Test Report

FCC Part15 Subpart E

Product Name	:	AC1200 Wireless Dual Band Gigabit Router
Model No.	:	Archer C1200
FCC ID	:	TE7C1200

Applicant	:	TP-LINK TECHNOLOGIES CO., LTD.
Address	:	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen, China

Date of Receipt	:	Mar. 16, 2016
Test Date	:	Mar. 22, 2016~May 14, 2016
Issued Date	:	Jun. 29, 2016
Report No.	:	1632069R-RF-US-P09V01
Report Version	:	V1.1

Test Report Certification

Issued Date : Jun. 29, 2016
Report No. : 1632069R-RF-US-P09V01

Product Name	:	AC1200 Wireless Dual Band Gigabit Router
Applicant	:	TP-LINK TECHNOLOGIES CO., LTD.
Address	:	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer	:	TP-LINK TECHNOLOGIES CO., LTD.
Address	:	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Model No.	:	Archer C1200
FCC ID	:	TE7C1200
EUT Voltage	:	AC 100-240V, 50/60Hz
Brand Name	:	TP-LINK
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart E: 2015 ANSI C63.4:2014; ANSI C63.10:2013; 789033 D02 General UNII Test Procedures New Rules v01r02
Test Result	:	Complied
Performed Location	:	Quietek Corporation - Suzhou EMC Laboratory No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006, Jiangsu, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392;

Documented By : Kathy Feng

(Adm. Specialist: Kathy Feng)

Reviewed By : Jack Zhang

(Senior Engineer: Jack Zhang)

Approved By : Harry Zhao

(Engineering Manager: Harry Zhao)

Laboratory Information

We, **QuieTek Corporation,** are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	**:**	**BSMI, NCC, TAF**
USA	**:**	**FCC**
Japan	**:**	**VCCI**
China	**:**	**CNAS**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site :http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory :
No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

Suzhou Testing Laboratory :
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006, Jiangsu, China
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1632069R-RF-US-P09V01	V1.0	Initial Issued Report	Jun. 01, 2016
1632069R-RF-US-P09V01	V1.1	Modified the new B4 limit	Jun. 29, 2016

1. General Information

1.1. EUT Description

Product Name	AC1200 Wireless Dual Band Gigabit Router						
Brand Name	TP-LINK						
Model No.	Archer C1200						
EUT Voltage	AC 100-240V, 50/60Hz						
Test Voltage	120V/60Hz						
Type of Modulation	OFDM						
Data Rate	802.11a: 6/9/12/18/24/36/48/54Mbps						
	802.11n: up to 300Mbps						
	802.11ac: up to 866.6Mbps						
Channel Control	Auto						
Transmit modes	☒	802.11a	☒	802.11n(20MHz)	☒	802.11n(40MHz)	
	☒	802.11ac(20MHz)	☒	802.11ac(40MHz)	☒	802.11ac(80MHz)	
Support Bands	☒	5150MHz~5250MHz	☐	Outdoor AP			
			☒	Indoor AP			
			☐	Fixed point-to-point AP			
			☐	Mobile and Portable Client			
	☐	5250MHz~5350MHz					
	☐	5470MHz~5725MHz	☐	With TDWR Channels			
			☐	Without TDWR Channels			
	☒	5725MHz~5850MHz					

1.2. Antenna information

Antenna Model	Dipole Antenna						
Antenna Manufacturer	TP-Link						
Antenna Delivery	☐	1*TX+1*RX	☒	2*TX+2*RX	☐	3*TX+3*RX	
Antenna Technology	☐	SISO					
	☒	MIMO	☐	Basic methodology with NANT transmit antennas			
			☐	Sectorized antenna systems			
			☐	Cross-polarized antennas			
			☐	Unequal antenna gains, with equal transmit powers			
			☐	Spatial Multiplexing			
			☒	Cyclic Delay Diversity (CDD)			
Antenna Type	Dipole Antenna						

Antenna Information						
No.				Ant Type	Ant Gain/ Directional Gain (dBi)	
☐	SISO	☐	Antenna 0			
		☐	Antenna 1			
		☐	Antenna 2			
☐	Basic			Dipole Antenna	5150-5250MHz	5725-5850MHz
					Ant0: 2.69 Ant1: 2.33	Ant0: 2.94 Ant1: 2.30
☒	CDD			Dipole Antenna	For power: 2.69 For PSD: 2.99	For power: 2.94 For PSD: 3.24
☐	Beam-forming					

1.3. Working Frequency of Each Channel:

802.11a/n/ac(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825MHz	N/A	N/A	N/A	N/A	N/A	N/A
802.11n/ac(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	151	5755 MHz	159	5795 MHz
802.11ac(80MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	155	5775 MHz	N/A	N/A	N/A	N/A

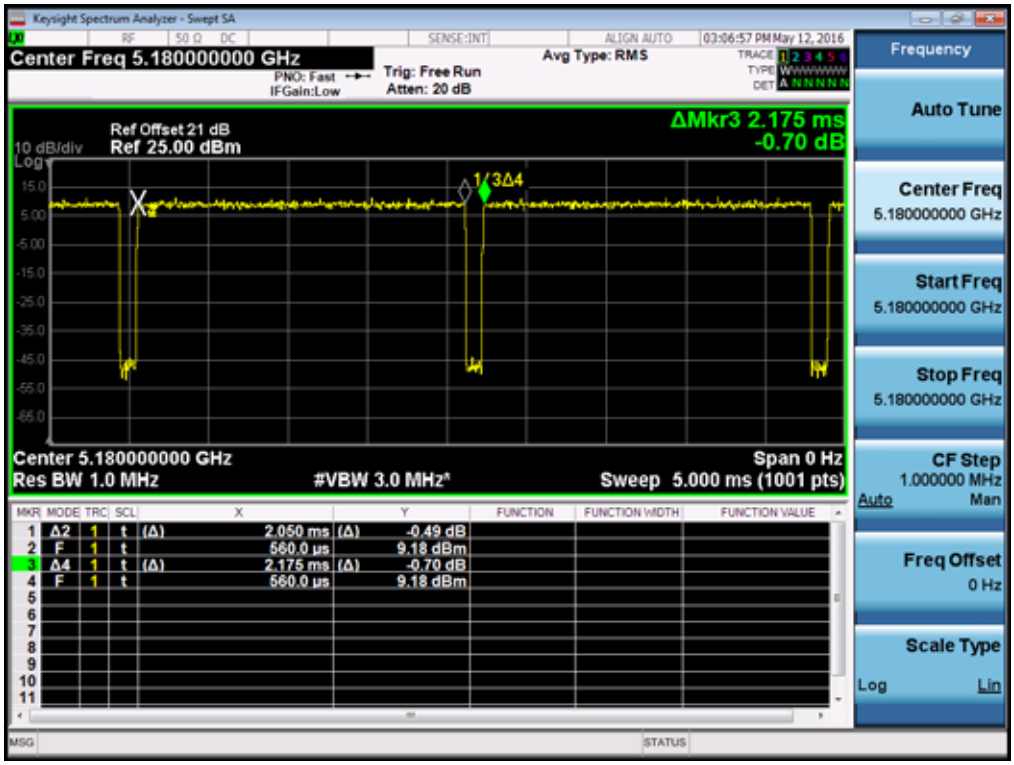
1.4. Power Parameter Value of the test software

Test Mode	Test Channel	Power Setting (With CDD)
802.11a	5180	92
	5220	98
	5240	100
	5745	102
	5785	102
	5825	102
802.11n(20MHz)	5180	91
	5220	101
	5240	100
	5745	102
	5785	102
	5825	101
802.11ac(20MHz)	5180	92
	5220	101
	5240	101
	5745	102
	5785	102
	5825	102
802.11n(40MHz)	5190	76
	5230	102
	5755	101
	5795	101
802.11ac(40MHz)	5190	80
	5230	100
	5755	102
	5795	102
802.11ac(80MHz)	5210	80
	5775	101

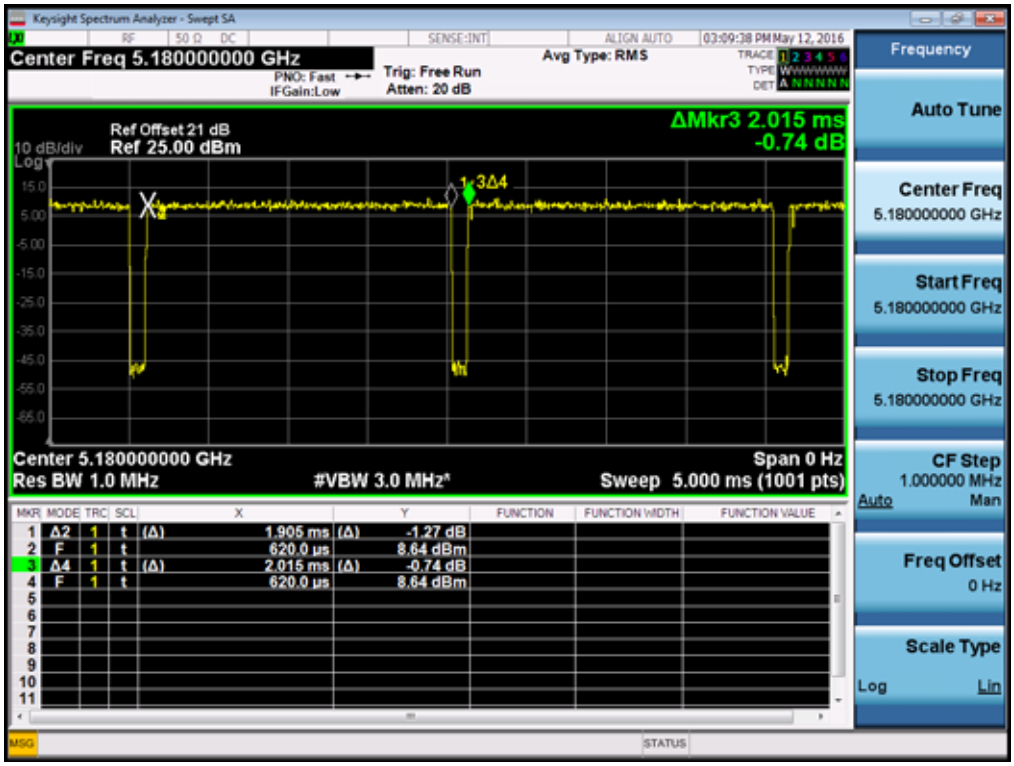
1.5. Duty Cycle

Test Mode	Duty Cycle
802.11a with CDD	94.33%
802.11n(20MHz) with CDD	94.20%
802.11n(40MHz) with CDD	87.43%
802.11ac(20MHz) with CDD	98.05%
802.11ac(40MHz) with CDD	93.57%
802.11ac(80MHz) with CDD	97.02%

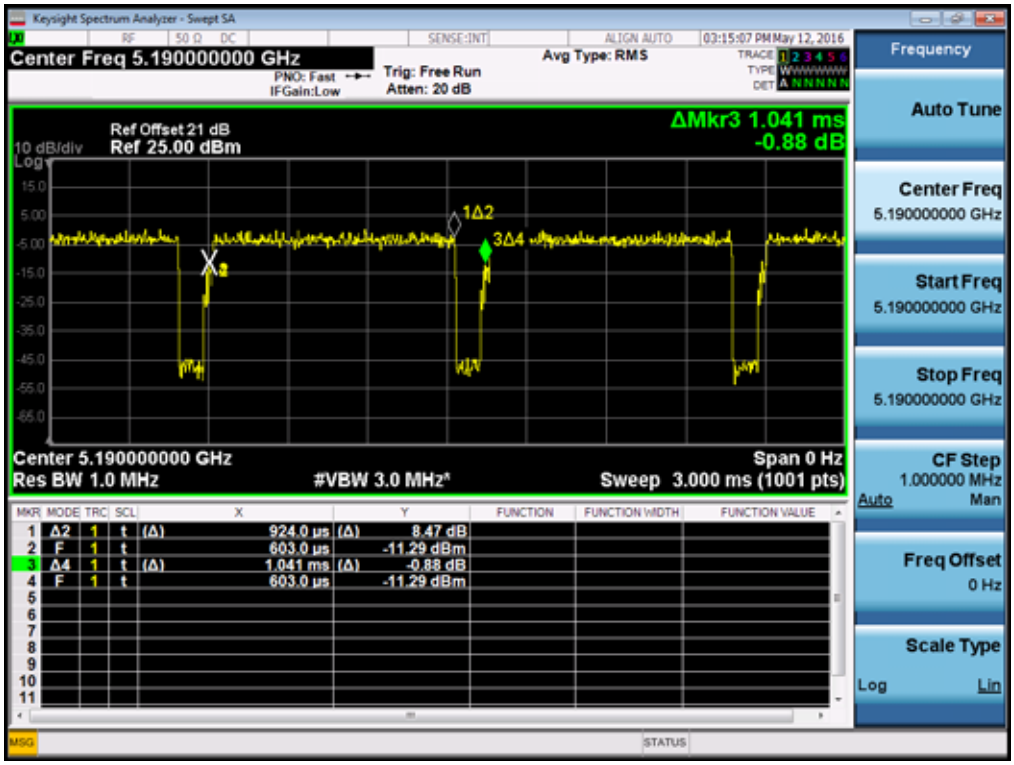
802.11a with CDD



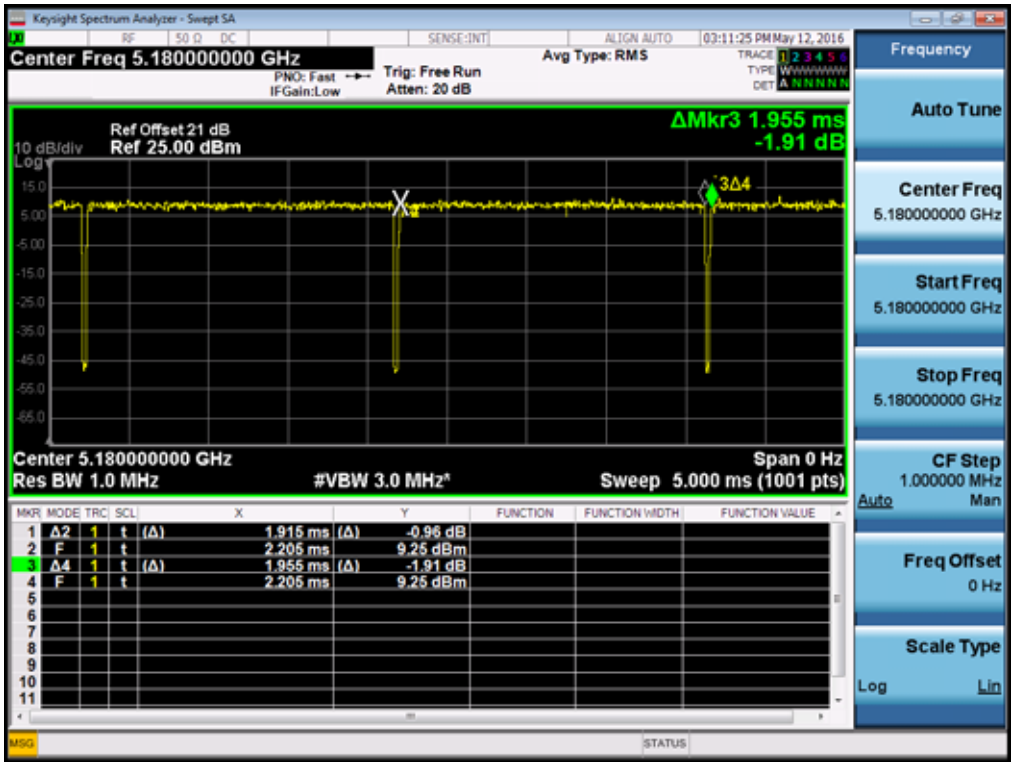
802.11n(20MHz) with CDD



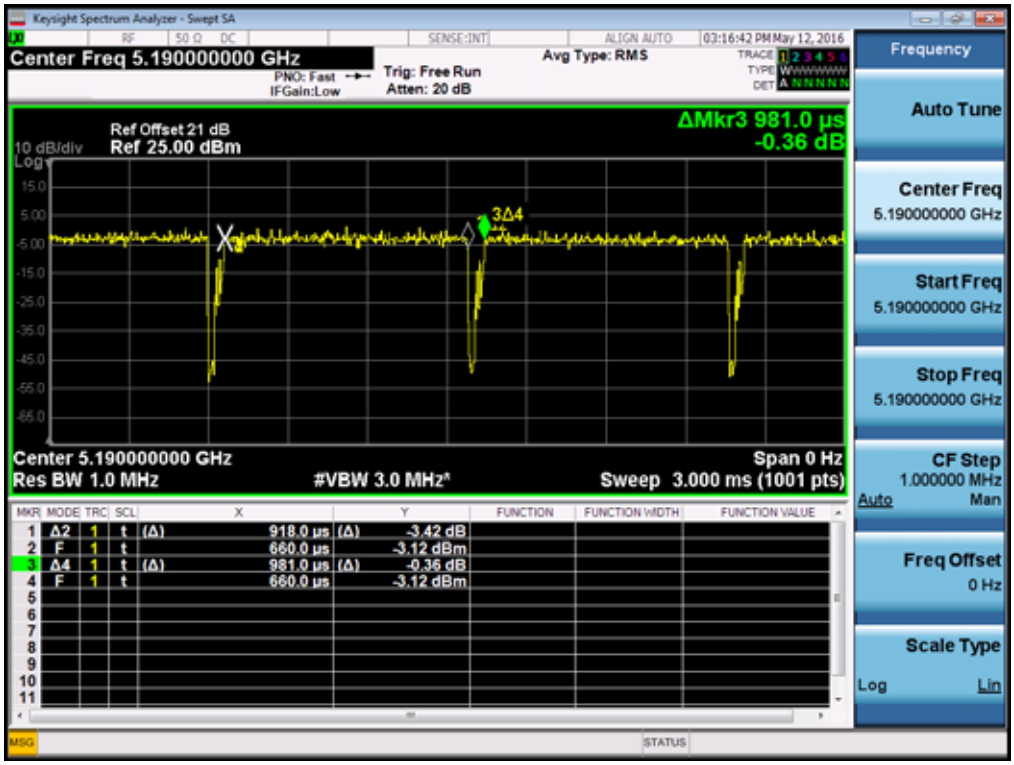
802.11n(40MHz) with CDD



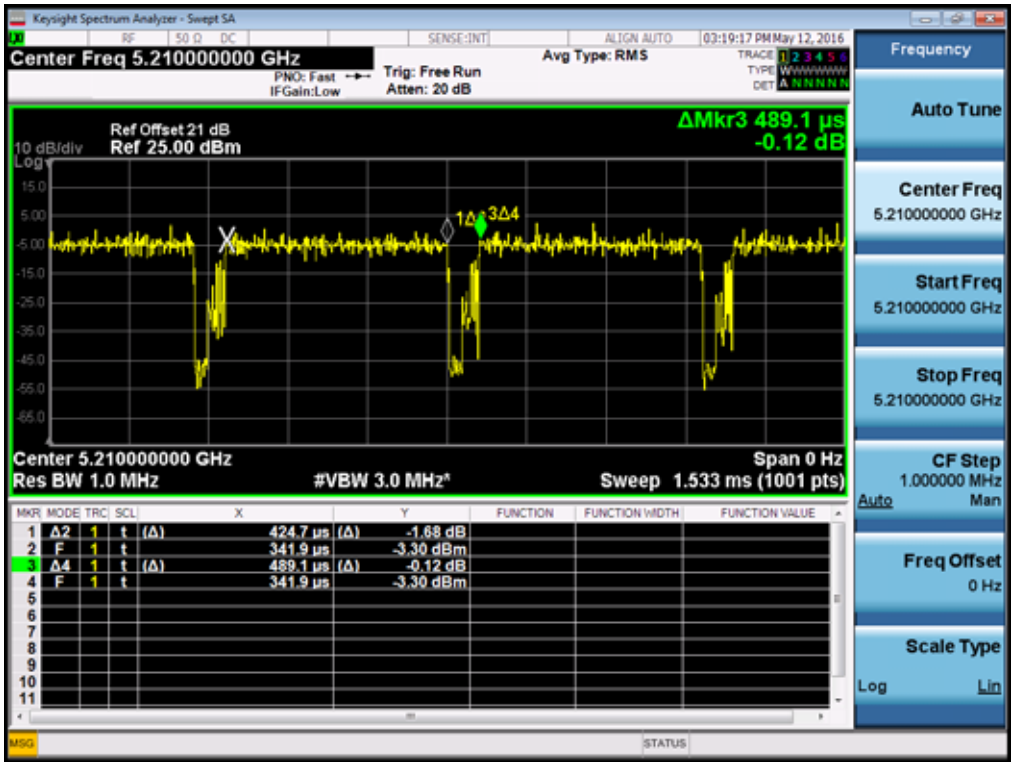
802.11ac(20MHz) with CDD



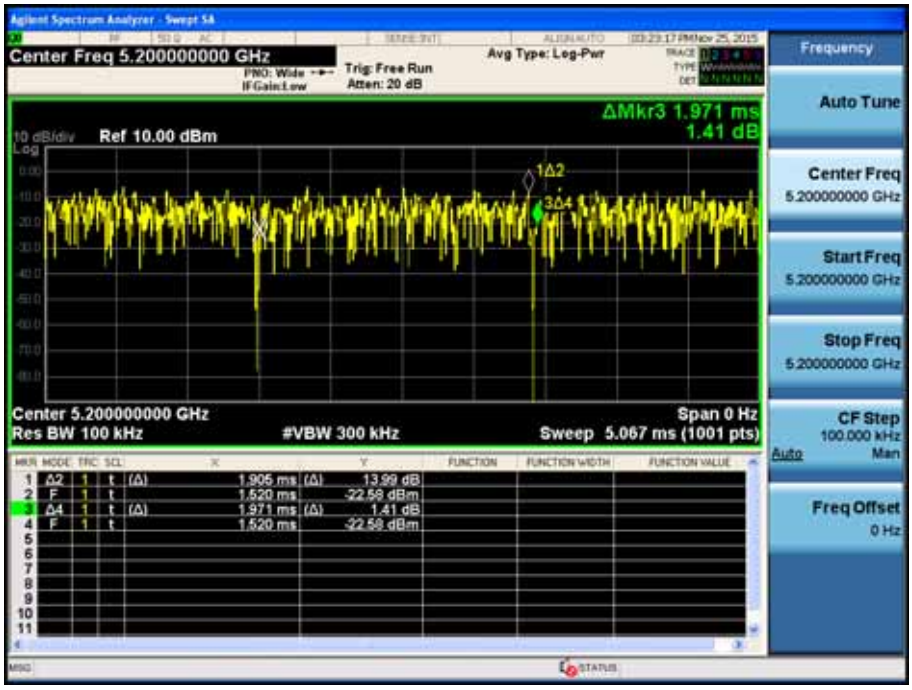
802.11ac(40MHz) with CDD



802.11ac(80MHz) with CDD



802.11ac(20MHz) with beam-forming



1.6. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11a with CDD
Mode 2: Transmit by 802.11n(20MHz) with CDD
Mode 3: Transmit by 802.11n(40MHz) with CDD
Mode 4: Transmit by 802.11ac(20MHz) with CDD
Mode 5: Transmit by 802.11ac(40MHz) with CDD
Mode 6: Transmit by 802.11ac(80MHz) with CDD

Note 1: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

2: For portable device, radiated tests was verified over X, Y, Z axis, and shown the worst case on this report.

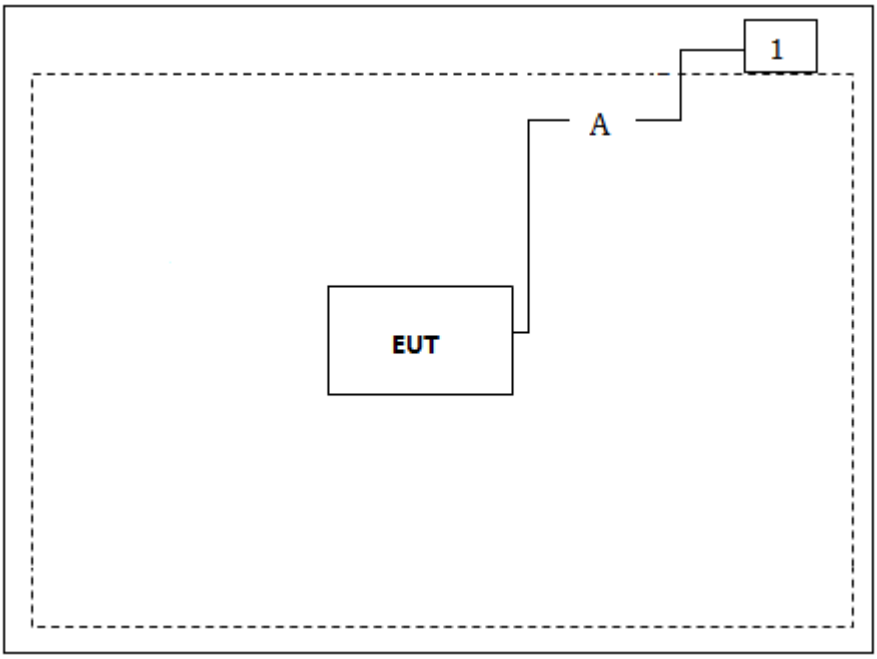
1.7. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Asus	N80V	8BN0AS226971468	None-shielded

1.8. Configuration of Tested System

With CDD:

Connection Diagram


Signal Cable Type		Signal cable Description
A	LAN Cable	Non-shielded, 15m

1.9. EUT Exercise Software

With CDD:

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Input RF commands, and set the test mode and channel, then press OK to start to continue transmit or receive.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

Performed Test Item	Normative References	Limit	Result
Conducted Emission	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.207	FCC 15.207	PASS
Radiated Emission	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.209	FCC 15.209	PASS
26dB Emission Bandwidth	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	N/A	PASS
Power Output	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	FCC 15.407(a)	PASS
Peak Power Spectral Density	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	FCC 15.407(a)	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.205, 15.407(b)	FCC 15.407(b)	PASS
Frequency Stability	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(g)	Within the band	PASS

2.2. Test Environment

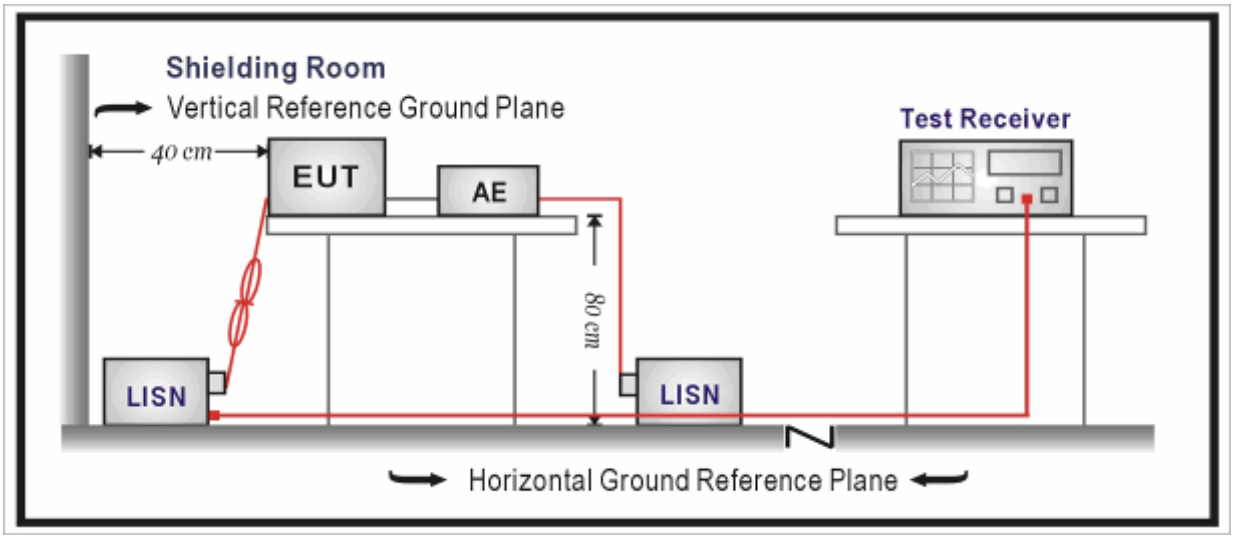
Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

3.1. Test Equipment

Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100726	2016.03.29	2017.03.28
Two-Line V-Network	R&S	ENV216	100043	2016.03.29	2017.03.28
Two-Line V-Network	R&S	ENV216	100044	2015.09.17	2016.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2016.03.02	2017.03.01
50ohm Termination	SHX	TF2	07081401	2015.09.17	2016.09.16
Temperature/Humidity Meter	zhichen	ZC1-2	TR1-TH	2016.01.09	2017.01.08
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

3.2. Test Setup



3.3. Limit

Frequency (MHz)	QP (dBμV)	AV (dBμV)
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 0.15 MHz to 0.5 MHz.		

3.4. Test Procedure

Test Method			
	References Rule	Chapter	Item
☒	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices
☒	ANSI C63.4-2014	7	AC power-line conducted emission measurements

3.5. Uncertainty

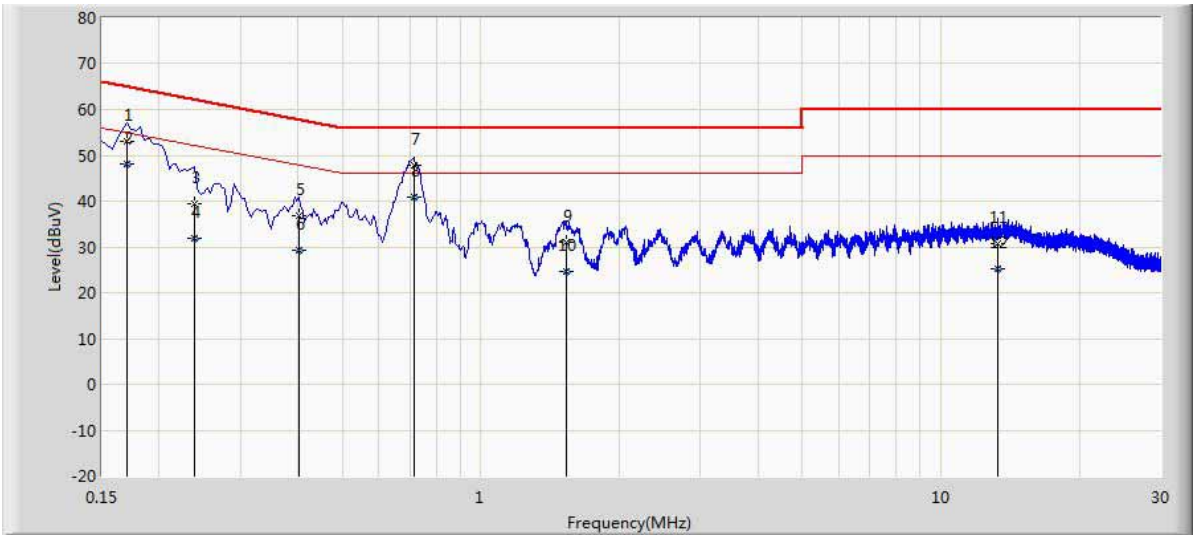
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Polarity	:	Line
Test Item	:	AC Power Line Conducted Emission	Power	:	AC 120V/60Hz
Test Site	:	TR1	Test Mode	:	Mode 1

No	Frequency (MHz)	Measured Level (dB μ V)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V)	Probe (dB)	Cable (dB)	Type
1	0.170	53.033	43.310	-11.927	64.960	9.663	0.060	QP
2	0.170	48.123	38.400	-6.837	54.960	9.663	0.060	AV
3	0.238	39.513	29.803	-22.653	62.166	9.650	0.060	QP
4	0.238	31.851	22.141	-20.315	52.166	9.650	0.060	AV
5	0.402	36.928	27.225	-20.884	57.812	9.639	0.064	QP
6	0.402	29.374	19.671	-18.438	47.812	9.639	0.064	AV
7	0.714	47.763	38.073	-8.237	56.000	9.620	0.070	QP
8	0.714	40.910	31.220	-5.090	46.000	9.620	0.070	AV
9	1.534	31.121	21.391	-24.879	56.000	9.640	0.090	QP
10	1.534	24.723	14.993	-21.277	46.000	9.640	0.090	AV
11	13.318	30.611	20.491	-29.389	60.000	9.790	0.330	QP
12	13.318	25.226	15.106	-24.774	50.000	9.790	0.330	AV

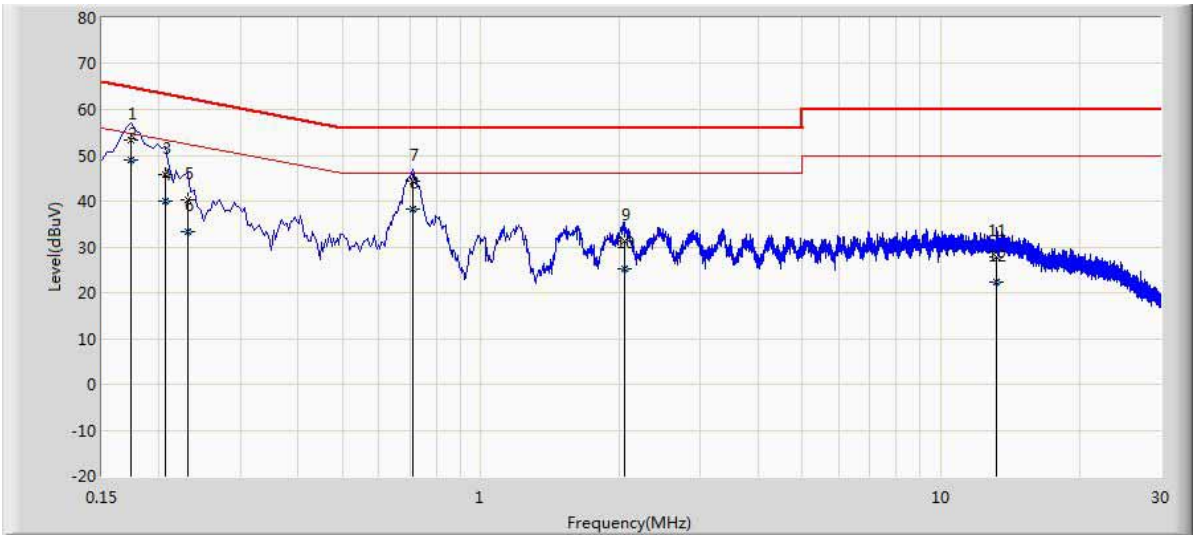
Polarity: Line



Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Polarity	:	Neutral
Test Item	:	AC Power Line Conducted Emission	Power	:	AC 120V/60Hz
Test Site	:	TR1	Test Mode	:	Mode 1

No	Frequency (MHz)	Measured Level (dB μV)	Reading Level (dB μV)	Over Limit (dB)	Limit (dB μV)	Probe (dB)	Cable (dB)	Type
1	0.174	53.395	43.670	-11.372	64.767	9.665	0.060	QP
2	0.174	48.988	39.263	-5.779	54.767	9.665	0.060	AV
3	0.206	45.862	36.142	-17.503	63.365	9.660	0.060	QP
4	0.206	40.080	30.360	-13.285	53.365	9.660	0.060	AV
5	0.230	40.210	30.490	-22.240	62.450	9.660	0.060	QP
6	0.230	33.358	23.638	-19.092	52.450	9.660	0.060	AV
7	0.710	44.478	34.768	-11.522	56.000	9.640	0.070	QP
8	0.710	38.365	28.655	-7.635	46.000	9.640	0.070	AV
9	2.054	31.335	21.595	-24.665	56.000	9.640	0.100	QP
10	2.054	25.274	15.534	-20.726	46.000	9.640	0.100	AV
11	13.170	27.812	17.692	-32.188	60.000	9.790	0.330	QP
12	13.170	22.304	12.184	-27.696	50.000	9.790	0.330	AV

Polarity: Neutral



4. Radiated Emission

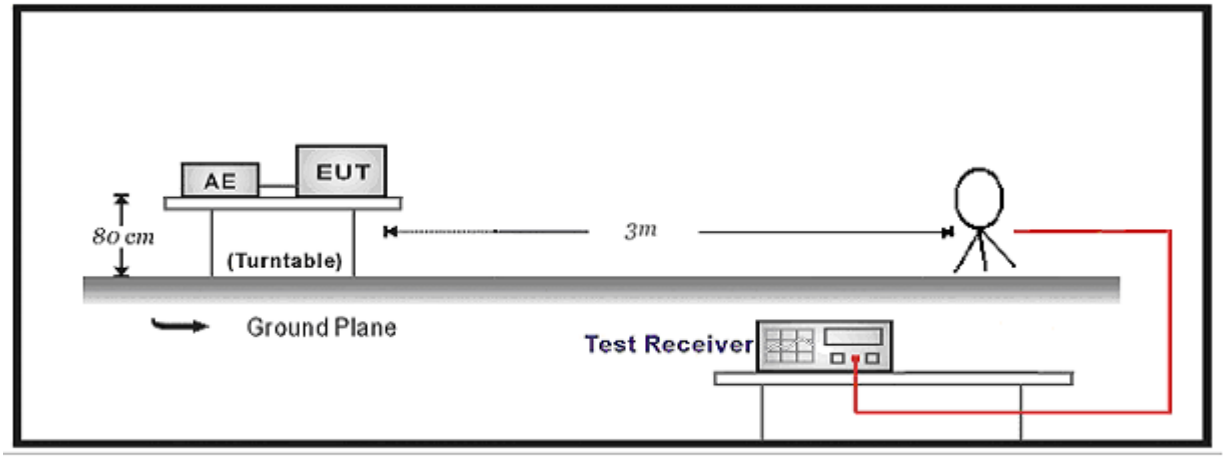
4.1. Test Equipment

Radiated Emission / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.29	2017.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2015.11.18	2016.11.17
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2015.10.16	2016.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.02	2017.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2016.01.09	2017.01.08

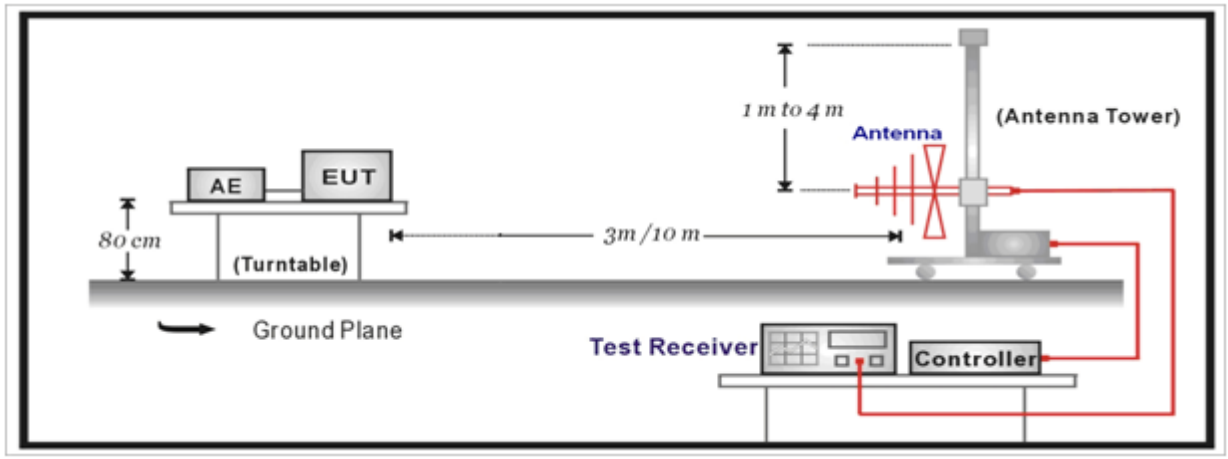
Radiated Emission / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.08	2017.01.07
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.06	2017.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.06	2017.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.22	2017.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2015.11.25	2016.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.02	2017.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2015.06.10	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.09	2017.01.08
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

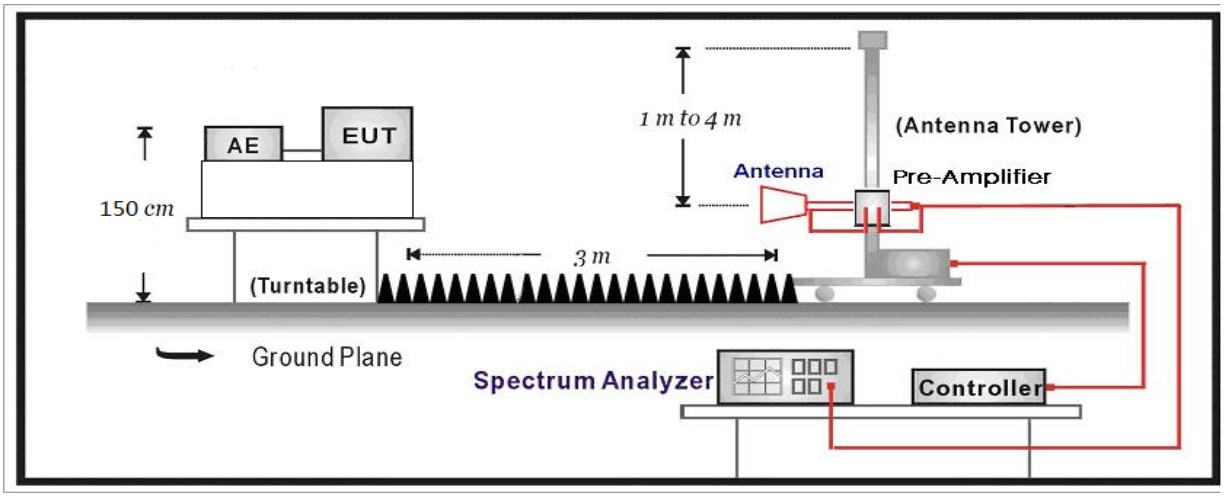
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



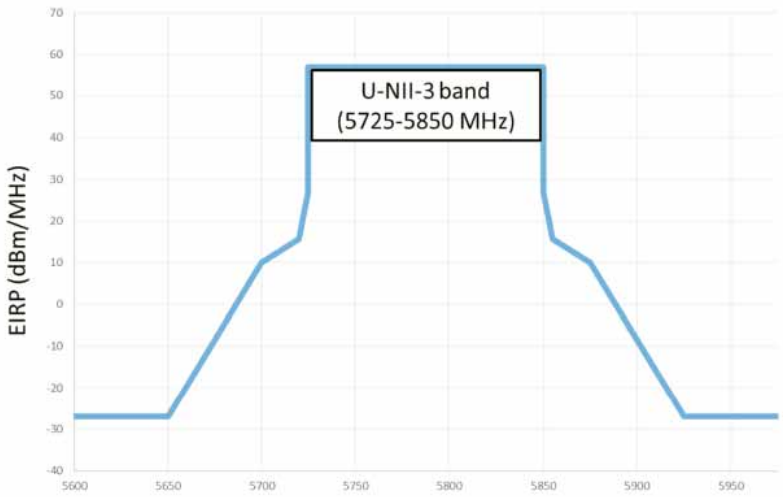
4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209 (Restricted Band Emissions Limit)		
Frequency (MHz)	Distance (m)	Level (dB μV/m)
0.009-0.490	300	2400/F(kHz)
0.490-1.705	30	24000/F(kHz)
1.705-30.0	30	30
30-88	3	100**
88-216	3	150**
216-960	3	200**
Above 960	3	500

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

FCC Part 15 Subpart C Paragraph 15.205 (Restricted Band)			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
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	8.025 – 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 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	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	
13.36 – 13.41			

FCC Part 15 Subpart C Paragraph 15.407(5)(b) (Unrestricted Band Emissions Limit)		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dB μ V/m)
5150 - 5250	-27	68.3
5250 - 5350	-27	68.3
5470 - 5725	-27	68.3
FCC 16-24		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	
5725 - 5850		

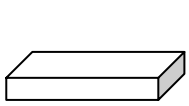
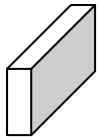
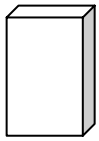
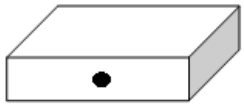
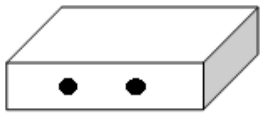
4.4. Test Procedure

Test Method					
	References Rule			Chapter	Description
☐	ANSI C63.10			12.7.3	Emissions in non-restricted frequency bands
☒	ANSI C63.10			12.7.2	Emissions in restricted frequency bands
	☒	ANSI C63.10		12.7.5	Radiated emission measurements
	☒	ANSI C63.10		12.7.6	Procedure for peak unwanted emissions measurements above 1000 MHz
	☒	ANSI C63.10		12.7.7	Procedures for average unwanted emissions measurements above 1000 MHz
		☐	ANSI C63.10	12.7.7.2	Method AD (average detection)—primary method
		☒	ANSI C63.10	12.7.7.3	Method VB-A (Alternative)
	☒	ANSI C63.10		6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒	ANSI C63.10		6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒	ANSI C63.10		6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
☐	FCC KDB 789033 D02v01r02			G.2	Unwanted Emissions that fall Outside of the Restricted Bands
☐	FCC KDB 789033 D02v01r02			G.1	Unwanted Emissions in the Restricted Bands
	☐	FCC KDB 789033 D02v01r02		G.4	Procedure for Unwanted Emissions Measurements below 1000 MHz
	☐	FCC KDB 789033 D02v01r02		G.5	Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz
	☐	FCC KDB 789033 D02v01r02		G.6	Procedures for Average Unwanted Emissions Measurements above 1000 MHz
		☐	FCC KDB 789033 D02v01r02	G.6.c	Method AD (Average detection)—primary method
		☒	FCC KDB 789033 D02v01r02	G.6.d	Method VB (Averaging using reduced video bandwidth): Alternative method.

4.5. Uncertainty

The measurement uncertainty above 1GHz is defined as ± 3.9 dB
below 1GHz is defined as ± 3.8 dB

4.6. EUT test Axis definition

<table>
<tr><td>Item</td><td colspan="4">Radiated Emission</td></tr>
<tr><td rowspan="4">Device Category</td><td>☐</td><td colspan="3">Outdoor AP</td></tr>
<tr><td>☒</td><td colspan="3">Indoor AP</td></tr>
<tr><td>☐</td><td colspan="3">Fixed point-to-point AP</td></tr>
<tr><td>☐</td><td colspan="3">Mobile and Portable Client</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1-6</td></tr>
<tr><td rowspan="11">Test method</td><td>☒</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="2"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>☐</td><td colspan="3">Conducted</td></tr>
<tr><td>☐</td><td colspan="3">Chain 0</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☒</td><td>Chain 0</td><td colspan="2">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 0</td><td>Chain 1</td><td>Chain 2</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

4.7. Test Result

Mode1: Transmit by 802.11a with CDD									
Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measured Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
Ant 0+1	36	H	10360	27.0	16.5	43.5	54(Note3)	10.5	PK
		H	15540	12.6	24.1	36.7	54(Note3)	17.3	PK
		V	10360	27.9	16.5	44.4	54(Note3)	9.6	PK
		V	15540	13.3	24.1	37.4	54(Note3)	16.6	PK
	44	H	10440	26.2	16.8	43.0	54(Note3)	11.0	PK
		H	15660	17.8	24.6	42.4	54(Note3)	11.6	PK
		V	10440	30.3	16.8	47.1	54(Note3)	6.9	PK
		V	15660	18.3	24.6	42.9	54(Note3)	11.1	PK
	48	H	10480	26.6	16.6	43.2	54(Note3)	10.8	PK
		H	15720	15.0	26.8	41.8	54(Note3)	12.2	PK
		V	10480	30.6	16.6	47.2	54(Note3)	6.8	PK
		V	15720	15.3	26.8	42.1	54(Note3)	11.9	PK
	149	H	11490	31.2	21.3	52.5	54(Note3)	1.5	PK
		H	17235	25.4	25.7	51.1	54(Note3)	2.9	PK
		V	11490	30.6	21.3	51.9	54(Note3)	2.1	PK
		V	17235	23.7	25.7	49.4	54(Note3)	4.6	PK
	157	H	11565.5	30.8	22.1	52.9	54(Note3)	1.1	PK
		H	17362.5	24.9	25.3	50.2	54(Note3)	3.8	PK
		V	11565.5	30.6	22.1	52.7	54(Note3)	1.3	PK
		V	17345.5	26.4	25.3	51.7	54(Note3)	2.3	PK
	165	H	11650.5	30.2	23.0	53.2	54(Note3)	0.8	PK
		H	17475	24.9	25.3	50.2	54(Note3)	3.8	PK
		V	11650.5	29.7	23.0	52.7	54(Note3)	1.3	PK
		V	17475	28.2	25.3	53.5	54(Note3)	0.5	PK

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~40GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode 2: Transmit by 802.11n(20MHz) with CDD									
Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measured Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
Ant 0+1	36	H	10360	26.2	16.5	42.7	54(Note3)	11.3	PK
		H	15540	12.9	24.1	37.0	54(Note3)	17.0	PK
		V	10360	27.6	16.5	44.1	54(Note3)	9.9	PK
		V	15540	12.5	24.1	36.6	54(Note3)	17.4	PK
	44	H	10440	26.7	16.8	43.5	54(Note3)	10.5	PK
		H	15660	17.8	24.6	42.4	54(Note3)	11.6	PK
		V	10440	30.7	16.8	47.5	54(Note3)	6.5	PK
		V	15660	18.0	24.6	42.6	54(Note3)	11.4	PK
	48	H	10480	27.3	16.6	43.9	54(Note3)	10.1	PK
		H	15720	16.3	26.8	43.1	54(Note3)	10.9	PK
		V	10480	30.7	16.6	47.3	54(Note3)	6.7	PK
		V	15720	15.5	26.8	42.3	54(Note3)	11.7	PK
	149	H	11490	30.5	21.3	51.8	54(Note3)	2.2	PK
		H	17235	25.6	25.7	51.3	54(Note3)	2.7	PK
		V	11490	30.5	21.3	51.8	54(Note3)	2.2	PK
		V	17235	23.6	25.7	49.3	54(Note3)	4.7	PK
	157	H	11570	30.6	22.1	52.7	54(Note3)	1.3	PK
		H	17355	25.1	25.3	50.4	54(Note3)	3.6	PK
		V	11570	30.6	22.1	52.7	54(Note3)	1.3	PK
		V	17355	26.6	25.3	51.9	54(Note3)	2.1	PK
	165	H	11650	29.7	23.0	52.7	54(Note3)	1.3	PK
		H	17475	25.1	25.3	50.4	54(Note3)	3.6	PK
		V	11650	29.7	23.0	52.7	54(Note3)	1.3	PK
		V	17475	27.7	25.3	53.0	54(Note3)	1.0	PK

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~40GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode 3: Transmit by 802.11n(40MHz) with CDD									
Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measured Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
Ant 0+1	38	H	10380	26.2	17.2	43.4	54(Note3)	10.6	PK
		H	15570	12.5	27.1	39.6	54(Note3)	14.4	PK
		V	10380	26.1	17.2	43.3	54(Note3)	10.7	PK
		V	15570	13.4	27.1	40.5	54(Note3)	13.5	PK
	46	H	10460	26.9	16.5	43.4	54(Note3)	10.6	PK
		H	15690	15.6	23.6	39.2	54(Note3)	14.8	PK
		V	10460	29.2	16.5	45.7	54(Note3)	8.3	PK
		V	15690	16.2	23.6	39.8	54(Note3)	14.2	PK
	151	H	11490	30.3	21.3	51.6	54(Note3)	2.4	PK
		H	17235	26.6	25.7	52.3	54(Note3)	1.7	PK
		V	11490	30.3	21.3	51.6	54(Note3)	2.4	PK
		V	17235	27.8	25.7	53.5	54(Note3)	0.5	PK
	159	H	11590	28.2	22.2	50.4	54(Note3)	3.6	PK
		H	17385	25.9	25.4	51.3	54(Note3)	2.7	PK
		V	11590	28.5	22.2	50.7	54(Note3)	3.3	PK
		V	17385	26.1	25.4	51.5	54(Note3)	2.5	PK

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~40GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode 4: Transmit by 802.11ac(20MHz) with CDD									
Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measured Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
Ant 0+1	36	H	10360	26.5	16.5	43.0	54(Note3)	11.0	PK
		H	15540	13.0	24.1	37.1	54(Note3)	16.9	PK
		V	10360	27.0	16.5	43.5	54(Note3)	10.5	PK
		V	15540	12.5	24.1	36.6	54(Note3)	17.4	PK
	44	H	10440	26.1	16.8	42.9	54(Note3)	11.1	PK
		H	15660	17.6	24.6	42.2	54(Note3)	11.8	PK
		V	10440	30.4	16.8	47.2	54(Note3)	6.8	PK
		V	15660	18.6	24.6	43.2	54(Note3)	10.8	PK
	48	H	10480	27.1	16.6	43.7	54(Note3)	10.3	PK
		H	15720	15.7	26.8	42.5	54(Note3)	11.5	PK
		V	10480	30.9	16.6	47.5	54(Note3)	6.5	PK
		V	15720	16.0	26.8	42.8	54(Note3)	11.2	PK
	149	H	11490	30.3	21.3	51.6	54(Note3)	2.4	PK
		H	17235	25.7	25.7	51.4	54(Note3)	2.6	PK
		V	11490	29.4	21.3	50.7	54(Note3)	3.3	PK
		V	17235	22.9	25.7	48.6	54(Note3)	5.4	PK
	157	H	11570	28.9	22.1	51.0	54(Note3)	3.0	PK
		H	17355	26.0	25.3	51.3	54(Note3)	2.7	PK
		V	11570	29.5	22.1	51.6	54(Note3)	2.4	PK
		V	17355	25.5	25.3	50.8	54(Note3)	3.2	PK
	165	H	11650	28.4	23.0	51.4	54(Note3)	2.6	PK
		H	17475	25.8	25.3	51.1	54(Note3)	2.9	PK
		V	11650	27.6	23.0	50.6	54(Note3)	3.4	PK
		V	17475	26.7	25.3	52.0	54(Note3)	2.0	PK

1. Measure Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~40GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode5: Transmit by 802.11ac(40MHz) with CDD									
Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measured Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
Ant 0+1	38	H	10380	26.4	17.2	43.6	54(Note3)	10.4	PK
		H	15570	13.0	27.1	40.1	54(Note3)	13.9	PK
		V	10380	27.4	17.2	44.6	54(Note3)	9.4	PK
		V	15570	14.5	27.1	41.6	54(Note3)	12.4	PK
	46	H	10460	26.8	16.5	43.3	54(Note3)	10.7	PK
		H	15690	15.6	23.6	39.2	54(Note3)	14.8	PK
		V	10460	30.5	16.5	47.0	54(Note3)	7.0	PK
		V	15690	15.7	23.6	39.3	54(Note3)	14.7	PK
	151	H	11510	29.2	21.3	50.5	54(Note3)	3.5	PK
		H	17265	25.9	25.7	51.6	54(Note3)	2.4	PK
		V	11510	29.1	21.3	50.4	54(Note3)	3.6	PK
		V	17265	25.8	25.7	51.5	54(Note3)	2.5	PK
	159	H	11590	27.6	22.2	49.8	54(Note3)	4.2	PK
		H	17385	24.9	25.4	50.3	54(Note3)	3.7	PK
		V	11590	27.9	22.2	50.1	54(Note3)	3.9	PK
		V	17385	25.7	25.4	51.1	54(Note3)	2.9	PK

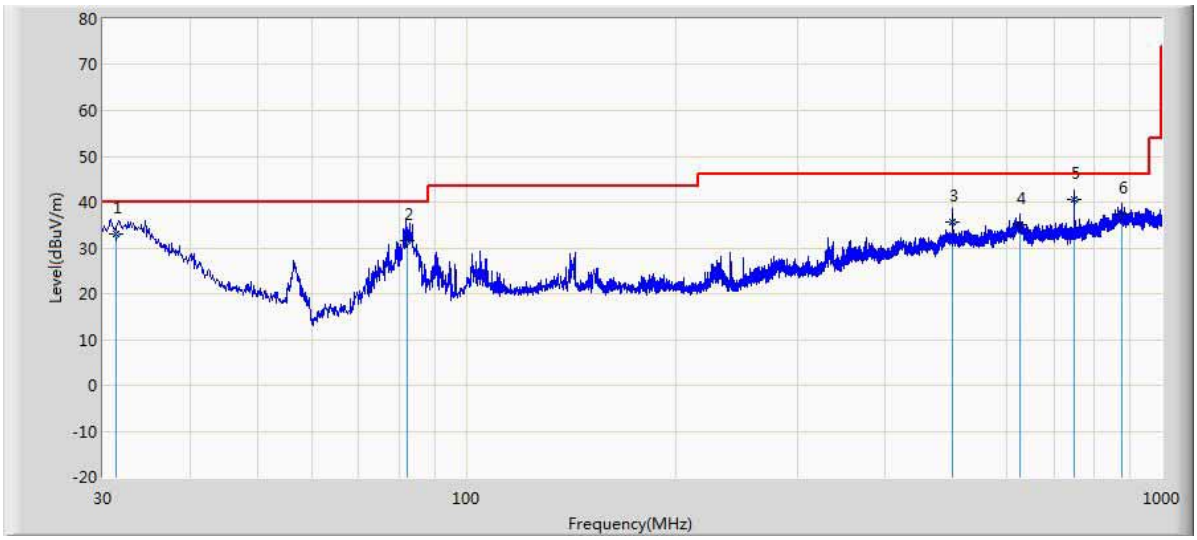
1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~40GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode6: Transmit by 802.11ac(80MHz) with CDD									
Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measured Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
Ant 0+1	42	H	10420	29.1	16.8	45.9	54(Note3)	8.1	PK
		H	15630	18.2	24.6	42.8	54(Note3)	11.2	PK
		V	10420	26.1	16.8	42.9	54(Note3)	11.1	PK
		V	15630	16.2	24.6	40.8	54(Note3)	13.2	PK
	155	H	11550	28.9	22.3	51.2	54(Note3)	2.8	PK
		H	17325	24.9	25.5	50.4	54(Note3)	3.6	PK
		V	11550	28.7	22.3	51.0	54(Note3)	3.0	PK
		V	17325	24.6	25.5	50.1	54(Note3)	3.9	PK
1. Measured Level = Reading Level + Factor. 2. The test frequency range, 9kHz~30MHz, 18GHz~40GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report. 3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.									

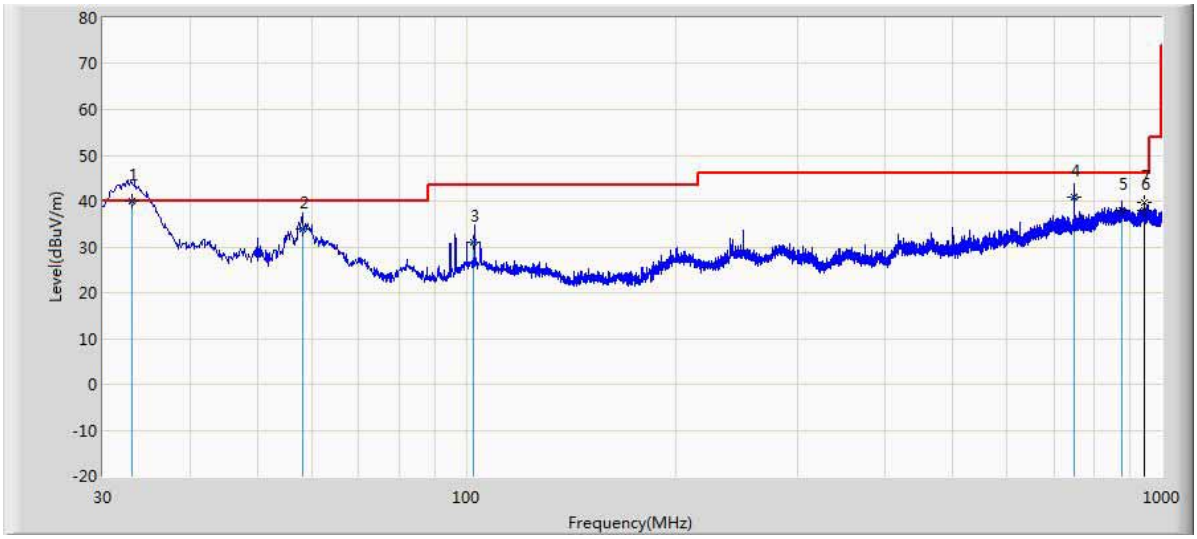
The worst case of Radiated Emission below 1GHz:

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measure Level (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Detector
Ant 0+1	42	H	31.353	37.381	-4.479	32.902	40.000	7.098	QP
		H	82.252	46.132	-14.658	31.474	43.500	12.026	QP
		H	499.863	38.051	-2.54	35.511	46.000	10.489	QP
		H	625.023	35.977	-0.796	35.181	46.000	10.819	QP
		H	750.352	40.511	0.19	40.701	46.000	5.299	QP
		H	875.252	36.335	1.051	37.386	46.000	8.614	QP
		V	33.078	45.475	-5.489	39.986	40.000	0.014	QP
		V	58.236	49.282	-15.409	33.873	40.000	6.127	QP
		V	102.523	41.825	-10.712	31.113	43.500	12.387	QP
		V	750.232	40.640	0.189	40.829	46.000	5.171	QP
		V	875.263	36.963	1.051	38.014	46.000	7.986	QP
		V	945.526	36.127	1.892	38.019	46.000	7.981	QP
		H	31.353	37.381	-4.479	32.902	40.000	7.098	QP
Note 1: The worst case of Radiated Emission below 1GHz:									

Polarity: Horizontal



Polarity: Vertical

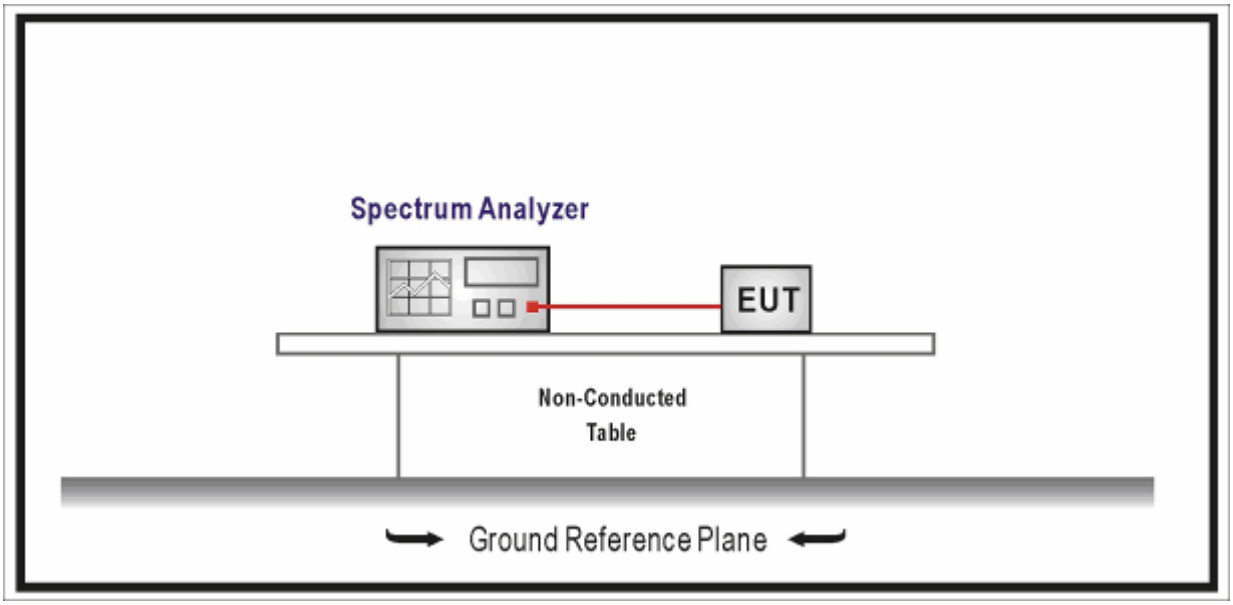


5. Emission bandwidth and occupied bandwidth

5.1. Test Equipment

Emission bandwidth and occupied bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

5.2. Test Setup



5.3. Limit

N/A

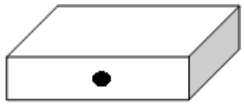
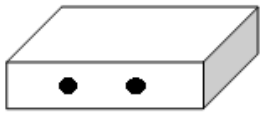
5.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
☒	ANSI C63.10	12.4	Emission bandwidth and occupied bandwidth
	☐ ANSI C63.10	12.4.1	Emission bandwidth (26dB)
	☒ ANSI C63.10	12.4.2	Occupied bandwidth (99%)
☒	FCC KDB 789033 D02v01r02	C	Bandwidth Measurement
	☒ FCC KDB 789033 D02v01r02	C.1	Emission Bandwidth (26dB)
	☐ FCC KDB 789033 D02v01r02	C.2	Minimum Emission Bandwidth for the band 5.725-5.85 GHz (6dB)
☐	FCC KDB 789033 D02v01r02	D	99 Percent Occupied Bandwidth

5.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

5.6. EUT test Axis definition

Item	Occupied bandwidth			
Device Category	☐	Outdoor AP		
	☒	Indoor AP		
	☐	Fixed point-to-point AP		
	☐	Mobile and Portable Client		
Test mode	Mode 1 ~ Mode 6			
	☒	Conducted		
	☐	Chain 0		
				
	☒	Chain 0	Chain 1	
				
	☐	Chain 0	Chain 1	Chain 2
				

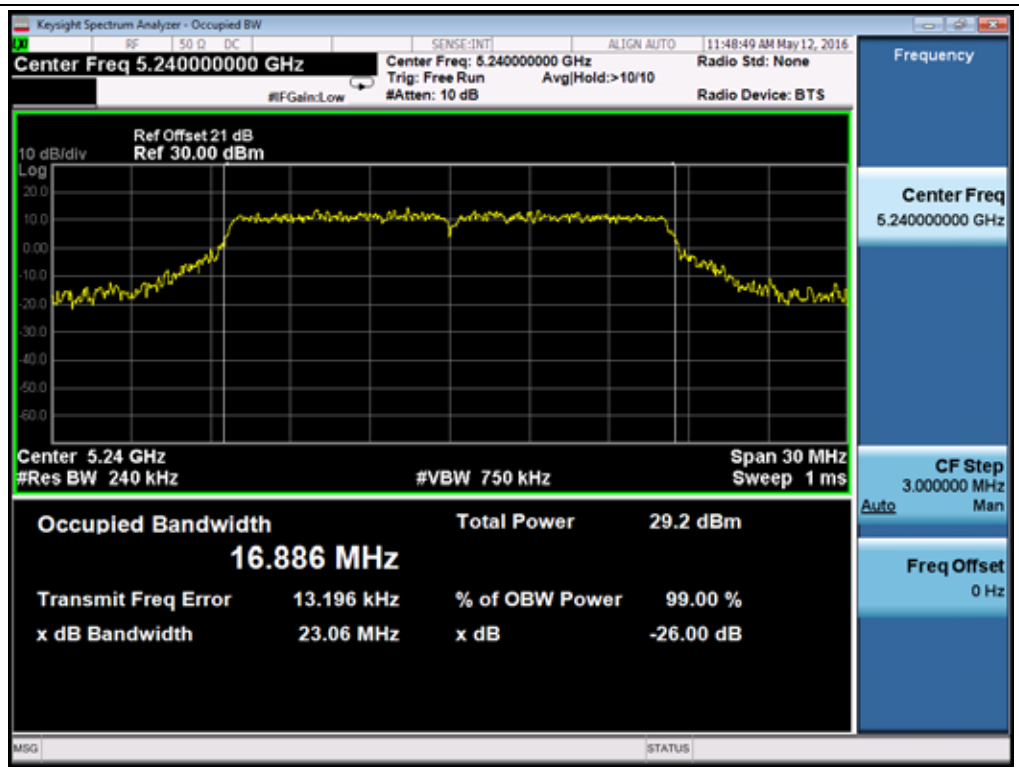
5.7. Test Result

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a with CDD

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)		Lower/Higher Frequency (MHz)		Result
		Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
36	5180	21.71	21.56	16.866	16.739	5171.57	5171.63	Pass
44	5220	25.87	23.51	16.947	16.896	N/A	N/A	Pass
48	5240	21.94	23.06	16.863	16.886	5248.43	5248.44	Pass
149	5745	21.18	21.03	16.812	16.775	N/A	N/A	Pass
157	5785	22.46	21.64	16.933	16.795	N/A	N/A	Pass
165	5825	21.40	21.45	16.779	16.699	N/A	N/A	Pass

The worst case of Occupied Bandwidth in mode 1 as below:

Mode 1 CH48 (5240MHz) Ant 1

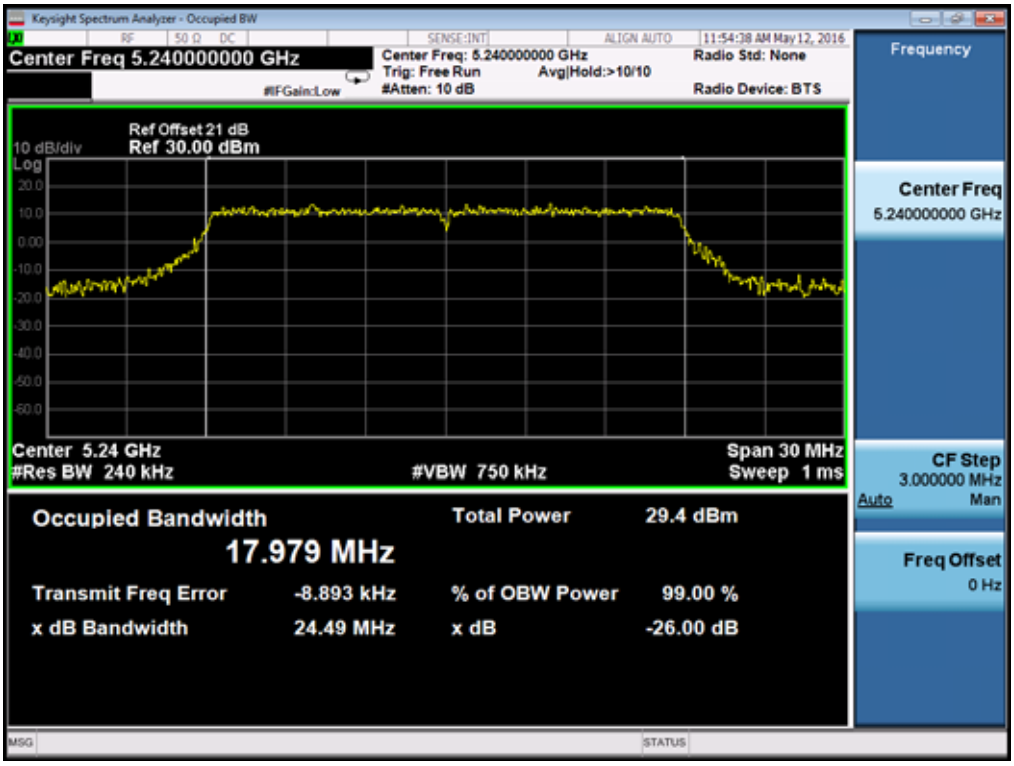


Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) with CDD

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)		Lower/Higher Frequency (MHz)		Result
		Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
36	5180	21.78	21.42	17.991	17.899	5171.00	5171.05	Pass
44	5220	26.06	23.31	18.013	17.971	N/A	N/A	Pass
48	5240	24.49	27.46	17.979	17.948	5248.99	5248.97	Pass
149	5745	24.13	22.26	17.983	18.002	N/A	N/A	Pass
157	5785	25.87	22.71	17.928	17.962	N/A	N/A	Pass
165	5825	26.21	24.20	17.988	17.984	N/A	N/A	Pass

The worst case of Occupied Bandwidth in mode 2 as below:

Mode 2 CH48 (5240MHz) Ant 0

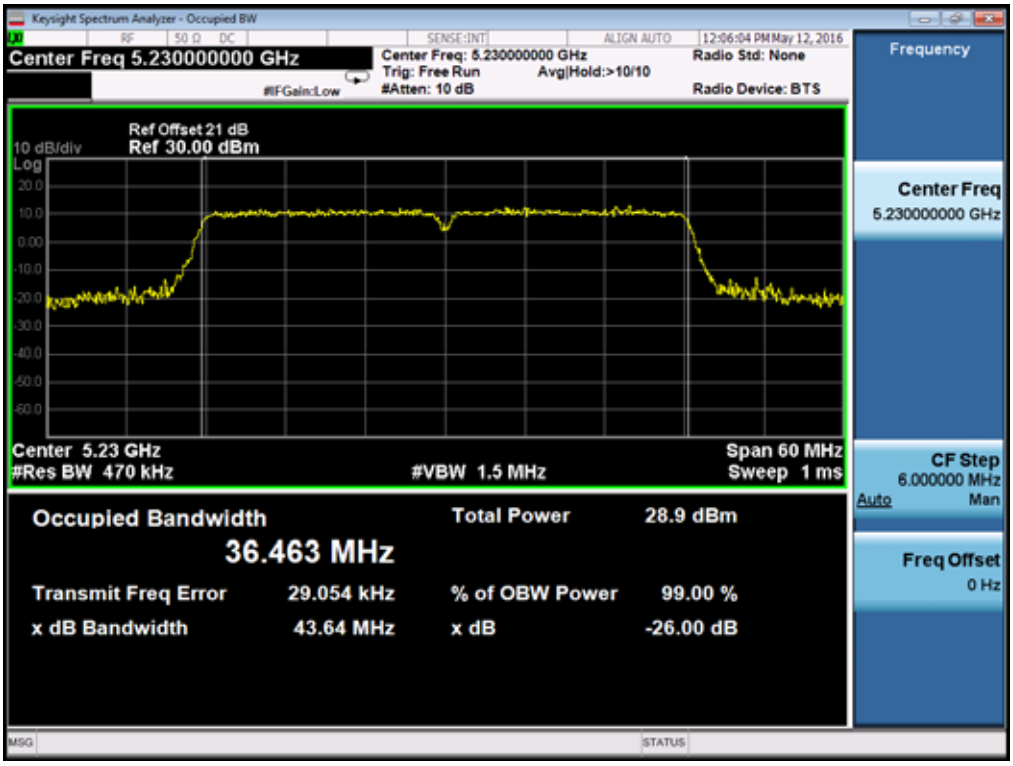


Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(40MHz) with CDD

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)		Lower/Higher Frequency (MHz)		Result
		Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
38	5190	40.03	39.29	36.351	36.277	5171.82	5171.86	Pass
46	5230	43.64	39.91	36.463	36.385	5248.23	5248.19	Pass
151	5755	39.91	40.19	36.249	36.282	N/A	N/A	Pass
159	5795	39.89	39.94	36.269	36.388	N/A	N/A	Pass

The worst case of Occupied Bandwidth in mode 3 as below:

Mode 3 CH46 (5230MHz) Ant 0

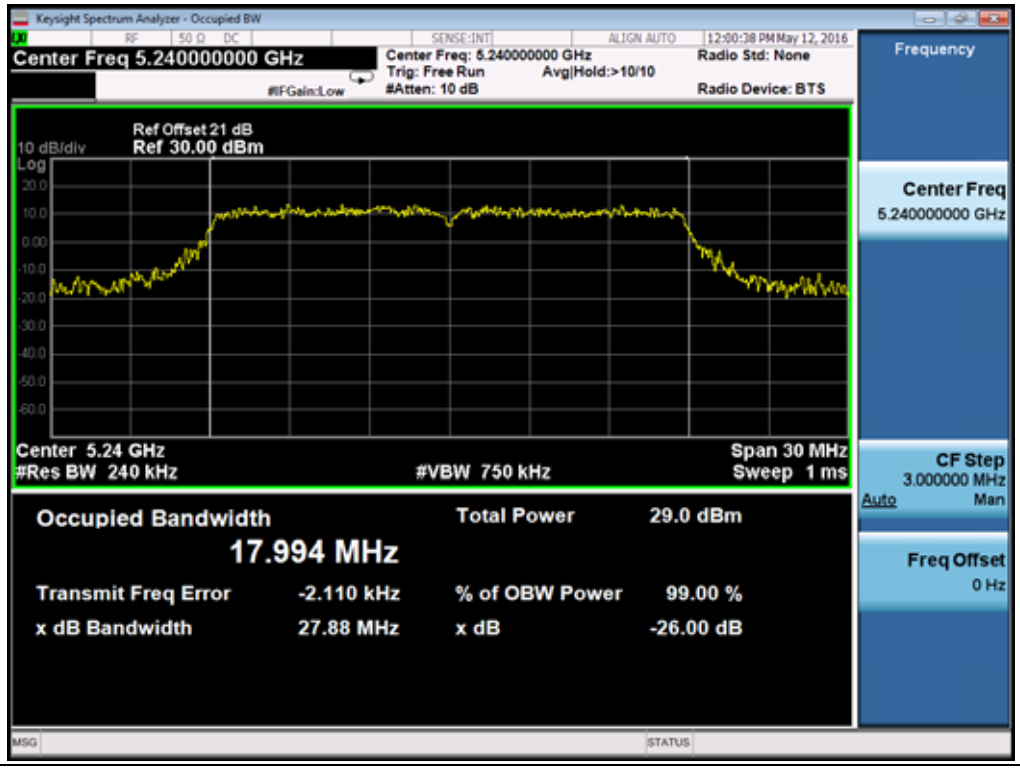


Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11ac(20MHz) with CDD

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)		Lower/Higher Frequency (MHz)		Result
		Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
36	5180	22.57	23.21	17.974	18.045	5171.01	5170.98	Pass
44	5220	24.08	22.49	18.026	17.981	N/A	N/A	Pass
48	5240	27.88	27.39	17.994	17.934	5248.99	5248.97	Pass
149	5745	21.13	21.67	17.887	17.901	N/A	N/A	Pass
157	5785	21.62	21.18	17.896	17.760	N/A	N/A	Pass
165	5825	21.49	21.38	17.815	17.913	N/A	N/A	Pass

The worst case of Occupied Bandwidth in mode 4 as below:

Mode 2 CH48 (5240MHz) Ant 0

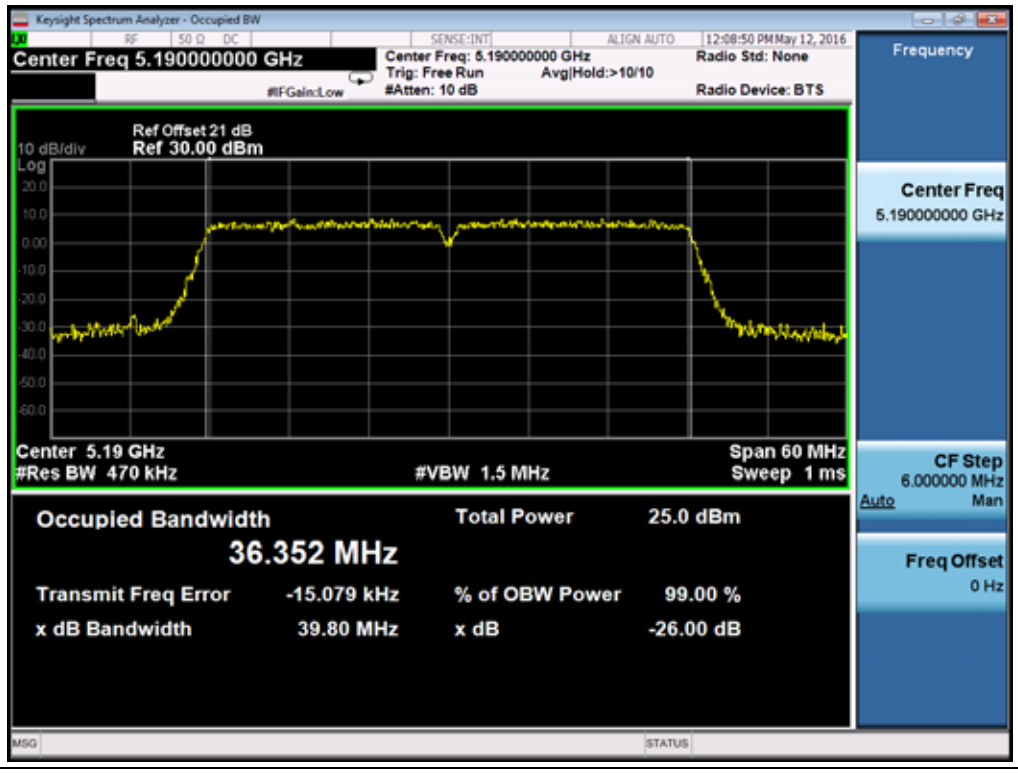


Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) with CDD

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)		Lower/Higher Frequency (MHz)		Result
		Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
38	5190	39.80	39.52	36.352	36.346	5171.82	5171.83	Pass
46	5230	41.36	41.79	36.365	36.213	5248.18	5248.11	Pass
151	5755	39.60	39.69	36.383	36.233	N/A	N/A	Pass
159	5795	39.77	46.71	36.298	36.293	N/A	N/A	Pass

The worst case of Occupied Bandwidth in mode 5 as below:

Mode 5 CH46 (5190MHz) Ant 0



Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) with CDD

Channel No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)		Lower/Higher Frequency (MHz)		Result
		Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
42	5210	81.16	81.00	75.825	75.642	5172.09/ 5247.91	5272.18/ 5247.82	Pass
155	5775	80.98	80.98	75.782	75.525	N/A	N/A	Pass

The worst case of Occupied Bandwidth in mode 6 as below:

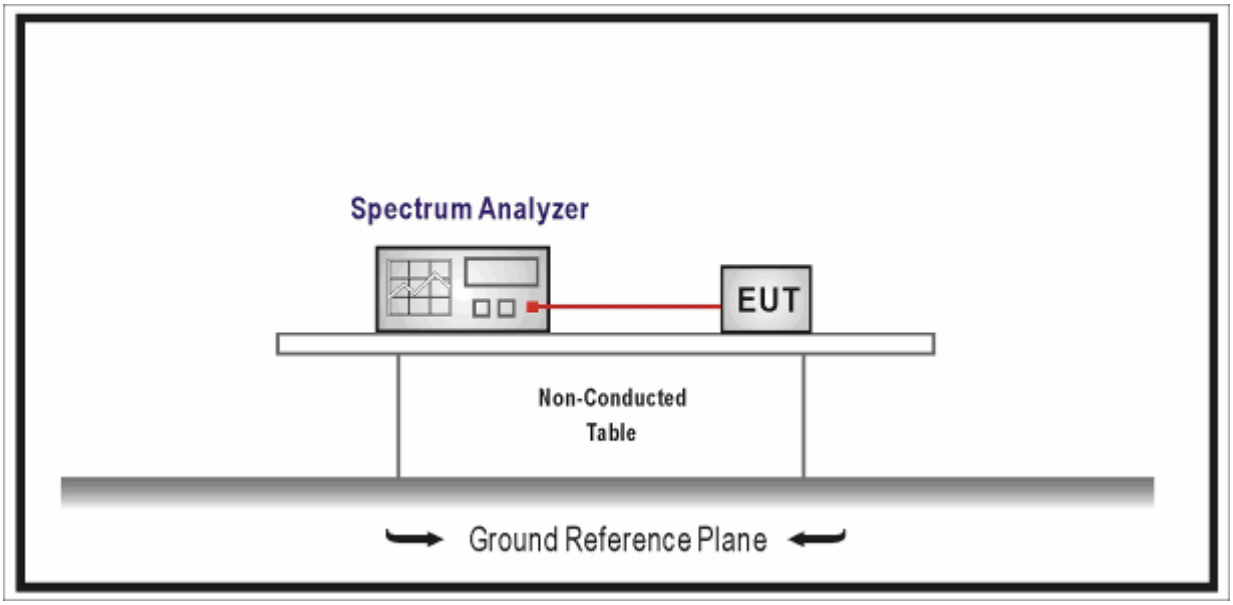
Mode 6 CH155 (5775MHz) Ant 0

6. 6dB bandwidth

6.1. Test Equipment

Emission bandwidth and occupied bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

6.2. Test Setup



6.3. Limit

>500kHz

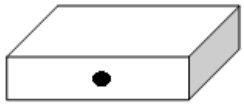
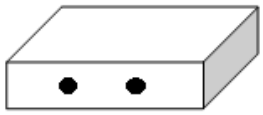
6.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
☒	ANSI C63.10	12.4	Emission bandwidth and occupied bandwidth
	☐ ANSI C63.10	12.4.1	Emission bandwidth (26dB)
	☒ ANSI C63.10	12.4.2	Occupied bandwidth (99%)
☒	FCC KDB 789033 D02v01r02	C	Bandwidth Measurement
	☐ FCC KDB 789033 D02v01r02	C.1	Emission Bandwidth (26dB)
	☒ FCC KDB 789033 D02v01r02	C.2	Minimum Emission Bandwidth for the band 5.725-5.85 GHz (6dB)
☐	FCC KDB 789033 D02v01r02	D	99 Percent Occupied Bandwidth

6.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

6.6. EUT test Axis definition

Item	Occupied bandwidth			
Device Category	☐	Outdoor AP		
	☒	Indoor AP		
	☐	Fixed point-to-point AP		
	☐	Mobile and Portable Client		
Test mode	Mode 1 ~ Mode 6			
	☒	Conducted		
	☐	Chain 0		
				
	☒	Chain 0	Chain 1	
				
	☐	Chain 0	Chain 1	Chain 2
				

6.7. Test Result

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	6dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1~6

Mode	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)		Limit (kHz)	Result
			Ant0	Ant1		
1	149	5745	16.45	16.54	>500	Pass
	157	5785	16.44	16.46		Pass
	165	5825	16.42	16.38		Pass
2	149	5745	17.57	17.61		Pass
	157	5785	17.72	17.68		Pass
	165	5825	17.64	17.75		Pass
3	151	5755	36.45	36.42		Pass
	159	5795	36.33	36.42		Pass
4	149	5745	17.65	17.67		Pass
	157	5785	17.65	17.64		Pass
	165	5825	17.62	17.58		Pass
5	151	5755	36.37	36.41		Pass
	159	5795	36.32	36.45		Pass
6	155	5775	76.26	76.04		Pass

The worst case of 6dB Bandwidth in CDD mode as below:

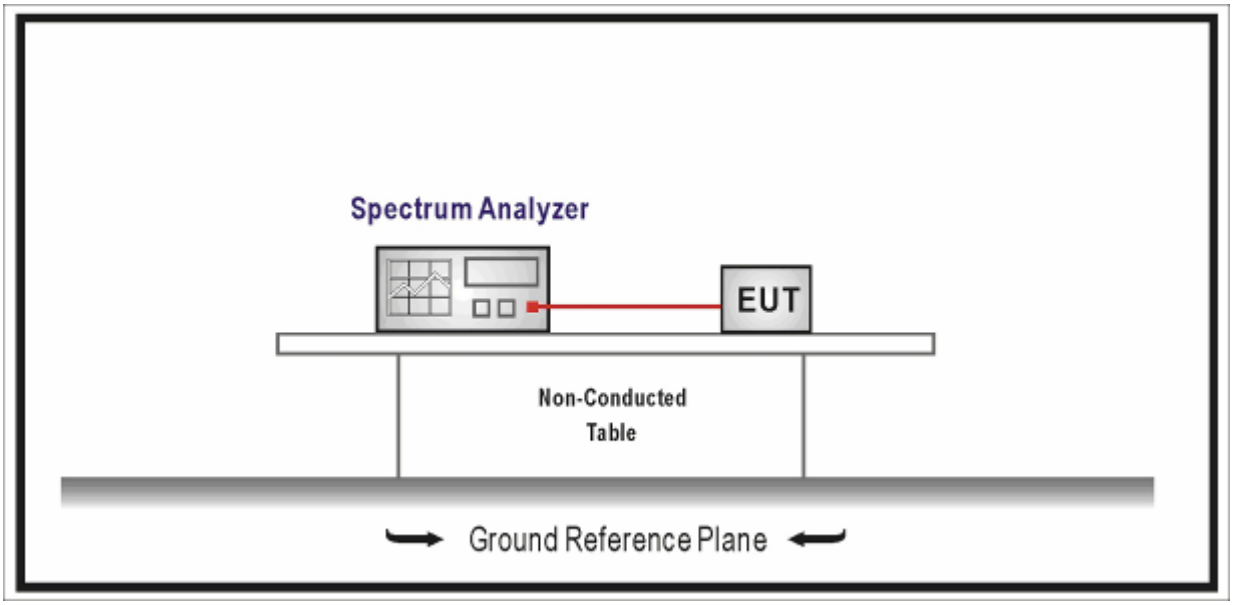
Mode 1 CH165 (5825MHz) Ant 1

7. Power Output

7.1. Test Equipment

Power Output / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Power Sensor	Anritsu	MA2411B	0846014	2016.11.11	2016.11.10
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

7.2. Test Setup



7.3. Limit

Fundamental emission output power Limit		
☒	For the band 5.15-5.25 GHz	
	☐	Outdoor access point: the maximum conducted output power shall not exceed 1 W. If G_{TX} ＞6dBi, then Pout≤30 - (G_{TX} - 6) and ≤125mW at any angle above 30 degrees
	☒	Indoor access point: the maximum conducted output power shall not exceed 1 W. If G_{TX} ＞6dBi, then Pout≤30 - (G_{TX} - 6)
	☐	Fixed point-to-point access points: the maximum conducted output power shall not exceed 1 W. If G_{TX}＞23dBi, then Pout≤30 - (G_{TX} - 23)
	☐	Mobile and portable client devices: the maximum conducted output power shall not exceed 250mW. If G_{TX}＞6dBi, then Pout≤24 - (G_{TX} - 6)
☐	For the 5.25-5.35 GHz: the maximum conducted output power shall not exceed 250mW or 11dBm+10 Log B, where B is the 26dB emission bandwidth in MHz. If G_{TX} ＞ 6dBi, then Pout ≤ (The lesser of 24 or 11dBm+10 Log B) - (GTX - 6)	
☐	For the 5.47-5.725 GHz: the maximum conducted output power shall not exceed 250mW or 11dBm+10 Log B, where B is the 26dB emission bandwidth in MHz. If G_{TX}＞6dBi, then Pout ≤ (The lesser of 24 or 11dBm+10 Log B) - (G_{TX} - 6)	
☒	For the band 5.725-5.85 GHz:	
	☒	Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	☐	Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W
Note 1 : G_{TX} directional gain of transmitting antennas. Note 2 : P_{out} is maximum peak conducted output power .		

7.4. Test Procedure

Fundamental emission output power Test Method					
	References Rule			Chapter	Description
☒	ANSI C63.10			12.3	Maximum conducted output power
	☒	ANSI C63.10		12.3.2	Maximum conducted output power measurement using a spectrum analyzer (SA) or EMI receiver
		☐	ANSI C63.10	12.3.2.2	Method SA-1
		☐	ANSI C63.10	12.3.2.3	Method SA-1A (alternative)
		☒	ANSI C63.10	12.3.2.4	Method SA-2
		☐	ANSI C63.10	12.3.2.5	Method SA-2A (alternative)
		☐	ANSI C63.10	12.3.2.6	Method SA-3
		☐	ANSI C63.10	12.3.2.7	Method SA-3A (alternative)
	☒	ANSI C63.10		12.3.3	Maximum conducted output power using a power meter
		☐	ANSI C63.10	12.3.3.1	Method PM
		☒	ANSI C63.10	12.3.3.2	Method PM-G
☒	FCC KDB 789033 D02v01r02			E	Maximum conducted output power
	☐	ANSI C63.10		E.2	Measurement using a Spectrum Analyzer or EMI Receiver (SA)
		☐	ANSI C63.10	E.2.b	Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)
		☐	ANSI C63.10	E.2.c	Method SA-1 Alternative (RMS detection with slow sweep and EUT transmitting continuously at full power)
		☐	ANSI C63.10	E.2.d	Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction)
		☐	ANSI C63.10	E.2.e	Method SA-2 Alternative (RMS detection with slow sweep with each spectrum bin averaging across on and off times of the EUT transmissions, followed by duty cycle correction)

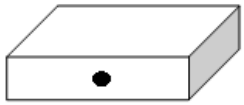
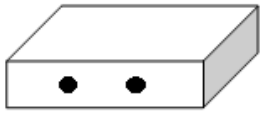
		☐	ANSI C63.10	E.2.f	Method SA-3 (RMS detection with max hold)
		☐	ANSI C63.10	E.2.g	Method SA-3 Alternative (Reduced VBW with max hold)
	☒	ANSI C63.10		E.3	Measurement using a Power Meter (PM)
		☐	ANSI C63.10	E.3.a	Method PM (Measurement using an RF average power meter)
		☒	ANSI C63.10	E.3.b	Method PM-G (Measurement using a gated RF average power meter)

Directional Gain Calculations for In-Band test method				
	References Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology with NANT transmit antennas
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas with NANT = 2.
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☐	KDB 662911		F2)d)	Sectorized antenna systems.
	☐	KDB 662911	F2)d) (i)	transmit signals are correlated
	☐	KDB 662911	F2)d) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)e)	Spatial Multiplexing
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☒	KDB 662911	F2)f) (i)	Antennas have the same gain
	☐	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)f) (ii)	Antenna have the different gain with more than one spatial stream

7.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

7.6. EUT test Axis definition

Item	Power Output	
Device Category	☐	Outdoor AP
	☒	Indoor AP
	☐	Fixed point-to-point AP
	☐	Mobile and Portable Client
Test mode	Mode 1 ~ Mode 6	
	☒	Conducted
	☐	Chain 0
		
	☒	Chain 0 / Chain 1
		
	☐	Chain 0 / Chain 1 / Chain 2
		

7.7. Test Result

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a with CDD

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Duty Factor	FCC Limit (dBm)	Result
		Ant0	Ant1				
36	5180	23.28	23.41	26.63	0.27	30.0	Pass
44	5220	25.27	25.31	28.57	0.27	30.0	Pass
48	5240	25.55	25.72	28.92	0.27	30.0	Pass
149	5745	26.56	26.63	29.88	0.27	30.0	Pass
157	5785	26.49	26.68	29.87	0.27	30.0	Pass
165	5825	26.34	26.65	29.78	0.27	30.0	Pass

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Duty Factor	FCC Limit (dBm)	Result
		Ant0	Ant1				
36	5180	23.08	23.23	26.42	0.25	30.0	Pass
44	5220	25.64	25.79	28.98	0.25	30.0	Pass
48	5240	25.33	25.44	28.65	0.25	30.0	Pass
149	5745	26.45	26.58	29.78	0.25	30.0	Pass
157	5785	26.48	26.54	29.77	0.25	30.0	Pass
165	5825	26.53	26.67	29.86	0.25	30.0	Pass

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(40MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Duty Factor	FCC Limit (dBm)	Result
		Ant0	Ant1				
38	5190	18.91	18.88	22.41	0.50	30.0	Pass
46	5230	25.93	26.22	29.59	0.50	30.0	Pass
151	5755	26.34	26.45	29.91	0.50	30.0	Pass
159	5795	26.32	26.39	29.87	0.50	30.0	Pass

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11ac(20MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Duty Factor	FCC Limit (dBm)	Result
		Ant0	Ant1				
36	5180	23.54	23.12	26.44	0.09	30.0	Pass
44	5220	25.26	25.71	28.59	0.09	30.0	Pass
48	5240	25.33	25.77	28.66	0.09	30.0	Pass
149	5745	26.45	26.58	29.62	0.09	30.0	Pass
157	5785	26.41	26.55	29.58	0.09	30.0	Pass
165	5825	26.39	26.47	29.53	0.09	30.0	Pass

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Duty Factor	FCC Limit (dBm)	Result
		Ant0	Ant1				
38	5190	19.78	19.71	23.02	0.26	30.0	Pass
46	5230	26.21	26.33	29.54	0.26	30.0	Pass
151	5755	26.42	26.45	29.71	0.26	30.0	Pass
159	5795	26.37	26.47	29.69	0.26	30.0	Pass

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) with CDD

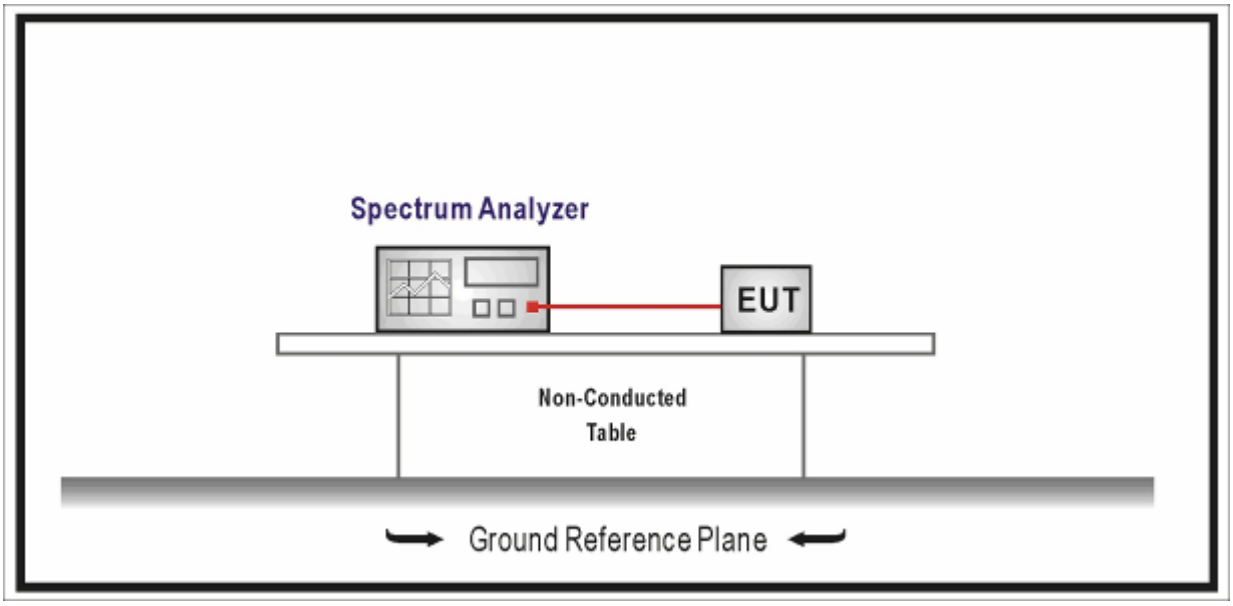
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Duty Factor	FCC Limit (dBm)	Result
		Ant0	Ant1				
42	5210	20.22	20.05	23.75	0.60	30.0	Pass
155	5775	26.17	26.19	29.79	0.60	30.0	Pass

8. Peak Power Spectral Density

8.1. Test Equipment

Peak Power Spectral Density / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.10	2017.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

8.2. Test Setup



8.3. Limit

Fundamental emission output power Limit		
☒	For the band 5.15-5.25 GHz	
	☐	Outdoor access point: the maximum power spectral density shall not exceed 17 dBm/MHz. If G_{TX}＞6dBi, then Pout≤17 - (G_{TX} - 6)
	☒	Indoor access point: the maximum power spectral density shall not exceed 17 dBm/MHz. If G_{TX}＞6dBi, then Pout≤17 - (G_{TX} - 6)
	☐	Fixed point-to-point access points: the maximum power spectral density shall not exceed 17 dBm/MHz. If G_{TX}＞23dBi, then Pout≤17 - (G_{TX} - 23)
	☐	Mobile and portable client devices: the maximum power spectral density shall not exceed 11 dBm/MHz. If G_{TX}＞6dBi, then Pout≤11 - (G_{TX} - 6)
☐	For the 5.25-5.35 GHz: the maximum power spectral density shall not exceed 11 dBm/MHz. If G_{TX}＞6dBi, then Pout≤11 - (G_{TX} - 6)	
☐	For the 5.47-5.725 GHz: the maximum power spectral density shall not exceed 11 dBm/MHz. If G_{TX}＞6dBi, then Pout≤11 - (G_{TX} - 6)	
☒	For the band 5.725-5.85 GHz: the maximum power spectral density shall not exceed 30 dBm/500KHz. If G_{TX}＞6dBi, then Pout≤30 - (G_{TX} - 6)	
Note 1 : G_{TX} directional gain of transmitting antennas. Note 2 : P_{out} is maximum peak conducted output power .		

8.4. Test Procedure

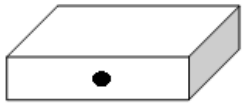
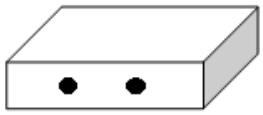
Fundamental emission output power Test Method			
	References Rule	Chapter	Description
☒	ANSI C63.10	12.5	Peak power spectral density
☒	FCC KDB 789033 D02v01r02	F	Maximum Power Spectral Density (PSD)

Directional Gain Calculations for In-Band test method				
	References Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology with NANT transmit antennas
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas with NANT = 2.
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☐	KDB 662911		F2)d)	Sectorized antenna systems.
	☐	KDB 662911	F2)d) (i)	transmit signals are correlated
	☐	KDB 662911	F2)d) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)e)	Spatial Multiplexing
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☒	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☐	KDB 662911	F2)f) (i)	Antennas have the same gain
	☐	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☒	KDB 662911	F2)f) (ii)	Antenna have the different gain with more than one spatial stream

8.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

8.6. EUT test Axis definition

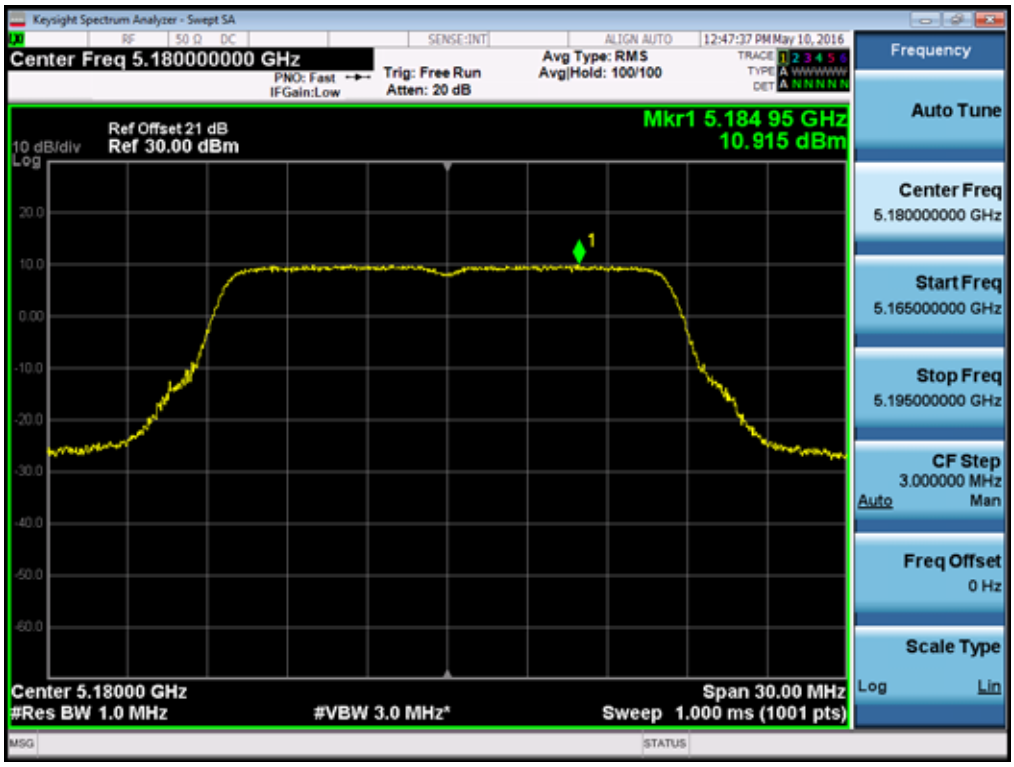
<table>
<tr><td>Item</td><td colspan="4">Peak power spectral density</td></tr>
<tr><td rowspan="4">Device Category</td><td>☐</td><td colspan="3">Outdoor AP</td></tr>
<tr><td>☒</td><td colspan="3">Indoor AP</td></tr>
<tr><td>☐</td><td colspan="3">Fixed point-to-point AP</td></tr>
<tr><td>☐</td><td colspan="3">Mobile and Portable Client</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1 ~ Mode 6</td></tr>
<tr><td rowspan="6"></td><td>☒</td><td colspan="3">Conducted</td></tr>
<tr><td>☐</td><td colspan="3">Chain 0</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☒</td><td>Chain 0</td><td colspan="2">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 0</td><td>Chain 1</td><td>Chain 2</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

8.7. Test Result

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a with CDD

Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/MHz)		Duty Factor	Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant0	Ant1				
36	5180	10.92	11.57	0.27	14.53	17	Pass
44	5220	12.91	12.99	0.27	16.23	17	Pass
48	5240	13.48	13.69	0.27	16.86	17	Pass
Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/500kHz)		Duty Factor	Total PPSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
		Ant0	Ant1				
149	5745	11.78	11.91	0.27	15.12	30	Pass
157	5785	11.72	11.92	0.27	15.10	30	Pass
165	5825	11.60	11.53	0.27	14.85	30	Pass

Test plot example:



Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/MHz)		Duty Factor	Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant0	Ant1				
36	5180	10.88	11.25	0.25	14.33	17	Pass
44	5220	13.62	13.72	0.25	16.93	17	Pass
48	5240	13.03	13.69	0.25	16.63	17	Pass
Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/500kHz)		Duty Factor	Total PPSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
		Ant0	Ant1				
149	5745	11.53	11.63	0.25	14.84	30	Pass
157	5785	11.62	11.65	0.25	14.89	30	Pass
165	5825	11.24	11.10	0.25	14.43	30	Pass

Test plot example:

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(40MHz) with CDD

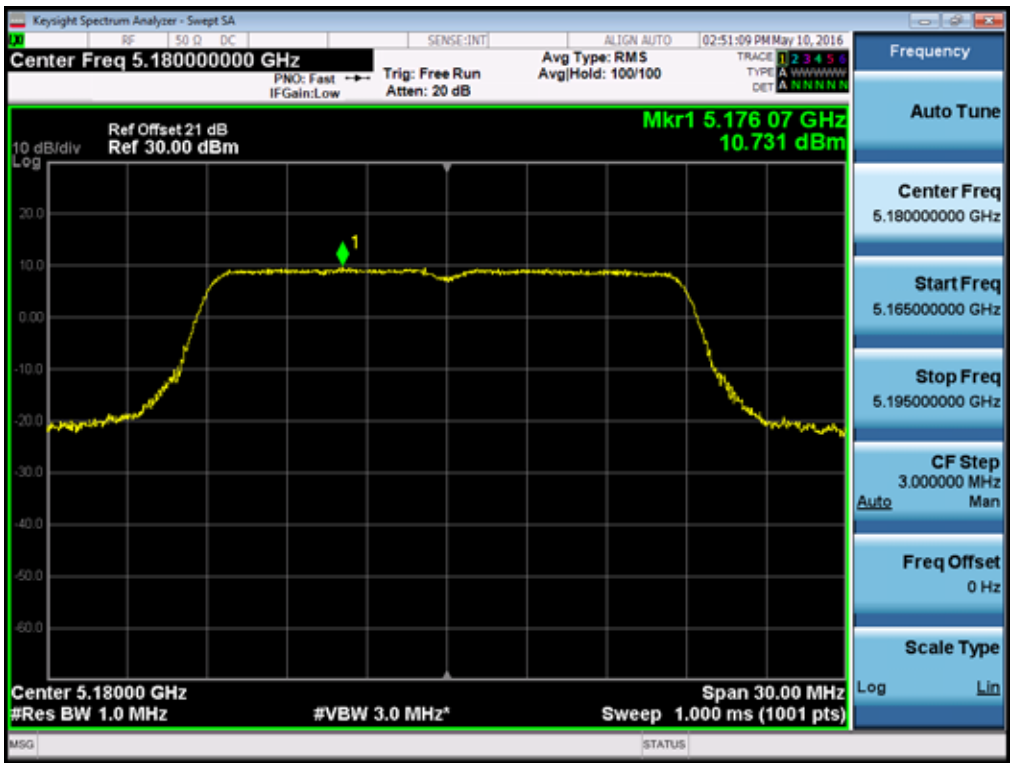
Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/MHz)		Duty Factor	Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant0	Ant1				
38	5190	4.11	4.61	0.50	7.88	17	Pass
46	5230	10.79	11.43	0.50	14.63	17	Pass
Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/500kHz)		Duty Factor	Total PPSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
		Ant0	Ant1				
151	5755	8.52	8.62	0.50	12.08	30	Pass
159	5795	8.69	8.66	0.50	12.18	30	Pass

Test plot example:

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11ac(20MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/MHz)		Duty Factor	Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant0	Ant1				
36	5180	10.73	11.06	0.09	14.00	17	Pass
44	5220	13.80	13.90	0.09	16.95	17	Pass
48	5240	13.69	14.04	0.09	16.97	17	Pass
Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/500kHz)		Duty Factor	Total PPSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
		Ant0	Ant1				
149	5745	11.79	11.91	0.09	14.95	30	Pass
157	5785	11.89	11.94	0.09	15.01	30	Pass
165	5825	11.68	11.60	0.09	14.74	30	Pass

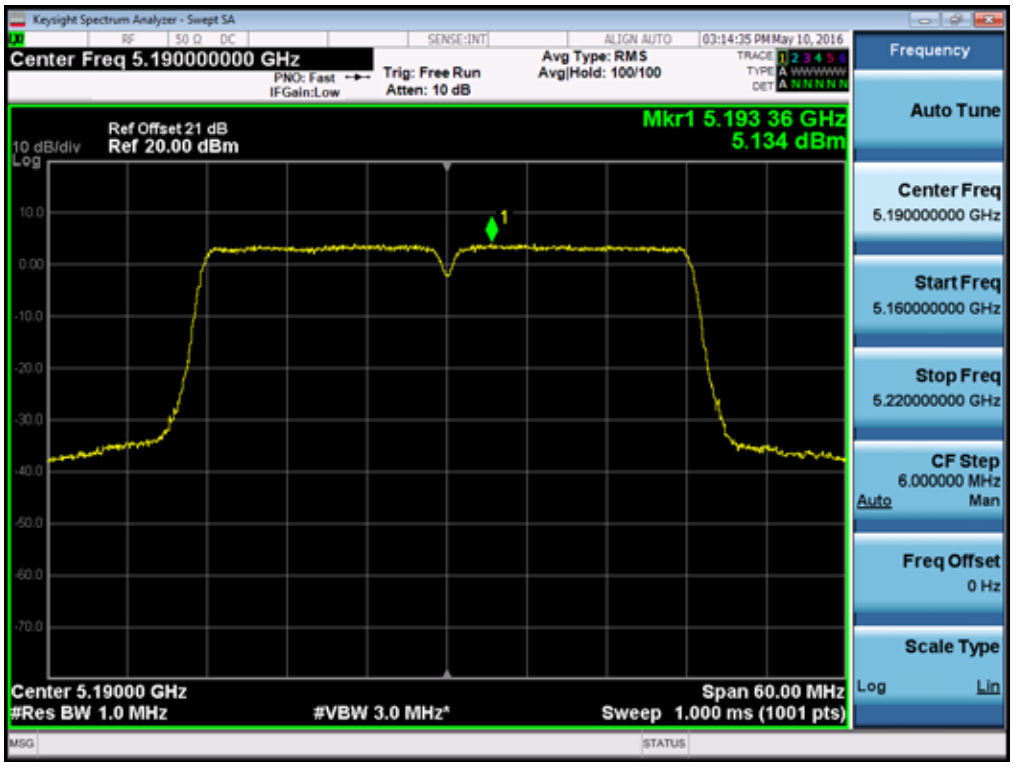
Test plot example:



Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(40MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/MHz)		Duty Factor	Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant0	Ant1				
38	5190	5.13	5.80	0.26	8.75	17	Pass
46	5230	11.48	12.72	0.26	15.41	17	Pass
Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/500kHz)		Duty Factor	Total PPSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
		Ant0	Ant1				
151	5755	8.87	9.00	0.26	12.20	30	Pass
159	5795	8.90	9.06	0.26	12.25	30	Pass

Test plot example:



Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Peak Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11ac(80MHz) with CDD

Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/MHz)		Duty Factor	Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Ant0	Ant1				
42	5210	2.60	3.20	0.60	6.52	17	Pass
Channel No.	Frequency (MHz)	Measurement Power Spectral Density (dBm/500kHz)		Duty Factor	Total PPSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
		Ant0	Ant1				
155	5775	6.41	6.30	0.60	9.97	30	Pass

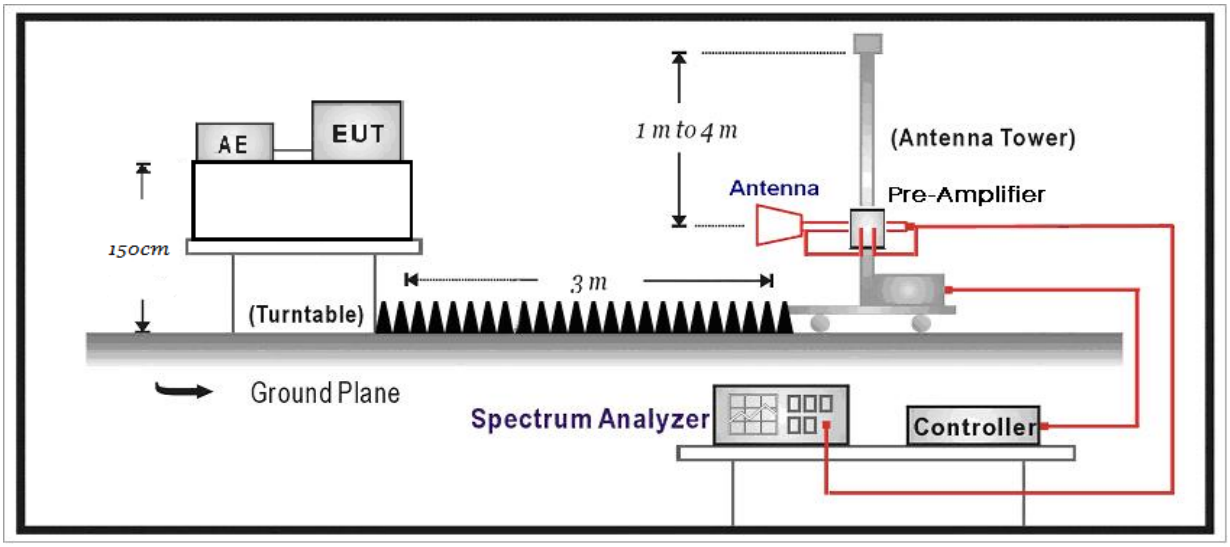
Test plot example:

9. Radiated Emission Band Edge

9.1. Test Equipment

Radiated Emission Band Edge / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.04	2017.05.03
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.04	2017.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2015.10.16	2016.10.15
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.08	2017.01.07
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.02	2017.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2015.06.10	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.09	2017.01.08
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

9.2. Test Setup



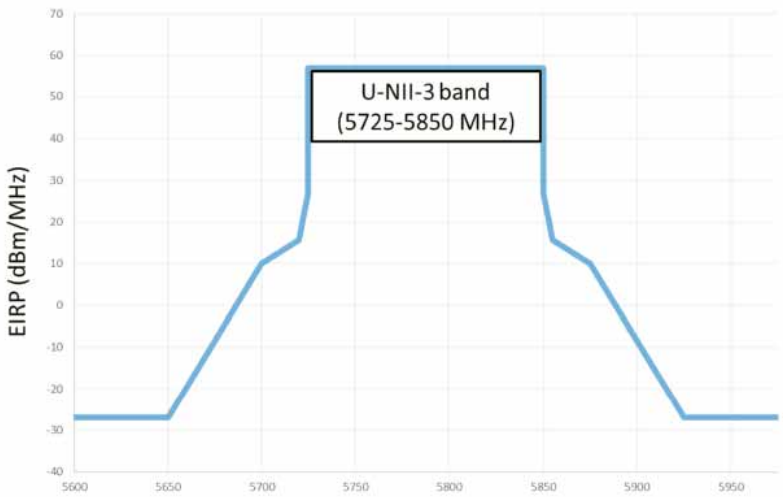
9.3. Limit

FCC Part 15 Subpart C Paragraph 15.209 (Restricted Band Emissions Limit)		
Frequency (MHz)	Distance (m)	Level (dBµV/m)
0.009-0.490	300	2400/F(kHz)
0.490-1.705	30	24000/F(kHz)
1.705-30.0	30	30
30-88	3	100**
88-216	3	150**
216-960	3	200**
Above 960	3	500

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

FCC Part 15 Subpart C Paragraph 15.205 (Restricted Band)			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
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	8.025 – 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 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	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	
13.36 – 13.41			

FCC Part 15 Subpart C Paragraph 15.407(5)(b) (Unrestricted Band Emissions Limit)		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dB μ V/m)
5150 - 5250	-27	68.3
5250 - 5350	-27	68.3
5470 - 5725	-27	68.3
FCC 16-24		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	
5725 - 5850		

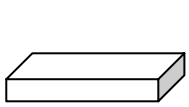
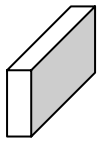
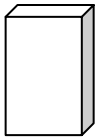
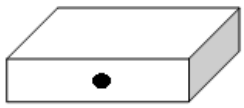
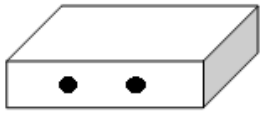
9.4. Test Procedure

Test Method					
	References Rule			Chapter	Description
☐	ANSI C63.10			12.7.3	Emissions in non-restricted frequency bands
☒	ANSI C63.10			12.7.2	Emissions in restricted frequency bands
	☒	ANSI C63.10		12.7.5	Radiated emission measurements
	☒	ANSI C63.10		12.7.6	Procedure for peak unwanted emissions measurements above 1000 MHz
	☒	ANSI C63.10		12.7.7	Procedures for average unwanted emissions measurements above 1000 MHz
		☐	ANSI C63.10	12.7.7.2	Method AD (average detection)—primary method
		☒	ANSI C63.10	12.7.7.3	Method VB-A (Alternative)
	☒	ANSI C63.10		6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒	ANSI C63.10		6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒	ANSI C63.10		6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
☐	FCC KDB 789033 D02v01r02			G.2	Unwanted Emissions that fall Outside of the Restricted Bands
☐	FCC KDB 789033 D02v01r02			G.1	Unwanted Emissions in the Restricted Bands
	☐	FCC KDB 789033 D02v01r02		G.4	Procedure for Unwanted Emissions Measurements below 1000 MHz
	☐	FCC KDB 789033 D02v01r02		G.5	Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz
	☐	FCC KDB 789033 D02v01r02		G.6	Procedures for Average Unwanted Emissions Measurements above 1000 MHz
		☐	FCC KDB 789033 D02v01r02	G.6.c	Method AD (Average detection)—primary method
		☒	FCC KDB 789033 D02v01r02	G.6.d	Method VB (Averaging using reduced video bandwidth): Alternative method.

9.5. Uncertainty

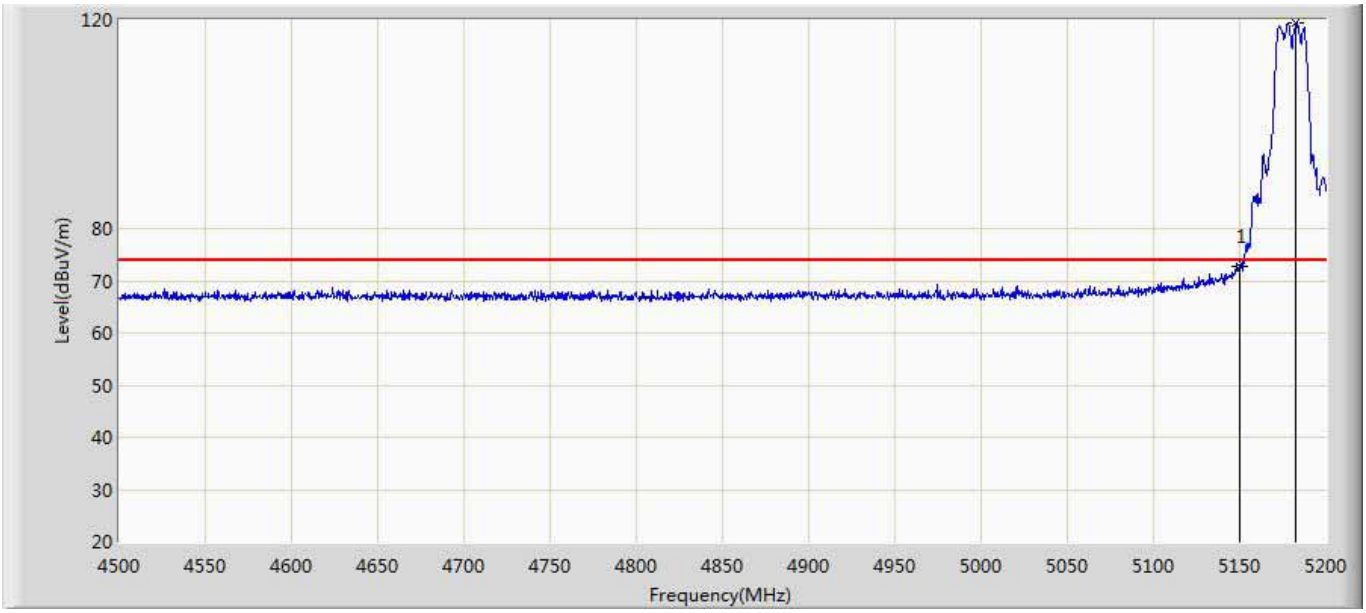
The measurement uncertainty above 1GHz is defined as ± 3.9 dB

9.6. EUT test Axis definition

<table>
<tr><td>Item</td><td colspan="4">Emissions in non-restricted frequency bands</td></tr>
<tr><td rowspan="4">Device Category</td><td>☐</td><td colspan="3">Outdoor AP</td></tr>
<tr><td>☒</td><td colspan="3">Indoor AP</td></tr>
<tr><td>☐</td><td colspan="3">Fixed point-to-point AP</td></tr>
<tr><td>☐</td><td colspan="3">Mobile and Portable Client</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1-6</td></tr>
<tr><td rowspan="11">Test method</td><td>☒</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="2"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>☐</td><td colspan="3">Conducted</td></tr>
<tr><td>☐</td><td colspan="3">Chain 0</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 0</td><td colspan="2">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 0</td><td>Chain 1</td><td>Chain 2</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

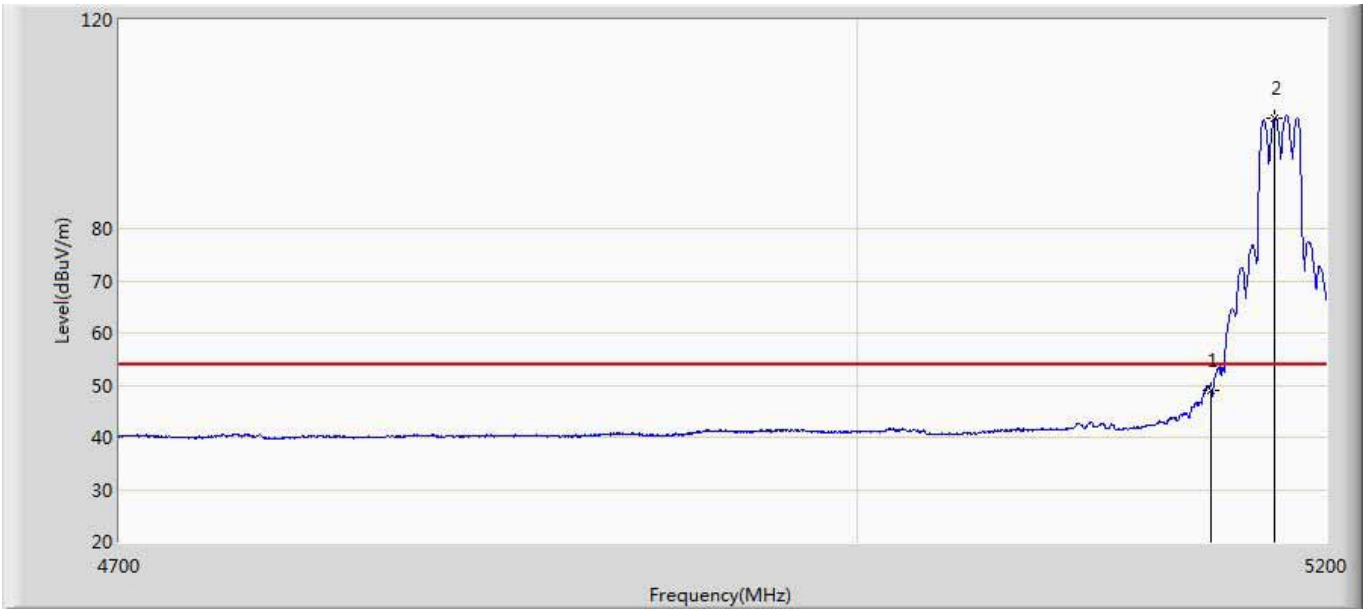
9.7. Test Result

Site: AC5	Time: 2016/05/04 - 16:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5180Mhz by 802.11a with CDD	



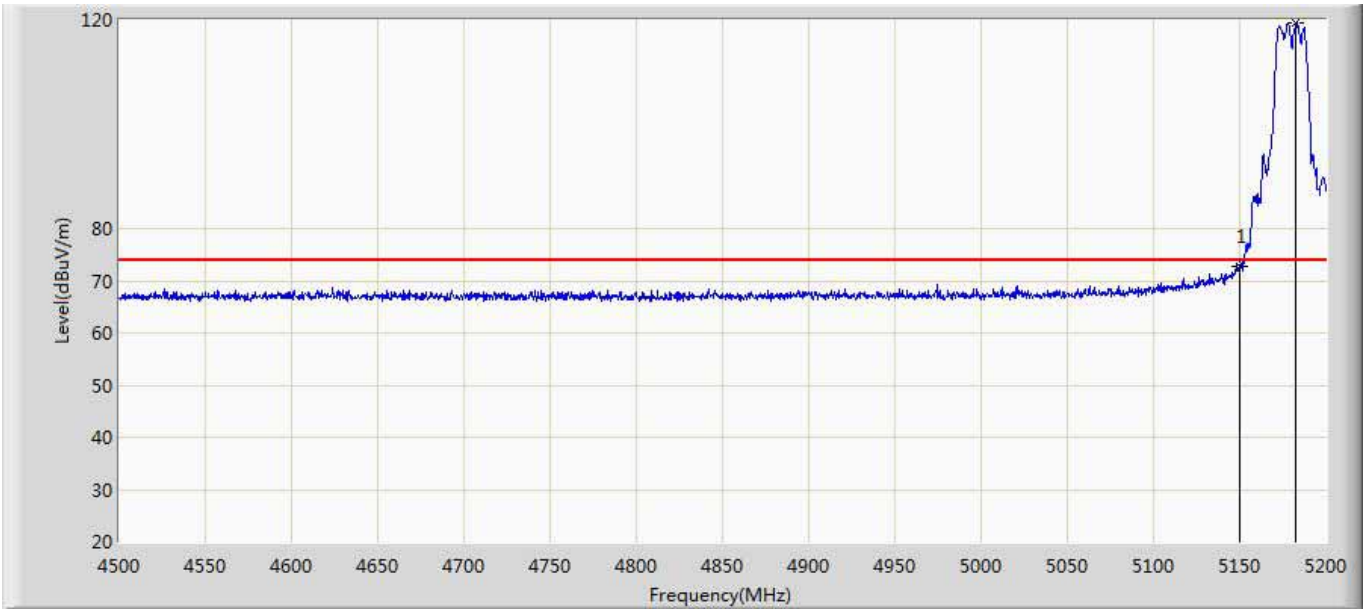
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	56.126	14.111	-17.874	74.000	42.015	PK
2	*	5182.850	104.872	62.732	N/A	N/A	42.140	PK

Site: AC5	Time: 2016/05/04 - 16:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5180Mhz by 802.11a with CDD	



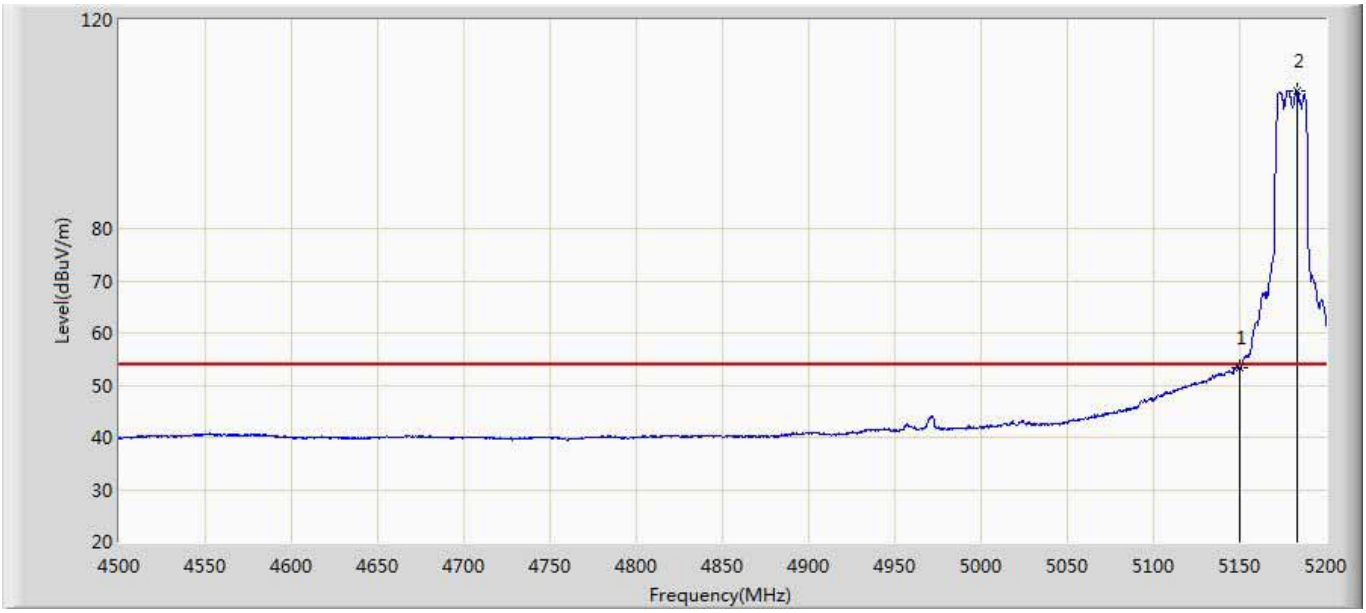
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	43.392	1.377	-10.608	54.000	42.015	AV
2	*	5186.350	94.211	52.094	N/A	N/A	42.117	AV

Site: AC5	Time: 2016/05/04 - 15:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5180Mhz by 802.11a with CDD	



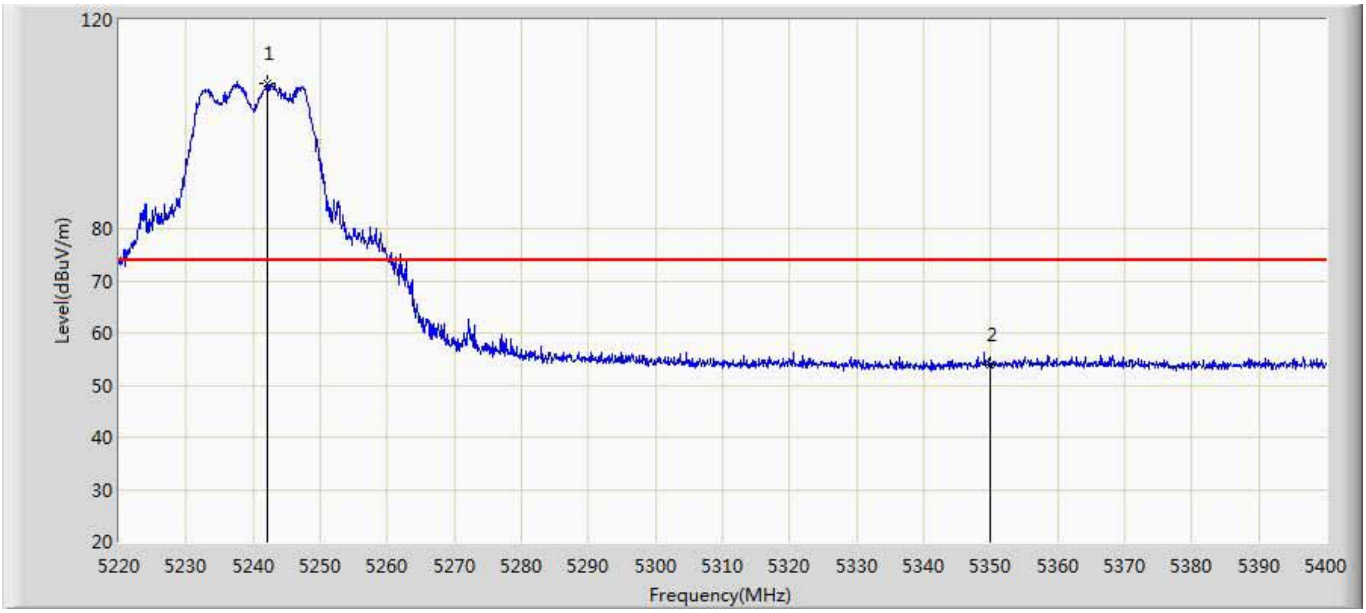
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	72.670	30.655	-1.330	74.000	42.015	PK
2	*	5182.850	119.564	77.424	N/A	N/A	42.140	PK

Site: AC5	Time: 2016/05/04 - 16:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5180Mhz by 802.11a with CDD	



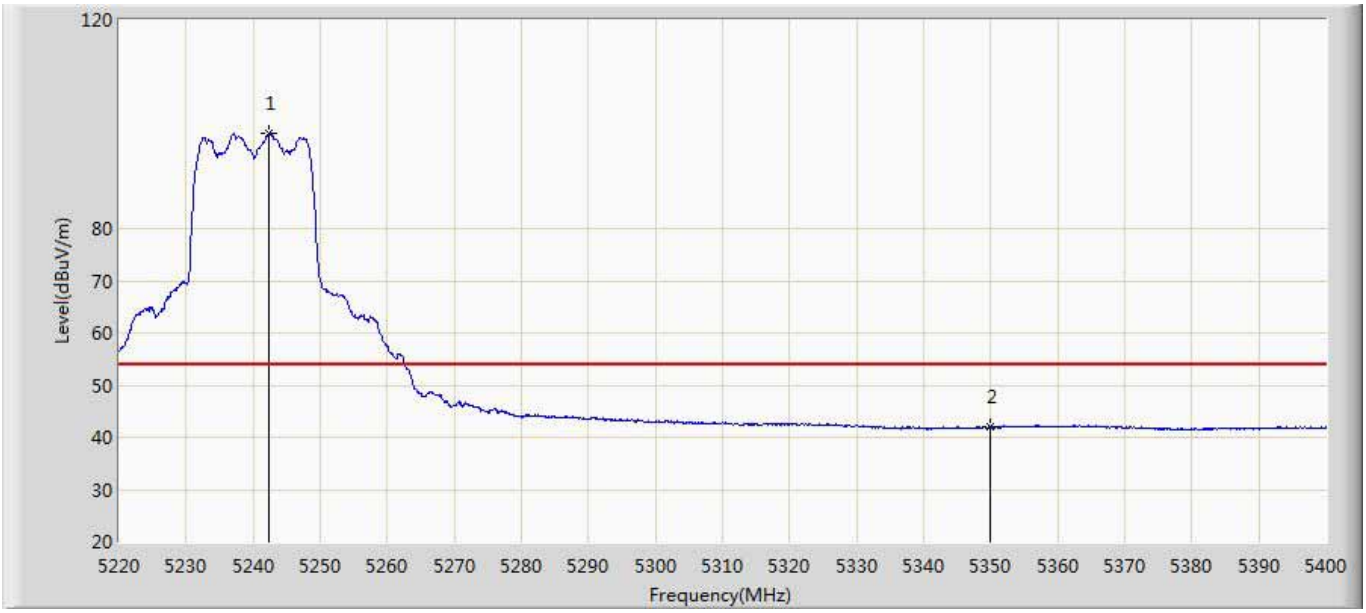
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	53.379	11.364	-0.621	54.000	42.015	AV
2	*	5183.200	106.503	64.365	N/A	N/A	42.137	AV

Site: AC5	Time: 2016/05/04 - 16:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5240Mhz by 802.11a with CDD	



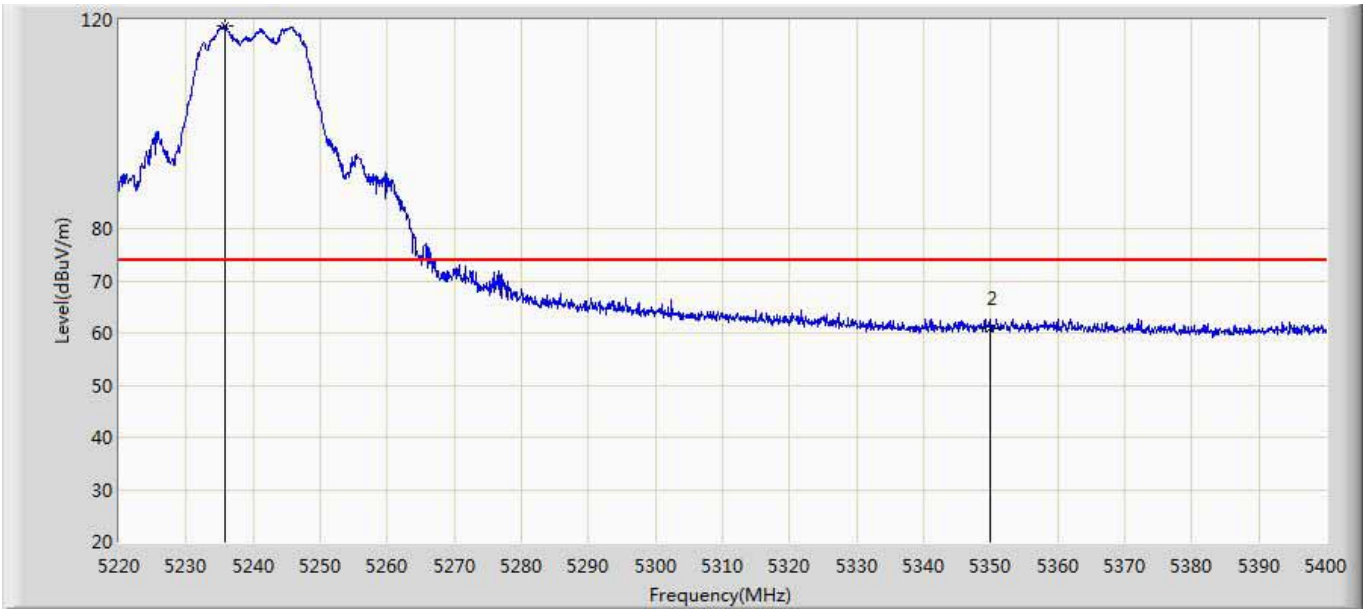
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5242.140	107.889	65.736	N/A	N/A	42.152	PK
2		5350.000	53.951	11.435	-20.049	74.000	42.516	PK

Site: AC5	Time: 2016/05/04 - 16:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5240Mhz by 802.11a with CDD	



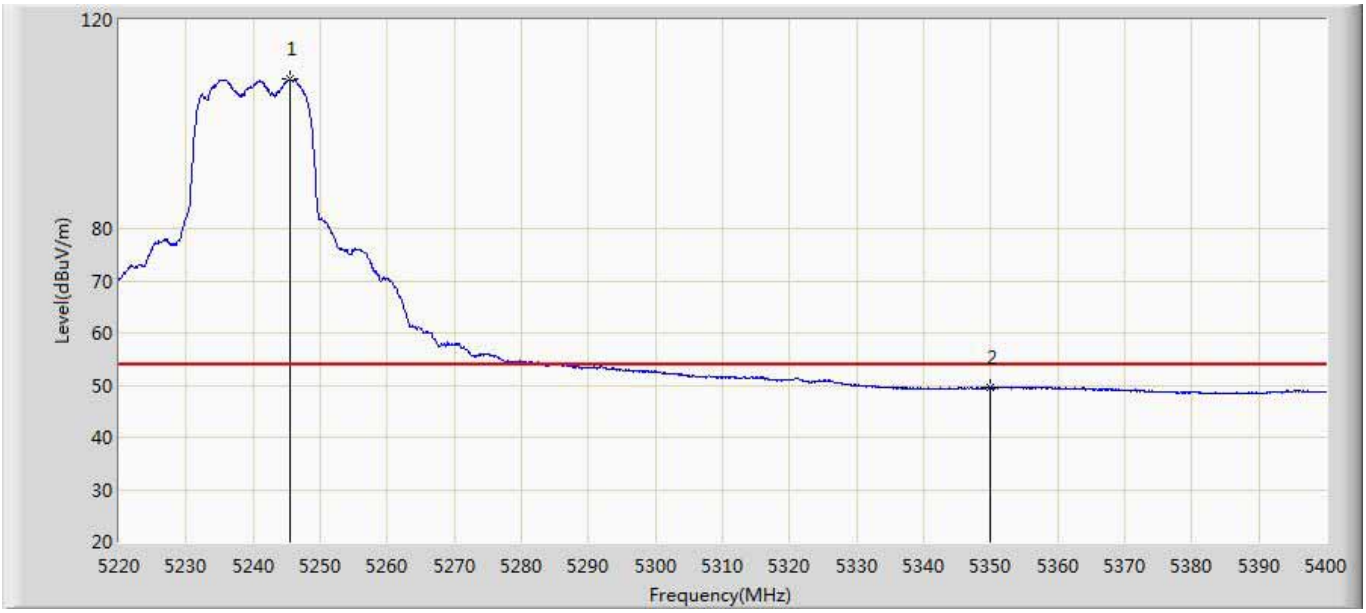
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5242.410	98.174	56.019	N/A	N/A	42.155	AV
2		5350.000	41.988	-0.528	-12.012	54.000	42.516	AV

Site: AC5	Time: 2016/05/04 - 16:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5240Mhz by 802.11a with CDD	



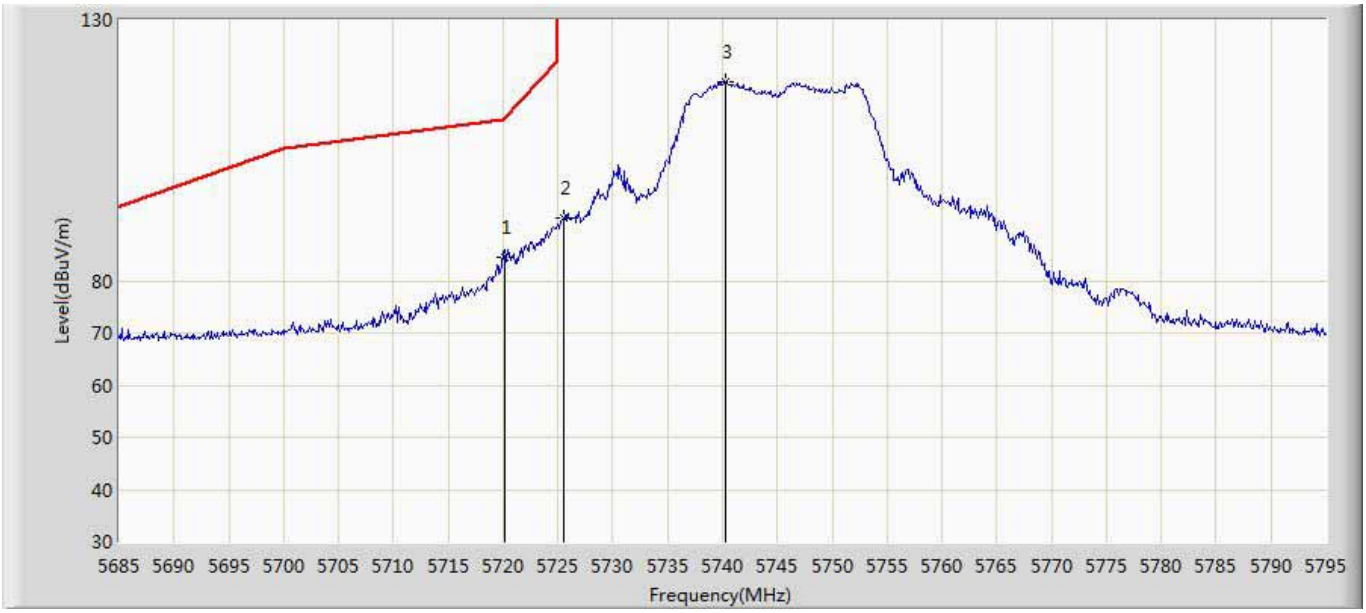
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5235.750	118.942	76.852	N/A	N/A	42.090	PK
2		5350.000	60.727	18.211	-13.273	74.000	42.516	PK

Site: AC5	Time: 2016/05/04 - 16:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5240Mhz by 802.11a with CDD	



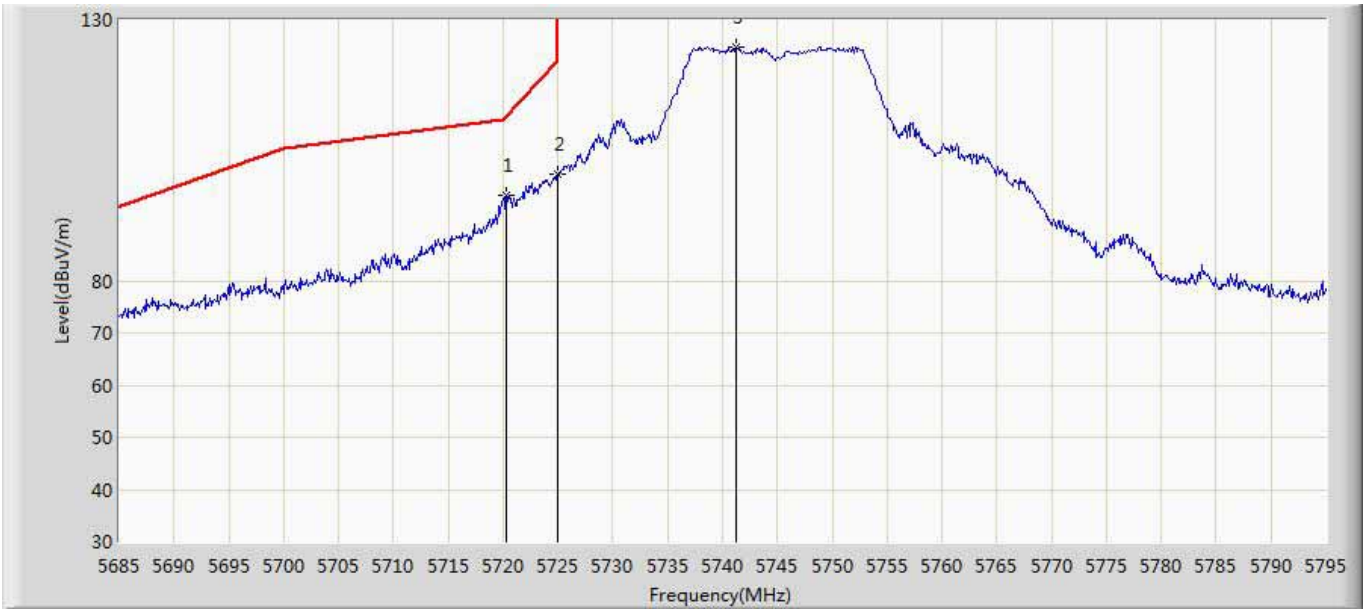
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5245.380	108.692	66.508	N/A	N/A	42.184	AV
2		5350.000	49.604	7.088	-4.396	54.000	42.516	AV

Site: AC5	Time: 2016/05/13 - 11:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5745Mhz by 802.11a with CDD	



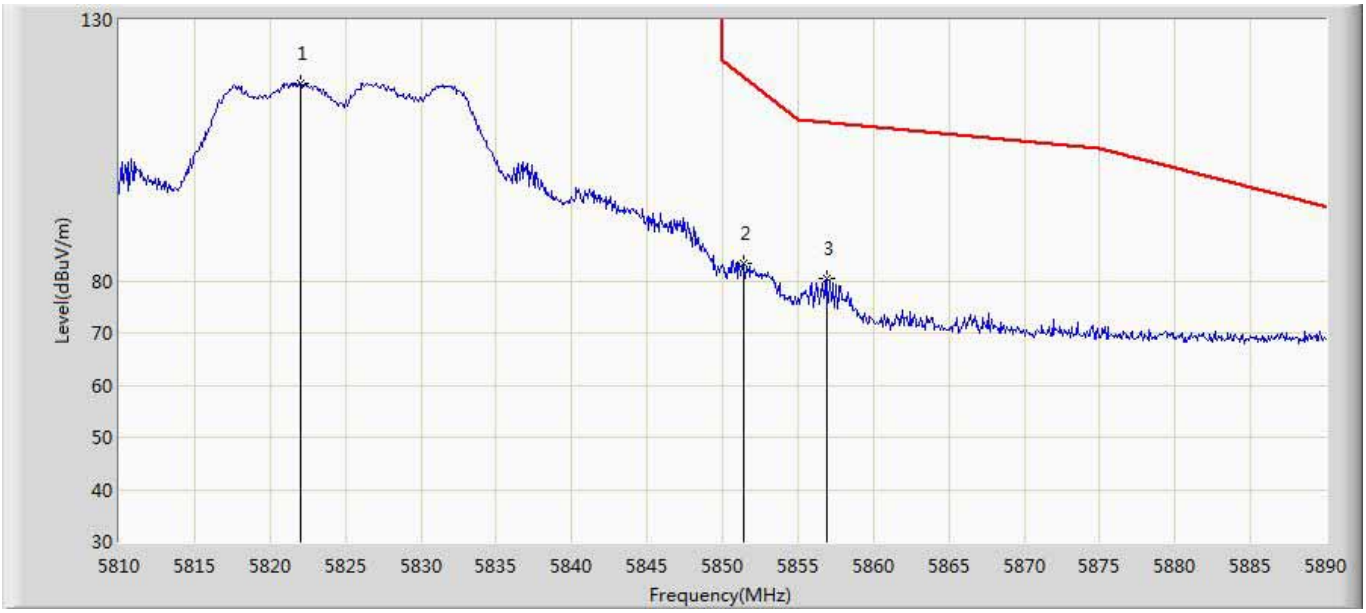
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5720.090	84.598	41.315	-26.508	111.105	43.283	PK
2		5725.480	92.165	48.901	N/A	N/A	43.264	PK
3		5740.220	118.182	74.886	N/A	N/A	43.296	PK

Site: AC5	Time: 2016/05/13 - 11:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5745Mhz by 802.11a with CDD	



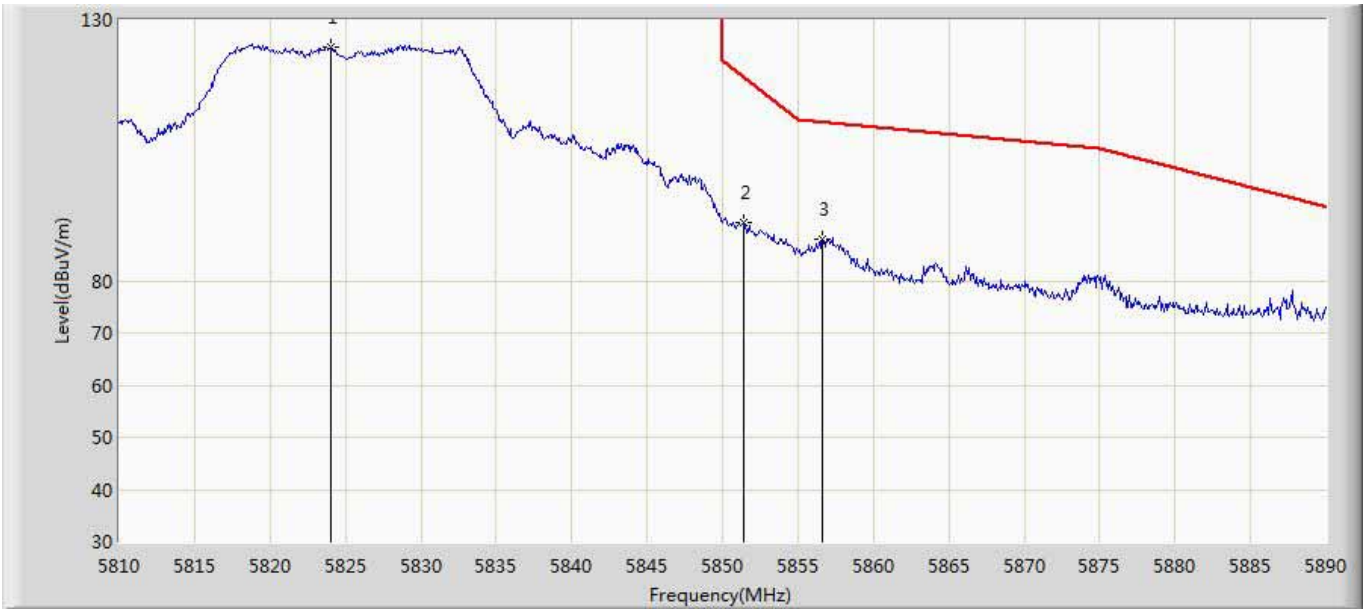
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5720.310	96.458	53.176	-15.149	111.607	43.282	PK
2		5724.930	100.492	57.226	-21.648	122.140	43.267	PK
3	*	5741.210	124.756	81.458	N/A	N/A	43.298	PK

Site: AC5	Time: 2016/03/18 - 17:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5825Mhz by 802.11a with CDD	



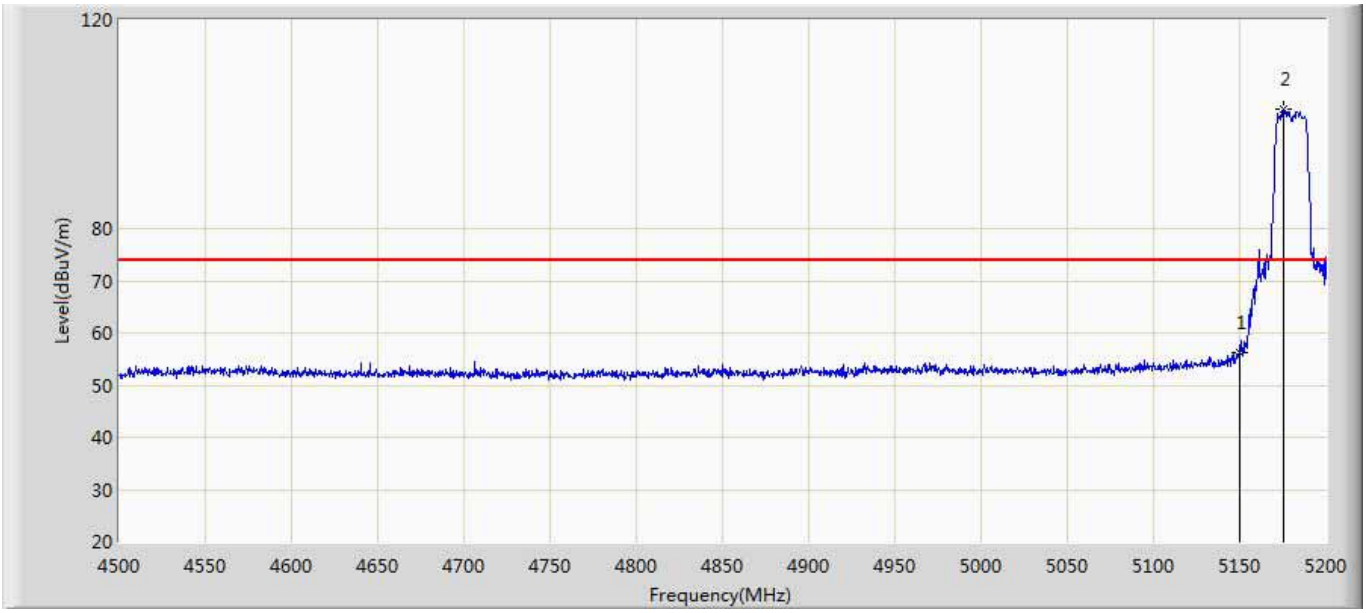
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5822.000	117.914	74.518	N/A	N/A	43.396	PK
2		5851.440	83.318	39.838	-35.698	119.016	43.480	PK
3		5856.960	80.572	37.049	-29.779	110.350	43.523	PK

Site: AC5	Time: 2016/05/13 - 12:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 1: Transmit at 5825Mhz by 802.11a with CDD	



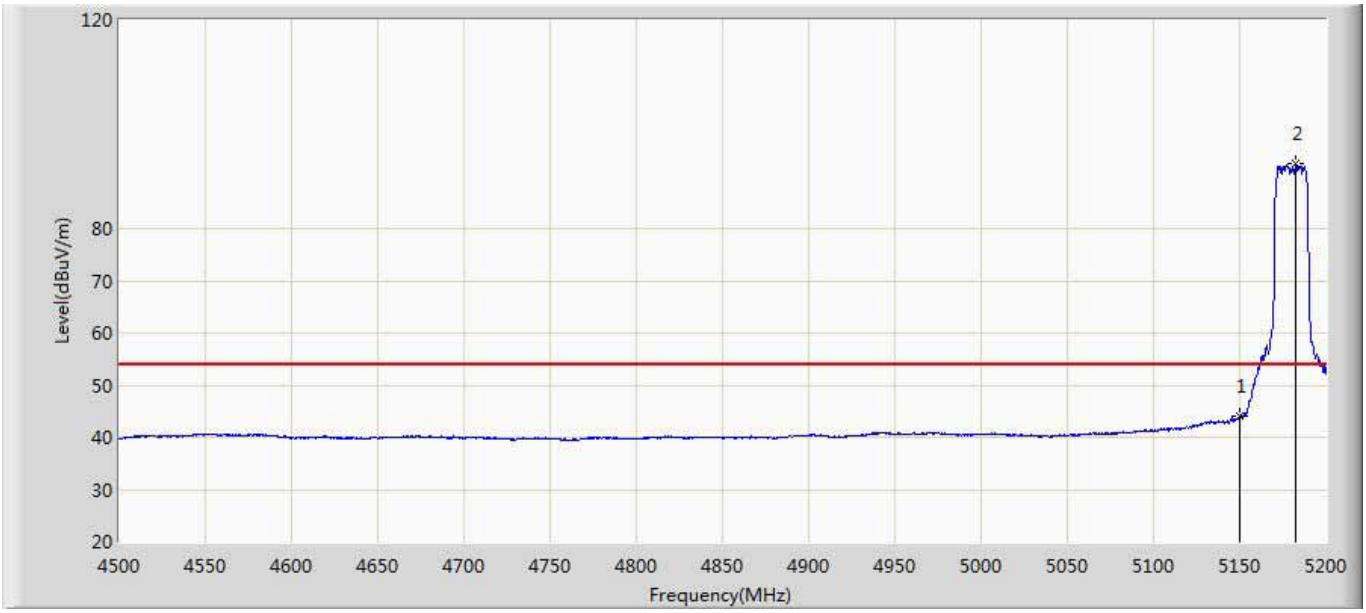
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5824.000	124.697	81.297	N/A	N/A	43.400	PK
2		5851.360	91.248	47.768	-27.951	119.198	43.480	PK
3		5856.640	87.941	44.421	-22.499	110.440	43.520	PK

Site: AC5	Time: 2016/05/04 - 17:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5180Mhz by 802.11n20 with CDD	



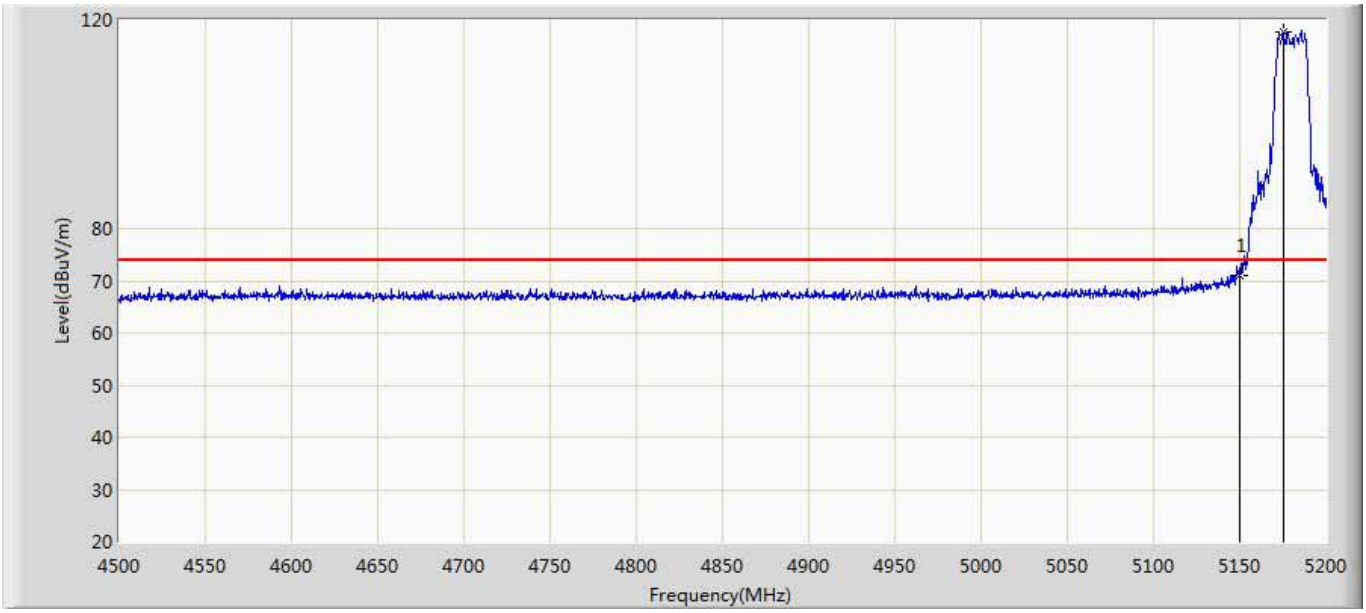
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	56.266	14.251	-17.734	74.000	42.015	PK
2	*	5175.150	102.832	60.687	N/A	N/A	42.145	PK

Site: AC5	Time: 2016/05/04 - 17:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5180Mhz by 802.11n20 with CDD	



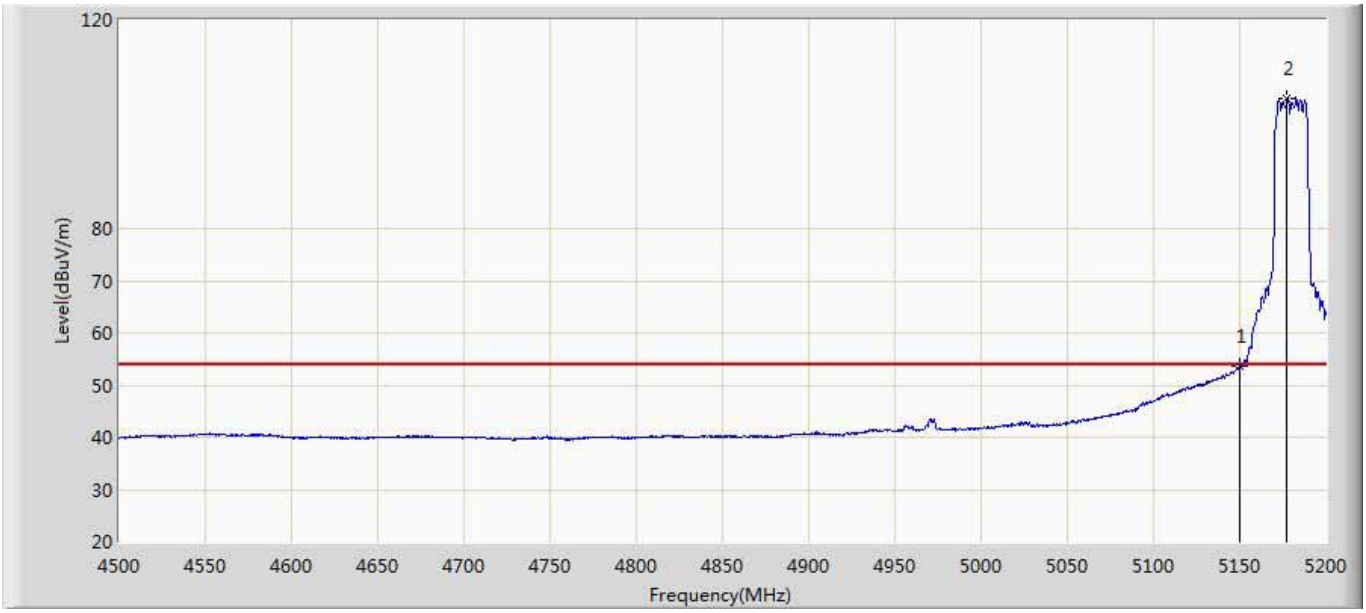
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	43.980	1.965	-10.020	54.000	42.015	AV
2	*	5182.500	92.508	50.366	N/A	N/A	42.143	AV

Site: AC5	Time: 2016/05/04 - 16:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5180Mhz by 802.11n20 with CDD	



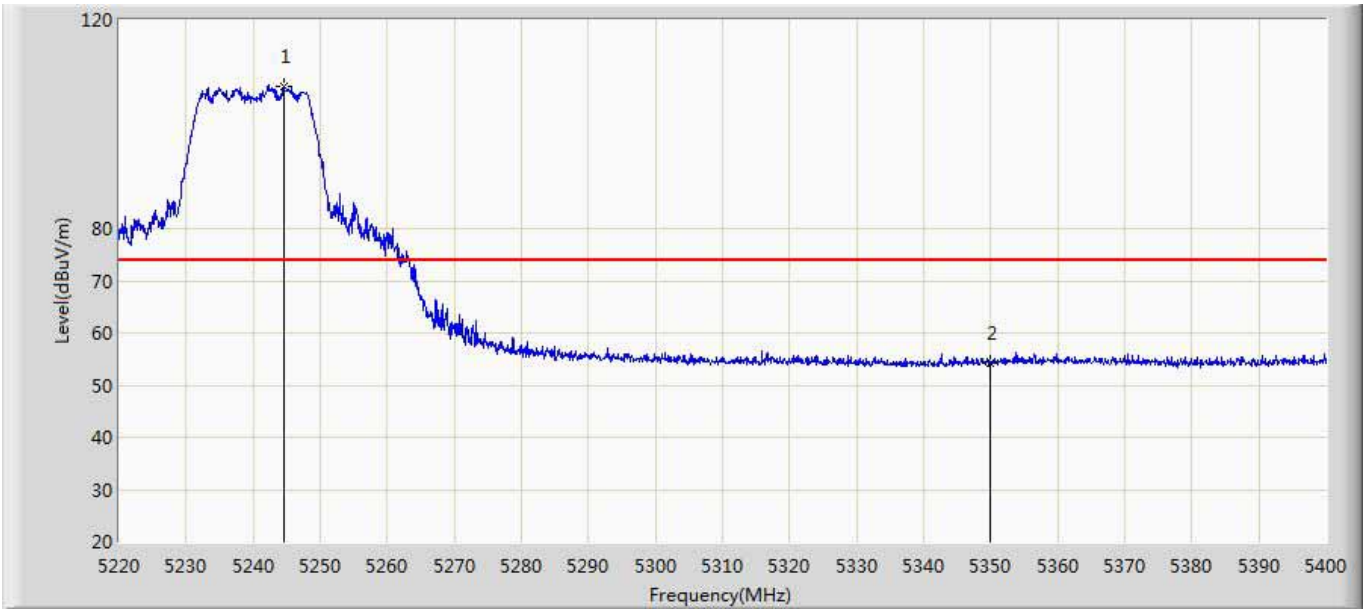
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	70.953	28.938	-3.047	74.000	42.015	PK
2	*	5175.150	117.819	75.674	N/A	N/A	42.145	PK

Site: AC5	Time: 2016/05/04 - 16:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5180Mhz by 802.11n20 with CDD	



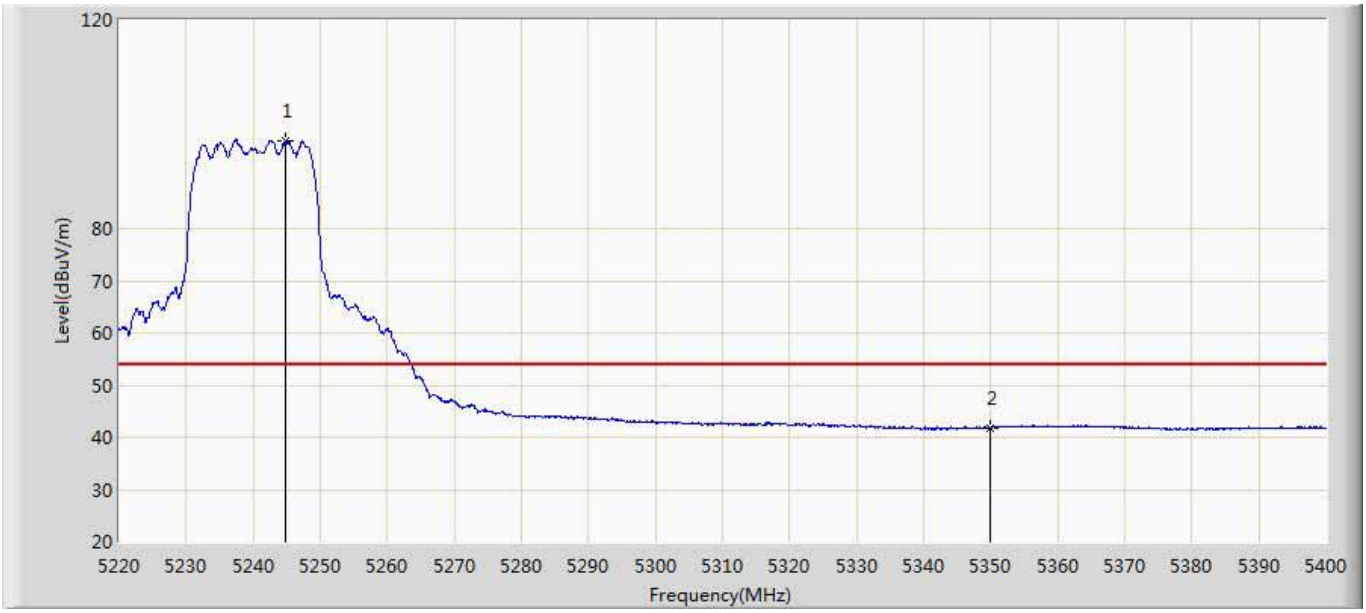
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	53.550	11.535	-0.450	54.000	42.015	AV
2	*	5177.600	105.001	62.856	N/A	N/A	42.146	AV

Site: AC5	Time: 2016/05/04 - 17:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5240Mhz by 802.11n20 with CDD	



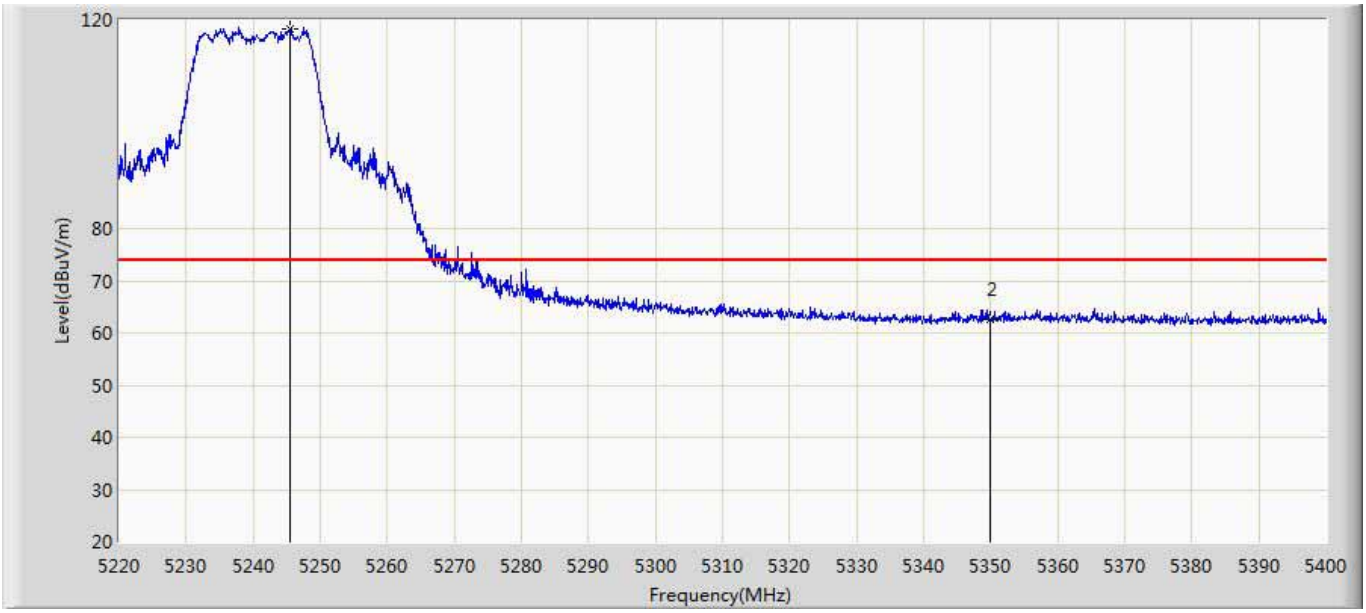
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5244.480	107.108	64.932	N/A	N/A	42.175	PK
2		5350.000	54.161	11.645	-19.839	74.000	42.516	PK

Site: AC5	Time: 2016/05/04 - 17:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5240Mhz by 802.11n20 with CDD	



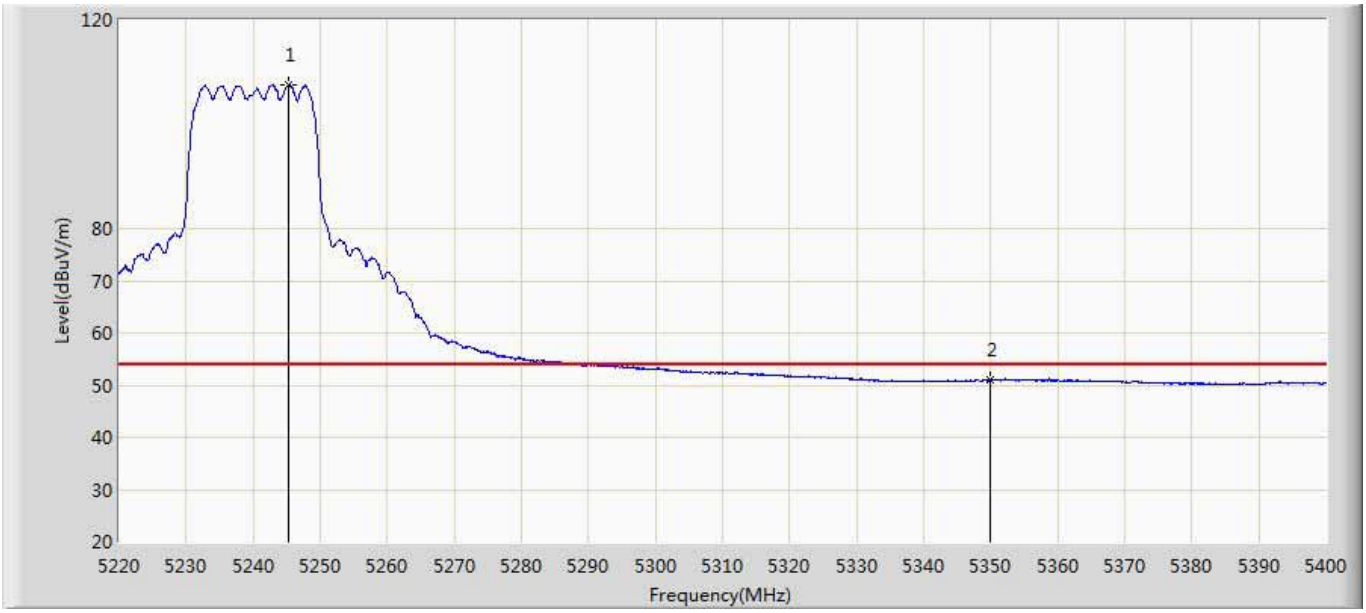
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5244.750	96.942	54.764	N/A	N/A	42.179	AV
2		5350.000	41.772	-0.744	-12.228	54.000	42.516	AV

Site: AC5	Time: 2016/05/04 - 17:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5240Mhz by 802.11n20 with CDD	



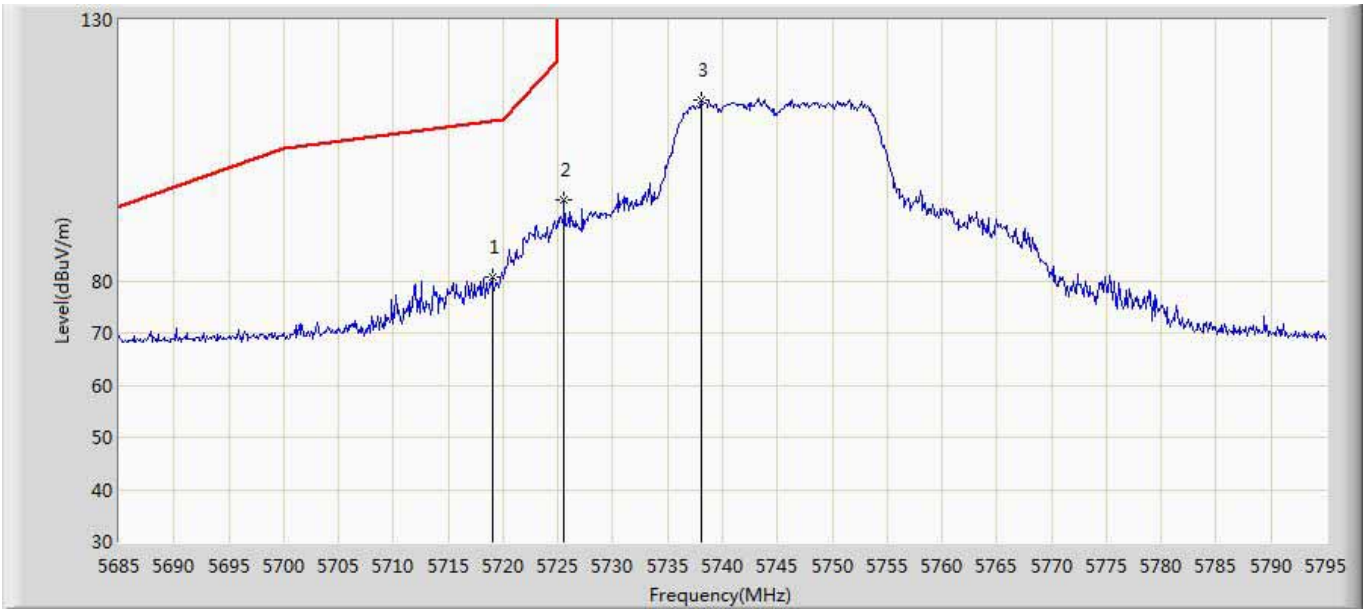
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5245.470	118.341	76.156	N/A	N/A	42.185	PK
2		5350.000	62.507	19.991	-11.493	74.000	42.516	PK

Site: AC5	Time: 2016/05/04 - 17:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5240Mhz by 802.11n20 with CDD	



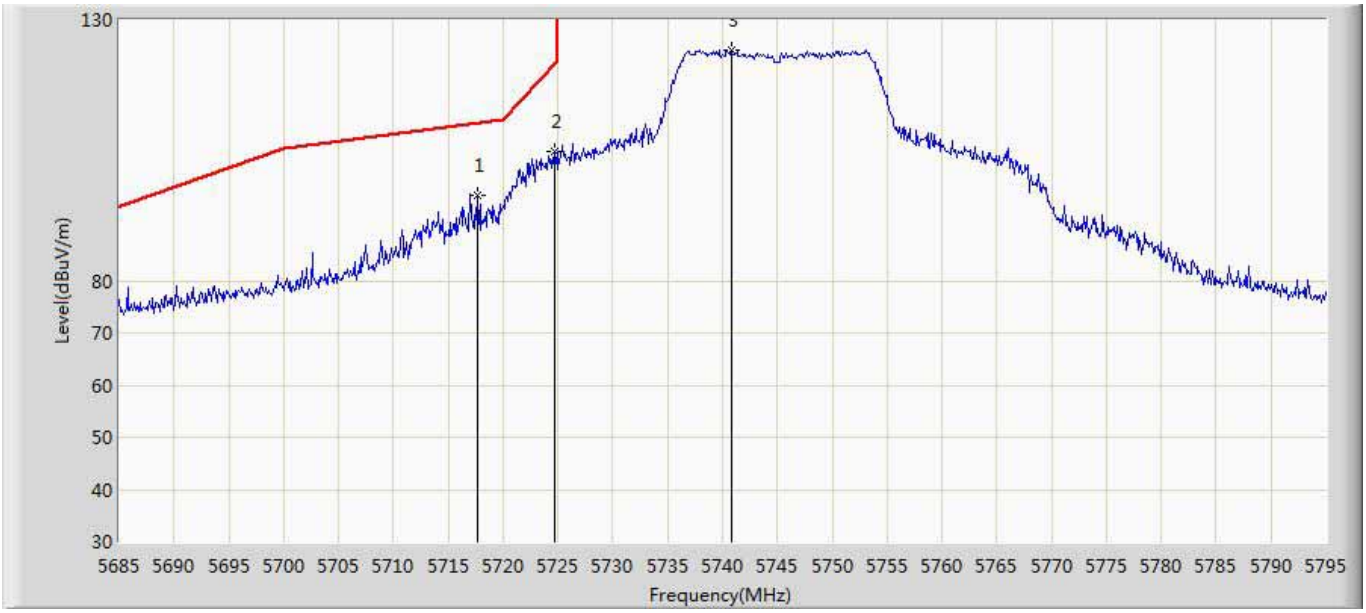
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5245.290	107.476	65.292	N/A	N/A	42.183	AV
2		5350.000	50.881	8.365	-3.119	54.000	42.516	AV

Site: AC5	Time: 2016/05/13 - 12:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5745Mhz by 802.11n20 with CDD	



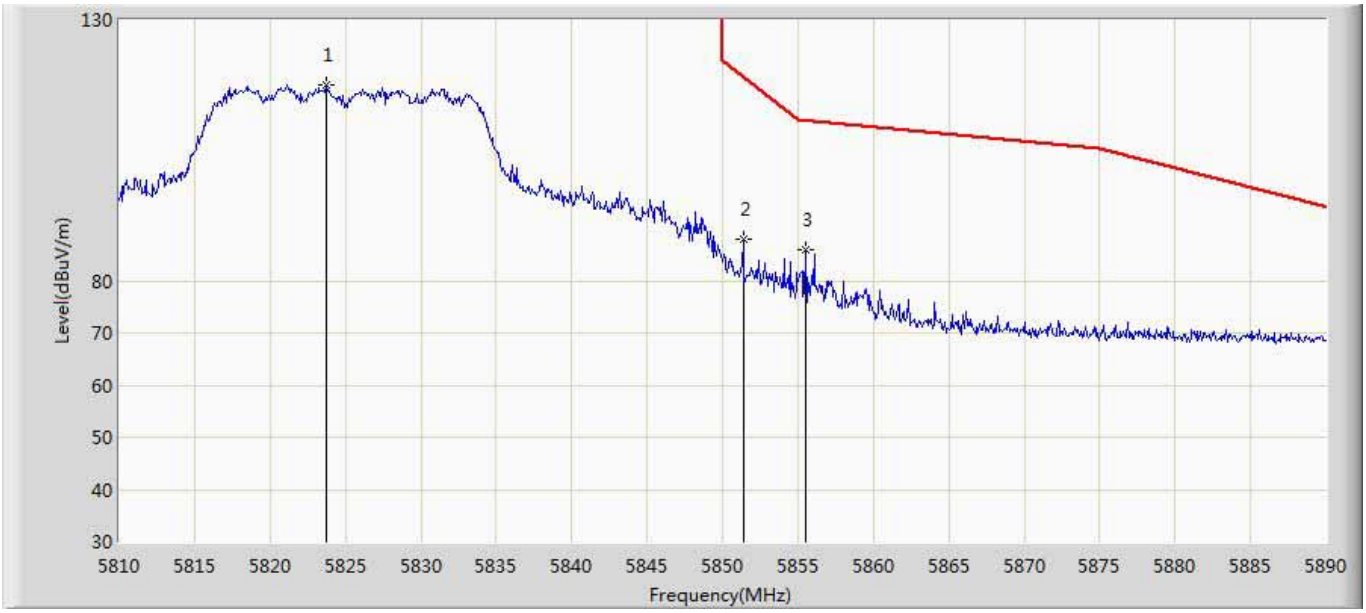
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5718.990	80.769	37.483	-29.848	110.618	43.287	PK
2		5725.590	95.424	52.160	N/A	N/A	43.264	PK
3	*	5738.020	114.610	71.319	N/A	N/A	43.291	PK

Site: AC5	Time: 2016/05/13 - 12:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5745Mhz by 802.11n20 with CDD	



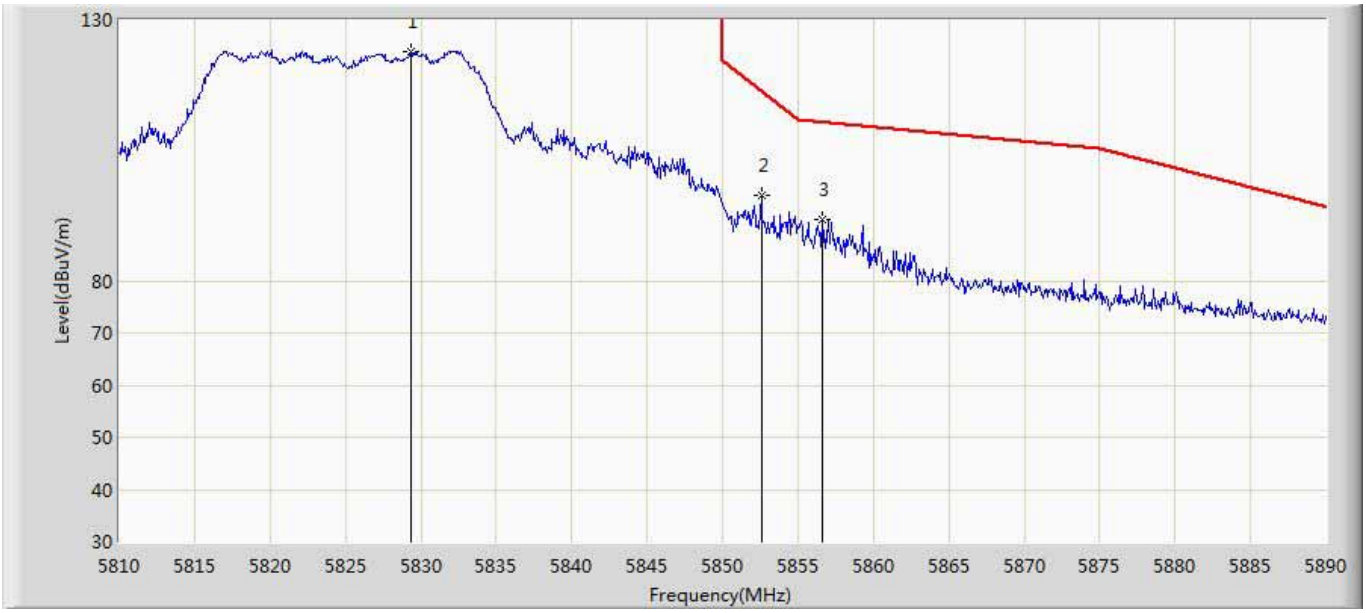
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5717.670	96.406	53.115	-13.843	110.249	43.291	PK
2		5724.710	104.849	61.582	-16.790	121.639	43.267	PK
3	*	5740.770	124.290	80.993	N/A	N/A	43.298	PK

Site: AC5	Time: 2016/05/13 - 12:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5825Mhz by 802.11n20 with CDD	



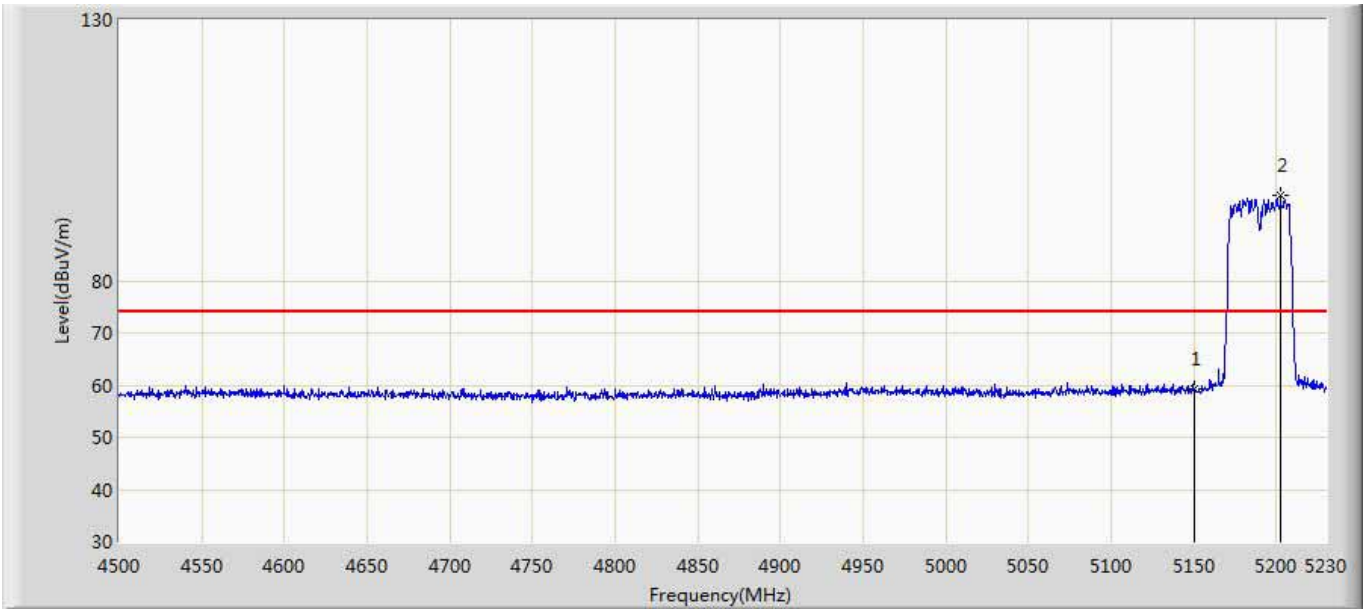
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5823.760	117.413	74.013	N/A	N/A	43.400	PK
2		5851.360	87.909	44.429	-31.290	119.198	43.480	PK
3		5855.520	85.847	42.335	-24.908	110.754	43.512	PK

Site: AC5	Time: 2016/05/13 - 12:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 2: Transmit at 5825Mhz by 802.11n20 with CDD	



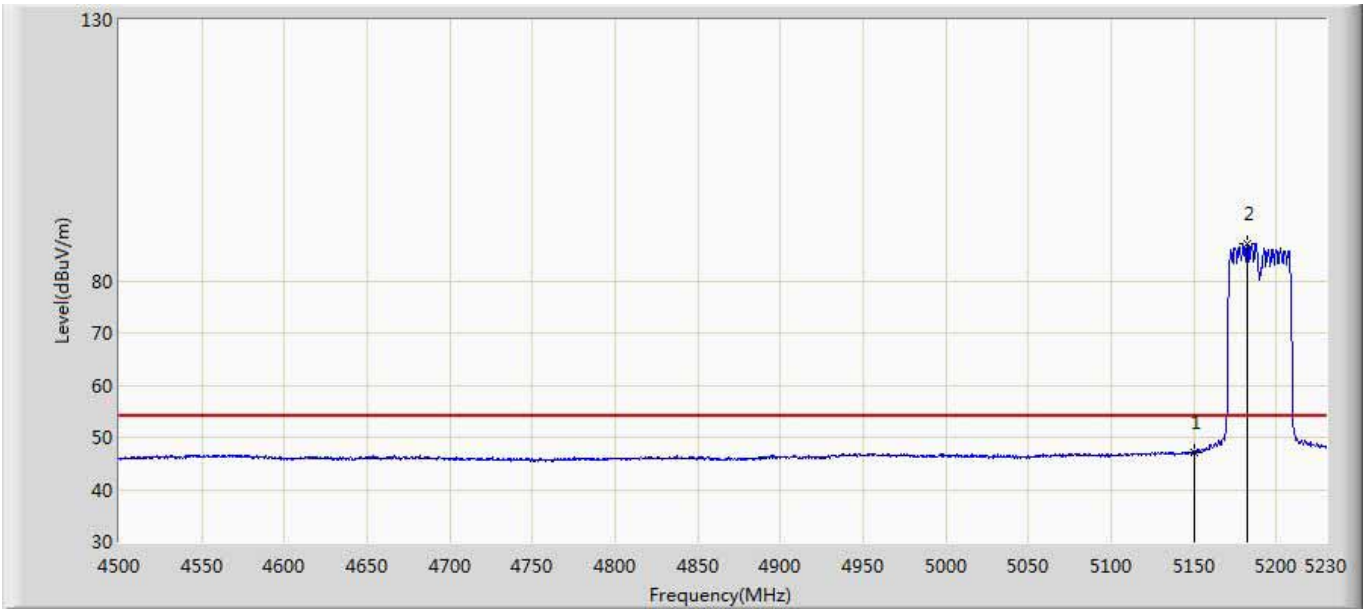
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5829.360	123.822	80.411	N/A	N/A	43.411	PK
2		5852.560	96.381	52.892	-20.081	116.462	43.489	PK
3		5856.640	91.787	48.267	-18.653	110.440	43.520	PK

Site: AC5	Time: 2016/05/05 - 21:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5190Mhz by 802.11n40 with CDD	



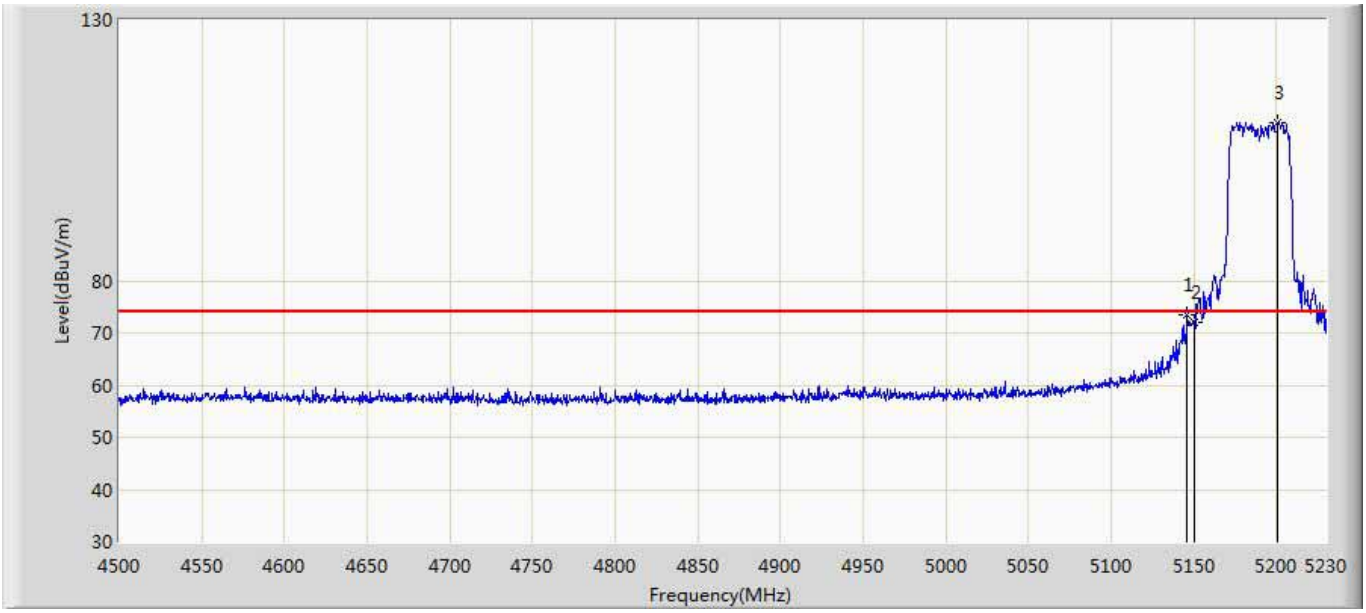
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	59.281	17.266	-14.719	74.000	42.015	PK
2	*	5202.625	96.373	54.348	N/A	N/A	42.025	PK

Site: AC5	Time: 2016/05/05 - 21:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5190Mhz by 802.11n40 with CDD	



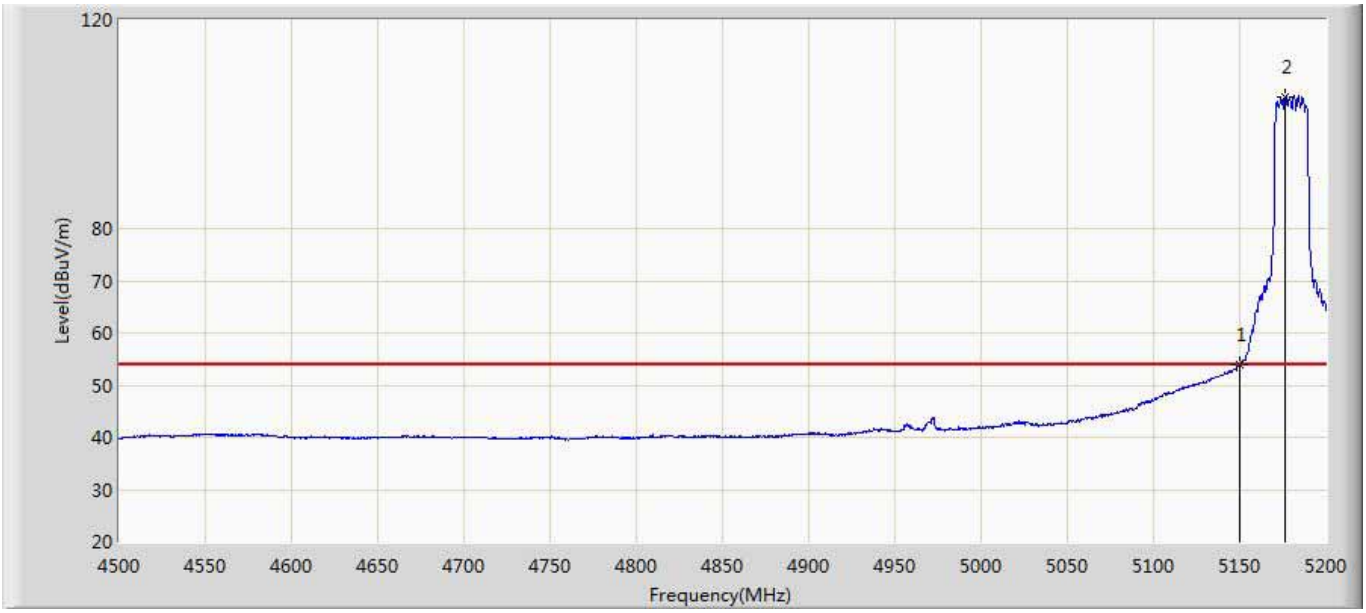
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	47.077	5.062	-6.923	54.000	42.015	AV
2	*	5182.185	87.046	44.902	N/A	N/A	42.144	AV

Site: AC5	Time: 2016/05/05 - 21:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5190Mhz by 802.11n40 with CDD	



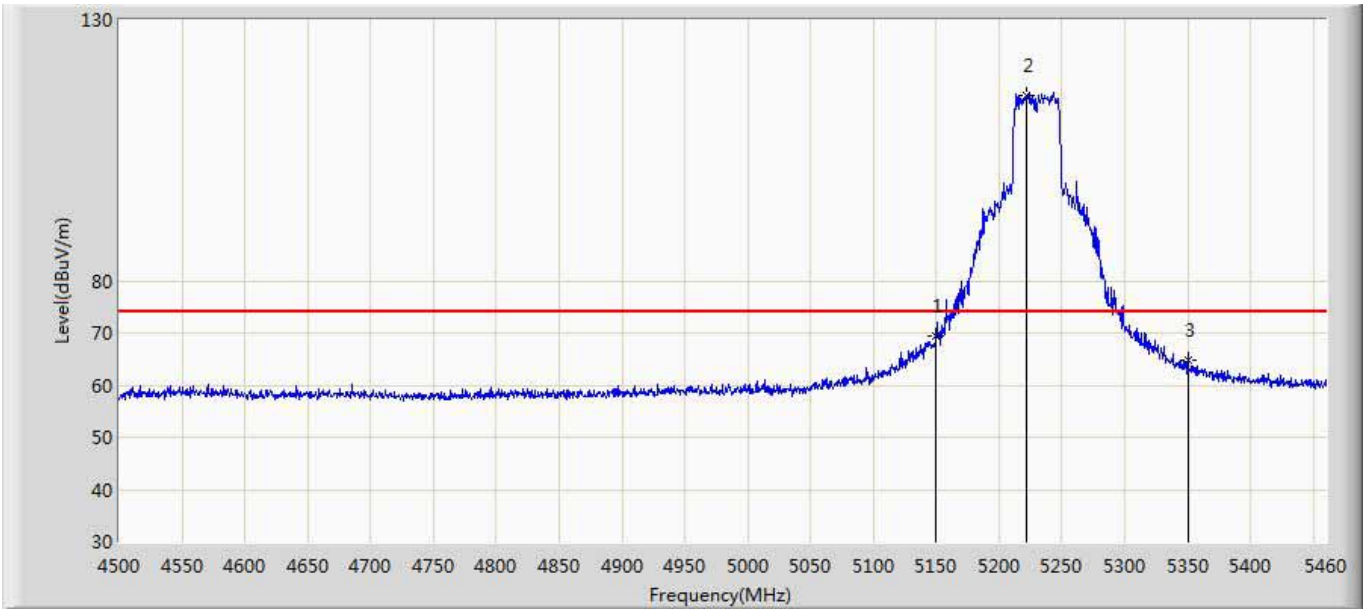
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5146.050	73.391	31.365	-0.609	74.000	42.026	PK
2		5150.000	72.144	30.129	-1.856	74.000	42.015	PK
3	*	5201.165	110.317	68.287	N/A	N/A	42.029	PK

Site: AC5	Time: 2016/05/05 - 21:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5190Mhz by 802.11n40 with CDD	



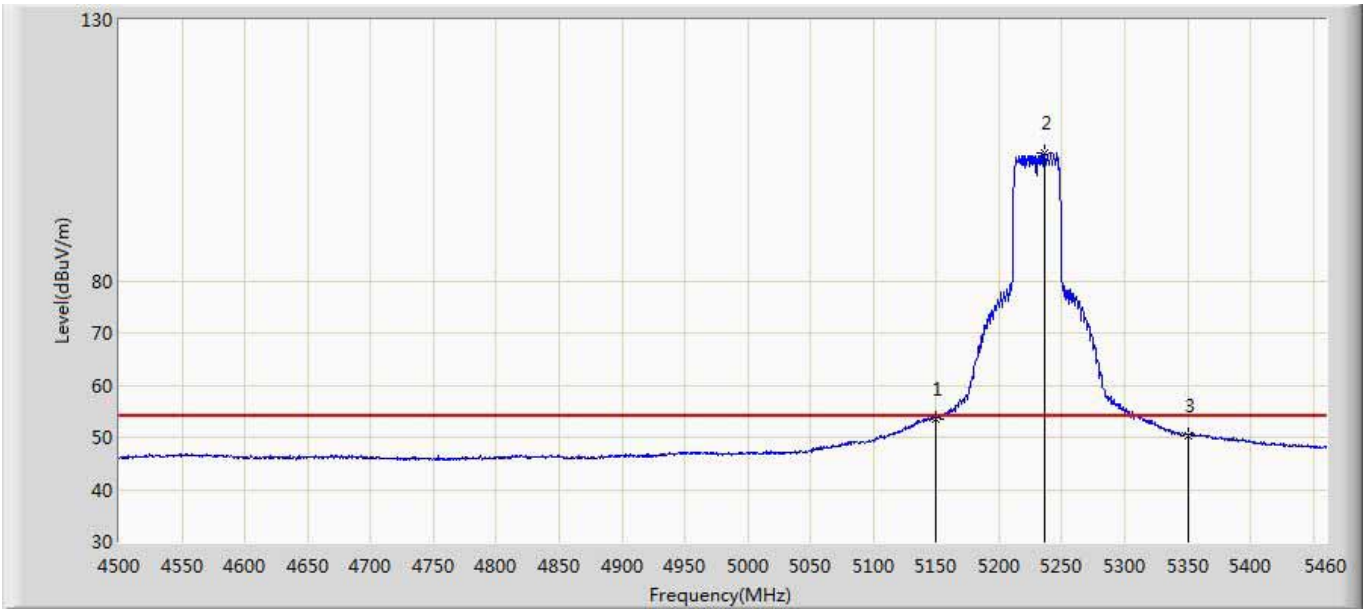
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	53.518	11.503	-0.482	54.000	42.015	AV
2	*	5182.185	98.304	56.160	N/A	N/A	42.144	AV

Site: AC5	Time: 2016/05/08 - 17:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5230Mhz by 802.11n40 with CDD	



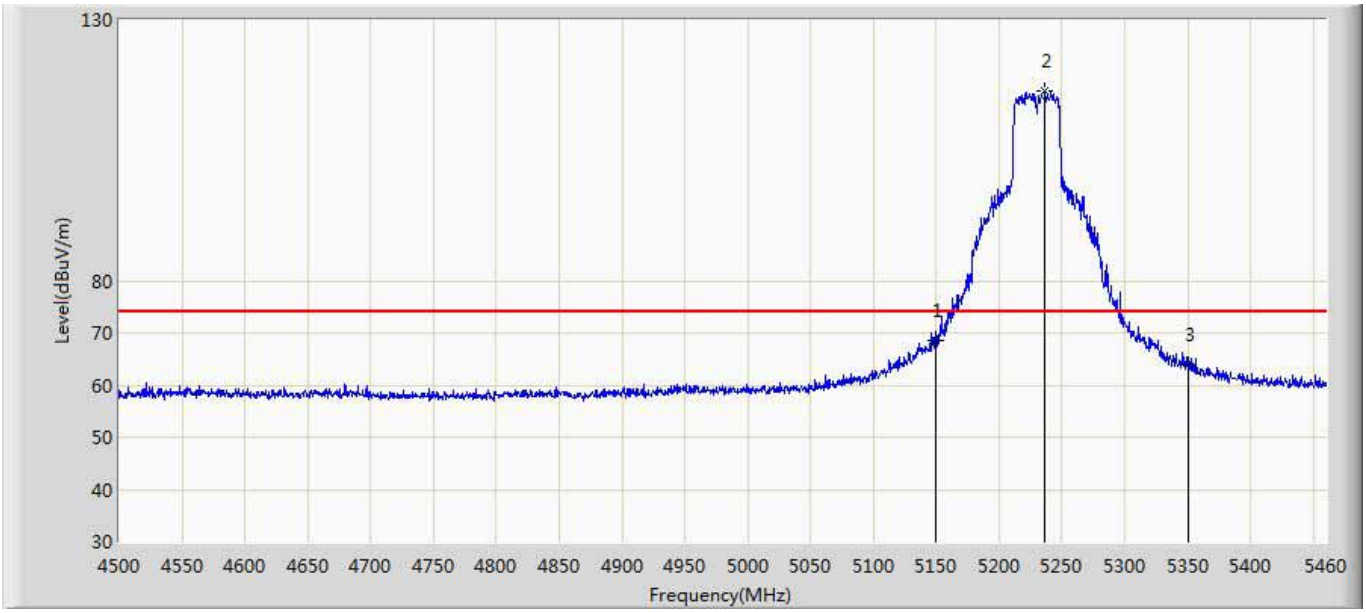
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5150.000	69.405	27.390	-4.595	74.000	42.015	PK
2		5222.400	115.615	73.602	N/A	N/A	42.012	PK
3		5350.000	64.782	22.266	-9.218	74.000	42.516	PK

Site: AC5	Time: 2016/05/08 - 17:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5230Mhz by 802.11n40 with CDD	



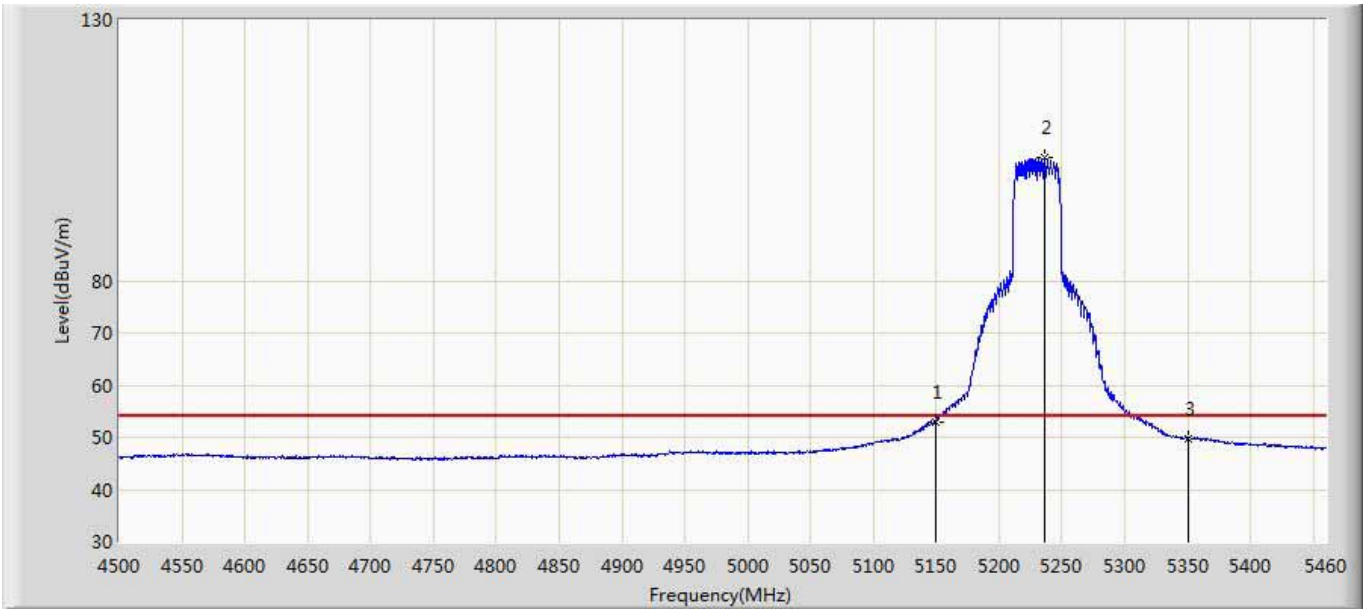
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5150.000	53.493	11.478	-0.507	54.000	42.015	AV
2		5236.320	104.496	62.401	N/A	N/A	42.095	AV
3		5350.000	50.430	7.914	-3.570	54.000	42.516	AV

Site: AC5	Time: 2016/05/08 - 17:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5230Mhz by 802.11n40 with CDD	



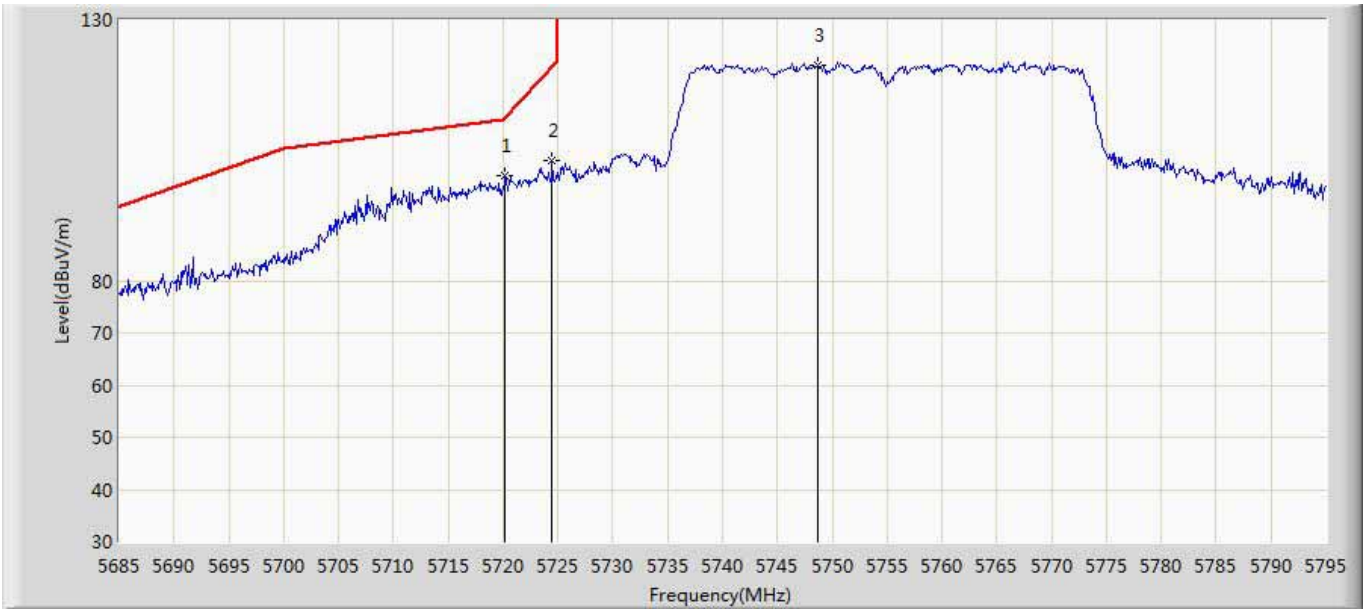
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5150.000	68.572	26.557	-5.428	74.000	42.015	PK
2		5236.800	116.505	74.405	N/A	N/A	42.100	PK
3		5350.000	63.955	21.439	-10.045	74.000	42.516	PK

Site: AC5	Time: 2016/05/08 - 17:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5230Mhz by 802.11n40 with CDD	



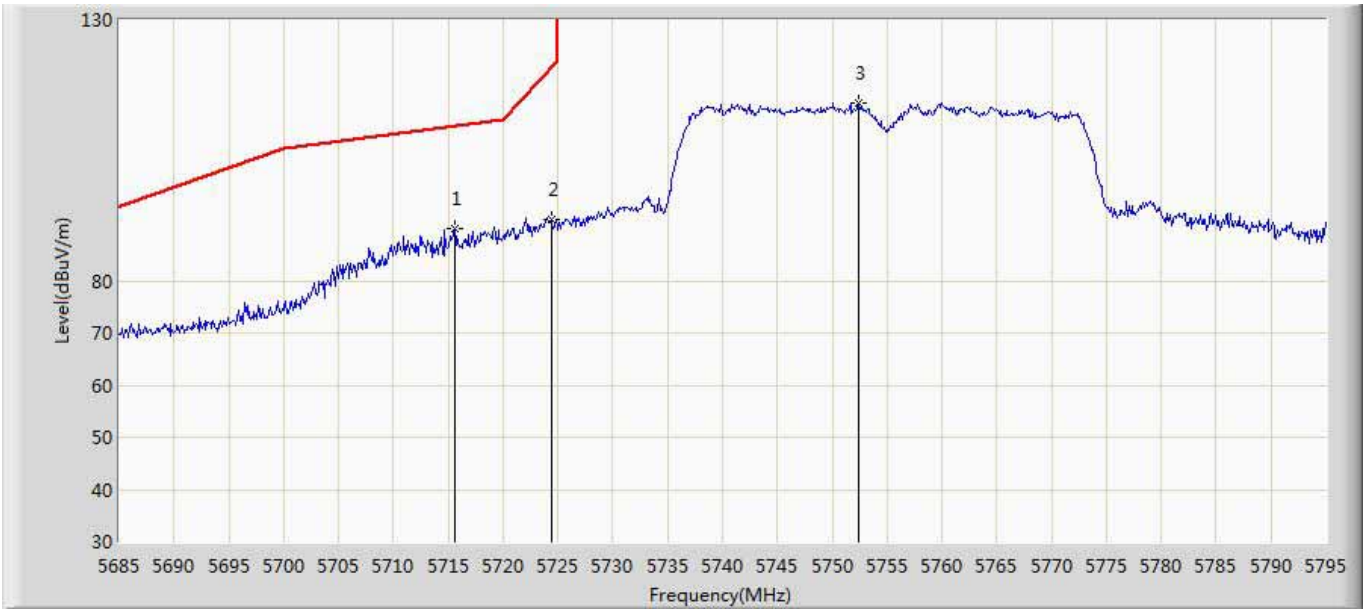
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5150.000	53.031	11.016	-0.969	54.000	42.015	AV
2		5236.320	103.562	61.467	N/A	N/A	42.095	AV
3		5350.000	49.763	7.247	-4.237	54.000	42.516	AV

Site: AC5	Time: 2016/05/13 - 12:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5755Mhz by 802.11n40 with CDD	



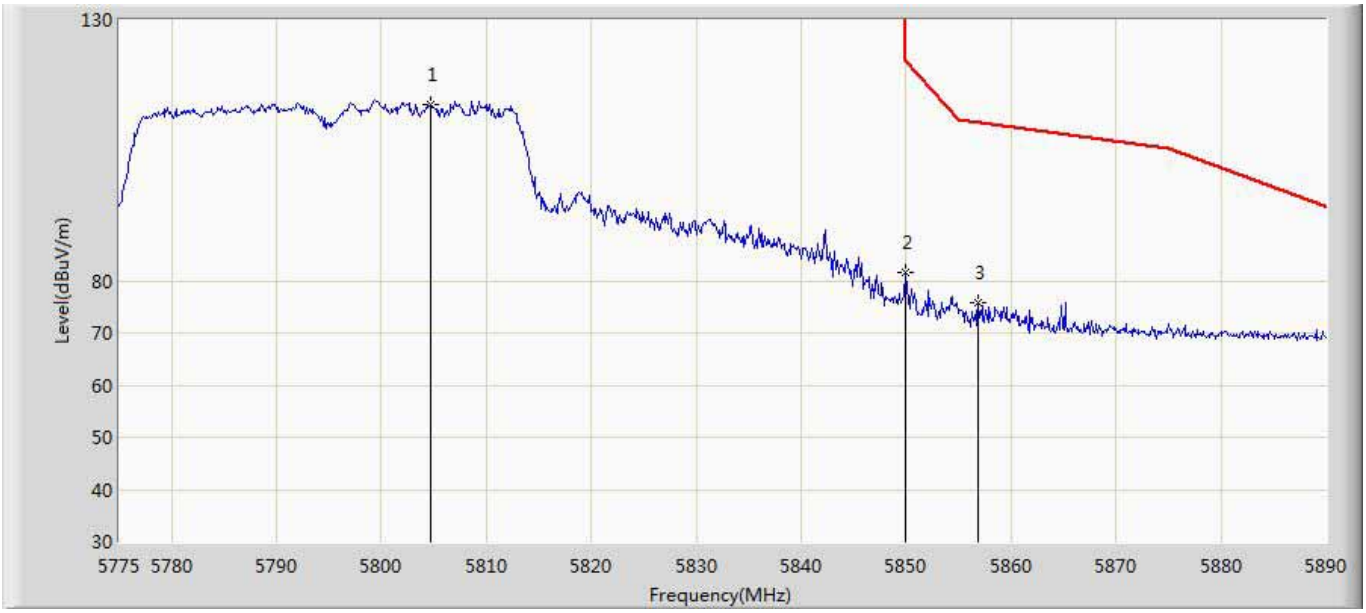
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5720.200	100.017	56.735	-11.339	111.356	43.282	PK
2		5724.490	103.180	59.912	-17.958	121.138	43.268	PK
3	*	5748.690	121.223	77.940	N/A	N/A	43.283	PK

Site: AC5	Time: 2016/05/13 - 12:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5745Mhz by 802.11ac20 with CDD	



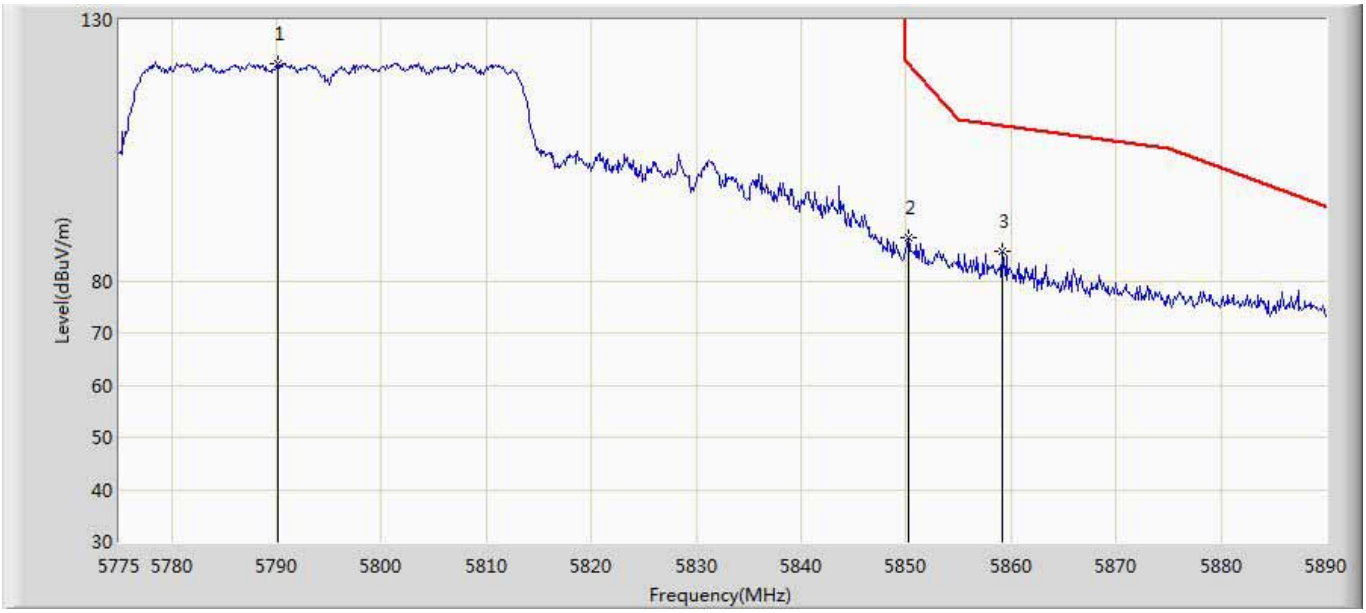
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5715.580	90.098	46.800	-19.566	109.664	43.298	PK
2		5724.380	91.826	48.558	-29.061	120.887	43.268	PK
3		5752.430	114.012	70.743	N/A	N/A	43.269	PK

Site: AC5	Time: 2016/05/13 - 12:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5795Mhz by 802.11n40 with CDD	



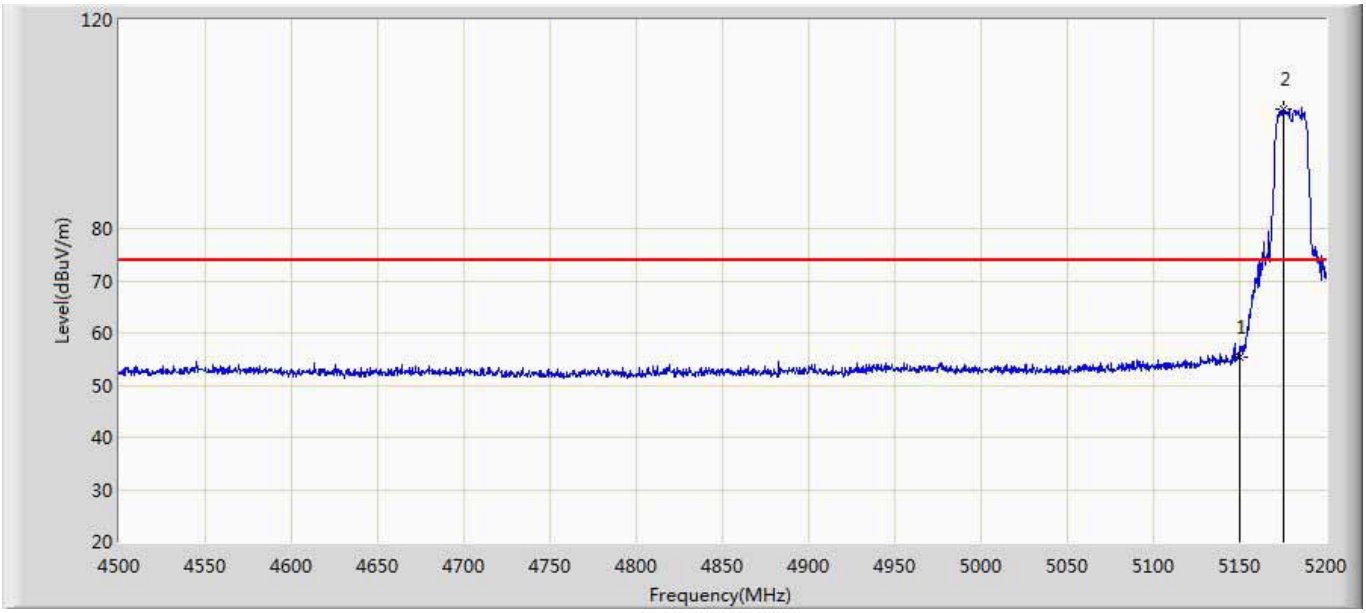
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5804.670	113.811	70.472	N/A	N/A	43.339	PK
2		5849.980	81.461	37.992	N/A	N/A	43.469	PK
3		5856.880	75.846	32.324	-34.527	110.373	43.522	PK

Site: AC5	Time: 2016/05/13 - 12:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 3: Transmit at 5795Mhz by 802.11n40 with CDD	



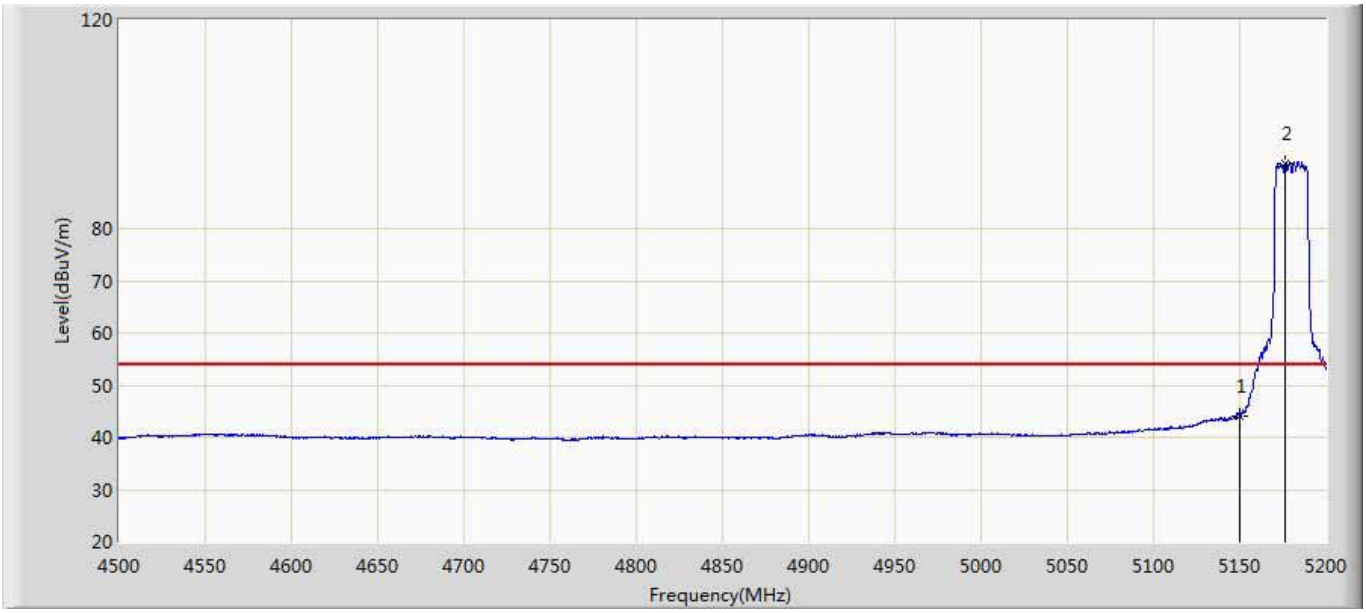
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5790.065	121.484	78.185	N/A	N/A	43.299	PK
2		5850.210	88.267	44.796	-33.554	121.821	43.470	PK
3		5859.180	85.555	42.015	-24.173	109.728	43.540	PK

Site: AC5	Time: 2016/05/04 - 17:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5180Mhz by 802.11ac20 with CDD	



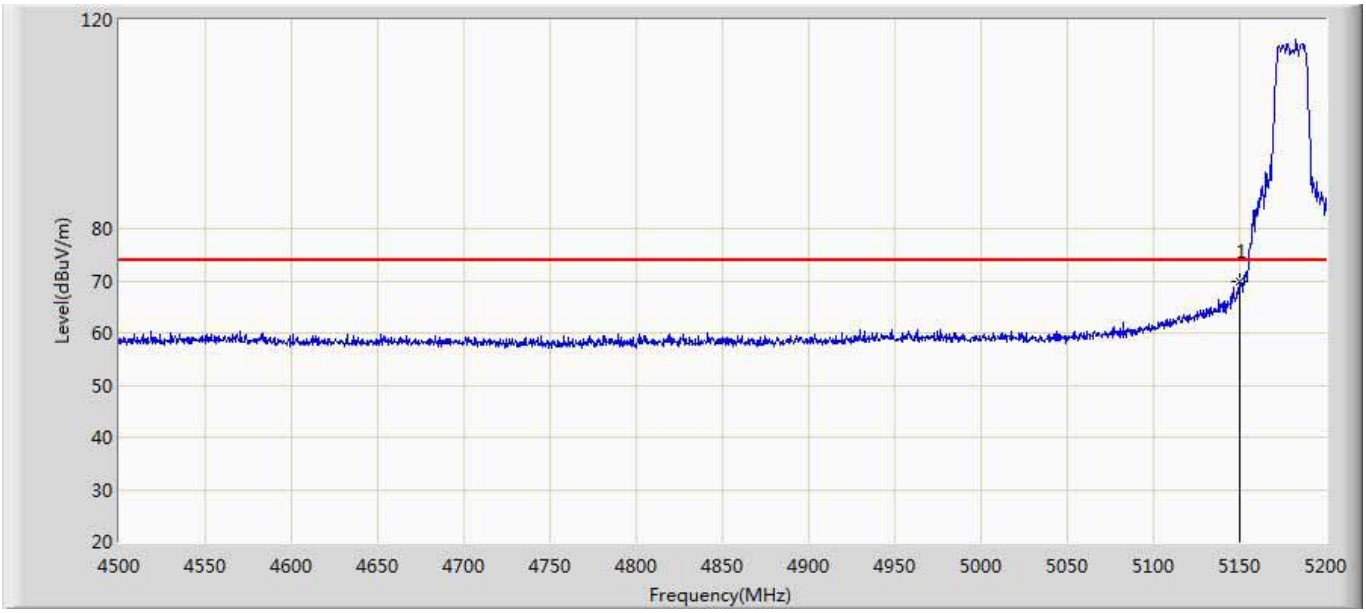
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	55.407	13.392	-18.593	74.000	42.015	PK
2	*	5175.500	102.786	60.641	N/A	N/A	42.145	PK

Site: AC5	Time: 2016/05/04 - 17:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5180Mhz by 802.11ac20 with CDD	



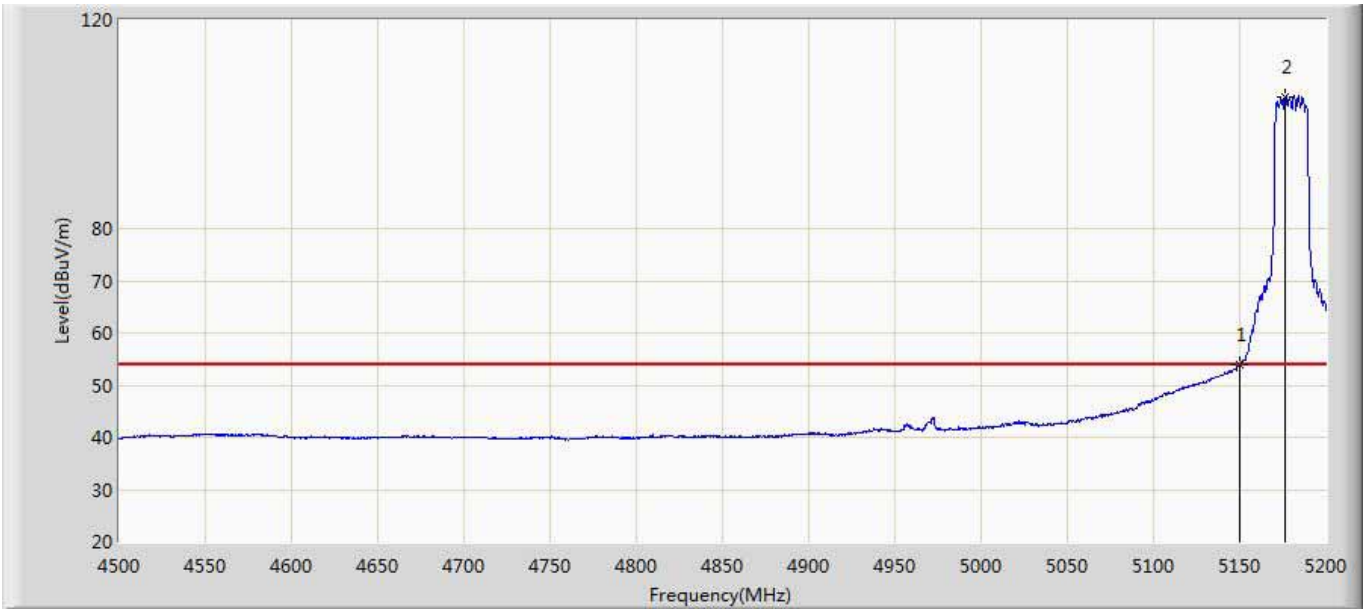
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	44.005	1.990	-9.995	54.000	42.015	AV
2	*	5176.550	92.597	50.452	N/A	N/A	42.146	AV

Site: AC5	Time: 2016/05/04 - 17:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5180Mhz by 802.11ac20 with CDD	



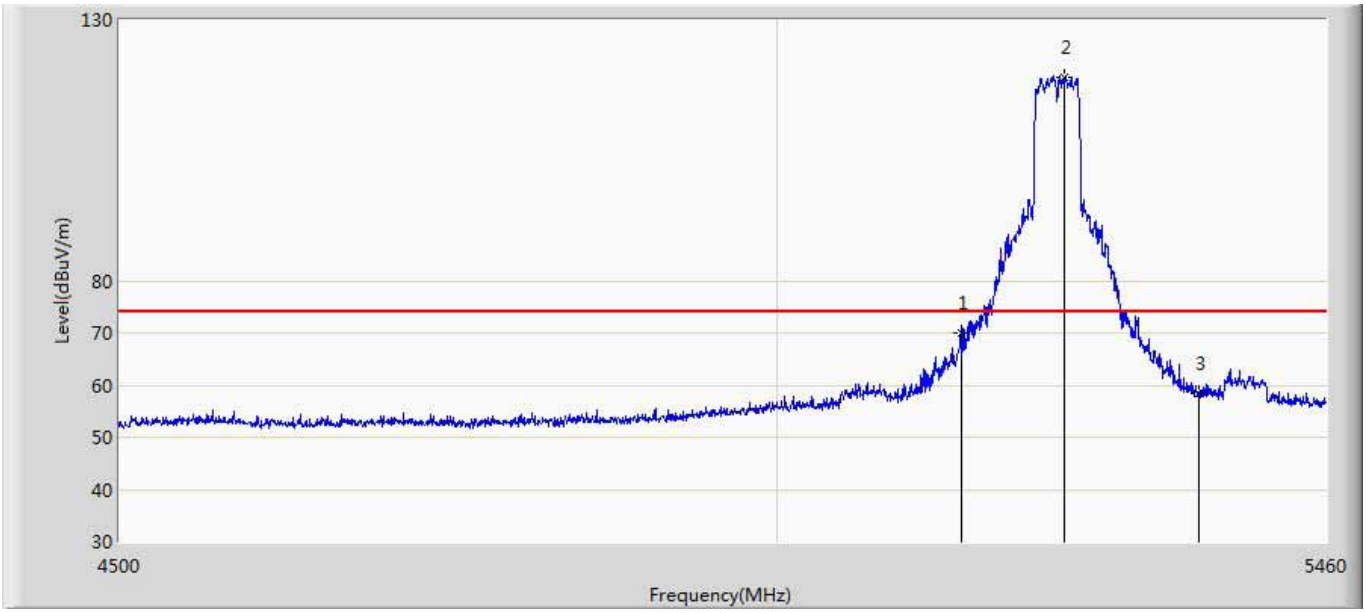
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	69.751	27.736	-4.249	74.000	42.015	PK
2	*	5244.750	96.942	54.764	N/A	N/A	42.179	PK

Site: AC5	Time: 2016/05/04 - 17:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5180Mhz by 802.11ac20 with CDD	



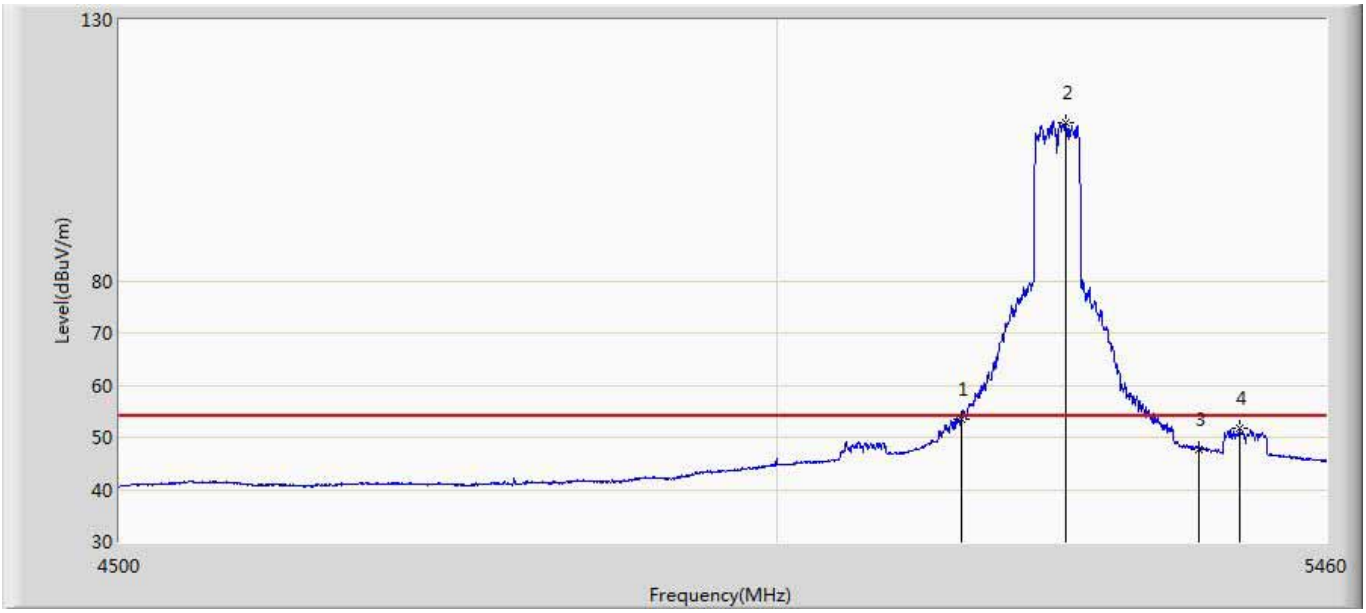
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	53.788	11.773	-0.212	54.000	42.015	AV
2	*	5176.550	105.298	63.153	N/A	N/A	42.146	AV

Site: AC5	Time: 2016/05/08 - 17:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5240Mhz by 802.11ac20 with CDD	



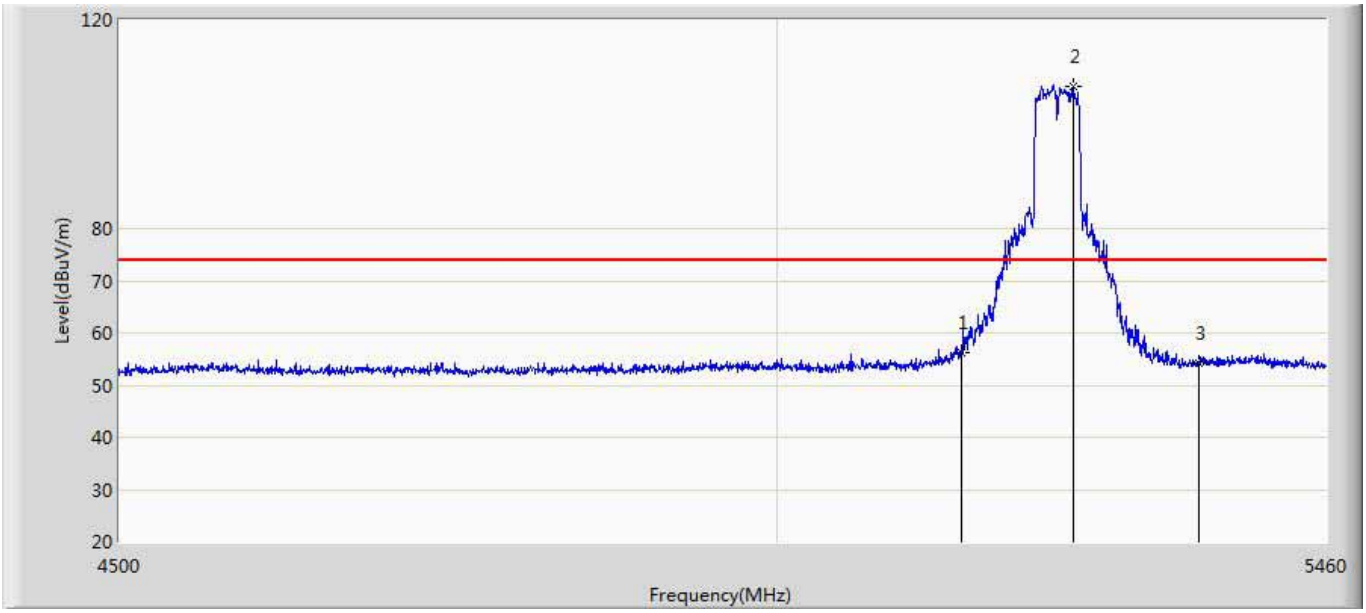
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	70.121	28.106	-3.879	74.000	42.015	PK
2	*	5236.320	119.060	76.965	N/A	N/A	42.095	PK
3		5350.000	58.298	15.782	-15.702	74.000	42.516	PK

Site: AC5	Time: 2016/05/08 - 17:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5240Mhz by 802.11ac20 with CDD	



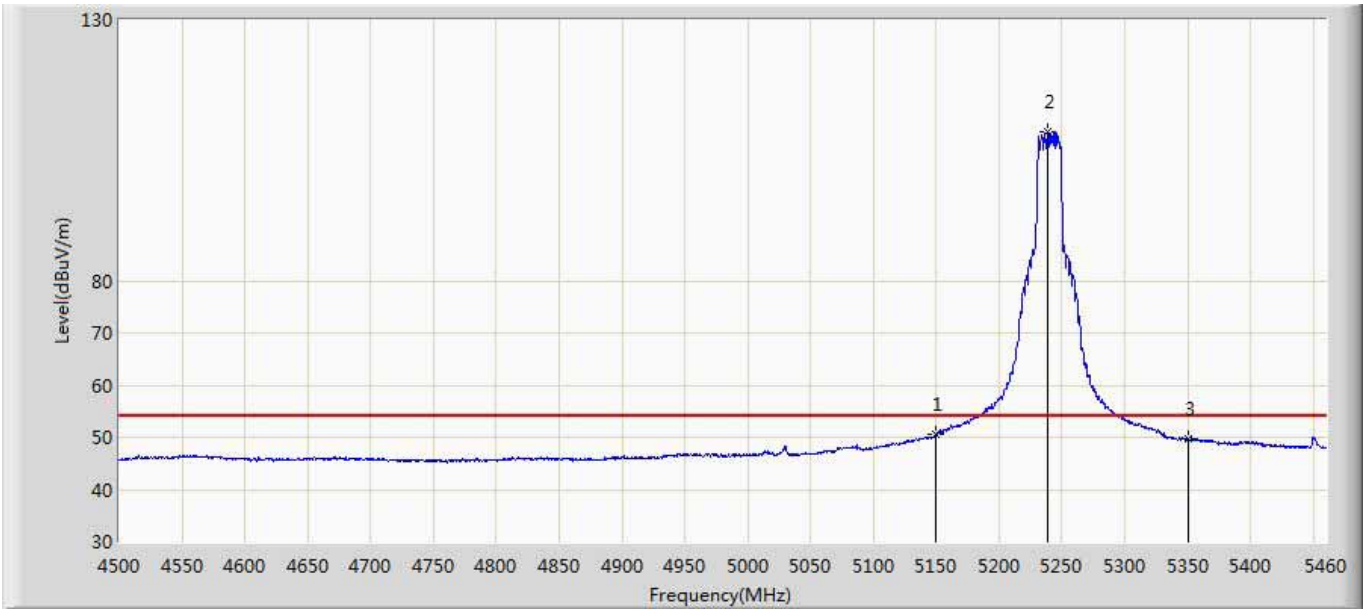
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	53.395	11.380	-0.605	54.000	42.015	AV
2	*	5236.800	110.291	68.191	N/A	N/A	42.100	AV
3		5350.000	47.760	5.244	-6.240	54.000	42.516	AV
4		5385.120	51.754	9.421	-2.246	54.000	42.333	AV

Site: AC5	Time: 2016/05/08 - 17:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5240Mhz by 802.11ac20 with CDD	



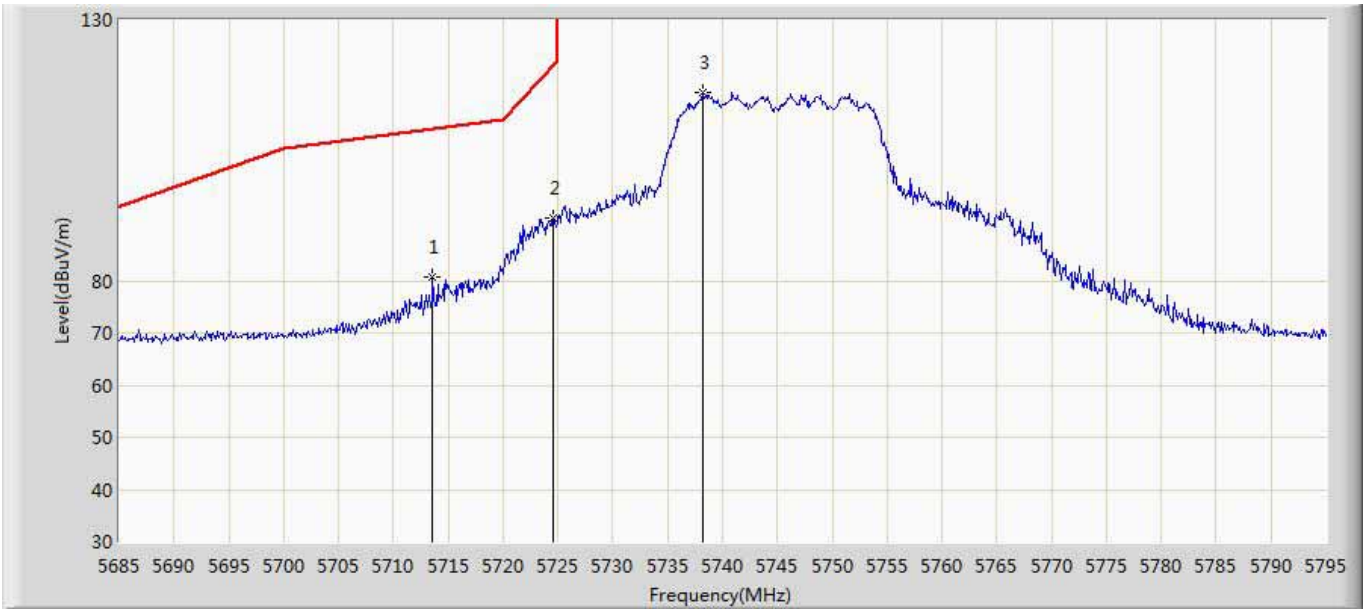
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	62.348	20.333	-11.652	74.000	42.015	PK
2	*	5244.480	119.026	76.850	N/A	N/A	42.175	PK
3		5350.000	62.110	19.594	-11.890	74.000	42.516	PK

Site: AC5	Time: 2016/05/08 - 17:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5240Mhz by 802.11ac20 with CDD	



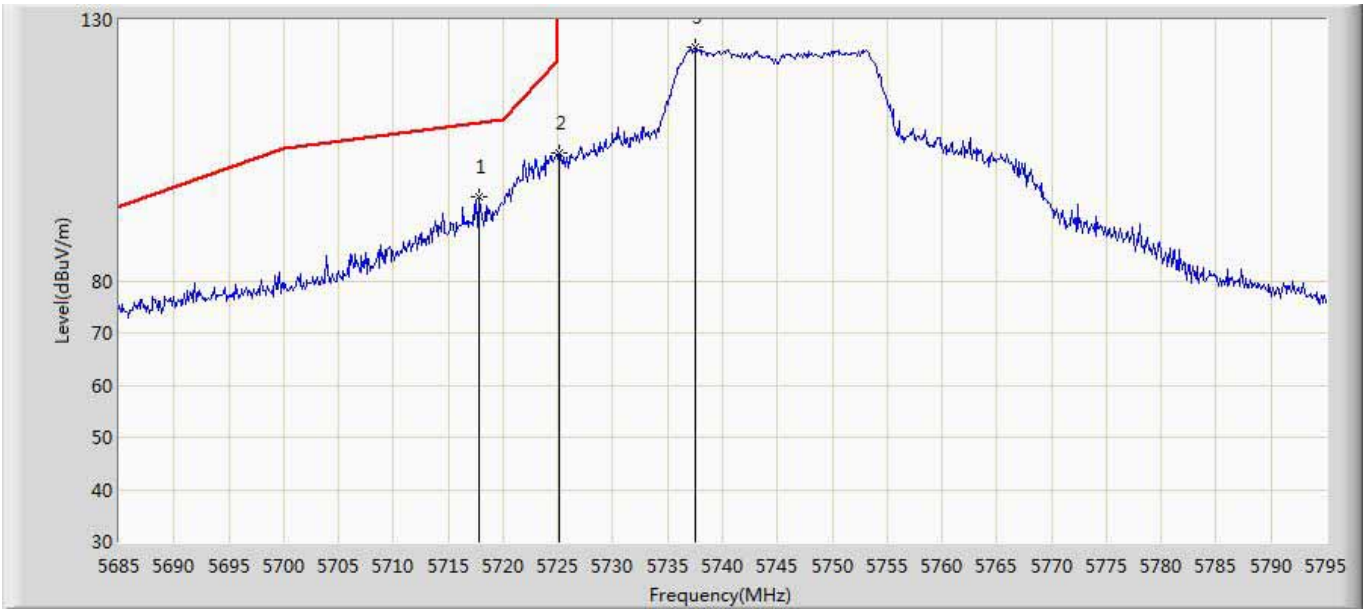
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	50.439	8.424	-3.561	54.000	42.015	AV
2	*	5239.200	108.460	66.336	N/A	N/A	42.123	AV
3		5350.000	49.675	7.159	-4.325	54.000	42.516	AV

Site: AC5	Time: 2016/05/13 - 12:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5745Mhz by 802.11ac20 with CDD	



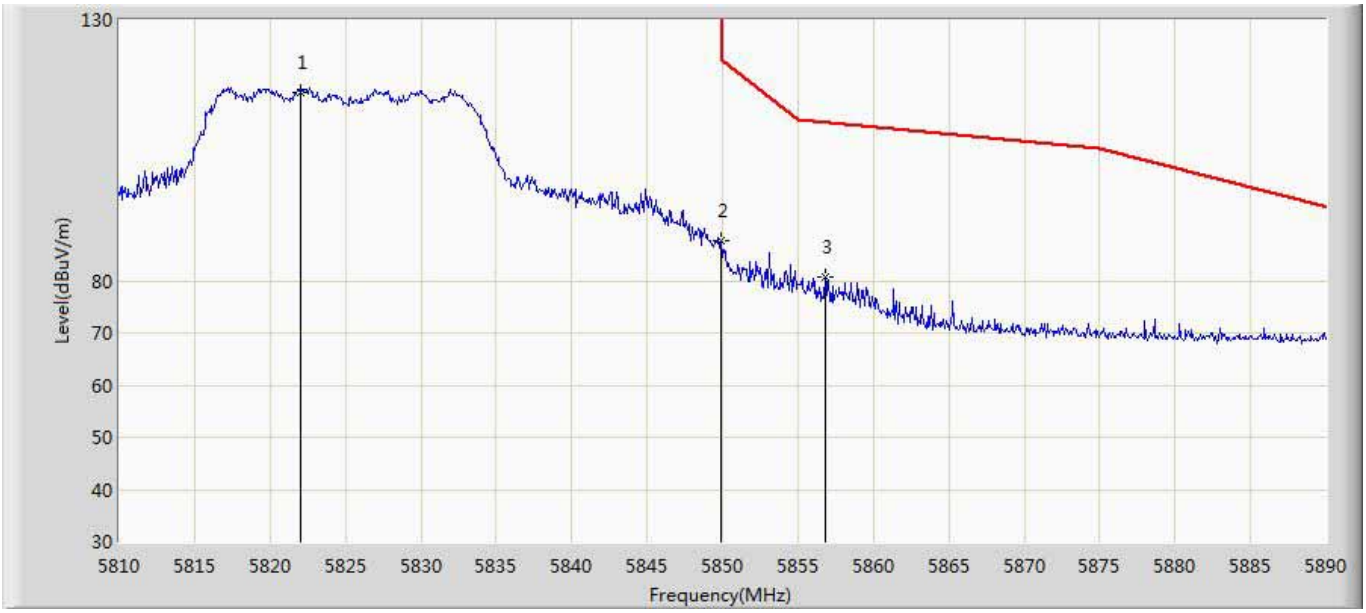
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5713.600	80.633	37.328	-28.477	109.110	43.305	PK
2		5724.600	91.979	48.712	-29.409	121.388	43.267	PK
3	*	5738.240	115.983	72.692	N/A	N/A	43.291	PK

Site: AC5	Time: 2016/05/13 - 12:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5745Mhz by 802.11ac20 with CDD	



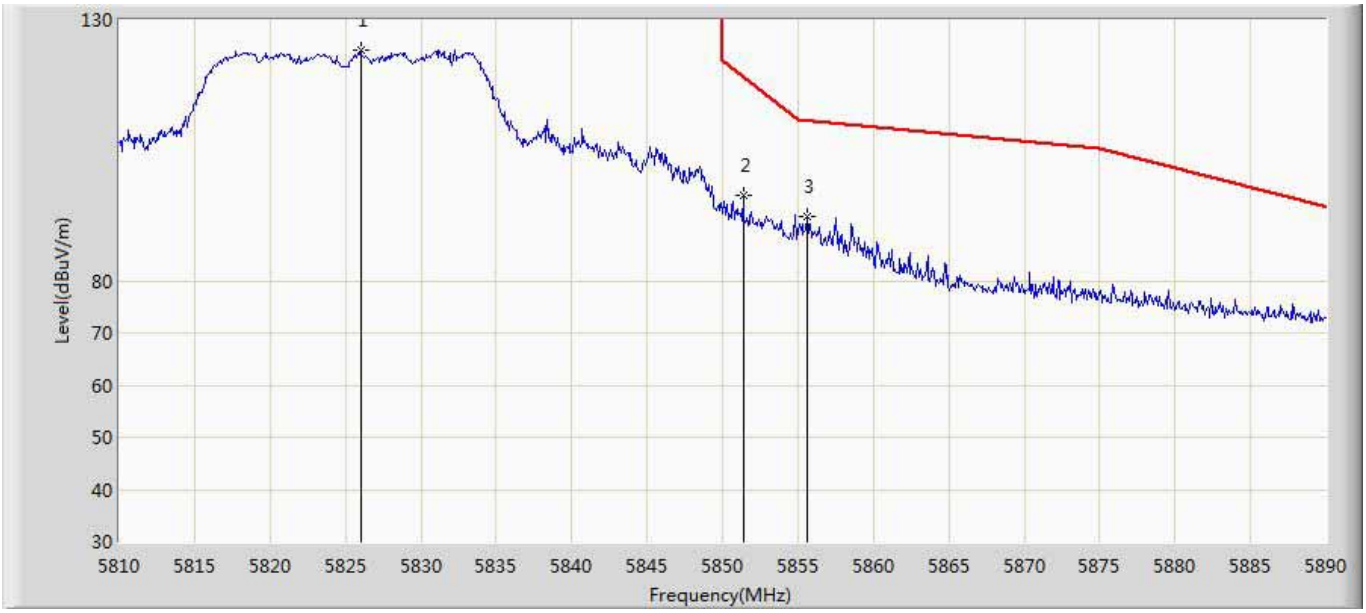
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5717.780	96.041	52.750	-14.239	110.279	43.291	PK
2		5725.150	104.407	61.142	N/A	N/A	43.266	PK
3		5737.580	124.750	81.460	N/A	N/A	43.290	PK

Site: AC5	Time: 2016/05/13 - 12:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5825Mhz by 802.11ac20 with CDD	



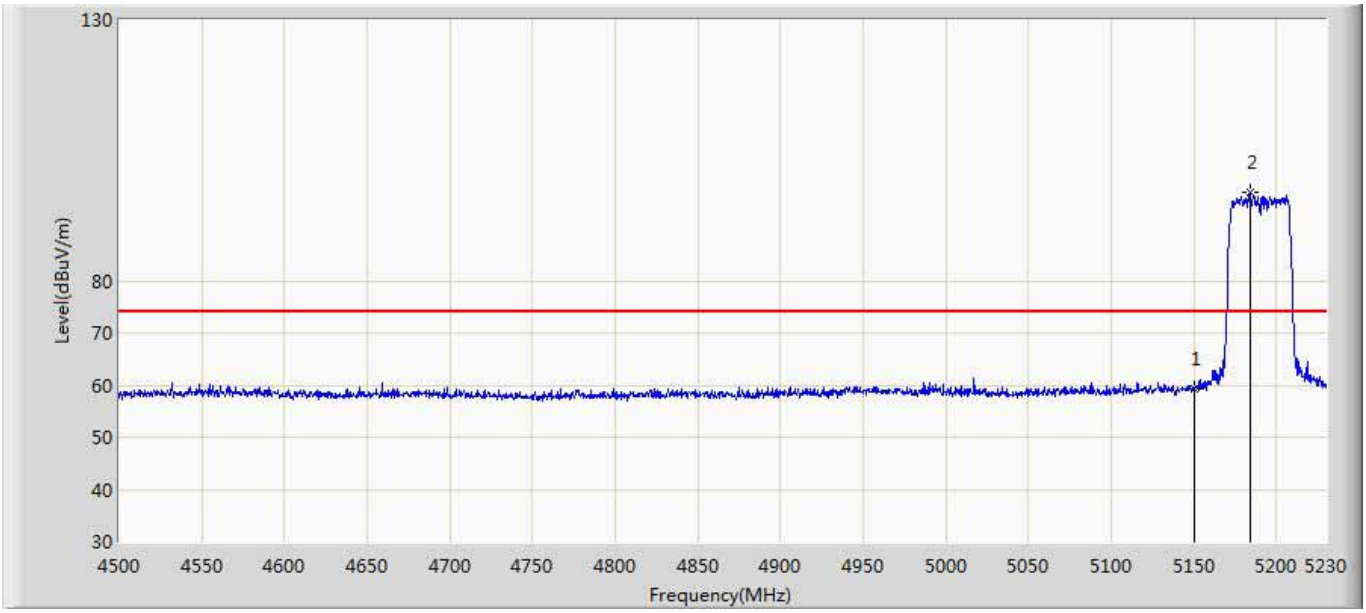
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5822.000	116.190	72.794	N/A	N/A	43.396	PK
2		5849.920	87.766	44.297	N/A	N/A	43.469	PK
3		5856.800	80.598	37.077	-29.797	110.395	43.522	PK

Site: AC5	Time: 2016/05/13 - 12:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 4: Transmit at 5825Mhz by 802.11ac20 with CDD	



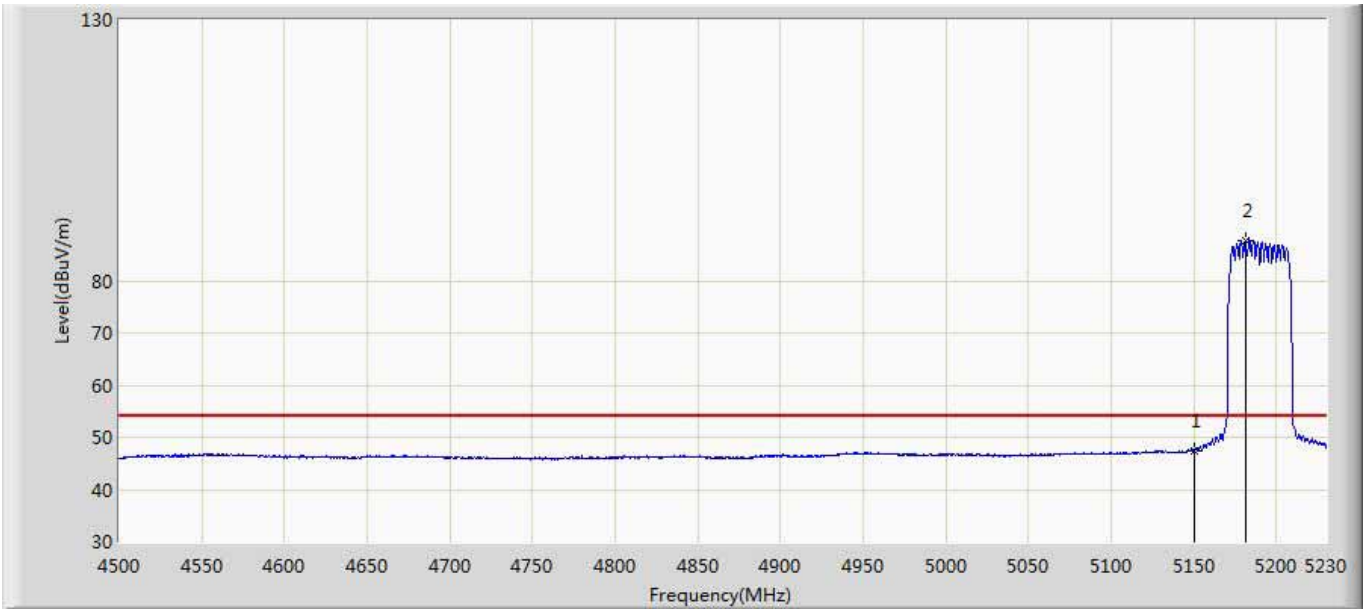
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5826.000	124.219	80.814	N/A	N/A	43.405	PK
2		5851.360	96.433	52.953	-22.766	119.198	43.480	PK
3		5855.600	92.454	48.942	-18.278	110.732	43.512	PK

Site: AC5	Time: 2016/05/05 - 21:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity :Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5190Mhz by 802.11ac40 with CDD	



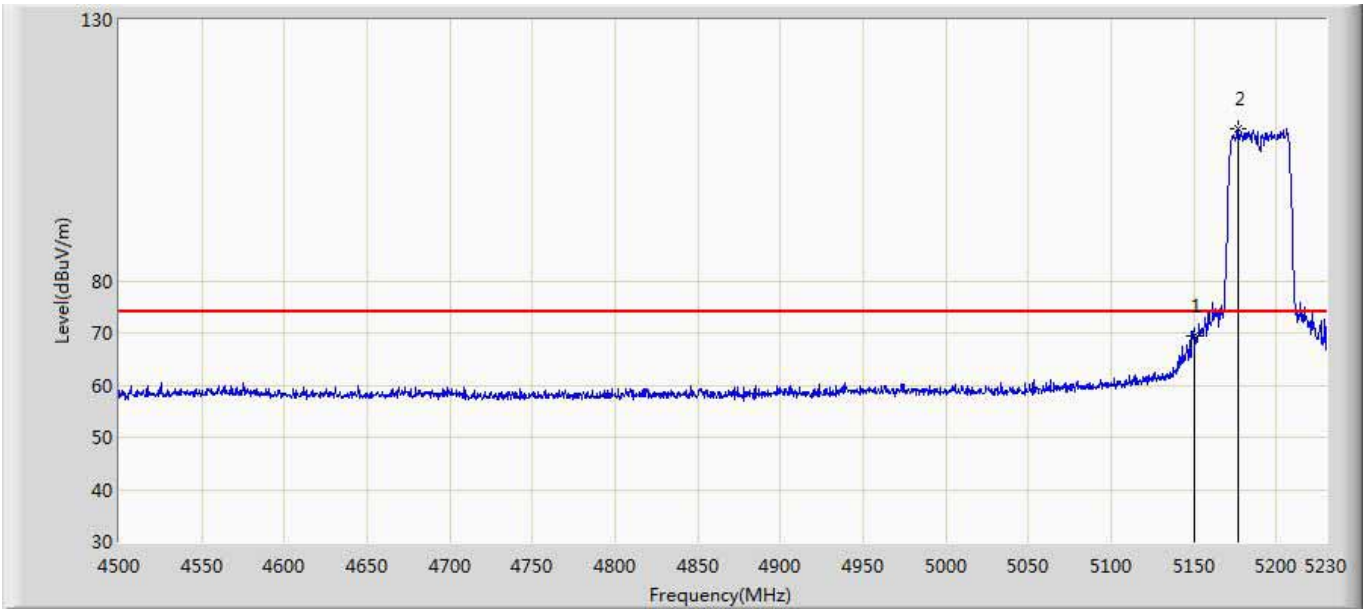
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	59.299	17.284	-14.701	74.000	42.015	PK
2	*	5184.010	96.835	54.703	N/A	N/A	42.132	PK

Site: AC5	Time: 2016/05/05 - 21:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5190Mhz by 802.11ac40 with CDD	



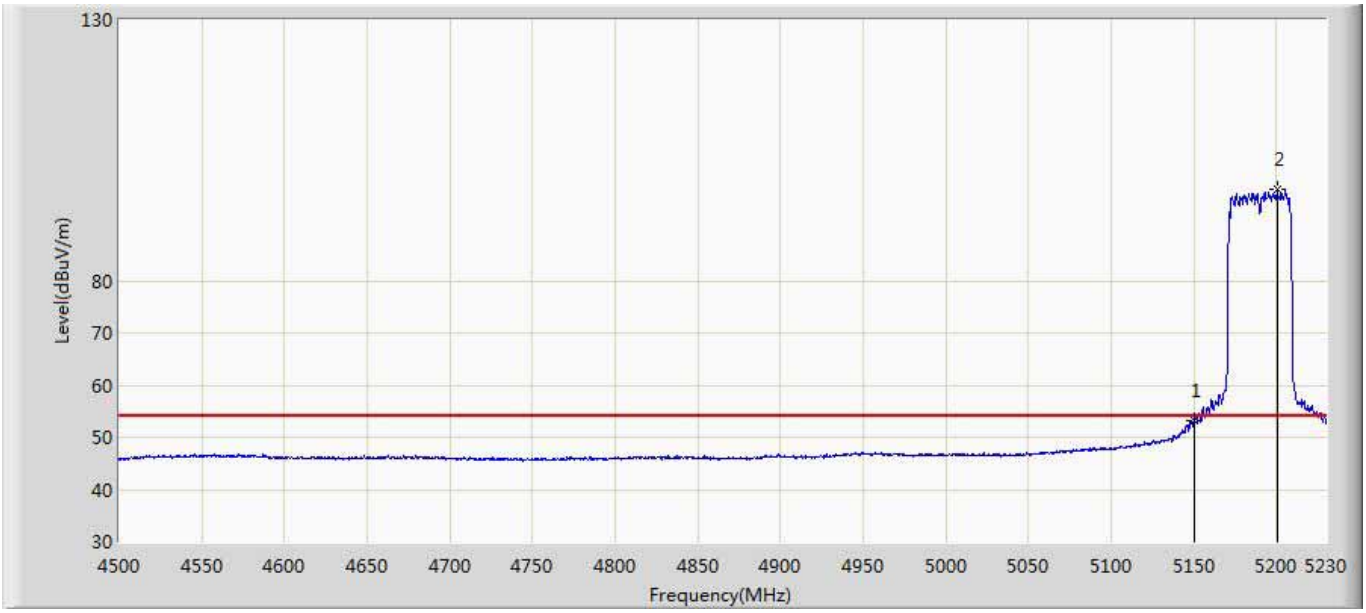
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	47.280	5.265	-6.720	54.000	42.015	AV
2	*	5181.090	87.797	45.652	N/A	N/A	42.145	AV

Site: AC5	Time: 2016/05/05 - 21:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5190Mhz by 802.11ac40 with CDD	



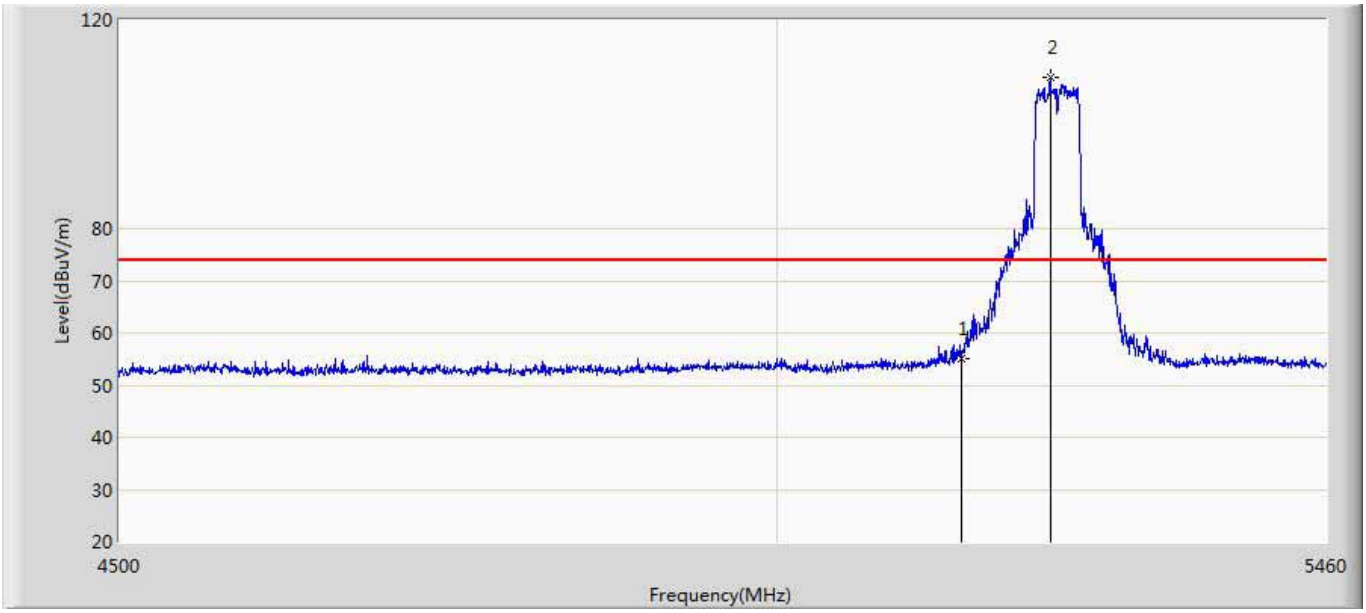
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	69.409	27.394	-4.591	74.000	42.015	PK
2		5176.710	109.052	66.907	N/A	N/A	42.146	PK

Site: AC5	Time: 2016/05/05 - 21:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5190Mhz by 802.11ac40 with CDD	



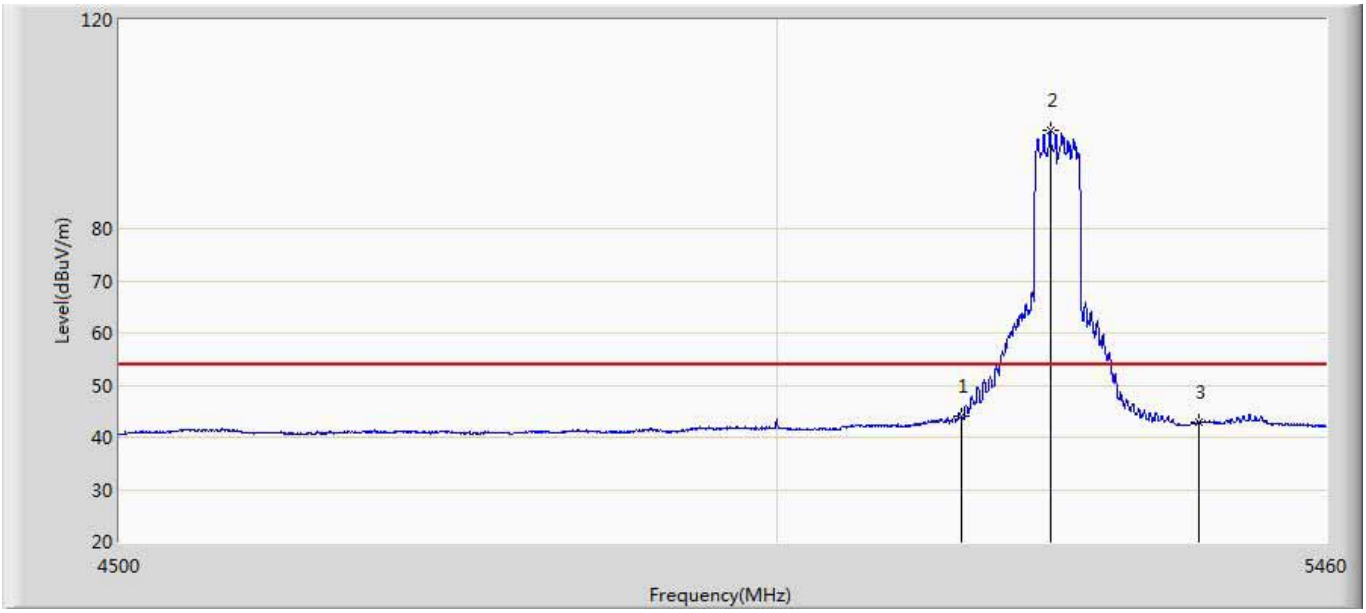
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	53.244	11.229	-0.756	54.000	42.015	AV
2	*	5200.435	97.681	55.649	N/A	N/A	42.031	AV

Site: AC5	Time: 2016/05/08 - 17:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5230Mhz by 802.11ac40 with CDD	



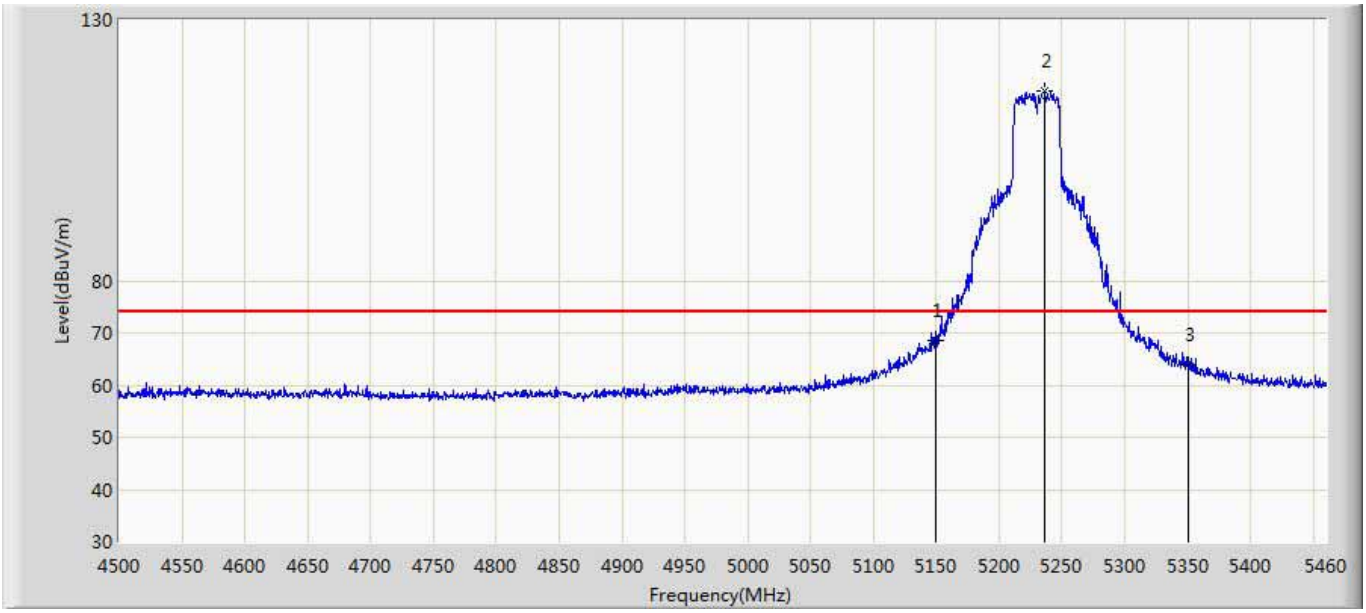
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	55.157	13.142	-18.843	74.000	42.015	PK
2	*	5223.840	109.070	67.051	N/A	N/A	42.020	PK

Site: AC5	Time: 2016/05/08 - 17:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5230Mhz by 802.11ac40 with CDD	



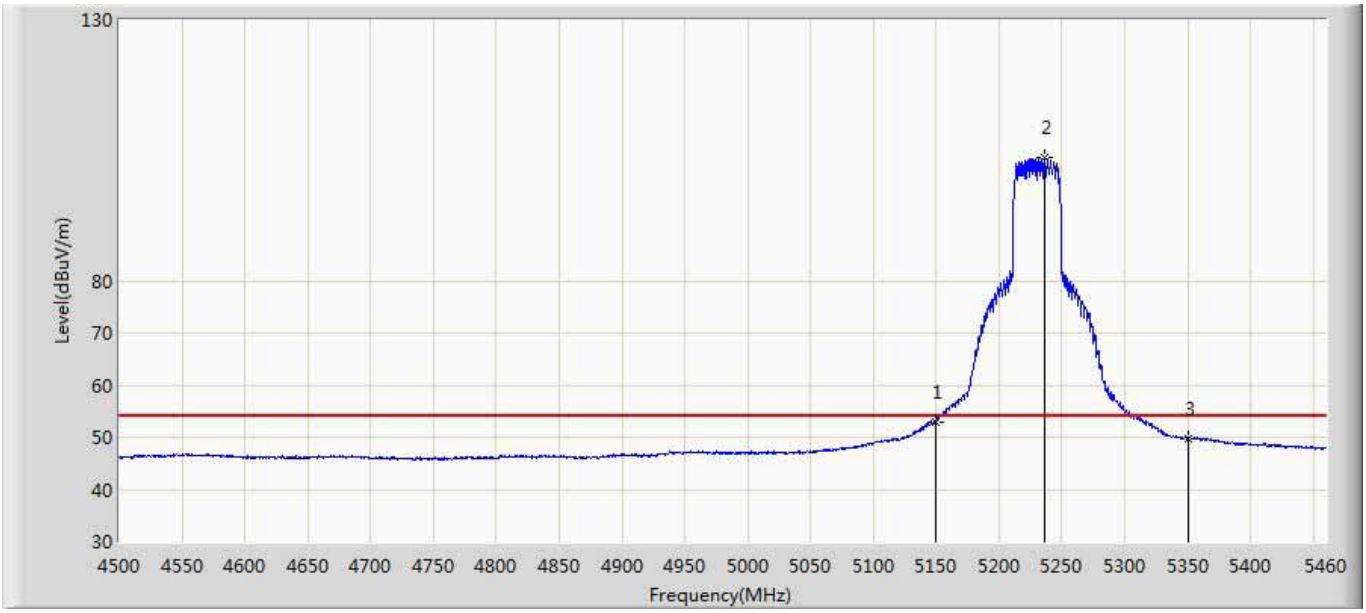
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	44.037	2.022	-9.963	54.000	42.015	AV
2	*	5223.840	98.929	56.910	N/A	N/A	42.020	AV
3		5350.000	42.844	0.328	-11.156	54.000	42.516	AV

Site: AC5	Time: 2016/05/08 - 17:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5230Mhz by 802.11ac40 with CDD	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	68.572	26.557	-5.428	74.000	42.015	PK
2	*	5236.800	116.505	74.405	N/A	N/A	42.100	PK
3		5350.000	63.955	21.439	-10.045	74.000	42.516	PK

Site: AC5	Time: 2016/05/08 - 17:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5230Mhz by 802.11ac40 with CDD	

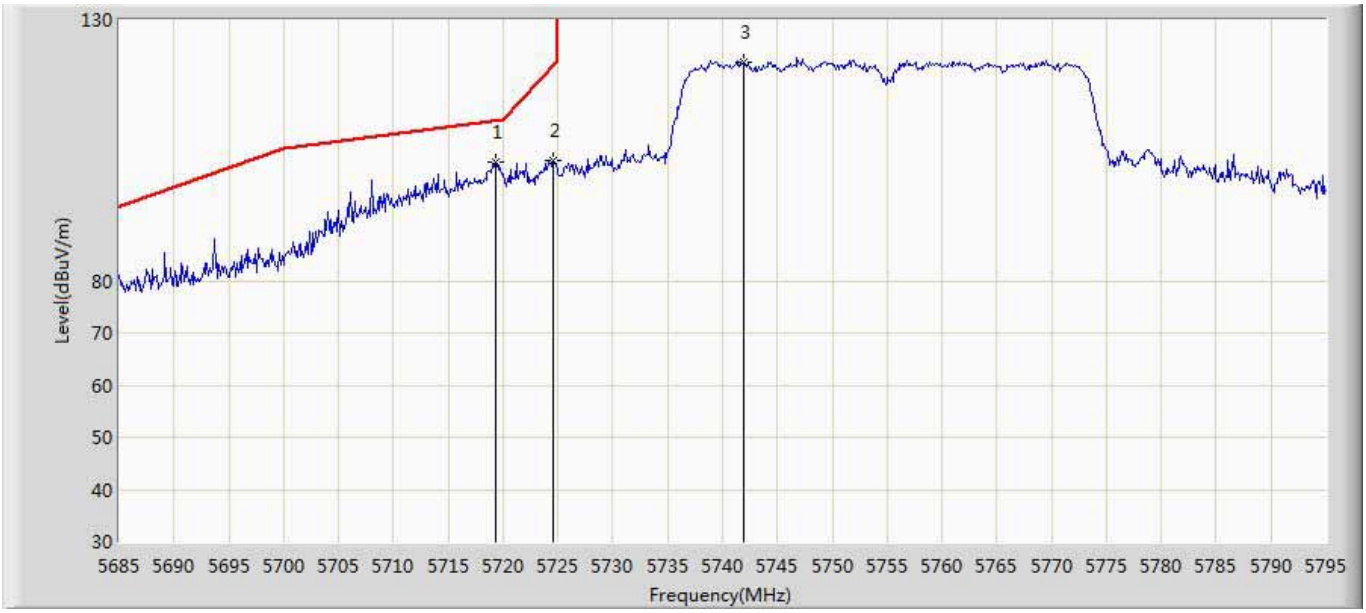


No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Over Limit (dB)	Limit (dBµV/m)	Factor (dB)	Type
1		5150.000	53.031	11.016	-0.969	54.000	42.015	AV
2	*	5236.320	103.562	61.467	N/A	N/A	42.095	AV
3		5350.000	49.763	7.247	-4.237	54.000	42.516	AV

Site: AC5	Time: 2016/05/13 - 12:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5755Mhz by 802.11ac40 with CDD	

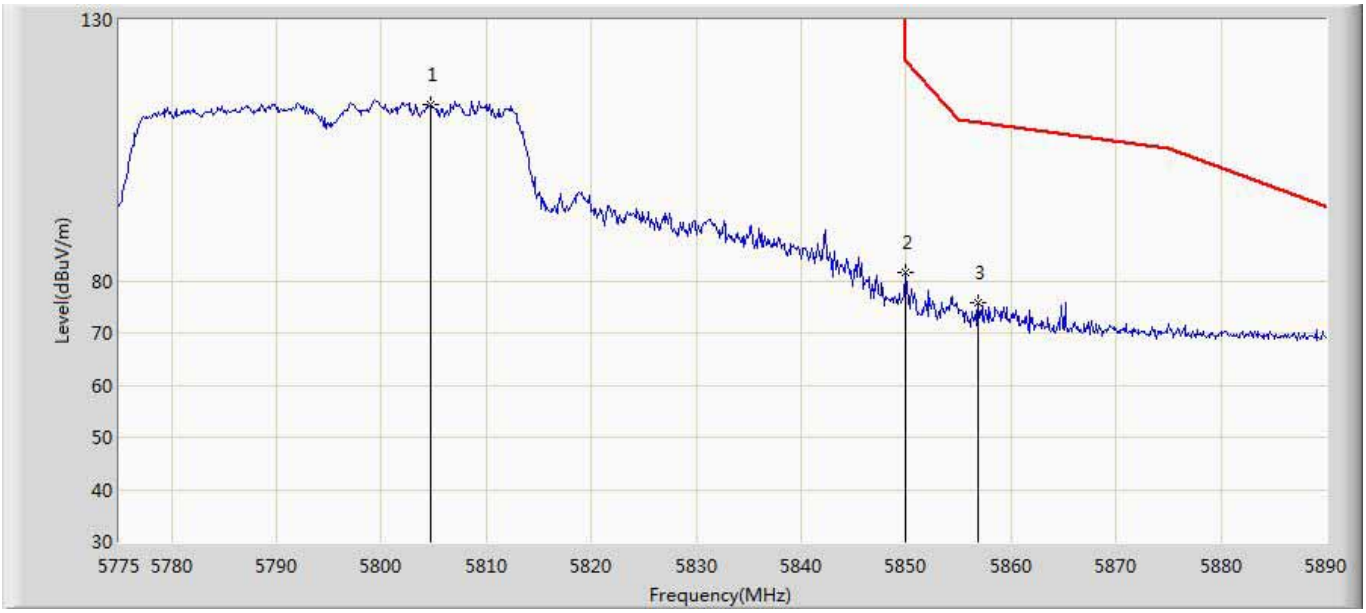
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5719.540	90.606	47.321	-20.166	110.771	43.284	PK
2		5724.270	92.003	48.735	-28.633	120.636	43.269	PK
3	*	5740.110	111.882	68.586	N/A	N/A	43.296	PK

Site: AC5	Time: 2016/05/13 - 12:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5755Mhz by 802.11ac40 with CDD	



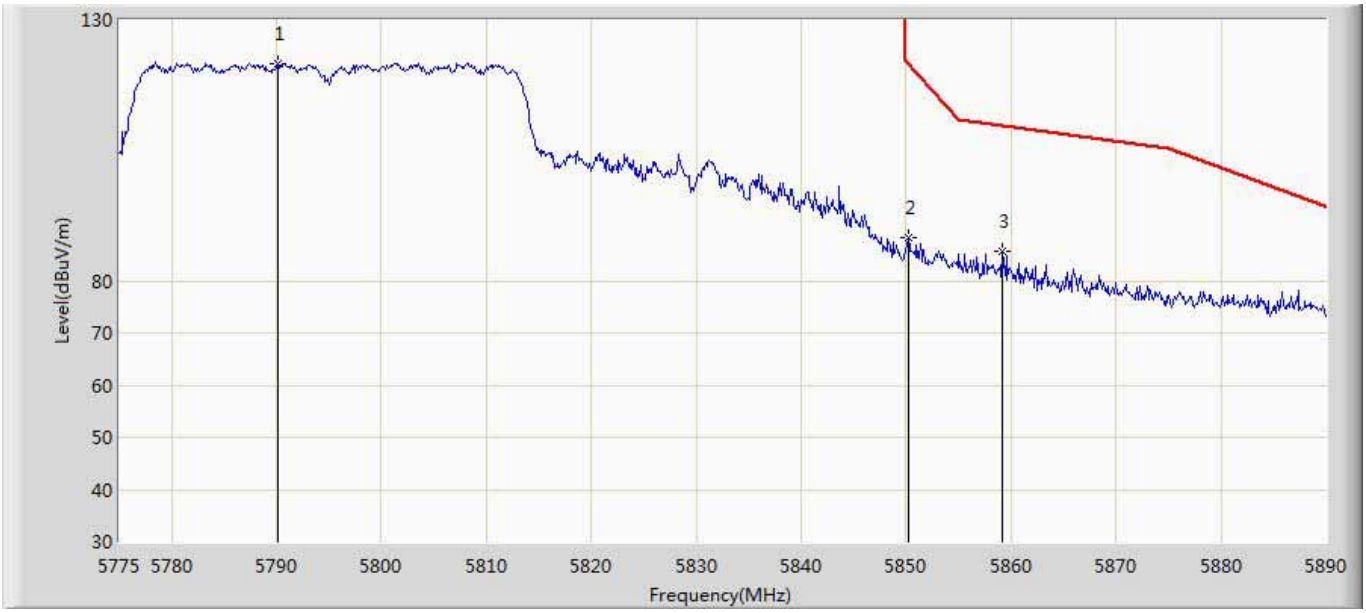
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5719.320	102.619	59.334	-8.091	110.710	43.285	PK
2		5724.600	103.183	59.916	-18.205	121.388	43.267	PK
3	*	5741.980	121.904	78.604	N/A	N/A	43.301	PK

Site: AC5	Time: 2016/05/13 - 12:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5755Mhz by 802.11ac40 with CDD	



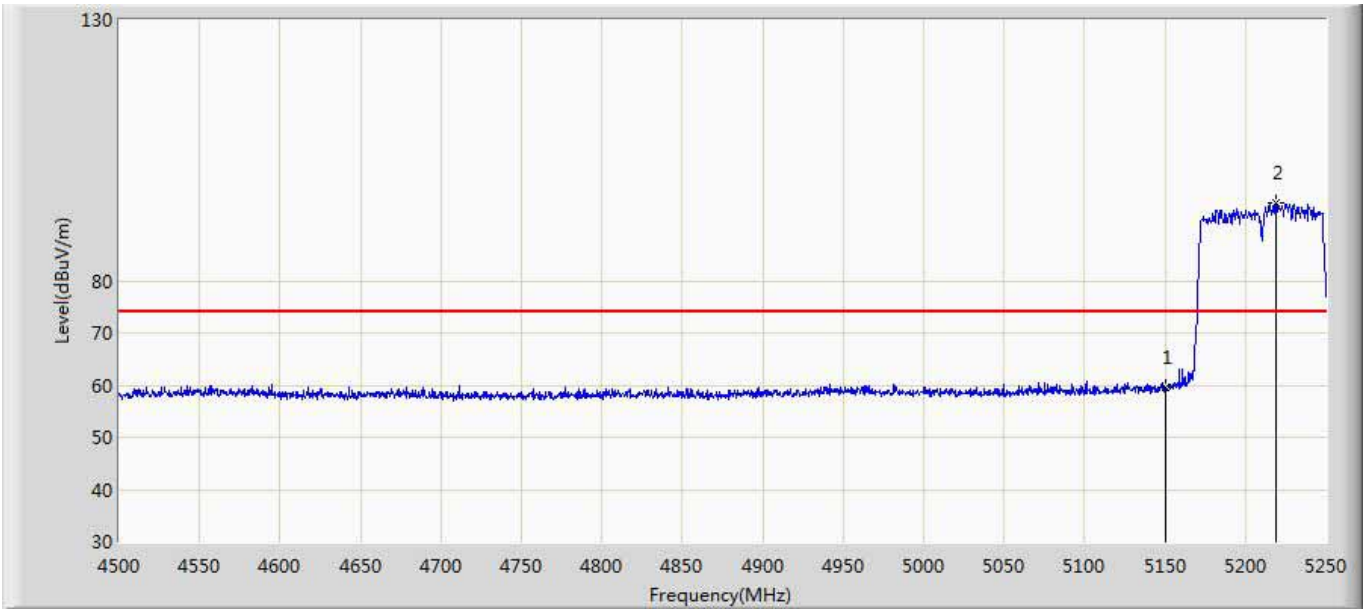
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5804.670	113.811	70.472	N/A	N/A	43.339	PK
2		5849.980	81.461	37.992	N/A	N/A	43.469	PK
3		5856.880	75.846	32.324	-34.527	110.373	43.522	PK

Site: AC5	Time: 2016/05/13 - 12:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 5: Transmit at 5795Mhz by 802.11ac40 with CDD	



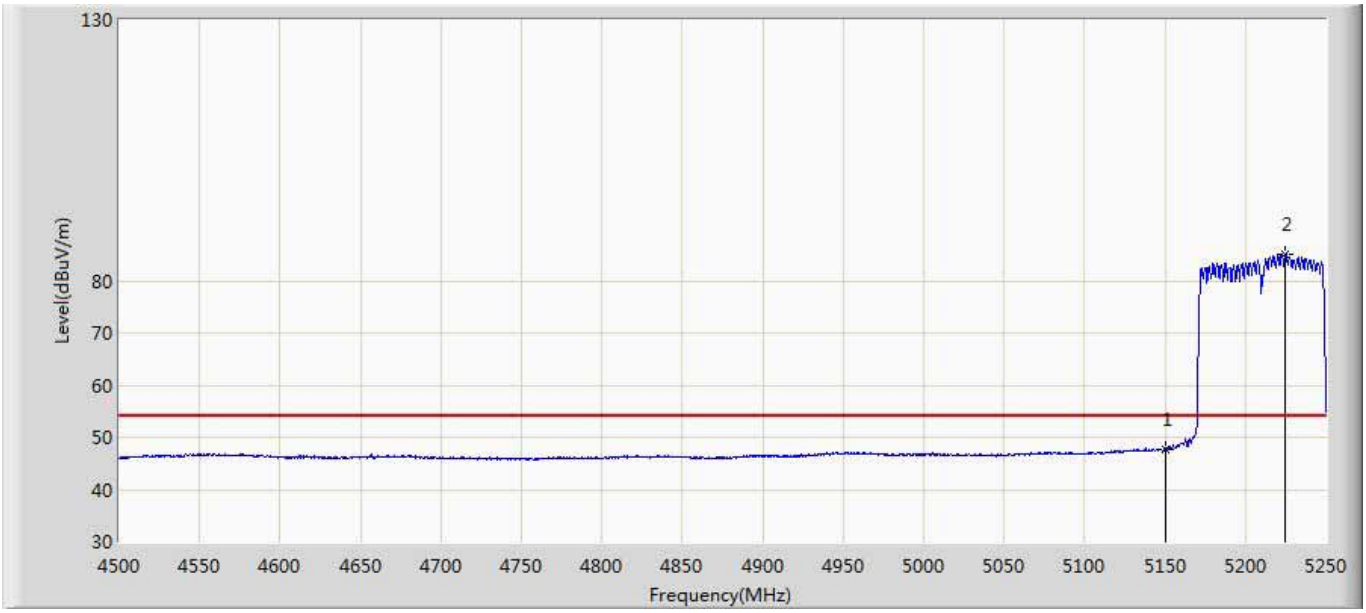
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5790.065	121.484	78.185	N/A	N/A	43.299	PK
2		5850.210	88.267	44.796	-33.554	121.821	43.470	PK
3		5859.180	85.555	42.015	-24.173	109.728	43.540	PK

Site: AC5	Time: 2016/05/05 - 21:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 6: Transmit at 5210Mhz by 802.11ac80 with CDD	



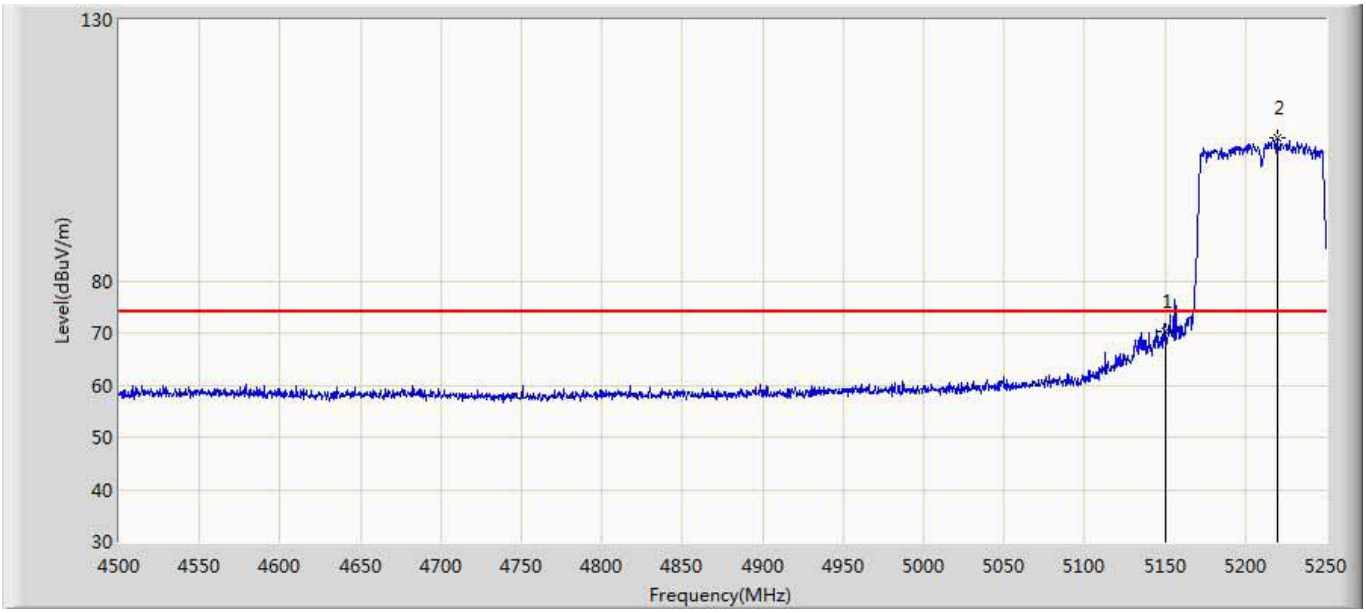
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	59.434	17.419	-14.566	74.000	42.015	PK
2	*	5218.875	95.059	53.063	N/A	N/A	41.996	PK

Site: AC5	Time: 2016/05/05 - 21:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 6: Transmit at 5210Mhz by 802.11ac80 with CDD	



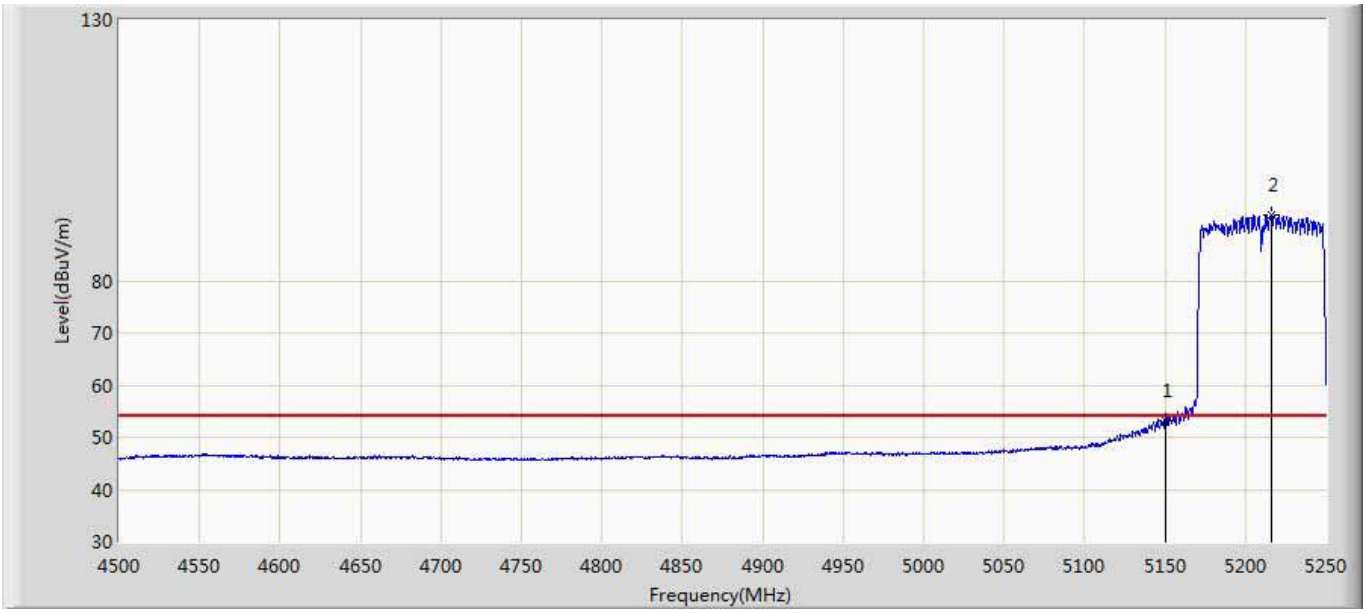
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	47.762	5.747	-6.238	54.000	42.015	AV
2	*	5224.875	85.129	43.105	N/A	N/A	42.024	AV

Site: AC5	Time: 2016/05/05 - 21:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 6: Transmit at 5210Mhz by 802.11ac80 with CDD	



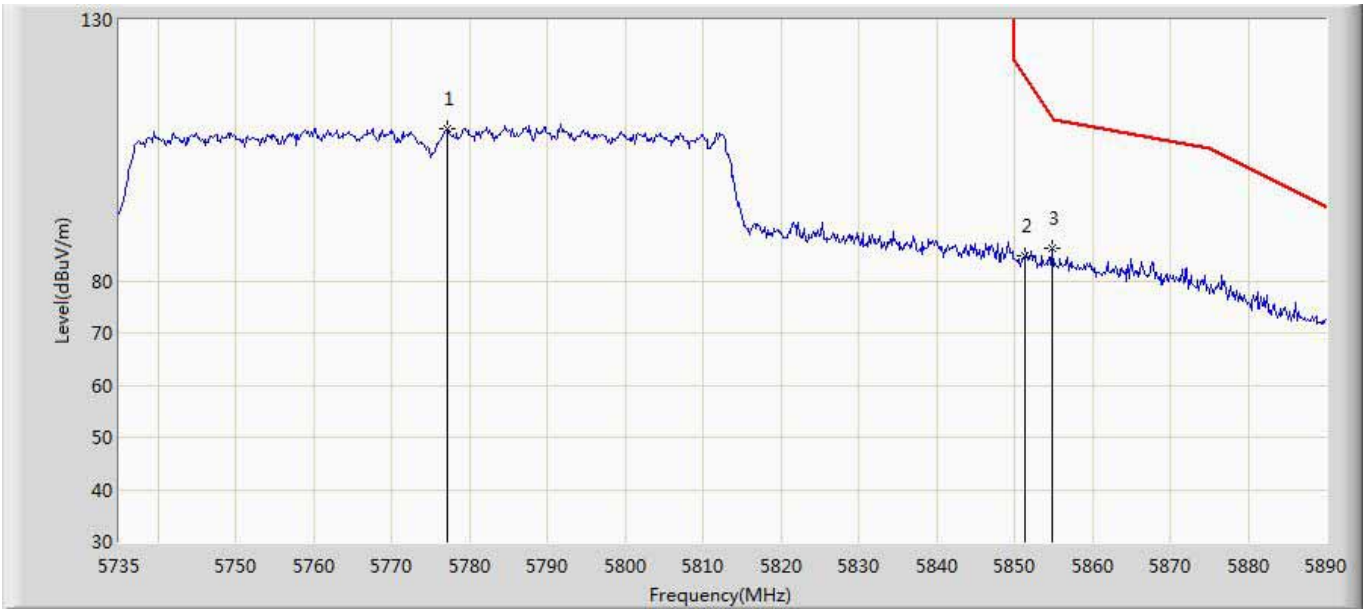
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	70.340	28.325	-3.660	74.000	42.015	PK
2	*	5219.625	107.249	65.249	N/A	N/A	42.000	PK

Site: AC5	Time: 2016/05/05 - 21:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 6: Transmit at 5210Mhz by 802.11ac80 with CDD	



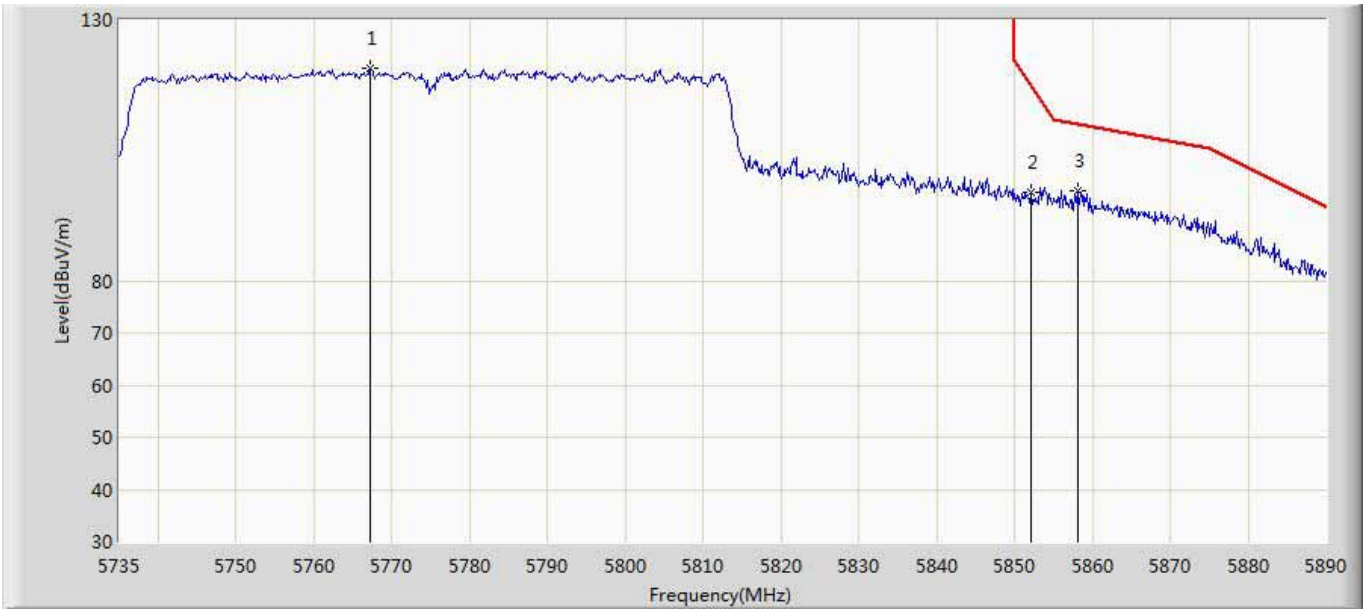
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	53.109	11.094	-0.891	54.000	42.015	AV
2	*	5215.875	92.636	50.653	N/A	N/A	41.983	AV

Site: AC5	Time: 2016/05/13 - 12:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 6: Transmit at 5775Mhz by 802.11ac80 with CDD	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5777.160	109.137	65.797	N/A	N/A	43.340	PK
2		5851.250	84.843	41.364	-34.606	119.449	43.479	PK
3		5854.815	86.198	42.692	-25.124	111.322	43.506	PK

Site: AC5	Time: 2016/05/13 - 12:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: 120V/60Hz
Note: Mode 6: Transmit at 5775Mhz by 802.11ac80 with CDD	



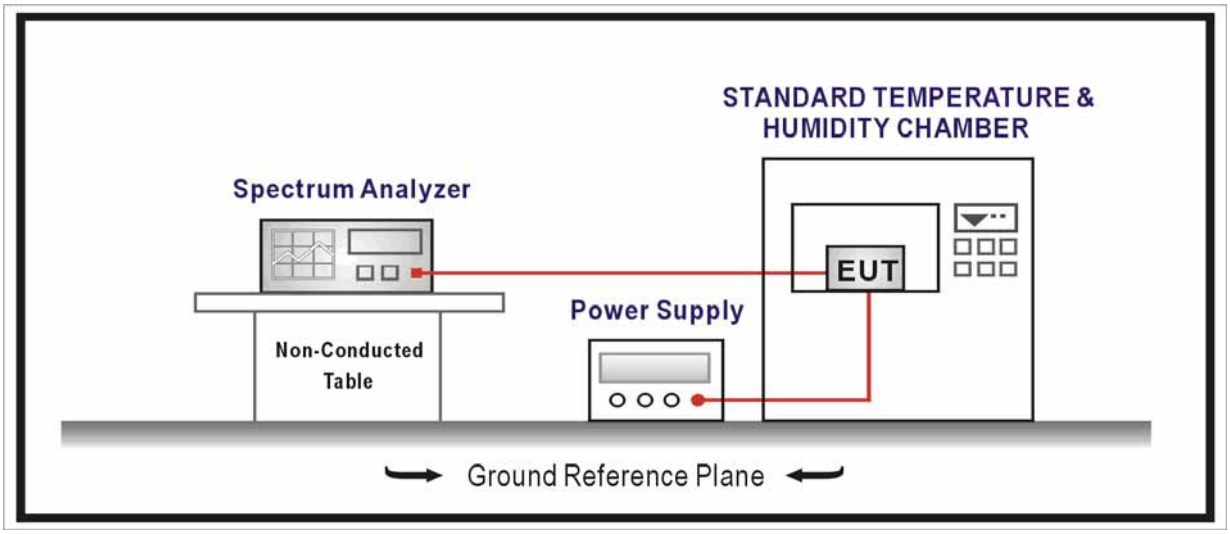
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5767.240	120.853	77.569	N/A	N/A	43.284	PK
2		5852.180	97.073	53.587	-20.255	117.328	43.486	PK
3		5858.070	97.108	53.577	-12.931	110.039	43.531	PK

10. Frequency Stability

10.1. Test Equipment

Frequency Stability / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.08	2017.01.07
AC Power Supply	IDRC	CF-500TP	979422	2015.09.17	2016.09.16
DC Power Supply	IDRC	CD-035-020PR	977272	2015.09.17	2016.09.16
Programmable Temperature & Humidity Chamber	Gaoyu	TH-1P-B	WIT-05121302	2016.01.08	2017.01.07
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

10.2. Test Setup



10.3. Limit

Frequency Stability Limit	
UNII Devices	
☒	In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
IEEE Std. 802.11n-2009	
☒	The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25ppm maximum for the 2.4 GHz band.

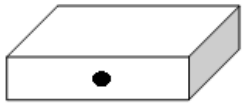
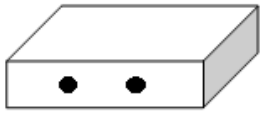
10.4. Test Procedure

Frequency Stability Test Method				
	References Rule		Chapter	Description
☒	ANSI C63.10		6.8	Frequency stability tests
	☒	ANSI C63.10	6.8.1	Frequency stability with respect to ambient temperature
	☒	ANSI C63.10	6.8.2	Frequency stability when varying supply voltage

10.5. Uncertainty

The measurement uncertainty is defined as ± 100 Hz

10.6. EUT test Axis definition

Item	Frequency Stability	
Device Category	☐	Outdoor AP
	☒	Indoor AP
	☐	Fixed point-to-point AP
	☐	Mobile and Portable Client
Test mode	Mode 1 ~ Mode 6	
	☒	Conducted
	☐	Chain 0
		
	☒	Chain 0 / Chain 1
		
	☐	Chain 0 / Chain 1 / Chain 2
		

10.7. Test Result

Product	:	AC1200 Wireless Dual Band Gigabit Router
Test Item	:	Frequency Stability
Test Site	:	TR-8
Test Mode	:	Carrier Transmit

Frequency Stability under Temperature

Temperature Interval (℃)	Test Frequency (MHz)	Deviation (Hz)
0	5200.000	47
10	5200.000	-86
20	5200.000	-109
30	5200.000	58
40	5200.000	13

Frequency Stability under Voltage

AC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)
102	5200.000	-58
120	5200.000	-89
138	5200.000	37

The End