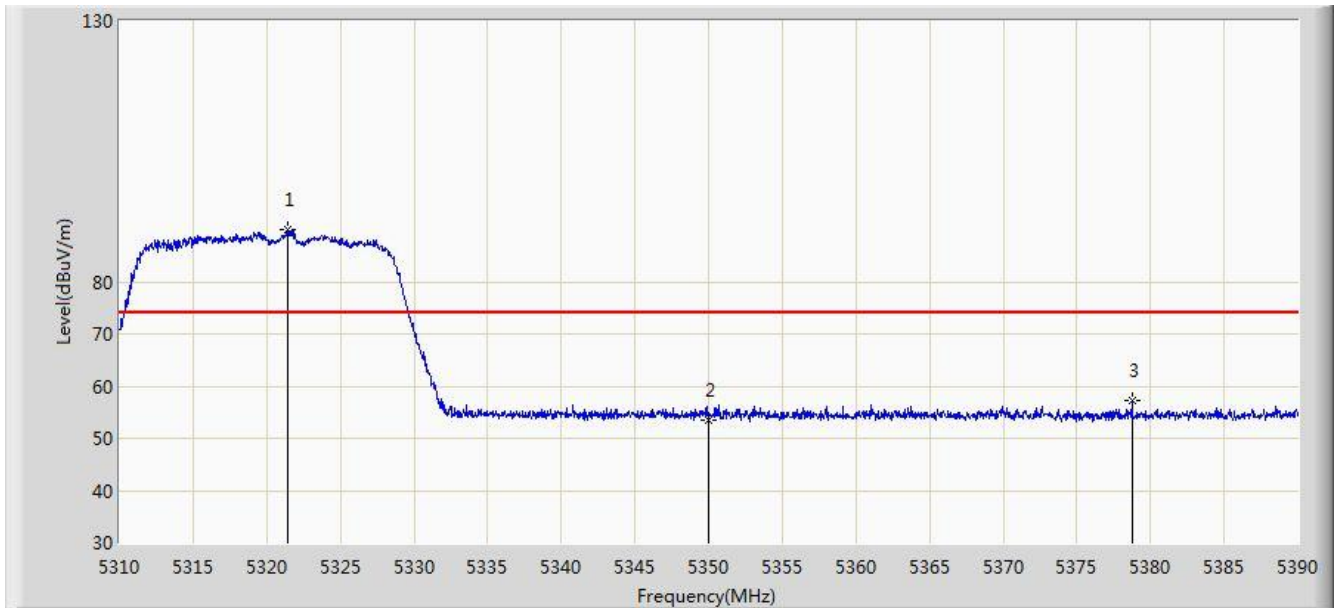


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.333	49.024	-1.667	54.000	3.309	AV
2		*	5177.815	102.558	99.283	N/A	N/A	3.275	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1	

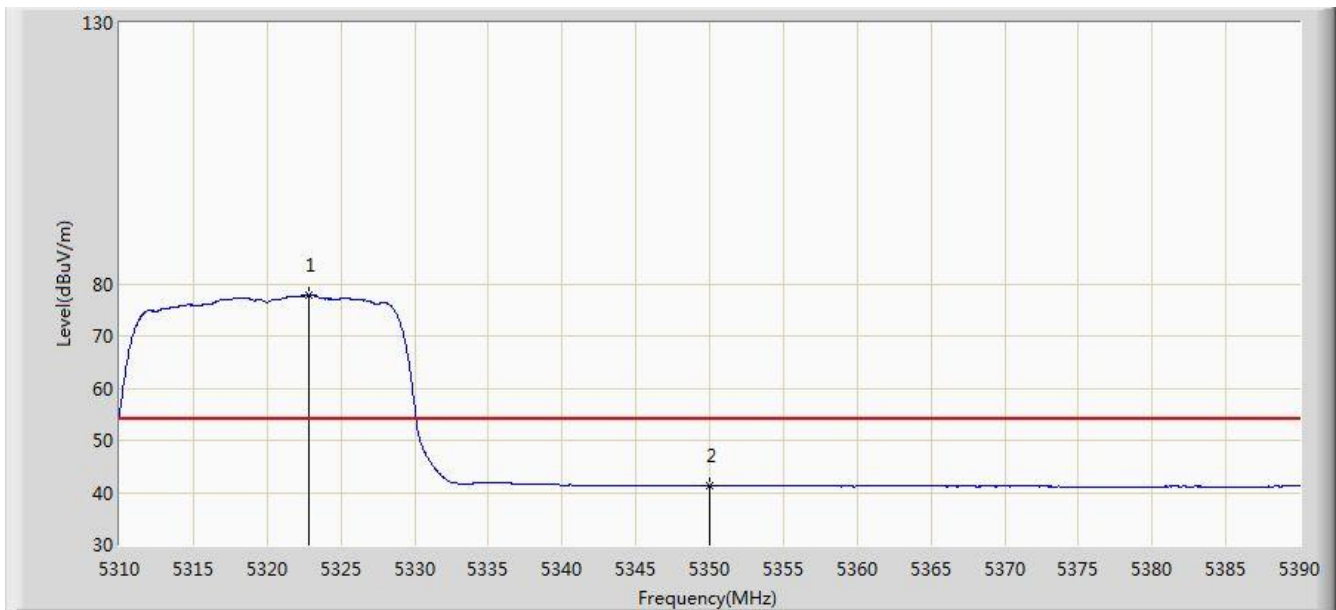


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5321.440	89.945	86.875	N/A	N/A	3.070	PK
2			5350.000	53.474	50.442	-20.526	74.000	3.032	PK
3			5378.760	57.255	54.226	-16.745	74.000	3.029	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1	

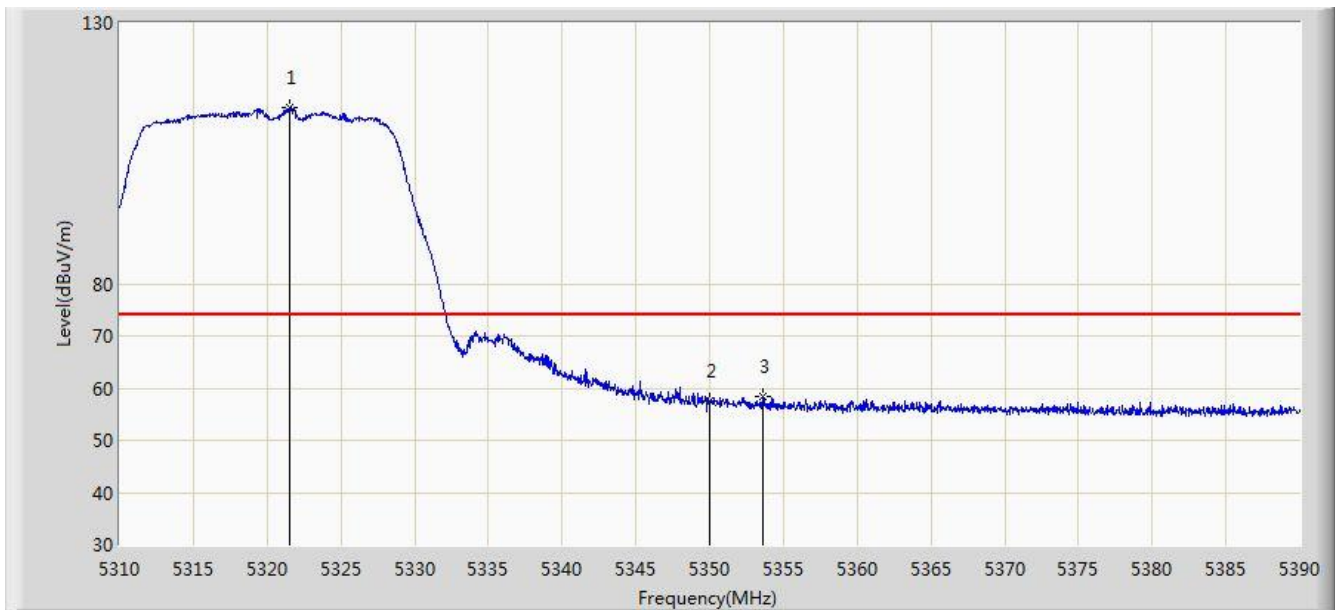


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5322.880	77.793	74.726	N/A	N/A	3.068	AV
2			5350.000	41.337	38.305	-12.663	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1	

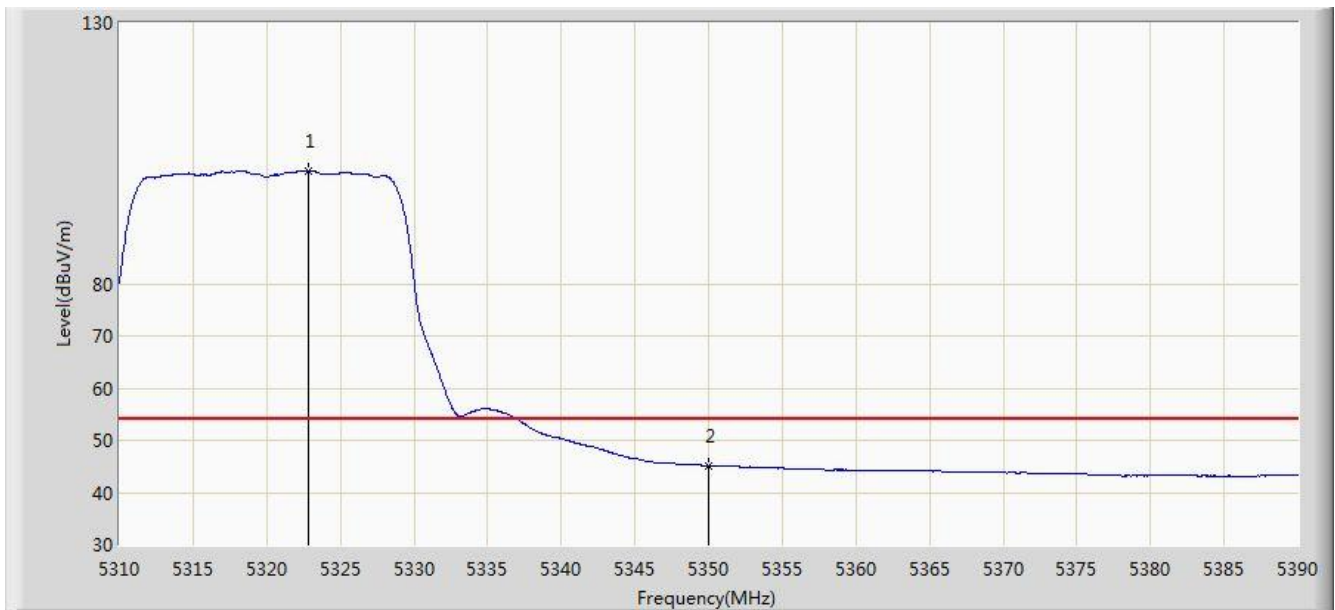


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5321.480	113.720	110.650	N/A	N/A	3.070	PK
2			5350.000	57.483	54.451	-16.517	74.000	3.032	PK
3			5353.560	58.349	55.320	-15.651	74.000	3.028	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 05:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1	

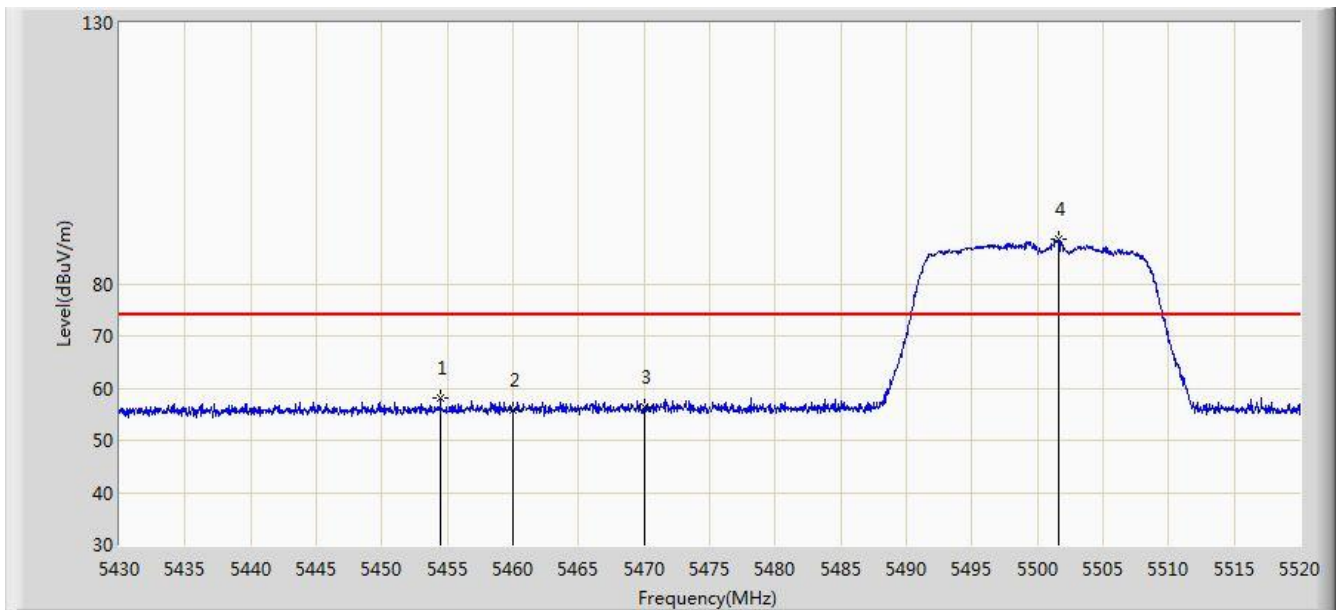


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5322.880	101.618	98.551	N/A	N/A	3.068	AV
2			5350.000	45.122	42.090	-8.878	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1	

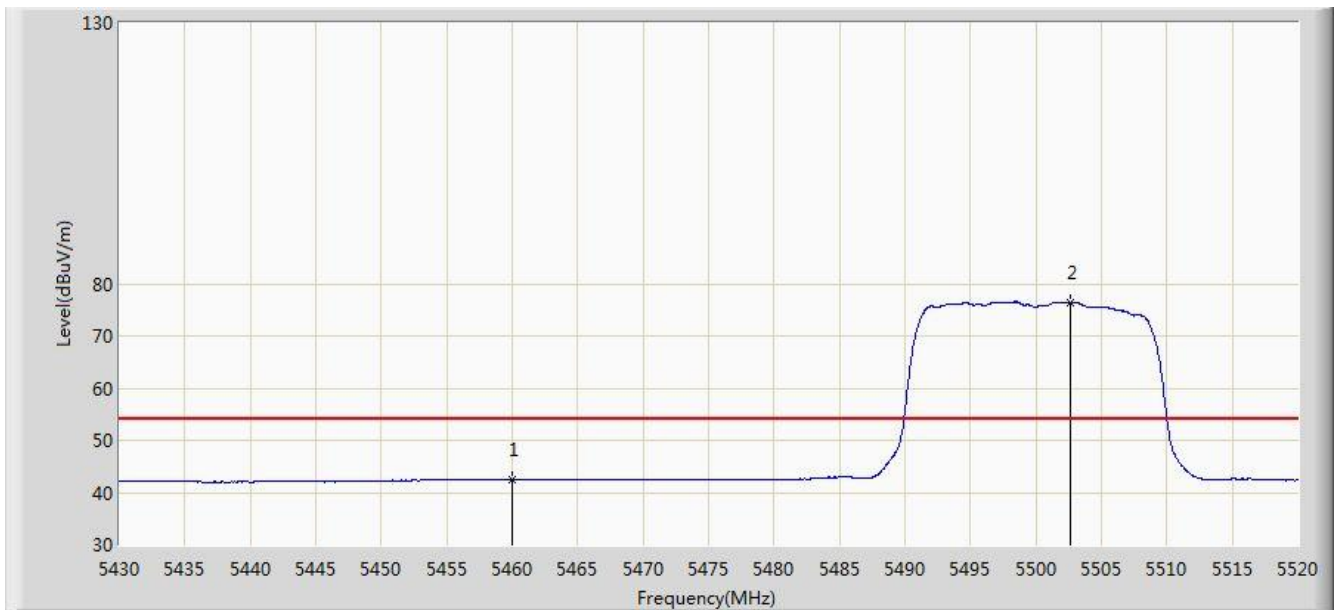


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5454.480	58.197	54.748	-15.803	74.000	3.450	PK
2			5460.000	55.711	52.229	-18.289	74.000	3.482	PK
3			5470.000	56.403	52.864	-17.597	74.000	3.539	PK
4		*	5501.640	88.475	84.951	N/A	N/A	3.524	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:08
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1	

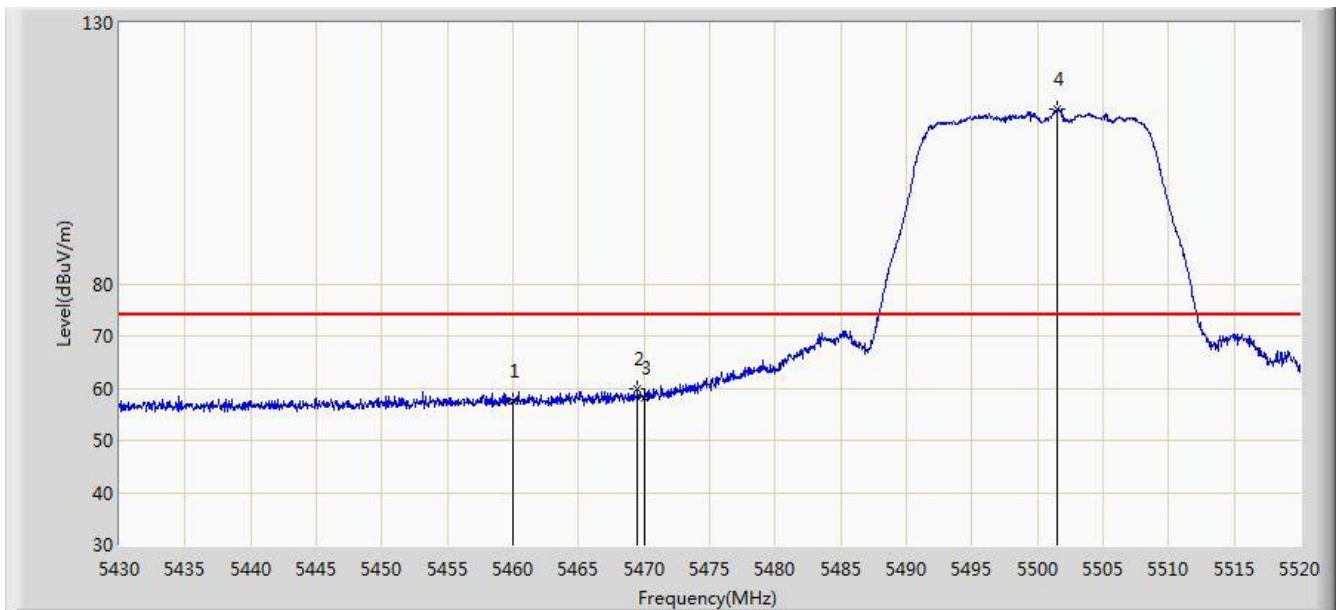


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.526	39.044	-11.474	54.000	3.482	AV
2		*	5502.630	76.430	72.907	N/A	N/A	3.523	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1	

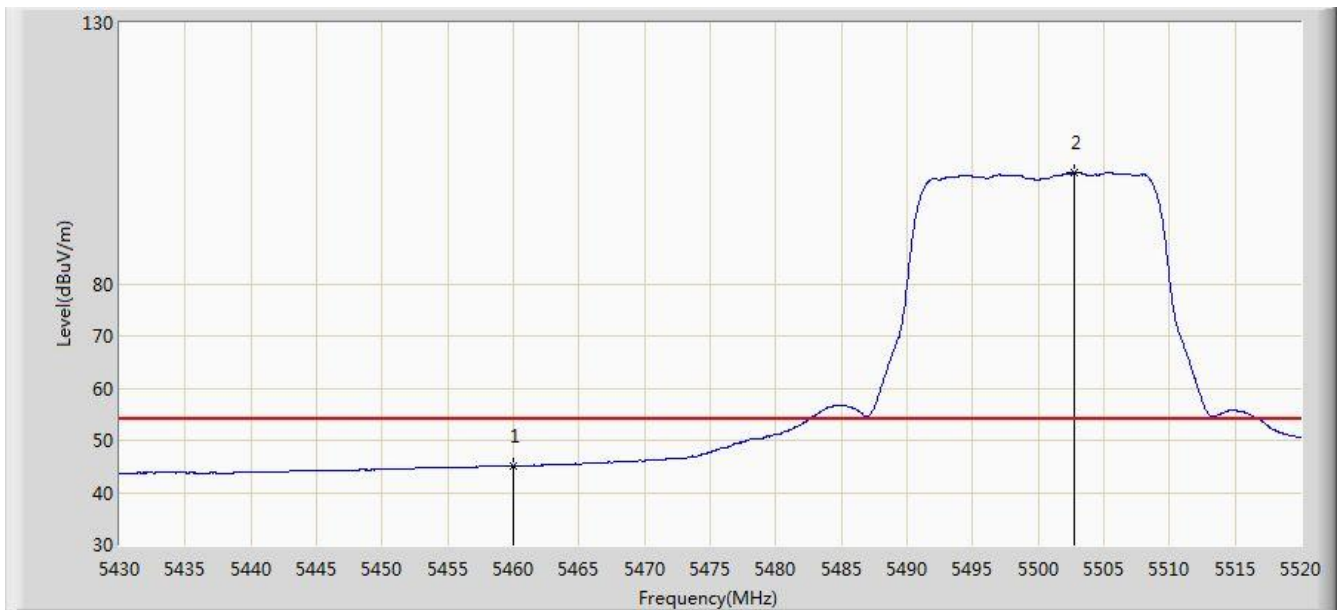


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	57.611	54.129	-16.389	74.000	3.482	PK
2			5469.510	59.993	56.456	-14.007	74.000	3.537	PK
3			5470.000	58.196	54.657	-15.804	74.000	3.539	PK
4		*	5501.460	113.577	110.052	N/A	N/A	3.525	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1	

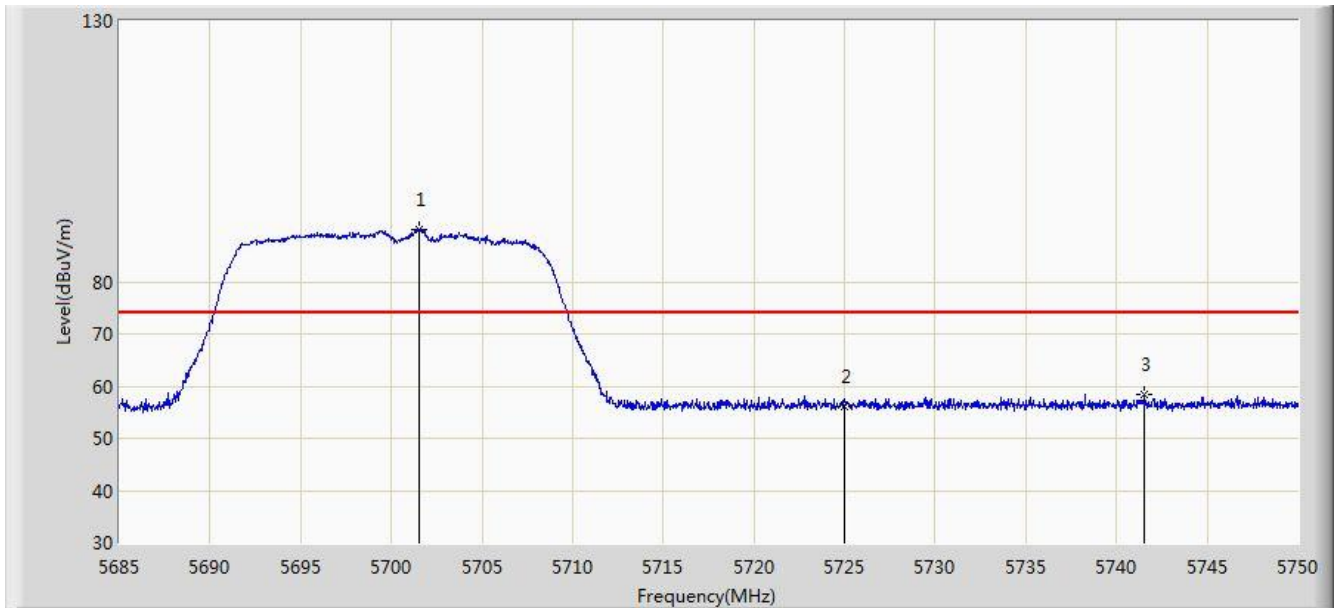


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	45.111	41.629	-8.889	54.000	3.482	AV
2		*	5502.720	101.273	97.750	N/A	N/A	3.523	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1	

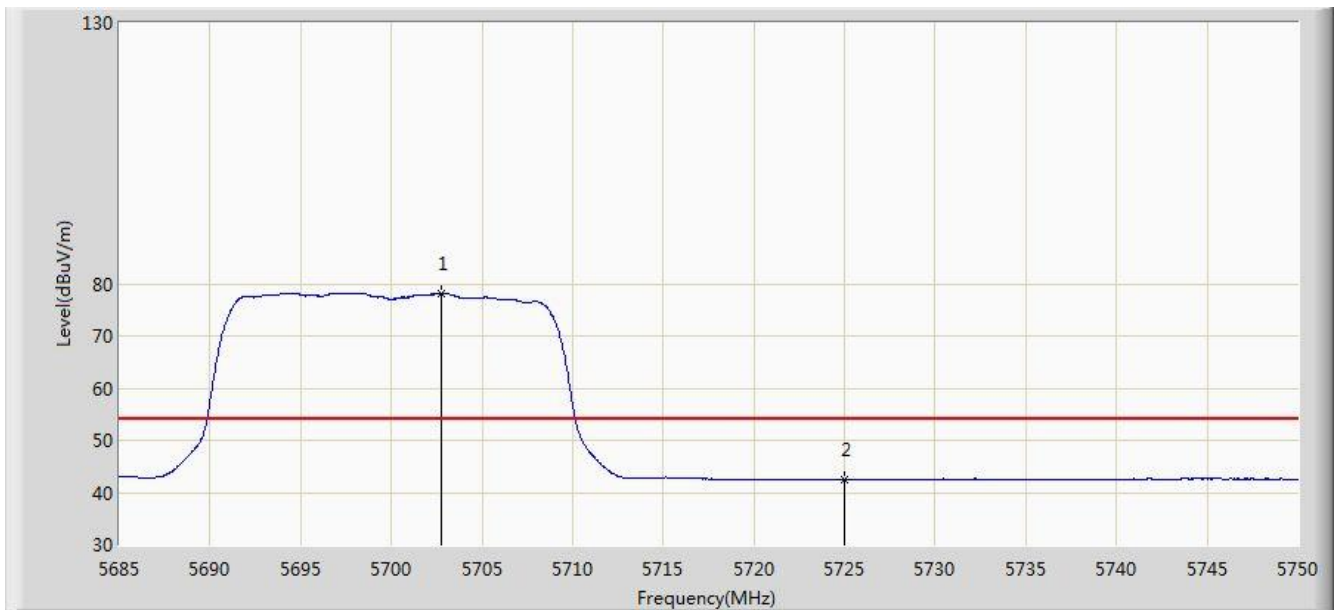


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.575	90.100	86.379	N/A	N/A	3.721	PK
2			5725.000	55.964	52.173	-18.036	74.000	3.791	PK
3			5741.550	58.261	54.420	-15.739	74.000	3.841	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1	

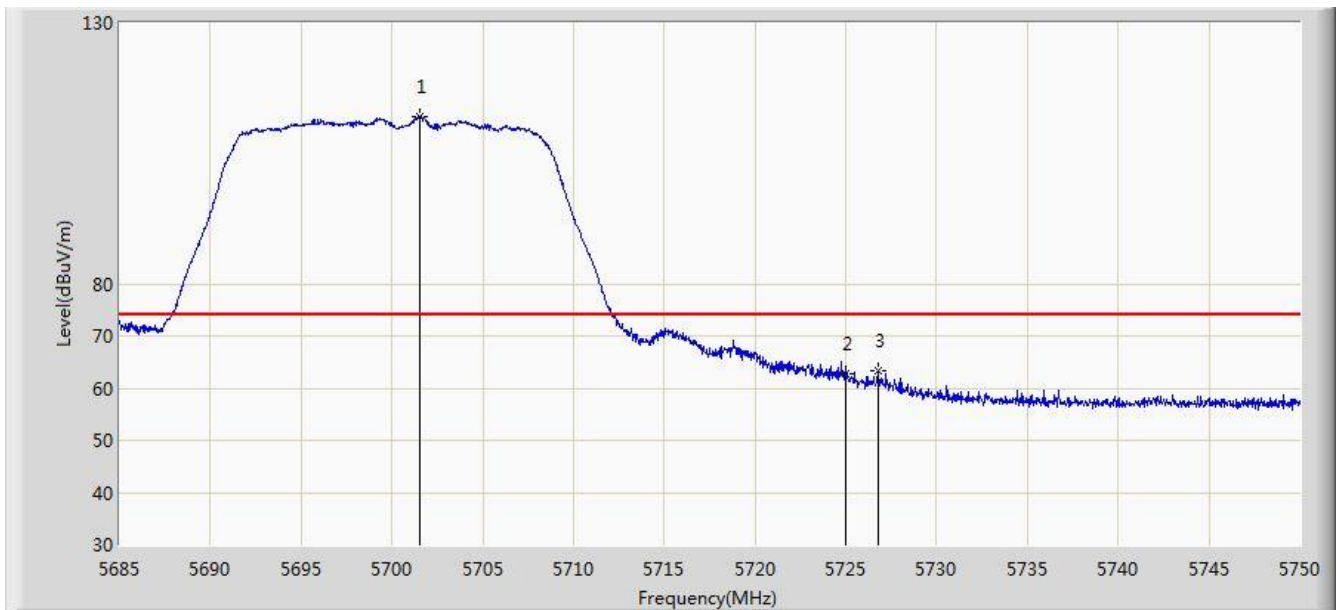


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5702.745	78.051	74.328	N/A	N/A	3.723	AV
2			5725.000	42.523	38.732	-11.477	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1	

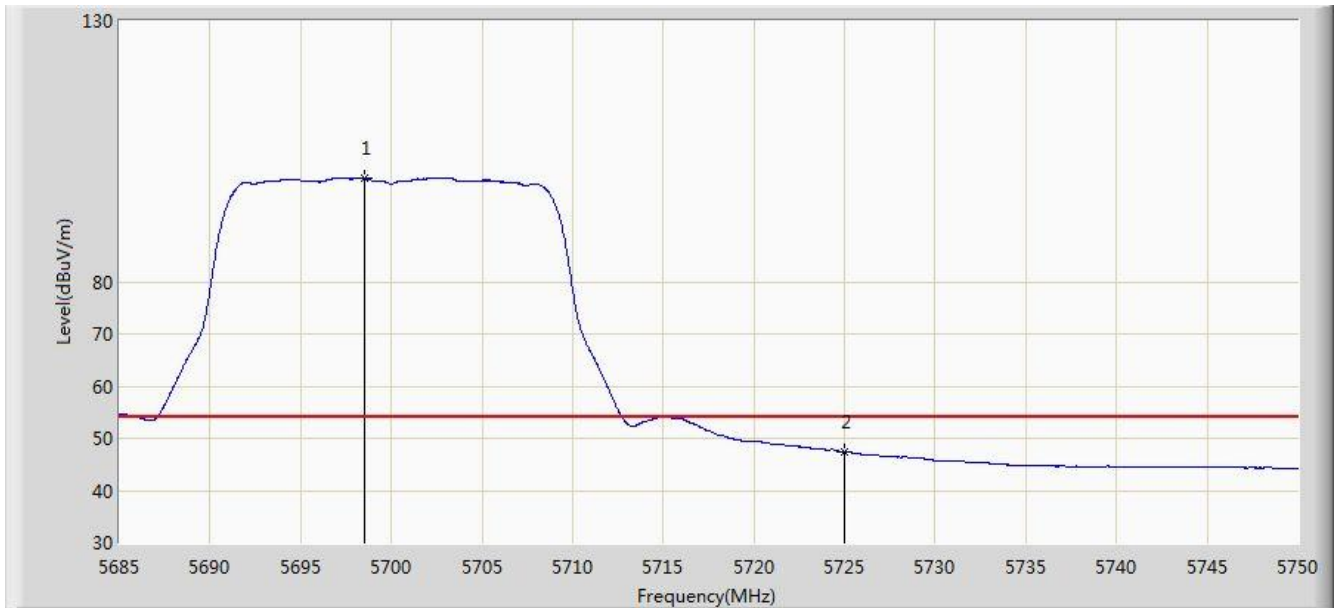


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.510	112.099	108.378	N/A	N/A	3.720	PK
2			5725.000	62.728	58.937	-11.272	74.000	3.791	PK
3			5726.795	63.236	59.440	-10.764	74.000	3.796	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1	

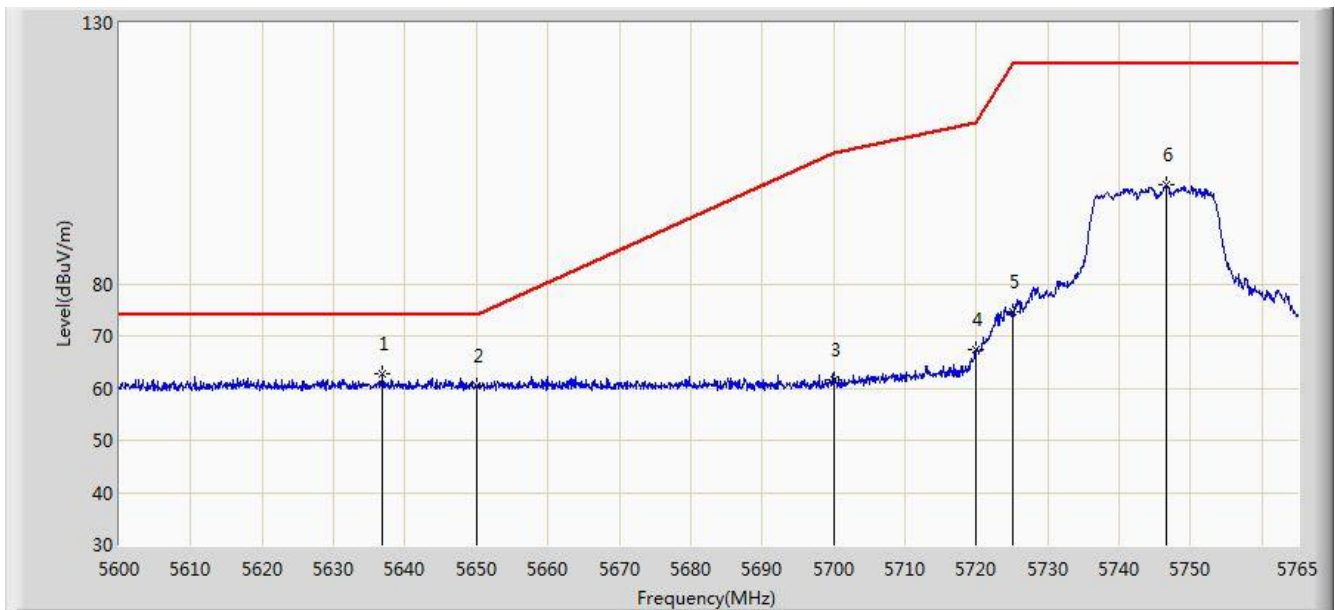


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5698.520	99.813	96.096	N/A	N/A	3.716	AV
2			5725.000	47.435	43.644	-6.565	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:36
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant 1	

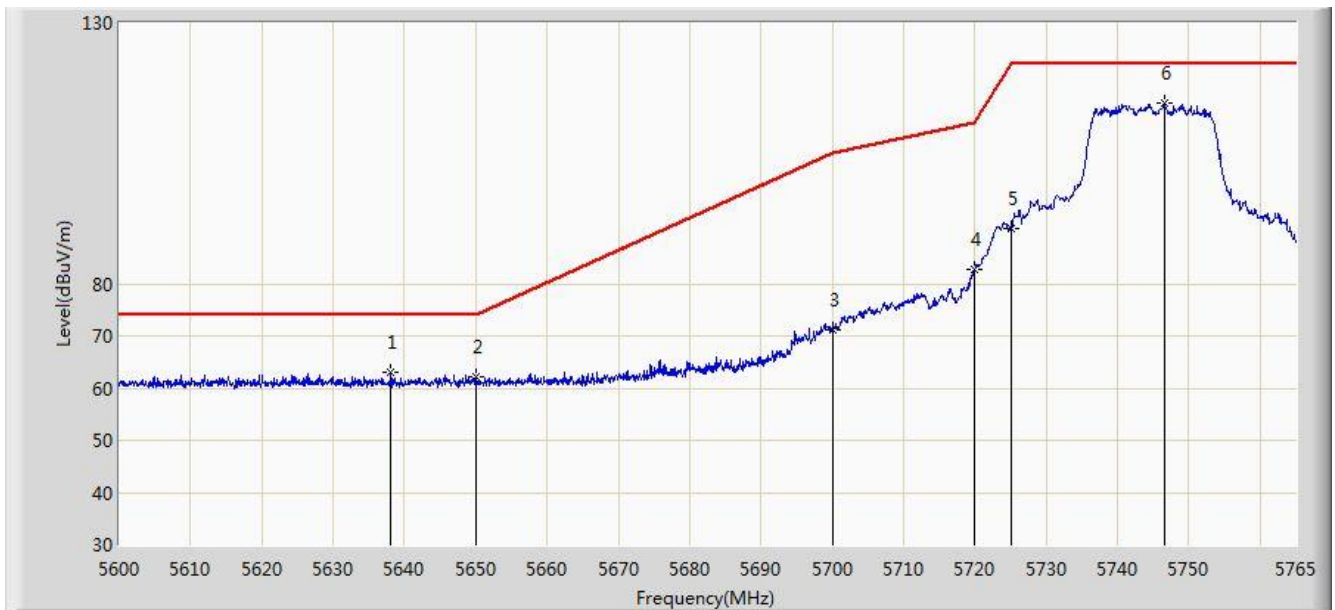


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5636.877	62.619	59.019	-11.381	74.000	3.600	PK
2			5650.000	60.372	56.745	-13.628	74.000	3.627	PK
3			5700.000	61.509	57.790	-43.691	105.200	3.719	PK
4			5720.000	67.301	63.525	-43.499	110.800	3.776	PK
5			5725.000	74.554	70.763	-47.646	122.200	3.791	PK
6			5746.685	98.952	95.093	N/A	N/A	3.859	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:39
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant 1	

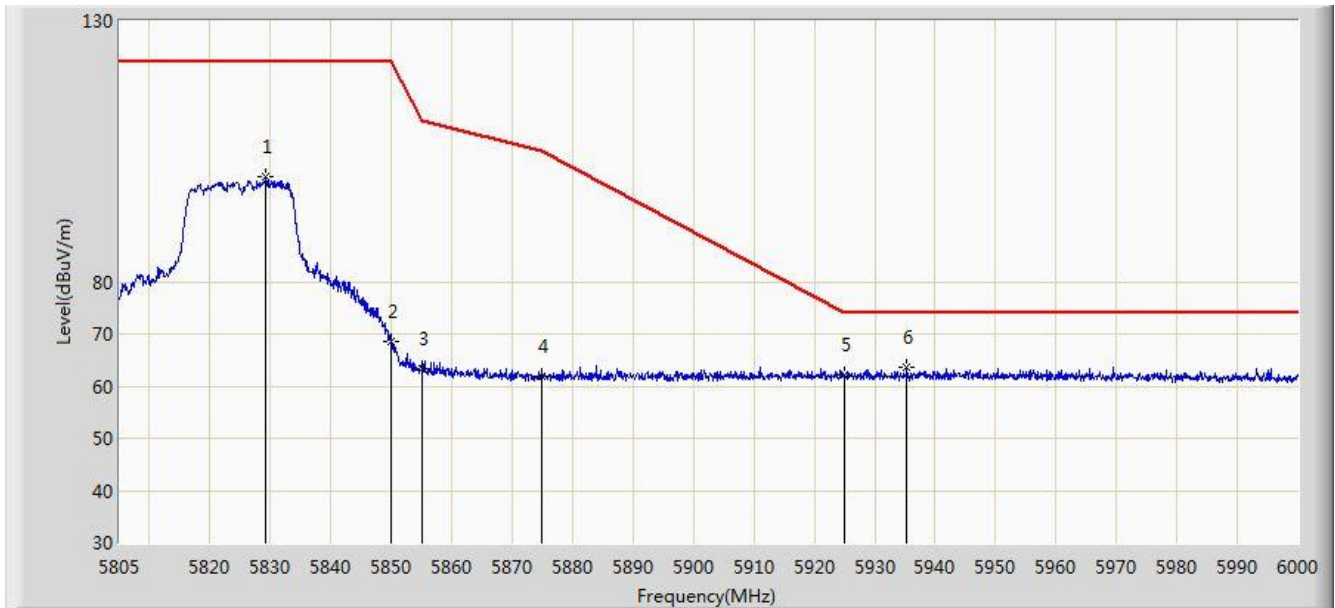


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5638.115	62.977	59.373	-11.023	74.000	3.605	PK
2			5650.000	62.066	58.439	-11.934	74.000	3.627	PK
3			5700.000	71.242	67.523	-33.958	105.200	3.719	PK
4			5720.000	82.760	78.984	-28.040	110.800	3.776	PK
5			5725.000	90.649	86.858	-31.551	122.200	3.791	PK
6		*	5746.603	114.646	110.787	N/A	N/A	3.859	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:41
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant 1	

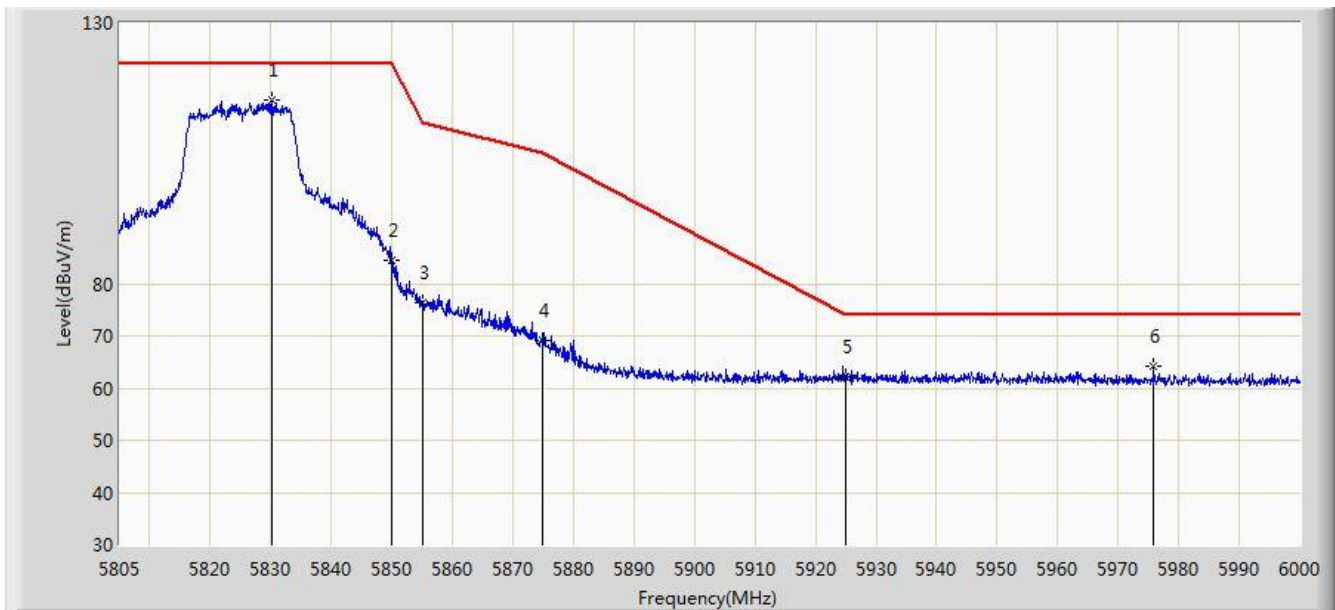


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5829.277	100.001	95.986	N/A	N/A	4.015	PK
2			5850.000	68.585	64.528	-53.615	122.200	4.058	PK
3			5855.000	63.328	59.268	-47.472	110.800	4.060	PK
4			5875.000	61.849	57.744	-43.351	105.200	4.105	PK
5			5925.000	62.077	57.824	-11.923	74.000	4.254	PK
6		*	5935.357	63.584	59.316	-10.416	74.000	4.268	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:47
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant 1	

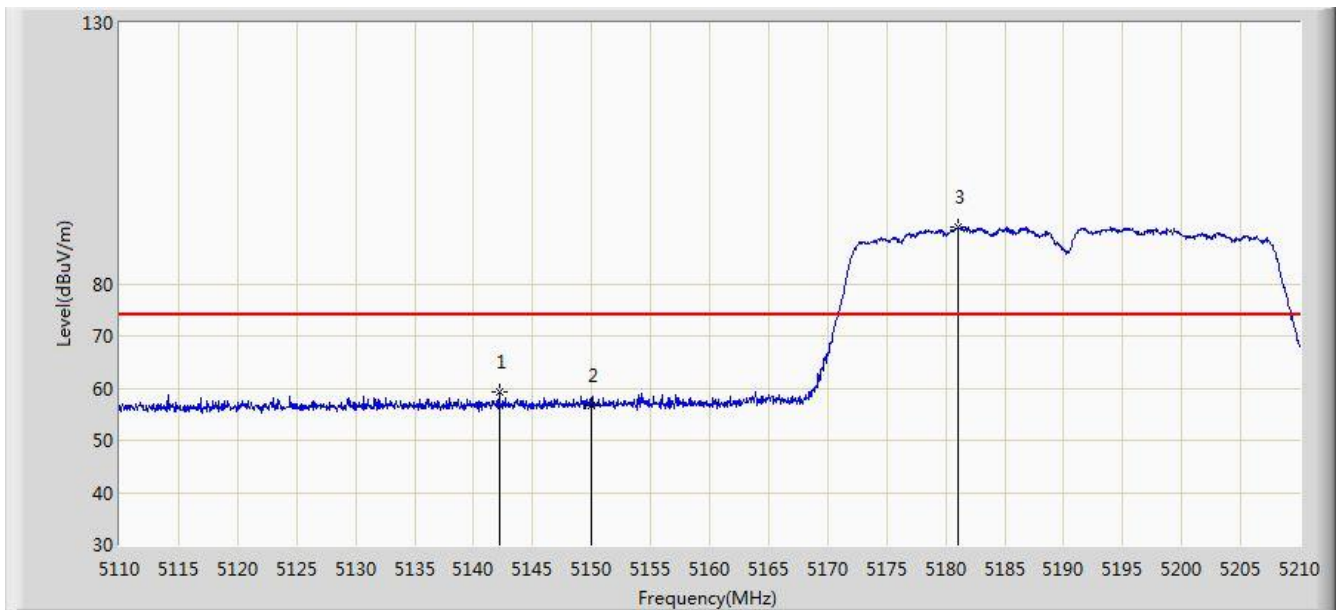


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5830.058	115.092	111.075	N/A	N/A	4.017	PK
2			5850.000	84.414	80.357	-37.786	122.200	4.058	PK
3			5855.000	76.510	72.450	-34.290	110.800	4.060	PK
4			5875.000	68.986	64.881	-36.214	105.200	4.105	PK
5			5925.000	62.297	58.044	-11.703	74.000	4.254	PK
6			5975.917	64.221	59.933	-9.779	74.000	4.289	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 1	

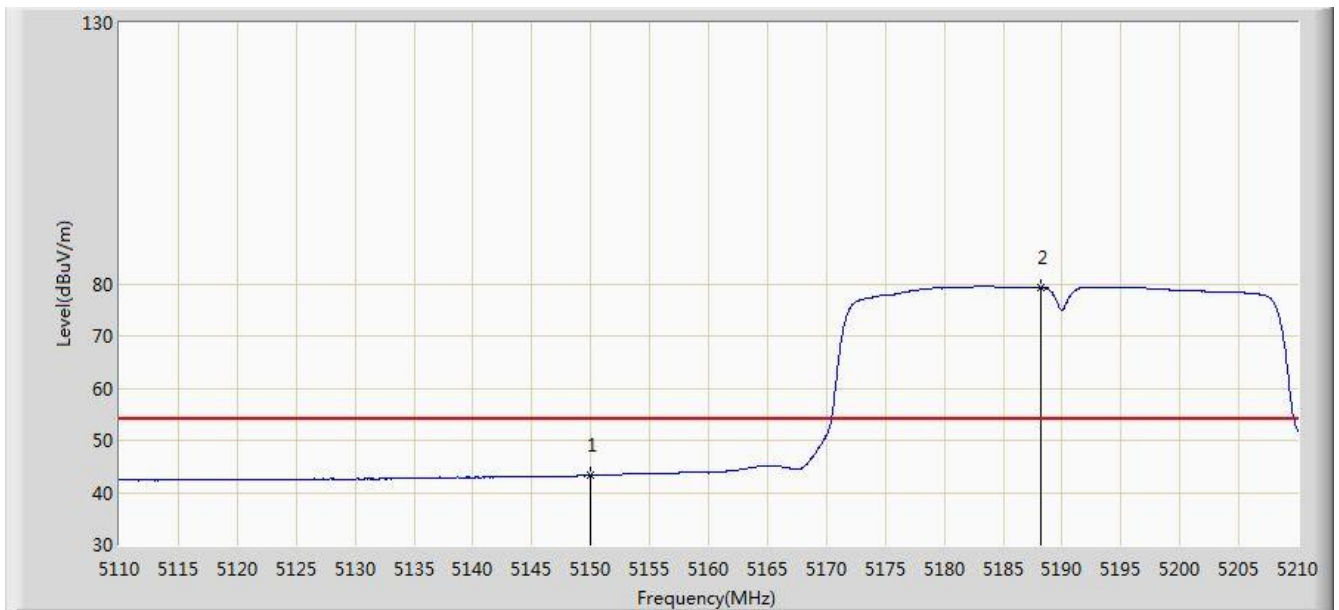


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5142.150	59.319	56.010	-14.681	74.000	3.309	PK
2			5150.000	56.795	53.486	-17.205	74.000	3.309	PK
3		*	5181.100	90.741	87.469	N/A	N/A	3.272	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 1	

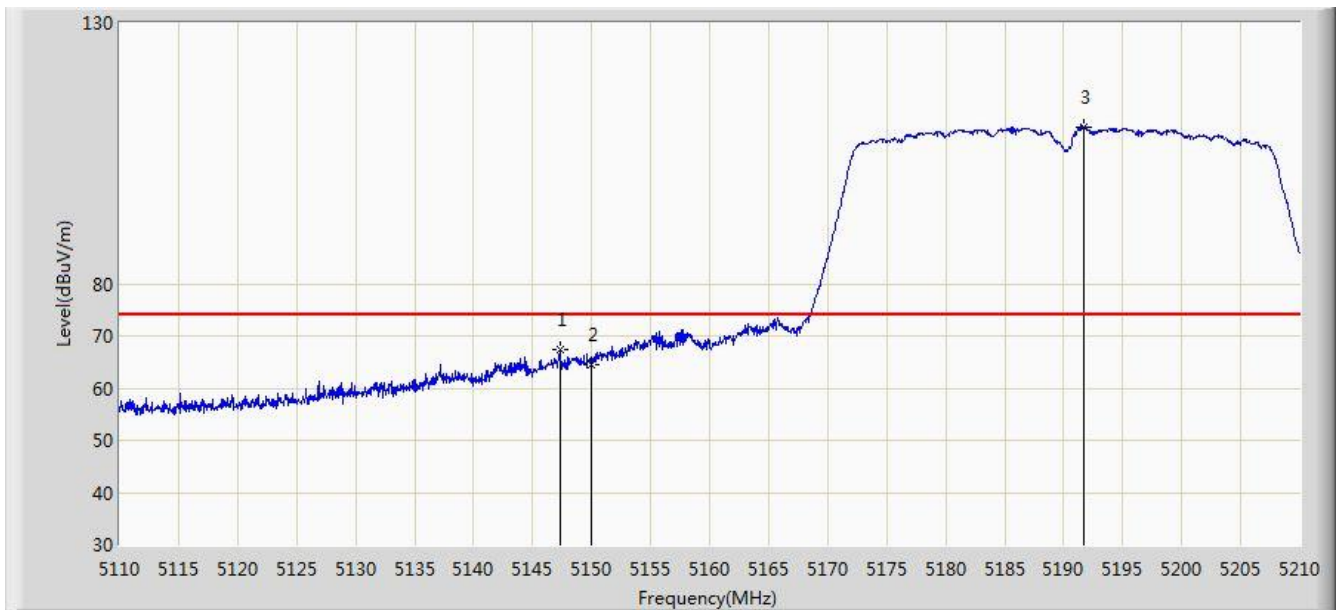


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.278	39.969	-10.722	54.000	3.309	AV
2		*	5188.150	79.245	75.982	N/A	N/A	3.263	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 1	

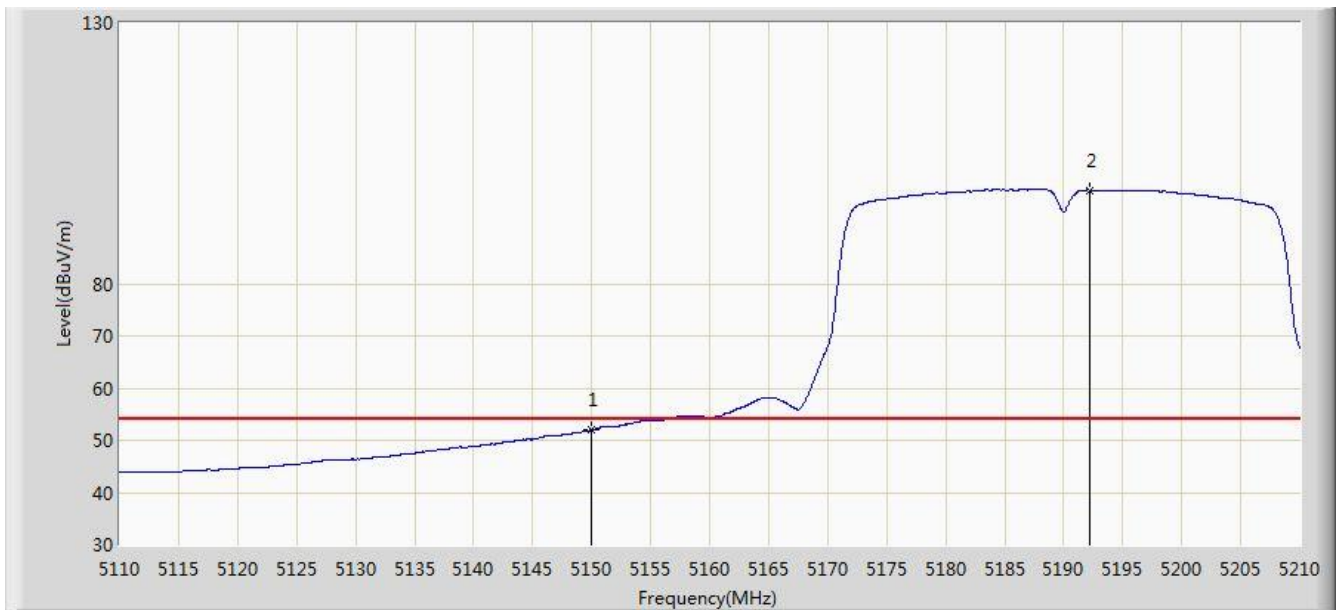


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5147.350	67.375	64.066	-6.625	74.000	3.309	PK
2			5150.000	64.436	61.127	-9.564	74.000	3.309	PK
3		*	5191.650	110.138	106.879	N/A	N/A	3.259	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 06:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 1	

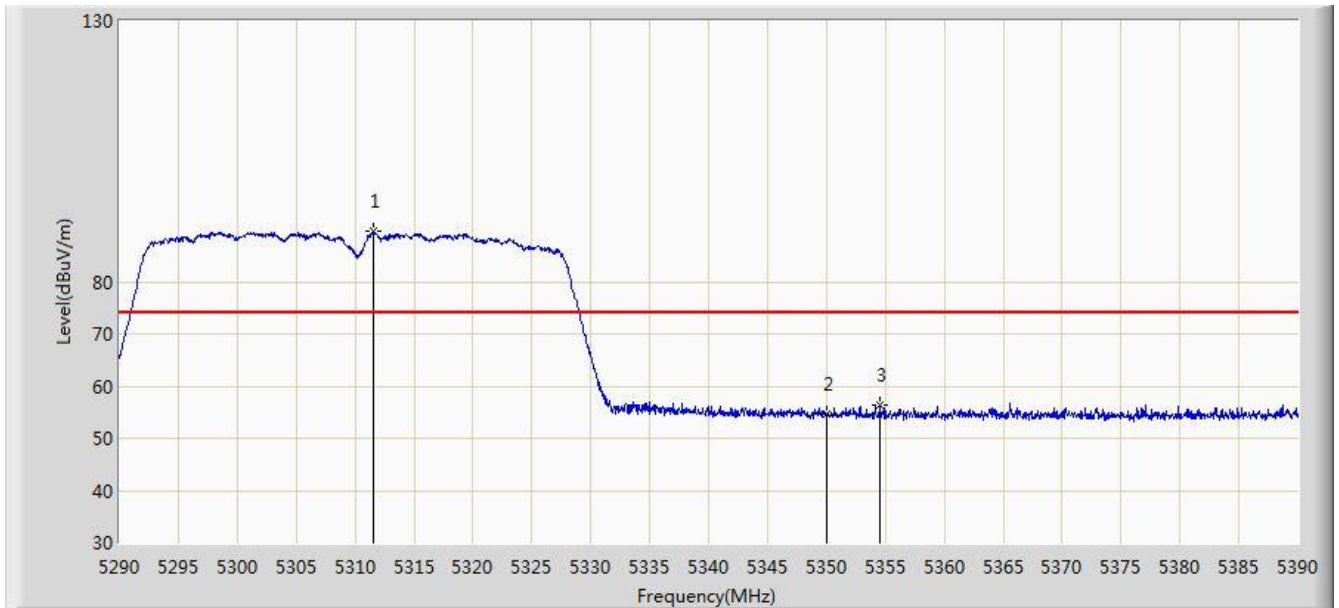


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.000	48.691	-2.000	54.000	3.309	AV
2		*	5192.200	97.967	94.709	N/A	N/A	3.259	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1	

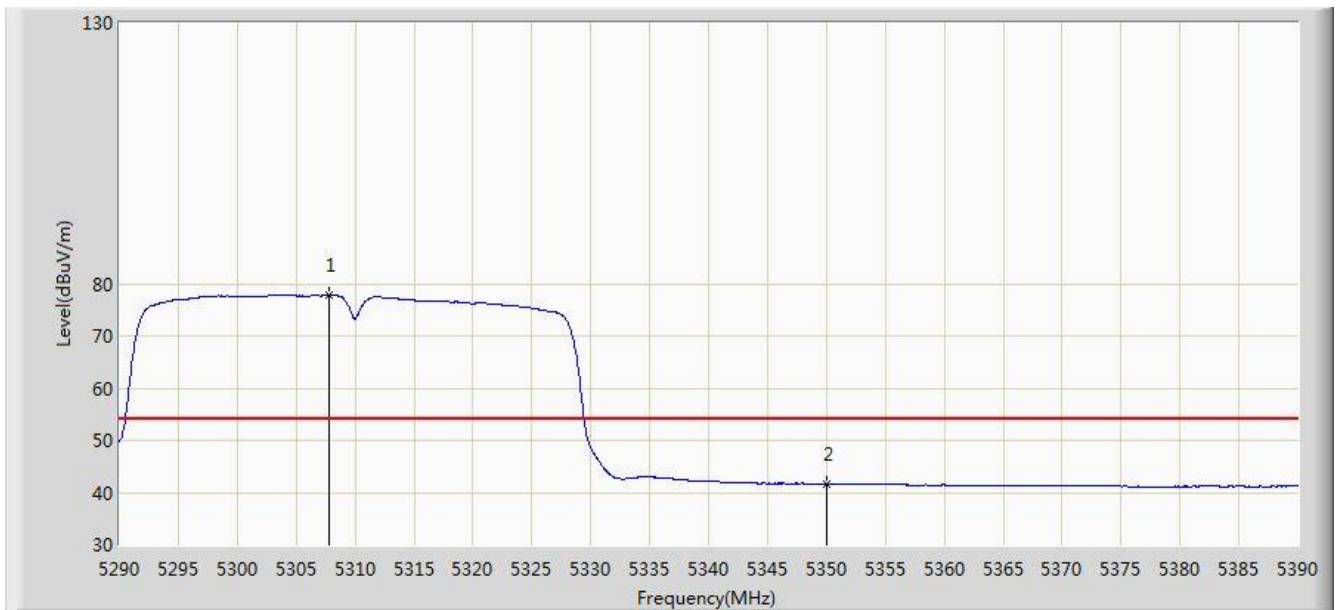


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5311.600	89.568	86.477	N/A	N/A	3.091	PK
2			5350.000	54.780	51.748	-19.220	74.000	3.032	PK
3			5354.550	56.276	53.248	-17.724	74.000	3.027	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:25
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1	

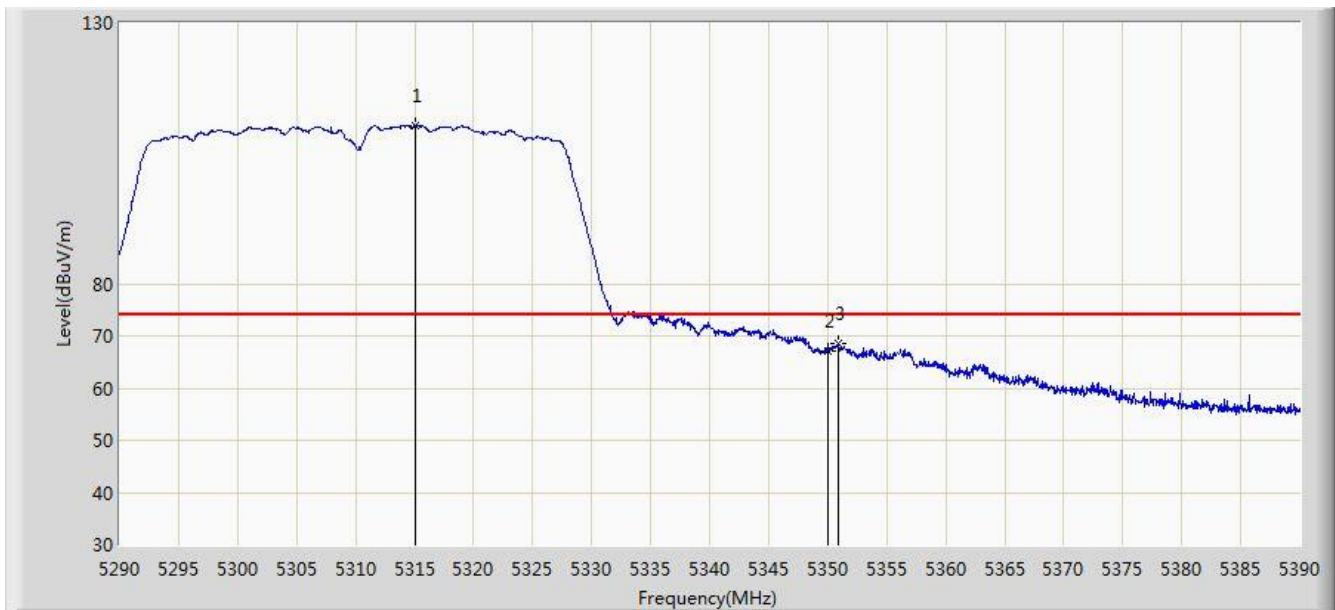


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5307.850	77.801	74.700	N/A	N/A	3.101	AV
2			5350.000	41.679	38.647	-12.321	54.000	3.032	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1	

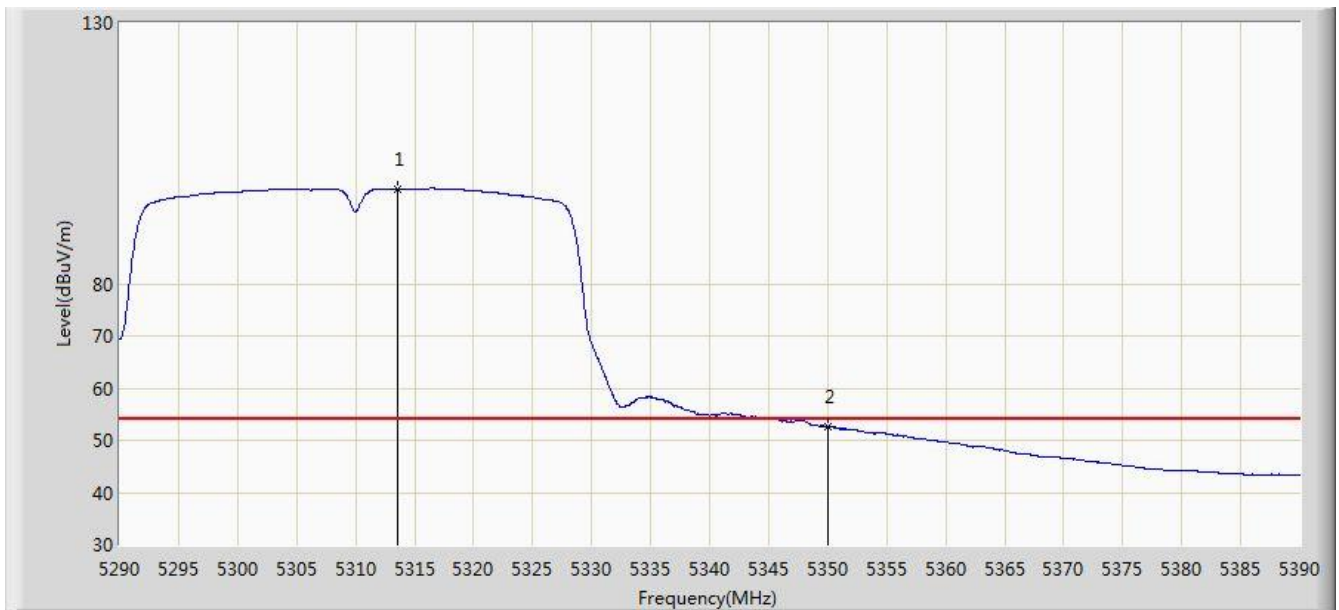


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5315.000	110.319	107.236	N/A	N/A	3.083	PK
2			5350.000	67.228	64.196	-6.772	74.000	3.032	PK
3			5350.950	68.414	65.383	-5.586	74.000	3.032	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1	

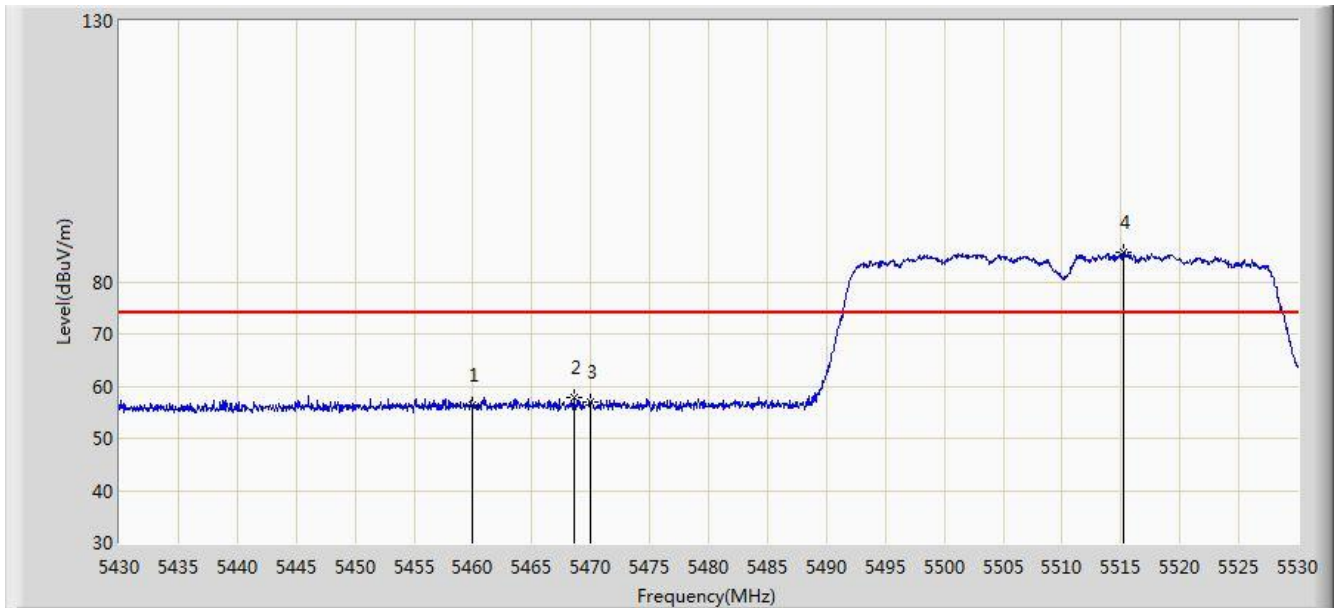


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5313.550	98.168	95.082	N/A	N/A	3.086	AV
2			5350.000	52.504	49.472	-1.496	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 1	

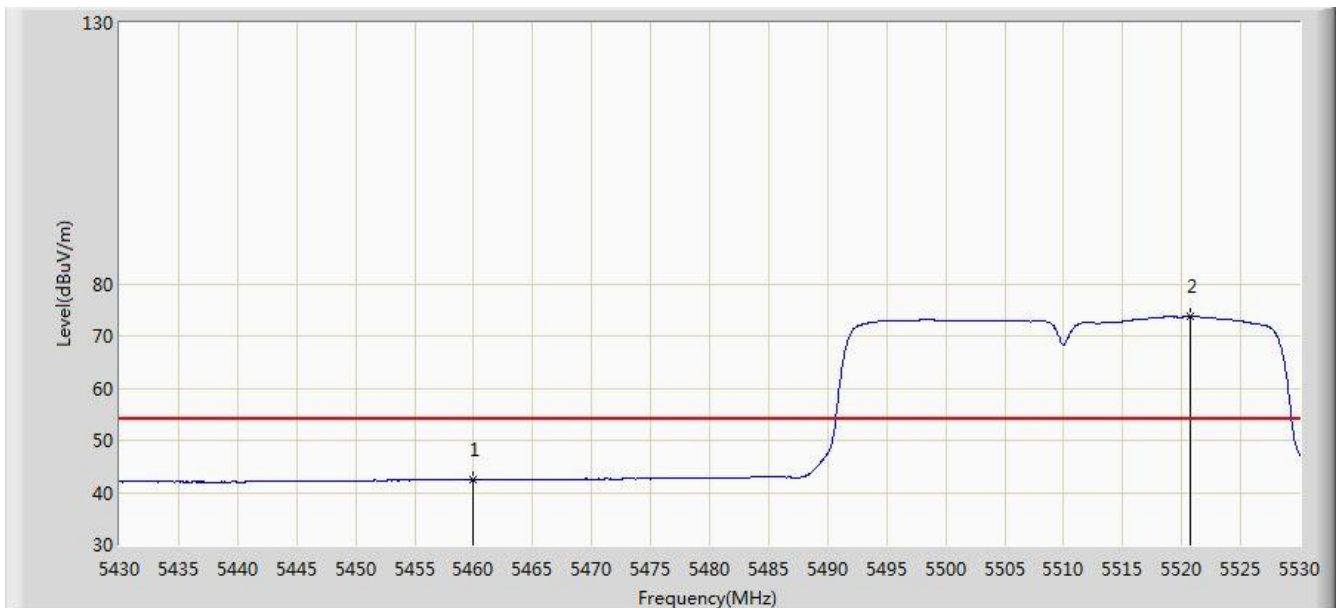


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	56.240	52.758	-17.760	74.000	3.482	PK
2			5468.600	57.938	54.407	-16.062	74.000	3.531	PK
3			5470.000	56.867	53.328	-17.133	74.000	3.539	PK
4		*	5515.250	85.612	82.102	N/A	N/A	3.510	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 1	

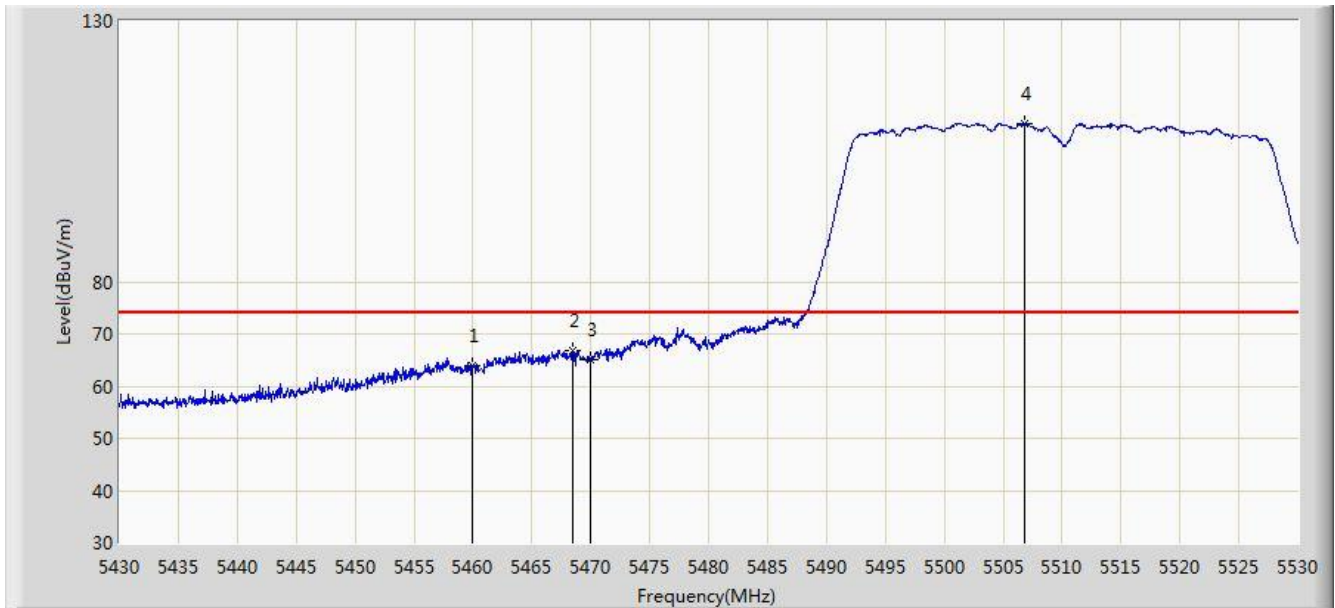


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.563	39.081	-11.437	54.000	3.482	AV
2		*	5520.750	73.709	70.205	N/A	N/A	3.505	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 1	

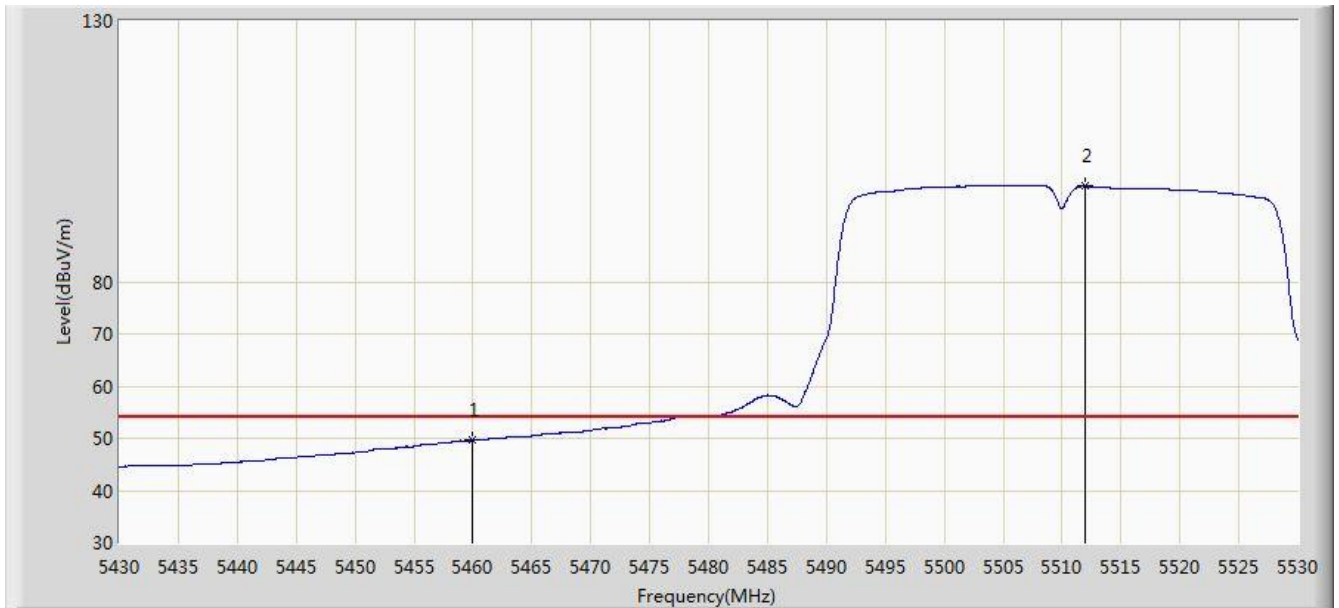


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	64.005	60.523	-9.995	74.000	3.482	PK
2			5468.450	66.924	63.394	-7.076	74.000	3.531	PK
3			5470.000	65.053	61.514	-8.947	74.000	3.539	PK
4		*	5506.800	110.411	106.892	N/A	N/A	3.519	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 1	

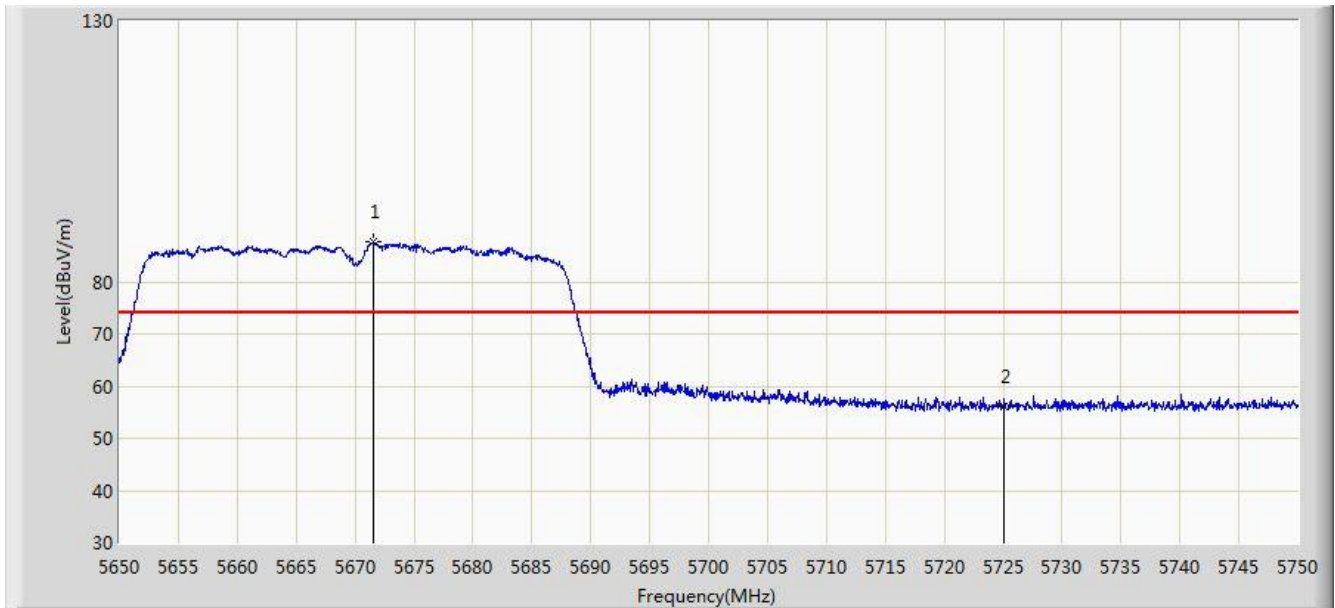


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	49.640	46.158	-4.360	54.000	3.482	AV
2		*	5511.900	98.301	94.787	N/A	N/A	3.514	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 1	

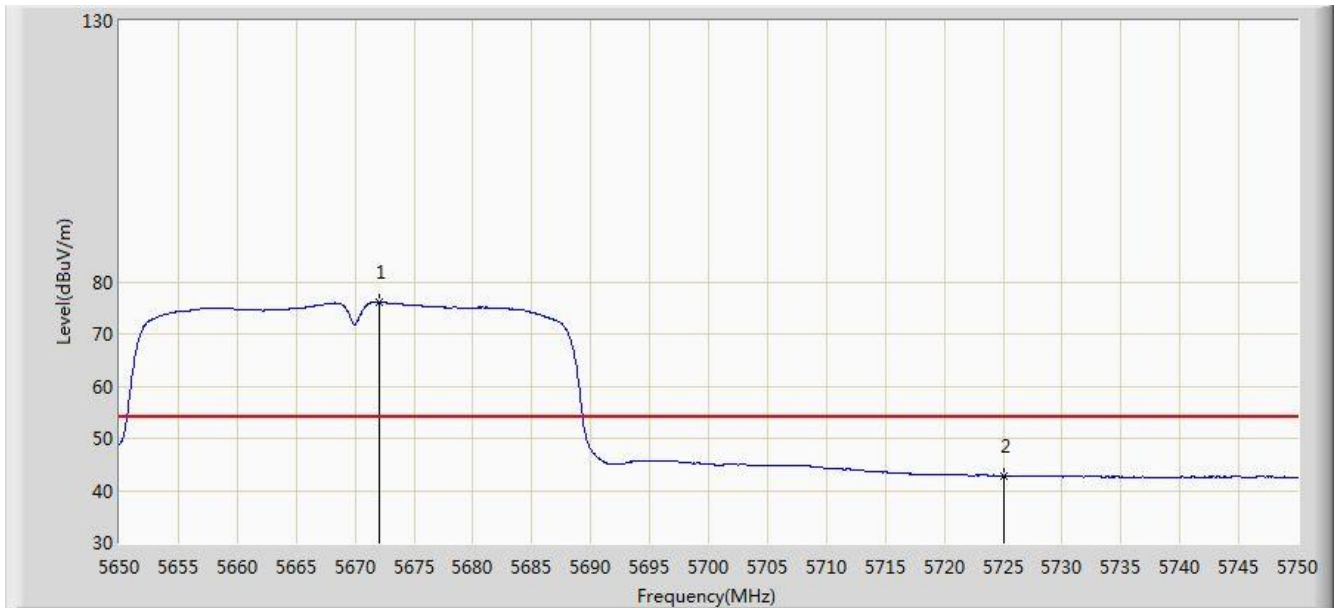


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5671.550	87.635	83.971	N/A	N/A	3.663	PK
2			5725.000	56.136	52.345	-17.864	74.000	3.791	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 1	

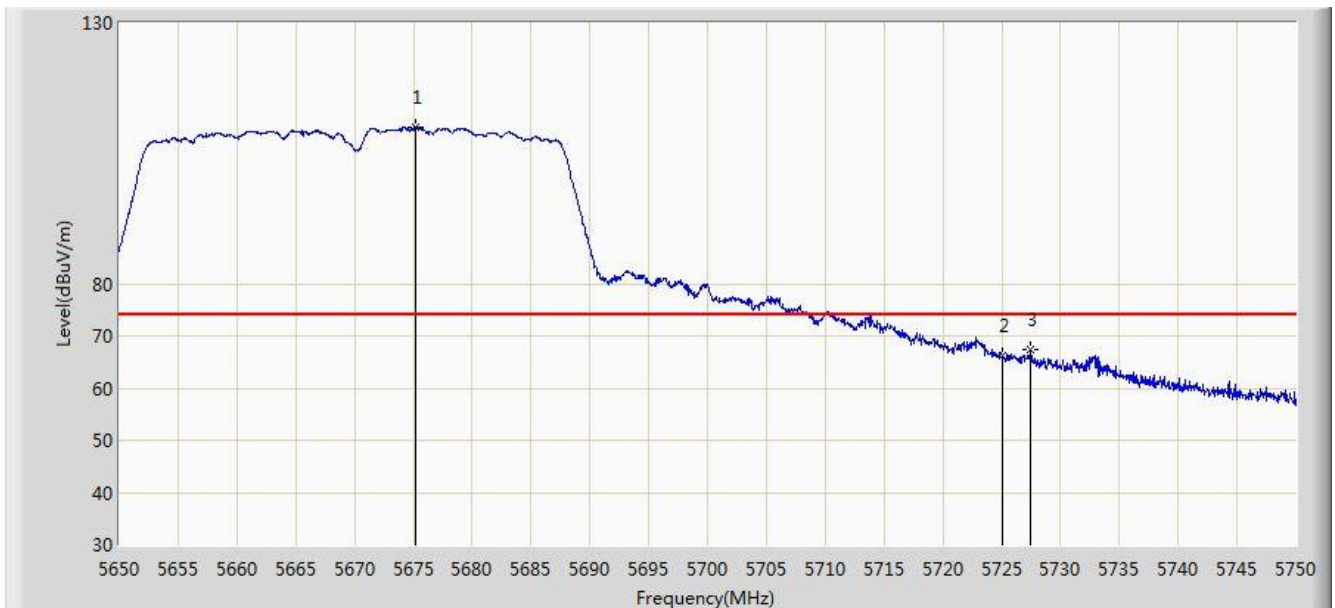


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5672.050	76.127	72.463	N/A	N/A	3.664	AV
2			5725.000	42.835	39.044	-11.165	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 1	

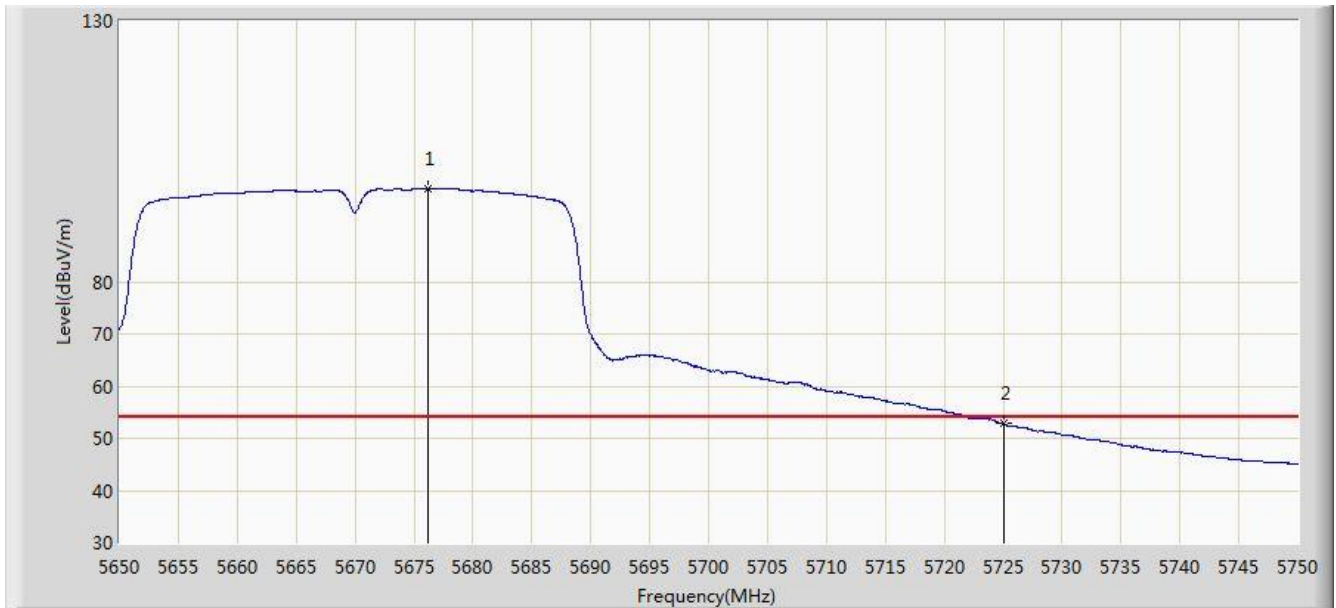


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5675.150	109.981	106.312	N/A	N/A	3.669	PK
2			5725.000	66.272	62.481	-7.728	74.000	3.791	PK
3			5727.450	67.282	63.484	-6.718	74.000	3.798	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 1	

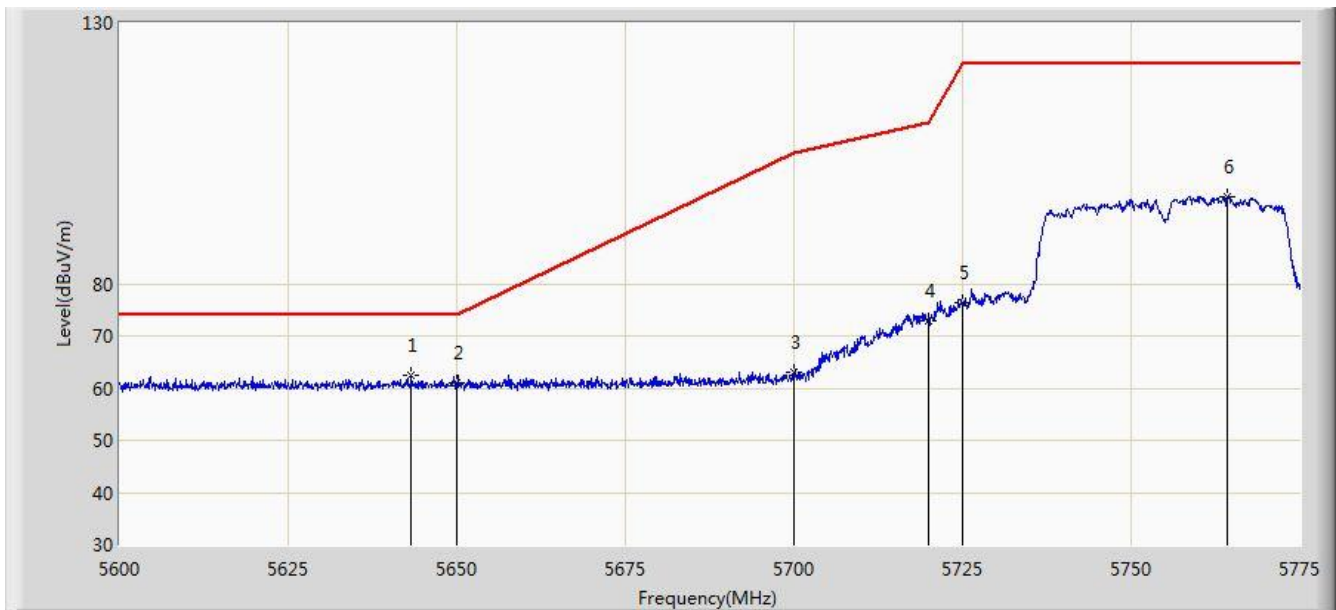


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5676.150	97.867	94.196	N/A	N/A	3.672	AV
2			5725.000	52.817	49.026	-1.183	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:05
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant 1	

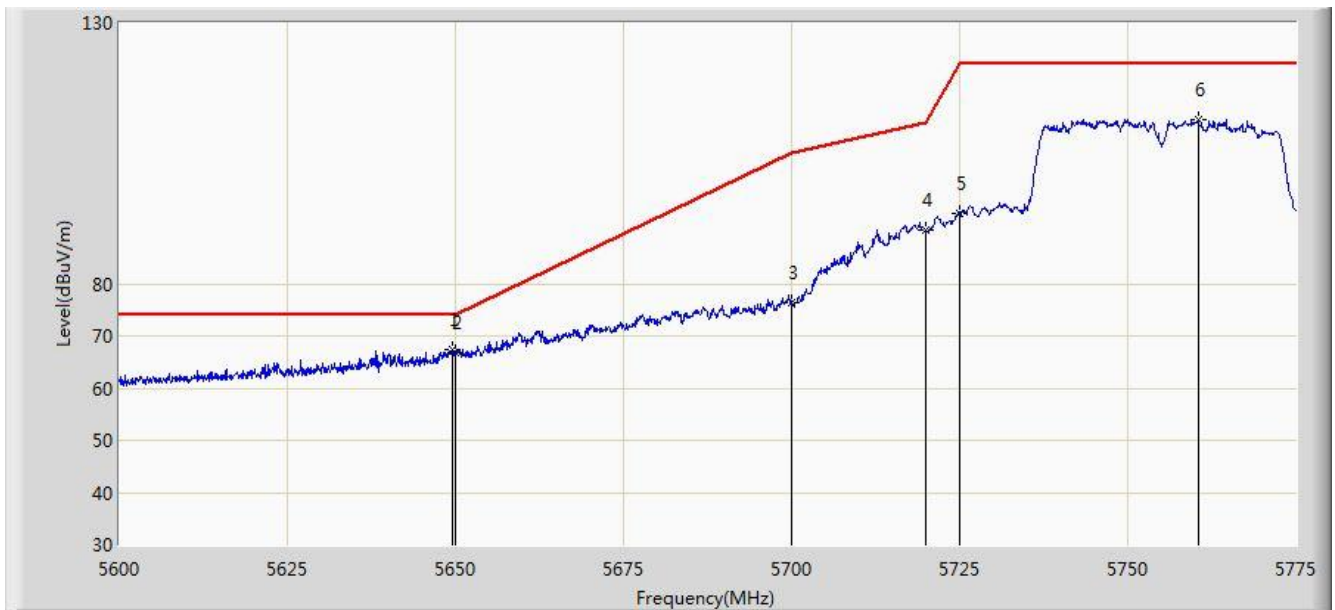


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5643.225	62.566	58.948	-11.434	74.000	3.617	PK
2			5650.000	60.969	57.342	-13.031	74.000	3.627	PK
3			5700.000	62.938	59.219	-42.262	105.200	3.719	PK
4			5720.000	73.033	69.257	-37.767	110.800	3.776	PK
5			5725.000	76.312	72.521	-45.888	122.200	3.791	PK
6			5764.150	96.654	92.744	N/A	N/A	3.910	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:07
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant 1	

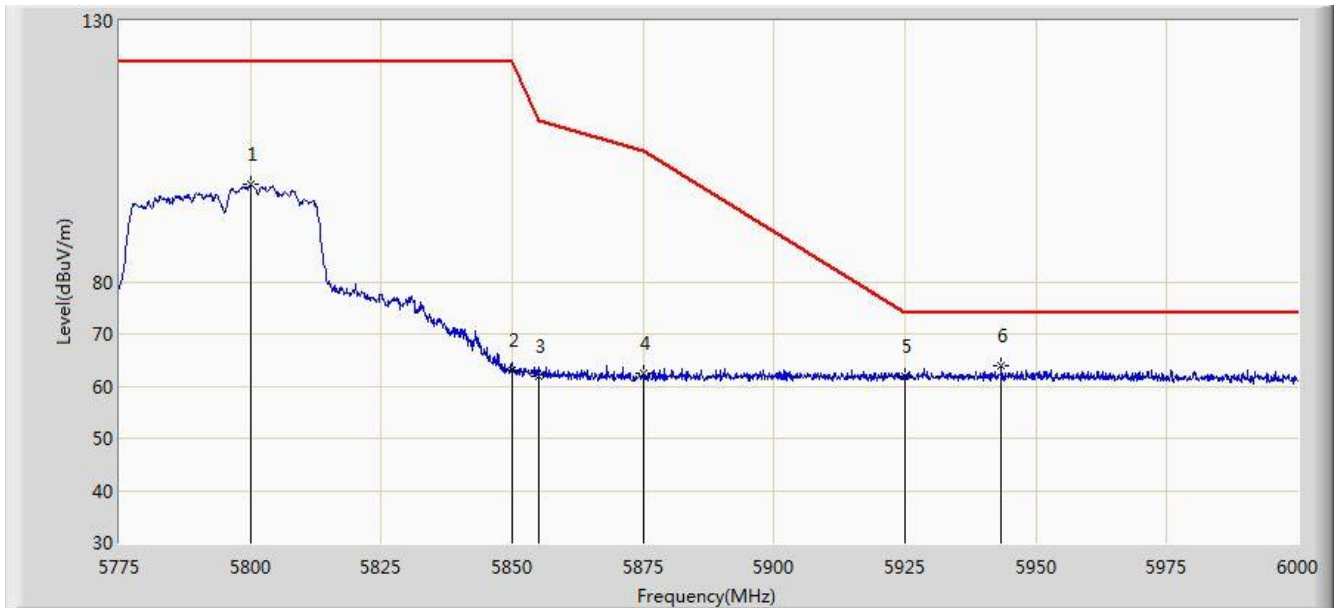


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5649.612	67.290	63.663	-6.710	74.000	3.627	PK
2			5650.000	66.703	63.076	-7.297	74.000	3.627	PK
3			5700.000	76.240	72.521	-28.960	105.200	3.719	PK
4			5720.000	90.160	86.384	-20.640	110.800	3.776	PK
5			5725.000	93.507	89.716	-28.693	122.200	3.791	PK
6			5760.475	111.590	107.684	N/A	N/A	3.906	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:10
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant 1	

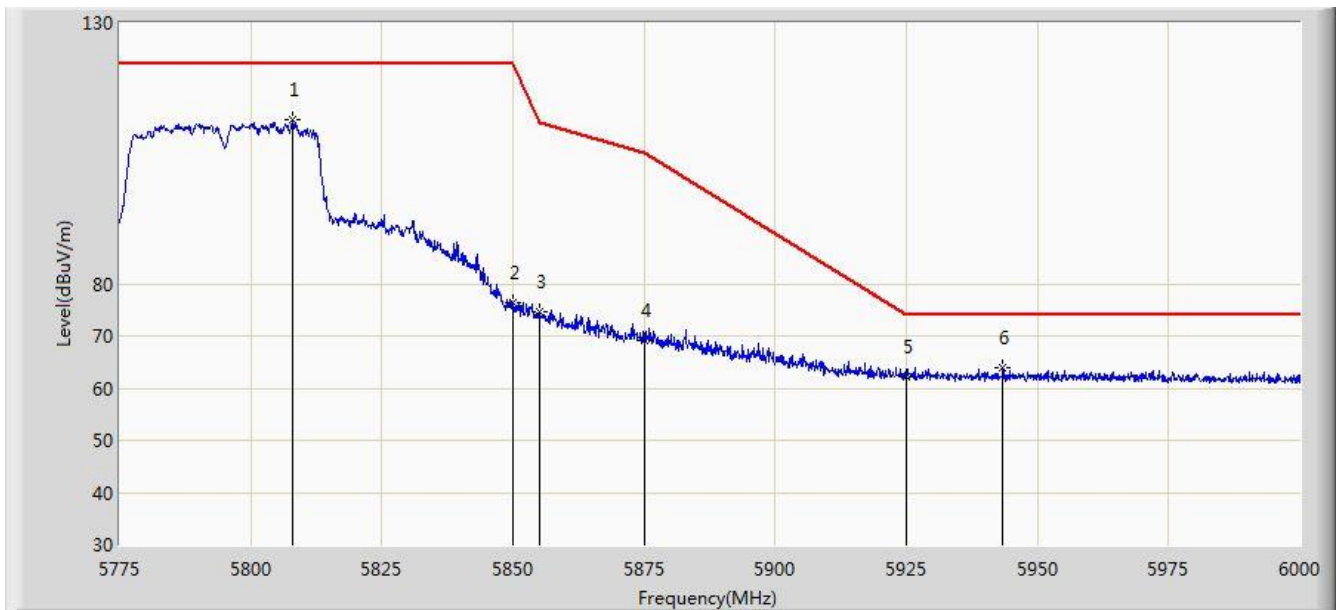


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5800.087	98.644	94.684	N/A	N/A	3.960	PK
2			5850.000	63.097	59.040	-59.103	122.200	4.058	PK
3			5855.000	61.900	57.840	-48.900	110.800	4.060	PK
4			5875.000	62.488	58.383	-42.712	105.200	4.105	PK
5			5925.000	61.859	57.606	-12.141	74.000	4.254	PK
6		*	5943.413	63.828	59.556	-10.172	74.000	4.272	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:13
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant 1	

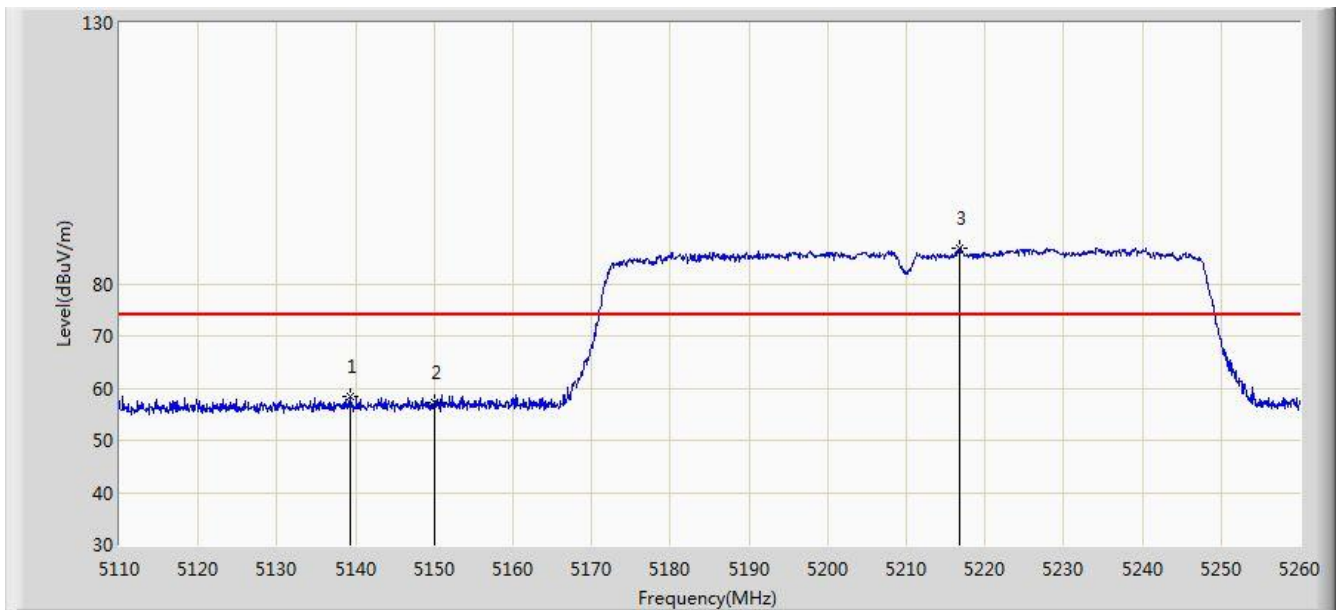


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5808.075	111.312	107.343	N/A	N/A	3.969	PK
2			5850.000	76.240	72.183	-45.960	122.200	4.058	PK
3			5855.000	74.516	70.456	-36.284	110.800	4.060	PK
4			5875.000	69.256	65.151	-35.944	105.200	4.105	PK
5			5925.000	62.234	57.981	-11.766	74.000	4.254	PK
6		*	5943.413	63.828	59.556	-10.172	74.000	4.272	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 1	

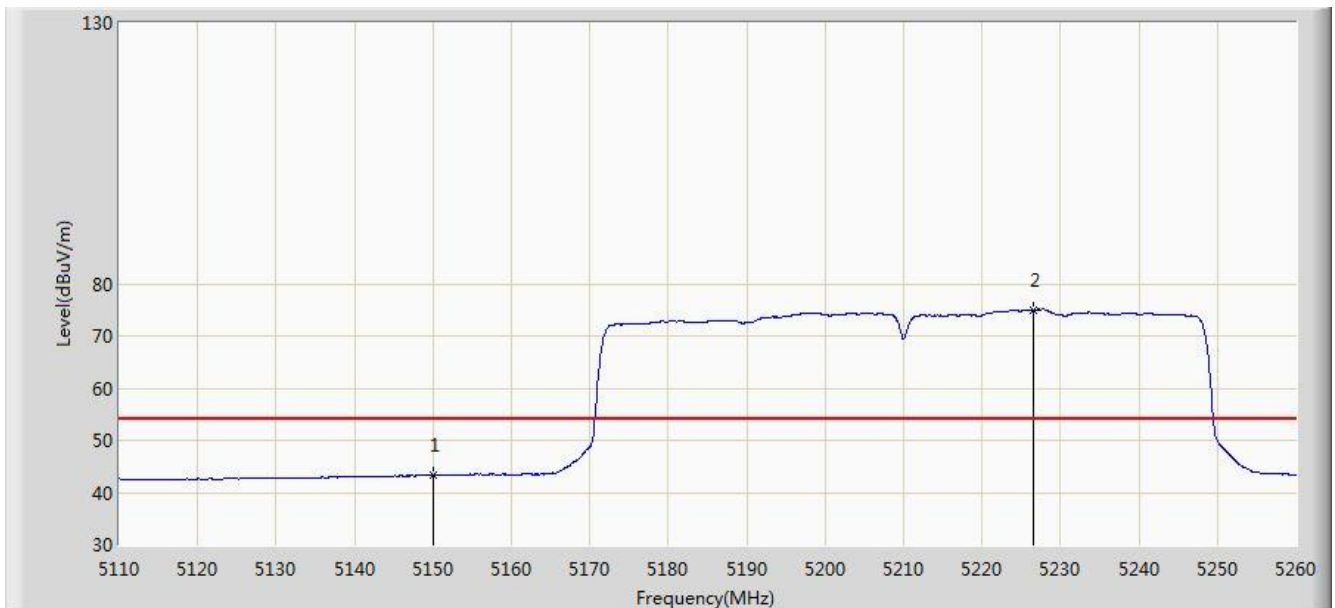


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5139.400	58.466	55.156	-15.534	74.000	3.310	PK
2			5150.000	57.341	54.032	-16.659	74.000	3.309	PK
3		*	5216.725	86.742	83.528	N/A	N/A	3.215	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 1	

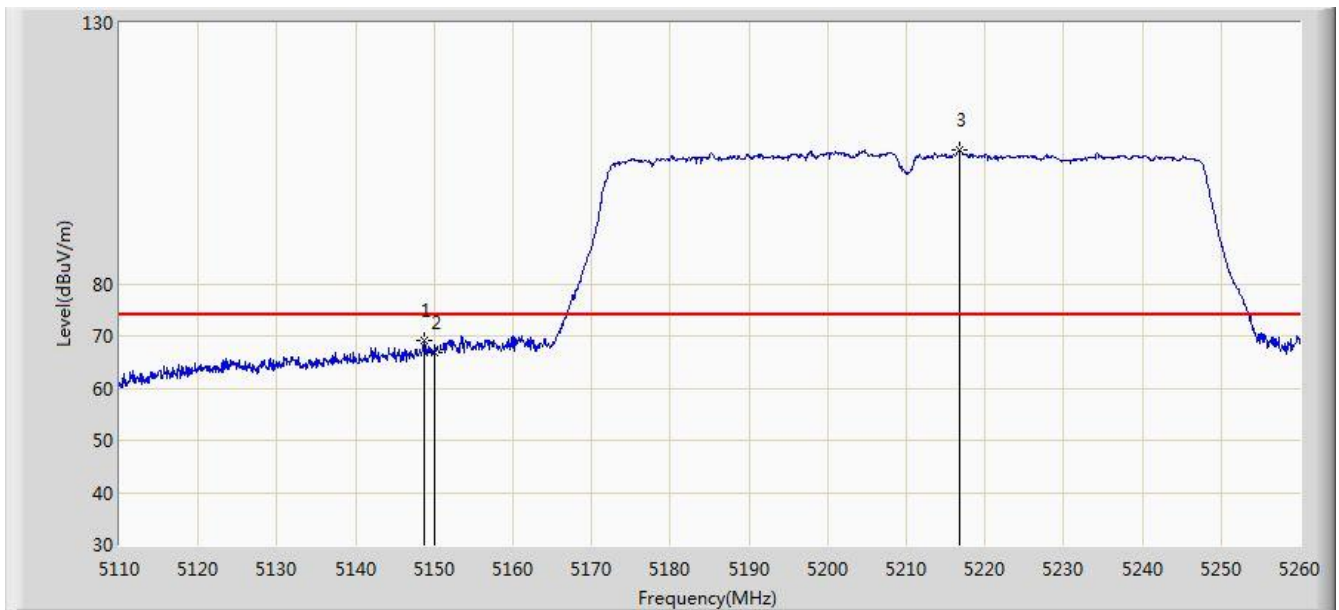


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.327	40.018	-10.673	54.000	3.309	AV
2		*	5226.550	74.966	71.761	N/A	N/A	3.205	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 1	

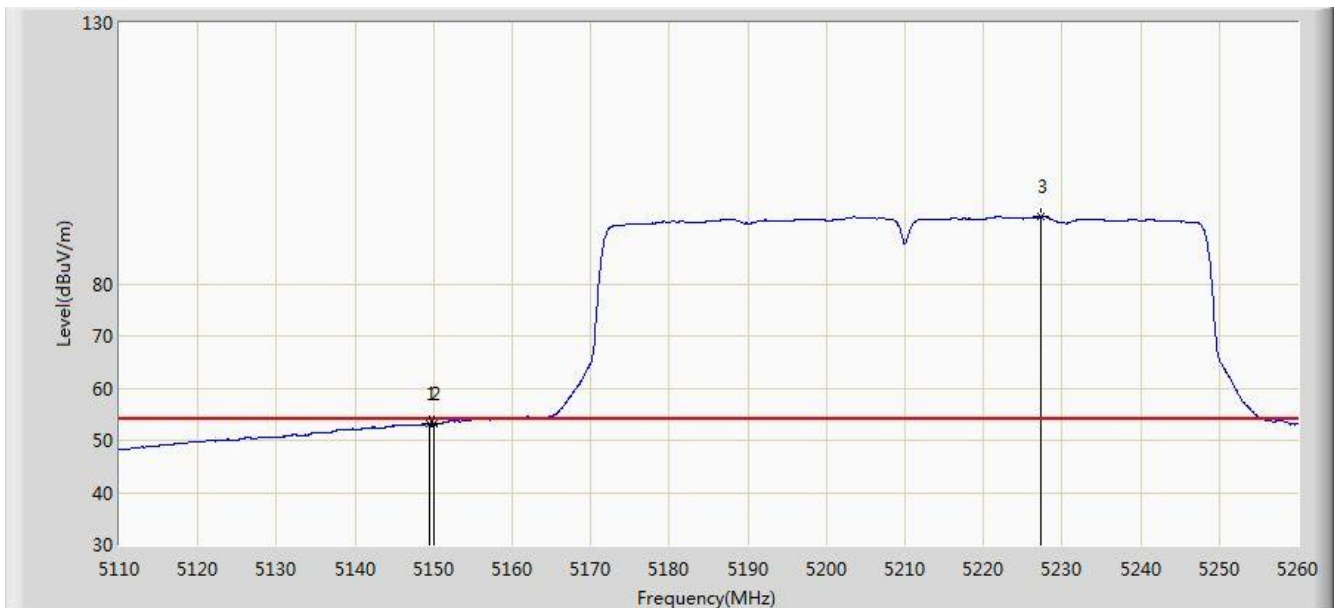


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.700	69.242	65.933	-4.758	74.000	3.309	PK
2			5150.000	66.799	63.490	-7.201	74.000	3.309	PK
3		*	5216.800	105.544	102.330	N/A	N/A	3.215	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 1	

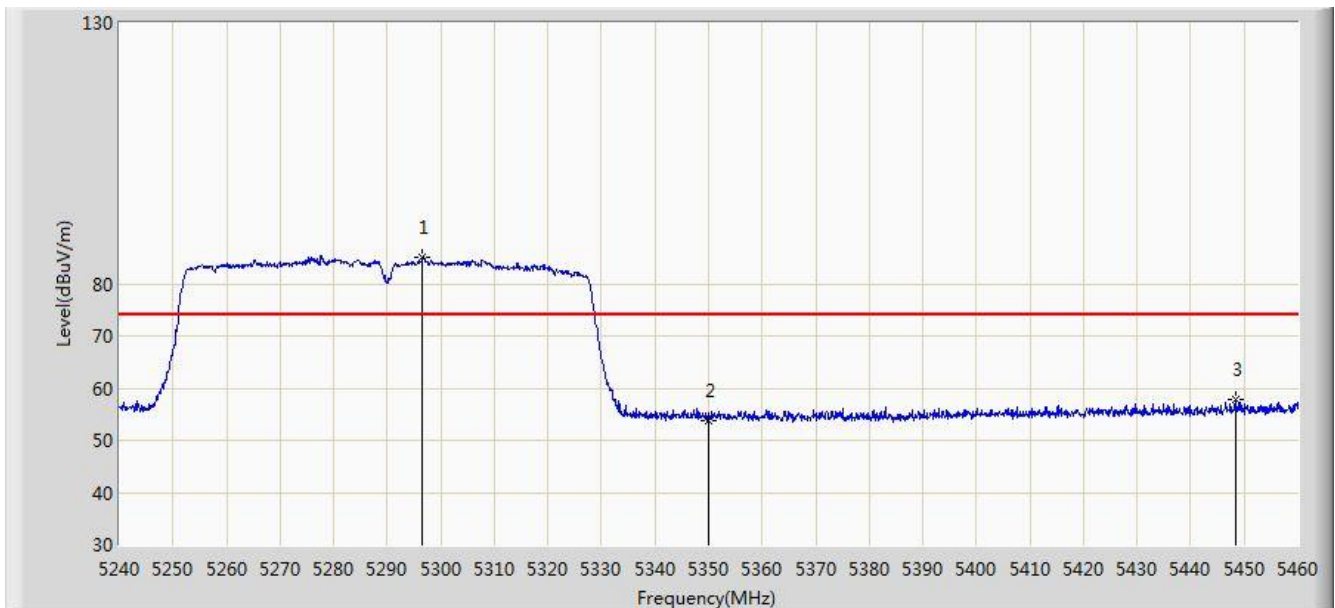


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.525	53.172	49.863	-0.828	54.000	3.309	AV
2			5150.000	53.115	49.806	-0.885	54.000	3.309	AV
3		*	5227.225	92.780	89.576	N/A	N/A	3.204	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 1	

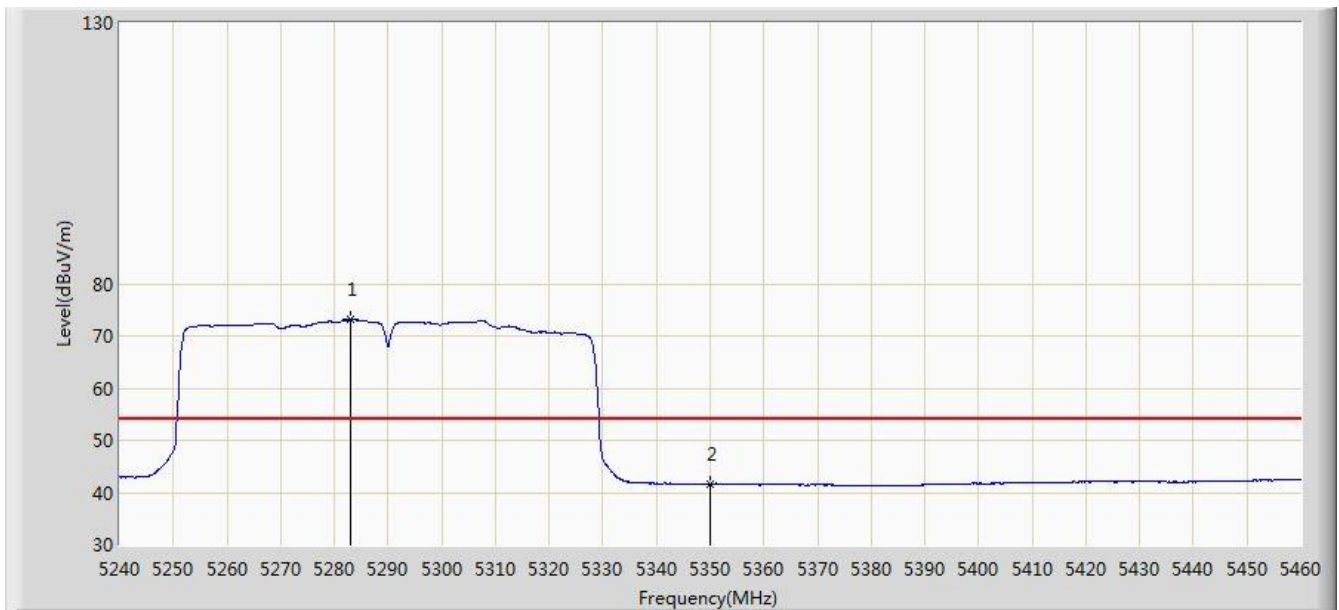


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5296.650	85.209	82.081	N/A	N/A	3.129	PK
2			5350.000	53.887	50.855	-20.113	74.000	3.032	PK
3			5448.340	57.883	54.463	-16.117	74.000	3.421	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 1	

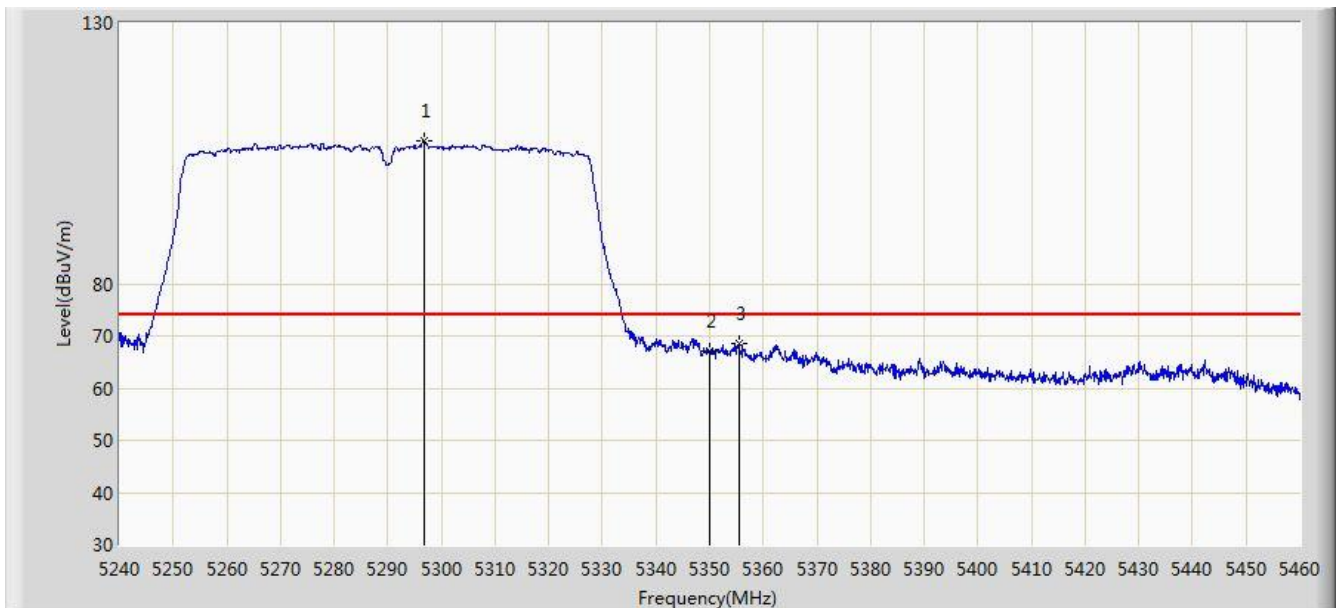


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5283.010	73.137	69.956	N/A	N/A	3.181	AV
2			5350.000	41.598	38.566	-12.402	54.000	3.032	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 1	

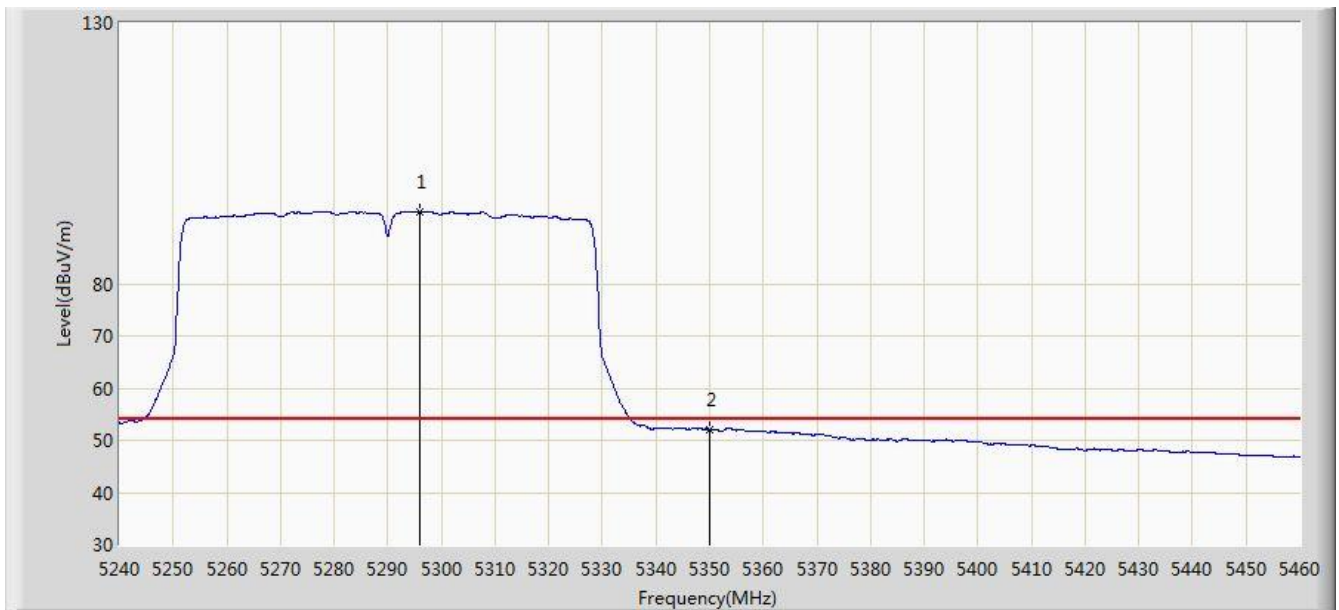


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5296.870	107.434	104.306	N/A	N/A	3.128	PK
2			5350.000	67.134	64.102	-6.866	74.000	3.032	PK
3			5355.390	68.447	65.420	-5.553	74.000	3.027	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 06:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 1	

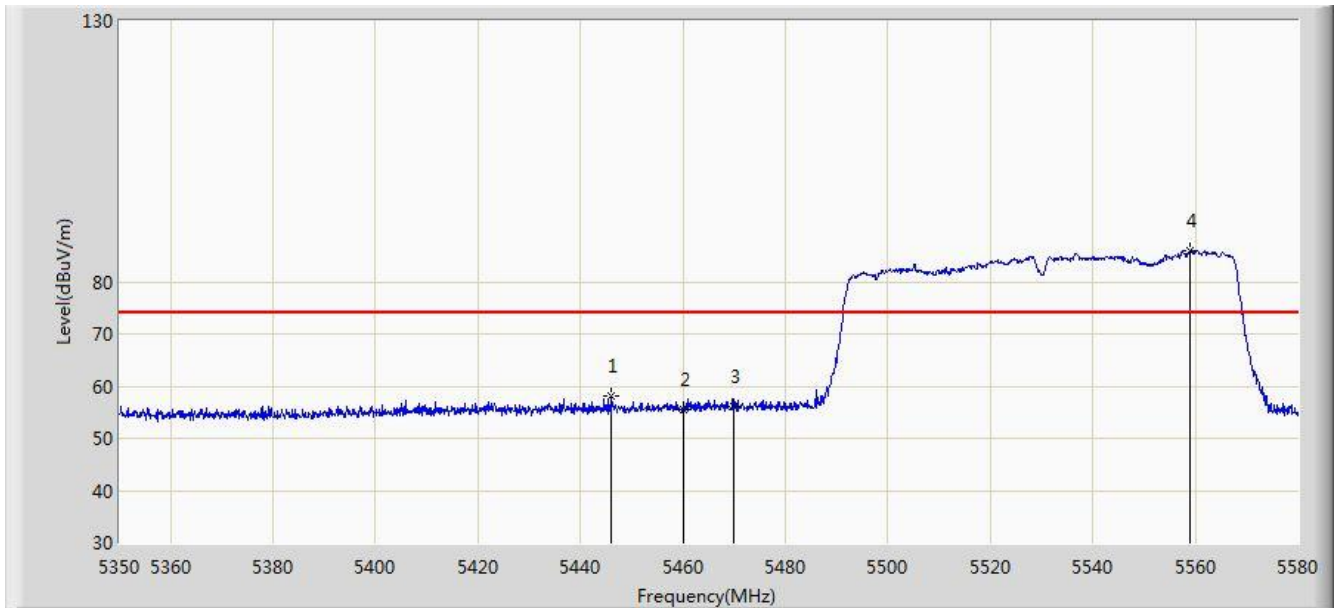


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5295.990	93.858	90.728	N/A	N/A	3.129	AV
2			5350.000	51.941	48.909	-2.059	54.000	3.032	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:08
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 1	

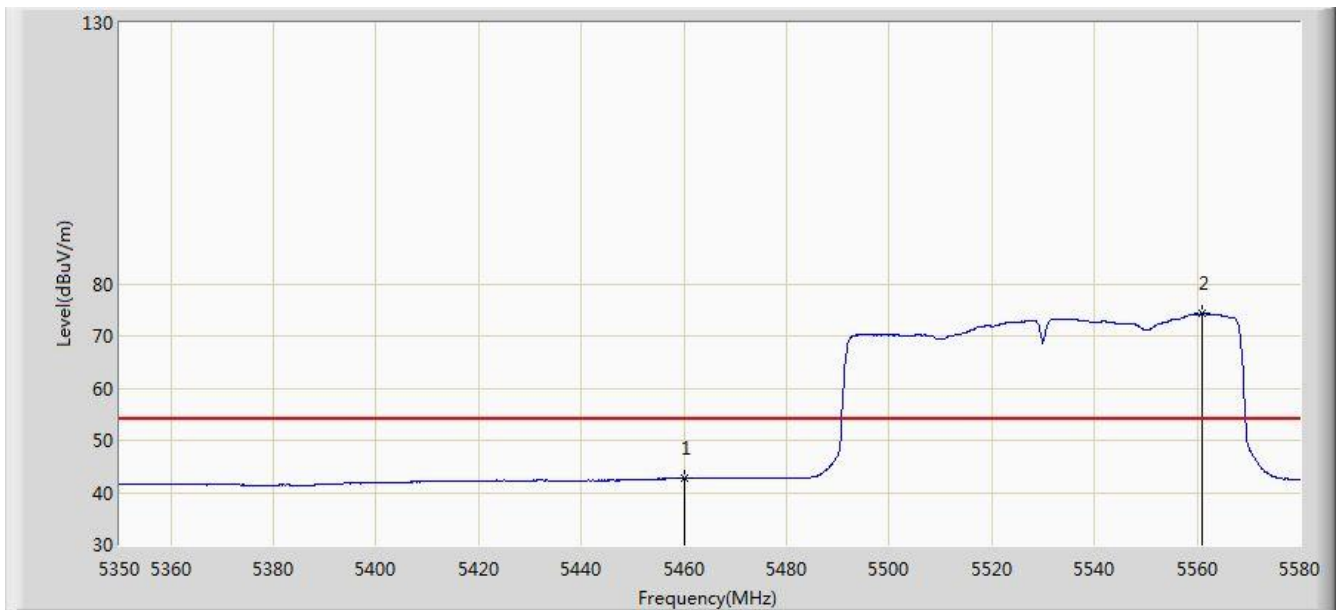


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5446.025	58.200	54.790	-15.800	74.000	3.410	PK
2			5460.000	55.610	52.128	-18.390	74.000	3.482	PK
3			5470.000	56.043	52.504	-17.957	74.000	3.539	PK
4		*	5558.840	85.907	82.425	N/A	N/A	3.481	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 1	

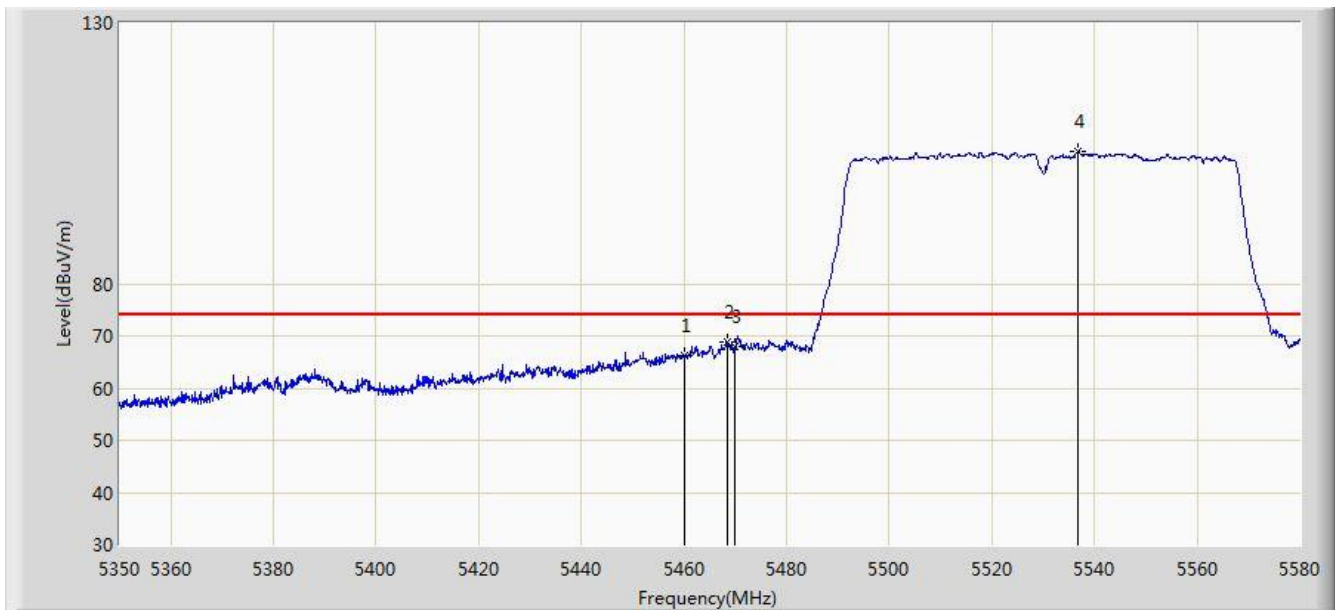


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.732	39.250	-11.268	54.000	3.482	AV
2		*	5561.025	74.297	70.818	N/A	N/A	3.479	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 1	

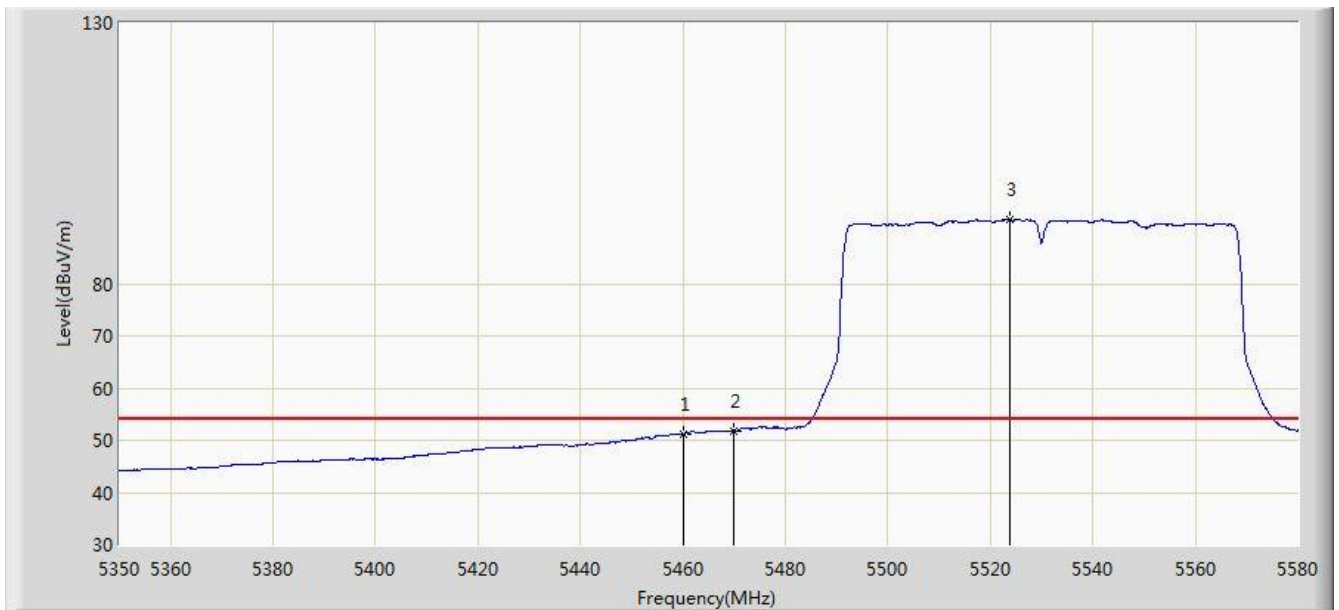


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	66.164	62.682	-7.836	74.000	3.482	PK
2			5468.565	68.972	65.441	-5.028	74.000	3.531	PK
3			5470.000	67.837	64.298	-6.163	74.000	3.539	PK
4		*	5536.875	105.429	101.927	N/A	N/A	3.502	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 1	

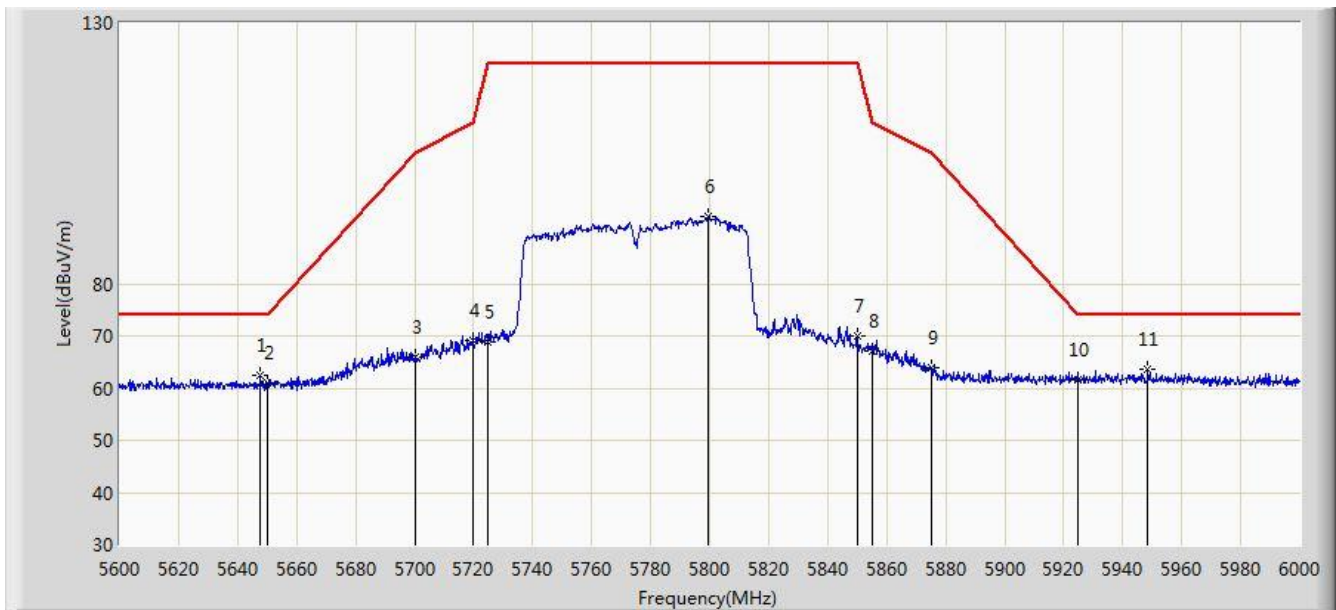


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	51.253	47.771	-2.747	54.000	3.482	AV
2			5470.000	51.865	48.326	-2.135	54.000	3.539	AV
3		*	5523.765	92.336	88.833	N/A	N/A	3.503	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:35
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 1	

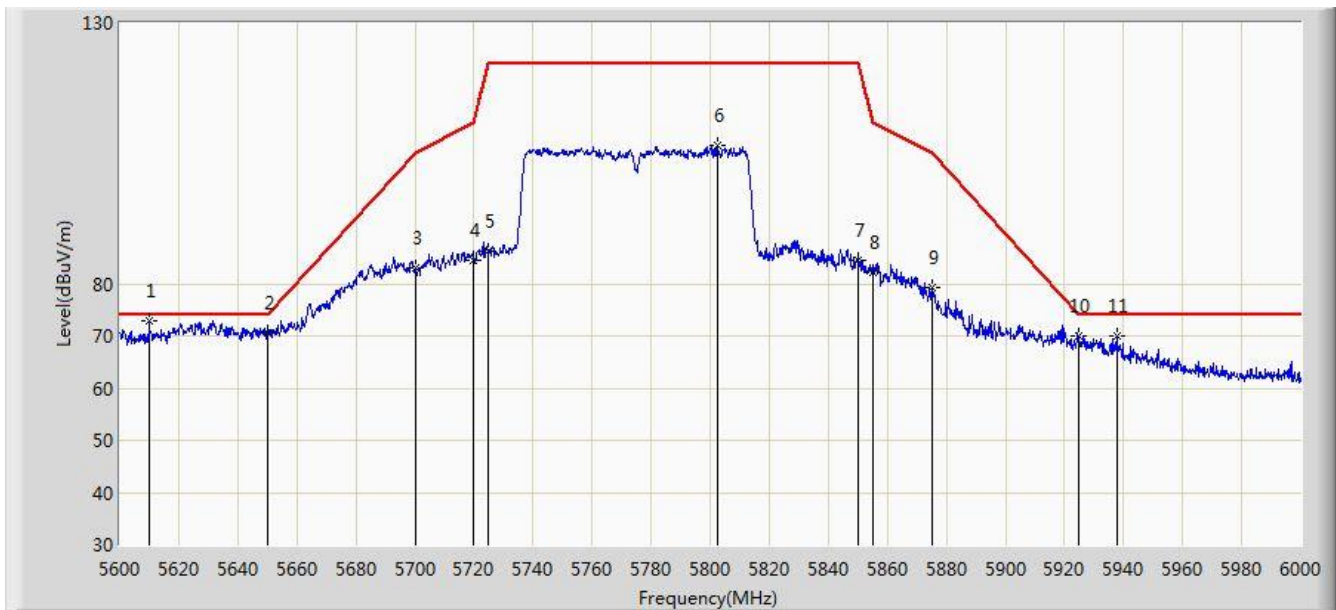


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5647.800	62.322	58.698	-11.678	74.000	3.625	PK
2			5650.000	60.947	57.320	-13.053	74.000	3.627	PK
3			5700.000	65.868	62.149	-39.332	105.200	3.719	PK
4			5720.000	69.159	65.383	-41.641	110.800	3.776	PK
5			5725.000	68.945	65.154	-53.255	122.200	3.791	PK
6			5799.600	92.910	88.950	N/A	N/A	3.959	PK
7			5850.000	69.960	65.903	-52.240	122.200	4.058	PK
8			5855.000	67.217	63.157	-43.583	110.800	4.060	PK
9			5875.000	64.036	59.931	-41.164	105.200	4.105	PK
10			5925.000	61.465	57.212	-12.535	74.000	4.254	PK
11		*	5948.600	63.548	59.274	-10.452	74.000	4.273	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:33
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 1	

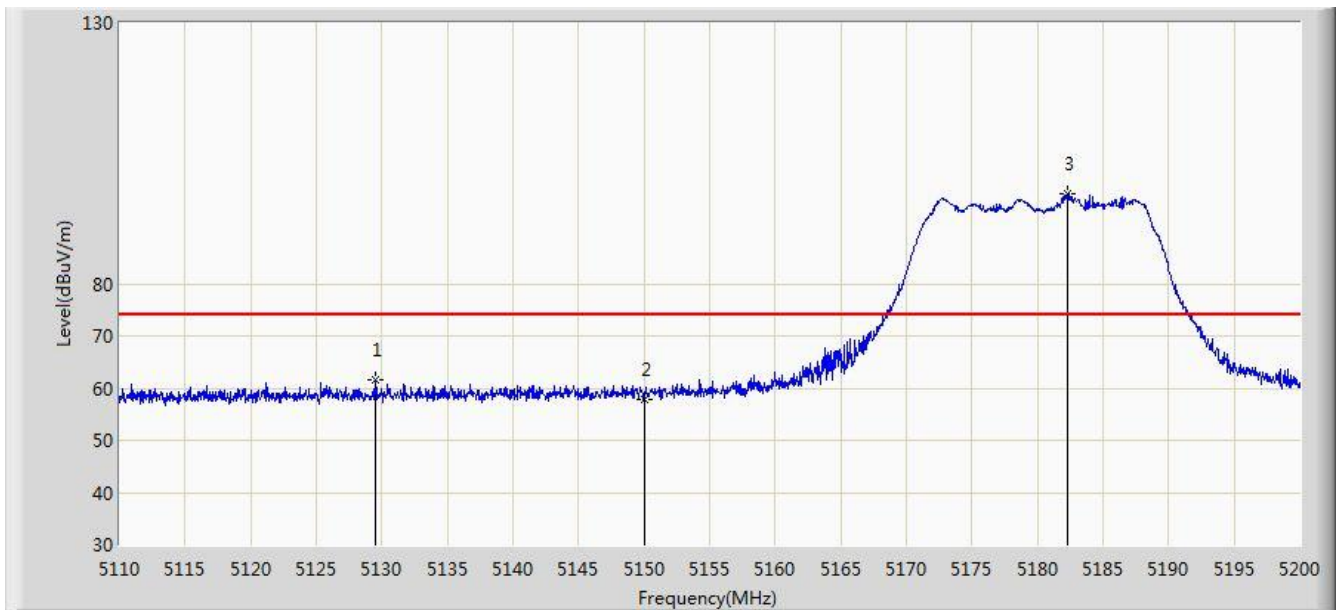


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5610.000	73.008	69.495	-0.992	74.000	3.513	PK
2			5650.000	70.673	67.046	-3.327	74.000	3.627	PK
3			5700.000	83.172	79.453	-22.028	105.200	3.719	PK
4			5720.000	84.602	80.826	-26.198	110.800	3.776	PK
5			5725.000	86.327	82.536	-35.873	122.200	3.791	PK
6			5802.400	106.451	102.488	N/A	N/A	3.963	PK
7			5850.000	84.435	80.378	-37.765	122.200	4.058	PK
8			5855.000	82.142	78.082	-28.658	110.800	4.060	PK
9			5875.000	79.185	75.080	-26.015	105.200	4.105	PK
10			5925.000	69.925	65.672	-4.075	74.000	4.254	PK
11			5937.800	69.972	65.703	-4.028	74.000	4.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	

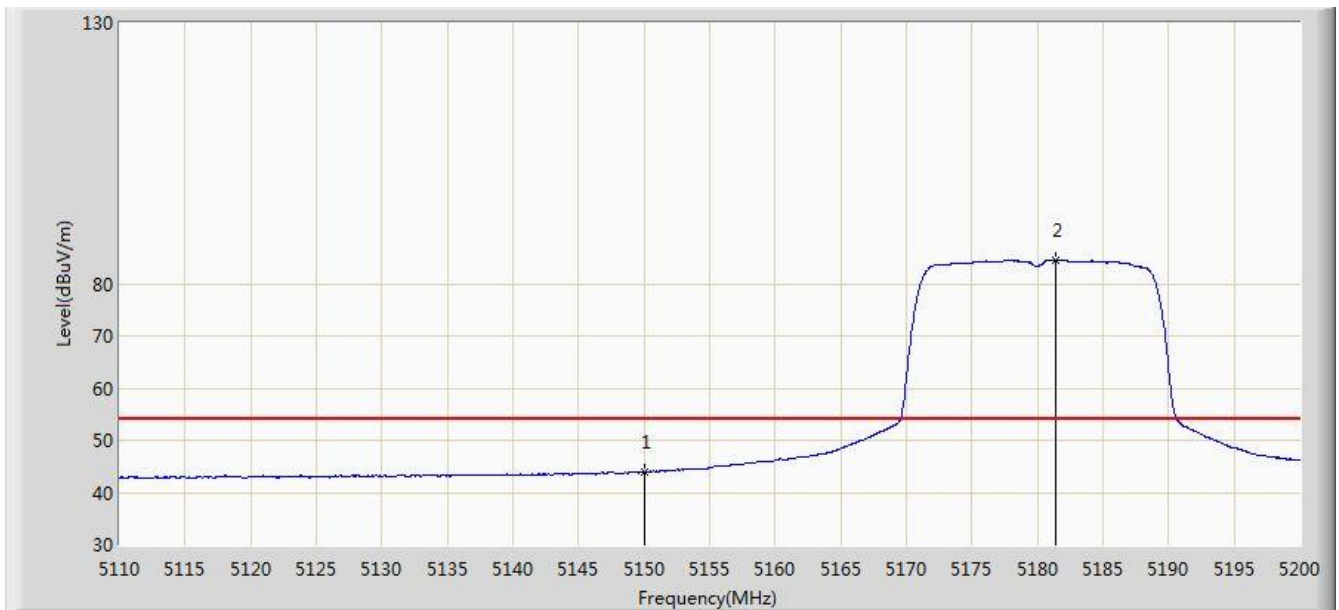


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5129.530	61.548	58.243	-12.452	74.000	3.306	PK
2			5150.000	57.769	54.460	-16.231	74.000	3.309	PK
3		*	5182.315	97.246	93.975	N/A	N/A	3.270	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	

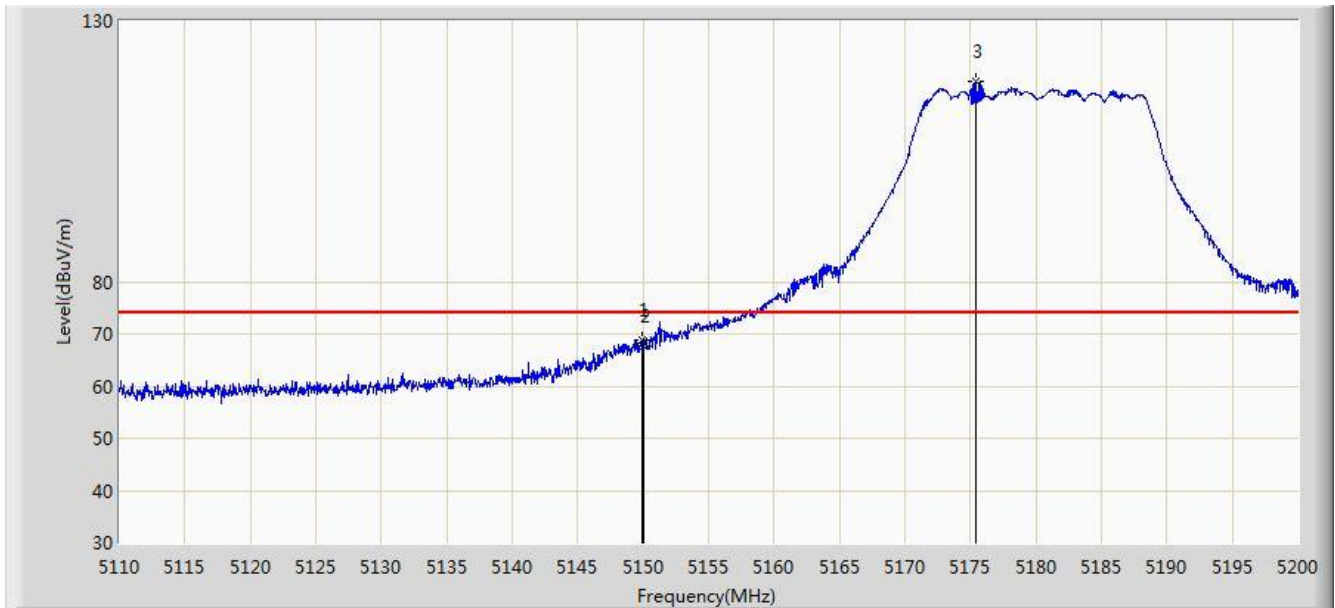


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.983	40.674	-10.017	54.000	3.309	AV
2		*	5181.415	84.504	81.232	N/A	N/A	3.271	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.870	68.858	65.549	-5.142	74.000	3.309	PK
2			5150.000	67.578	64.269	-6.422	74.000	3.309	PK
3		*	5175.385	118.262	114.985	N/A	N/A	3.277	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	

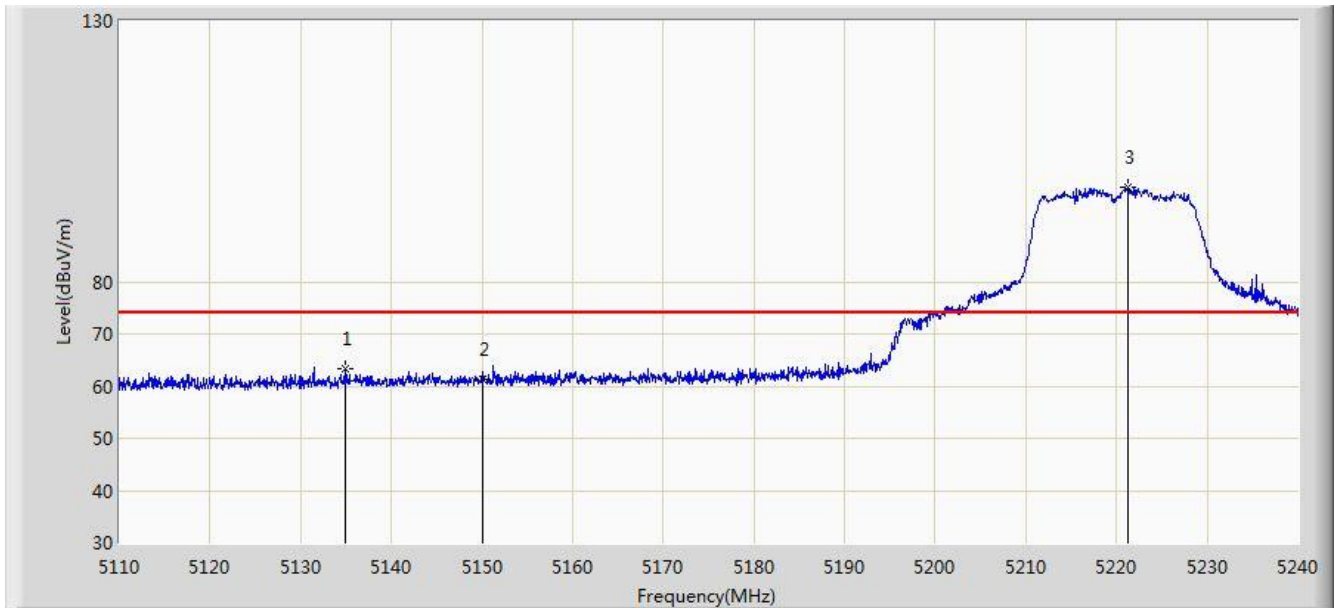


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.937	49.628	-1.063	54.000	3.309	AV
2		*	5181.910	104.958	101.687	N/A	N/A	3.272	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

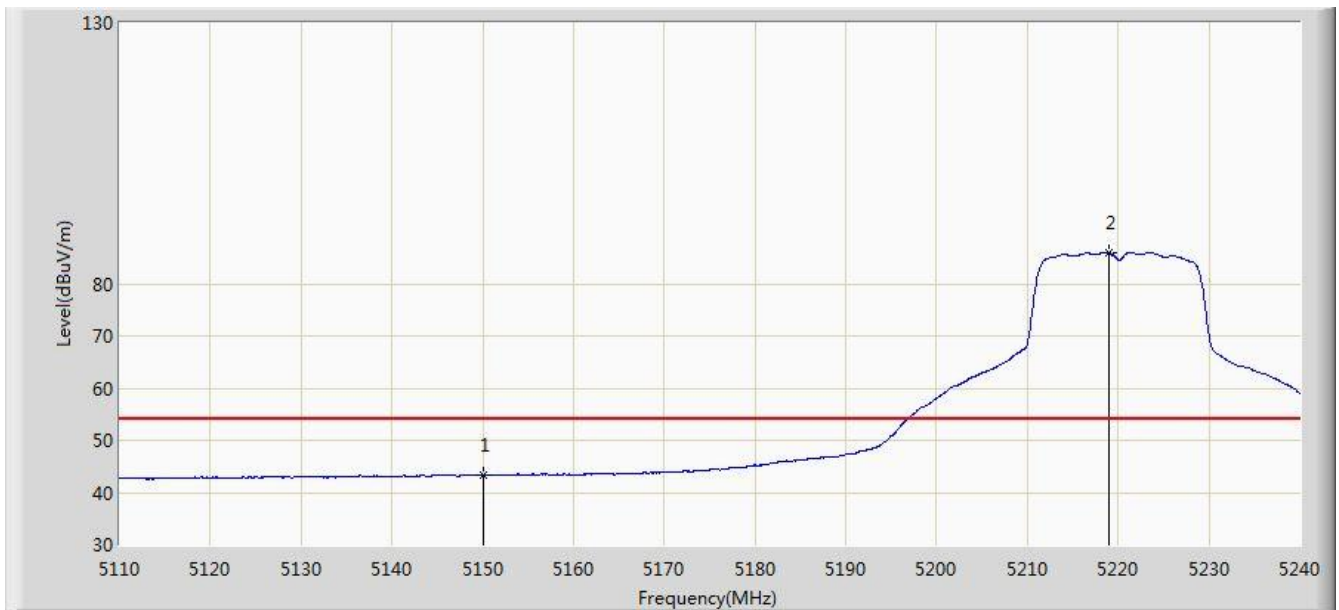


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5134.895	63.320	60.011	-10.680	74.000	3.309	PK
2			5150.000	61.237	57.928	-12.763	74.000	3.309	PK
3		*	5221.215	98.138	94.928	N/A	N/A	3.209	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

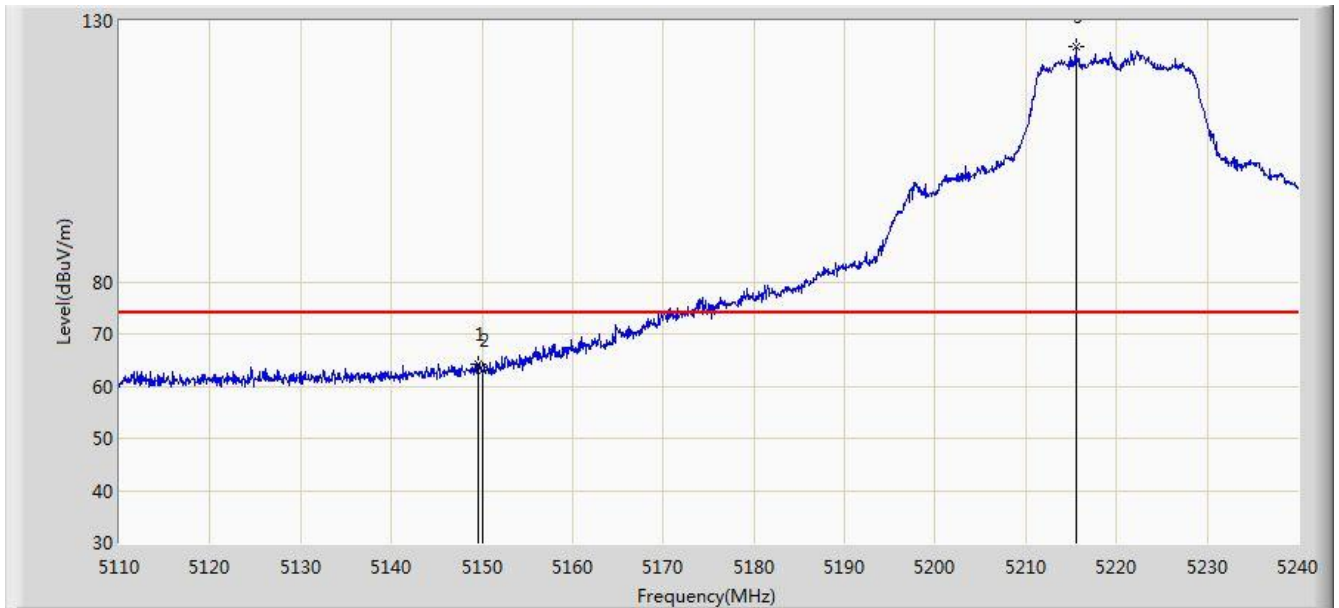


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.304	39.995	-10.696	54.000	3.309	AV
2		*	5218.940	86.011	82.799	N/A	N/A	3.212	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 14:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

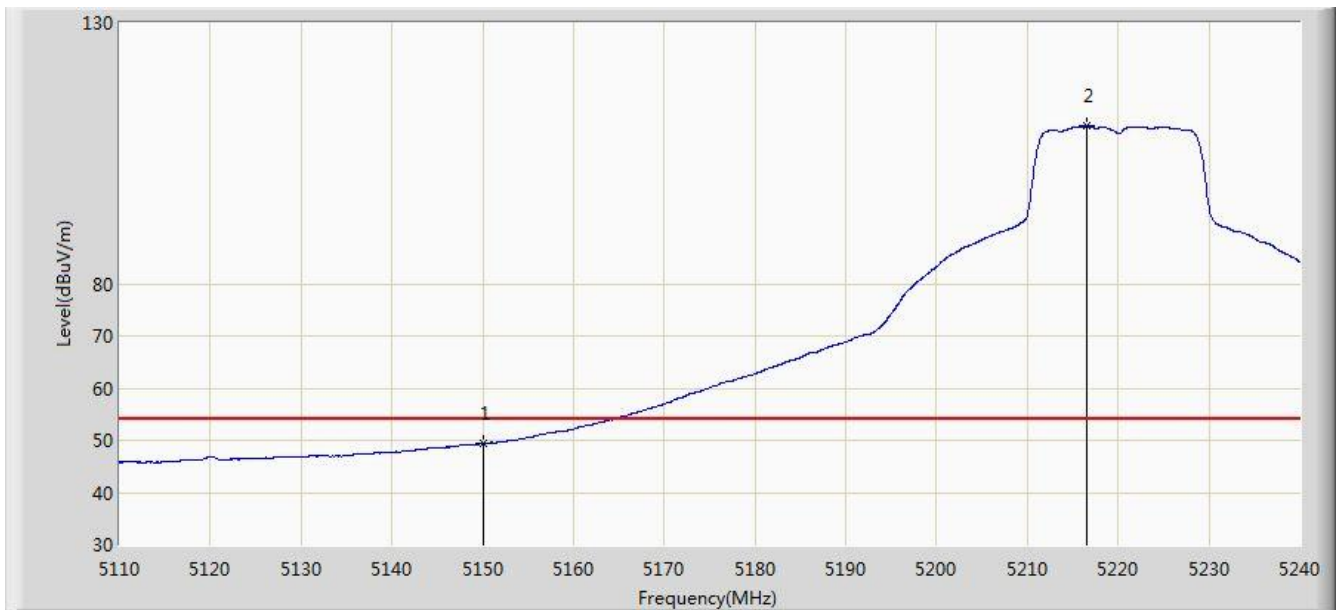


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.585	64.327	61.018	-9.673	74.000	3.309	PK
2			5150.000	63.028	59.719	-10.972	74.000	3.309	PK
3		*	5215.495	125.006	121.790	N/A	N/A	3.215	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

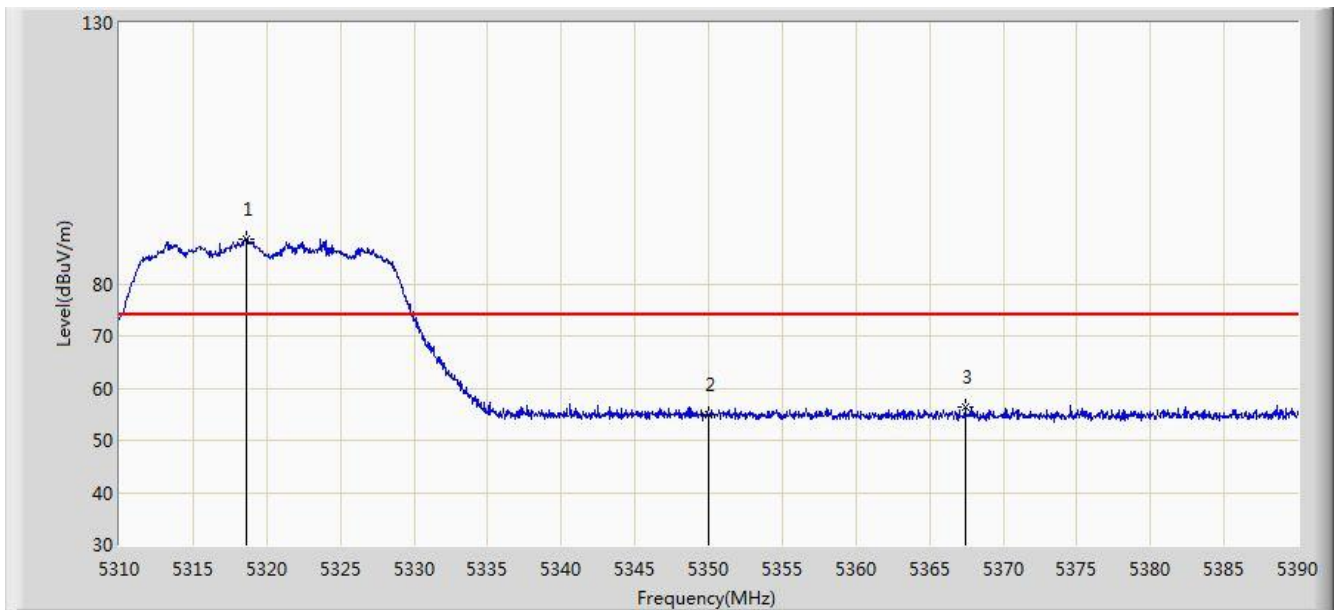


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	49.363	46.054	-4.637	54.000	3.309	AV
2		*	5216.470	110.257	107.042	N/A	N/A	3.215	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

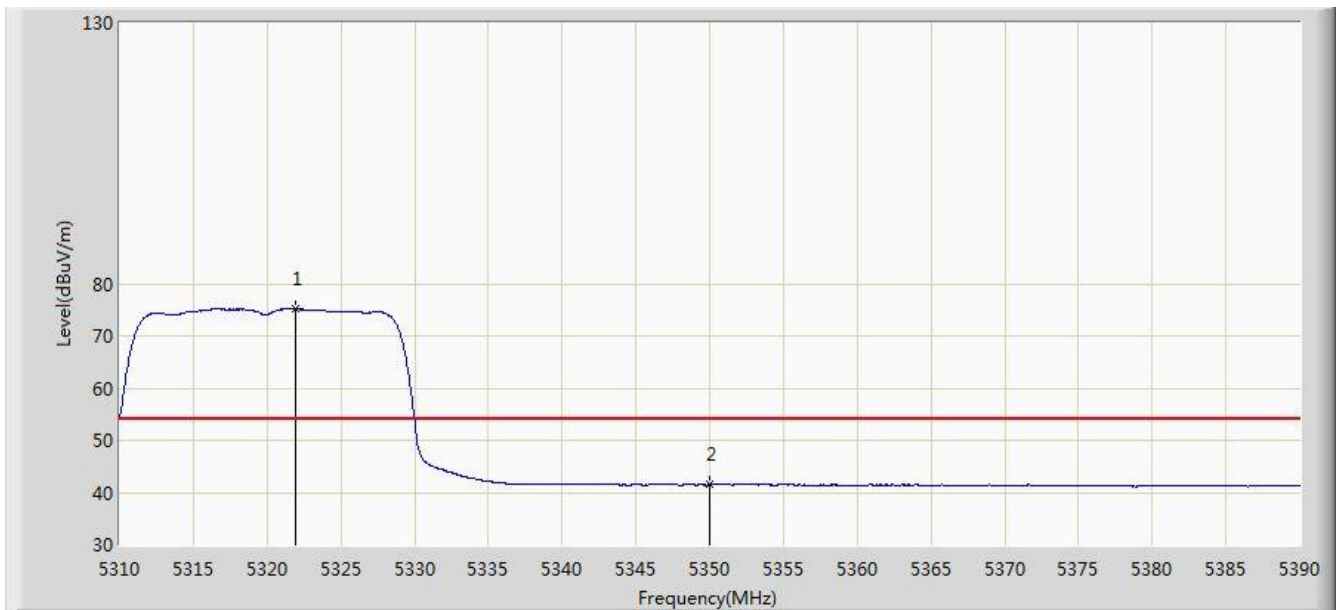


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5318.640	88.467	85.391	N/A	N/A	3.076	PK
2			5350.000	54.916	51.884	-19.084	74.000	3.032	PK
3			5367.400	56.389	53.376	-17.611	74.000	3.013	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

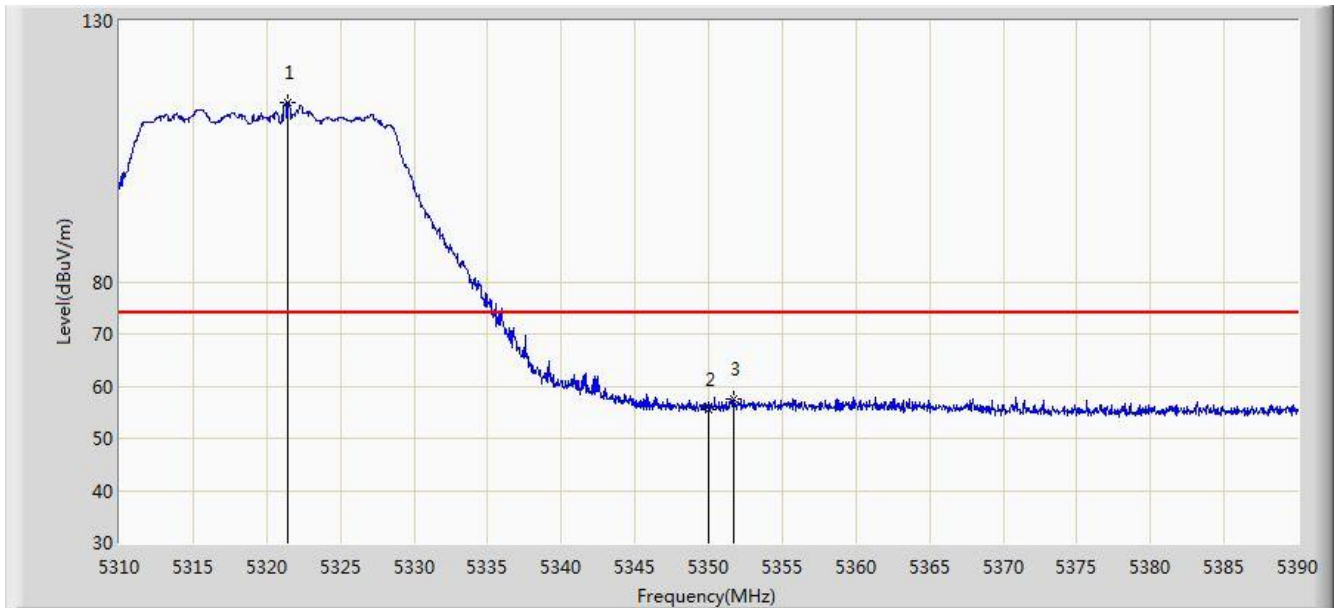


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5321.880	75.188	72.119	N/A	N/A	3.069	AV
2			5350.000	41.514	38.482	-12.486	54.000	3.032	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

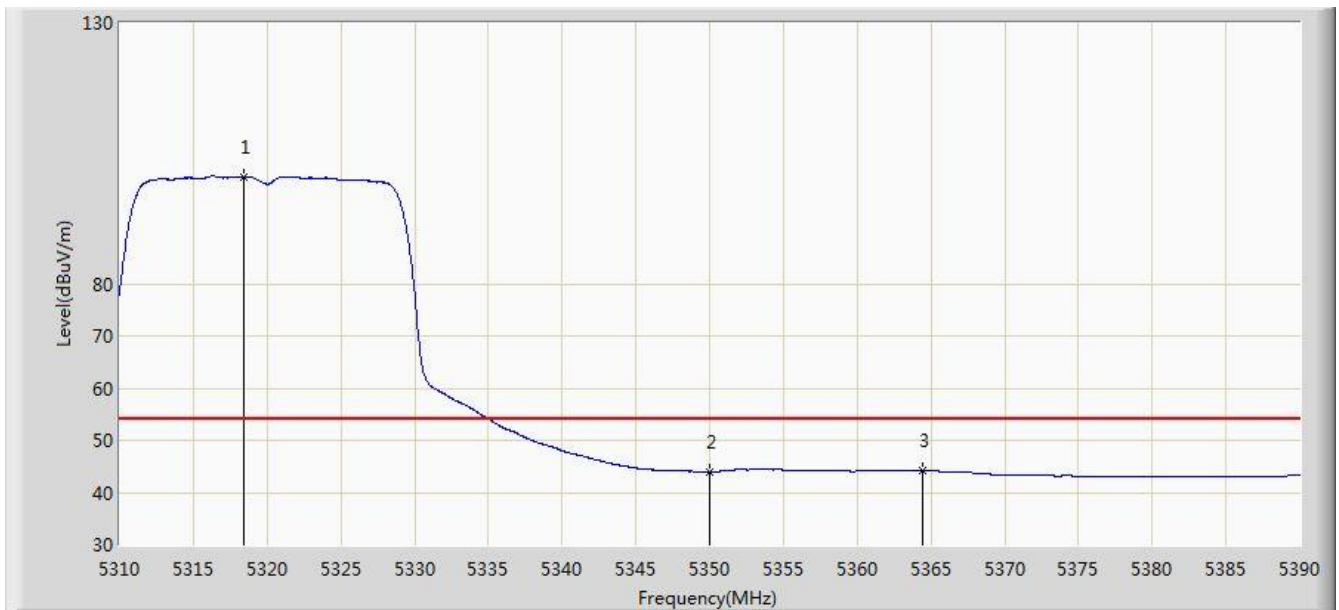


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5321.440	114.345	111.275	N/A	N/A	3.070	PK
2			5350.000	55.565	52.533	-18.435	74.000	3.032	PK
3			5351.720	57.617	54.586	-16.383	74.000	3.031	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

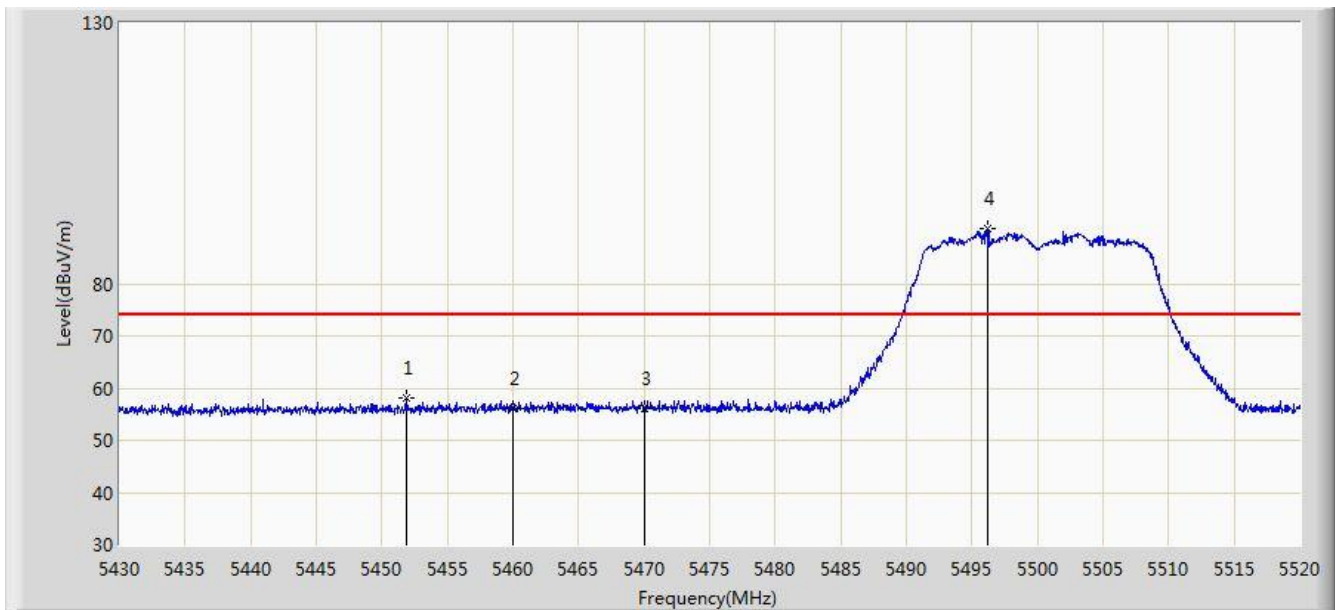


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5318.400	100.521	97.445	N/A	N/A	3.076	AV
2			5350.000	43.932	40.900	-10.068	54.000	3.032	AV
3			5364.440	44.161	41.144	-9.839	54.000	3.016	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

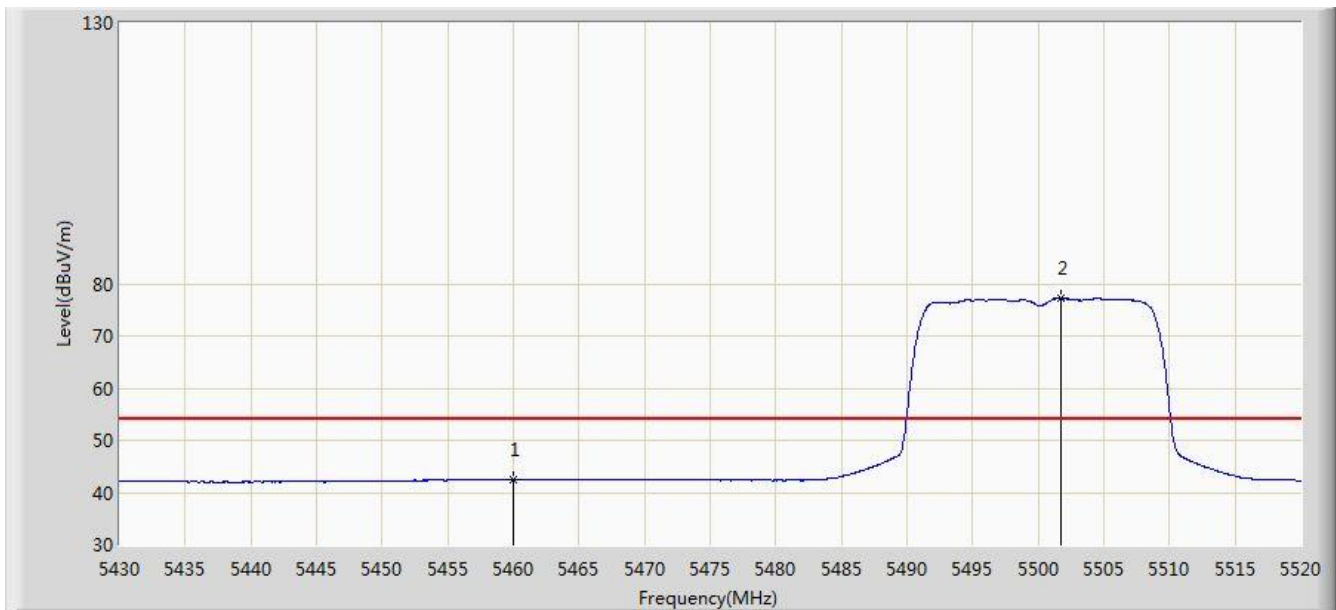


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5451.825	57.975	54.539	-16.025	74.000	3.436	PK
2			5460.000	56.160	52.678	-17.840	74.000	3.482	PK
3			5470.000	56.162	52.623	-17.838	74.000	3.539	PK
4		*	5496.195	90.629	87.099	N/A	N/A	3.530	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

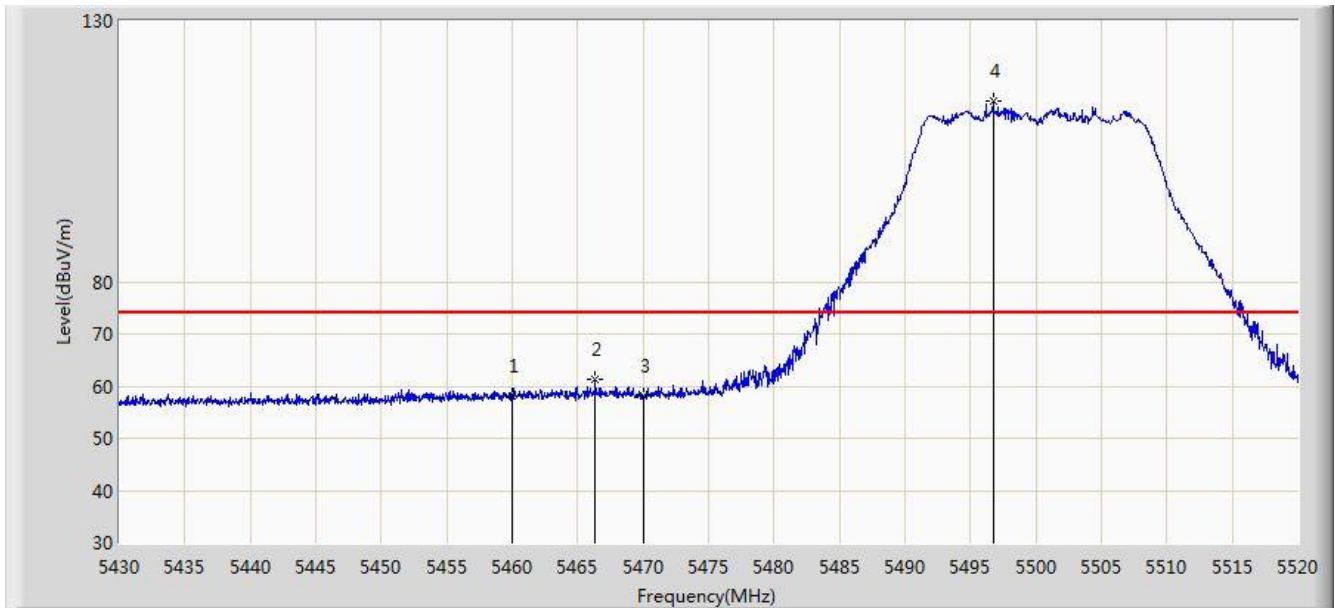


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.380	38.898	-11.620	54.000	3.482	AV
2		*	5501.775	77.144	73.620	N/A	N/A	3.524	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

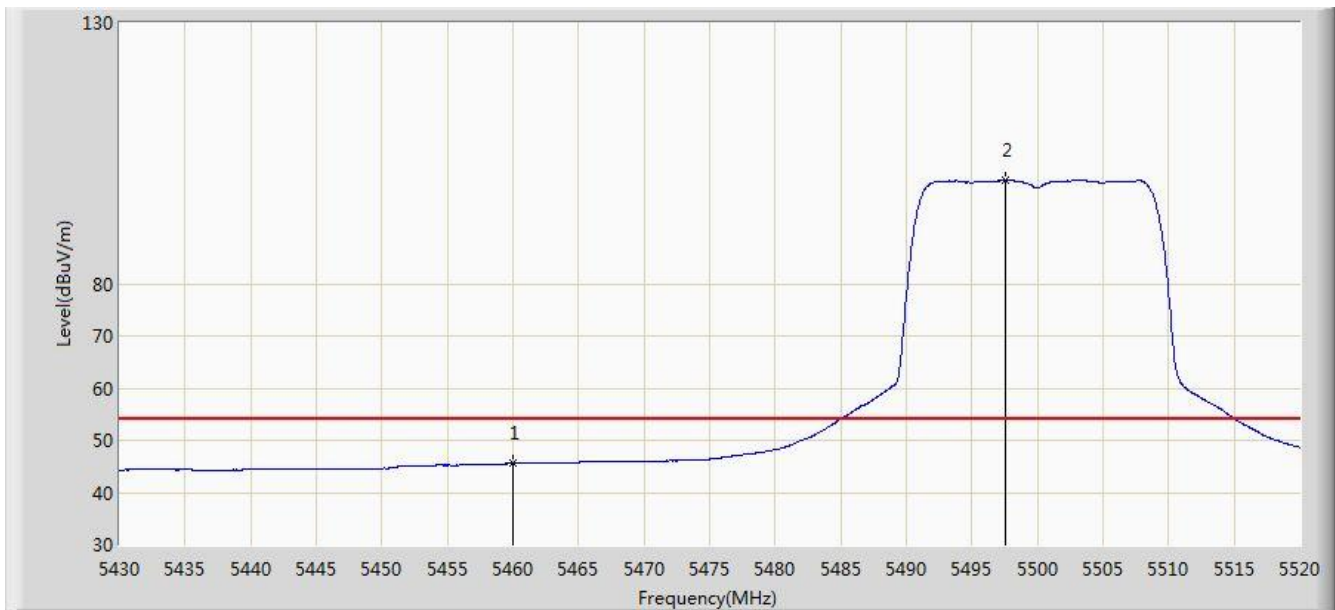


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	57.984	54.502	-16.016	74.000	3.482	PK
2			5466.360	61.328	57.810	-12.672	74.000	3.518	PK
3			5470.000	58.056	54.517	-15.944	74.000	3.539	PK
4		*	5496.735	114.609	111.079	N/A	N/A	3.530	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

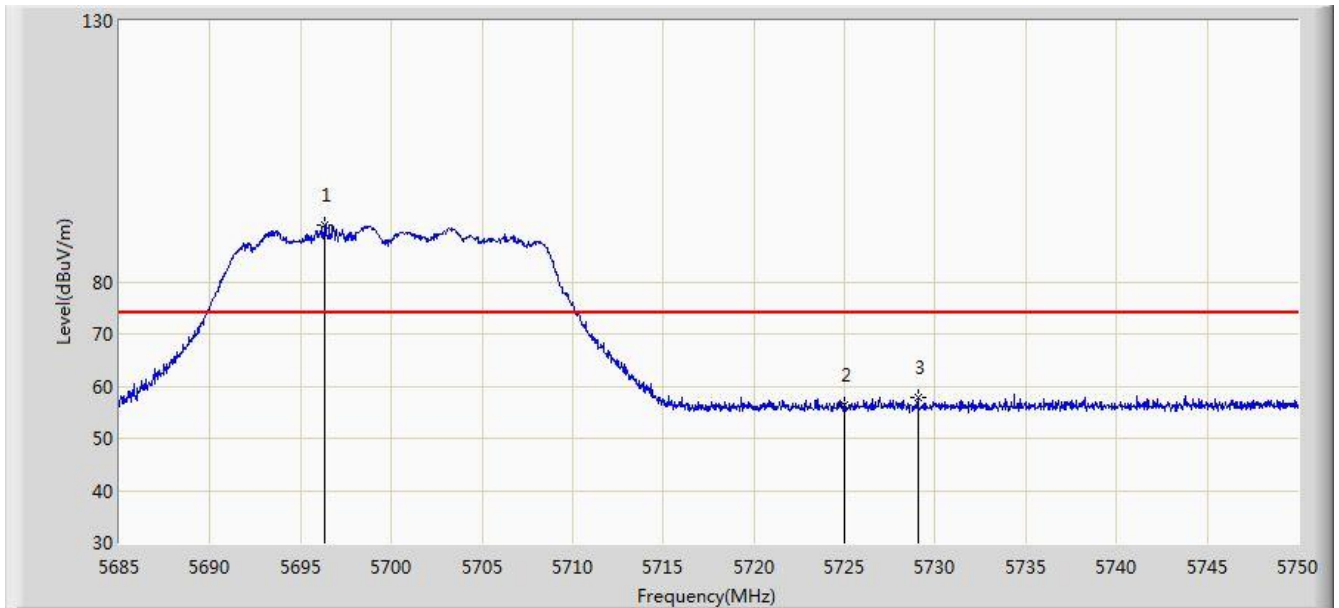


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	45.589	42.107	-8.411	54.000	3.482	AV
2		*	5497.545	99.861	96.332	N/A	N/A	3.529	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

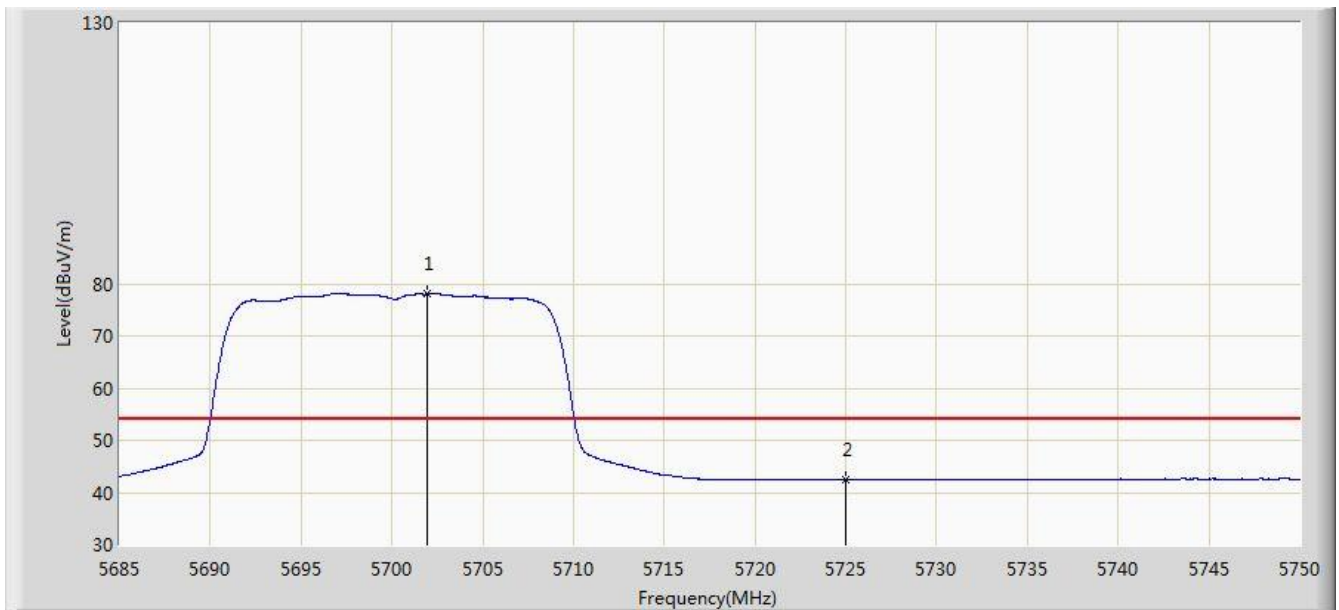


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5696.310	90.928	87.214	N/A	N/A	3.714	PK
2			5725.000	56.452	52.661	-17.548	74.000	3.791	PK
3			5729.070	57.906	54.103	-16.094	74.000	3.804	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

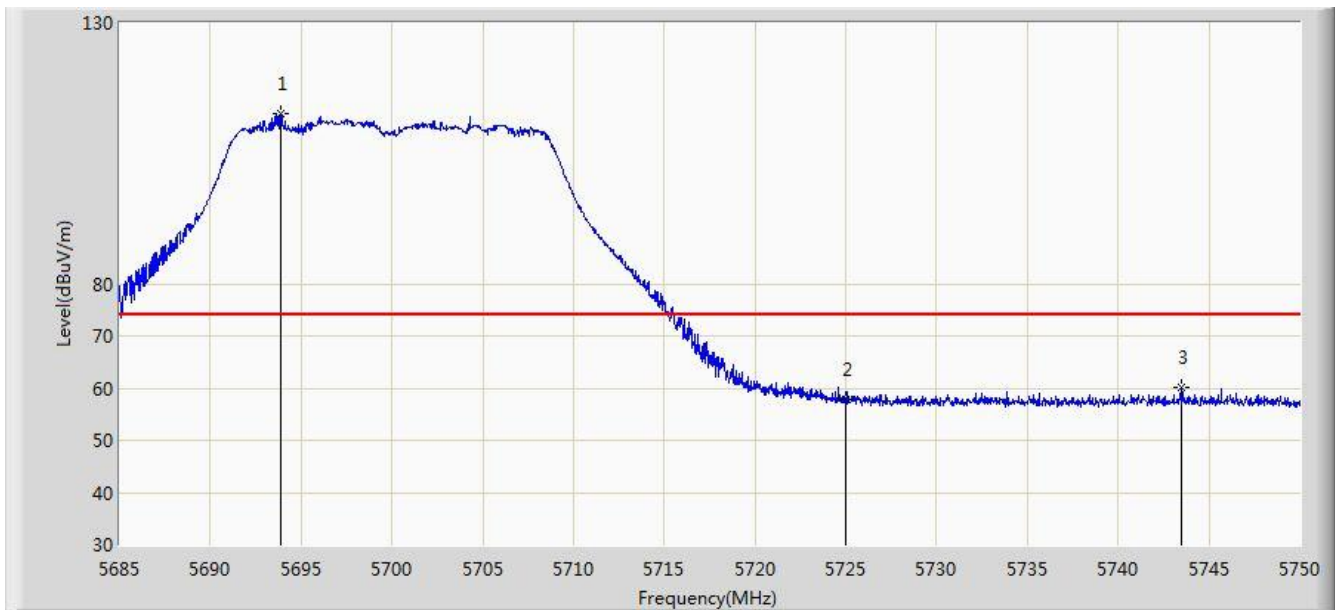


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5701.933	78.025	74.303	N/A	N/A	3.722	AV
2			5725.000	42.554	38.763	-11.446	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

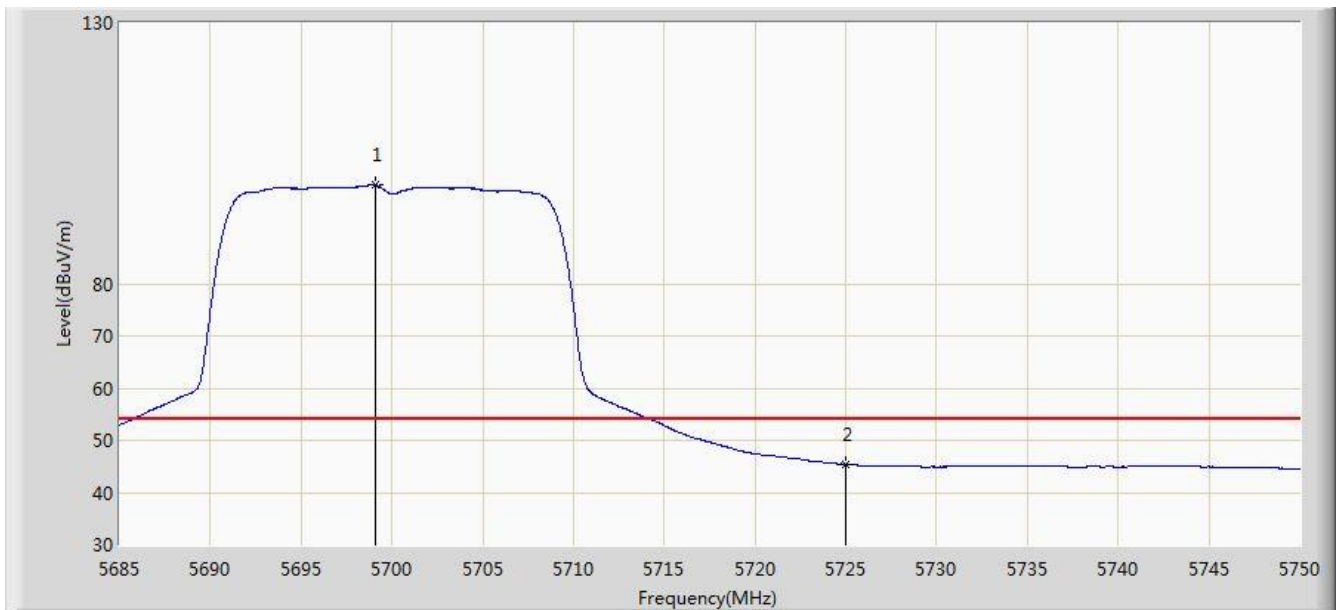


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5693.873	112.503	108.793	N/A	N/A	3.710	PK
2			5725.000	57.761	53.970	-16.239	74.000	3.791	PK
3			5743.500	60.008	56.161	-13.992	74.000	3.847	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

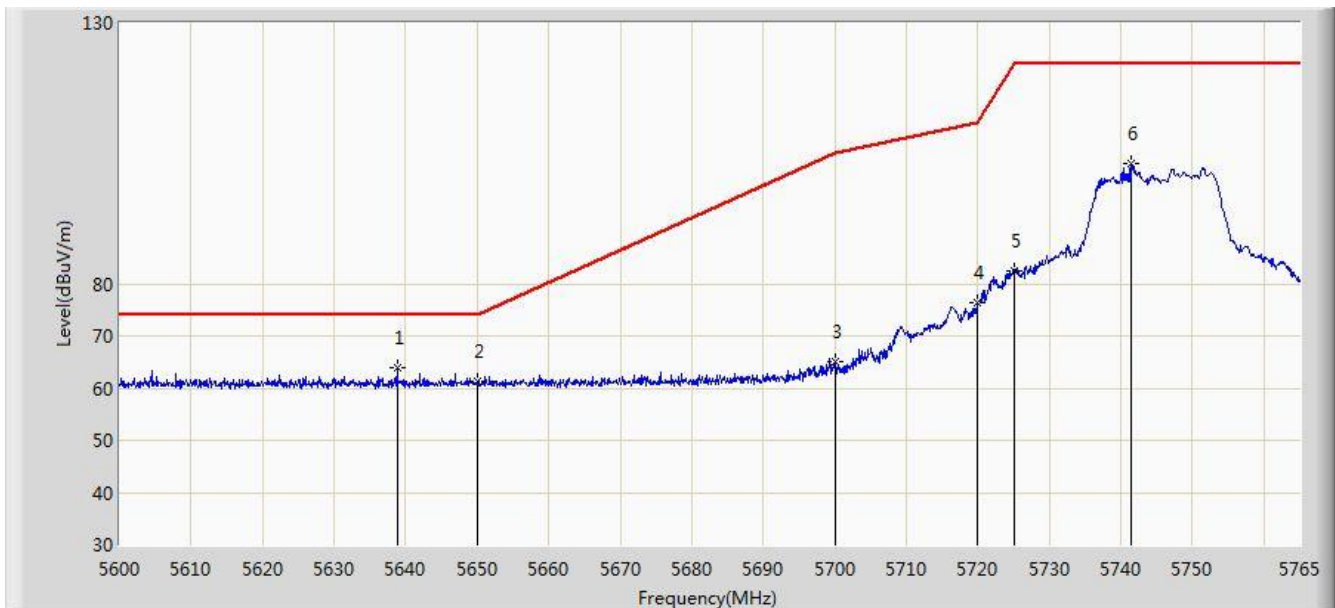


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5699.105	98.956	95.238	N/A	N/A	3.717	AV
2			5725.000	45.433	41.642	-8.567	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:49
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant 0 + 1 + 2 + 3	

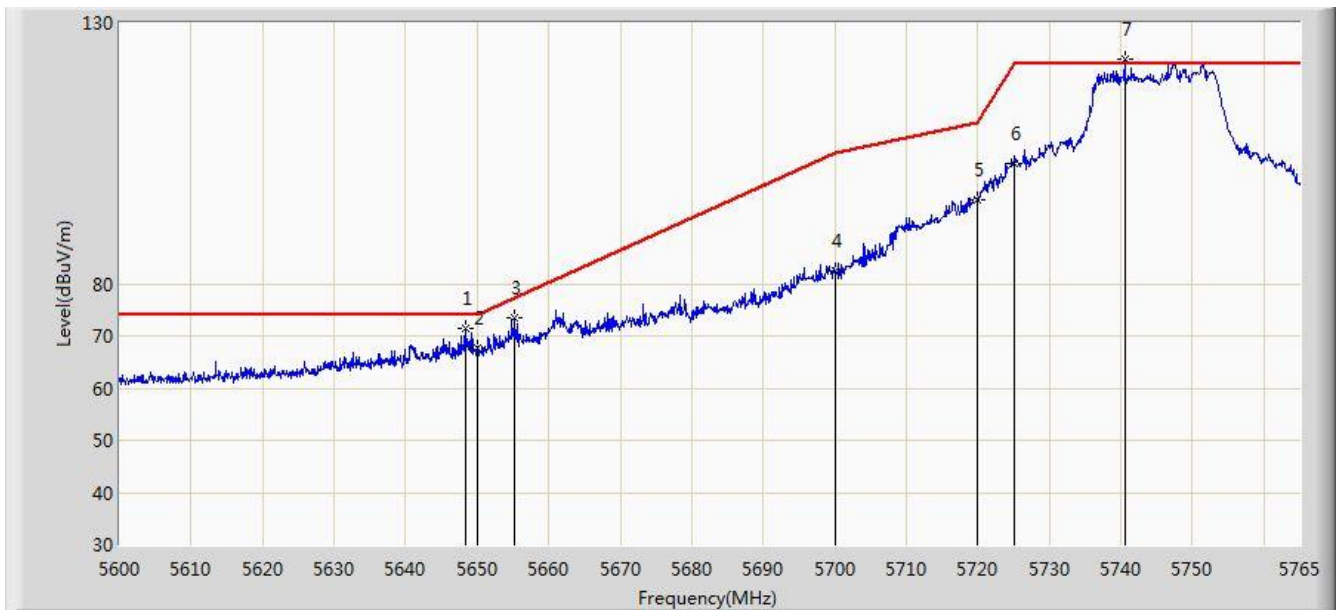


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5638.775	63.772	60.165	-10.228	74.000	3.608	PK
2			5650.000	61.364	57.737	-12.636	74.000	3.627	PK
3			5700.000	65.050	61.331	-40.150	105.200	3.719	PK
4			5720.000	76.491	72.715	-34.309	110.800	3.776	PK
5			5725.000	82.579	78.788	-39.621	122.200	3.791	PK
6			5741.487	103.013	99.172	N/A	N/A	3.842	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:52
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant 0 + 1 + 2 + 3	

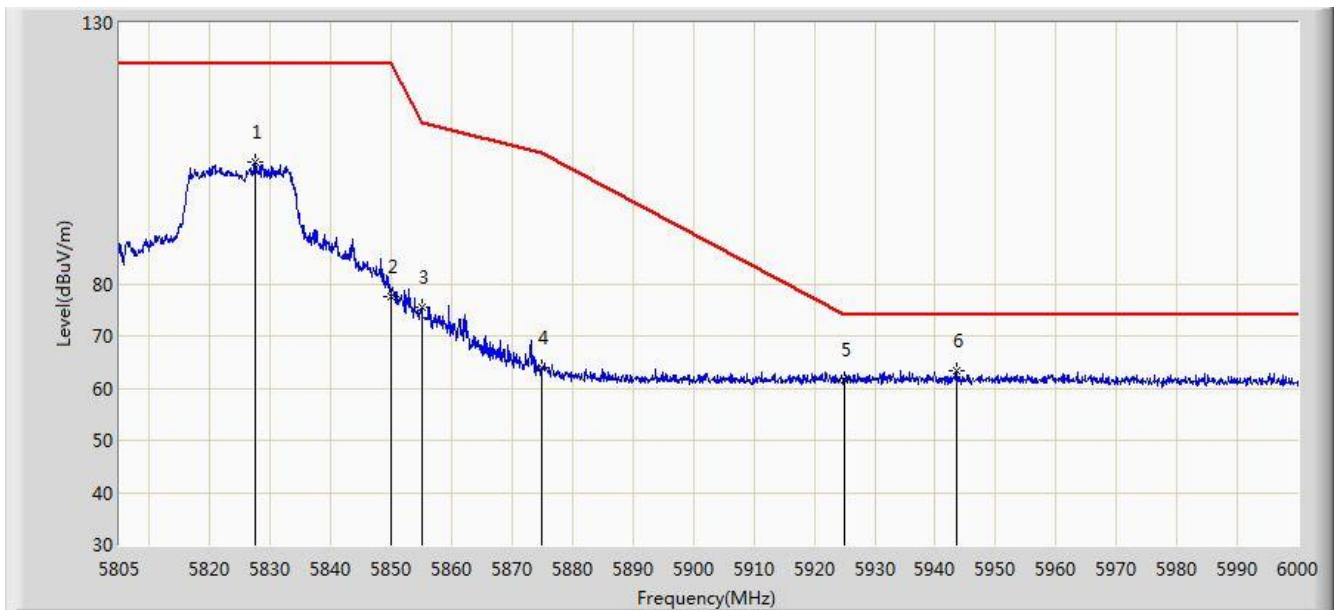


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5648.345	71.445	67.820	-2.555	74.000	3.625	PK
2			5650.000	67.686	64.059	-6.314	74.000	3.627	PK
3			5655.275	73.508	69.870	-3.797	77.305	3.638	PK
4			5700.000	82.590	78.871	-22.610	105.200	3.719	PK
5			5720.000	96.060	92.284	-14.740	110.800	3.776	PK
6			5725.000	103.134	99.343	-19.066	122.200	3.791	PK
7		*	5740.580	123.069	119.230	N/A	N/A	3.838	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:59
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant 0 + 1 + 2 + 3	

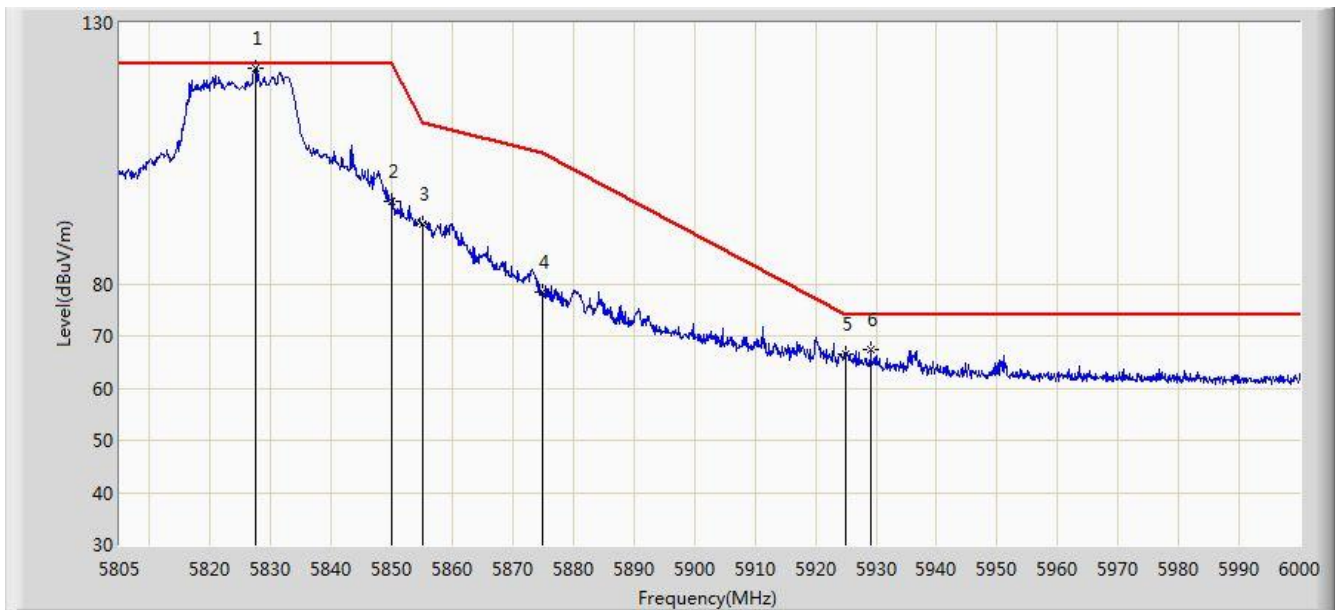


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5827.522	103.352	99.341	N/A	N/A	4.011	PK
2			5850.000	77.438	73.381	-44.762	122.200	4.058	PK
3			5855.000	75.374	71.314	-35.426	110.800	4.060	PK
4			5875.000	63.850	59.745	-41.350	105.200	4.105	PK
5			5925.000	61.490	57.237	-12.510	74.000	4.254	PK
6		*	5943.450	63.478	59.206	-10.522	74.000	4.272	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 07:56
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant 0 + 1 + 2 + 3	

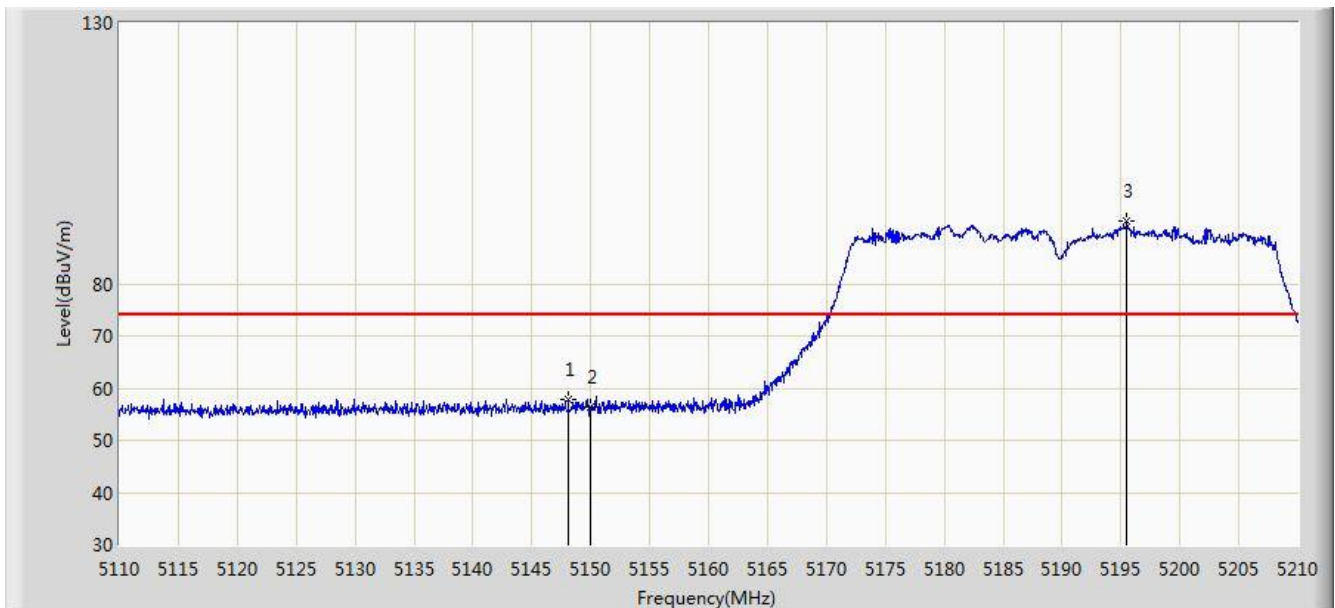


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5827.425	121.295	117.284	N/A	N/A	4.011	PK
2			5850.000	95.919	91.862	-26.281	122.200	4.058	PK
3			5855.000	91.484	87.424	-19.316	110.800	4.060	PK
4			5875.000	78.448	74.343	-26.752	105.200	4.105	PK
5			5925.000	66.531	62.278	-7.469	74.000	4.254	PK
6			5929.118	67.456	63.192	-6.544	74.000	4.265	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	

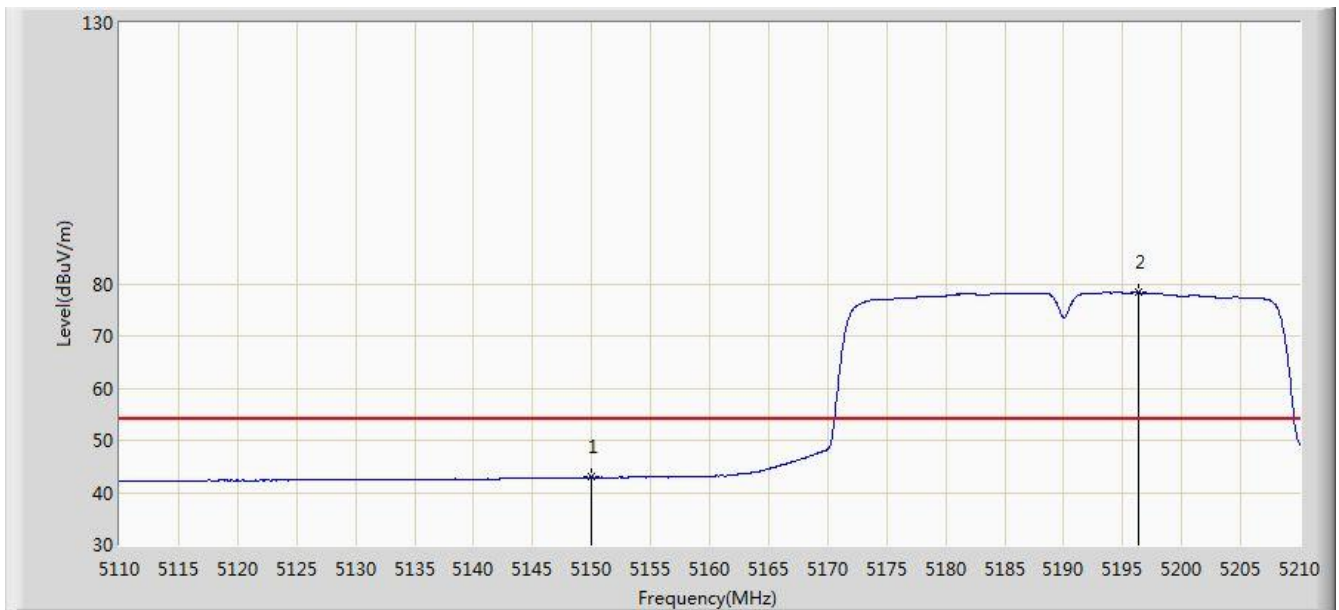


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.100	57.821	54.512	-16.179	74.000	3.309	PK
2			5150.000	56.302	52.993	-17.698	74.000	3.309	PK
3		*	5195.500	92.025	88.770	N/A	N/A	3.255	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	

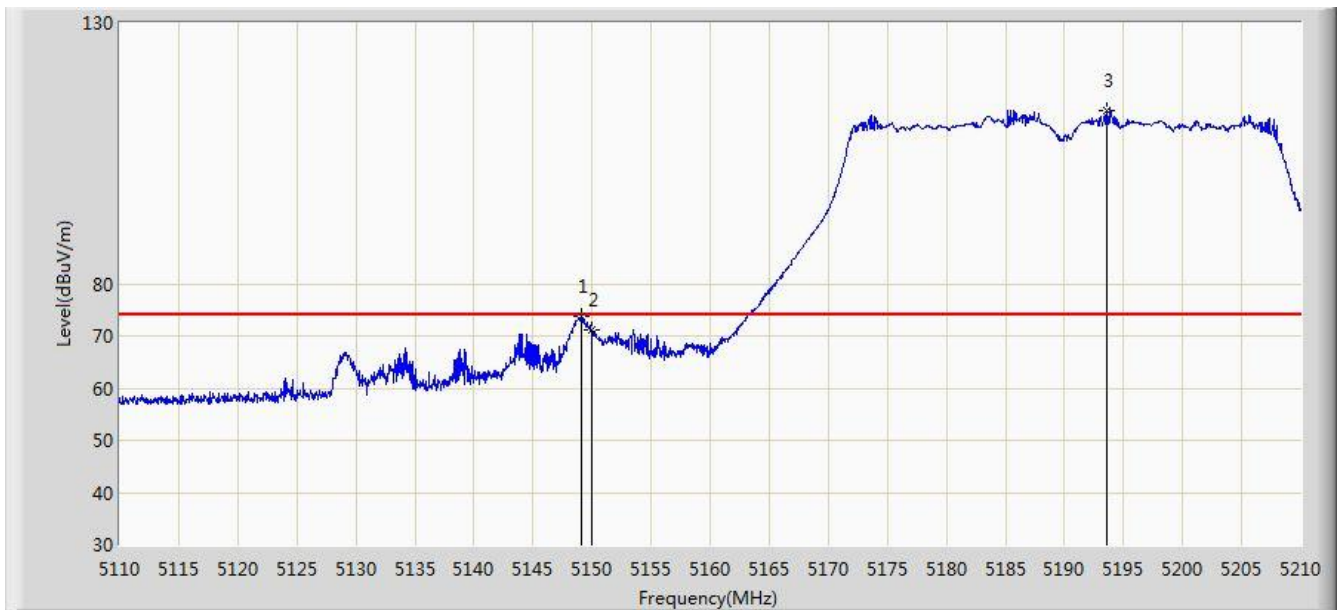


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	42.905	39.596	-11.095	54.000	3.309	AV
2		*	5196.400	78.294	75.040	N/A	N/A	3.254	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.150	73.787	70.478	-0.213	74.000	3.309	PK
2			5150.000	71.068	67.759	-2.932	74.000	3.309	PK
3		*	5193.600	113.217	109.960	N/A	N/A	3.256	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	

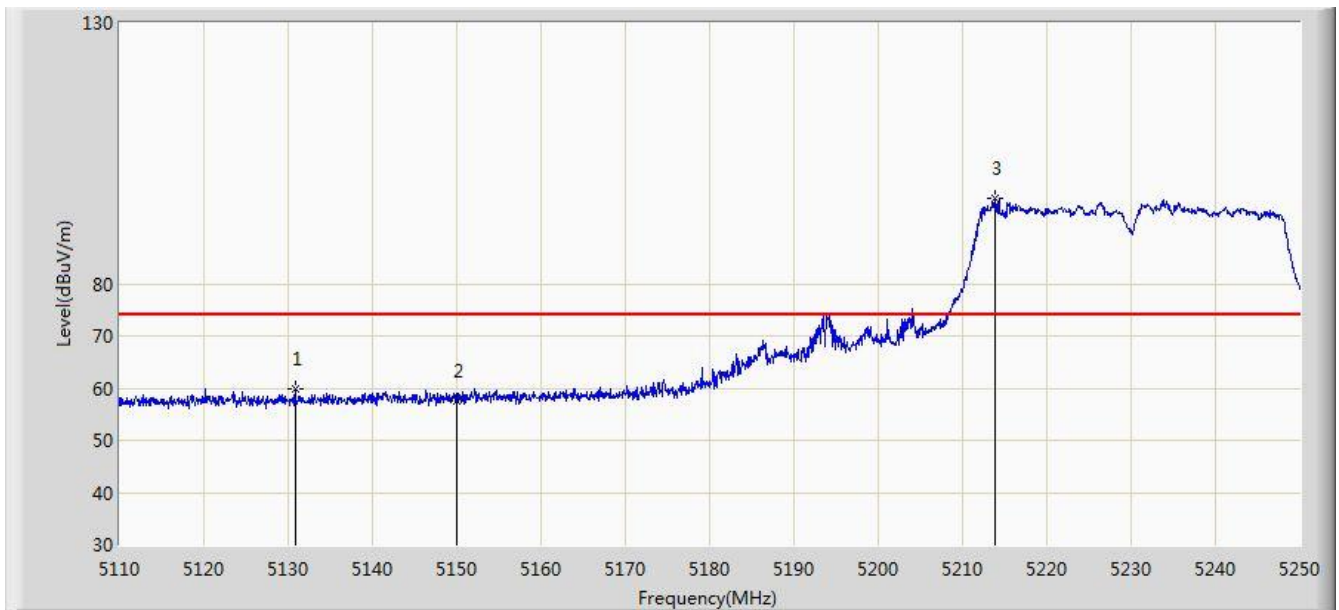


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	50.106	46.797	-3.894	54.000	3.309	AV
2		*	5187.850	98.641	95.378	N/A	N/A	3.263	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	

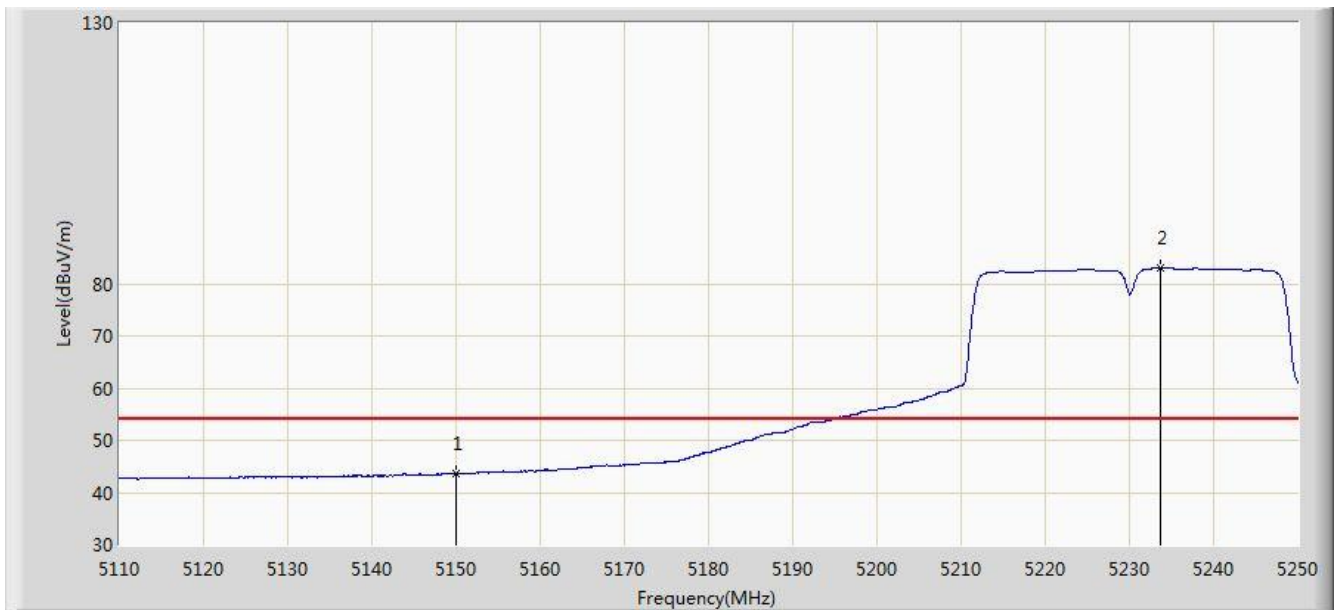


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5130.860	59.905	56.598	-14.095	74.000	3.307	PK
2			5150.000	57.525	54.216	-16.475	74.000	3.309	PK
3		*	5213.880	96.320	93.101	N/A	N/A	3.218	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.489	40.180	-10.511	54.000	3.309	AV
2		*	5233.620	83.151	79.953	N/A	N/A	3.198	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	

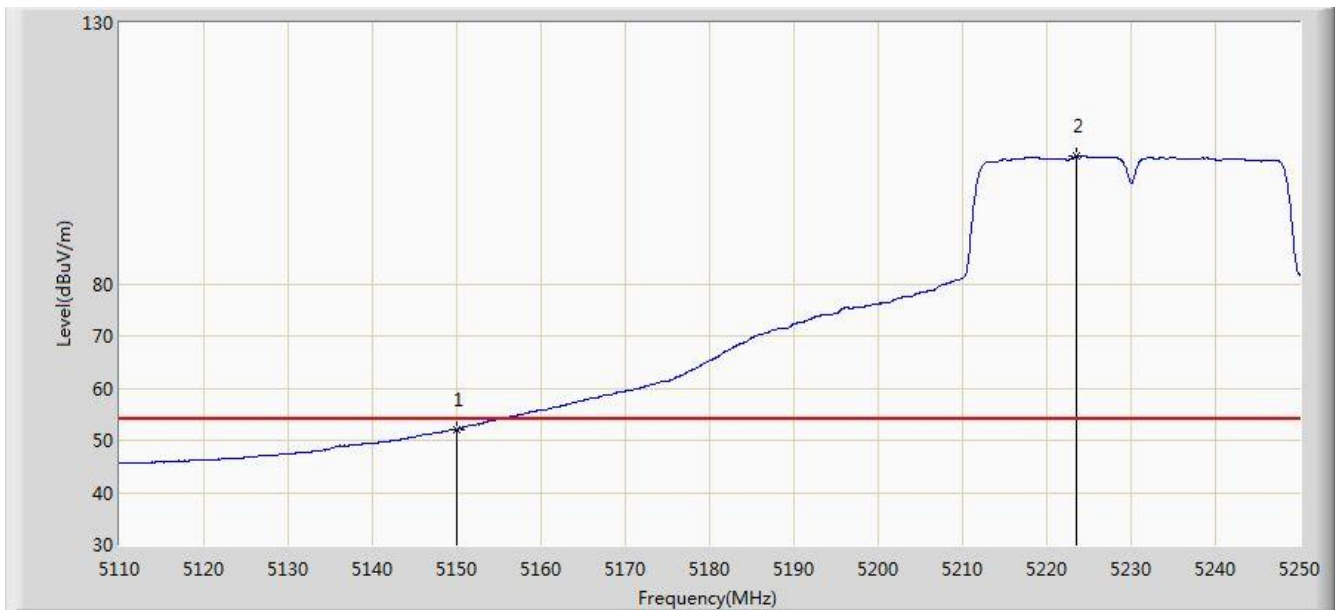


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.780	72.260	68.951	-1.740	74.000	3.309	PK
2			5150.000	66.271	62.962	-7.729	74.000	3.309	PK
3		*	5225.360	119.988	116.782	N/A	N/A	3.207	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	

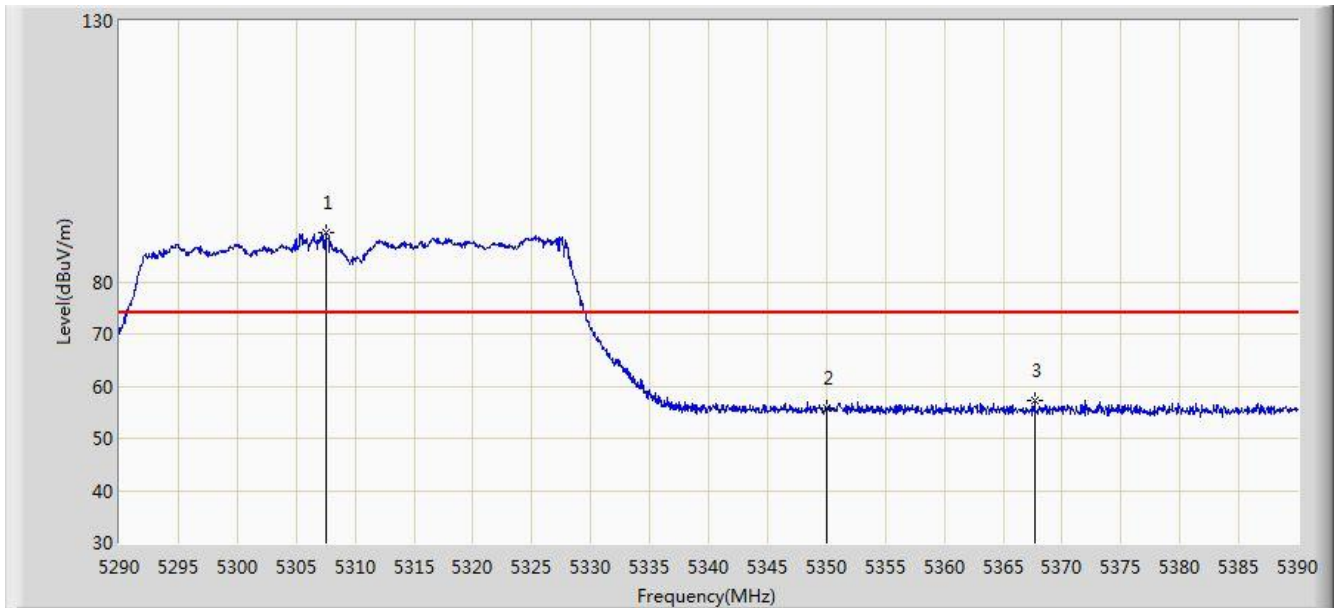


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.119	48.810	-1.881	54.000	3.309	AV
2		*	5223.540	104.422	101.214	N/A	N/A	3.207	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

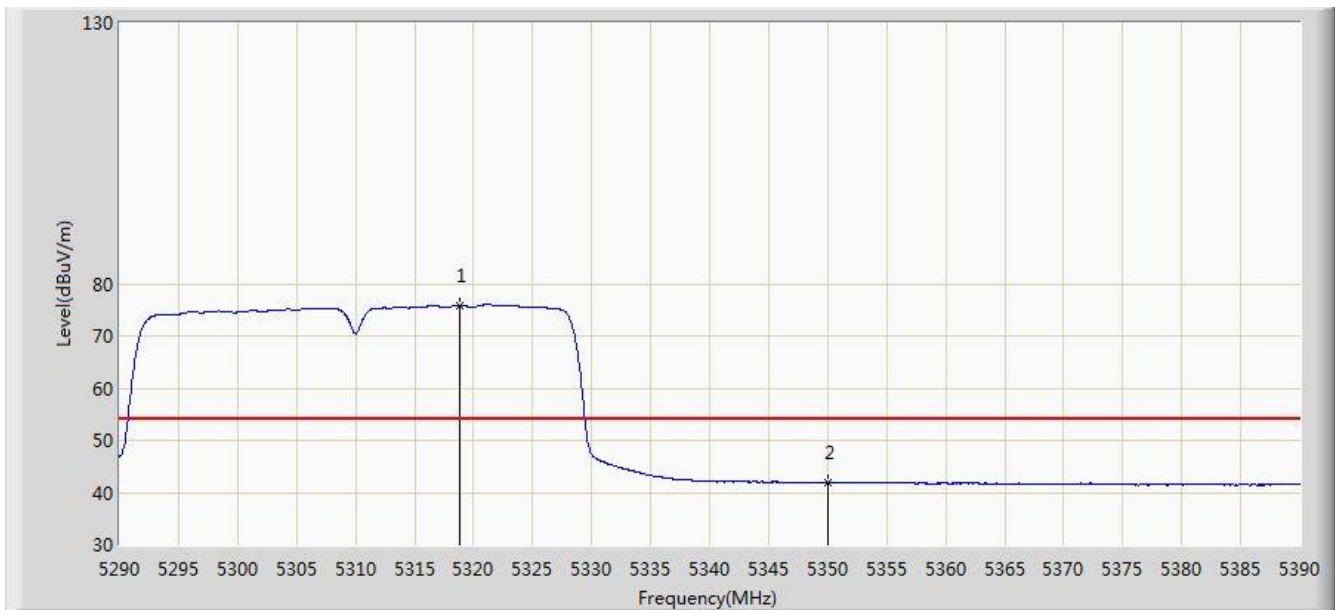


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5307.550	89.282	86.180	N/A	N/A	3.102	PK
2			5350.000	55.842	52.810	-18.158	74.000	3.032	PK
3			5367.650	57.246	54.233	-16.754	74.000	3.013	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

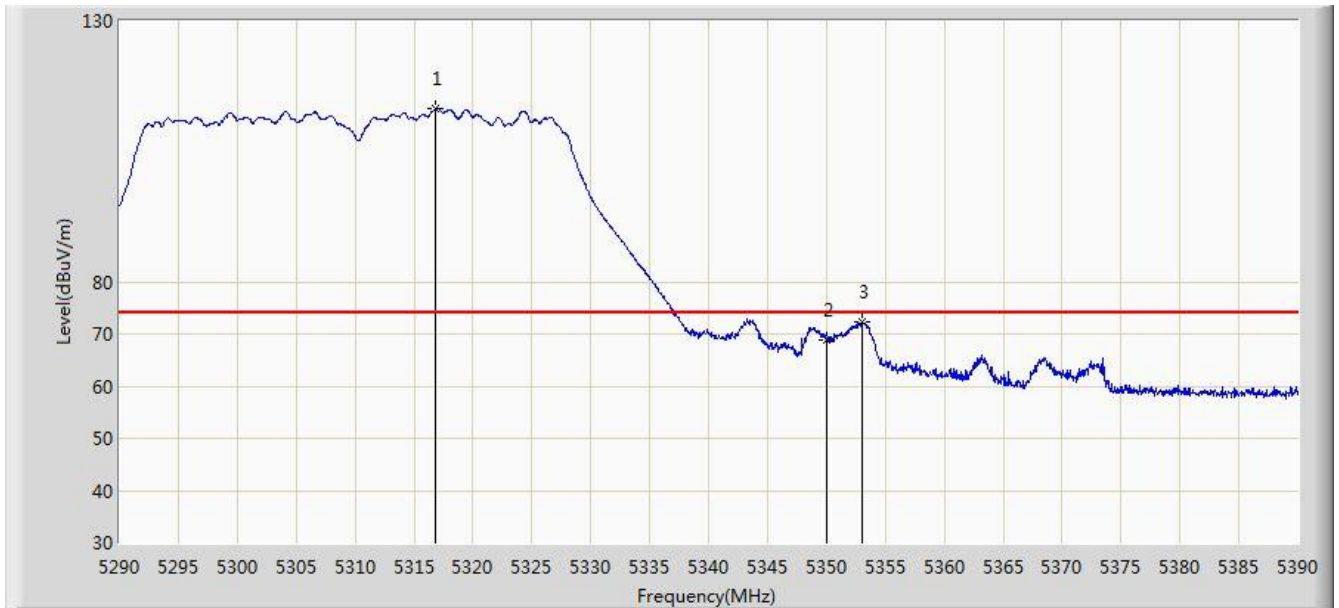


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5318.850	75.856	72.781	N/A	N/A	3.076	AV
2			5350.000	41.903	38.871	-12.097	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

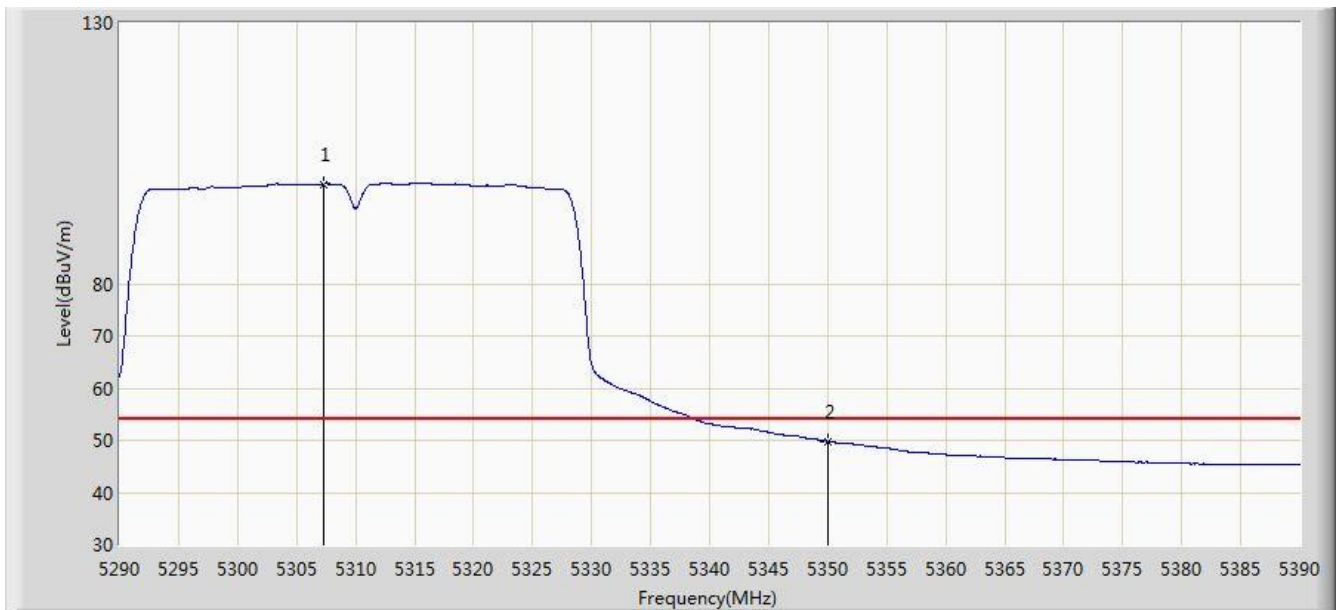


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5316.850	113.212	110.133	N/A	N/A	3.079	PK
2			5350.000	68.971	65.939	-5.029	74.000	3.032	PK
3			5353.050	72.244	69.215	-1.756	74.000	3.030	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

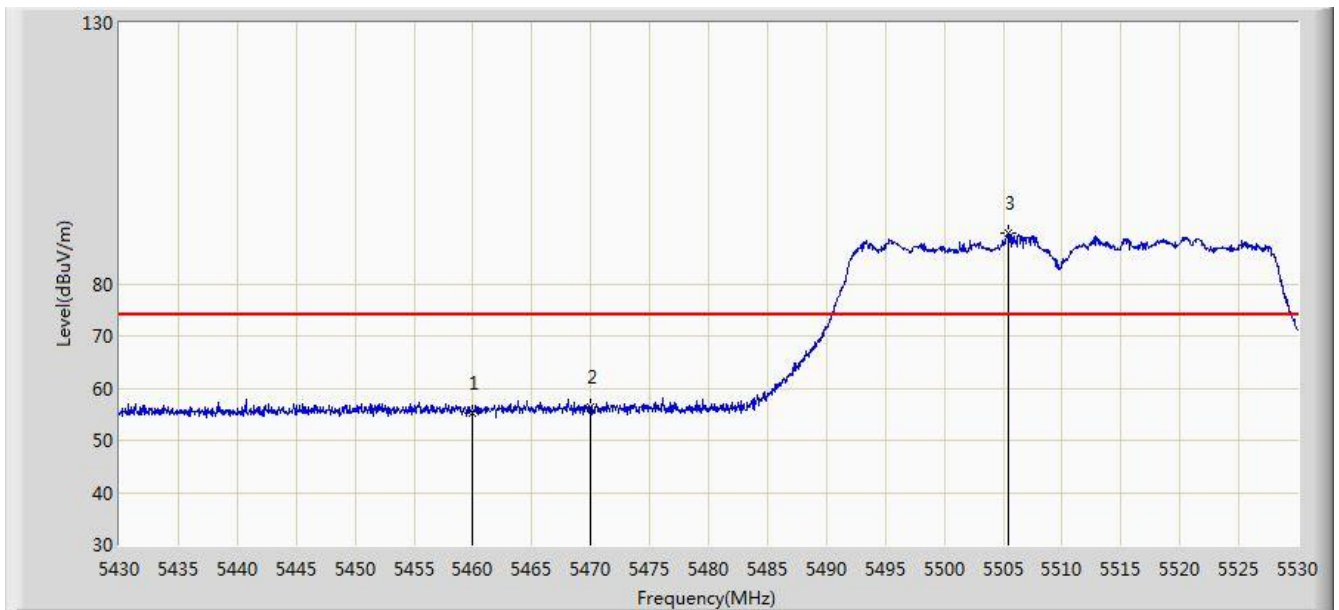


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5307.350	99.116	96.014	N/A	N/A	3.102	AV
2			5350.000	49.840	46.808	-4.160	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	

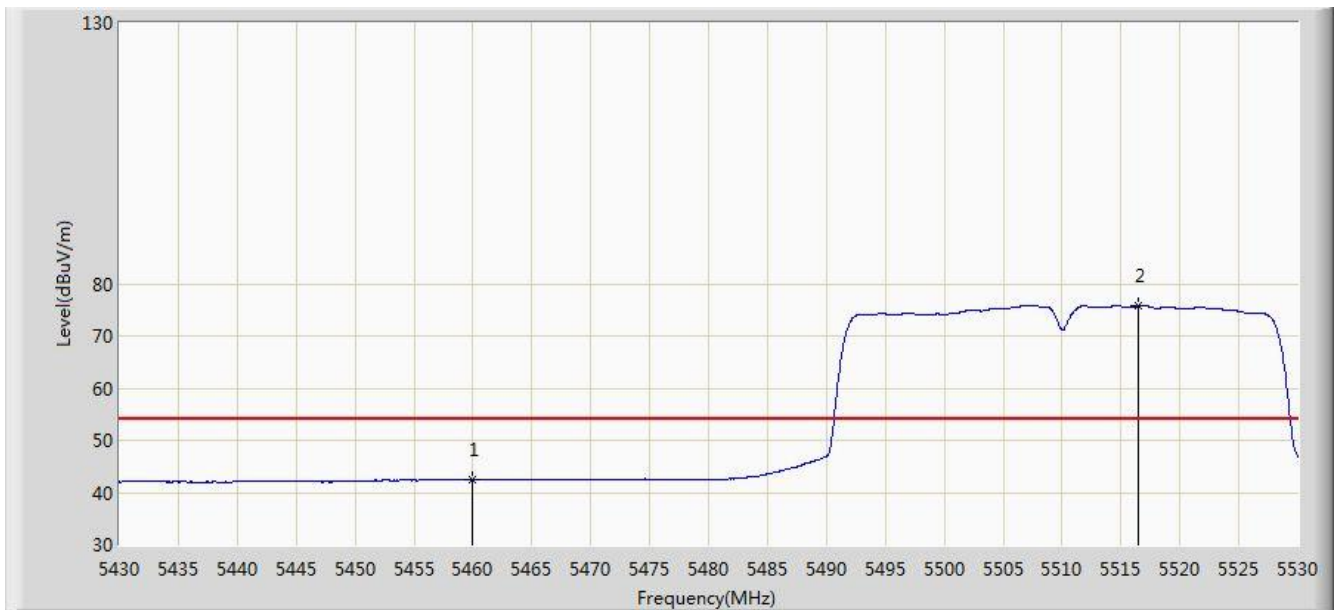


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	55.272	51.790	-18.728	74.000	3.482	PK
2			5470.000	56.333	52.794	-17.667	74.000	3.539	PK
3		*	5505.500	89.635	86.115	N/A	N/A	3.520	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	

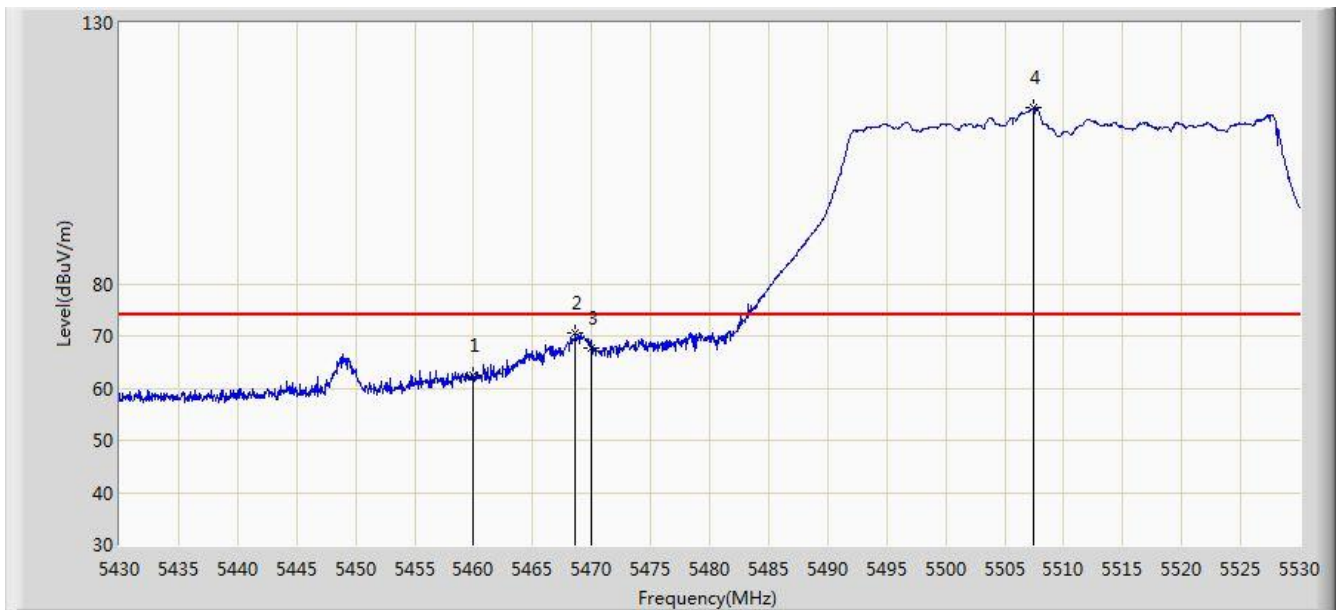


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.440	38.958	-11.560	54.000	3.482	AV
2		*	5516.450	75.808	72.299	N/A	N/A	3.508	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	

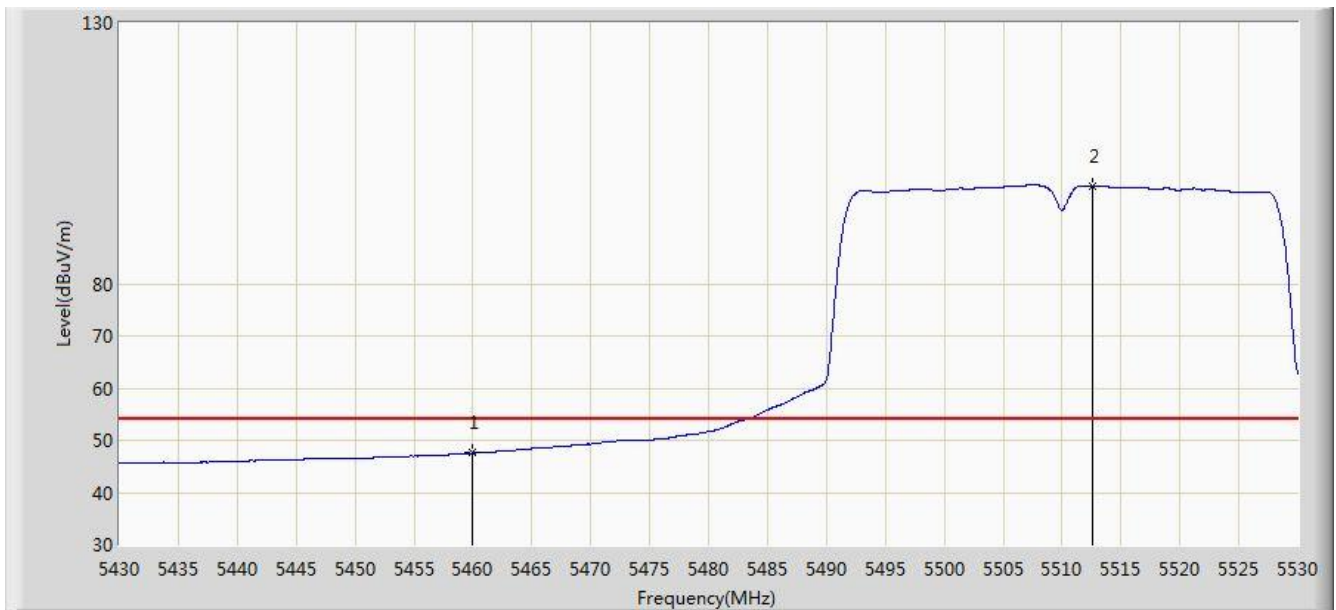


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	62.371	58.889	-11.629	74.000	3.482	PK
2			5468.650	70.664	67.132	-3.336	74.000	3.532	PK
3			5470.000	67.569	64.030	-6.431	74.000	3.539	PK
4		*	5507.450	113.769	110.251	N/A	N/A	3.518	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 07:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	

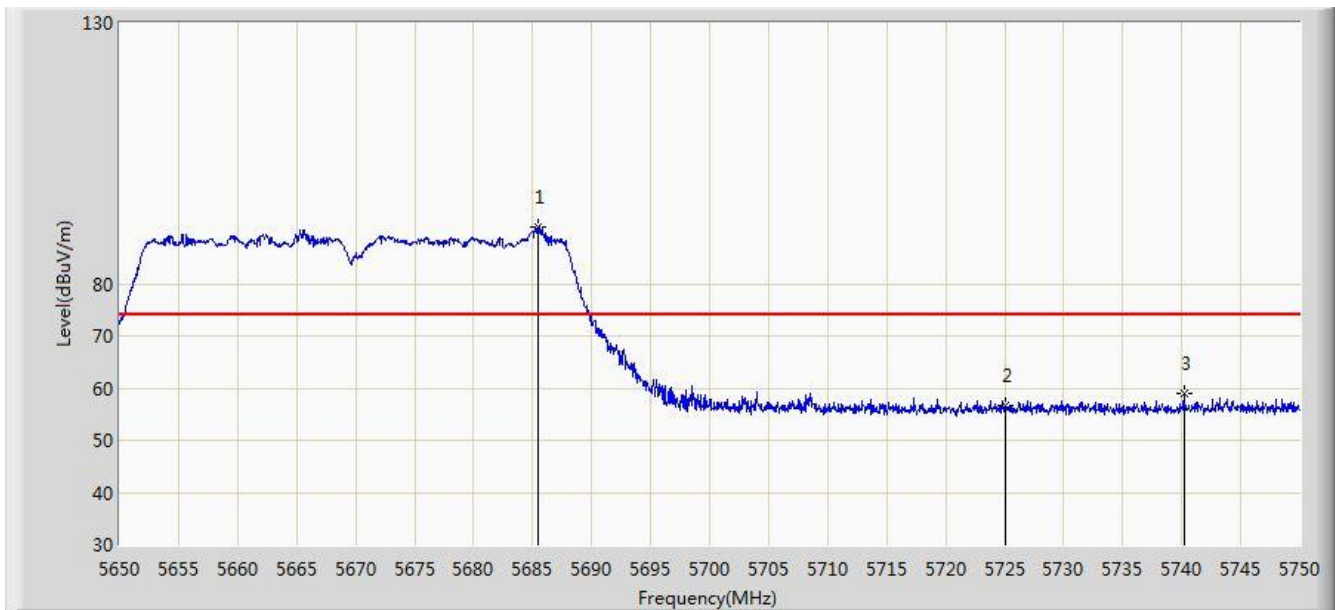


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	47.540	44.058	-6.460	54.000	3.482	AV
2		*	5512.550	98.745	95.232	N/A	N/A	3.513	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

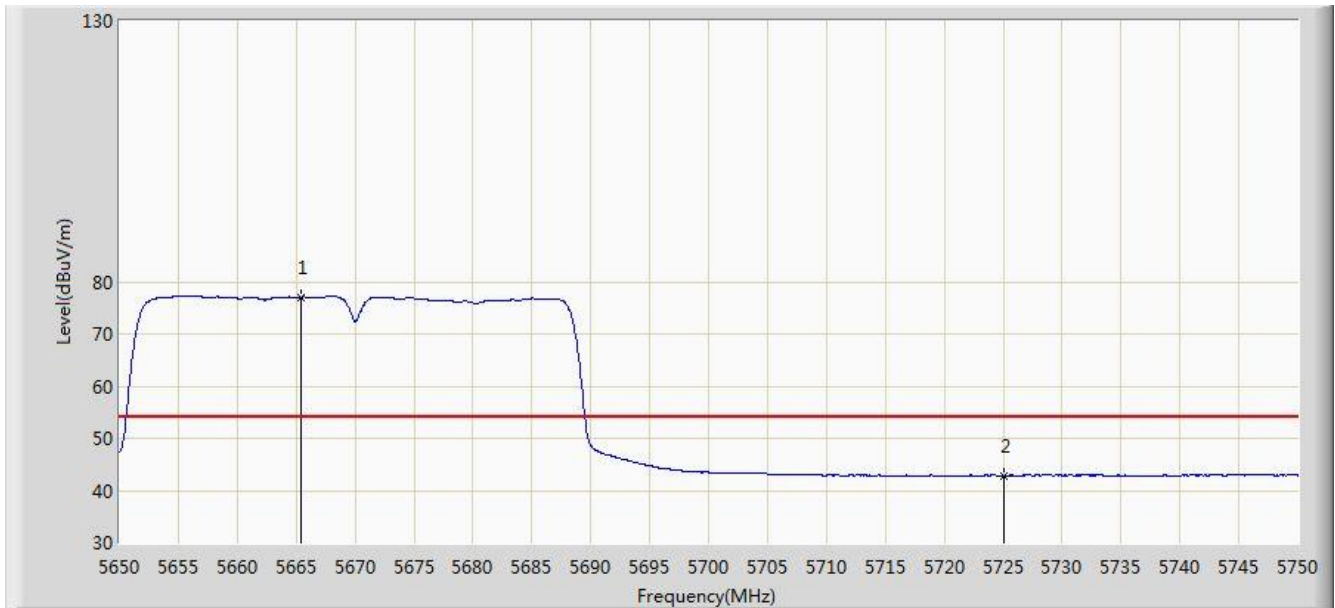


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5685.500	90.969	87.278	N/A	N/A	3.692	PK
2			5725.000	56.566	52.775	-17.434	74.000	3.791	PK
3			5740.200	59.087	55.249	-14.913	74.000	3.838	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

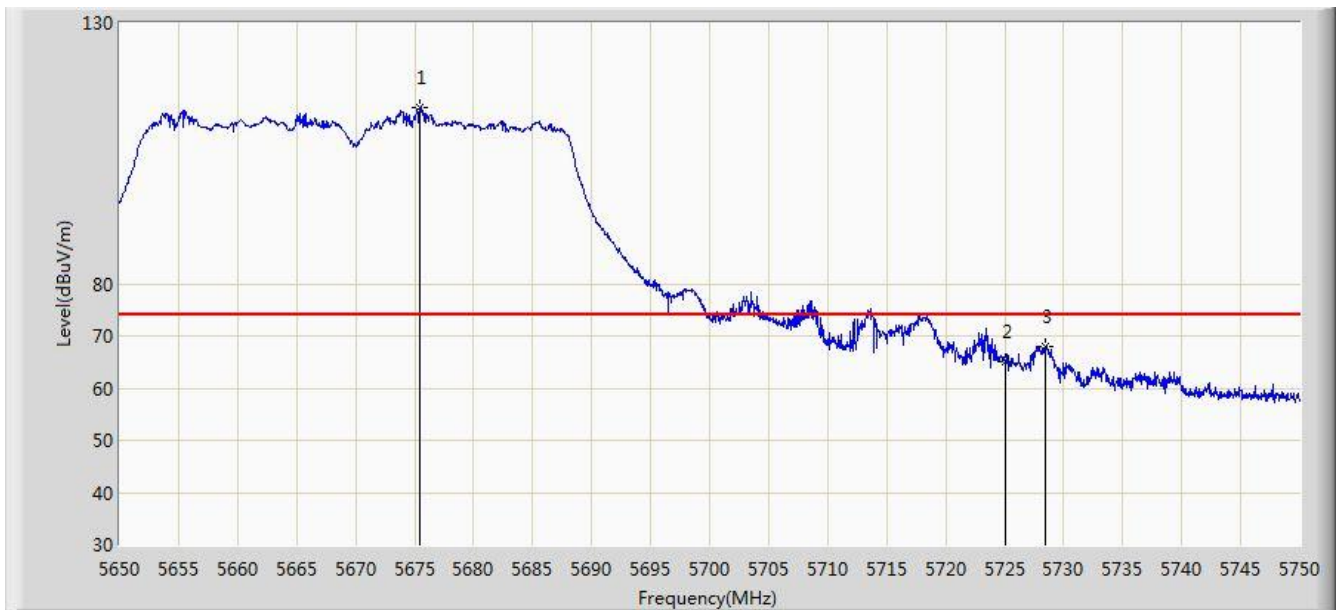


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5665.450	77.080	73.426	N/A	N/A	3.655	AV
2			5725.000	42.826	39.035	-11.174	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

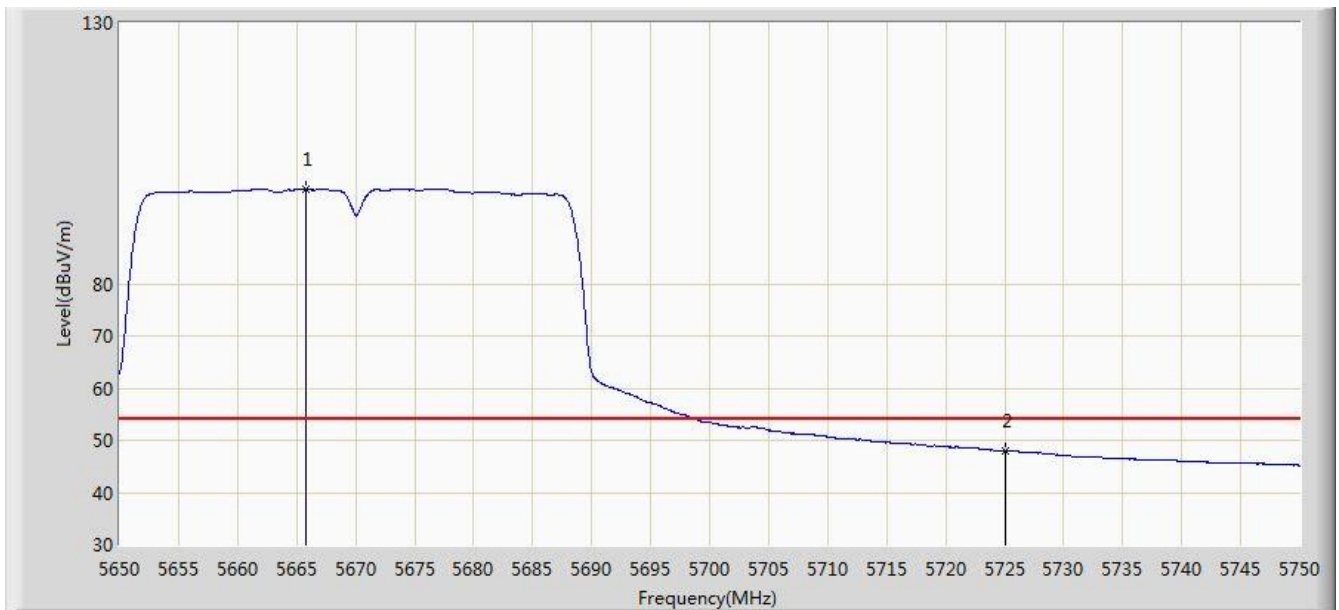


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5675.400	113.758	110.088	N/A	N/A	3.670	PK
2			5725.000	65.018	61.227	-8.982	74.000	3.791	PK
3			5728.450	67.969	64.168	-6.031	74.000	3.802	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

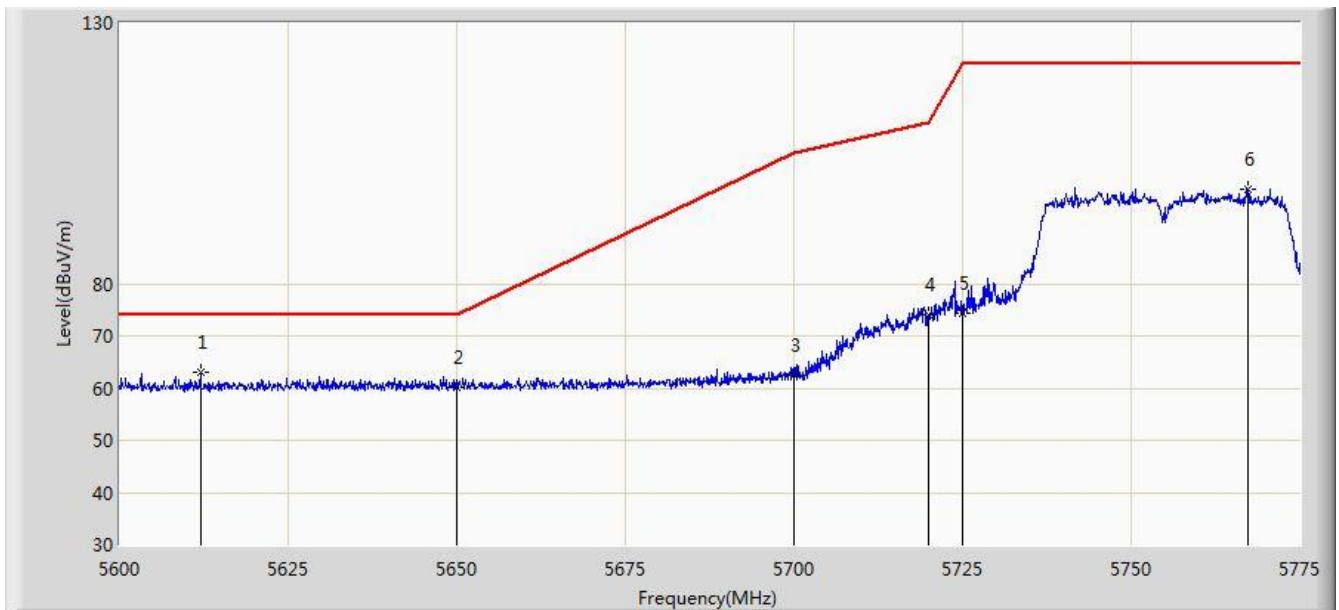


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5665.800	98.182	94.527	N/A	N/A	3.655	AV
2			5725.000	48.016	44.225	-5.984	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:20
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant 0 + 1 + 2 + 3	

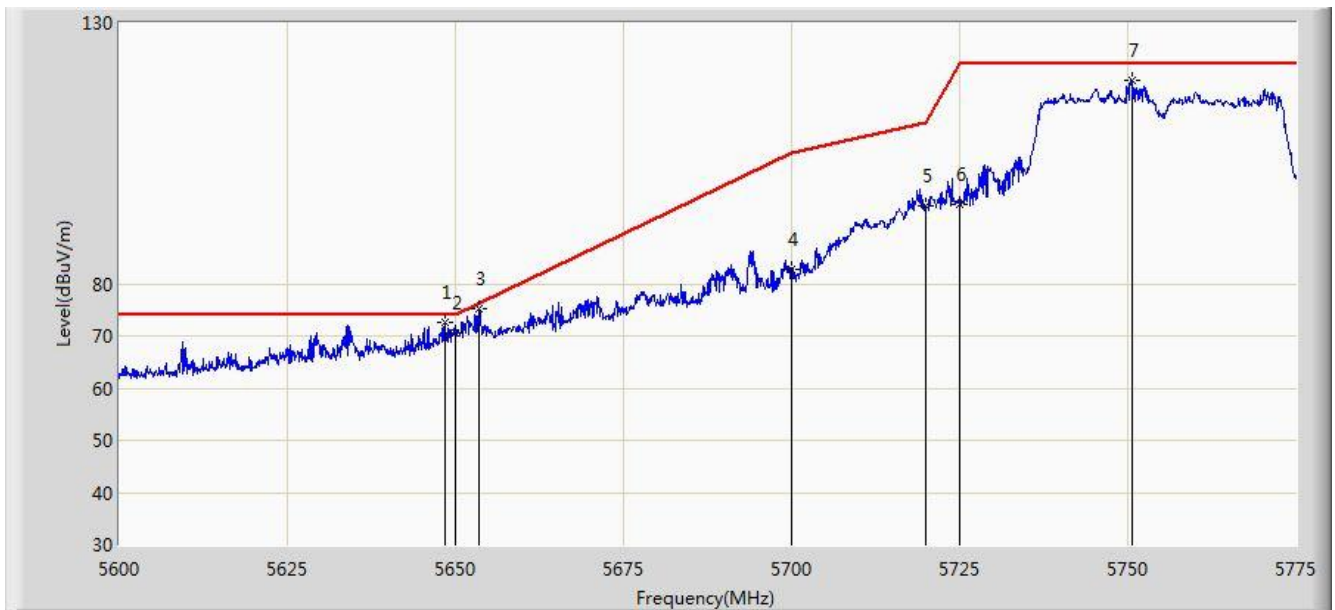


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5611.987	62.989	59.470	-11.011	74.000	3.519	PK
2			5650.000	60.270	56.643	-13.730	74.000	3.627	PK
3			5700.000	62.455	58.736	-42.745	105.200	3.719	PK
4			5720.000	73.969	70.193	-36.831	110.800	3.776	PK
5			5725.000	74.307	70.516	-47.893	122.200	3.791	PK
6			5767.300	98.232	94.319	N/A	N/A	3.912	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:17
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant 0 + 1 + 2 + 3	

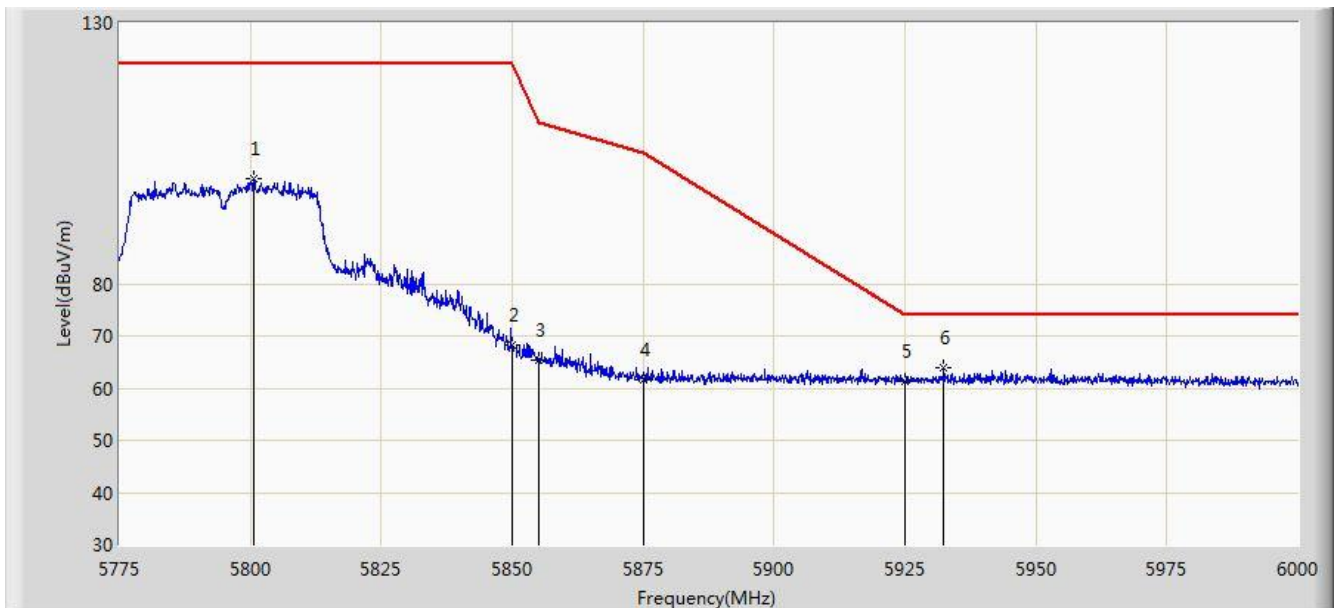


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5648.388	72.659	69.034	-1.341	74.000	3.625	PK
2			5650.000	70.646	67.019	-3.354	74.000	3.627	PK
3		*	5653.550	75.230	71.596	-0.994	76.224	3.634	PK
4			5700.000	82.733	79.014	-22.467	105.200	3.719	PK
5			5720.000	94.797	91.021	-16.003	110.800	3.776	PK
6			5725.000	95.351	91.560	-26.849	122.200	3.791	PK
7			5750.587	118.985	115.111	N/A	N/A	3.873	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:26
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5795MHz Ant 0 + 1 + 2 + 3	

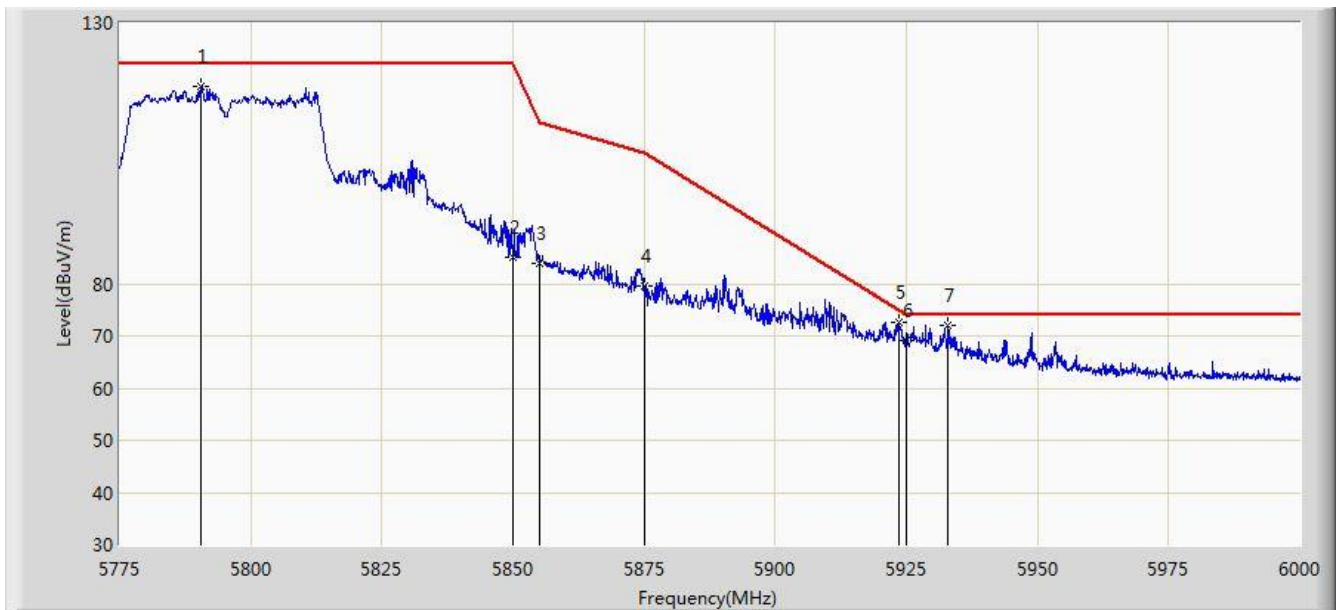


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5800.650	100.150	96.189	N/A	N/A	3.961	PK
2			5850.000	68.278	64.221	-53.922	122.200	4.058	PK
3			5855.000	65.293	61.233	-45.507	110.800	4.060	PK
4			5875.000	61.632	57.527	-43.568	105.200	4.105	PK
5			5925.000	61.192	56.939	-12.808	74.000	4.254	PK
6		*	5932.388	63.930	59.663	-10.070	74.000	4.267	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:23
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11n-HT40 at Channel 5795MHz Ant 0 + 1 + 2 + 3	

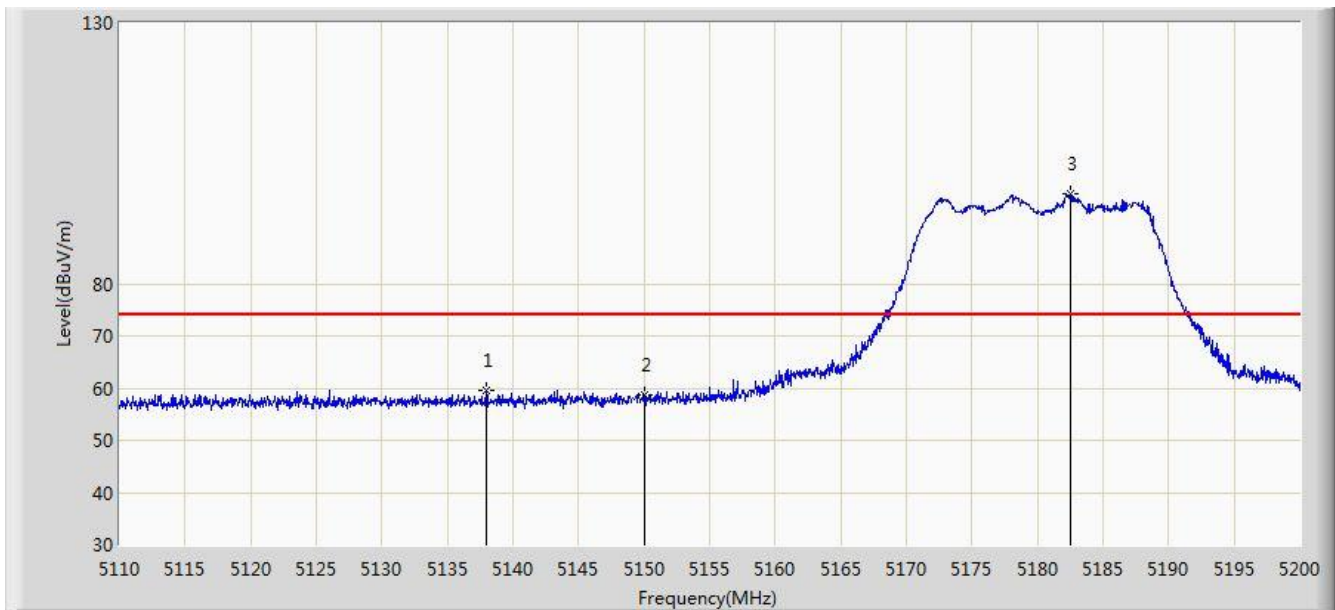


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5790.413	117.830	113.884	N/A	N/A	3.946	PK
2			5850.000	85.052	80.995	-37.148	122.200	4.058	PK
3			5855.000	84.018	79.958	-26.782	110.800	4.060	PK
4			5875.000	79.476	75.371	-25.724	105.200	4.105	PK
5			5923.725	72.468	68.218	-2.325	74.792	4.251	PK
6			5925.000	69.272	65.019	-4.728	74.000	4.254	PK
7		*	5932.950	72.087	67.820	-1.913	74.000	4.268	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	

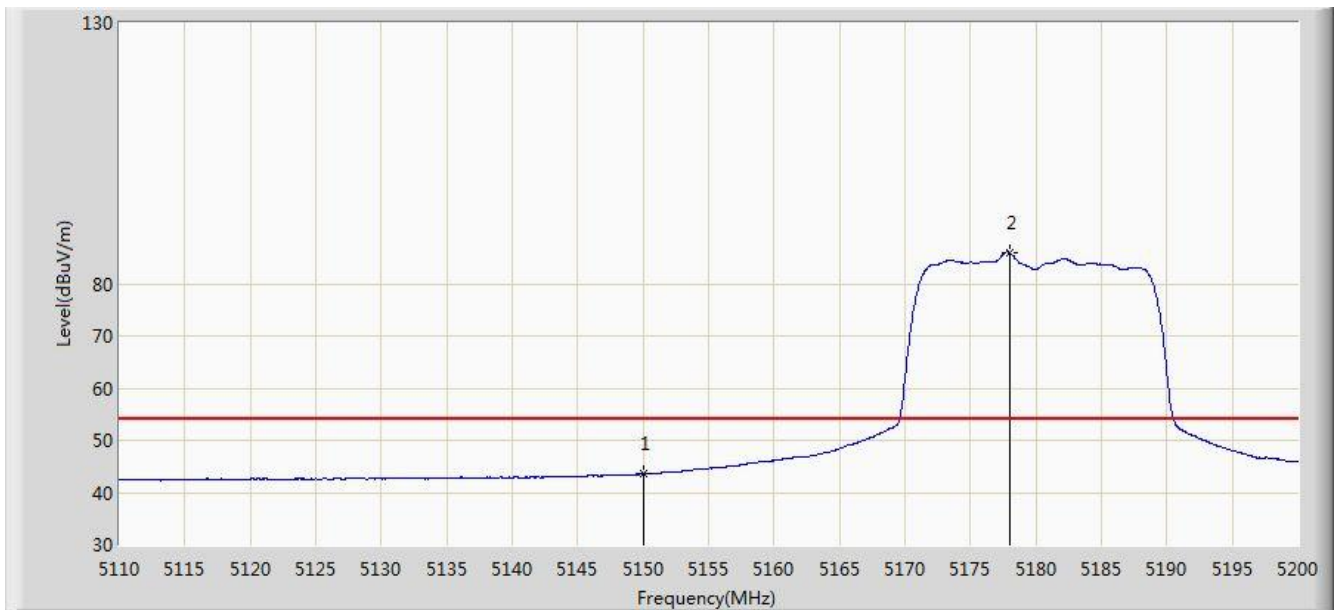


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5137.990	59.607	56.297	-14.393	74.000	3.310	PK
2			5150.000	58.610	55.301	-15.390	74.000	3.309	PK
3		*	5182.495	97.197	93.926	N/A	N/A	3.270	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	

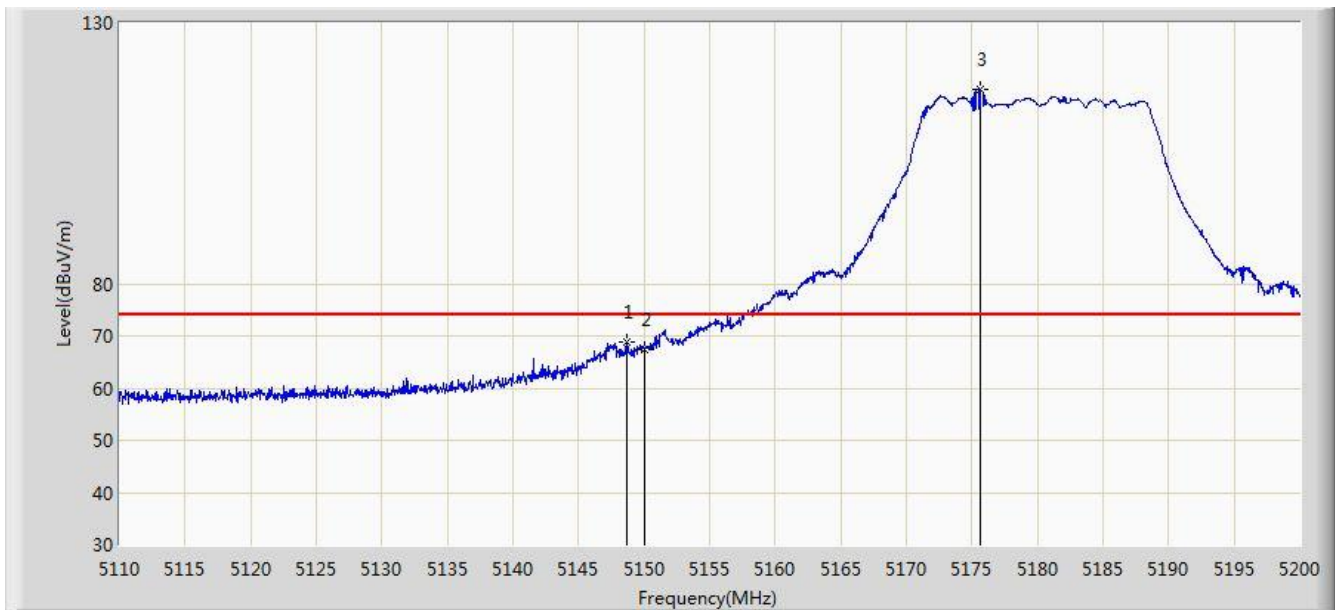


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.497	40.188	-10.503	54.000	3.309	AV
2		*	5177.995	86.061	82.786	N/A	N/A	3.274	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	

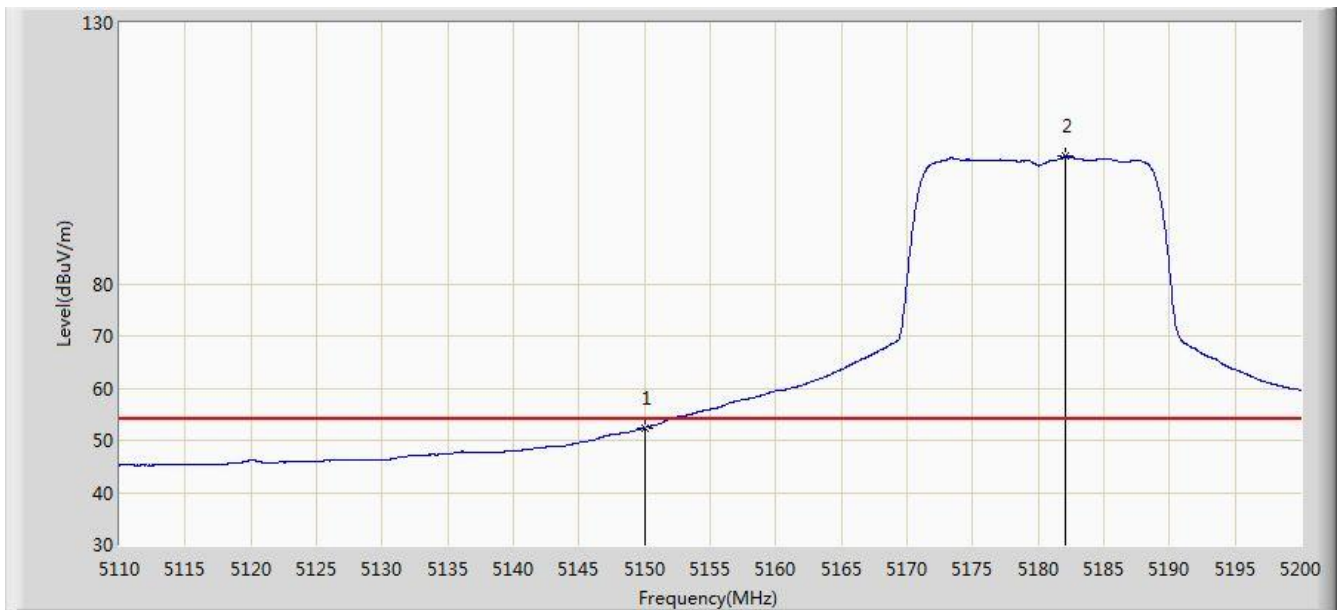


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.655	68.826	65.517	-5.174	74.000	3.309	PK
2			5150.000	67.445	64.136	-6.555	74.000	3.309	PK
3		*	5175.655	117.155	113.878	N/A	N/A	3.277	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0 + 1 + 2 + 3	

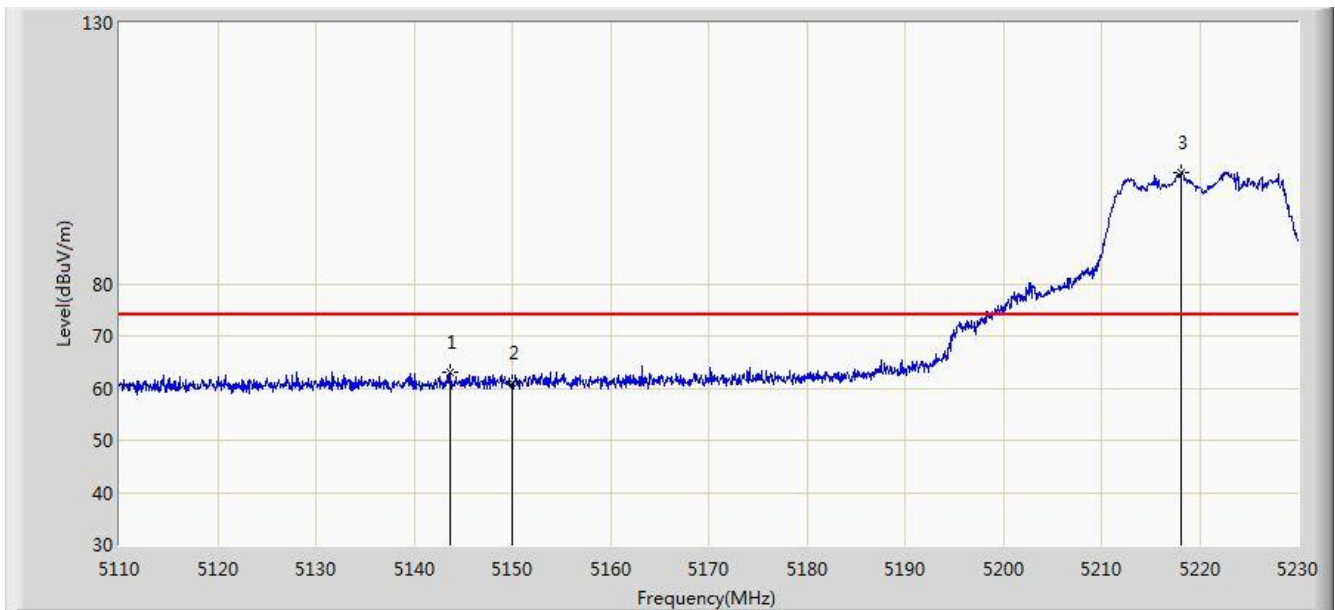


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.411	49.102	-1.589	54.000	3.309	AV
2		*	5182.090	104.392	101.121	N/A	N/A	3.271	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

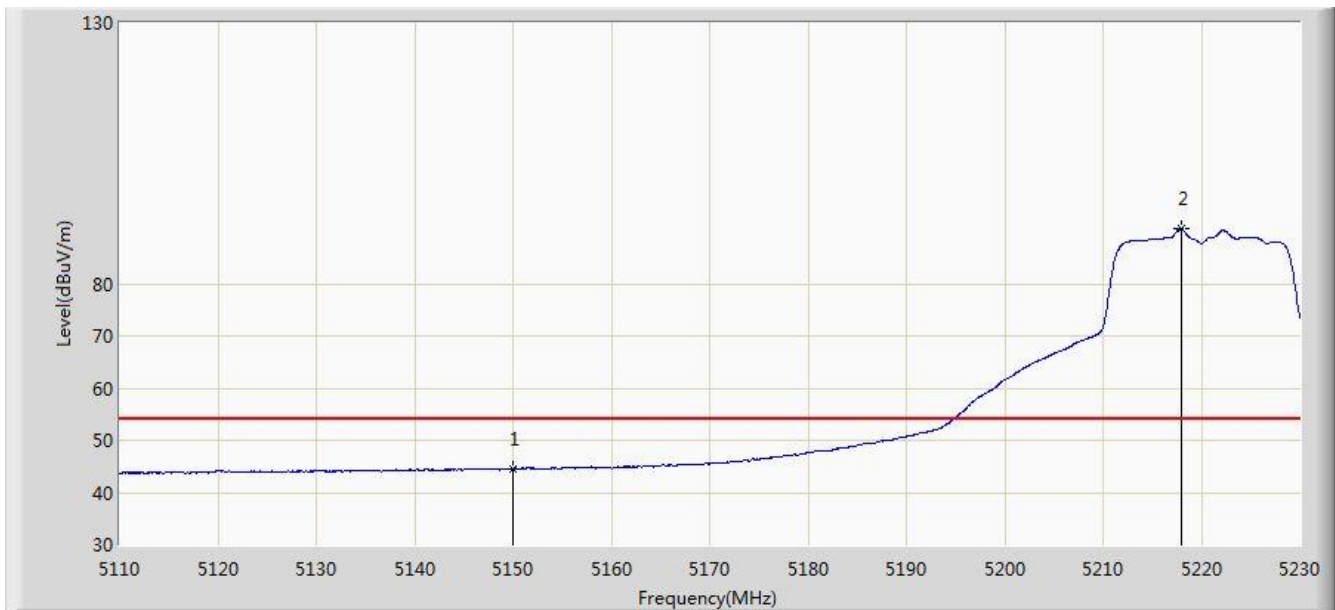


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5143.660	63.107	59.798	-10.893	74.000	3.310	PK
2			5150.000	61.105	57.796	-12.895	74.000	3.309	PK
3		*	5218.180	101.337	98.124	N/A	N/A	3.213	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

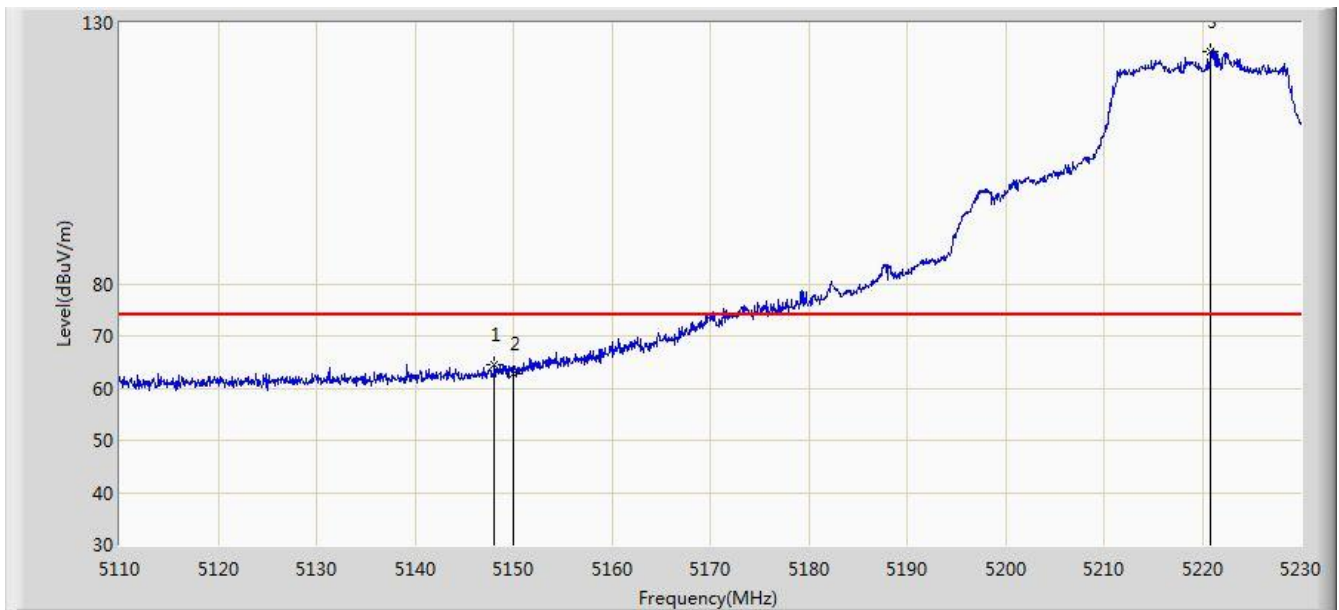


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	44.554	41.245	-9.446	54.000	3.309	AV
2		*	5218.000	90.625	87.412	N/A	N/A	3.213	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

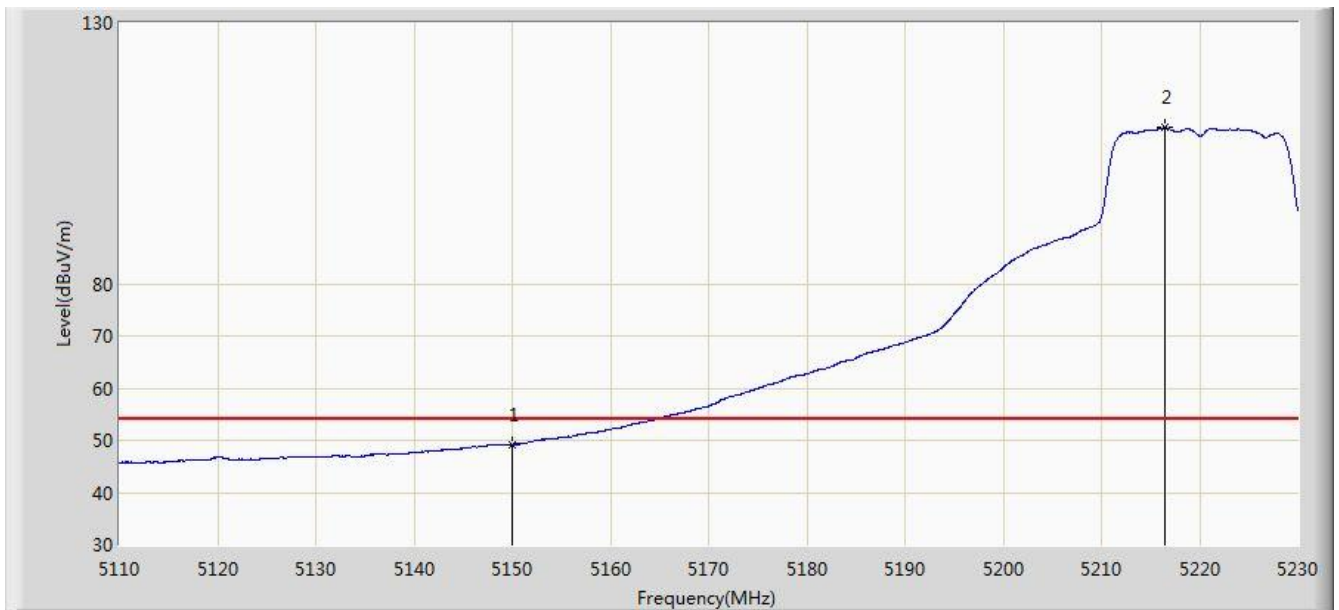


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.100	64.632	61.323	-9.368	74.000	3.309	PK
2			5150.000	62.751	59.442	-11.249	74.000	3.309	PK
3		*	5220.880	124.612	121.402	N/A	N/A	3.210	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5220MHz Ant 0 + 1 + 2 + 3	

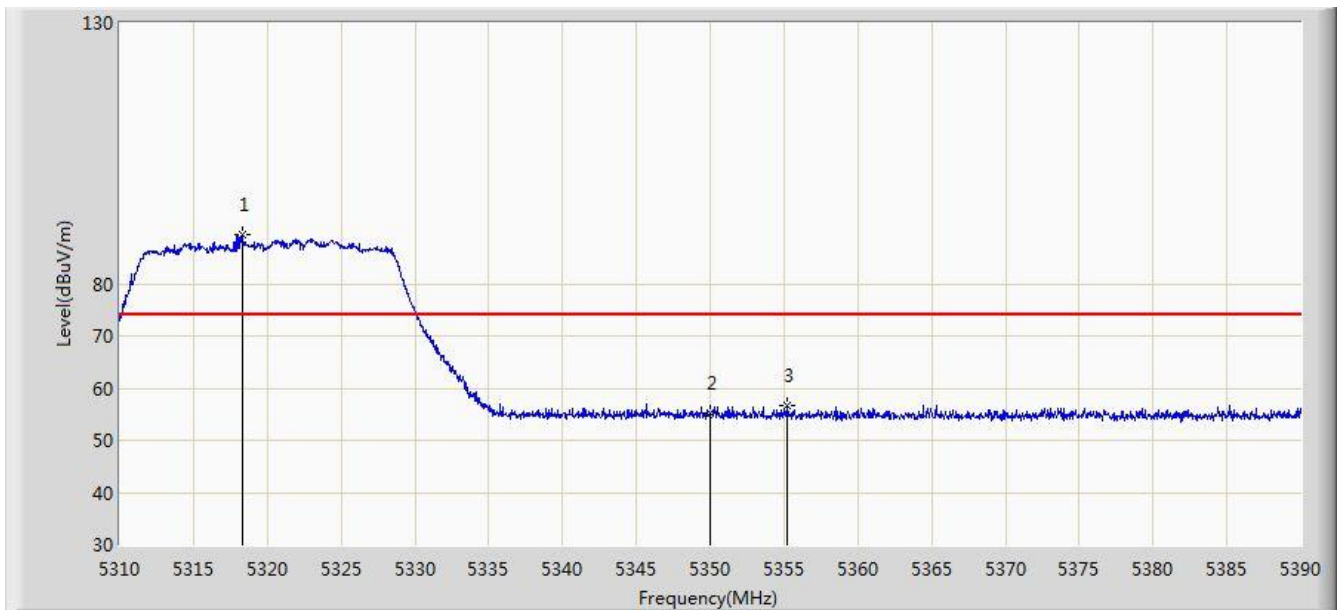


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	49.195	45.886	-4.805	54.000	3.309	AV
2		*	5216.500	109.915	106.701	N/A	N/A	3.214	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

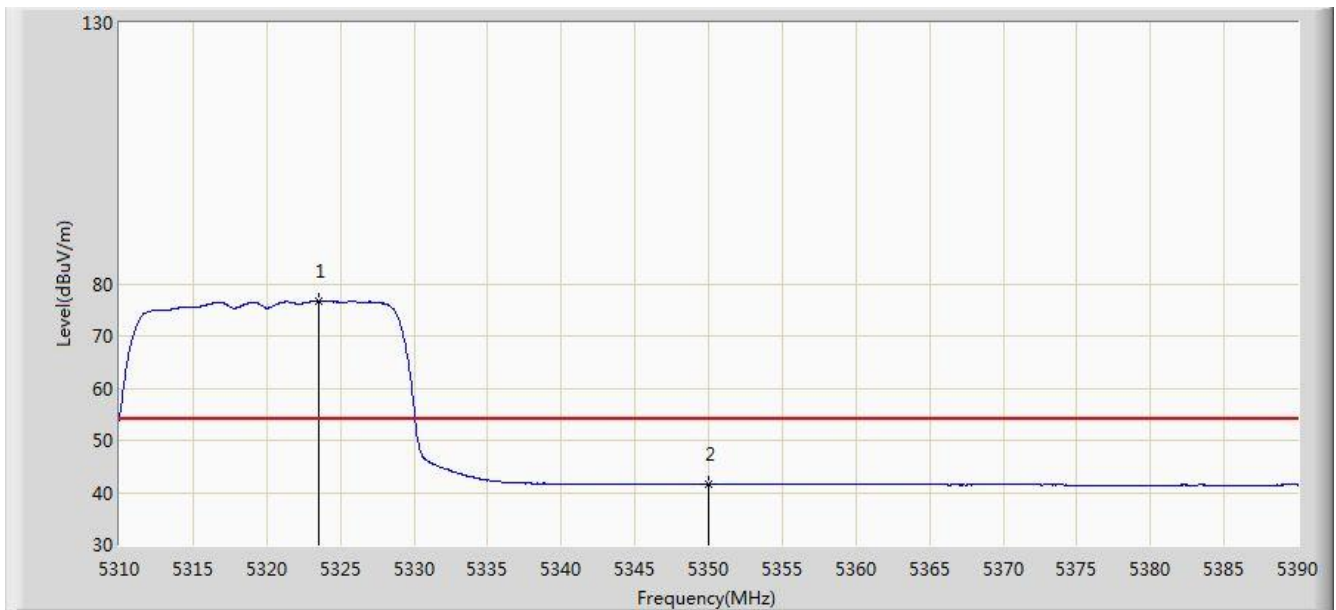


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5318.280	89.335	86.258	N/A	N/A	3.077	PK
2			5350.000	55.332	52.300	-18.668	74.000	3.032	PK
3			5355.200	56.748	53.721	-17.252	74.000	3.027	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

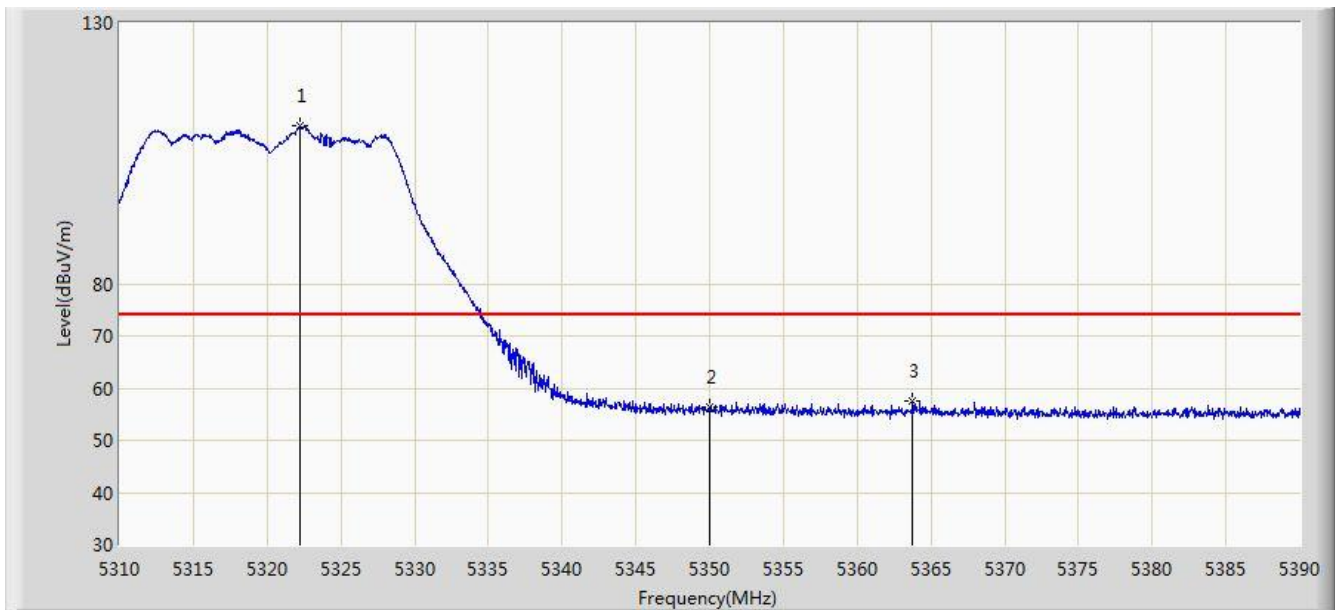


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5323.520	76.761	73.695	N/A	N/A	3.066	AV
2			5350.000	41.586	38.554	-12.414	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

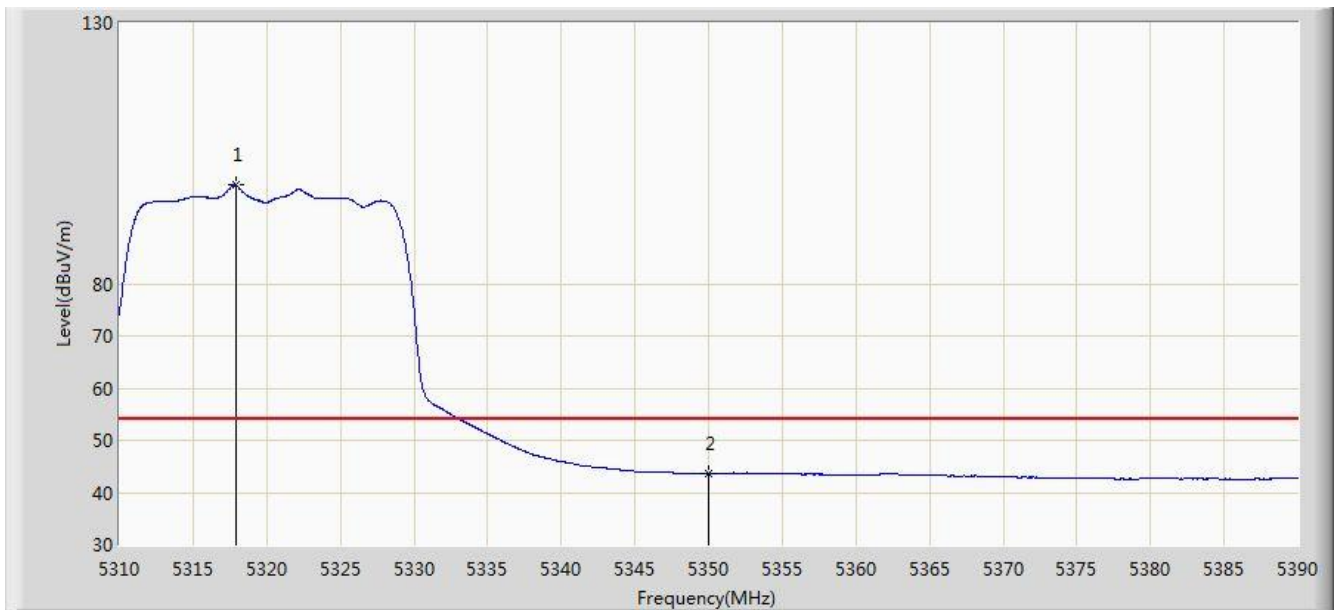


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5322.240	110.221	107.152	N/A	N/A	3.069	PK
2			5350.000	56.377	53.345	-17.623	74.000	3.032	PK
3			5363.760	57.491	54.474	-16.509	74.000	3.017	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 0 + 1 + 2 + 3	

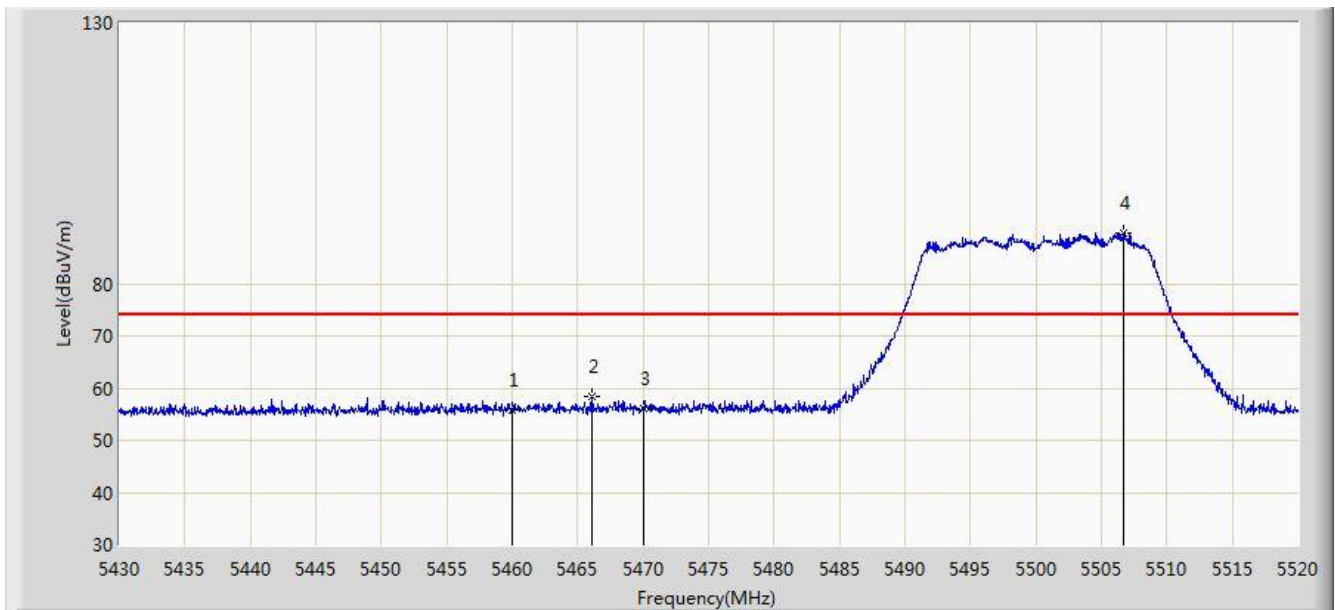


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5317.920	98.842	95.765	N/A	N/A	3.077	AV
2			5350.000	43.600	40.568	-10.400	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

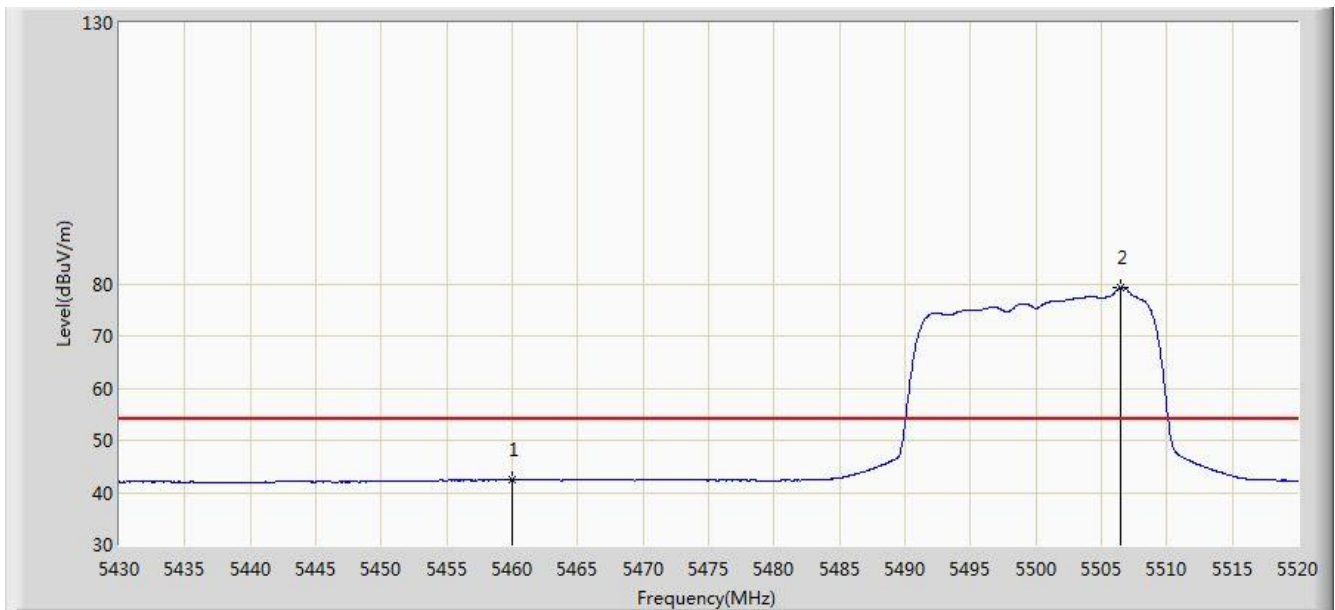


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	55.839	52.357	-18.161	74.000	3.482	PK
2			5466.045	58.338	54.821	-15.662	74.000	3.516	PK
3			5470.000	56.211	52.672	-17.789	74.000	3.539	PK
4		*	5506.725	89.614	86.095	N/A	N/A	3.519	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

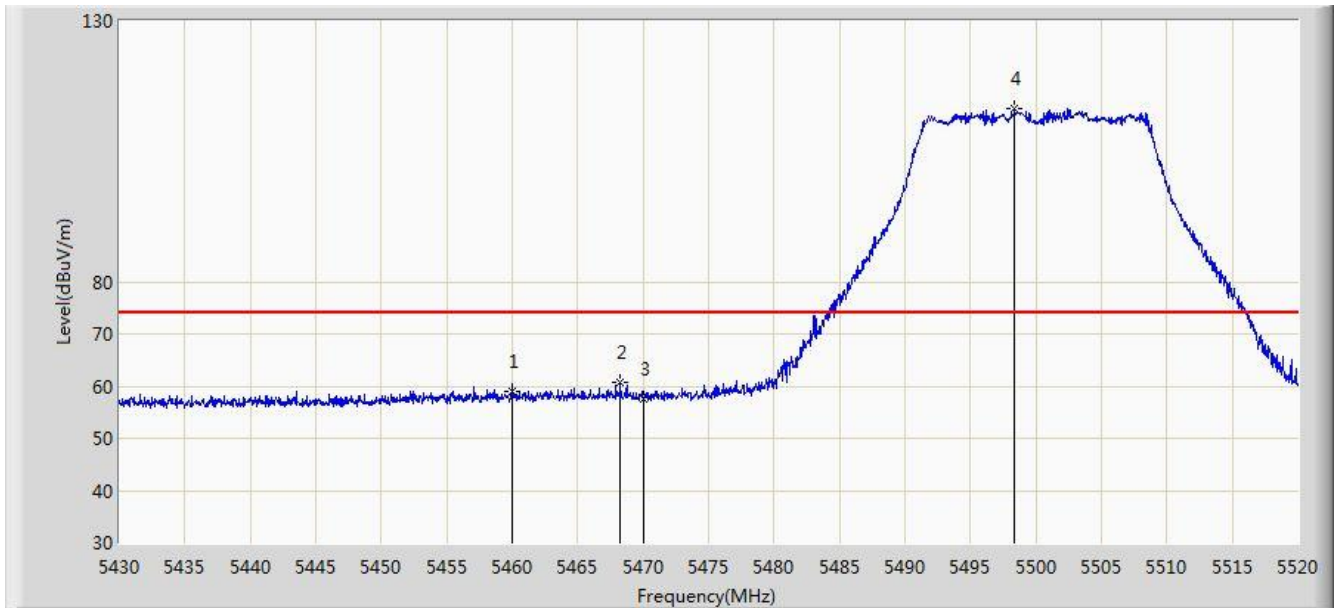


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.340	38.858	-11.660	54.000	3.482	AV
2		*	5506.410	79.253	75.734	N/A	N/A	3.519	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

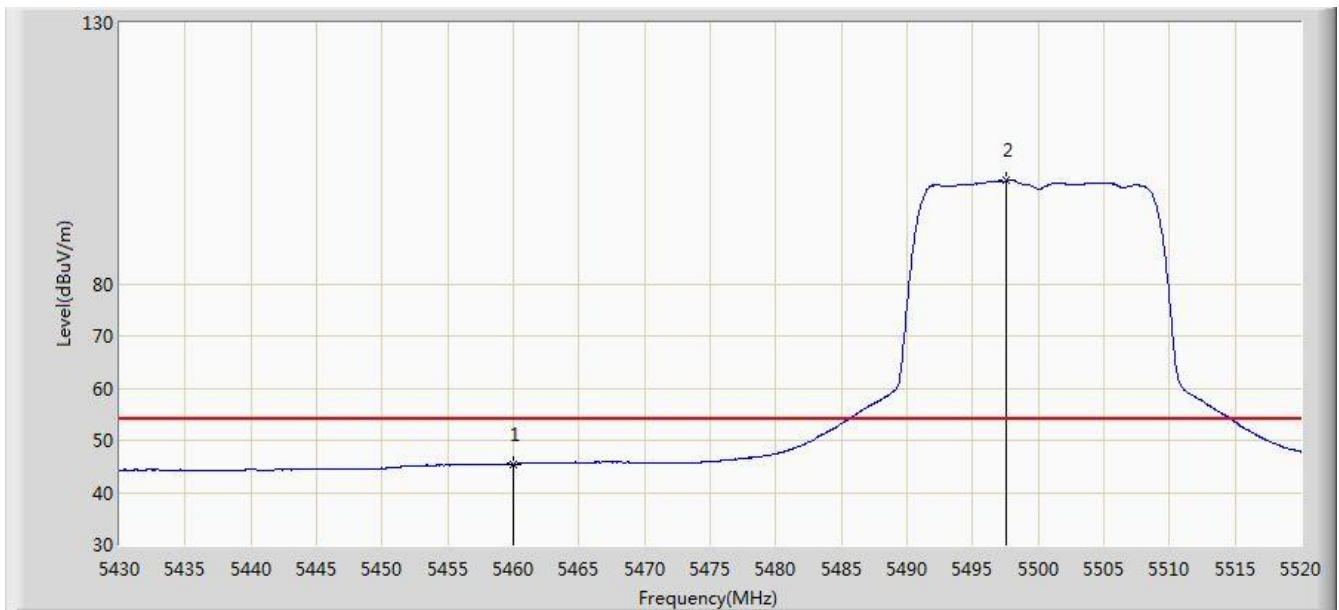


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	58.949	55.467	-15.051	74.000	3.482	PK
2			5468.250	60.715	57.186	-13.285	74.000	3.529	PK
3			5470.000	57.450	53.911	-16.550	74.000	3.539	PK
4		*	5498.400	113.262	109.734	N/A	N/A	3.528	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 0 + 1 + 2 + 3	

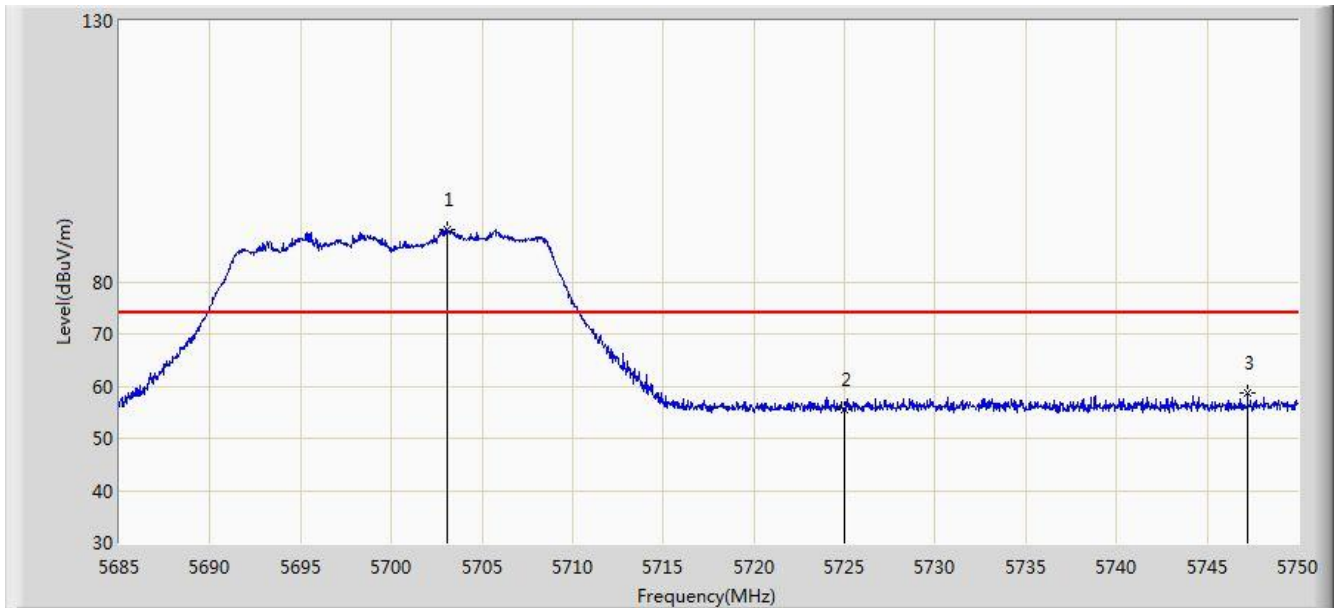


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	45.495	42.013	-8.505	54.000	3.482	AV
2		*	5497.590	99.728	96.199	N/A	N/A	3.529	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

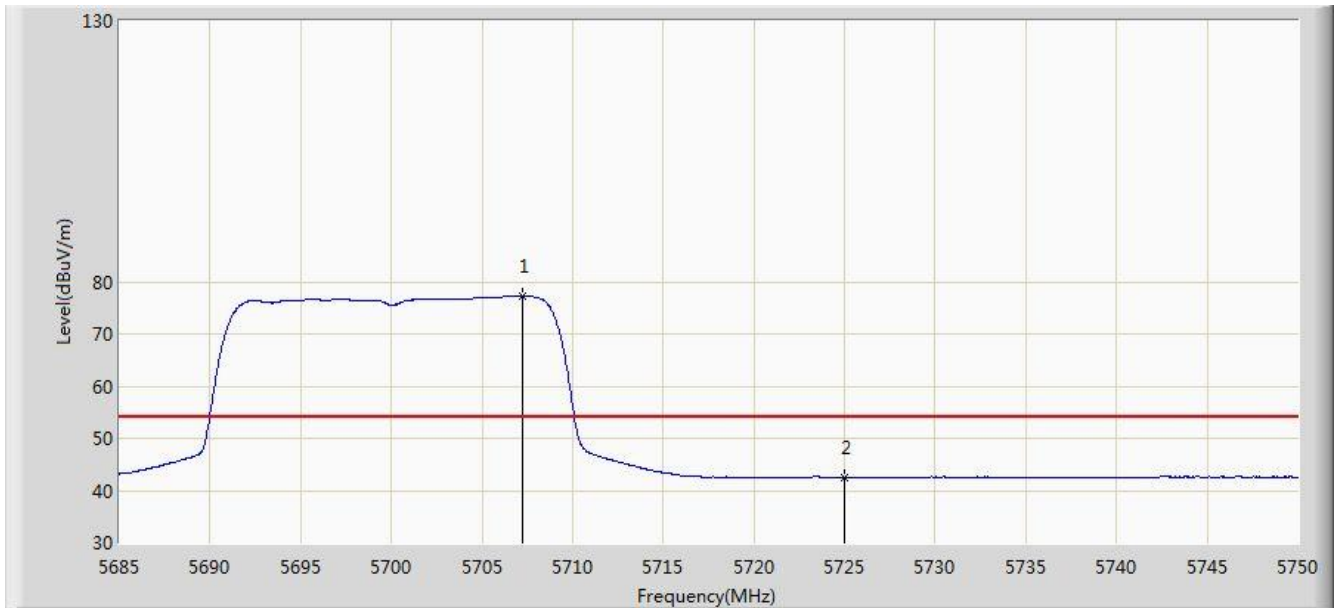


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5703.103	90.082	86.358	N/A	N/A	3.724	PK
2			5725.000	55.365	51.574	-18.635	74.000	3.791	PK
3			5747.237	58.708	54.847	-15.292	74.000	3.862	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

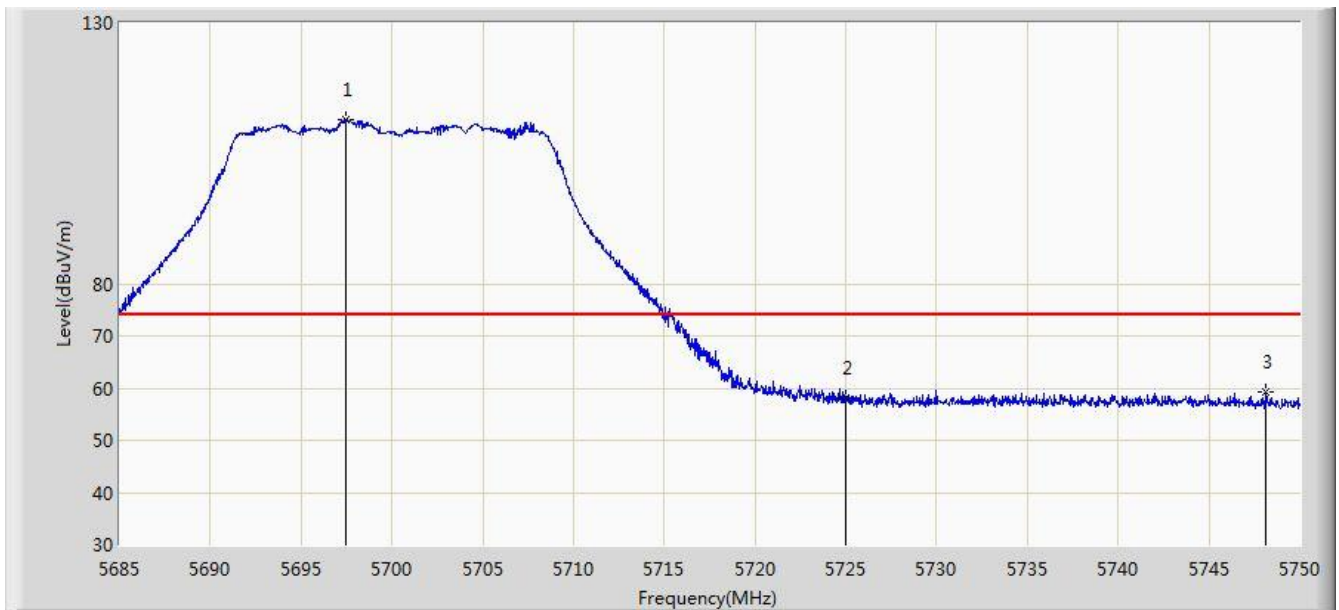


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5707.197	77.362	73.625	N/A	N/A	3.737	AV
2			5725.000	42.529	38.738	-11.471	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

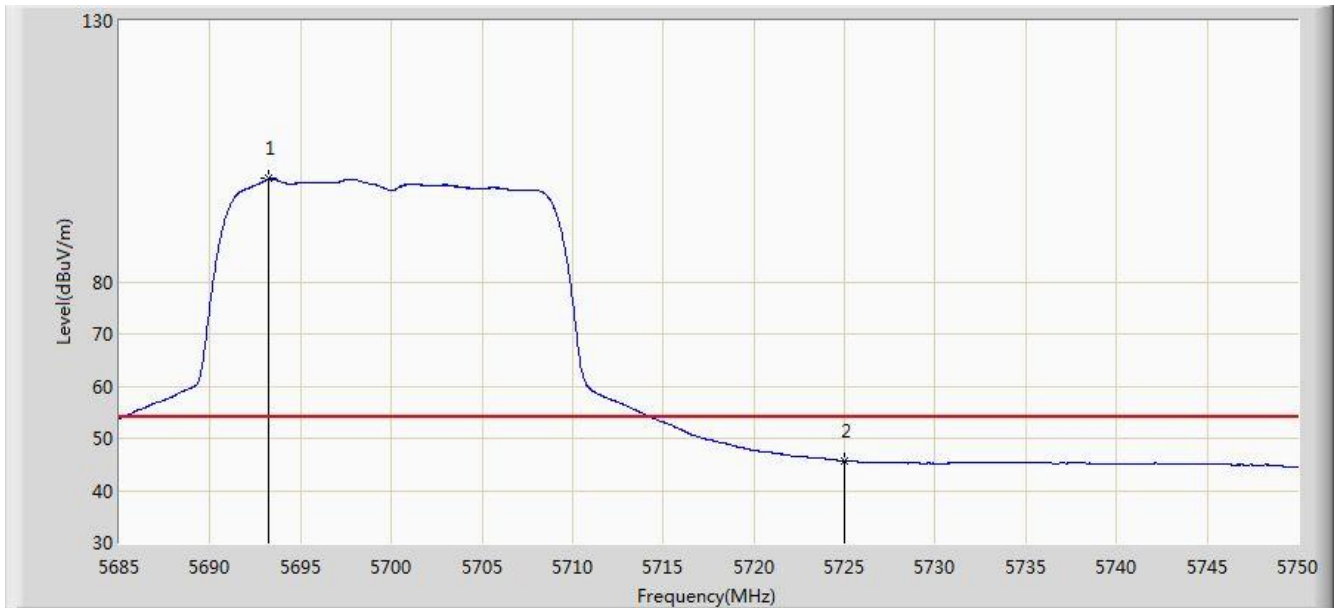


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5697.480	111.389	107.674	N/A	N/A	3.716	PK
2			5725.000	58.026	54.235	-15.974	74.000	3.791	PK
3			5748.147	59.372	55.508	-14.628	74.000	3.865	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 0 + 1 + 2 + 3	

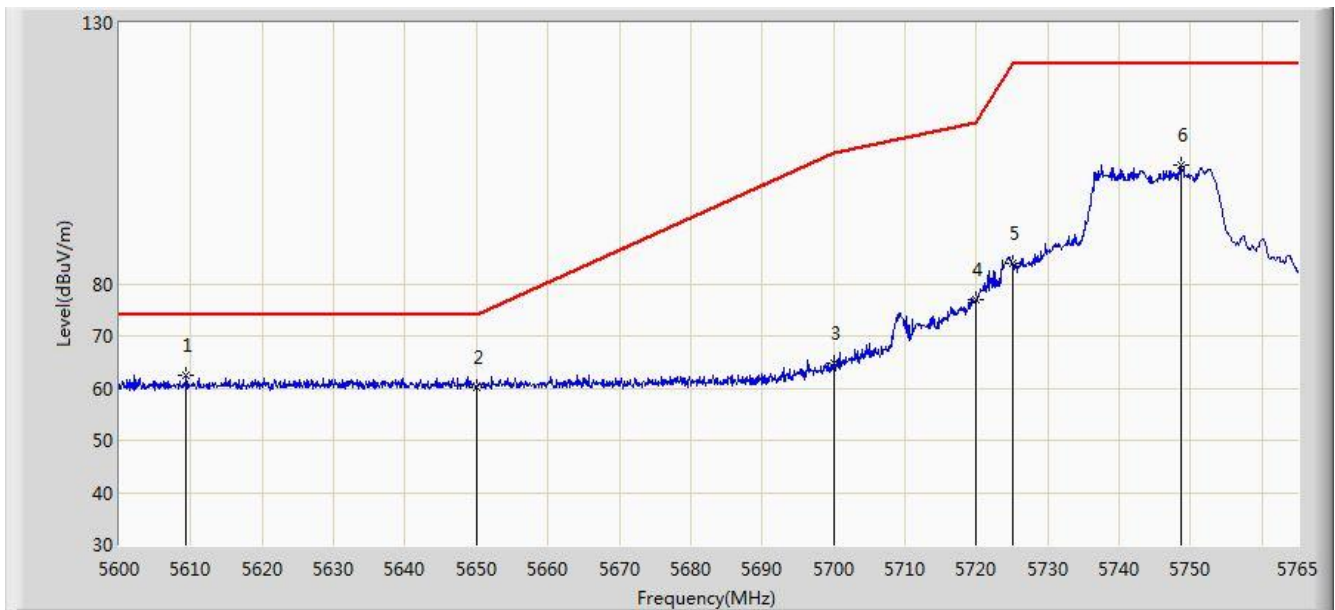


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5693.255	99.734	96.025	N/A	N/A	3.710	AV
2			5725.000	45.668	41.877	-8.332	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:41
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant 0 + 1 + 2 + 3	

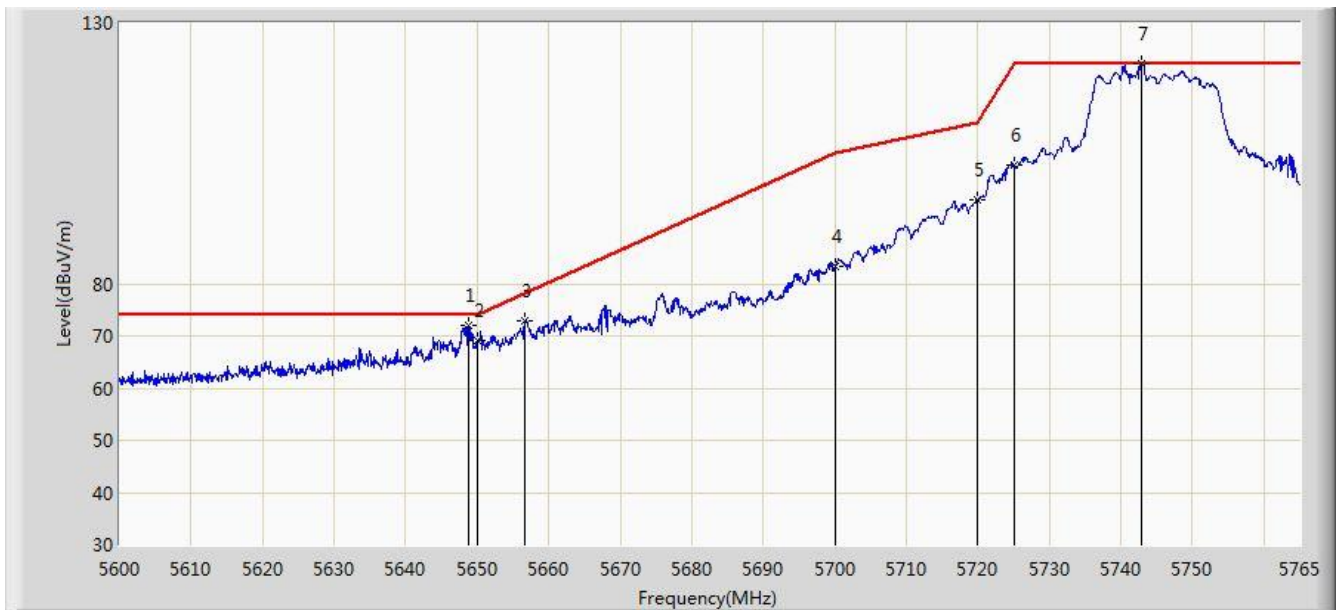


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5609.405	62.357	58.845	-11.643	74.000	3.512	PK
2			5650.000	60.186	56.559	-13.814	74.000	3.627	PK
3			5700.000	64.718	60.999	-40.482	105.200	3.719	PK
4			5720.000	76.880	73.104	-33.920	110.800	3.776	PK
5			5725.000	83.818	80.027	-38.382	122.200	3.791	PK
6			5748.665	102.855	98.989	N/A	N/A	3.867	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:39
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant 0 + 1 + 2 + 3	

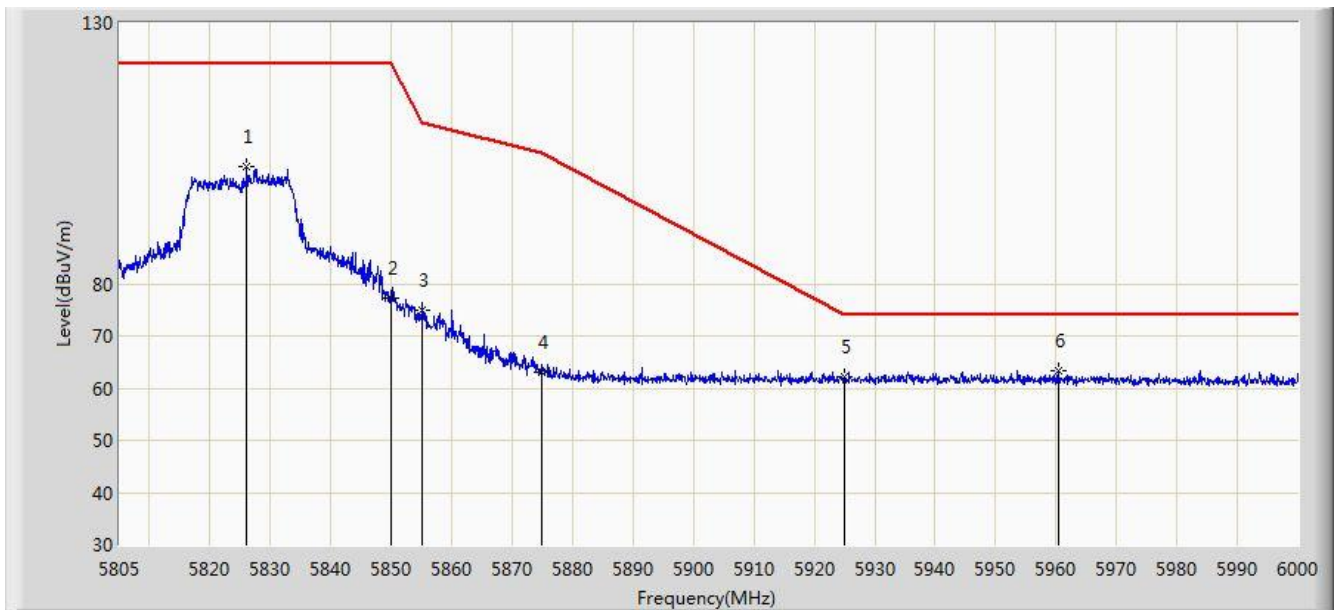


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5648.757	72.043	68.417	-1.957	74.000	3.626	PK
2			5650.000	69.162	65.535	-4.838	74.000	3.627	PK
3			5656.678	72.946	69.306	-5.237	78.183	3.641	PK
4			5700.000	83.209	79.490	-21.991	105.200	3.719	PK
5			5720.000	96.226	92.450	-14.574	110.800	3.776	PK
6			5725.000	102.728	98.937	-19.472	122.200	3.791	PK
7		*	5742.808	122.122	118.277	N/A	N/A	3.845	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:46
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant 0 + 1 + 2 + 3	

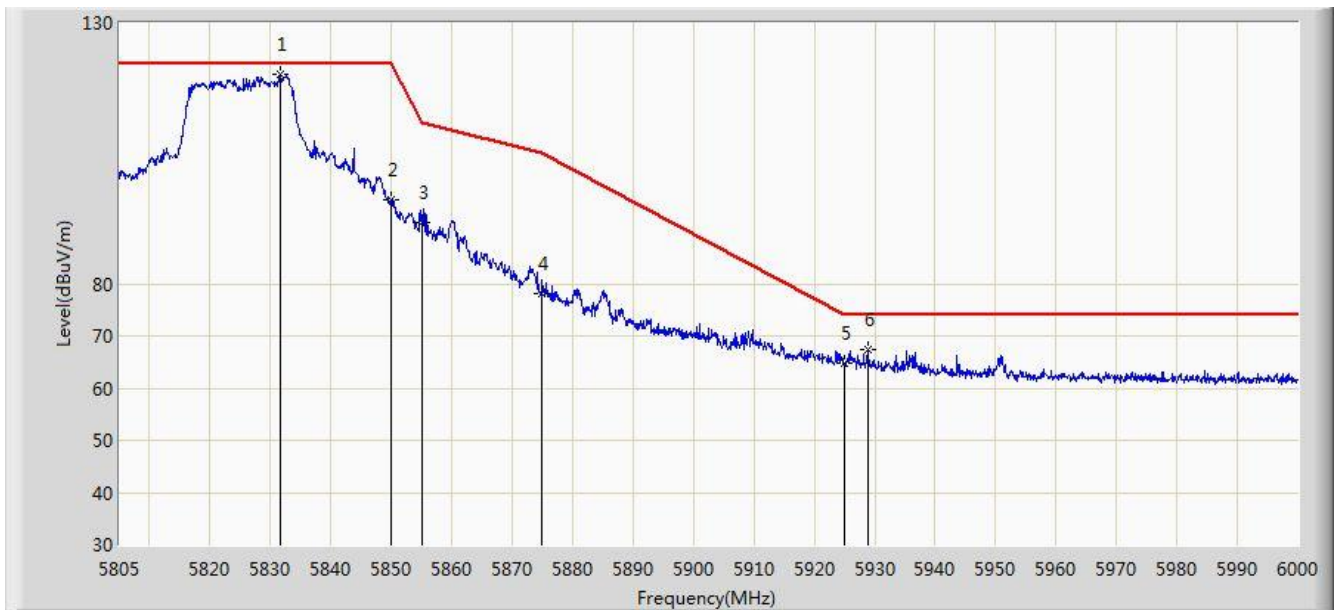


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5826.060	102.423	98.415	N/A	N/A	4.008	PK
2			5850.000	77.284	73.227	-44.916	122.200	4.058	PK
3			5855.000	74.883	70.823	-35.917	110.800	4.060	PK
4			5875.000	62.988	58.883	-42.212	105.200	4.105	PK
5			5925.000	62.286	58.033	-11.714	74.000	4.254	PK
6		*	5960.317	63.351	59.052	-10.649	74.000	4.299	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 08:43
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant 0 + 1 + 2 + 3	

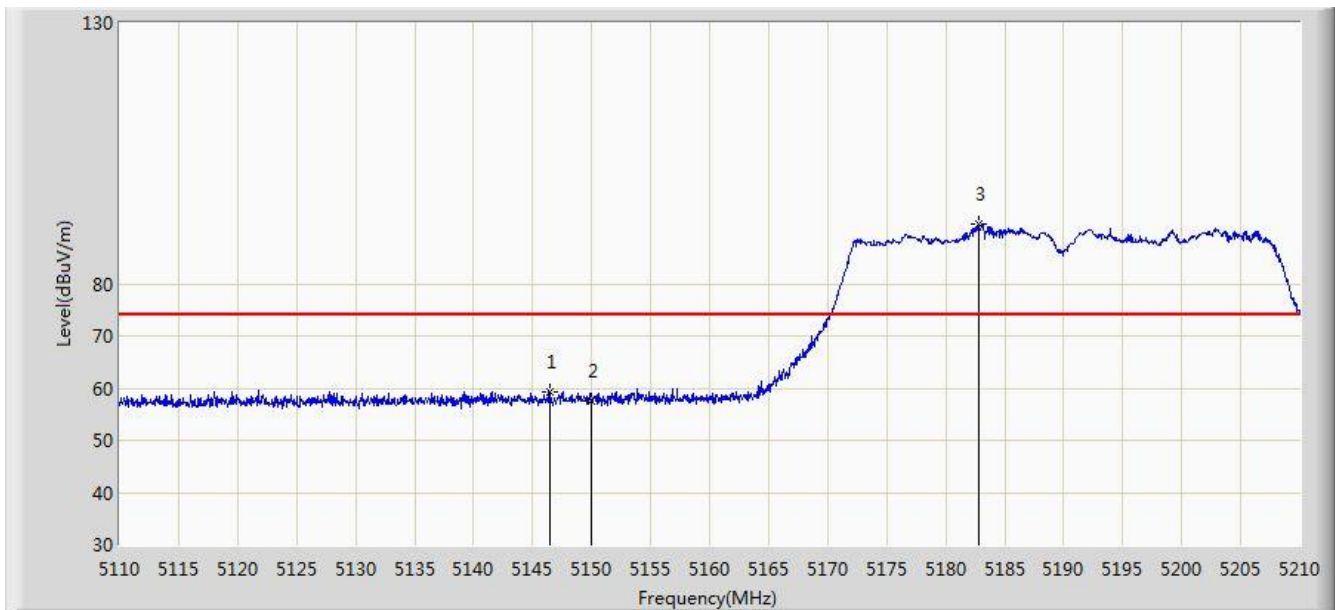


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5831.618	120.199	116.178	N/A	N/A	4.020	PK
2			5850.000	96.057	92.000	-26.143	122.200	4.058	PK
3			5855.000	91.754	87.694	-19.046	110.800	4.060	PK
4			5875.000	78.057	73.952	-27.143	105.200	4.105	PK
5			5925.000	64.717	60.464	-9.283	74.000	4.254	PK
6			5928.825	67.287	63.023	-6.713	74.000	4.263	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 16:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	

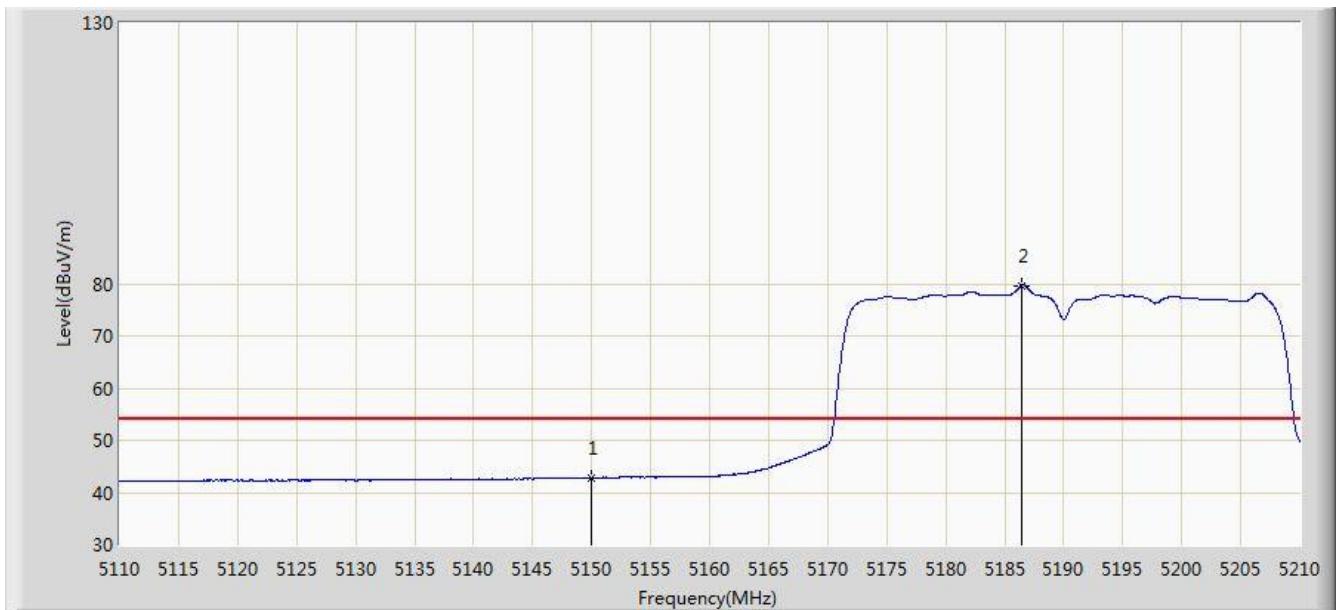


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5146.500	59.405	56.096	-14.595	74.000	3.309	PK
2			5150.000	57.574	54.265	-16.426	74.000	3.309	PK
3		*	5182.750	91.343	88.073	N/A	N/A	3.271	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 16:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	

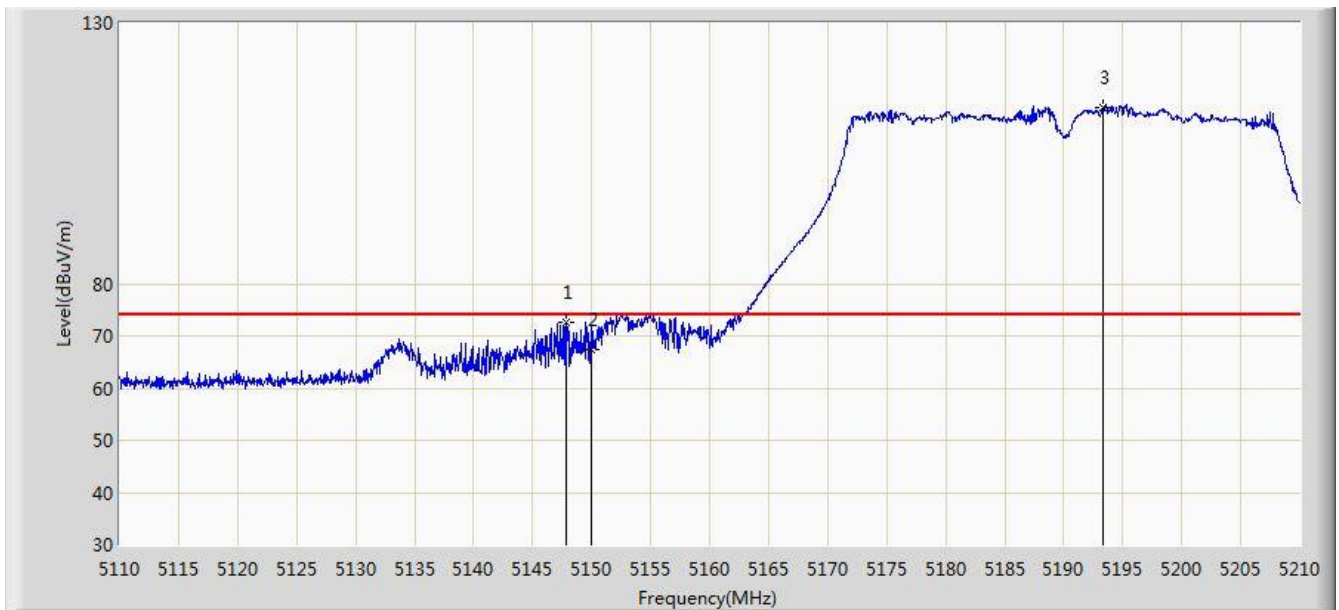


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	42.753	39.444	-11.247	54.000	3.309	AV
2		*	5186.400	79.606	76.341	N/A	N/A	3.265	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 16:13
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	

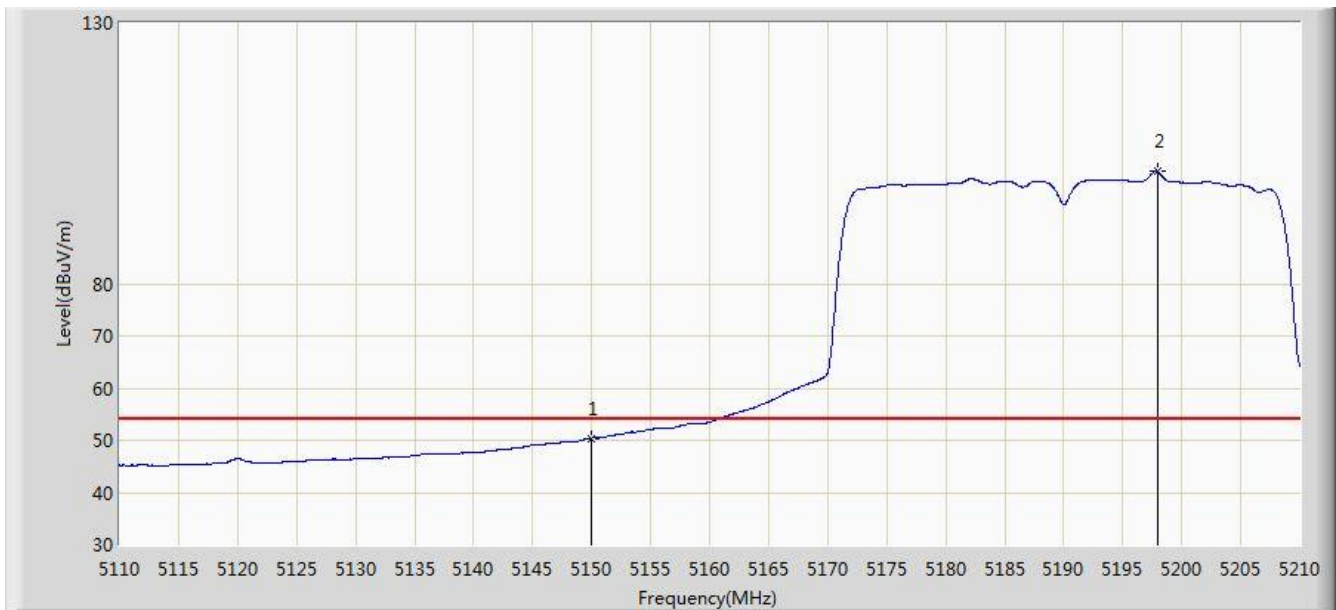


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5147.900	72.617	69.308	-1.383	74.000	3.309	PK
2			5150.000	67.529	64.220	-6.471	74.000	3.309	PK
3		*	5193.350	113.765	110.508	N/A	N/A	3.257	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 16:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 0 + 1 + 2 + 3	

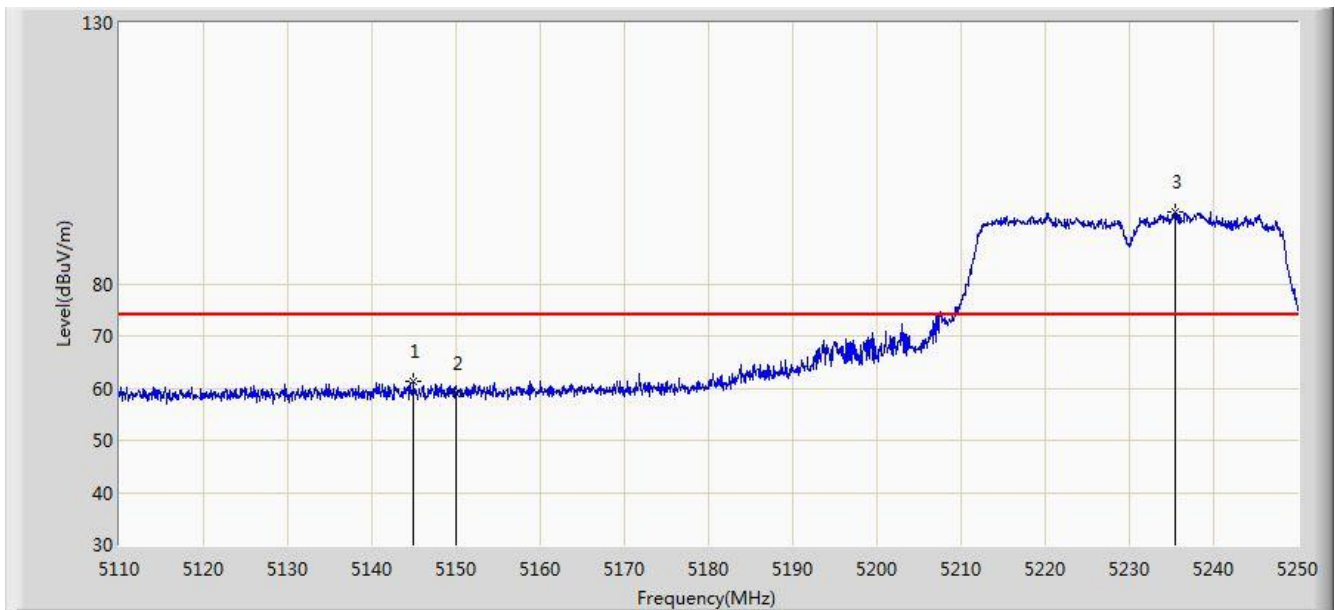


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	50.427	47.118	-3.573	54.000	3.309	AV
2		*	5197.950	101.496	98.244	N/A	N/A	3.252	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	

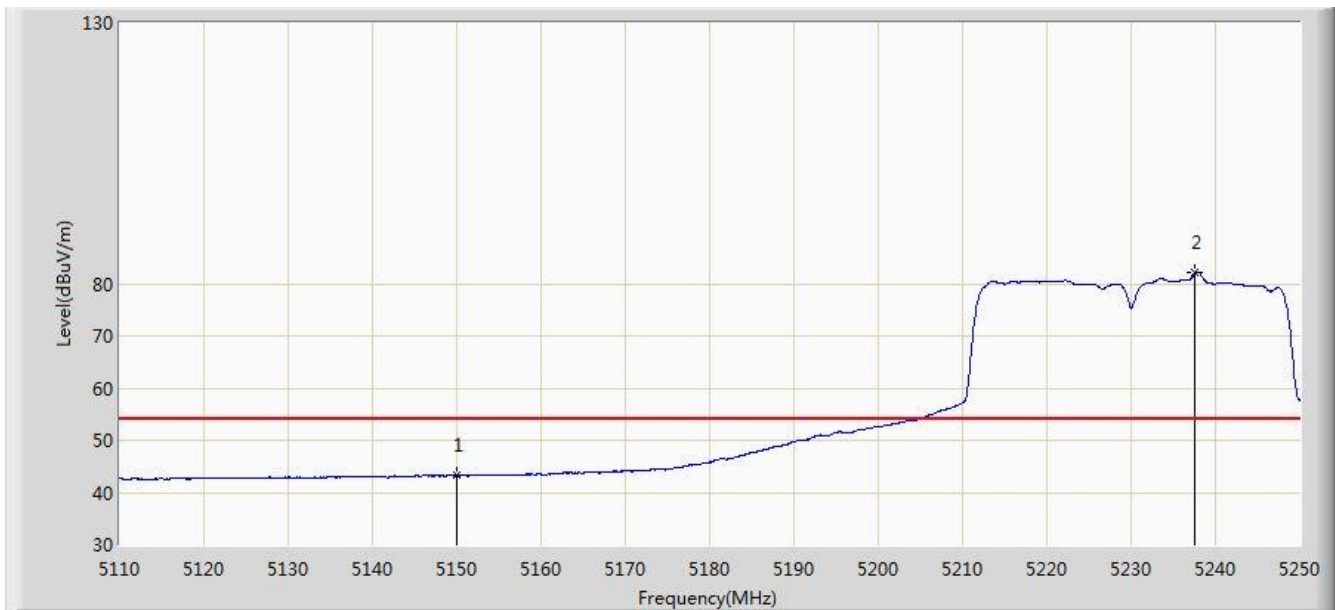


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5144.930	61.170	57.861	-12.830	74.000	3.309	PK
2			5150.000	58.961	55.652	-15.039	74.000	3.309	PK
3		*	5235.510	93.687	90.491	N/A	N/A	3.196	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	

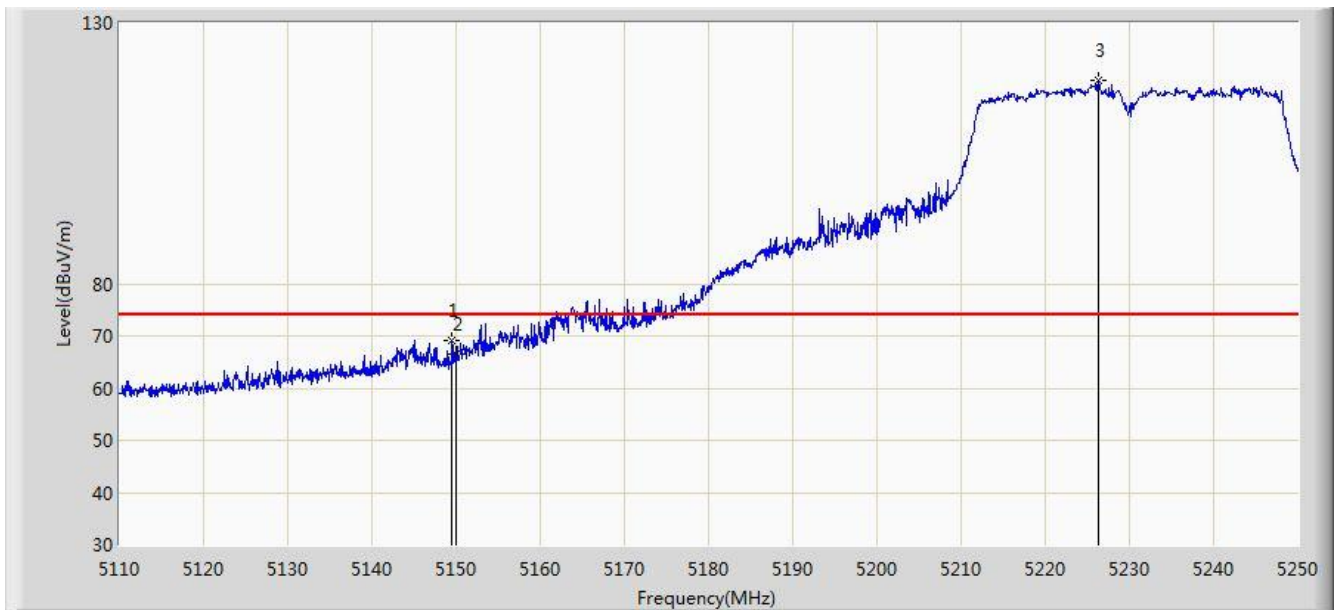


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	43.246	39.937	-10.754	54.000	3.309	AV
2		*	5237.610	82.070	78.877	N/A	N/A	3.193	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	

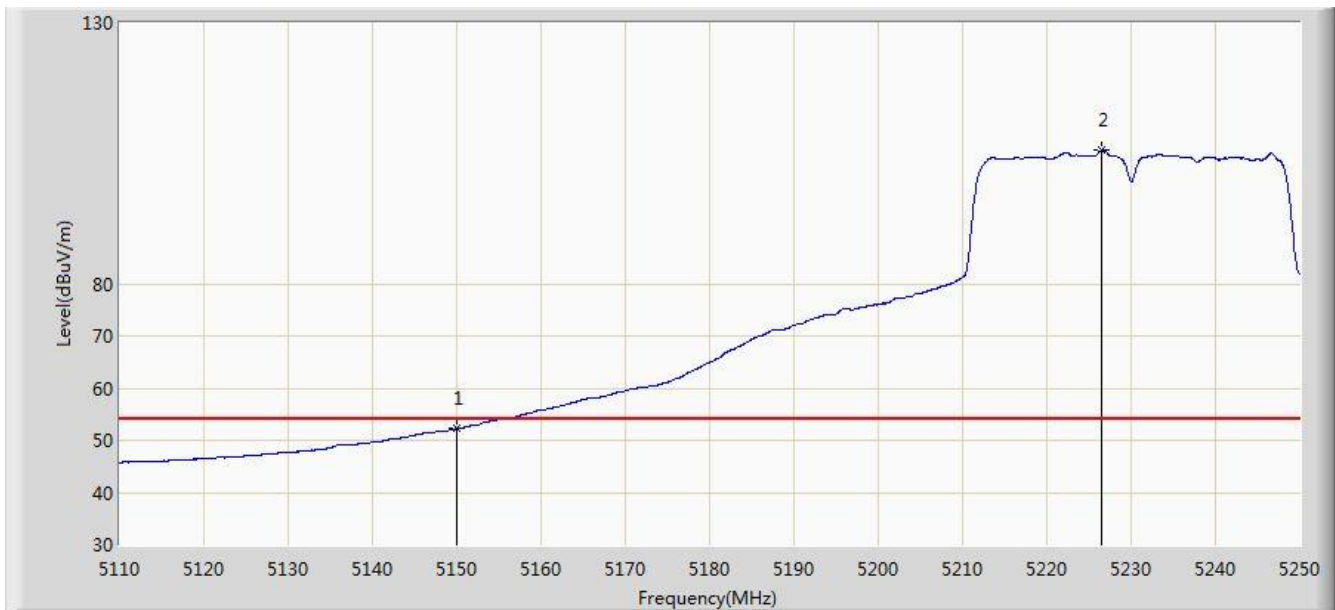


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.480	69.046	65.737	-4.954	74.000	3.309	PK
2			5150.000	66.514	63.205	-7.486	74.000	3.309	PK
3		*	5226.340	119.049	115.844	N/A	N/A	3.206	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 15:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5230MHz Ant 0 + 1 + 2 + 3	

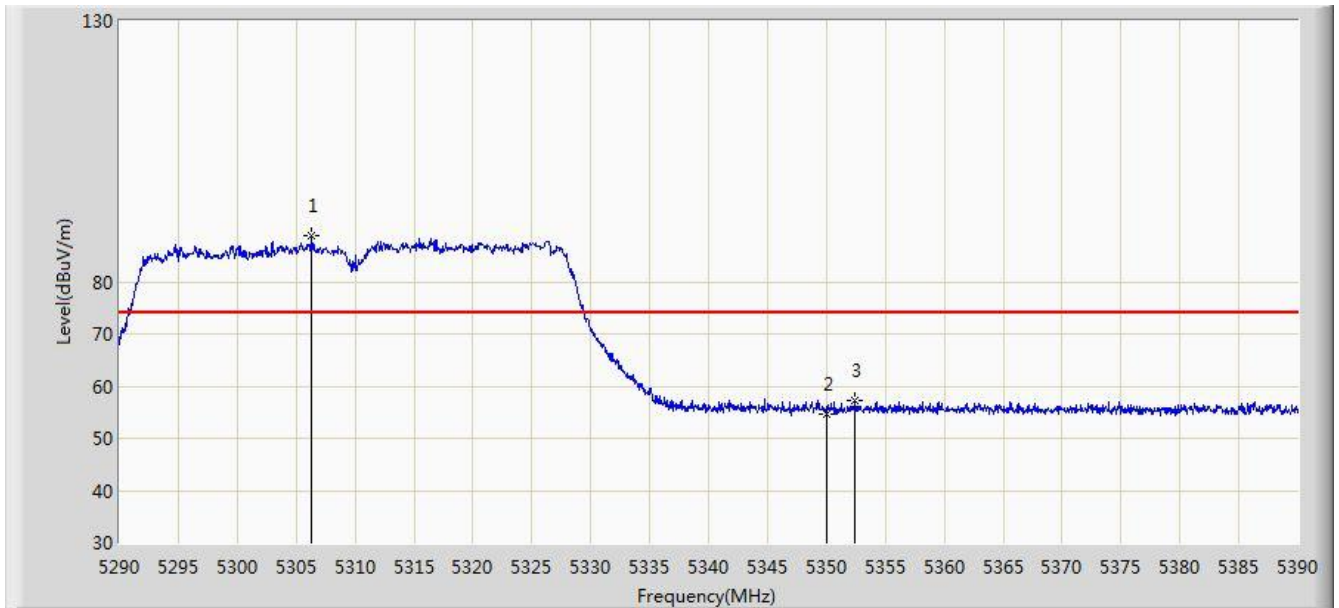


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.228	48.919	-1.772	54.000	3.309	AV
2		*	5226.480	105.688	102.483	N/A	N/A	3.206	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

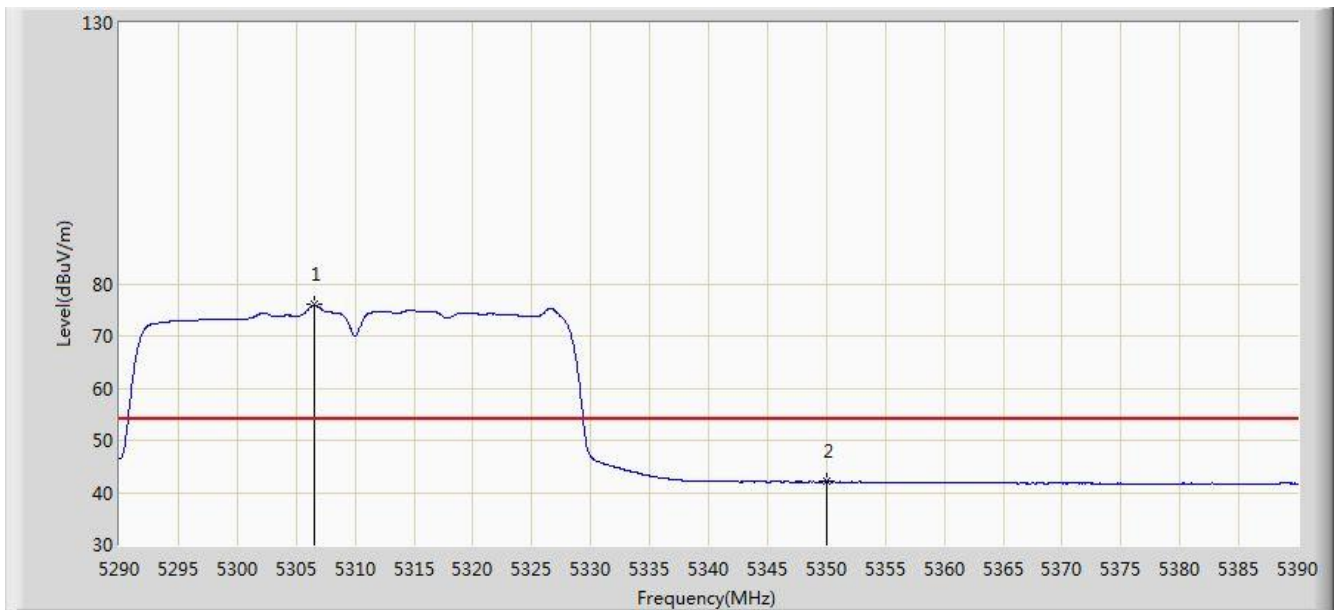


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5306.350	88.950	85.845	N/A	N/A	3.105	PK
2			5350.000	54.579	51.547	-19.421	74.000	3.032	PK
3			5352.450	57.186	54.156	-16.814	74.000	3.029	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

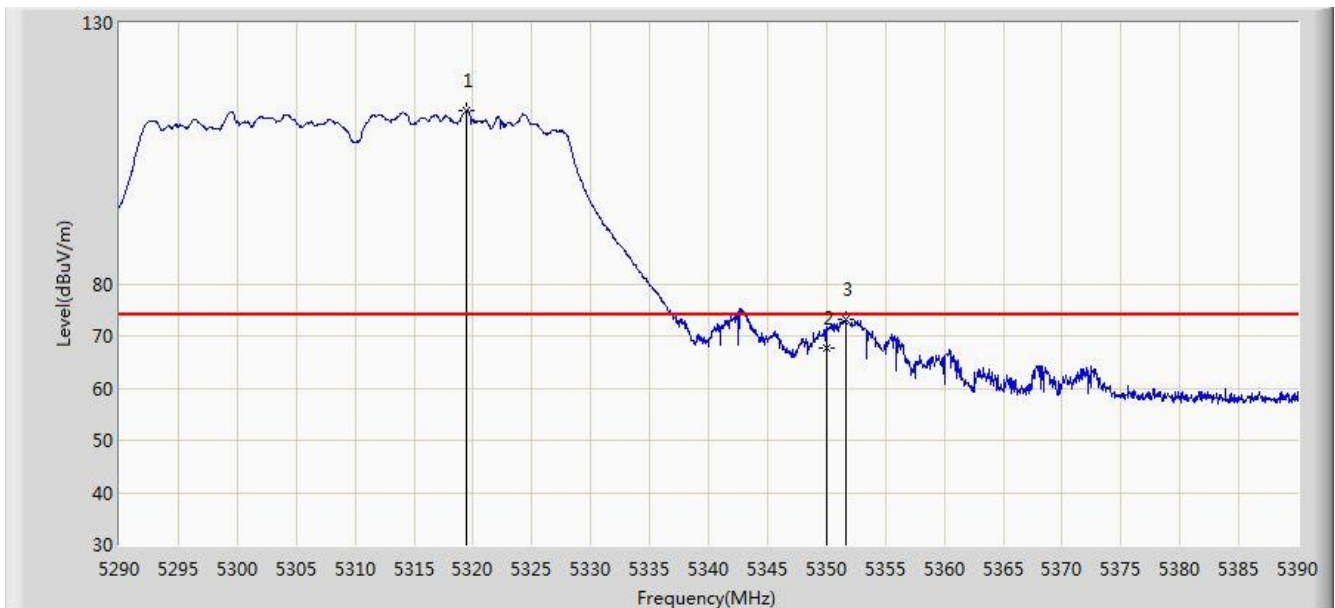


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5306.500	75.970	72.865	N/A	N/A	3.104	AV
2			5350.000	42.070	39.038	-11.930	54.000	3.032	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

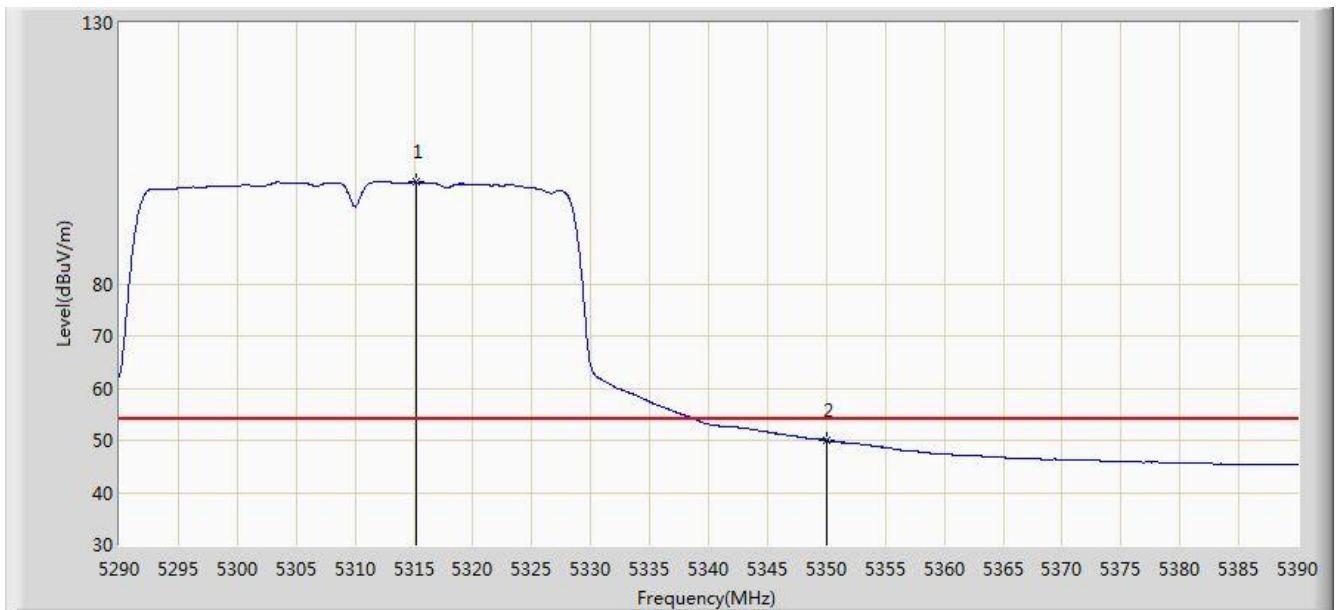


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5319.500	113.214	110.140	N/A	N/A	3.074	PK
2			5350.000	67.587	64.555	-6.413	74.000	3.032	PK
3			5351.600	73.086	70.055	-0.914	74.000	3.031	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 0 + 1 + 2 + 3	

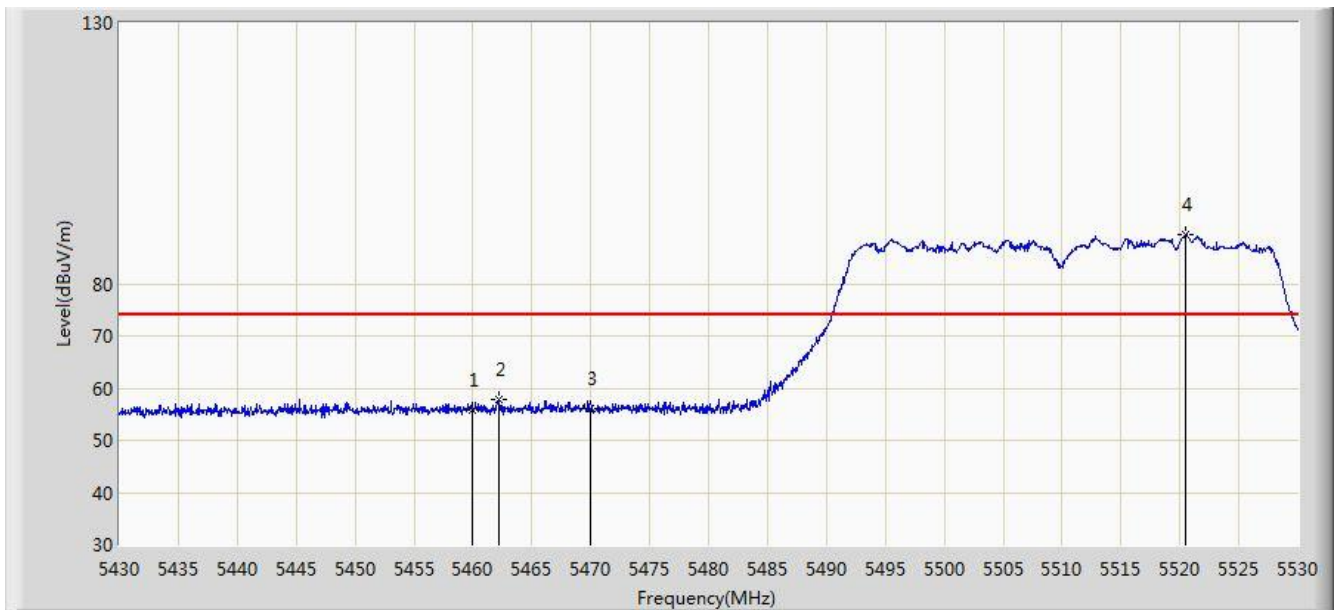


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5315.150	99.430	96.347	N/A	N/A	3.083	AV
2			5350.000	49.964	46.932	-4.036	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	

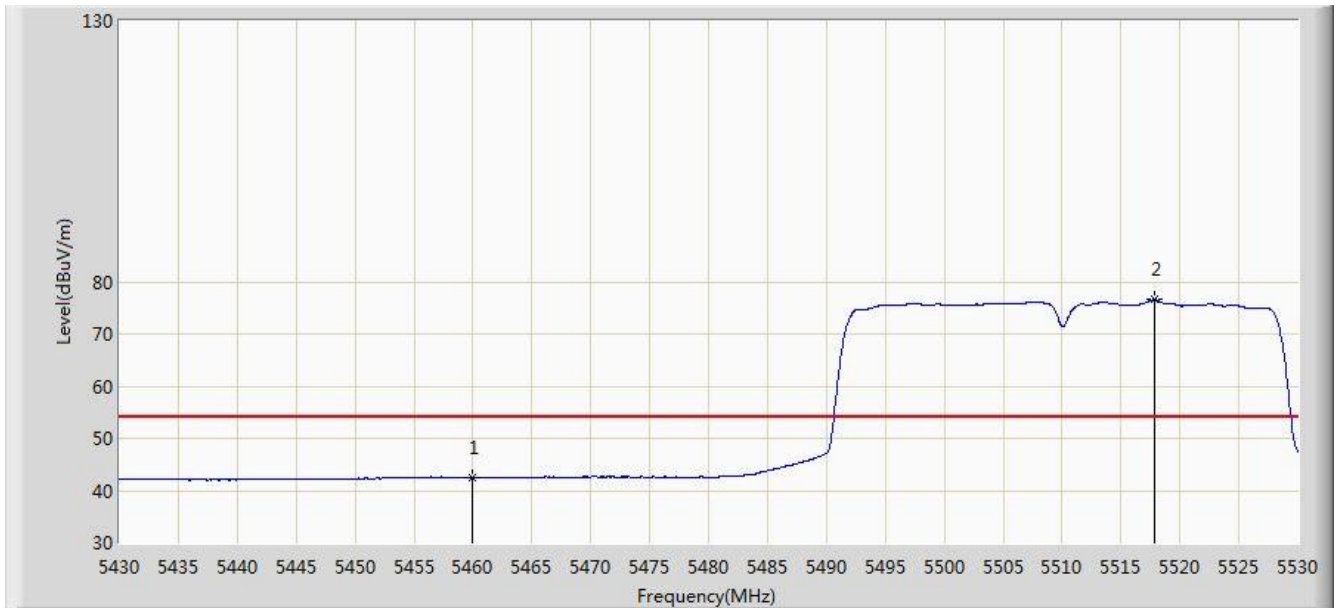


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	55.770	52.288	-18.230	74.000	3.482	PK
2			5462.150	57.760	54.266	-16.240	74.000	3.494	PK
3			5470.000	56.203	52.664	-17.797	74.000	3.539	PK
4		*	5520.450	89.278	85.773	N/A	N/A	3.504	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	

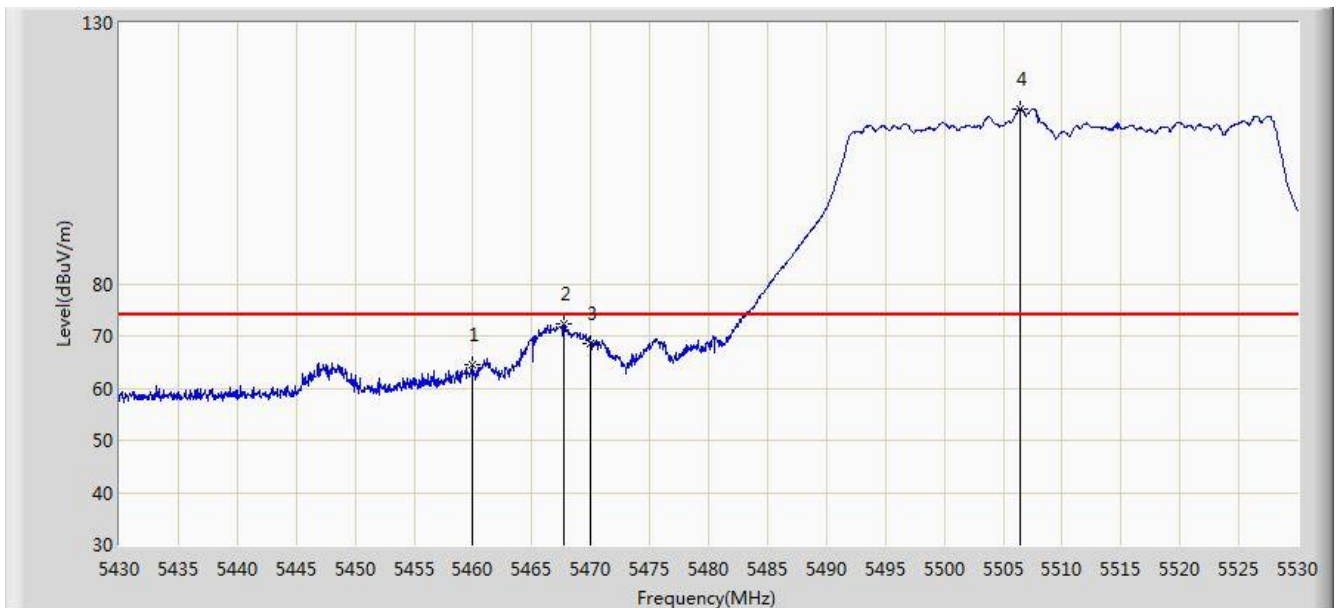


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.493	39.011	-11.507	54.000	3.482	AV
2		*	5517.800	76.564	73.057	N/A	N/A	3.508	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	64.502	61.020	-9.498	74.000	3.482	PK
2			5467.700	72.274	68.748	-1.726	74.000	3.527	PK
3			5470.000	68.525	64.986	-5.475	74.000	3.539	PK
4		*	5506.400	113.540	110.021	N/A	N/A	3.519	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 0 + 1 + 2 + 3	

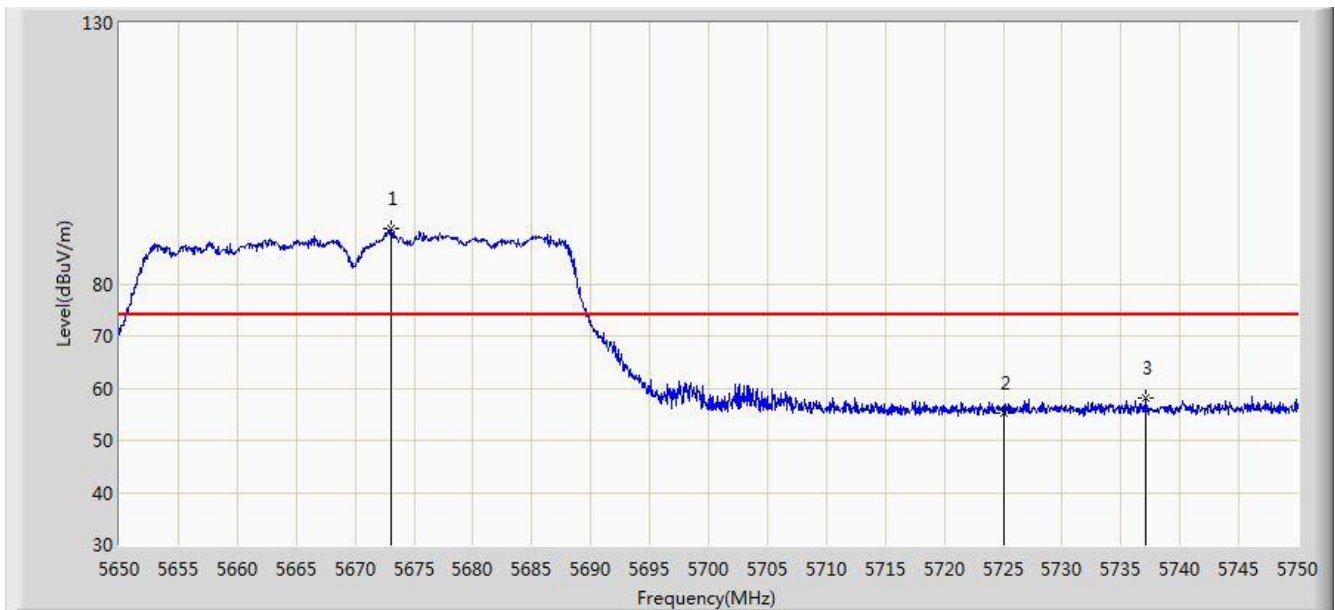


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	47.451	43.969	-6.549	54.000	3.482	AV
2			5470.000	49.012	45.473	-4.988	54.000	3.539	AV
3		*	5507.850	98.821	95.303	N/A	N/A	3.518	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

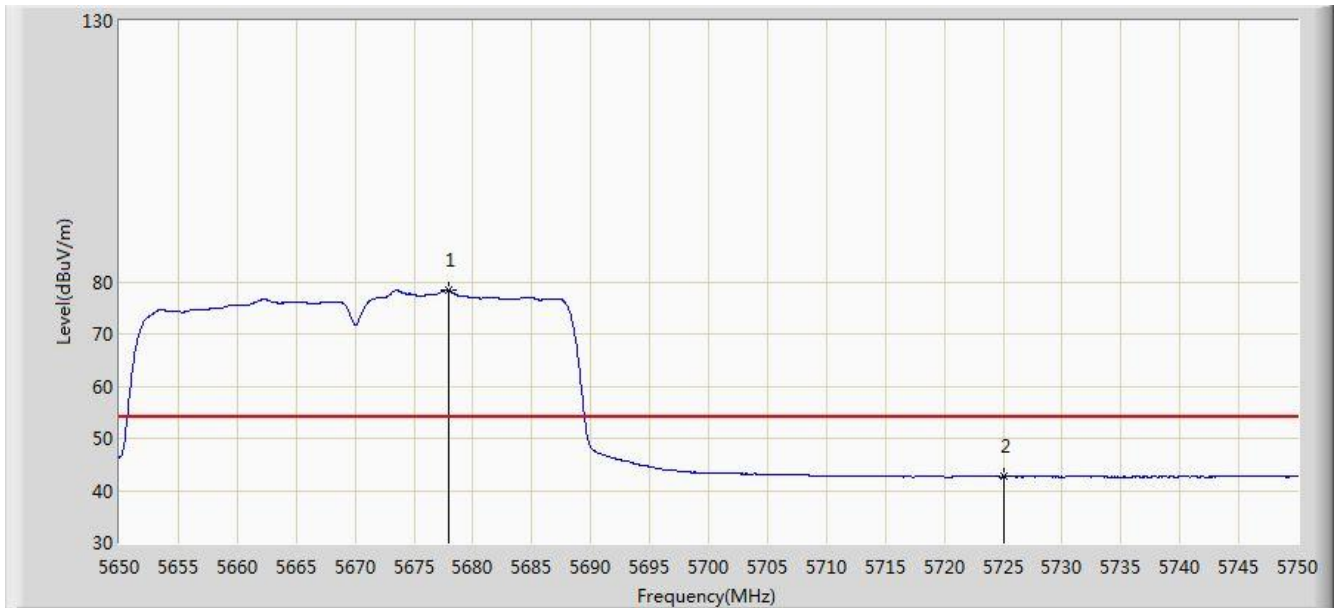


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5673.050	90.584	86.918	N/A	N/A	3.667	PK
2			5725.000	55.329	51.538	-18.671	74.000	3.791	PK
3			5737.100	58.009	54.180	-15.991	74.000	3.828	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

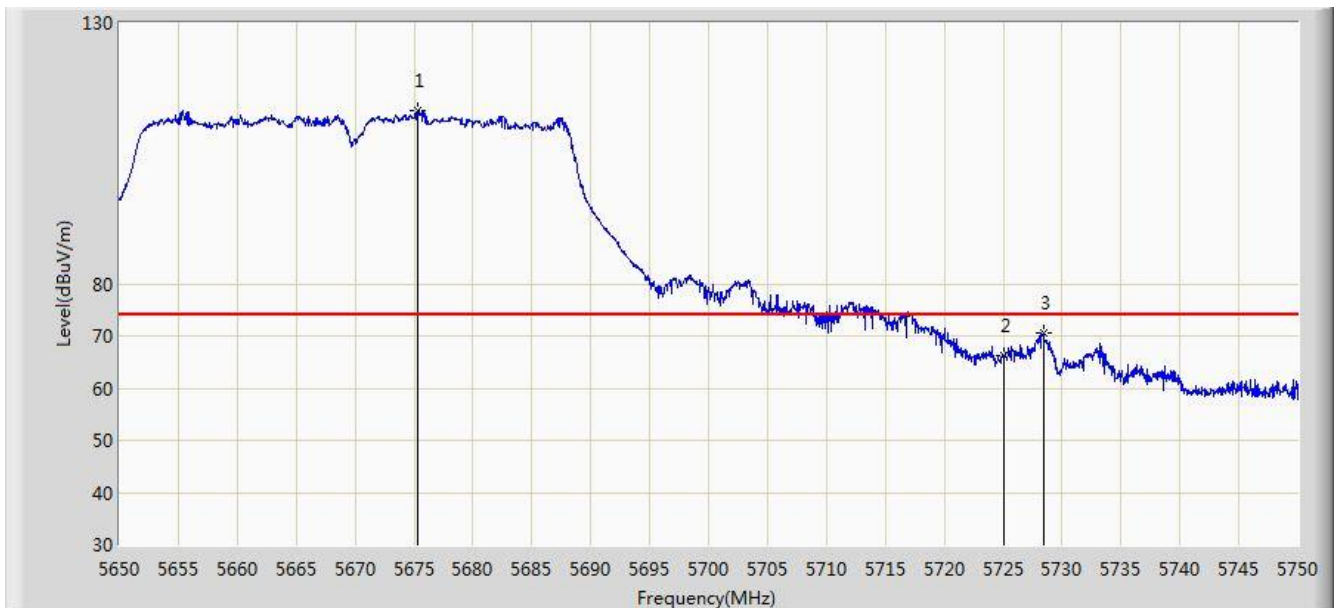


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5677.950	78.356	74.681	N/A	N/A	3.676	AV
2			5725.000	42.675	38.884	-11.325	54.000	3.791	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

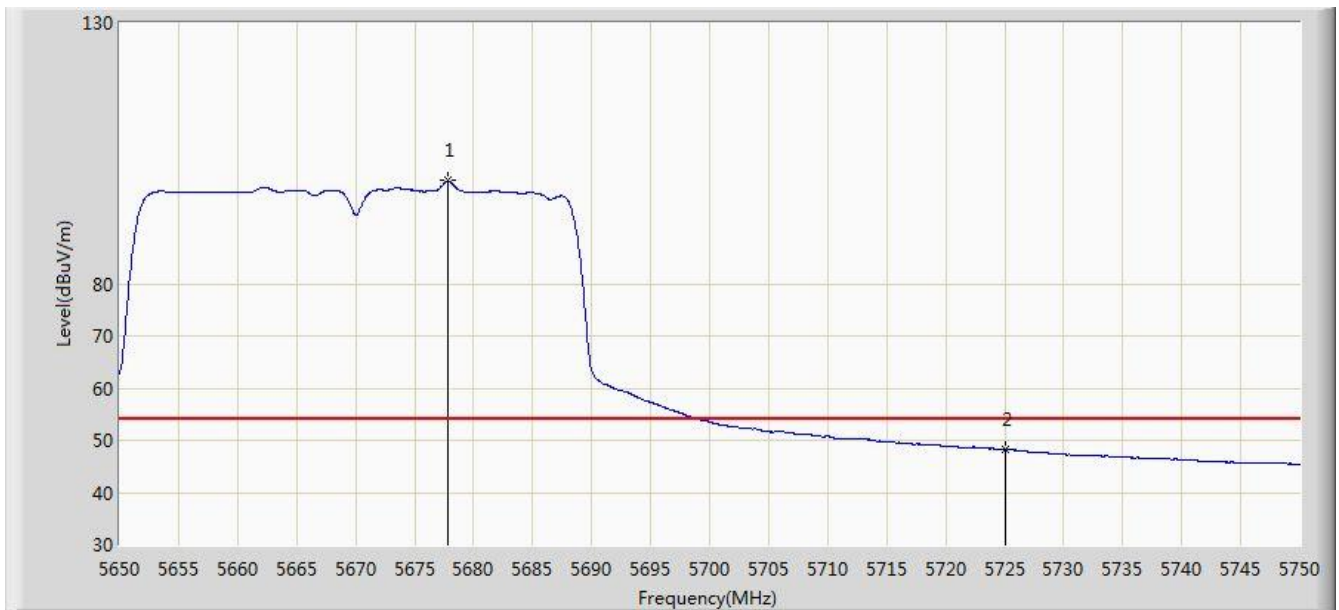


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5675.350	113.312	109.642	N/A	N/A	3.670	PK
2			5725.000	66.100	62.309	-7.900	74.000	3.791	PK
3			5728.450	70.718	66.917	-3.282	74.000	3.802	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5670MHz Ant 0 + 1 + 2 + 3	

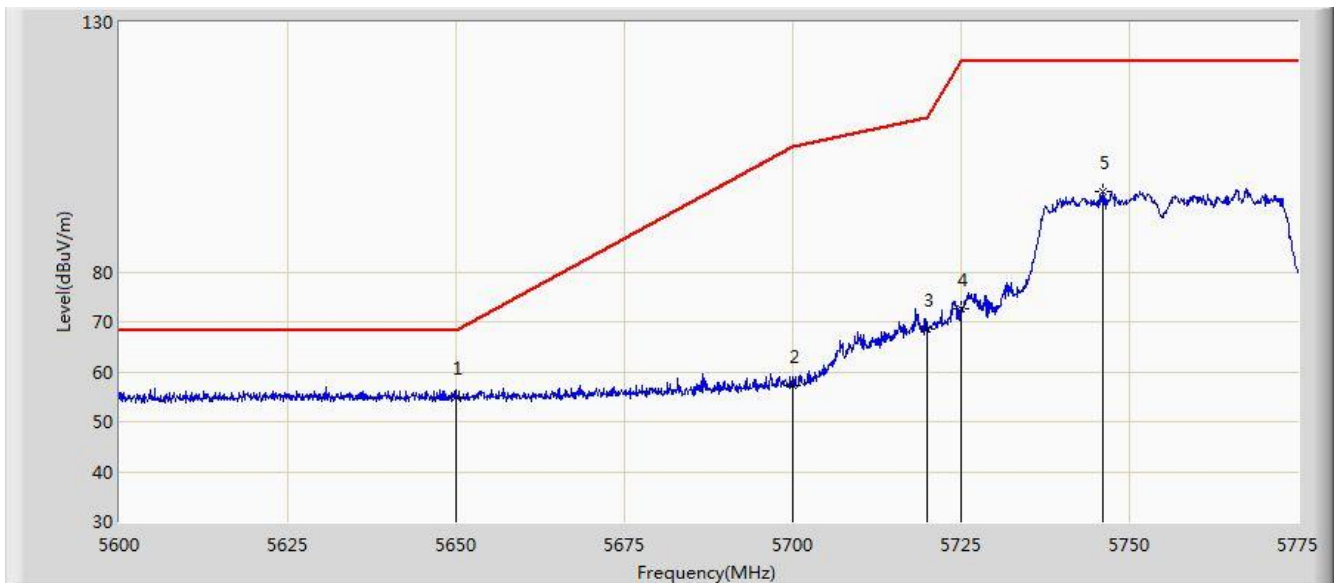


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5677.850	99.727	96.052	N/A	N/A	3.675	AV
2			5725.000	48.239	44.448	-5.761	54.000	3.791	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 16:47
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant 0 + 1 + 2 + 3	

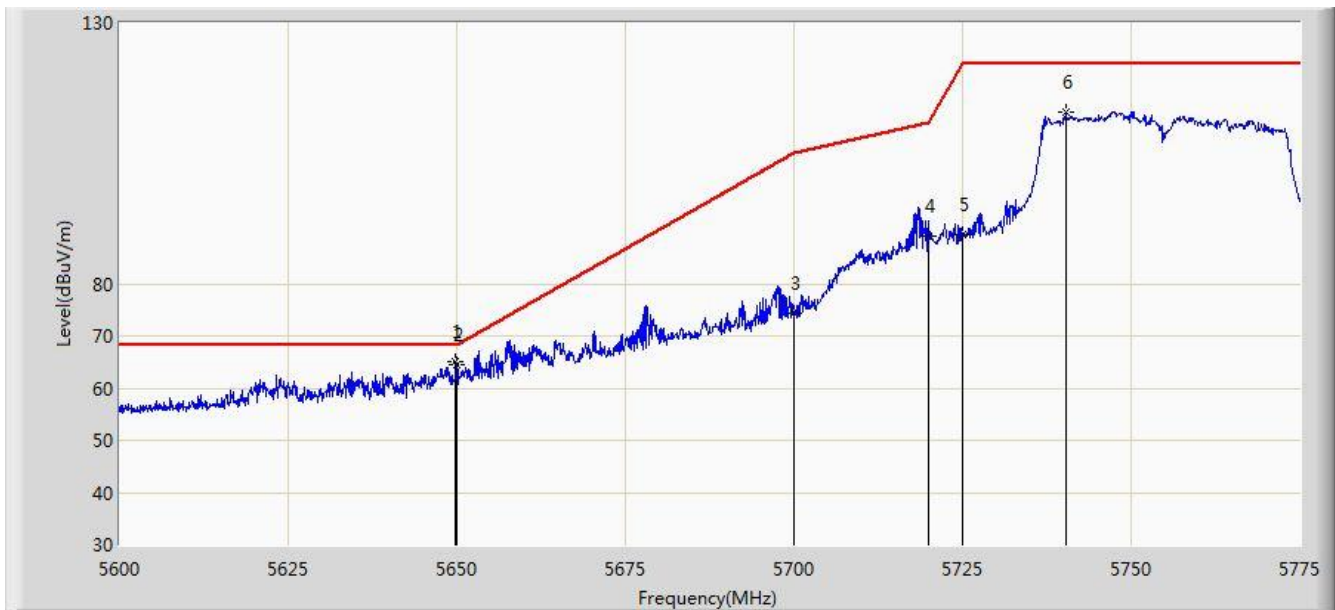


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5650.000	54.943	51.316	-13.257	68.200	3.627	PK
2			5700.000	57.226	53.507	-47.974	105.200	3.719	PK
3			5720.000	68.639	64.863	-42.161	110.800	3.776	PK
4			5725.000	72.467	68.676	-49.733	122.200	3.791	PK
5			5745.950	96.100	92.244	N/A	N/A	3.856	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 16:46
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant 0 + 1 + 2 + 3	

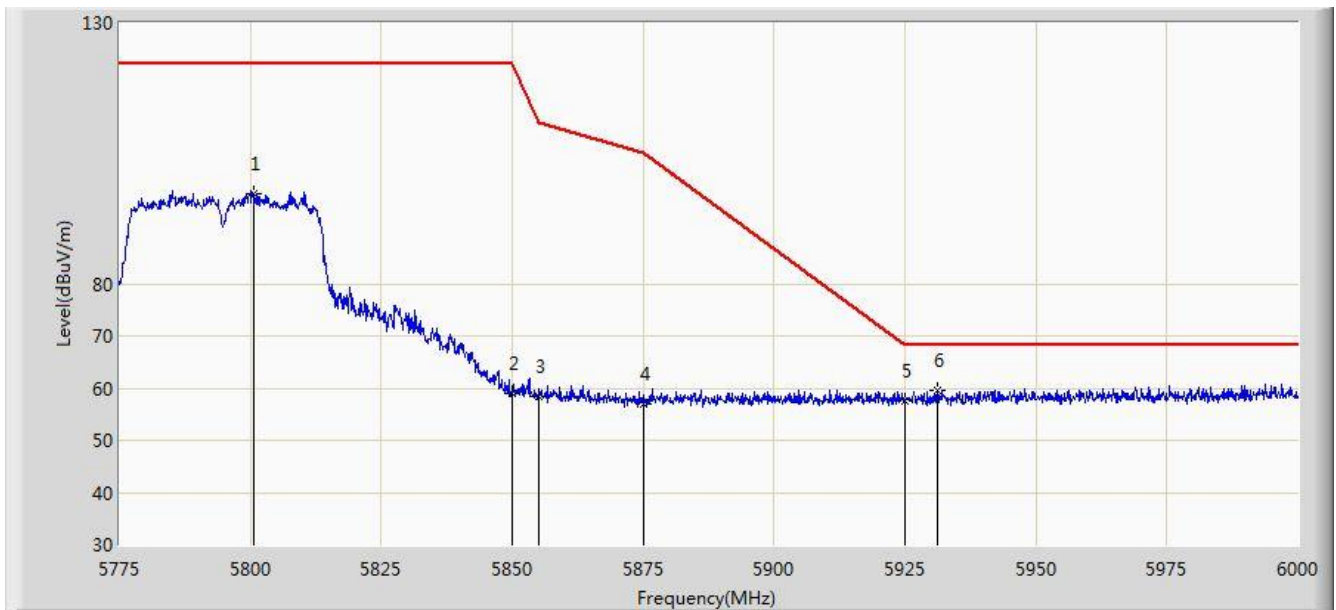


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5649.875	64.932	61.305	-3.268	68.200	3.627	PK
2			5650.000	64.371	60.744	-3.829	68.200	3.627	PK
3			5700.000	74.317	70.598	-30.883	105.200	3.719	PK
4			5720.000	89.034	85.258	-21.766	110.800	3.776	PK
5			5725.000	89.515	85.724	-32.685	122.200	3.791	PK
6			5740.263	112.895	109.057	N/A	N/A	3.838	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:09
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant 0 + 1 + 2 + 3	

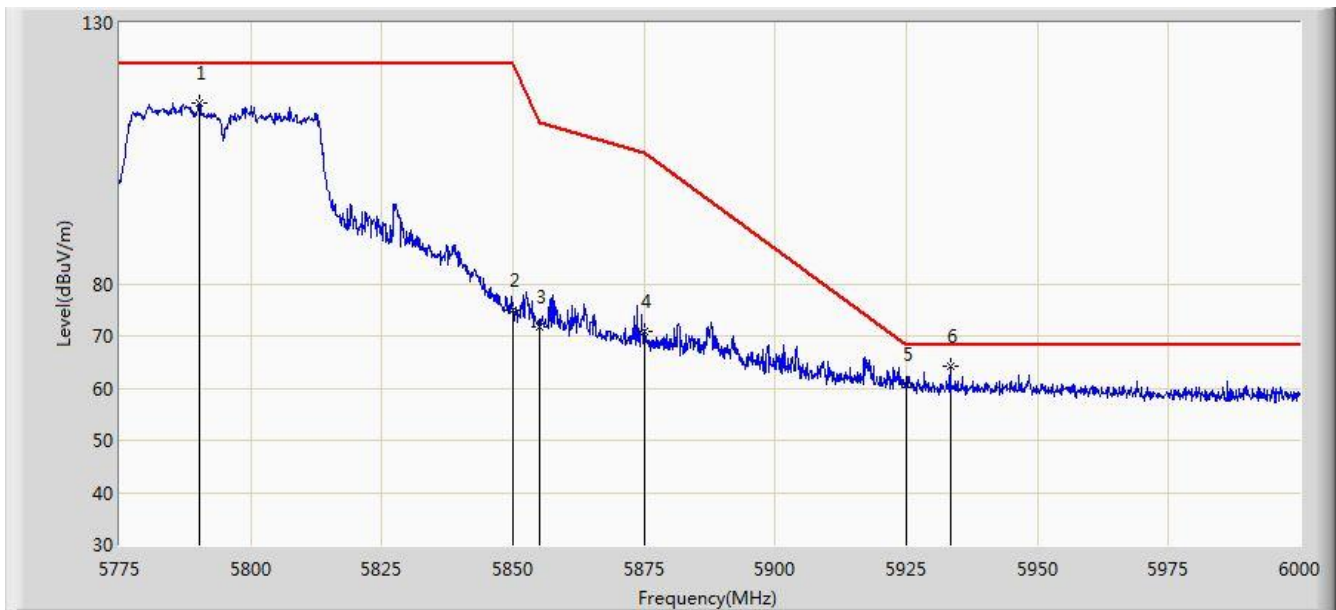


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5800.538	97.308	93.347	N/A	N/A	3.960	PK
2			5850.000	59.128	55.071	-63.072	122.200	4.058	PK
3			5855.000	58.543	54.483	-52.257	110.800	4.060	PK
4			5875.000	56.860	52.755	-48.340	105.200	4.105	PK
5			5925.000	57.624	53.371	-10.576	68.200	4.254	PK
6		*	5931.263	59.566	55.299	-8.634	68.200	4.267	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:08
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant 0 + 1 + 2 + 3	

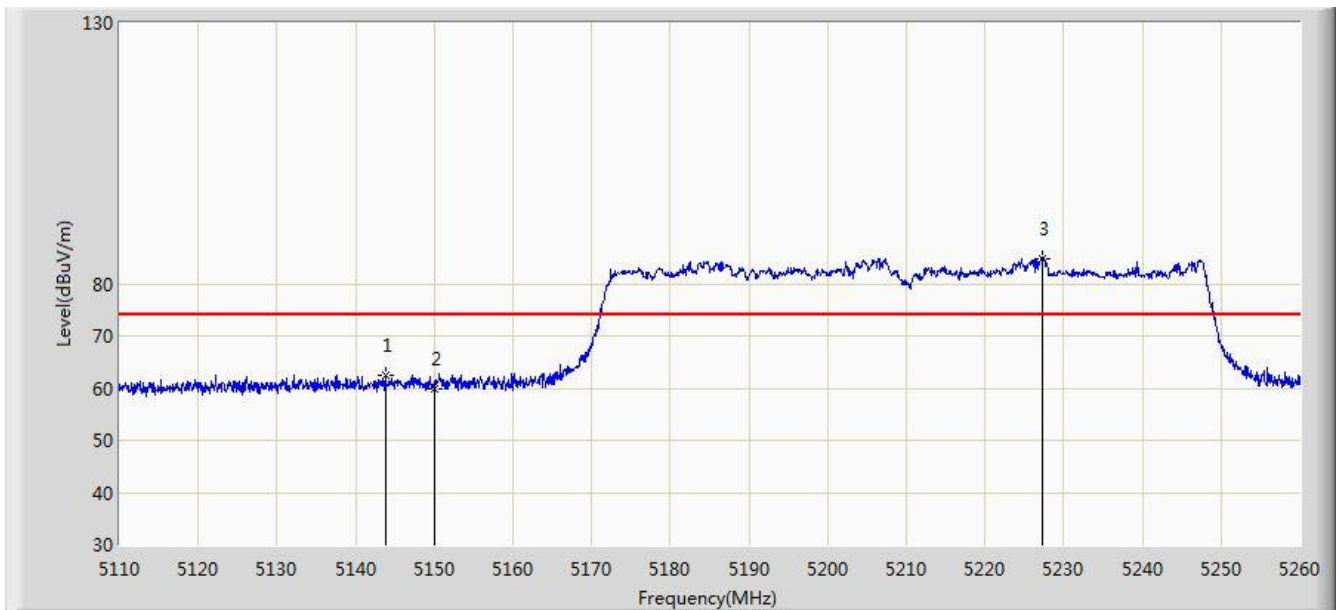


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5790.300	114.651	110.705	N/A	N/A	3.946	PK
2			5850.000	75.042	70.985	-47.158	122.200	4.058	PK
3			5855.000	71.828	67.768	-38.972	110.800	4.060	PK
4			5875.000	70.925	66.820	-34.275	105.200	4.105	PK
5			5925.000	60.826	56.573	-7.374	68.200	4.254	PK
6		*	5933.400	64.068	59.800	-4.132	68.200	4.268	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0 + 1 + 2 + 3	

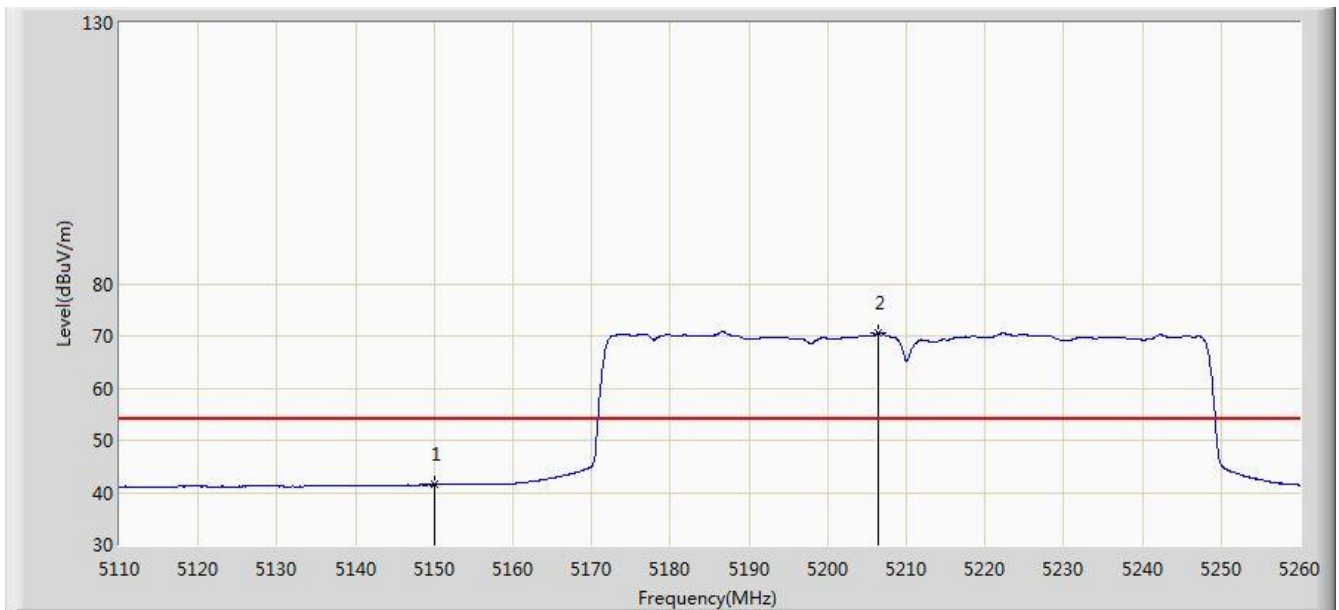


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5143.750	62.523	59.214	-11.477	74.000	3.310	PK
2			5150.000	59.944	56.635	-14.056	74.000	3.309	PK
3		*	5227.225	84.893	81.689	N/A	N/A	3.204	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0 + 1 + 2 + 3	

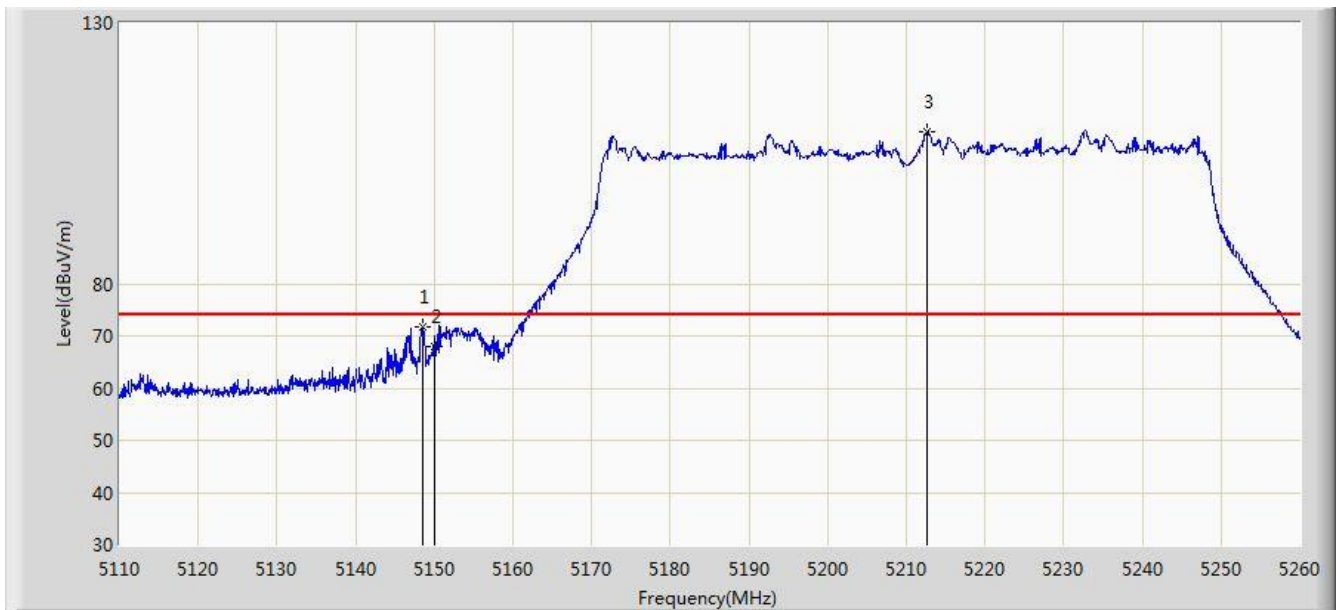


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	41.495	38.186	-12.505	54.000	3.309	AV
2		*	5206.450	70.546	67.312	N/A	N/A	3.234	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0 + 1 + 2 + 3	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.550	71.628	68.319	-2.372	74.000	3.309	PK
2			5150.000	68.088	64.779	-5.912	74.000	3.309	PK
3		*	5212.600	109.074	105.852	N/A	N/A	3.222	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant 0 + 1 + 2 + 3	

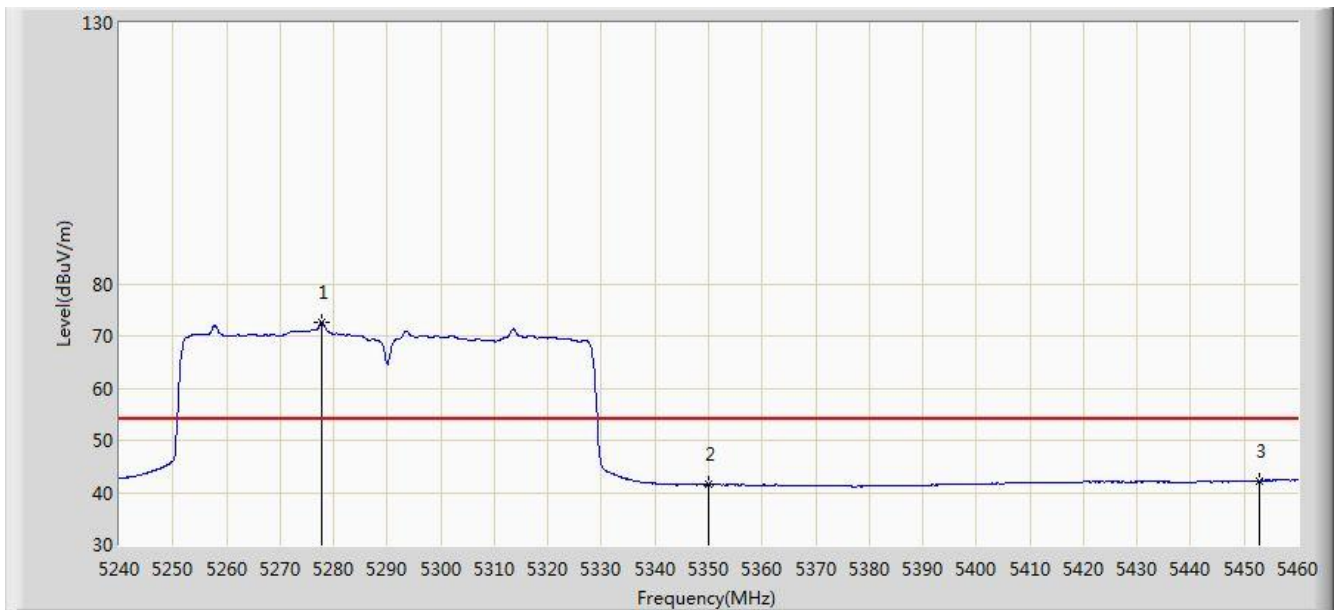


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.401	44.092	-6.599	54.000	3.309	AV
2		*	5242.225	93.281	90.094	N/A	N/A	3.186	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 0 + 1 + 2 + 3	

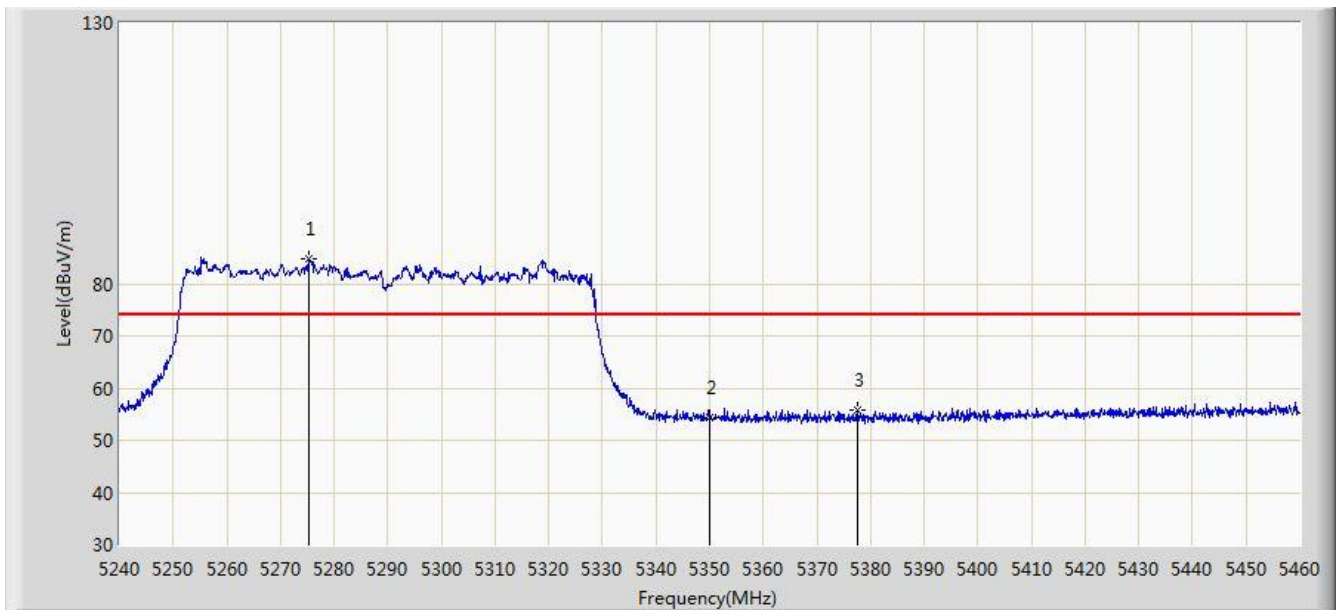


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5277.840	72.541	69.357	N/A	N/A	3.184	AV
2			5350.000	41.478	38.446	-12.522	54.000	3.032	AV
3			5452.960	42.270	38.829	-11.730	54.000	3.442	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 0 + 1 + 2 + 3	

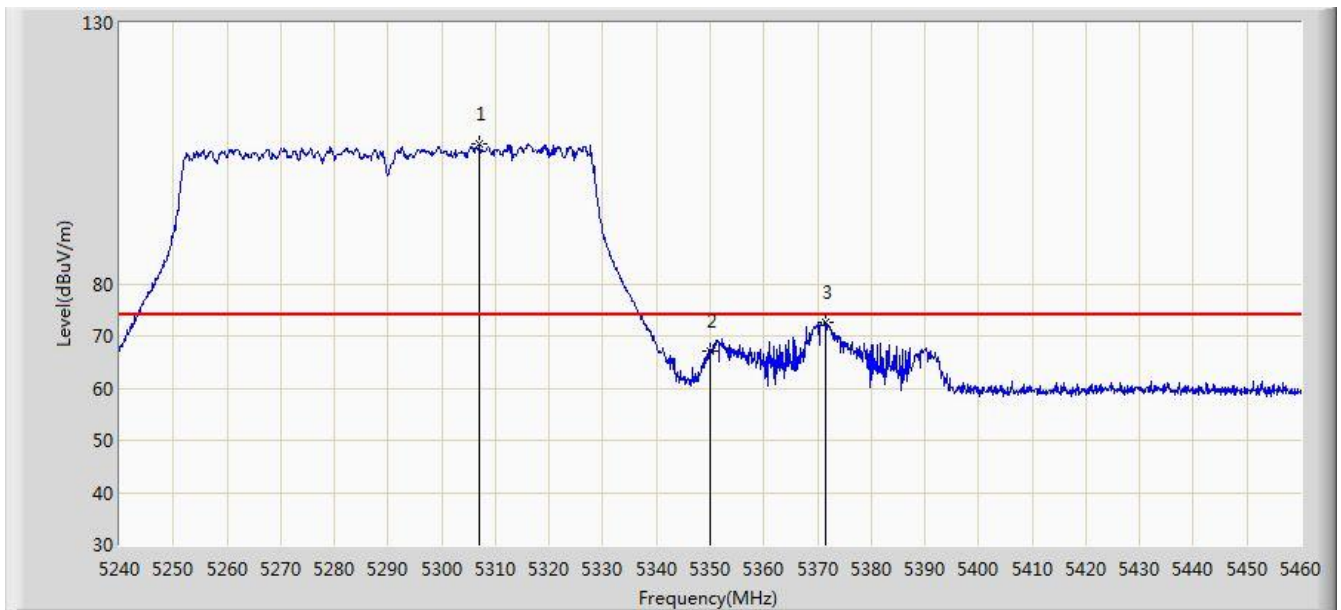


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5275.310	84.786	81.600	N/A	N/A	3.186	PK
2			5350.000	54.346	51.314	-19.654	74.000	3.032	PK
3			5377.500	55.730	52.703	-18.270	74.000	3.027	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 0 + 1 + 2 + 3	

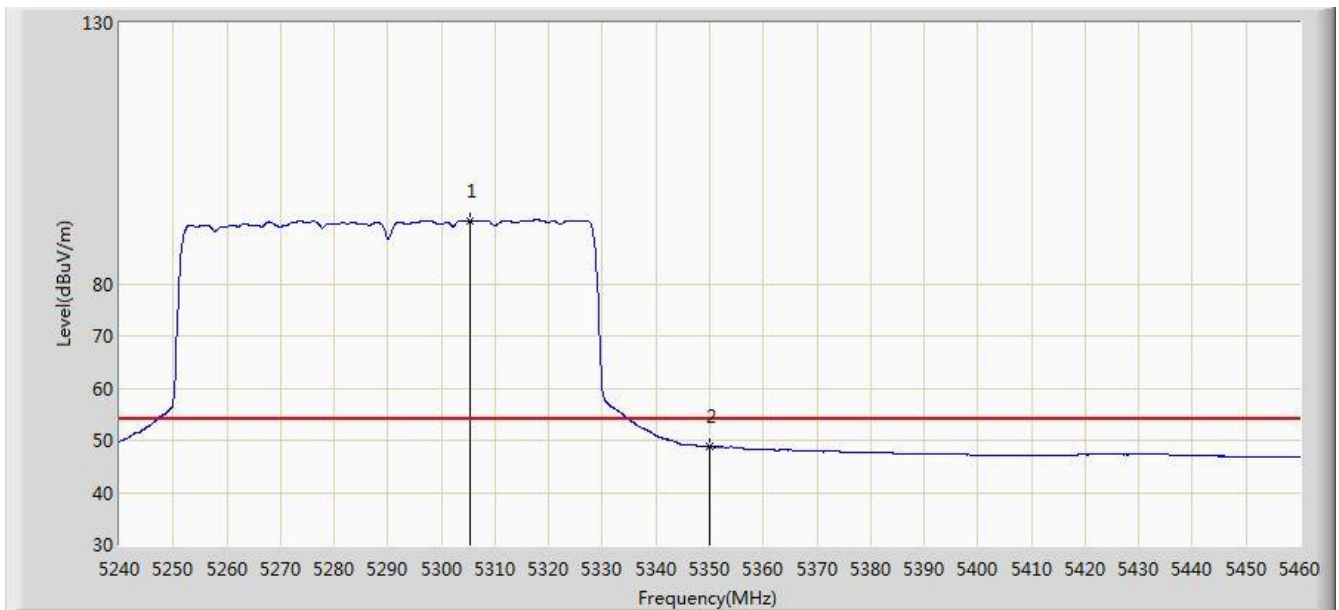


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5307.100	106.927	103.824	N/A	N/A	3.103	PK
2			5350.000	67.120	64.088	-6.880	74.000	3.032	PK
3			5371.450	72.624	69.608	-1.376	74.000	3.016	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 08:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5290MHz Ant 0 + 1 + 2 + 3	

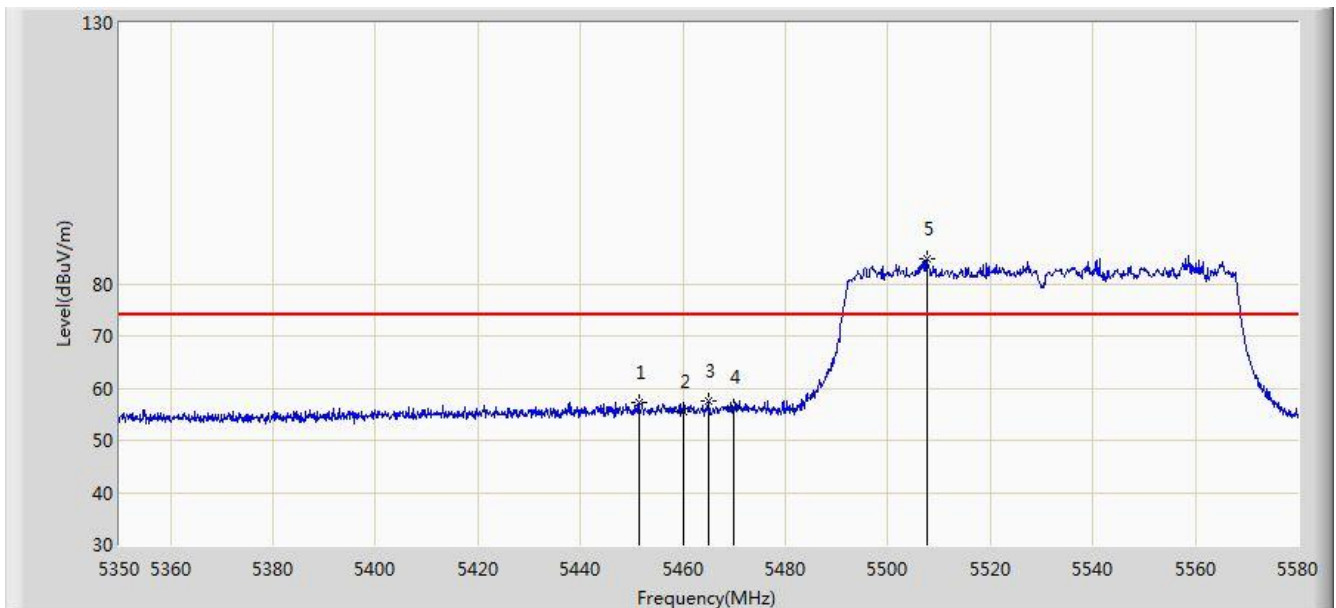


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5305.340	92.057	88.949	N/A	N/A	3.107	AV
2			5350.000	48.741	45.709	-5.259	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 09:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 0 + 1 + 2 + 3	

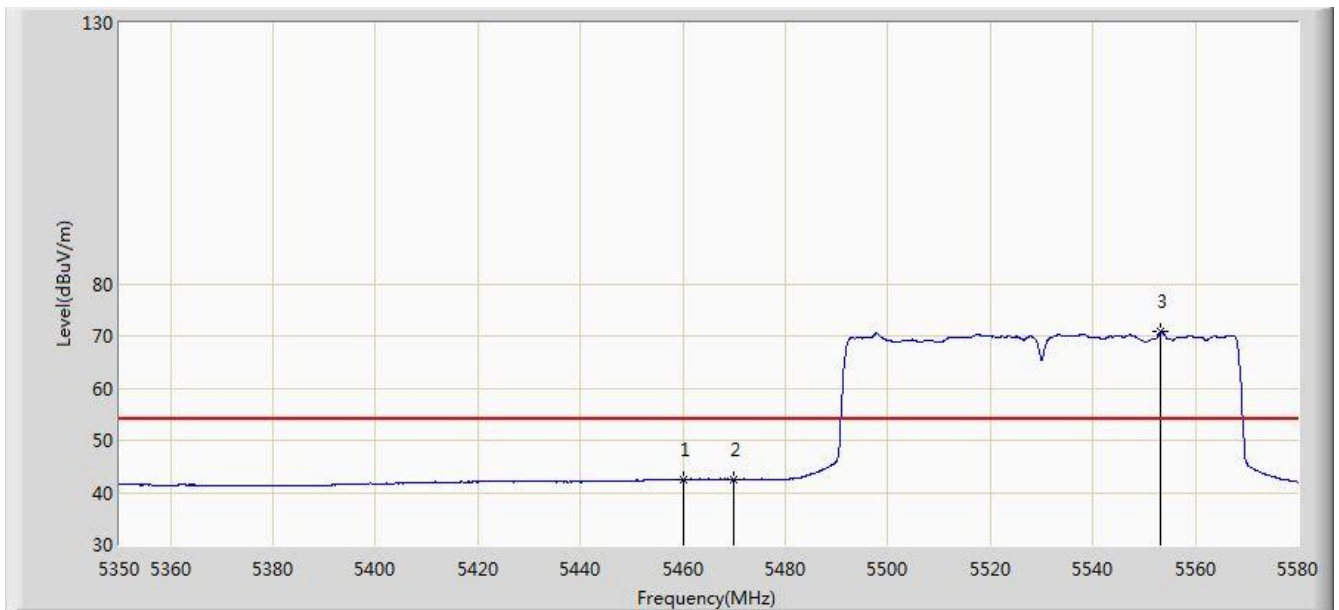


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5451.430	57.177	53.743	-16.823	74.000	3.435	PK
2			5460.000	55.401	51.919	-18.599	74.000	3.482	PK
3			5464.885	57.408	53.898	-16.592	74.000	3.510	PK
4			5470.000	56.441	52.902	-17.559	74.000	3.539	PK
5		*	5507.665	84.668	81.150	N/A	N/A	3.517	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 09:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 0 + 1 + 2 + 3	

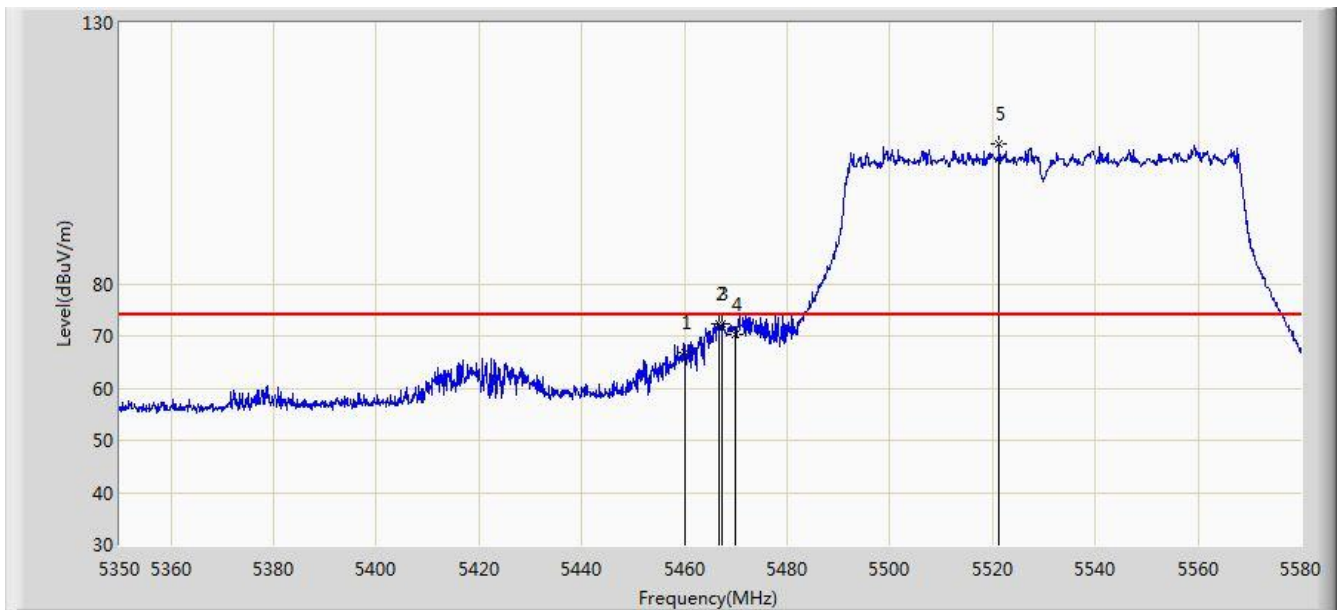


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	42.514	39.032	-11.486	54.000	3.482	AV
2			5470.000	42.479	38.940	-11.521	54.000	3.539	AV
3		*	5553.320	70.853	67.364	N/A	N/A	3.489	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 09:14
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 0 + 1 + 2 + 3	

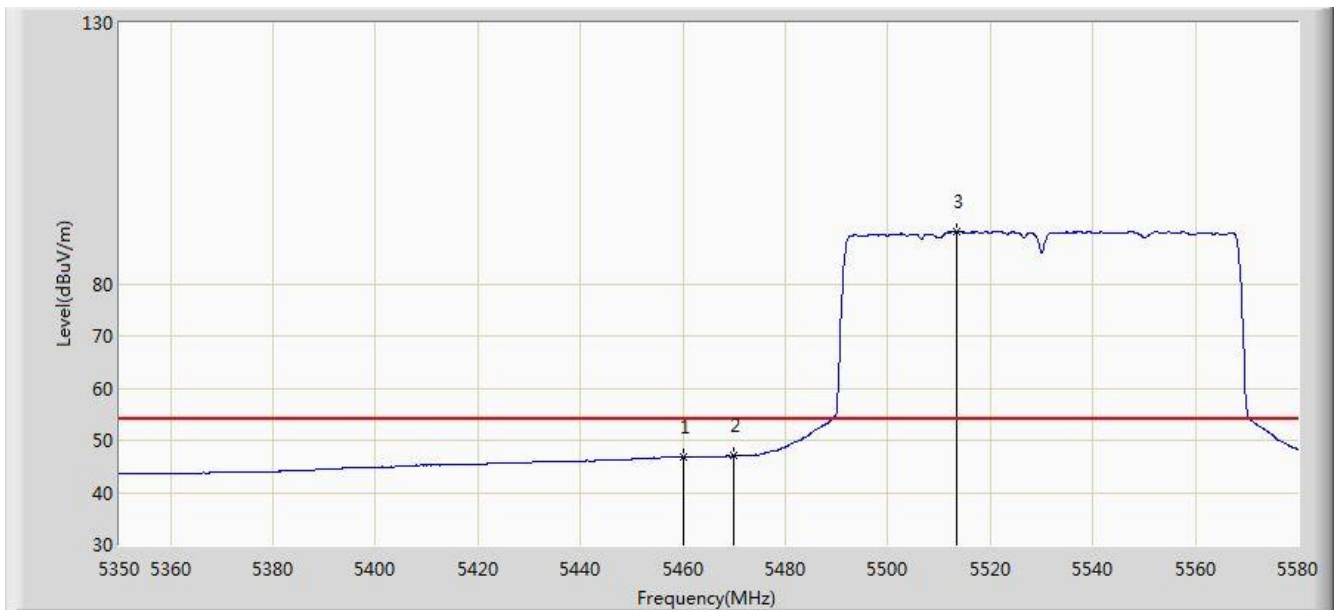


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	66.700	63.218	-7.300	74.000	3.482	PK
2			5466.840	72.254	68.733	-1.746	74.000	3.521	PK
3			5467.300	72.446	68.922	-1.554	74.000	3.523	PK
4			5470.000	70.165	66.626	-3.835	74.000	3.539	PK
5		*	5521.235	106.712	103.208	N/A	N/A	3.504	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 09:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5530MHz Ant 0 + 1 + 2 + 3	

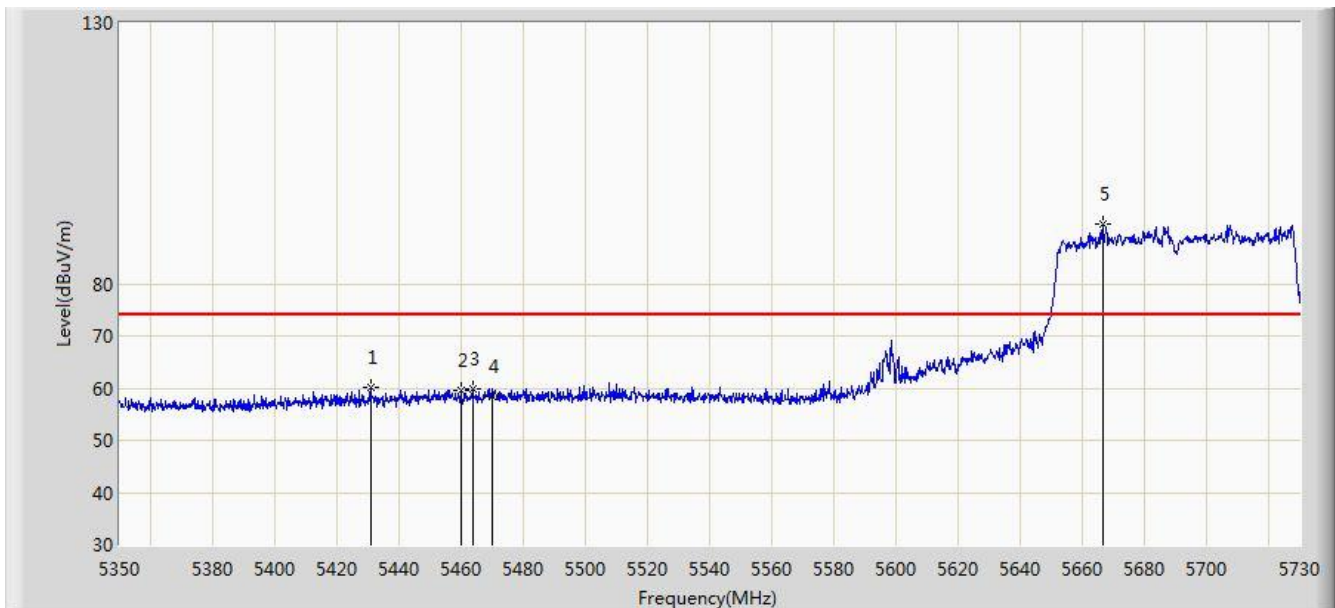


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	46.690	43.208	-7.310	54.000	3.482	AV
2			5470.000	46.996	43.457	-7.004	54.000	3.539	AV
3		*	5513.415	89.939	86.427	N/A	N/A	3.512	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 16:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5690MHz Ant 0 + 1 + 2 + 3	

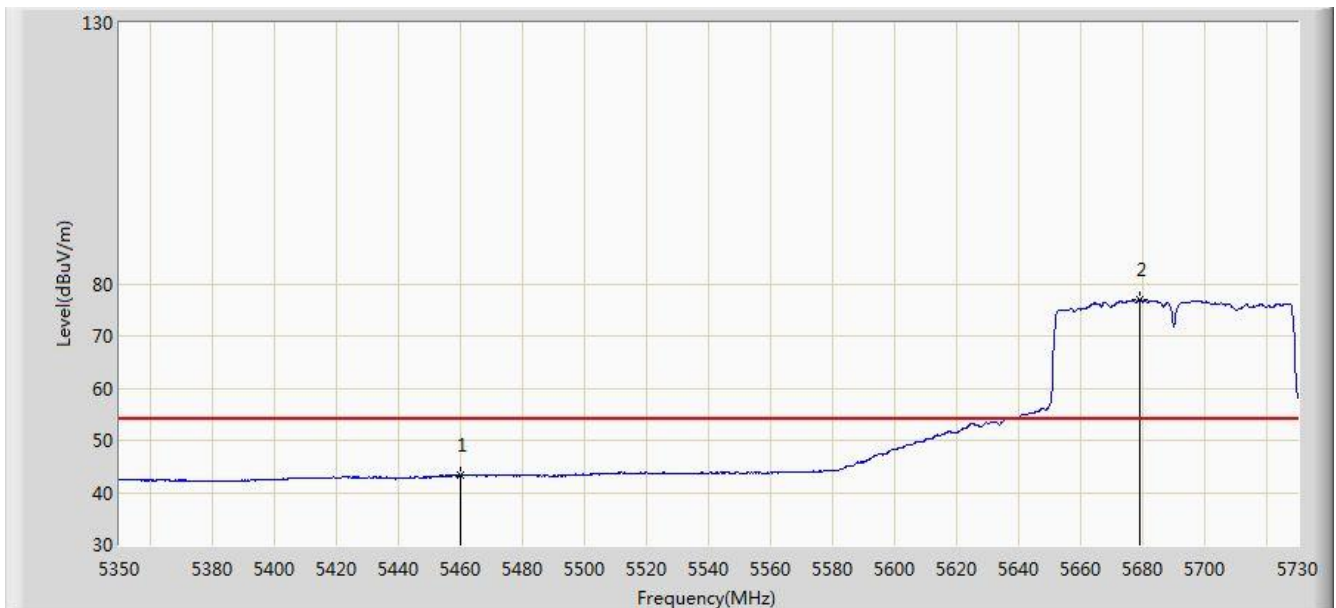


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5430.940	60.077	56.735	-13.923	74.000	3.342	PK
2			5460.000	59.479	55.997	-14.521	74.000	3.482	PK
3			5463.620	59.810	56.307	-14.190	74.000	3.503	PK
4			5470.000	58.541	55.002	-15.459	74.000	3.539	PK
5		*	5666.540	91.343	87.687	N/A	N/A	3.655	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 16:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5690MHz Ant 0 + 1 + 2 + 3	

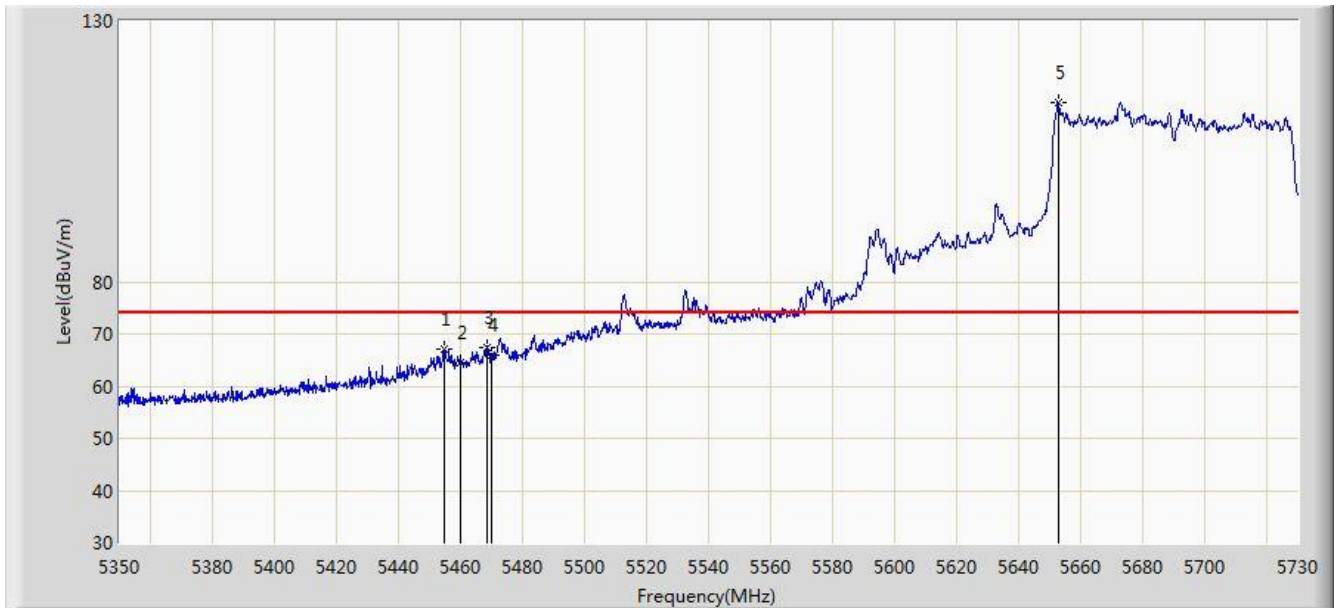


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	43.266	39.784	-10.734	54.000	3.482	AV
2		*	5679.270	76.875	73.197	N/A	N/A	3.678	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 16:14
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5690MHz Ant 0 + 1 + 2 + 3	

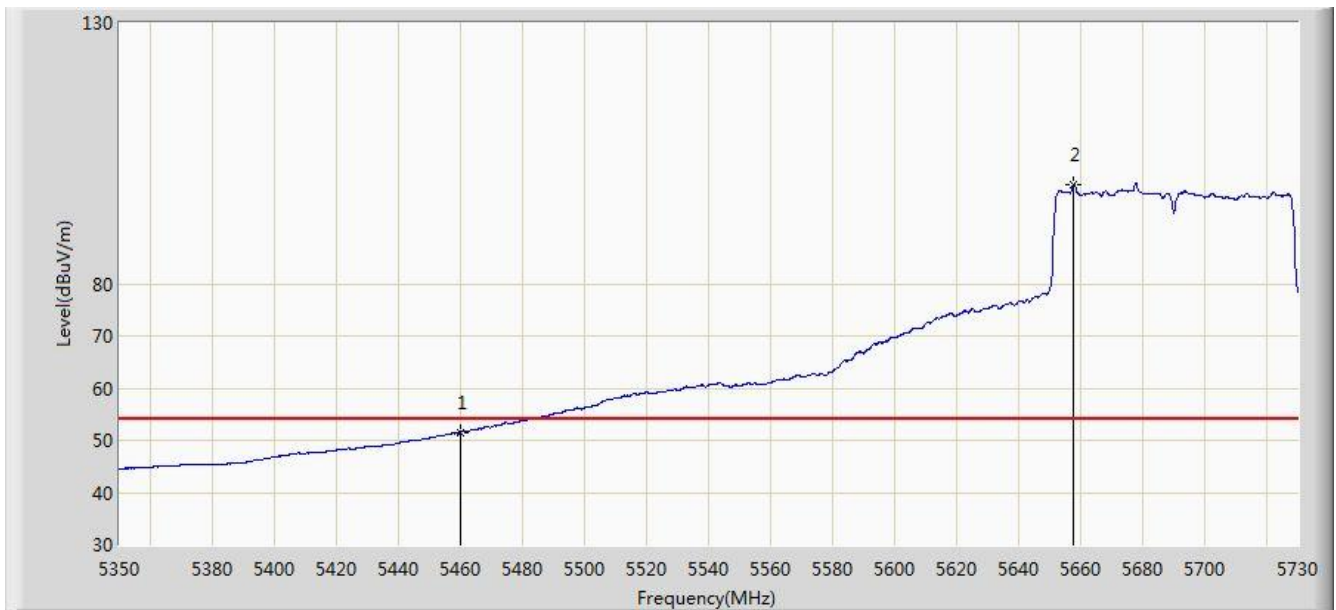


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5454.690	67.209	63.759	-6.791	74.000	3.450	PK
2			5460.000	64.406	60.924	-9.594	74.000	3.482	PK
3			5468.370	67.525	63.995	-6.475	74.000	3.530	PK
4			5470.000	65.922	62.383	-8.078	74.000	3.539	PK
5		*	5652.670	114.395	110.762	N/A	N/A	3.633	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/04 - 16:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5690MHz Ant 0 + 1 + 2 + 3	

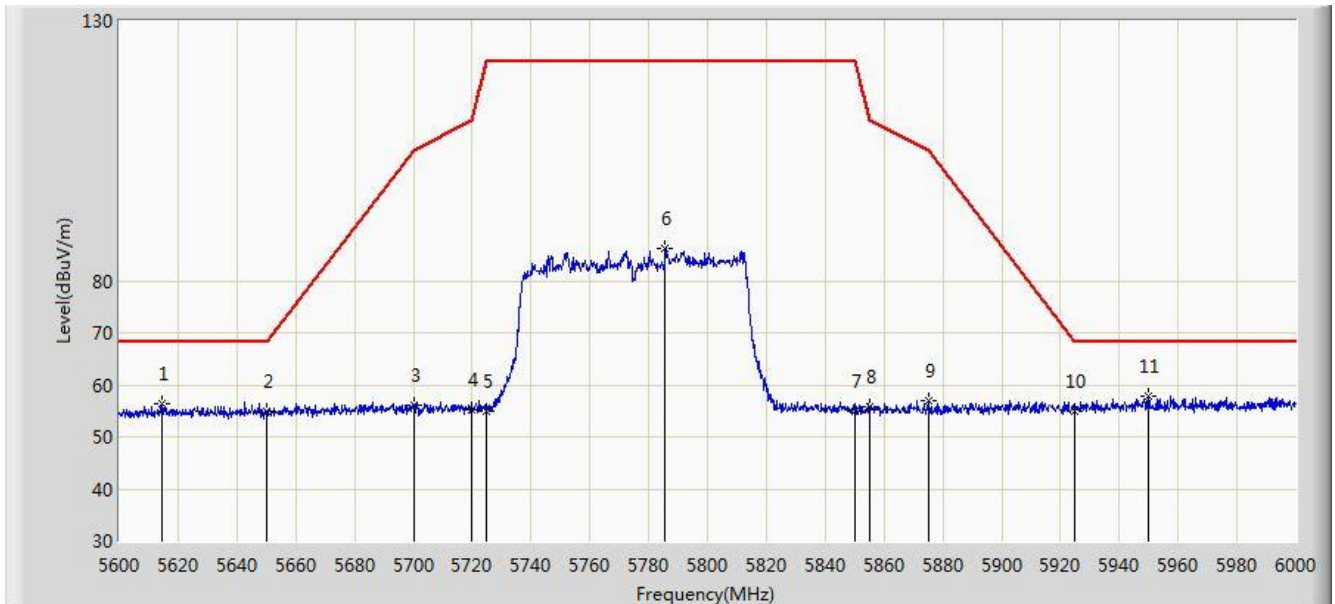


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	51.569	48.087	-2.431	54.000	3.482	AV
2		*	5657.610	98.932	95.290	N/A	N/A	3.642	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:53
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 0 + 1 + 2 + 3	

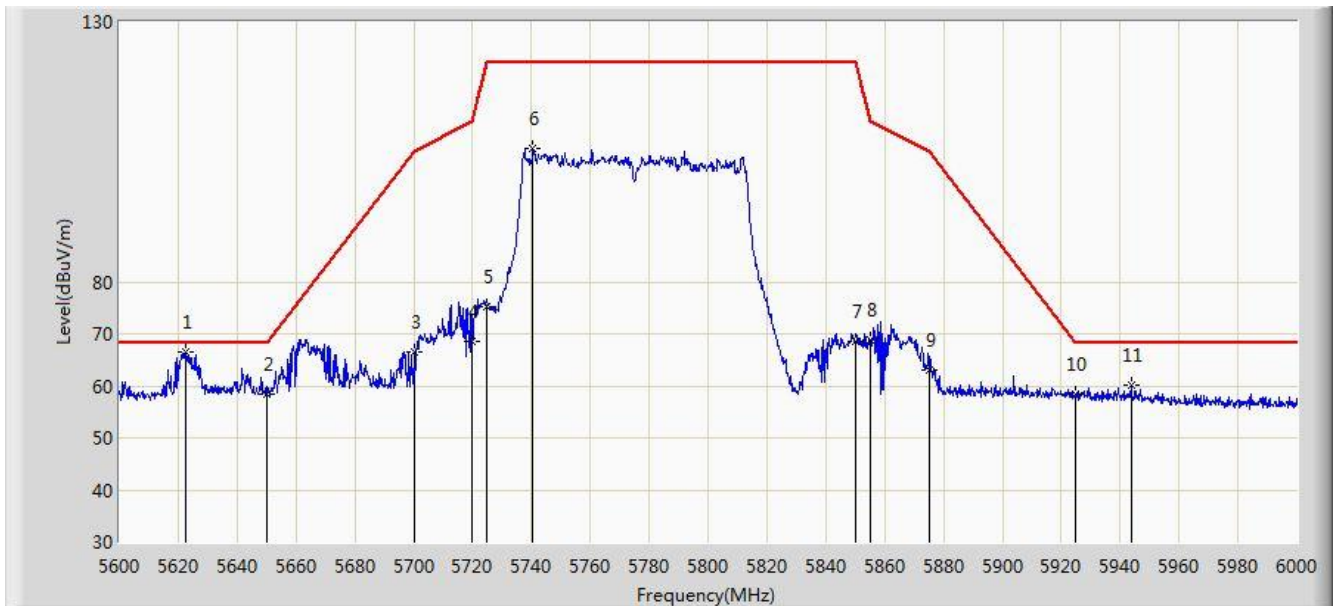


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5614.600	56.479	52.953	-11.721	68.200	3.525	PK
2			5650.000	54.905	51.278	-13.295	68.200	3.627	PK
3			5700.000	56.092	52.373	-49.108	105.200	3.719	PK
4			5720.000	55.222	51.446	-55.578	110.800	3.776	PK
5			5725.000	55.000	51.209	-67.200	122.200	3.791	PK
6			5785.600	86.104	82.167	N/A	N/A	3.937	PK
7			5850.000	54.943	50.886	-67.257	122.200	4.058	PK
8			5855.000	55.825	51.765	-54.975	110.800	4.060	PK
9			5875.000	56.942	52.837	-48.258	105.200	4.105	PK
10			5925.000	54.850	50.597	-13.350	68.200	4.254	PK
11		*	5950.000	57.737	53.462	-10.463	68.200	4.274	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 17:50
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 0 + 1 + 2 + 3	

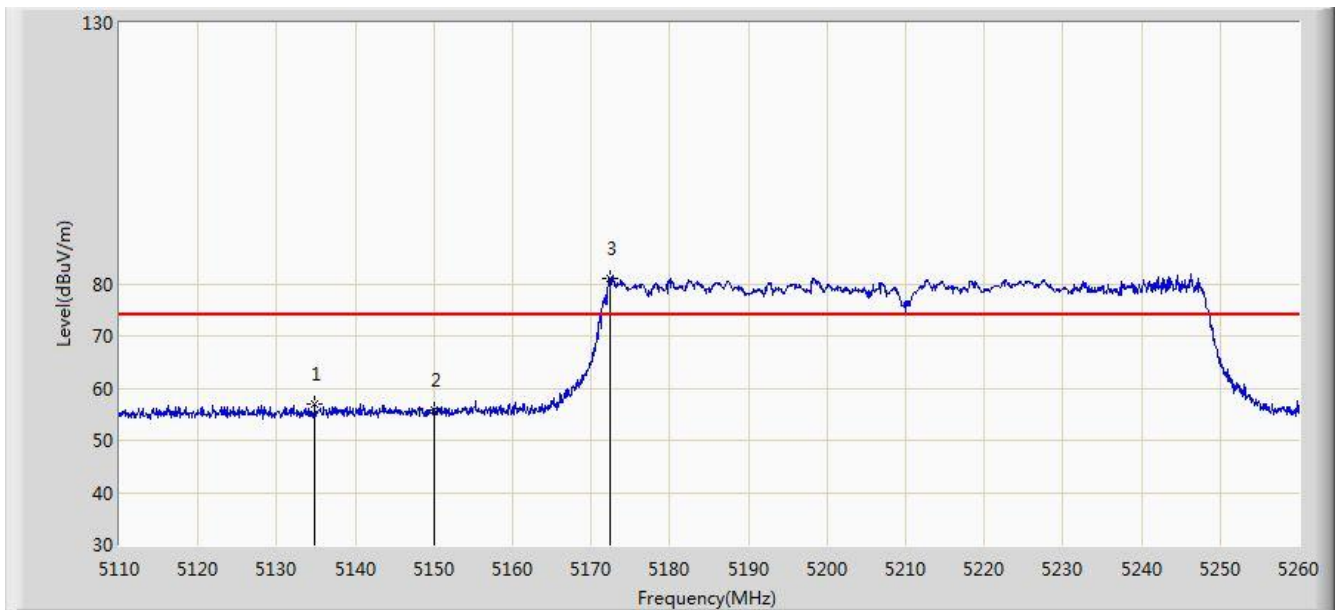


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5622.600	66.579	63.030	-1.621	68.200	3.548	PK
2			5650.000	58.412	54.785	-9.788	68.200	3.627	PK
3			5700.000	66.544	62.825	-38.656	105.200	3.719	PK
4			5720.000	68.500	64.724	-42.300	110.800	3.776	PK
5			5725.000	75.209	71.418	-46.991	122.200	3.791	PK
6			5740.400	105.516	101.678	N/A	N/A	3.838	PK
7			5850.000	68.556	64.499	-53.644	122.200	4.058	PK
8			5855.000	68.936	64.876	-41.864	110.800	4.060	PK
9			5875.000	62.937	58.832	-42.263	105.200	4.105	PK
10			5925.000	58.451	54.198	-9.749	68.200	4.254	PK
11			5943.800	60.049	55.777	-8.151	68.200	4.272	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 20:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5134.900	56.960	53.651	-17.040	74.000	3.309	PK
2			5150.000	55.675	52.366	-18.325	74.000	3.309	PK
3		*	5172.475	81.103	77.824	N/A	N/A	3.280	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 20:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

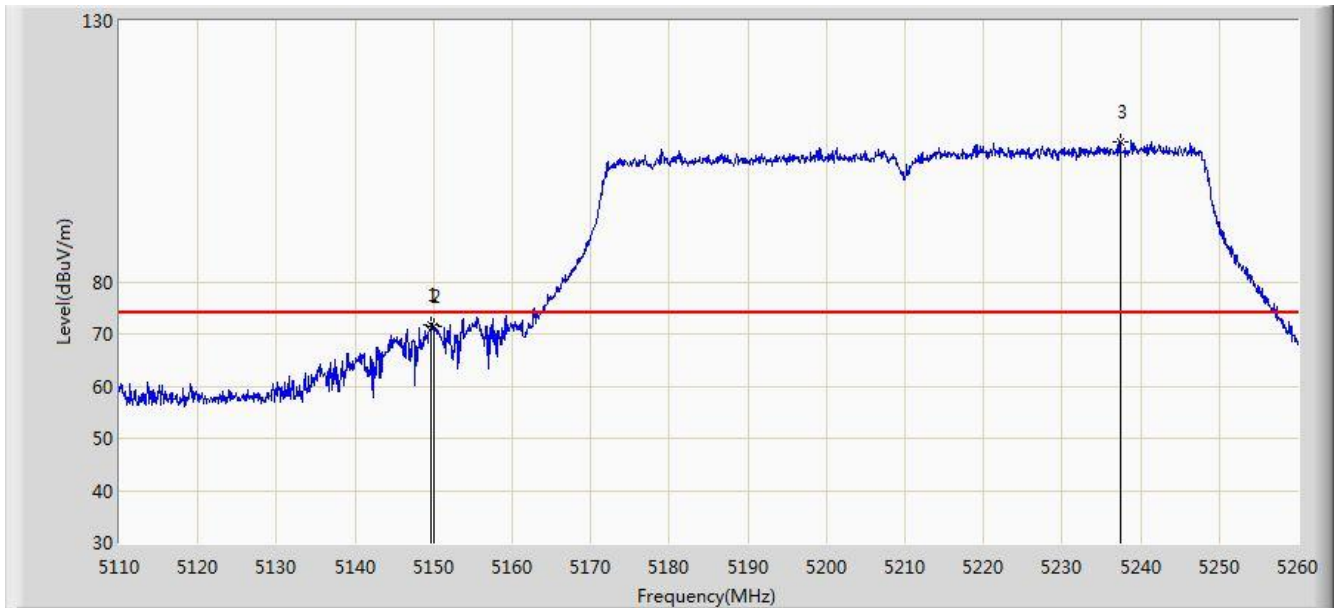


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	42.382	39.073	-11.618	54.000	3.309	AV
2		*	5223.025	68.296	65.088	N/A	N/A	3.209	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 20:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

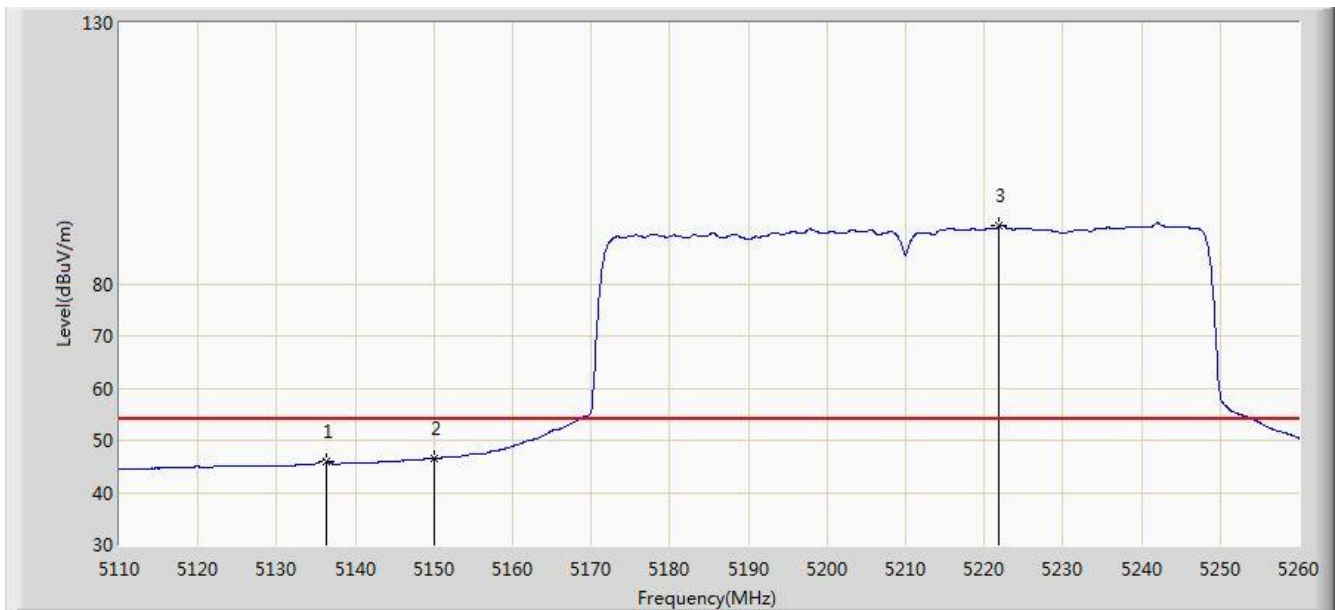


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5149.675	71.598	68.289	-2.402	74.000	3.308	PK
2			5150.000	71.356	68.047	-2.644	74.000	3.309	PK
3		*	5237.425	106.877	103.684	N/A	N/A	3.193	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 20:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

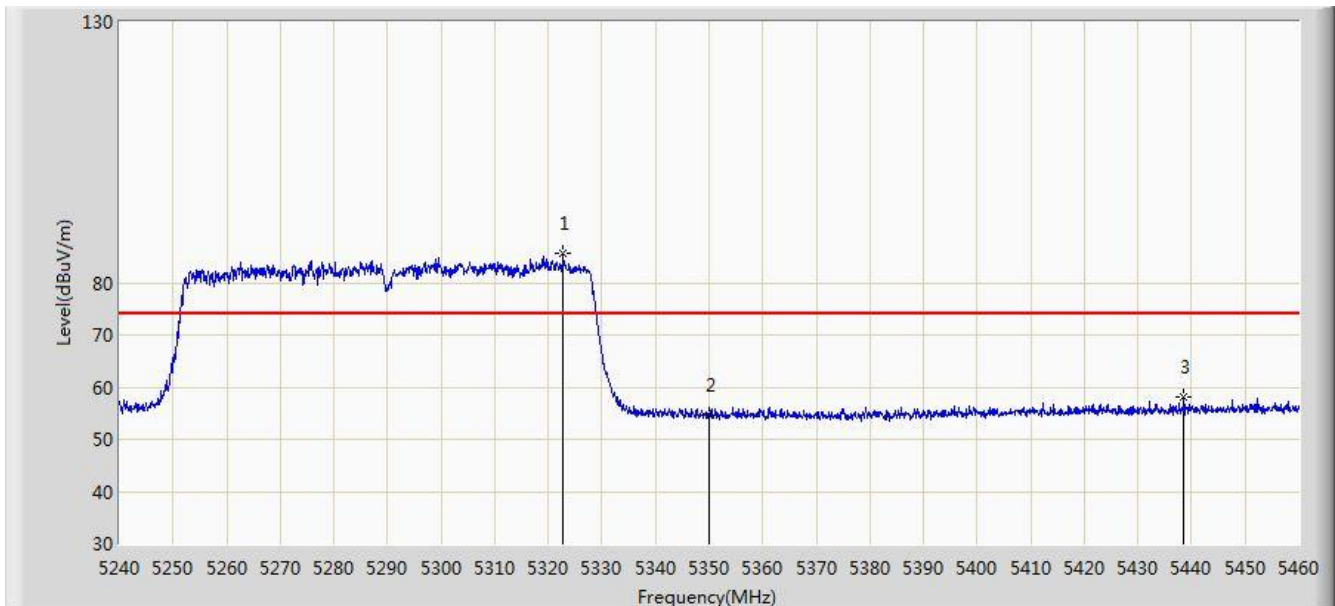


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5136.250	46.073	42.763	-7.927	54.000	3.310	AV
2			5150.000	46.650	43.341	-7.350	54.000	3.309	AV
3		*	5221.900	91.089	87.880	N/A	N/A	3.209	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

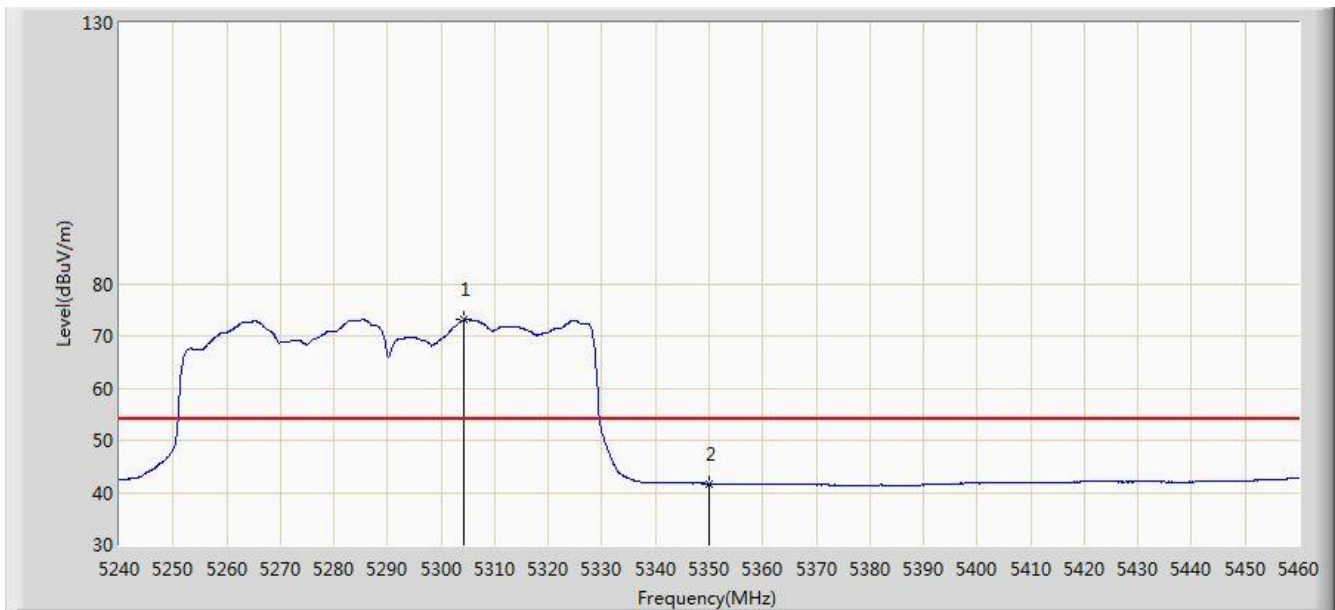


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5322.830	85.794	82.727	N/A	N/A	3.068	PK
2			5350.000	54.584	51.552	-19.416	74.000	3.032	PK
3			5438.550	58.138	54.762	-15.862	74.000	3.376	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

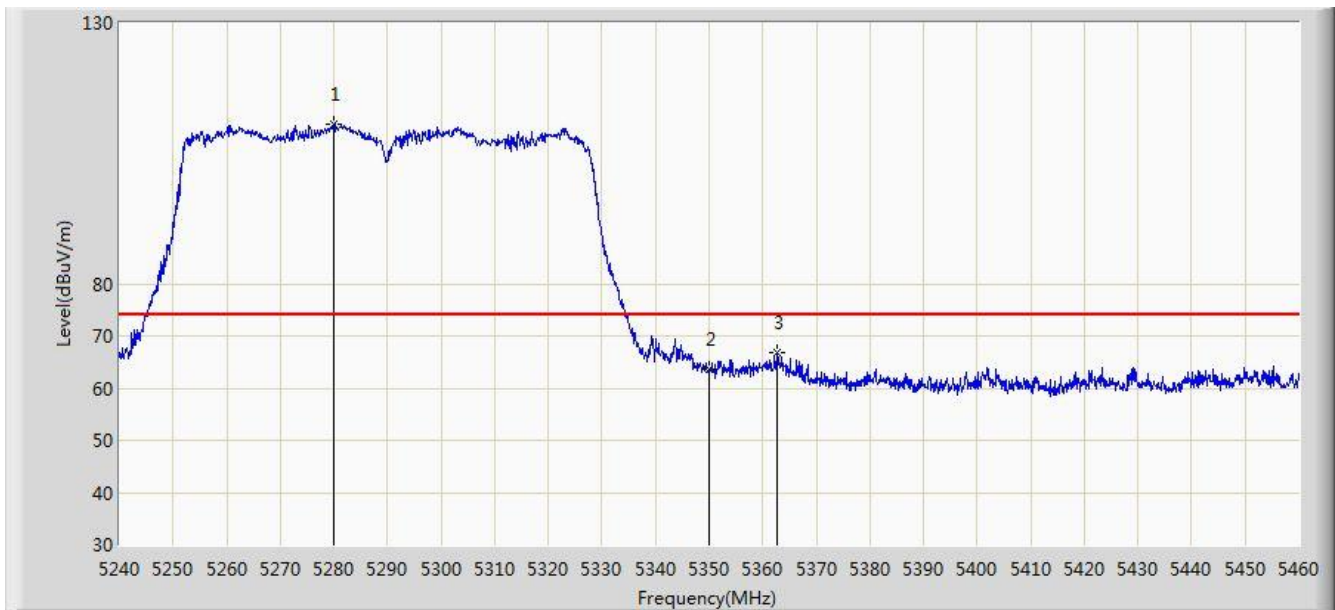


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5304.130	73.069	69.958	N/A	N/A	3.111	AV
2			5350.000	41.712	38.680	-12.288	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

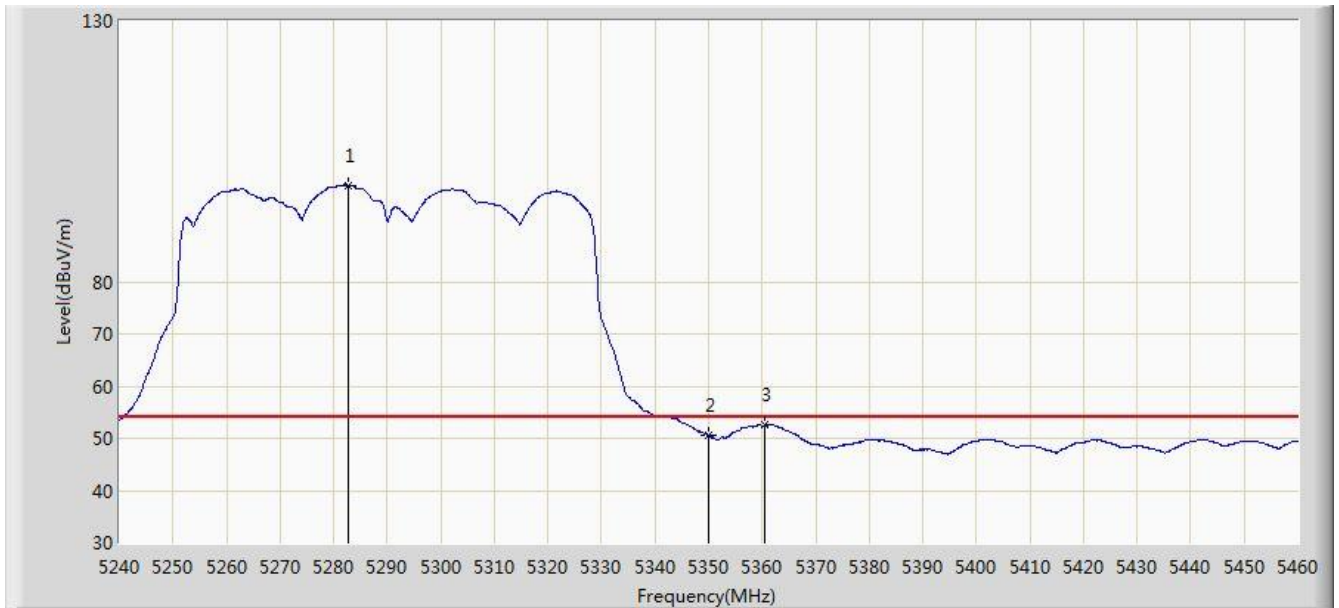


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5279.930	110.460	107.277	N/A	N/A	3.183	PK
2			5350.000	63.715	60.683	-10.285	74.000	3.032	PK
3			5362.650	66.754	63.735	-7.246	74.000	3.018	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

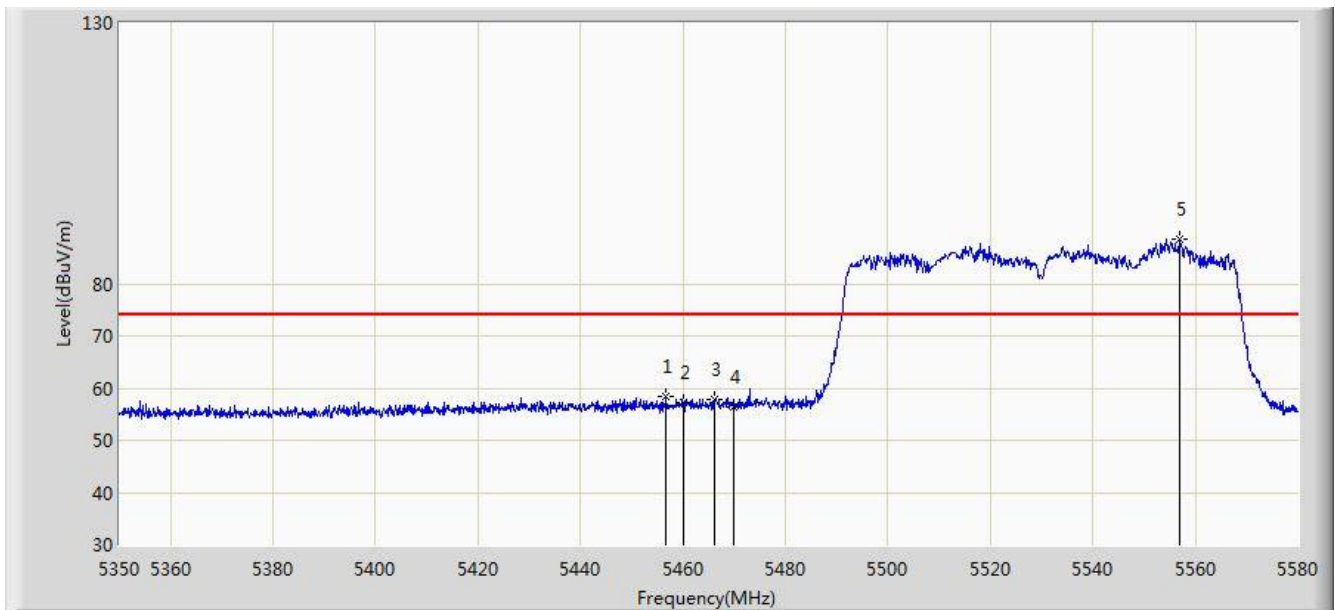


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5282.680	98.525	95.344	N/A	N/A	3.182	AV
2			5350.000	50.583	47.551	-3.417	54.000	3.032	AV
3			5360.560	52.540	49.519	-1.460	54.000	3.021	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

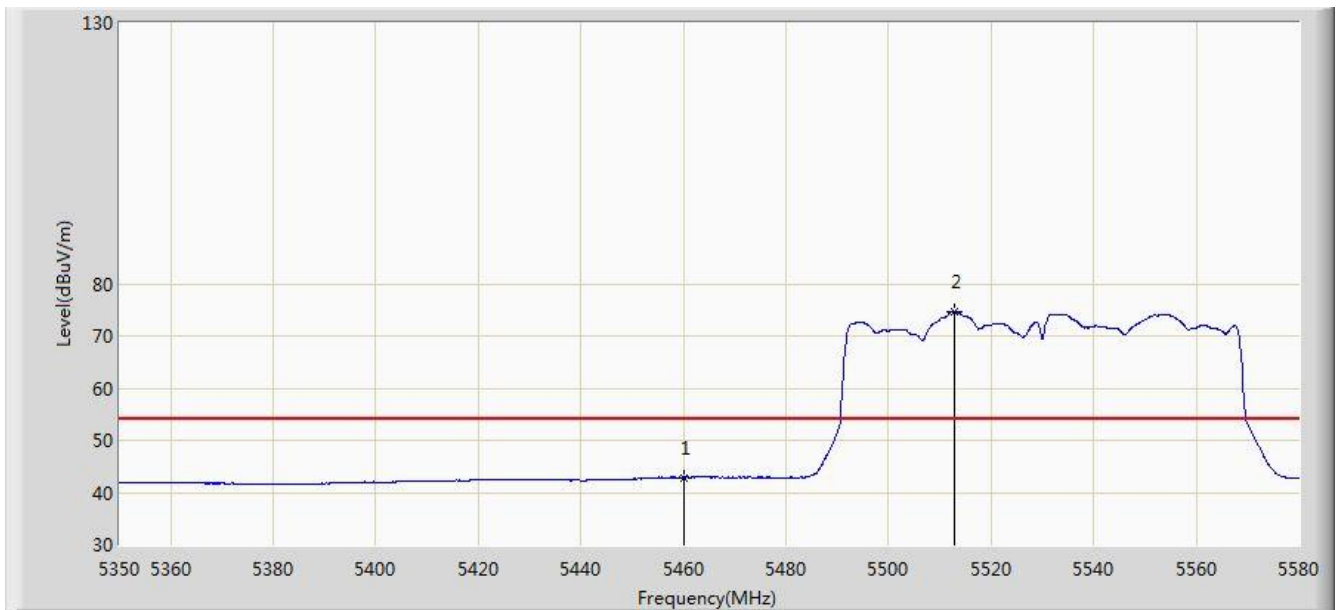


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5456.720	58.388	54.925	-15.612	74.000	3.463	PK
2			5460.000	57.330	53.848	-16.670	74.000	3.482	PK
3			5466.035	57.813	54.297	-16.187	74.000	3.516	PK
4			5470.000	56.500	52.961	-17.500	74.000	3.539	PK
5		*	5556.885	88.562	85.077	N/A	N/A	3.485	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

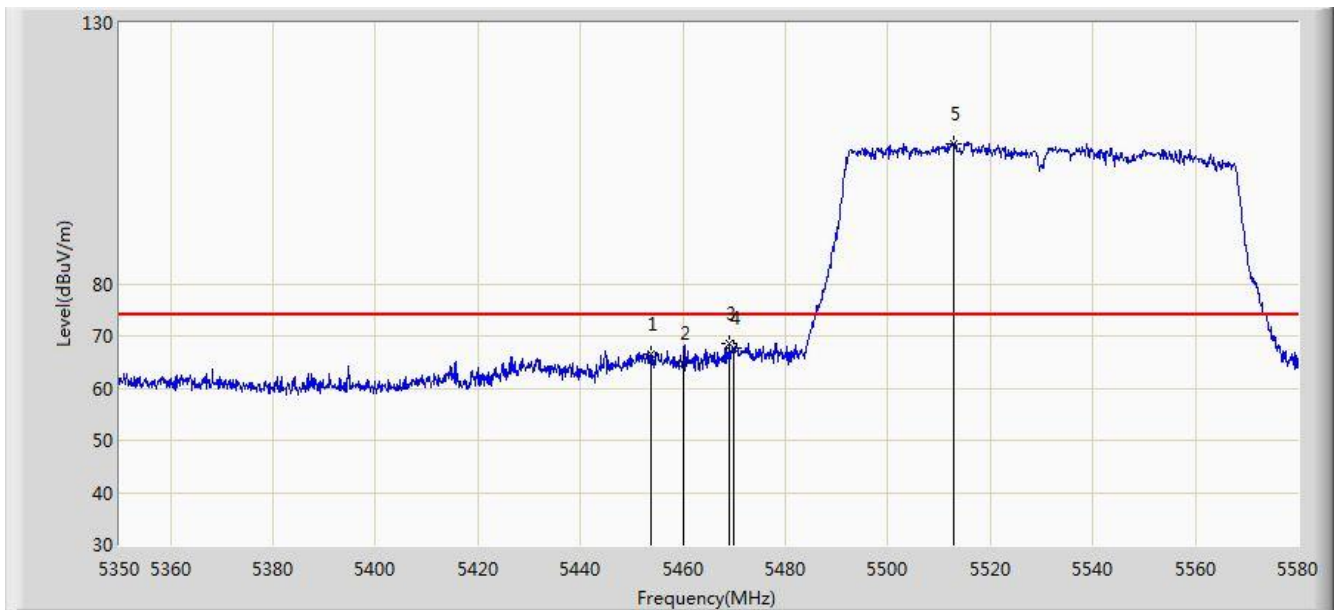


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5460.000	42.883	39.401	-11.117	54.000	3.482	AV
2		*	5512.955	74.680	71.168	N/A	N/A	3.513	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

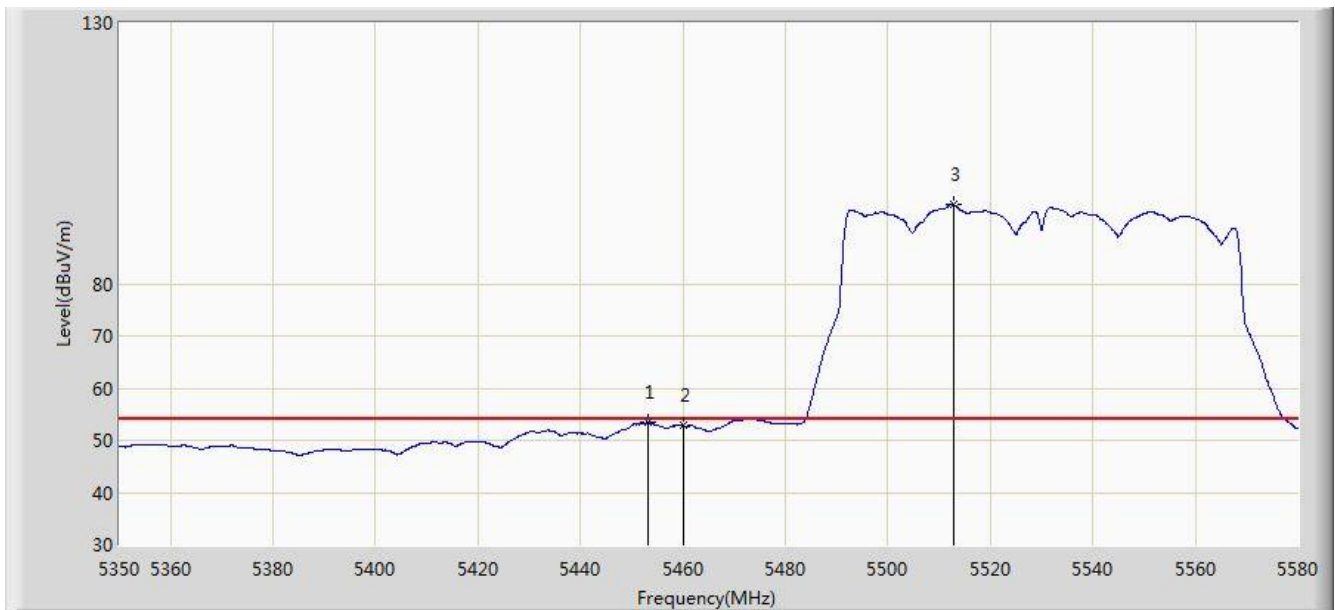


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5453.845	66.546	63.101	-7.454	74.000	3.446	PK
2			5460.000	64.751	61.269	-9.249	74.000	3.482	PK
3			5469.140	68.431	64.897	-5.569	74.000	3.534	PK
4			5470.000	67.537	63.998	-6.463	74.000	3.539	PK
5		*	5512.725	106.869	103.356	N/A	N/A	3.513	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

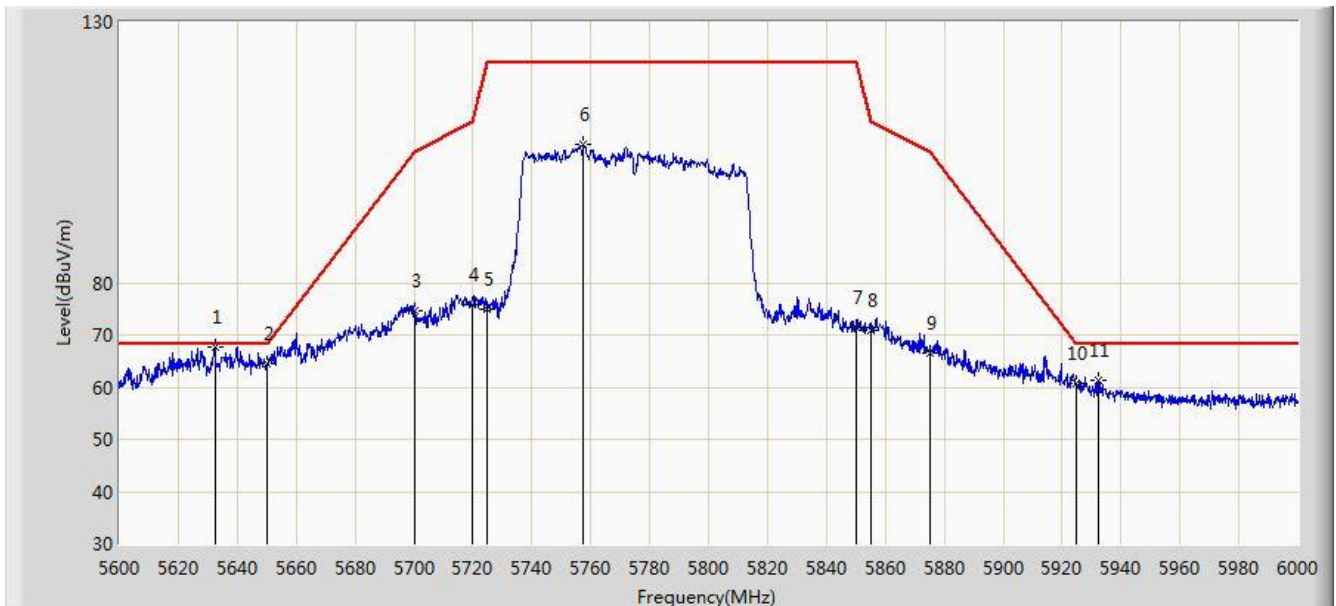


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5453.270	53.451	50.008	-0.549	54.000	3.442	AV
2			5460.000	52.805	49.323	-1.195	54.000	3.482	AV
3		*	5512.955	95.092	91.580	N/A	N/A	3.513	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:29
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5775MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

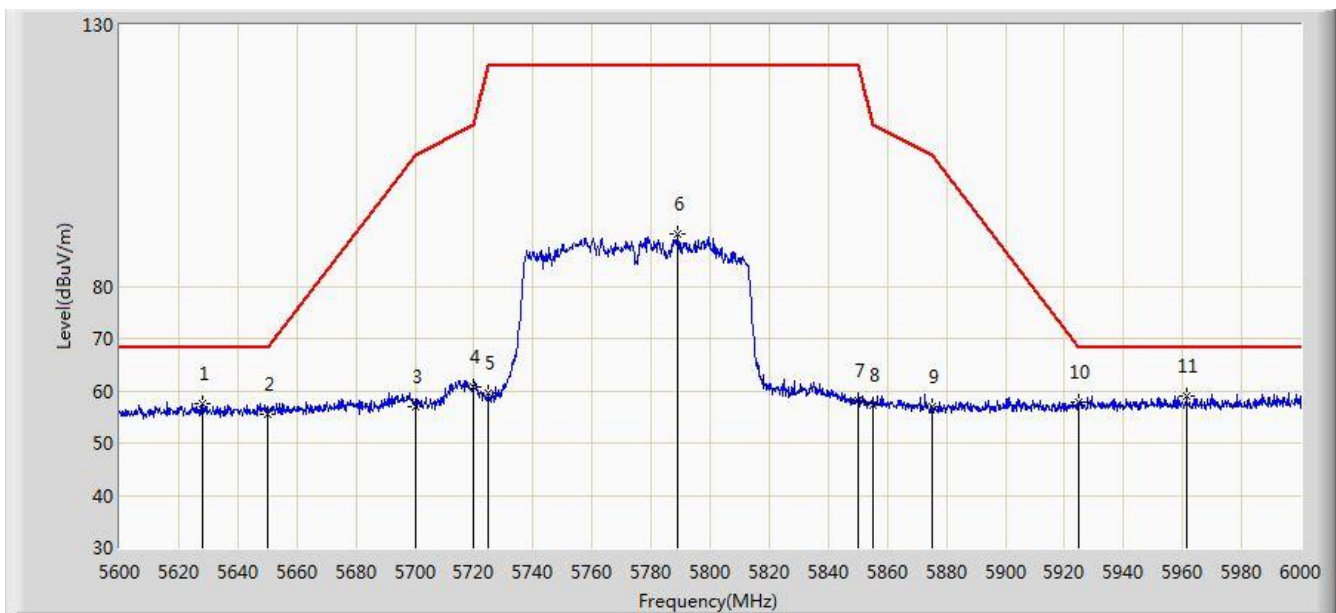


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5632.600	67.798	64.214	-0.402	68.200	3.585	PK
2			5650.000	64.499	60.872	-3.701	68.200	3.627	PK
3			5700.000	74.632	70.913	-30.568	105.200	3.719	PK
4			5720.000	75.814	72.038	-34.986	110.800	3.776	PK
5			5725.000	75.030	71.239	-47.170	122.200	3.791	PK
6			5757.600	106.457	102.558	N/A	N/A	3.899	PK
7			5850.000	71.319	67.262	-50.881	122.200	4.058	PK
8			5855.000	70.820	66.760	-39.980	110.800	4.060	PK
9			5875.000	66.514	62.409	-38.686	105.200	4.105	PK
10			5925.000	60.593	56.340	-7.607	68.200	4.254	PK
11			5932.400	61.232	56.965	-6.968	68.200	4.268	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Profile: 80+80.Bandedge	Page No.: 57
Engineer: Will Yan	
Site: AC1	Time: 2017/11/03 - 22:30
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5775MHz Ant 0 + 1 / Ant 0 + 1 + 2 + 3	

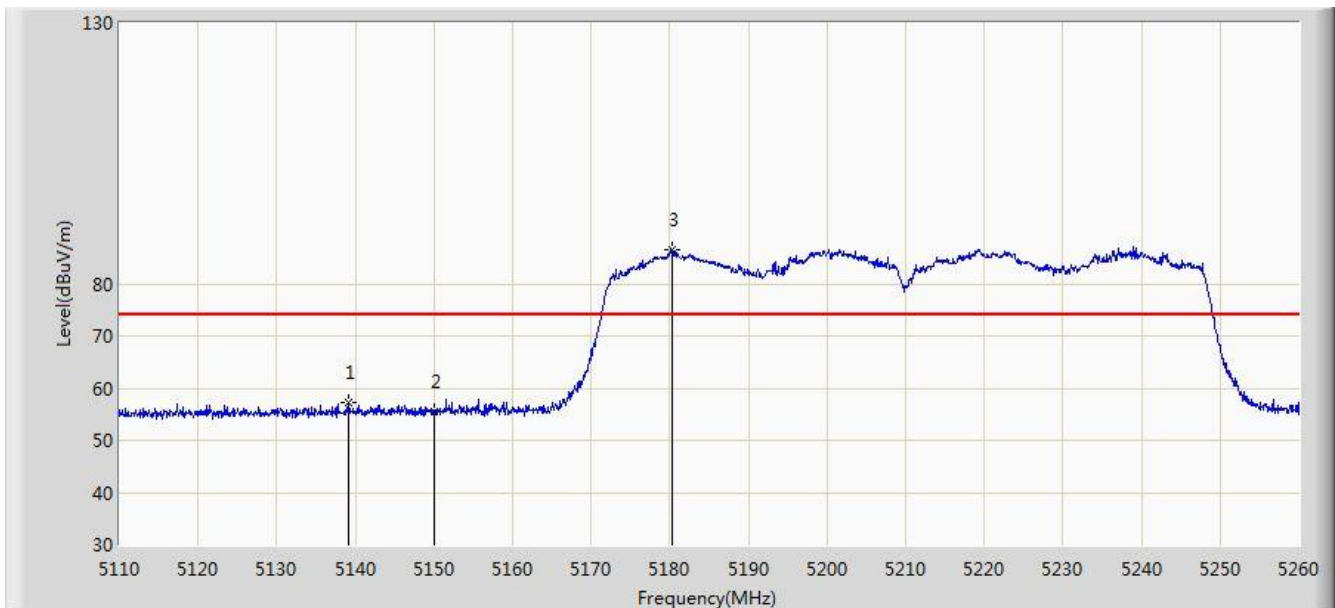


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5628.000	57.614	54.047	-10.586	68.200	3.567	PK
2			5650.000	55.387	51.760	-12.813	68.200	3.627	PK
3			5700.000	56.832	53.113	-48.368	105.200	3.719	PK
4			5720.000	60.585	56.809	-50.215	110.800	3.776	PK
5			5725.000	59.523	55.732	-62.677	122.200	3.791	PK
6			5788.800	89.920	85.977	N/A	N/A	3.943	PK
7			5850.000	58.237	54.180	-63.963	122.200	4.058	PK
8			5855.000	57.323	53.263	-53.477	110.800	4.060	PK
9			5875.000	56.926	52.821	-48.274	105.200	4.105	PK
10			5925.000	57.788	53.535	-10.412	68.200	4.254	PK
11		*	5961.400	58.947	54.645	-9.253	68.200	4.302	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

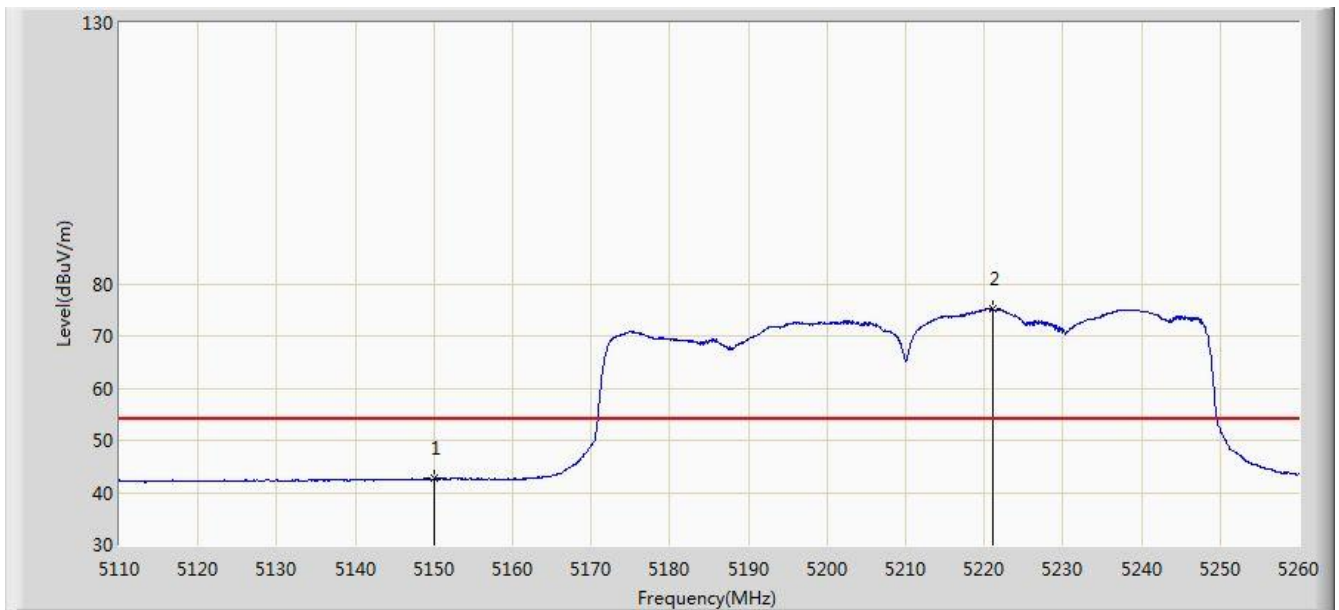


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5139.100	57.360	54.050	-16.640	74.000	3.310	PK
2			5150.000	55.576	52.267	-18.424	74.000	3.309	PK
3		*	5180.350	86.400	83.127	N/A	N/A	3.273	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

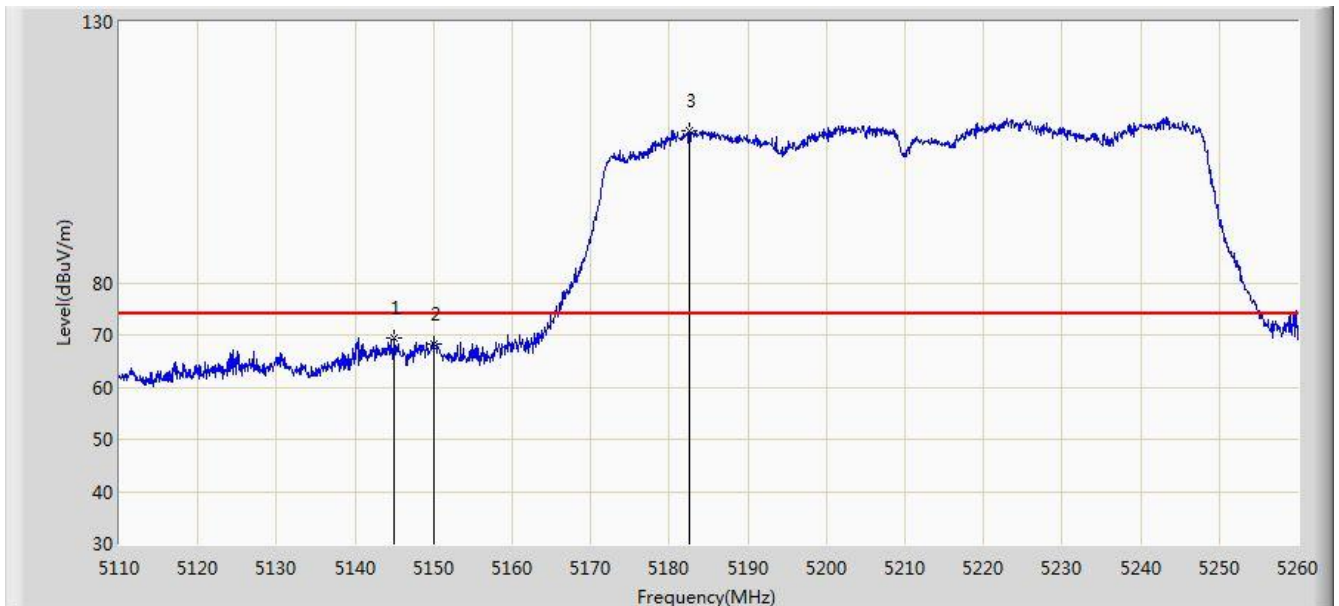


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	42.677	39.368	-11.323	54.000	3.309	AV
2		*	5221.000	75.099	71.889	N/A	N/A	3.210	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

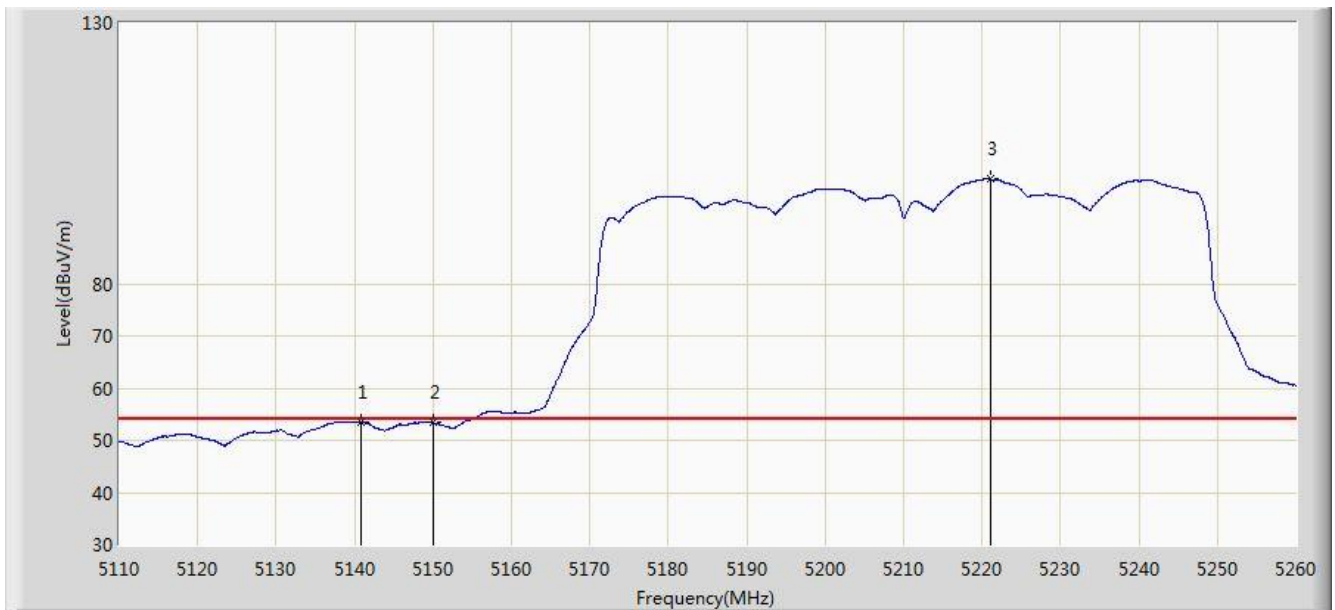


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5144.875	69.377	66.068	-4.623	74.000	3.309	PK
2			5150.000	68.285	64.976	-5.715	74.000	3.309	PK
3		*	5182.600	109.152	105.882	N/A	N/A	3.271	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5210MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

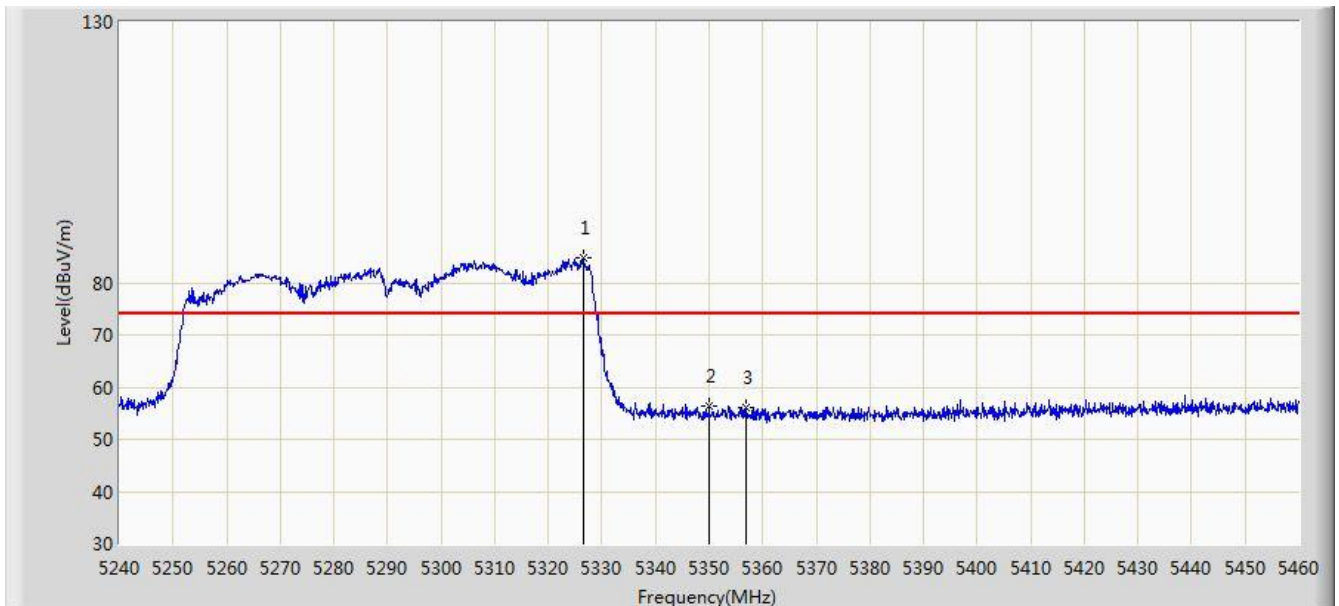


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5140.825	53.555	50.245	-0.445	54.000	3.309	AV
2			5150.000	53.438	50.129	-0.562	54.000	3.309	AV
3		*	5221.000	100.044	96.834	N/A	N/A	3.210	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

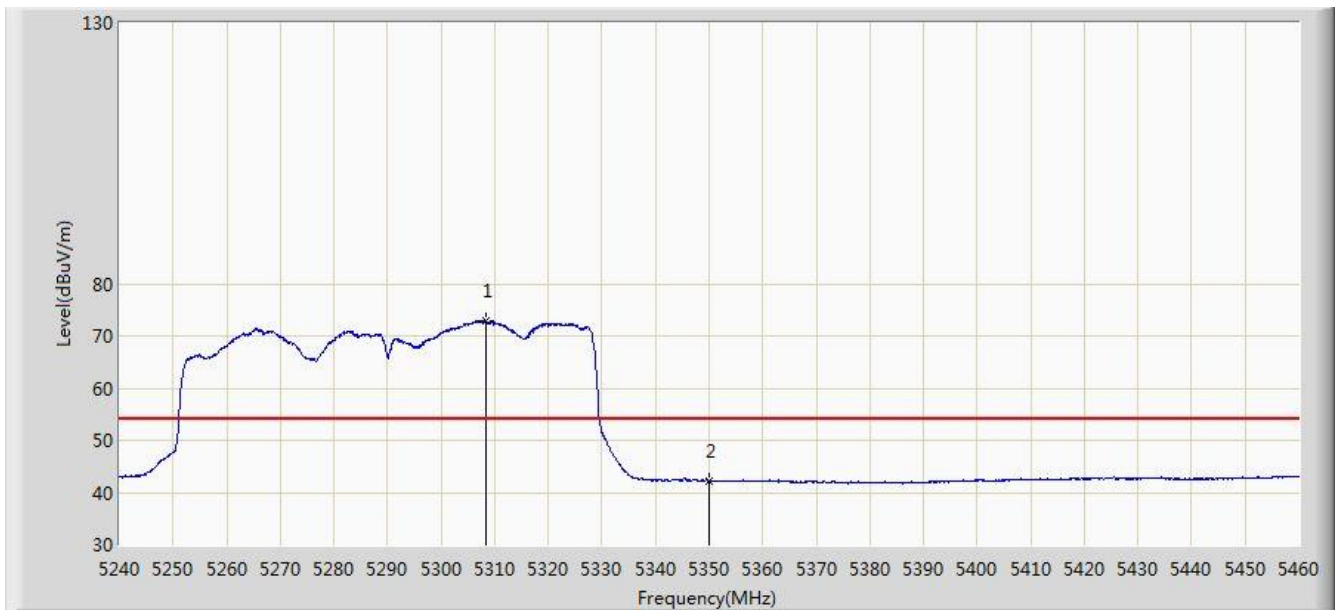


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5326.460	84.649	81.589	N/A	N/A	3.060	PK
2			5350.000	56.266	53.234	-17.734	74.000	3.032	PK
3			5356.820	56.051	53.026	-17.949	74.000	3.025	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

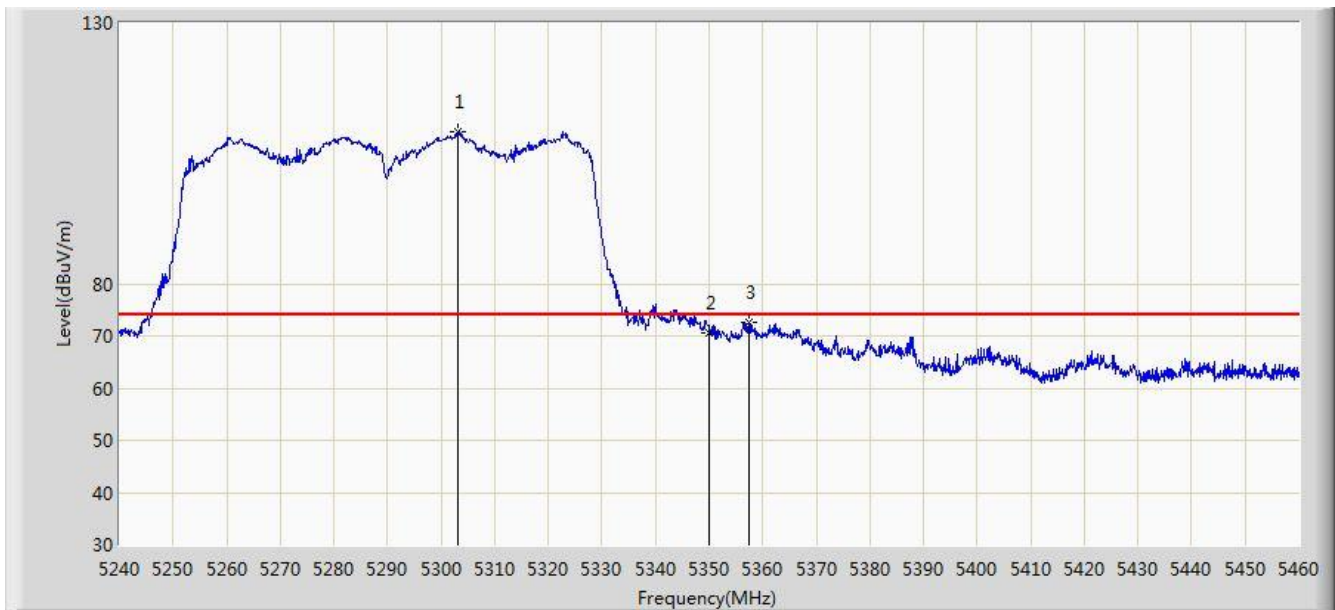


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5308.310	72.807	69.707	N/A	N/A	3.099	AV
2			5350.000	42.231	39.199	-11.769	54.000	3.032	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/09 - 14:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

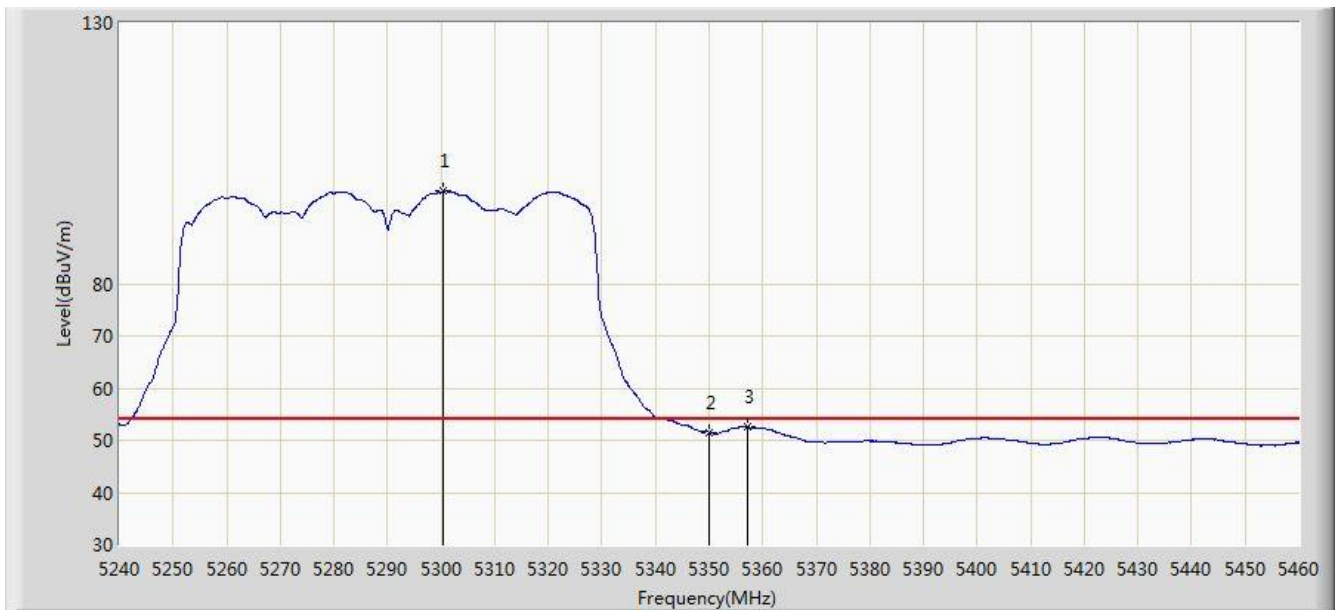


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5303.250	109.006	105.893	N/A	N/A	3.113	PK
2			5350.000	70.716	67.684	-3.284	74.000	3.032	PK
3			5357.480	72.724	69.699	-1.276	74.000	3.025	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 21:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5290MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

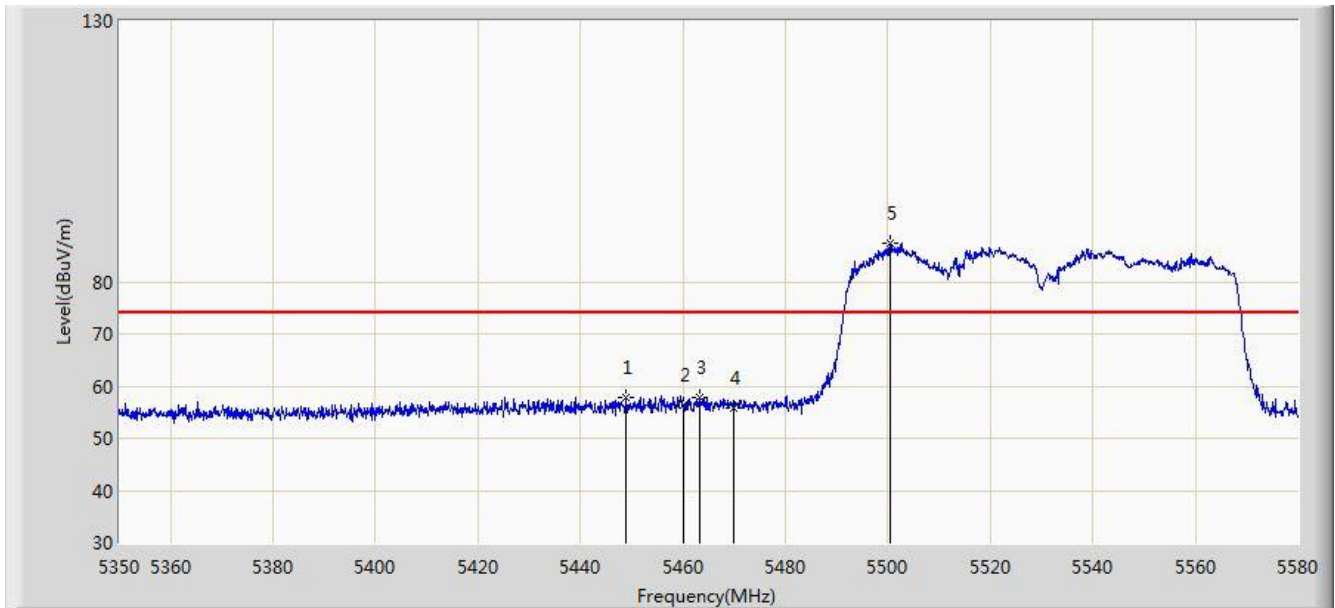


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5300.390	97.732	94.611	N/A	N/A	3.121	AV
2			5350.000	51.570	48.538	-2.430	54.000	3.032	AV
3			5357.260	52.582	49.557	-1.418	54.000	3.025	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

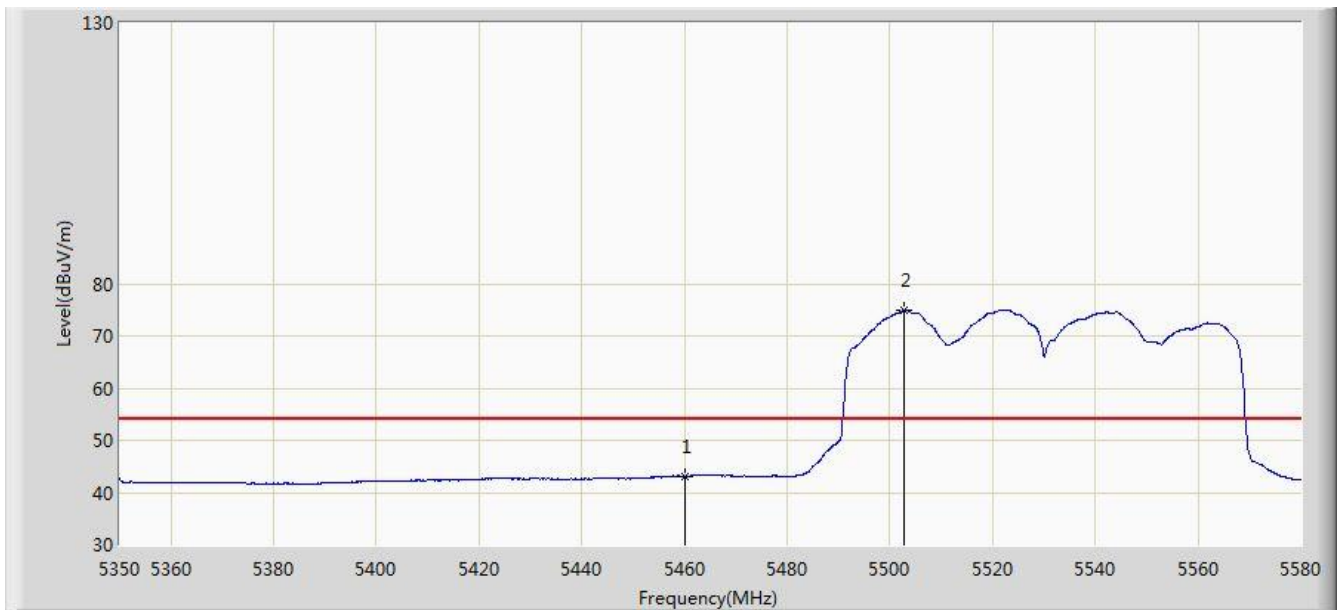


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5448.900	57.810	54.387	-16.190	74.000	3.423	PK
2			5460.000	56.474	52.992	-17.526	74.000	3.482	PK
3			5463.275	57.751	54.250	-16.249	74.000	3.500	PK
4			5470.000	55.778	52.239	-18.222	74.000	3.539	PK
5		*	5500.420	87.459	83.933	N/A	N/A	3.526	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

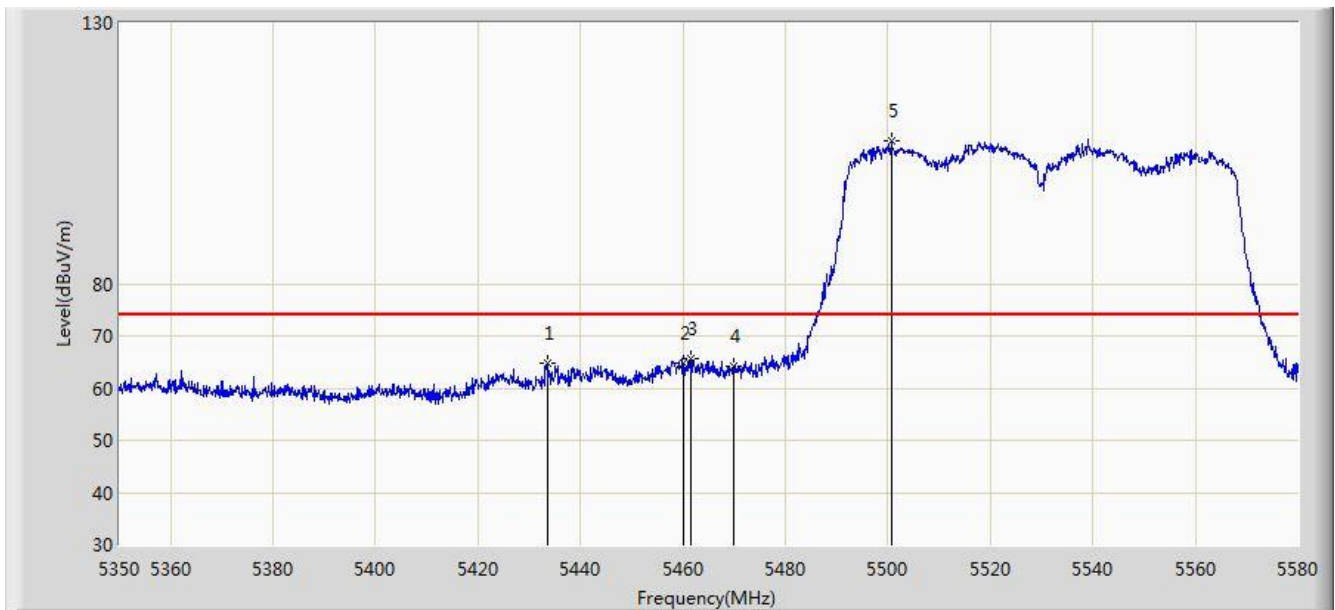


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5460.000	43.106	39.624	-10.894	54.000	3.482	AV
2		*	5502.720	74.891	71.368	N/A	N/A	3.523	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

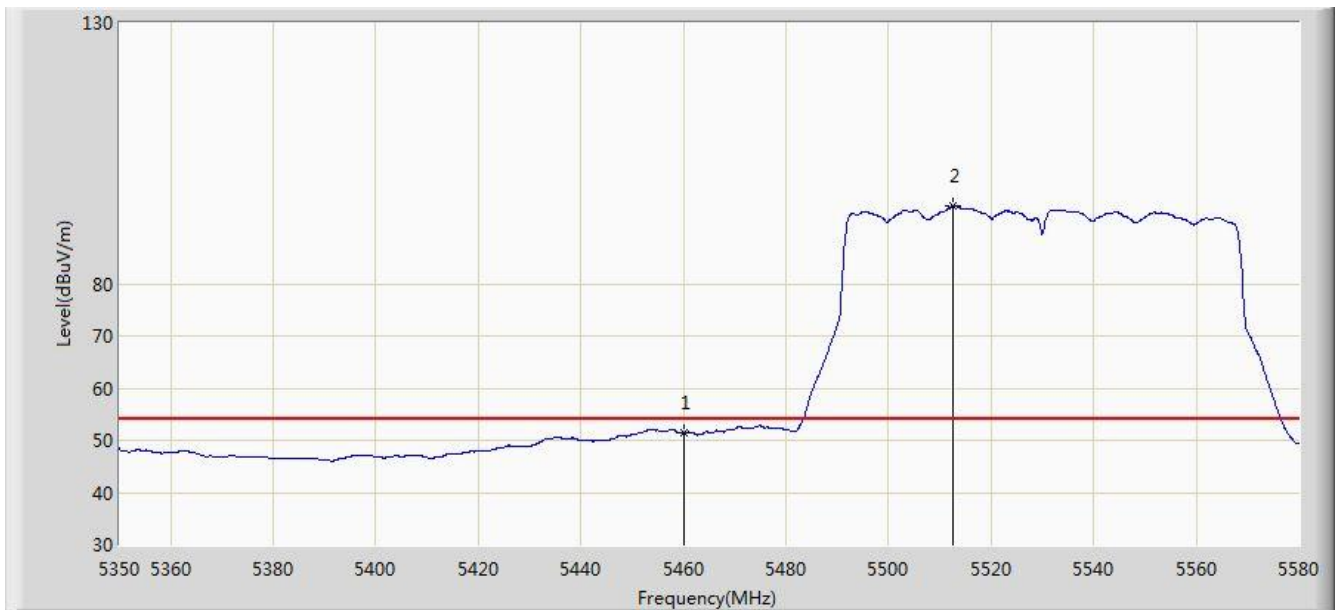


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5433.605	64.918	61.564	-9.082	74.000	3.354	PK
2			5460.000	64.825	61.343	-9.175	74.000	3.482	PK
3			5461.550	65.624	62.133	-8.376	74.000	3.491	PK
4			5470.000	64.094	60.555	-9.906	74.000	3.539	PK
5		*	5500.650	107.406	103.880	N/A	N/A	3.525	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5530MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

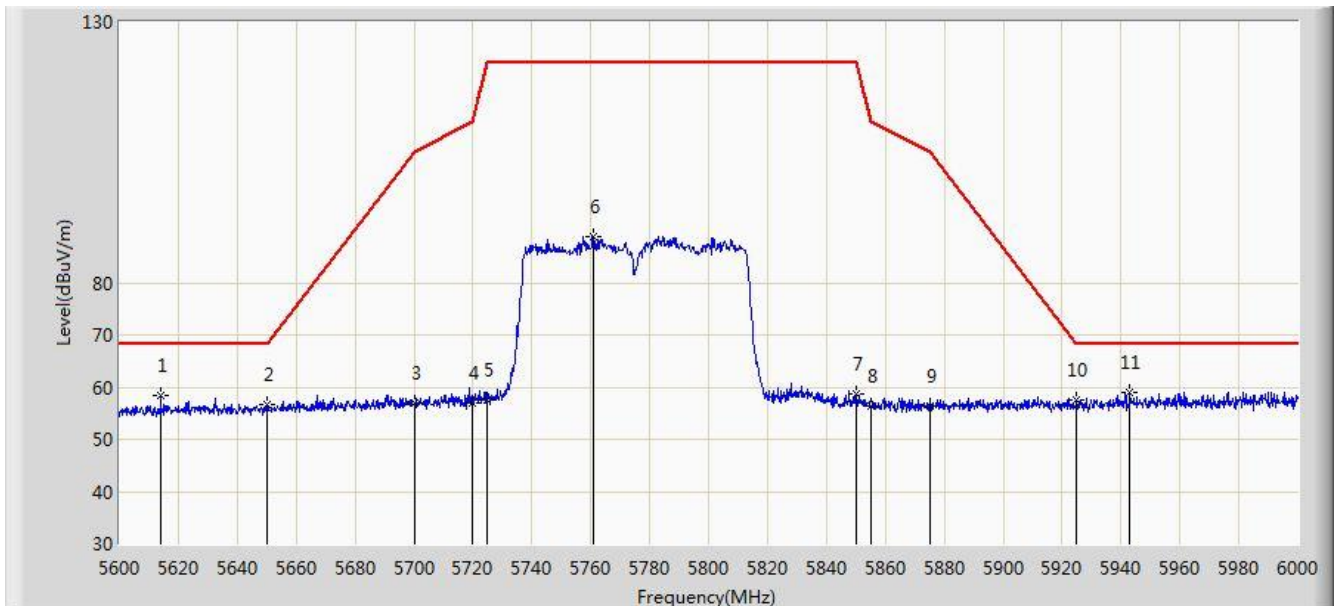


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5460.000	51.553	48.071	-2.447	54.000	3.482	AV
2		*	5512.610	95.040	91.527	N/A	N/A	3.512	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:39
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5775MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	

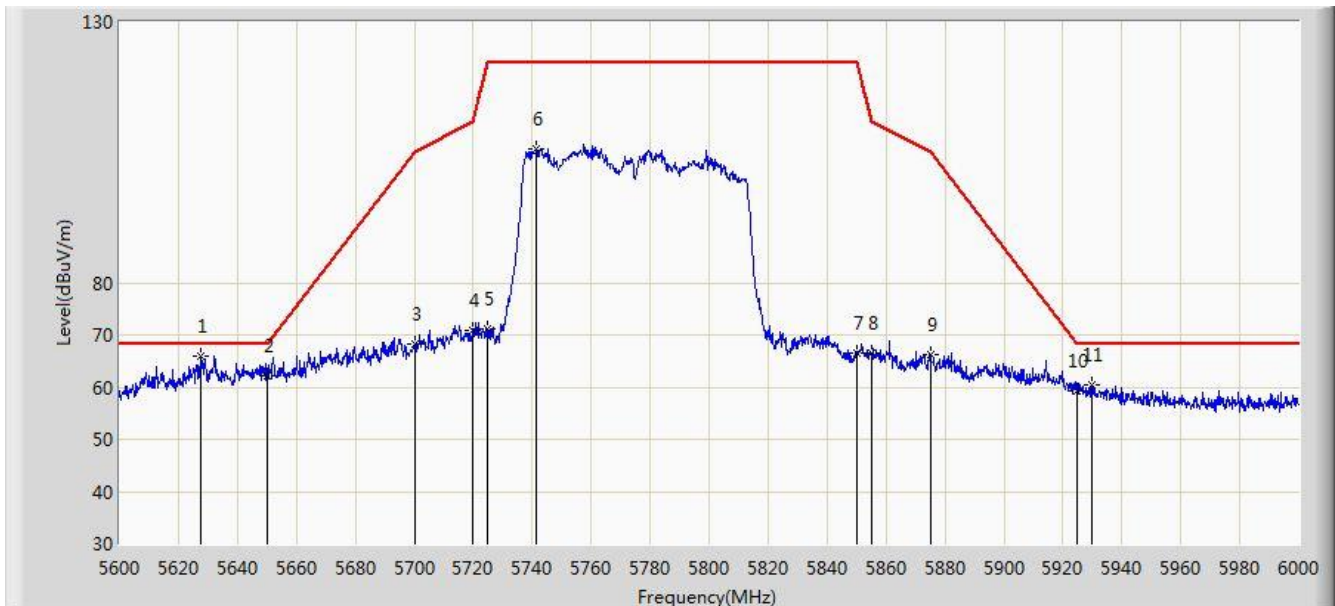


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5614.000	58.307	54.783	-9.893	68.200	3.524	PK
2			5650.000	56.799	53.172	-11.401	68.200	3.627	PK
3			5700.000	56.989	53.270	-48.211	105.200	3.719	PK
4			5720.000	56.992	53.216	-53.808	110.800	3.776	PK
5			5725.000	57.602	53.811	-64.598	122.200	3.791	PK
6			5761.000	88.932	85.025	N/A	N/A	3.907	PK
7			5850.000	58.807	54.750	-63.393	122.200	4.058	PK
8			5855.000	56.319	52.259	-54.481	110.800	4.060	PK
9			5875.000	56.428	52.323	-48.772	105.200	4.105	PK
10			5925.000	57.470	53.217	-10.730	68.200	4.254	PK
11		*	5943.000	59.007	54.736	-9.193	68.200	4.271	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2017/11/03 - 22:38
Limit: FCC_Part15.407_RE(3m)_Bandedge	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: Powered by PCB Board
Test Mode: Transmit by 802.11ac-VHT80+80 at Channel 5775MHz Ant 2 + 3 / Ant 0 + 1 + 2 + 3	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	5627.800	65.887	62.320	-2.313	68.200	3.567	PK
2			5650.000	62.084	58.457	-6.116	68.200	3.627	PK
3			5700.000	68.335	64.616	-36.865	105.200	3.719	PK
4			5720.000	70.925	67.149	-39.875	110.800	3.776	PK
5			5725.000	71.200	67.409	-51.000	122.200	3.791	PK
6			5741.400	105.658	101.817	N/A	N/A	3.842	PK
7			5850.000	66.403	62.346	-55.797	122.200	4.058	PK
8			5855.000	66.436	62.376	-44.364	110.800	4.060	PK
9			5875.000	66.227	62.122	-38.973	105.200	4.105	PK
10			5925.000	59.189	54.936	-9.011	68.200	4.254	PK
11			5929.600	60.473	56.207	-7.727	68.200	4.265	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

7.10. AC Conducted Emissions Measurement

7.10.1. Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

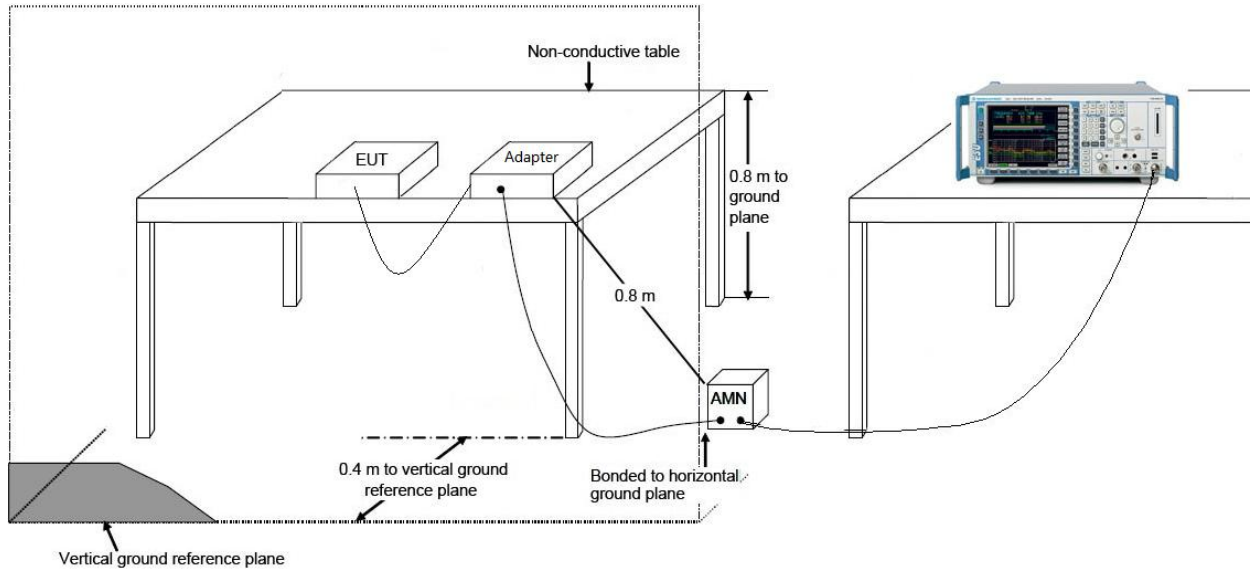
7.10.2. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

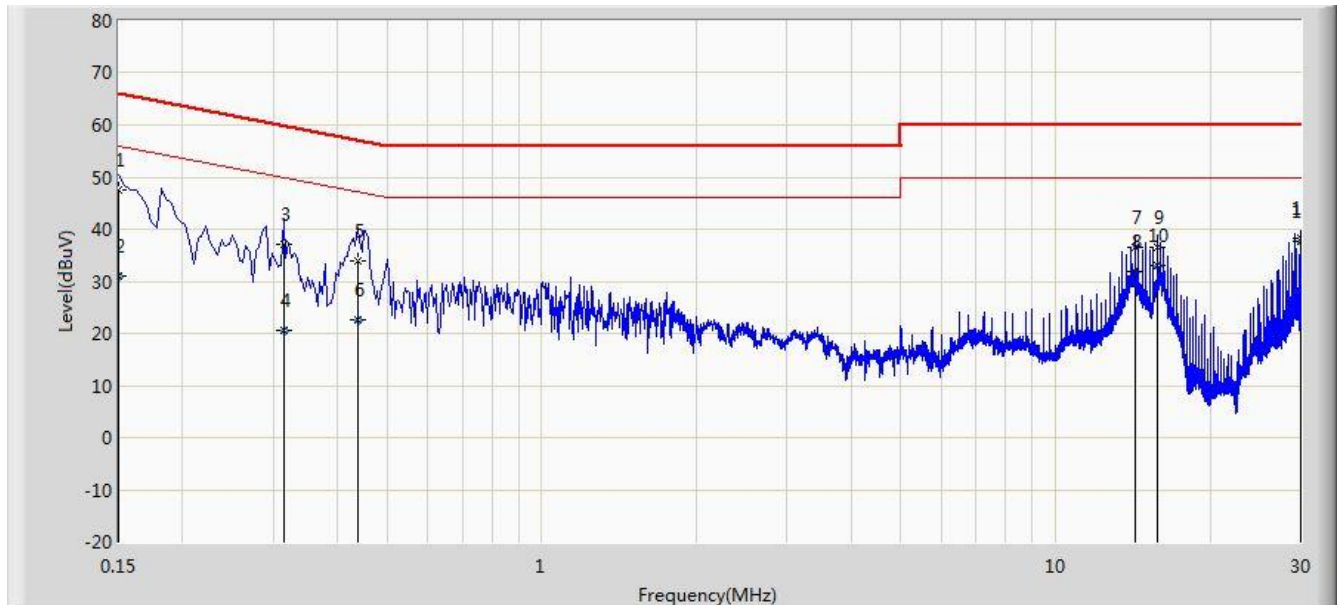
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

7.10.3. Test Setup



7.10.4. Test Result

Site: SR2	Time: 2017/11/16 - 00:05
Limit: FCC_Part15.207_CE_AC Power	Engineer: Milo Li
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: AC 120V/60Hz
Test Mode: Mode 1	

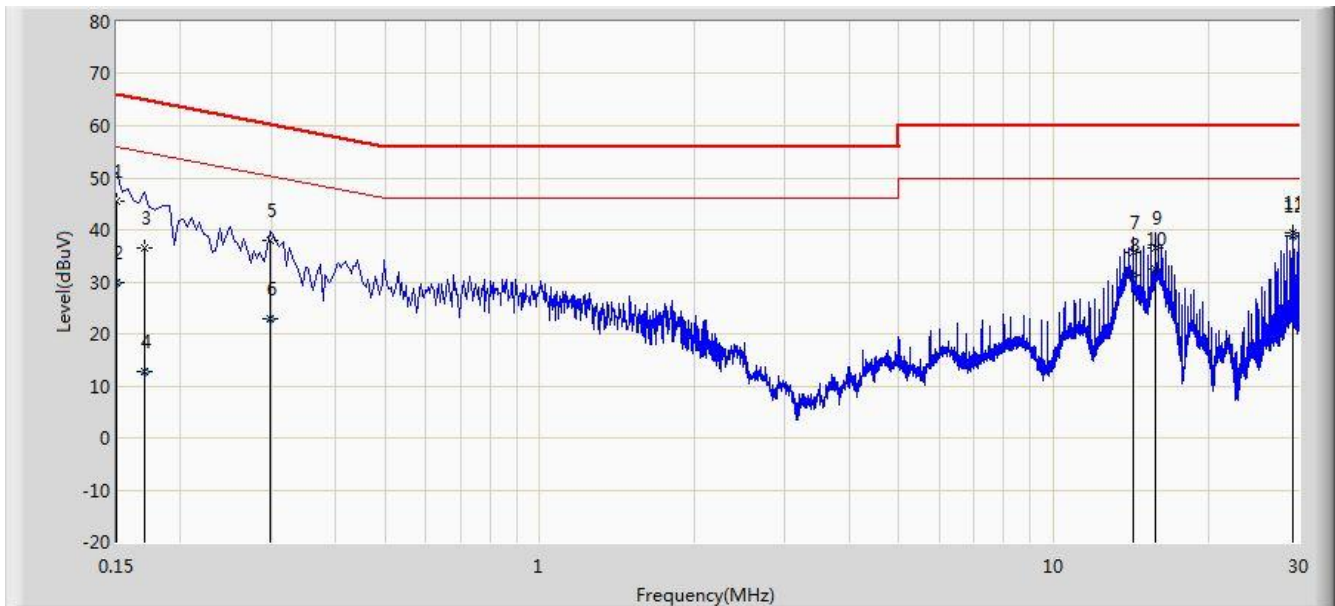


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	47.579	36.410	-18.421	66.000	11.168	QP
2			0.150	30.897	19.728	-25.103	56.000	11.168	AV
3			0.314	36.976	26.960	-22.888	59.864	10.015	QP
4			0.314	20.717	10.701	-29.147	49.864	10.015	AV
5			0.438	33.927	23.811	-23.172	57.100	10.117	QP
6			0.438	22.682	12.566	-24.417	47.100	10.117	AV
7			14.250	36.379	26.308	-23.621	60.000	10.072	QP
8			14.250	31.950	21.878	-18.050	50.000	10.072	AV
9			15.750	36.545	26.475	-23.455	60.000	10.070	QP
10		*	15.750	32.938	22.869	-17.062	50.000	10.070	AV
11			30.002	38.191	27.921	NaN	NaN	10.270	QP
12			30.002	37.737	27.467	NaN	NaN	10.270	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SR2	Time: 2017/11/16 - 00:20
Limit: FCC_Part15.207_CE_AC Power	Engineer: Milo Li
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: 4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module	Power: AC 120V/60Hz
Test Mode: Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	45.509	34.367	-20.491	66.000	11.142	QP
2			0.150	29.724	18.582	-26.276	56.000	11.142	AV
3			0.170	36.666	26.602	-28.295	64.960	10.064	QP
4			0.170	12.794	2.730	-42.167	54.960	10.064	AV
5			0.298	37.866	27.830	-22.432	60.298	10.036	QP
6			0.298	22.781	12.745	-27.517	50.298	10.036	AV
7			14.250	35.558	25.440	-24.442	60.000	10.118	QP
8			14.250	31.349	21.231	-18.651	50.000	10.118	AV
9			15.750	36.502	26.386	-23.498	60.000	10.117	QP
10			15.750	32.518	22.401	-17.482	50.000	10.117	AV
11			29.254	39.353	28.921	-20.647	60.000	10.432	QP
12		*	29.254	38.974	28.541	-11.026	50.000	10.432	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **4x4 Wave-2 802.11ac/a/n Mini PCIe WiFi Module** is in compliance with Part 15E of the FCC Rules.

The End