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TESTING
CNAS L5313



DEKRA

Test Report

FCC Part15 Subpart C

Product Name : AC1200 Wireless Dual Band Gigabit
Router

Model No. : Archer C1200

FCC ID : TE7C1200V3

Applicant : TP-Link Technologies Co., Ltd..

Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central
Science and Technology Park, Shennan Rd, Nanshan,
Shenzhen, China

Date of Receipt : Sep. 21st, 2016

Test Date : Sep. 21st, 2016~ Mar. 15th, 2017

Issued Date : Jul. 04th, 2017

Report No. : 1692075R-RF- US-P06V02

Report Version : V1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report Certification

Issued Date : Jul. 04th, 2017

Report No. : 1692075R-RF-US-P06V02



Product Name : AC1200 Wireless Dual Band Gigabit Router
Applicant : TP-Link Technologies Co., Ltd.
Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer : TP-Link Technologies Co., Ltd.
Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Model No. : Archer C1200
FCC ID : TE7C1200V3
EUT Voltage : AC 100-240V, 50/60Hz
Test Voltage : AC 120V/60Hz
Brand Name : TP-Link
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C
ANSI C63.4:2014; ANSI C63.10:2013;
KDB 558074 D01v03r05
KDB 662911 D01 Multiple Transmitter Output v02r01
Test Result : Complied
Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.
Corporation - Suzhou EMC Laboratory
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
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FCC Registration Number: 800392; IC Lab Code: 4075B

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1692075R-RF-US-P06V02	V1.0	Initial Issued Report	Apr. 26th, 2017
1692075R-RF-US-P06V02	V1.1	For band-edge, update the data.	Jul. 04th, 2017

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	AC 120V/60Hz
Frequency Range	For 2.4GHz Band 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz
Channel Number	For 2.4GHz Band 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7
Type of Modulation	802.11b: DSSS 802.11g: OFDM
Data Rate	802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11b: 1/2/5.5/11 Mbps 802.11n: up to 300 Mbps
Channel Control	Auto

1.2. Channel List:

802.11b/g/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	N/A	N/A
802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	N/A	N/A

1.3. Test Channel:

802.11b/g/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	06	2437MHz	11	2462 MHz	N/A	N/A
802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	06	2437 MHz	09	2452 MHz	N/A	N/A

1.4. Antenna information

Antenna manufacturer	N/A					
Antenna Delivery	☐	1*TX+1*RX	☒	2*TX+2*RX	☐	3*TX+3*RX
Antenna technology	☐	SISO				
	☒	MIMO	☐	Basic		
			☐	Sectorized antenna systems		
			☐	Cross-polarized antennas		
			☐	Unequal antenna gains, with equal transmit powers		
			☐	Spatial Multiplexing		
			☒	CDD		
			☐	Beam-forming		
Antenna Type	☒	External	☒	Dipole		
	☐	Internal	☐	PIFA		
			☐	PCB		
			☐	Ceramic Chip Antenna		
			☐	Metal plate type F antenna		
			☐	Cross-polarize Antenna		
Antenna Gain #0	1.5dBi					
Antenna Gain #1	1.5dBi					

1.5. Mode of Operation

Test Modes List
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g
Mode 3: Transmit by 802.11n(20MHz)
Mode 4: Transmit by 802.11n(40MHz)

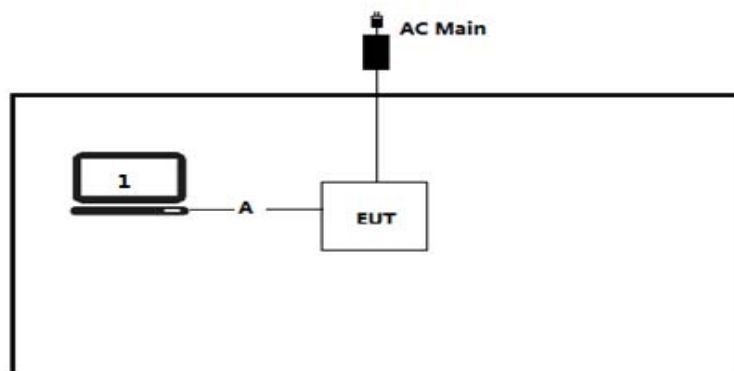
1.6. Tested System Details

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

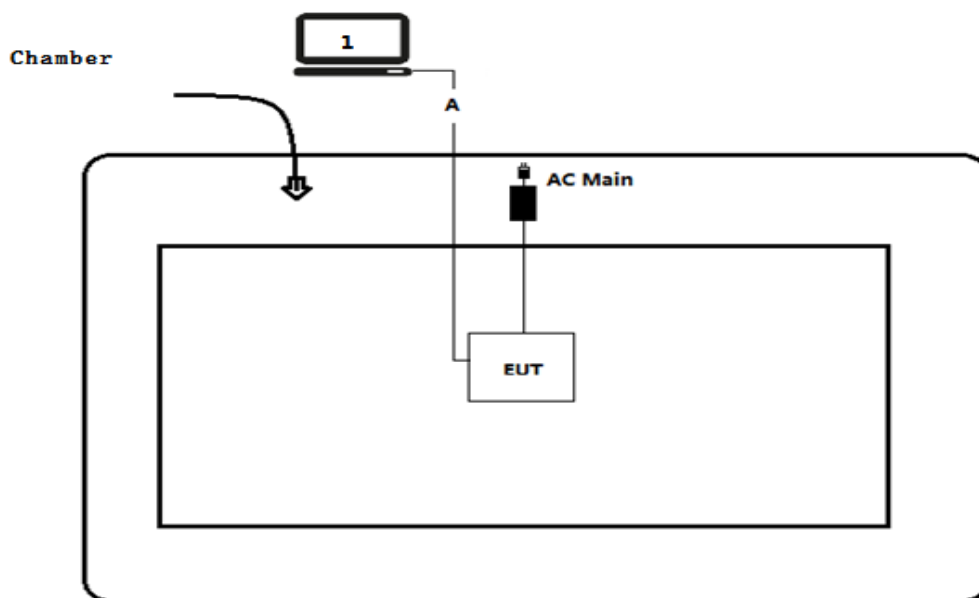
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	Think pad x220	SUA0600195	Non-shielded
A	LAN cable	N/A	N/A	N/A	Non-shielded, 1.5m
B	LAN cable	N/A	N/A	N/A	Non-shielded, 10m

1.7. Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



A	LAN Cable	Non-shielded, 1.5m
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2. Technical Test

2.1. Summary of Test Result

Performed Test Item	Normative References	Worst case mode	Limit	Result
AC Power Line Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.207	Mode 1	FCC 15.207	PASS
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.209	Mode 1	FCC 15.209	PASS
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(d)	Mode 1	$\geq 30\text{dBc}$	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2015 15.247(d)	Mode 1	FCC 15.209	PASS
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(2)	Mode 1	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(b)(3)	Mode 1	$\leq 30\text{dBm}$	PASS
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(e)	Mode 1	$\leq 8\text{dBm/3kHz}$	PASS
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.203	N/A	FCC 15.203	PASS

2.2. Power setting parameter

Test Software	MTool			
Modulation Mode	Test Frequency	Ant 0	Ant 1	Ant 0+1
802.11b	2412	74	–	–
	2417	82	–	–
	2437	84	–	–
	2457	75	–	–
	2462	66	–	–
802.11g	2412	–	–	55
	2417	–	–	61
	2437	–	–	81
	2457	–	–	58
	2462	–	–	47
802.11n(20MHz)	2412	–	–	48
	2417	–	–	60
	2437	–	–	78
	2457	–	–	56
	2462	–	–	44
802.11n(40MHz)	2422	–	–	43
	2427	–	–	40
	2437	–	–	50
	2447	–	–	42
	2452	–	–	40

2.3. Power vs Data Rate

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)						
		802.11b	802.11g		20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
0	1	1	6	---	6.5	7.2	13.5	15.0
1	1	2	9	---	13.0	14.4	27.0	30.0
2	1	5.5	12	---	19.5	21.7	40.5	45.0
3	1	11	18	---	26.0	28.9	54.0	60.0
4	1	---	24	---	39.0	43.3	81.0	90.0
5	1	---	36	---	52.0	57.8	108.0	120.0
6	1	---	48	---	58.5	65.0	121.5	135.0
7	1	---	54	---	65.0	72.2	135.0	150.0
8	2	---	---	---	13.0	14.4	27.0	30.0
9	2	---	---	---	26.0	28.9	54.0	60.0
10	2	---	---	---	39.0	43.3	81.0	90.0
11	2	---	---	---	52.0	57.8	108.0	120.0
12	2	---	---	---	78.0	86.7	162.0	180.0
13	2	---	---	---	104.0	115.6	216.0	240.0
14	2	---	---	---	117.0	130.0	243.0	270.0
15	2	---	---	---	130.0	144.0	270.0	300.0

Note 1 : The blue form is the maximum power data rate

Note 2 : The EUT has two spatial Streams

2.4. 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

2.5. Measurement Uncertainty

Test Items	Uncertainty
AC Power Line Conducted Emission	$\pm 2.02\text{dB}$
Radiated Emission	Below 1GHz $\pm 3.8\text{ dB}$
	Above 1GHz $\pm 3.9\text{ dB}$
RF Antenna Port Conducted Emission	$\pm 1.27\text{dB}$
Radiated Emission Band Edge	$\pm 3.9\text{dB}$
Occupied Bandwidth	$\pm 1\text{kHz}$
Power Spectral Density	$\pm 1.27\text{dB}$

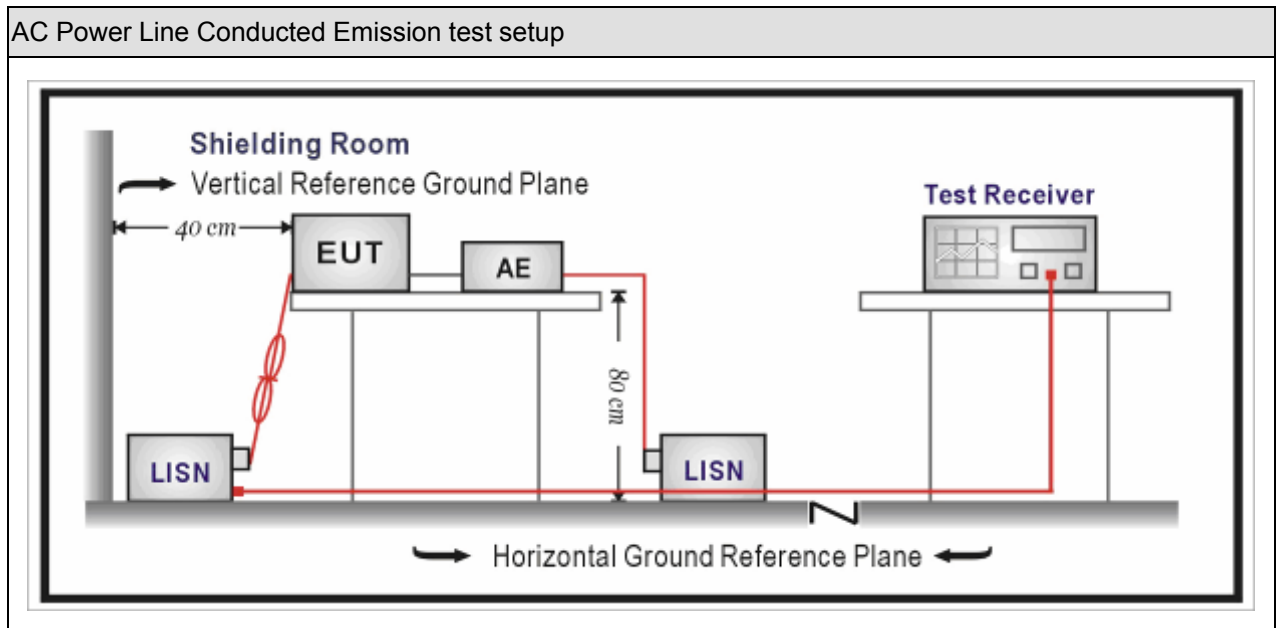
3. AC Power Line Conducted Emission

3.1. Test Equipment

AC Power Line Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100906	2017.03.05	2018.03.04
Two-Line V-Network	R&S	ENV 216	101189	2016.07.16	2017.07.15
Two-Line V-Network	R&S	ENV 216	101044	2016.09.16	2017.09.15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
50ohm Termination	SHX	TF2	07081402	2016.09.16	2017.09.15
Temperature/Humidity Meter	Zhichen	ZC1-2	TR1-TH	2017.01.04	2018.01.03

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

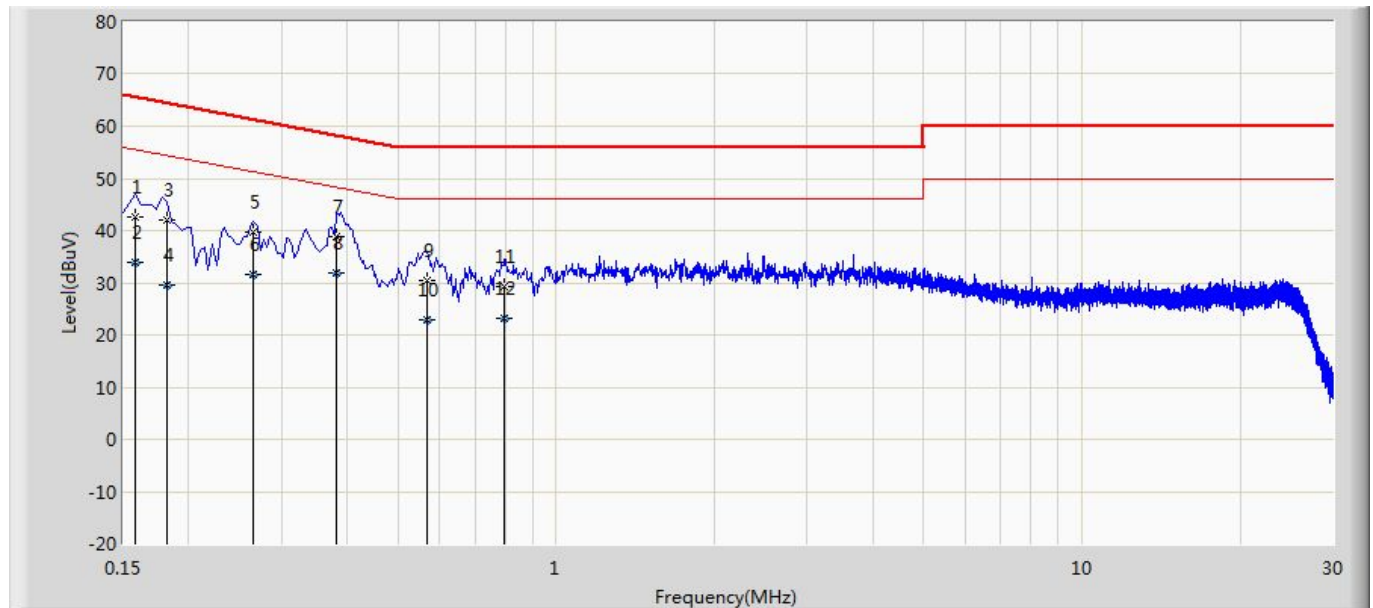
Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dB μ V)	Average (dB μ V)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50
Note 1: The lower limit shall apply at the transition frequencies.		
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 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. Test Result

Site: TR1	Time: 2016/09/23
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-L1	Polarity: Line
EUT: AC 1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1	



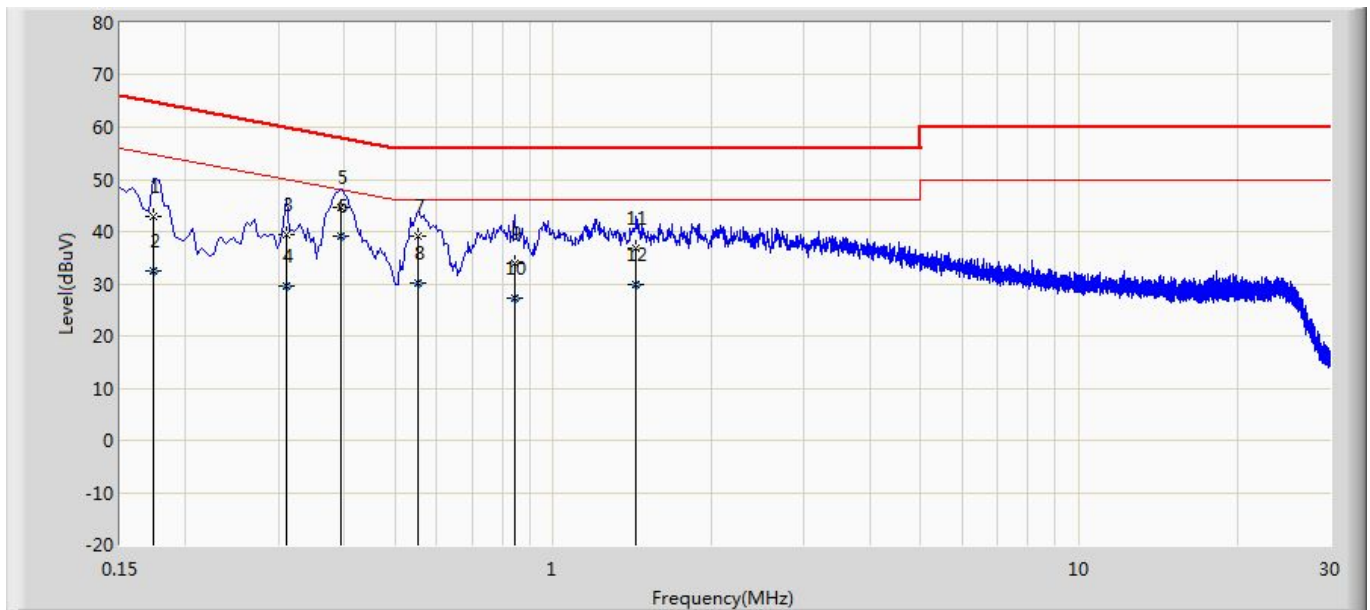
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.158	42.650	32.919	-22.918	65.568	9.671	0.060	0.000	QP
2		0.158	34.036	24.305	-21.532	55.568	9.671	0.060	0.000	AV
3		0.182	41.885	32.170	-22.509	64.394	9.655	0.060	0.000	QP
4		0.182	29.679	19.964	-24.715	54.394	9.655	0.060	0.000	AV
5		0.266	39.854	30.150	-21.388	61.242	9.644	0.060	0.000	QP
6		0.266	31.525	21.821	-19.717	51.242	9.644	0.060	0.000	AV
7		0.382	38.726	29.026	-19.510	58.236	9.640	0.060	0.000	QP
8	*	0.382	31.987	22.287	-16.249	48.236	9.640	0.060	0.000	AV
9		0.566	30.555	20.855	-25.445	56.000	9.630	0.070	0.000	QP
10		0.566	22.972	13.272	-23.028	46.000	9.630	0.070	0.000	AV
11		0.798	29.174	19.484	-26.826	56.000	9.620	0.070	0.000	QP
12		0.798	23.131	13.441	-22.869	46.000	9.620	0.070	0.000	AV

Note:

1. " * ", means this data is the worst emission level.

2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: TR1	Time: 2016/09/23
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-N	Polarity: Neutral
EUT: AC 1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.174	42.778	33.053	-21.989	64.767	9.665	0.060	0.000	QP
2		0.174	32.461	22.736	-22.306	54.767	9.665	0.060	0.000	AV
3		0.310	39.390	29.680	-20.580	59.970	9.650	0.060	0.000	QP
4		0.310	29.672	19.962	-20.298	49.970	9.650	0.060	0.000	AV
5		0.394	44.612	34.910	-13.367	57.979	9.640	0.062	0.000	QP
6	*	0.394	39.089	29.387	-8.890	47.979	9.640	0.062	0.000	AV
7		0.554	39.050	29.350	-16.950	56.000	9.630	0.070	0.000	QP
8		0.554	30.251	20.551	-15.749	46.000	9.630	0.070	0.000	AV
9		0.846	33.884	24.174	-22.116	56.000	9.640	0.070	0.000	QP
10		0.846	27.147	17.437	-18.853	46.000	9.640	0.070	0.000	AV
11		1.438	36.681	26.961	-19.319	56.000	9.630	0.090	0.000	QP
12		1.438	29.762	20.042	-16.238	46.000	9.630	0.090	0.000	AV

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

4. Emissions in restricted frequency bands

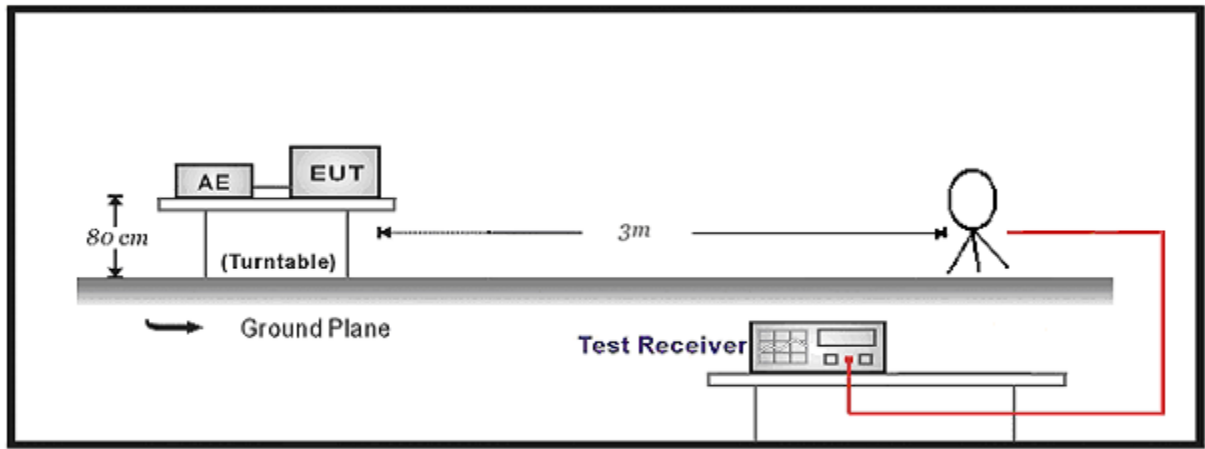
4.1. Test Equipment

Radiated Emission(Below 1GHz) / 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	2016.11.16	2017.11.15
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2016.10.16	2017.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2017.03.02	2018.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2017.01.04	2018.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

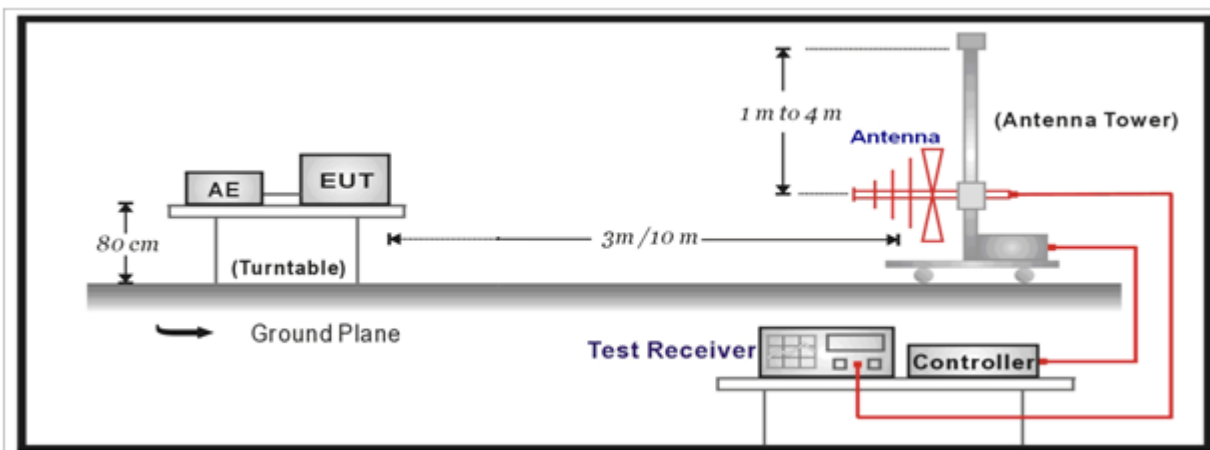
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.03	2018.01.02
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.06	2017.05.05
Preamplifier	DEKRA Testing and Certification (Suzhou) Co., Ltd.	AP-040G	CHM-0906001	2016.05.06	2017.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2017.01.22	2018.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.11.25	2017.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2017.03.02	2018.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2017.03.02	2018.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.10	2017.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.04	2018.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

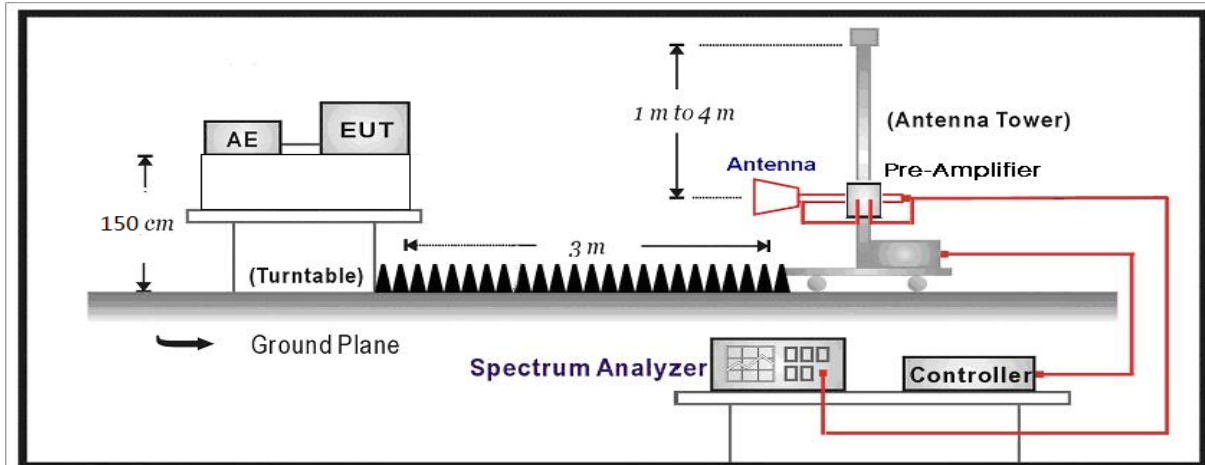
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

For FCC:

Restricted Bands of operation			
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			

Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3 _(Note 2)
216 - 960	200	46	3 _(Note 2)
Above 960	500	54	3 _(Note 2)

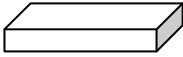
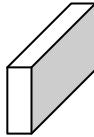
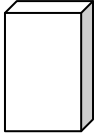
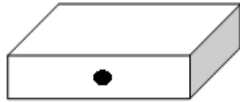
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed 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).

4.4. Test Procedure

Test Method						
	References Rule		Chapter	Description		
☐	ANSI C63.10		11.11	Emissions in non-restricted frequency bands		
	☐	ANSI C63.10	11.11.2	Reference level measurement		
	☐	ANSI C63.10	11.11.3	Emission level measurement		
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands		
	☒	ANSI C63.10	11.12.1	Radiated emission measurements		
	☒	ANSI C63.10	11.12.2.7	Radiated spurious emission test		
		☒	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	
		☐	ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure	
		☒	ANSI C63.10	11.12.2.4	Peak power measurement procedure	
		☒	ANSI C63.10	11.12.2.5	Average power measurement procedures	
			☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
			☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
			☒	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

4.5. EUT test Axis definition

Item	Emissions in restricted frequency bands			
Device Category	☒	Fixed position use		
	☐	Mobile position use		
Test mode	Mode 1~4			
Test method	☒	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☒
	☐	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

4.6. Test Result

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	AC-5
Test Date	:	2017.01.31			

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Detector
Ant 0	1	H	4824.000	49.965	-7.731	42.234	54(note3)	-11.766	PK
		H	7236.000	47.387	-4.473	42.914	54(note3)	-11.086	PK
		H	9648.000	45.108	-0.989	44.118	54(note3)	-9.882	PK
		V	4824.000	52.823	-7.731	45.092	54(note3)	-8.908	PK
		V	7236.000	48.554	-4.473	44.081	54(note3)	-9.919	PK
		V	9648.000	44.167	-0.989	43.177	54(note3)	-10.823	PK
	6	H	4874.000	48.724	-7.543	41.181	54(note3)	-12.819	PK
		H	7311.000	45.708	-4.348	41.360	54(note3)	-12.640	PK
		H	9748.000	44.063	-1.548	42.514	54(note3)	-11.486	PK
		V	4874.000	52.128	-7.543	44.585	54(note3)	-9.415	PK
		V	7311.000	50.126	-4.348	45.778	54(note3)	-8.222	PK
		V	9748.000	44.659	-1.548	43.110	54(note3)	-10.890	PK
	11	H	4924.000	49.274	-7.694	41.581	54(note3)	-12.419	PK
		H	7386.000	45.997	-3.897	42.100	54(note3)	-11.900	PK
		H	9848.000	43.493	-1.196	42.297	54(note3)	-11.703	PK
		V	4924.000	52.084	-7.694	44.391	54(note3)	-9.609	PK
		V	7386.000	47.236	-3.897	43.339	54(note3)	-10.661	PK
		V	9848.000	43.837	-1.196	42.641	54(note3)	-11.359	PK

Note: 1. Measure Level = Reading Level + Factor.

Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

Note: 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.

Note: 4. The RBW setting, see Clause 6.6.

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Mode	:	Mode 2	Test Site	:	AC-5
Test Date	:	2017.01.31			

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Detector
Ant 0+1	1	H	4824.000	48.290	-7.731	40.559	54(note3)	-13.441	PK
		H	7236.000	46.643	-4.473	42.170	54(note3)	-11.830	PK
		H	9648.000	45.242	-0.989	44.252	54(note3)	-9.748	PK
		V	4824.000	49.200	-7.731	41.469	54(note3)	-12.531	PK
		V	7236.000	47.572	-4.473	43.099	54(note3)	-10.901	PK
		V	9648.000	44.342	-0.989	43.352	54(note3)	-10.648	PK
	6	H	4874.000	49.499	-7.543	41.956	54(note3)	-12.044	PK
		H	7311.000	46.666	-4.348	42.318	54(note3)	-11.682	PK
		H	9748.000	44.776	-1.548	43.227	54(note3)	-10.773	PK
		V	4874.000	50.569	-7.543	43.026	54(note3)	-10.974	PK
		V	7311.000	48.174	-4.348	43.826	54(note3)	-10.174	PK
		V	9748.000	44.984	-1.548	43.435	54(note3)	-10.565	PK
	11	H	4924.000	49.029	-7.543	41.336	54(note3)	-12.664	PK
		H	7386.000	46.833	-4.348	42.936	54(note3)	-11.064	PK
		H	9848.000	43.832	-1.548	42.636	54(note3)	-11.364	PK
		V	4924.000	49.493	-7.694	41.800	54(note3)	-12.200	PK
		V	7386.000	47.077	-3.897	43.180	54(note3)	-10.820	PK
		V	9848.000	45.840	-1.196	44.644	54(note3)	-9.356	PK

Note: 1. Measure Level = Reading Level + Factor.

Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

Note: 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.

Note: 4. The RBW setting, see Clause 6.6.

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Mode	:	Mode 3	Test Site	:	AC-5
Test Date	:	2017.01.31			

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Detector
Ant 0+1	1	H	4824.000	48.995	-7.731	41.264	54(note3)	-12.736	PK
		H	7236.000	47.834	-4.473	43.361	54(note3)	-10.639	PK
		H	9648.000	44.640	-0.989	43.650	54(note3)	-10.35	PK
		V	4824.000	49.587	-7.731	41.856	54(note3)	-12.144	PK
		V	7236.000	47.326	-4.473	42.853	54(note3)	-11.147	PK
		V	9648.000	45.043	-0.989	44.053	54(note3)	-9.947	PK
	6	H	4874.000	49.453	-7.543	41.910	54(note3)	-12.090	PK
		H	7311.000	46.426	-4.348	42.078	54(note3)	-11.922	PK
		H	9748.000	45.013	-1.548	43.464	54(note3)	-10.536	PK
		V	4874.000	50.495	-7.543	42.952	54(note3)	-11.048	PK
		V	7311.000	47.432	-4.348	43.084	54(note3)	-10.916	PK
		V	9748.000	45.340	-1.548	43.791	54(note3)	-10.209	PK
	11	H	4924.000	49.000	-7.694	41.307	54(note3)	-12.693	PK
		H	7386.000	46.647	-3.897	42.750	54(note3)	-11.250	PK
		H	9848.000	44.282	-1.196	43.086	54(note3)	-10.914	PK
		V	4924.000	50.126	-7.694	42.433	54(note3)	-11.567	PK
		V	7386.000	46.927	-3.897	43.030	54(note3)	-10.970	PK
		V	9848.000	45.078	-1.196	43.882	54(note3)	-10.118	PK

Note: 1. Measure Level = Reading Level + Factor.

Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

Note: 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.

Note: 4. The RBW setting, see Clause 6.6.

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Mode	:	Mode 4	Test Site	:	AC-5
Test Date	:	2017.01.31			

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Detector
Ant 0+1	3	H	4844.000	48.894	-7.726	41.168	54(note3)	-12.832	PK
		H	7266.000	46.753	-4.218	42.535	54(note3)	-11.465	PK
		H	9688.000	44.816	-0.645	44.171	54(note3)	-9.829	PK
		V	4844.000	49.454	-7.726	41.728	54(note3)	-12.272	PK
		V	7266.000	48.538	-4.218	44.320	54(note3)	-9.680	PK
		V	9688.000	43.973	-0.645	43.328	54(note3)	-10.672	PK
	6	H	4874.000	48.929	-7.543	41.386	54(note3)	-12.614	PK
		H	7311.000	46.826	-4.348	42.478	54(note3)	-11.522	PK
		H	9748.000	45.745	-1.548	44.196	54(note3)	-9.804	PK
		V	4874.000	49.045	-7.543	41.502	54(note3)	-12.498	PK
		V	7311.000	46.431	-4.348	42.083	54(note3)	-11.917	PK
		V	9748.000	44.782	-1.548	43.233	54(note3)	-10.767	PK
	9	H	4904.000	49.073	-7.547	41.525	54(note3)	-12.475	PK
		H	7356.000	47.070	-4.309	42.761	54(note3)	-11.239	PK
		H	9808.000	44.177	-0.994	43.184	54(note3)	-10.816	PK
		V	4904.000	49.304	-7.547	41.756	54(note3)	-12.244	PK
		V	7356.000	47.548	-4.309	43.239	54(note3)	-10.761	PK
		V	9808.000	44.557	-0.994	43.564	54(note3)	-10.436	PK

Note: 1. Measure Level = Reading Level + Factor.

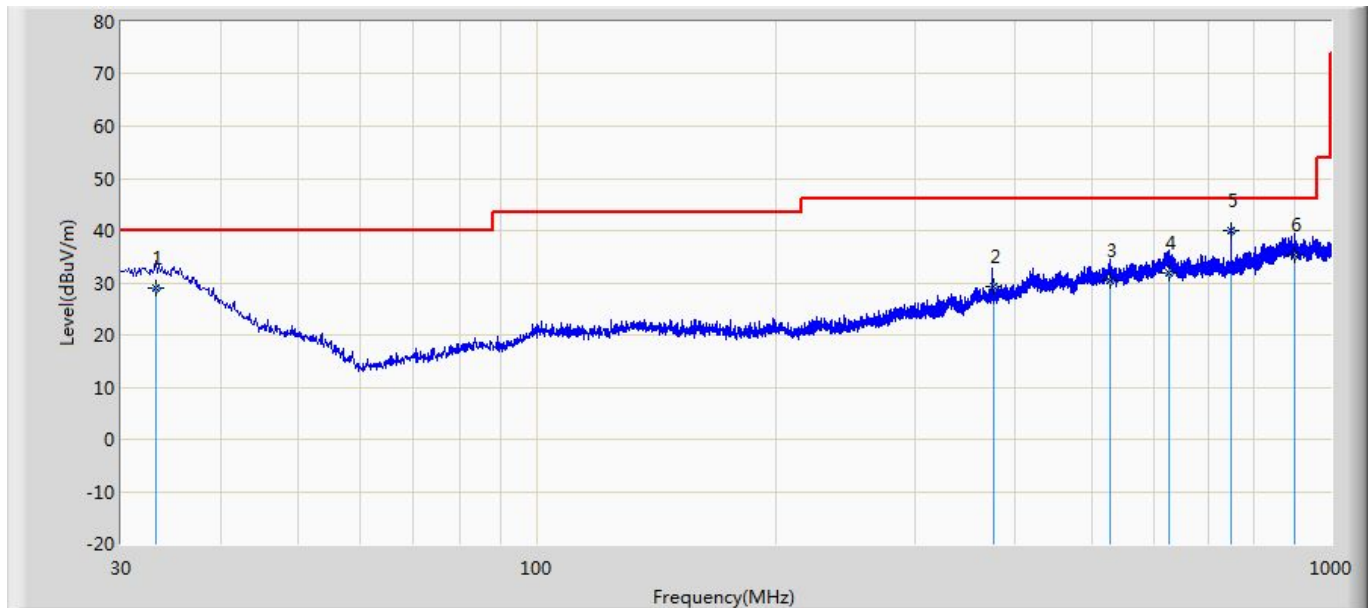
Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

Note: 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.

Note: 4. The RBW setting, see Clause 6.6.

The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2016/09/23
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CB7_CBL6112_0726	Polarity: Horizontal
EUT: AC 1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1	

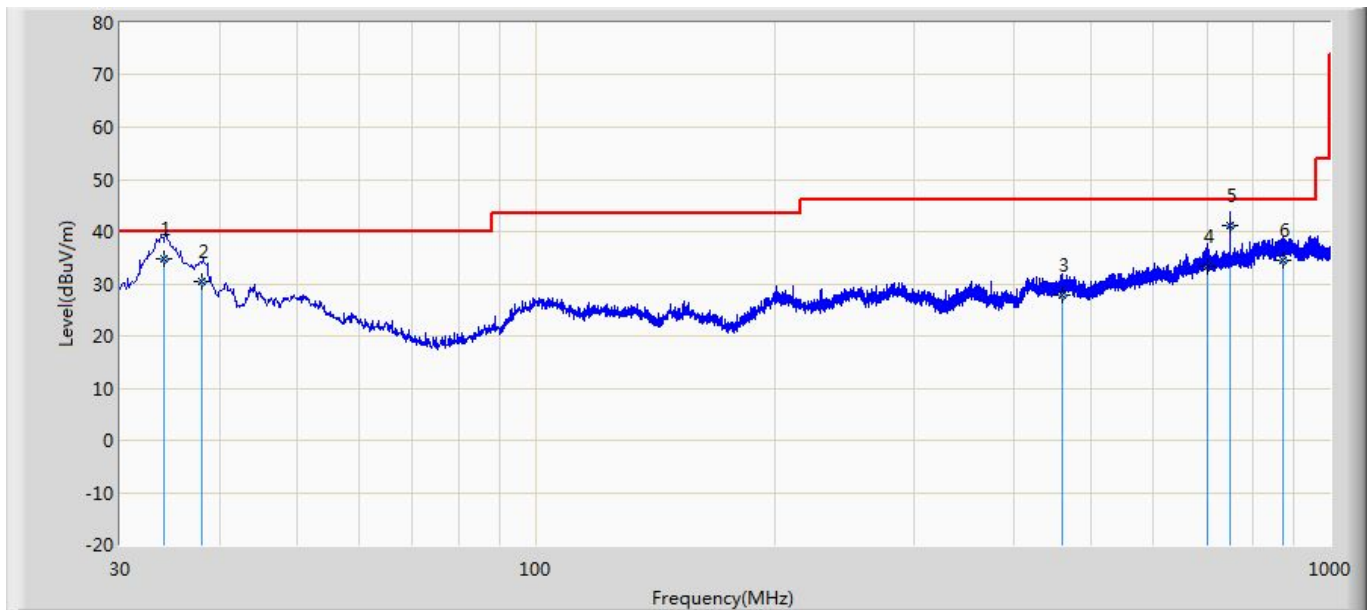


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		33.124	28.967	34.483	-11.033	40.000	16.988	0.630	23.134	200	18	QP
2		375.512	29.135	34.644	-16.865	46.000	15.363	2.130	23.002	100	29	QP
3		528.322	30.420	32.220	-15.580	46.000	18.480	2.490	22.770	200	359	QP
4		624.951	32.000	32.796	-14.000	46.000	19.000	2.740	22.536	100	136	QP
5	*	750.124	40.001	39.813	-5.999	46.000	19.798	3.030	22.640	100	346	QP
6		902.121	35.247	34.209	-10.753	46.000	20.517	3.310	22.789	100	237	QP

Note:

- " * ", means this data is the worst emission level.
- Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: AC2	Time: 2016/09/23
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CB7_CBL6112_0726	Polarity: Vertical
EUT: AC 1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		34.034	34.755	40.816	-5.245	40.000	16.461	0.632	23.153	100	221	QP
2		38.033	30.319	38.728	-9.681	40.000	14.141	0.673	23.223	100	26	QP
3		461.120	27.934	31.186	-18.066	46.000	17.178	2.340	22.770	100	297	QP
4		701.100	33.278	33.957	-12.722	46.000	18.920	2.940	22.539	200	197	QP
5	*	750.044	41.066	40.878	-4.934	46.000	19.798	3.030	22.640	161	360	QP
6		872.956	34.385	33.339	-11.615	46.000	20.446	3.250	22.650	161	360	QP

Note:

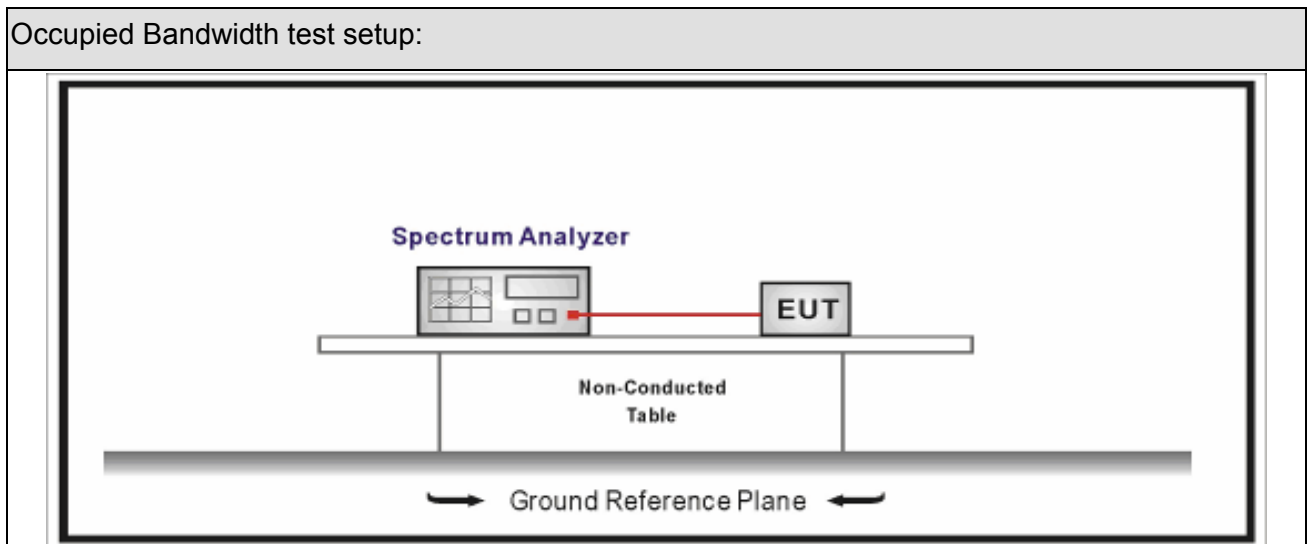
1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

5. Emissions in non-restricted frequency bands

5.1. Test Equipment

Occupied Bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.08
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



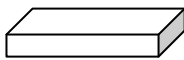
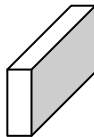
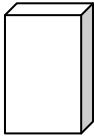
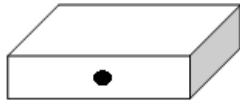
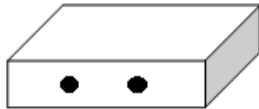
5.3. Limit

Un-Restricted Band Emissions Limit	
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30c(Note1)
RF Output power(PK detector)	20c(Note2)
Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc). Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).	

5.4. Test Procedure

Test Method					
	References Rule		Chapter	Description	
☒	ANSI C63.10		11.11	Emissions in non-restricted frequency bands	
	☒	ANSI C63.10	11.11.2	Reference level measurement	
	☒	ANSI C63.10	11.11.3	Emission level measurement	
☐	ANSI C63.10		11.12	Emissions in restricted frequency bands	
	☐	ANSI C63.10	11.12.1	Radiated emission measurements	
	☐	ANSI C63.10	11.12.2.7	Radiated spurious emission test	
☐	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	
	☒	ANSI C63.10	11.12.2	Antenna-port conducted measurements	
		☐	ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
		☐	ANSI C63.10	11.12.2.4	Peak power measurement procedure
		☒	ANSI C63.10	11.12.2.5	Average power measurement procedures
		☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
		☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
		☐	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

5.5. EUT test Axis definition

Item	Emissions in non-restricted frequency bands			
Device Category	☒	Fixed position use		
	☐	Mobile position use		
Test mode	Mode 1 ~ Mode 4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 0		
				
	☒	Chain 0	Chain 1	
				
	☐	Chain 0	Chain 1	Chain 2
				

5.6. Test Result

Product Name	: AC1200 Wireless Dual Band Gigabit Router	Power	: AC 120V/60Hz
Test Mode	: Mode1~4	Test Site	: TR8
Test Date	: 2017.01.31		

Antenna #0

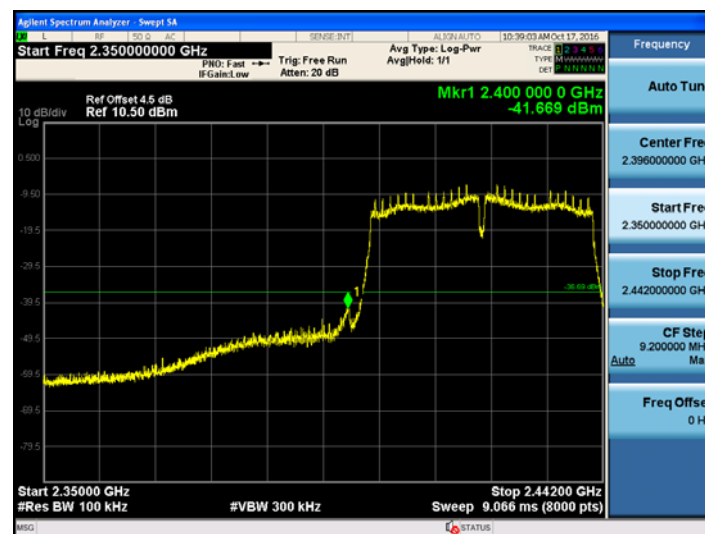
Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	11.3	2400	-29.0	40.3	>30	Pass
1	11	2462	8.4	2500	-51.2	59.6	>30	Pass
2	01	2412	1.3	2400	-42.5	43.8	>30	Pass
2	11	2462	0.1	2500	-52.5	52.6	>30	Pass
3	01	2412	0.8	2400	-40.4	41.2	>30	Pass
3	11	2462	-0.3	2500	-50.9	50.6	>30	Pass
4	03	2422	-6.7	2400	-41.7	35	>30	Pass
4	09	2452	-8.1	2500	-56.6	48.5	>30	Pass

Note 1: The worst case of Emissions in non-restricted frequency bands as below:

2: As the radiated emission was performed, so conducted emission was only tested for the nearest emission of fundamental frequency.

3: In-Band PSD[a] data is tested by Mid channel.

Mode 4 CH03(2422MHz)



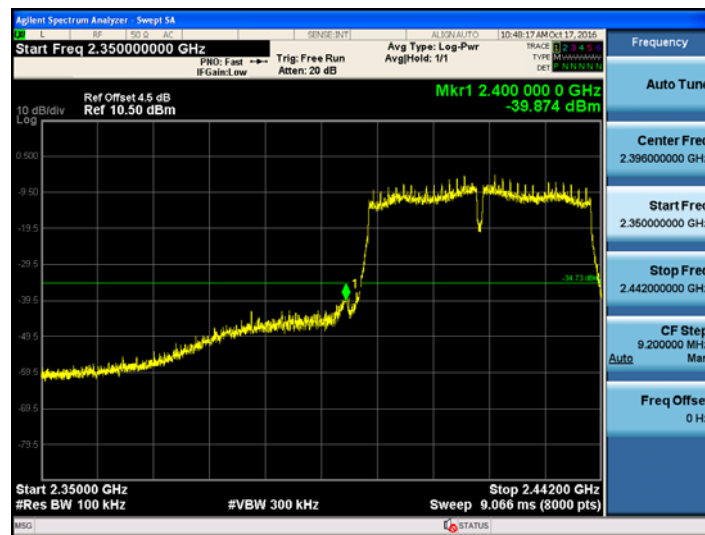
Antenna #1

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
2	01	2412	1.4	2400	-36.6	38.0	>30	Pass
2	11	2462	0.3	2500	-53.1	53.4	>30	Pass
3	01	2412	1.3	2400	-41.6	42.9	>30	Pass
3	11	2462	0.4	2500	-53.7	54.1	>30	Pass
4	03	2422	-4.7	2400	-39.9	35.2	>30	Pass
4	09	2452	-5.7	2500	-58.3	52.6	>30	Pass

Note 1: The worst case of Emissions in non-restricted frequency bands as below:

2: As the radiated emission was performed, so conducted emission was only tested for the nearest emission of fundamental frequency.

3: In-Band PSD[a] data is tested by Mid channel.

Mode 4 CH03(2422MHz)

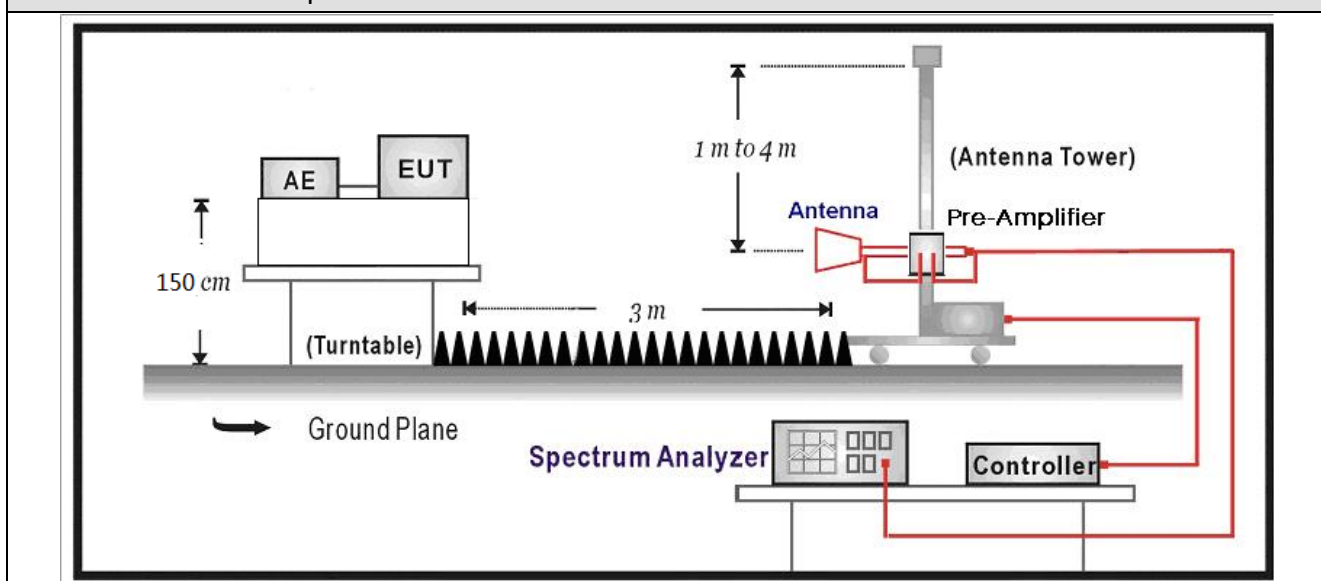
6. Radiated Emission Band Edge

6.1. Test Equipment

Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Receiver	Agilent	N9038A	MY51210196	2016.07.16	2017.07.15
Pre-Amplifier	Miteq	NSP1800-25	1364185	2016.05.03	2017.05.02
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2016.07.12	2017.07.11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.09.18	2017.09.17
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2017.02.28	2018.02.27
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2017.02.28	2018.02.27
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.05	2018.01.04
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

6.2. Test Setup

Above 1GHz Test Setup:



6.3. Limit

Band edge Limit

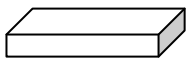
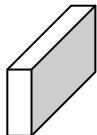
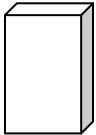
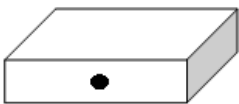
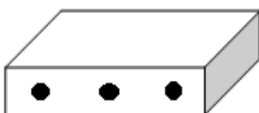
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

6.4. Test Procedure

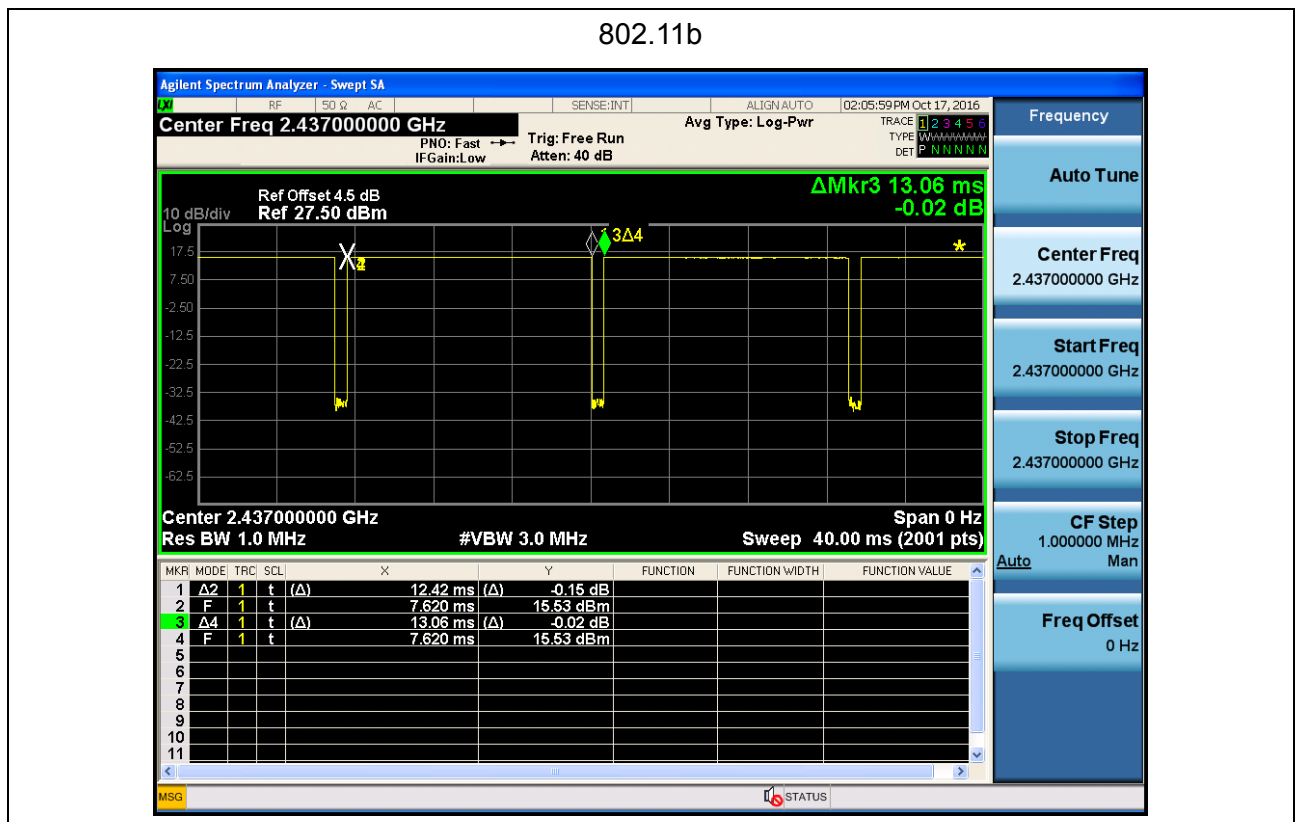
Test Method						
	References Rule			Chapter	Description	
☒	ANSI C63.10			6.10	Band-edge testing	
	☒	ANSI C63.10		6.10.5	Restricted-band band-edge measurements	
	☐	ANSI C63.10		6.10.6	Marker-delta method	
☒	ANSI C63.10			11.12	Emissions in restricted frequency bands	
	☒	ANSI C63.10		11.12.1	Radiated emission measurements	
	☒	ANSI C63.10		11.12.2.7	Radiated spurious emission test	
☐	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	
		☐	ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure	
		☒	ANSI C63.10	11.12.2.4	Peak power measurement procedure	
		☒	ANSI C63.10	11.12.2.5	Average power measurement procedures	
			☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
			☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
			☒	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

6.5. EUT test definition

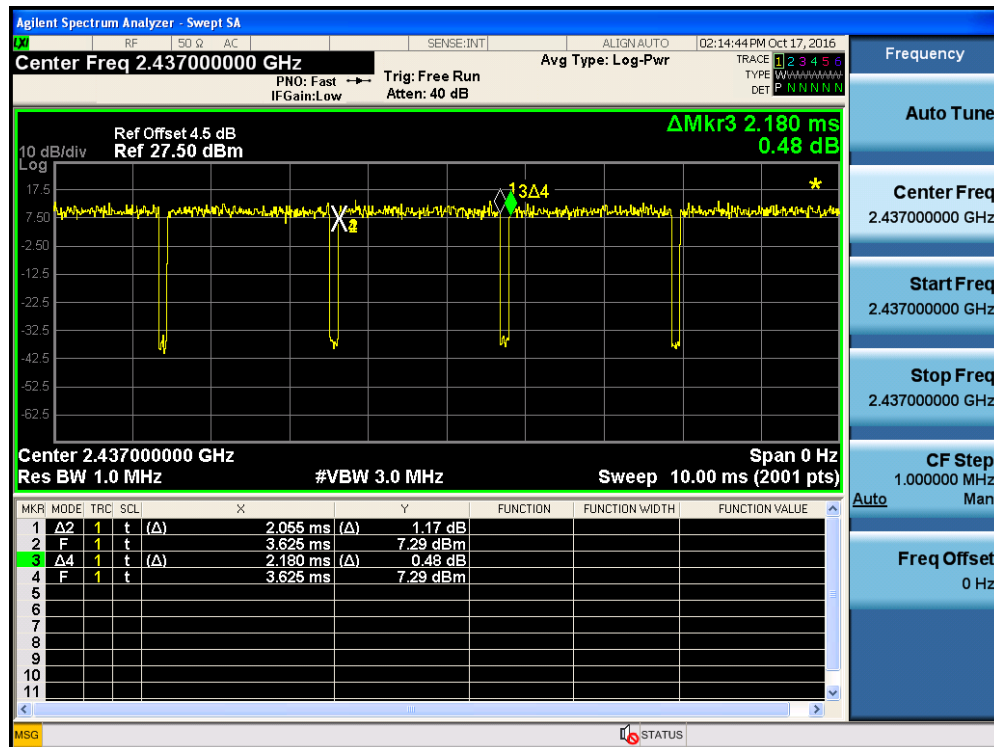
Item	Emissions in non-restricted frequency bands			
Device Category	☒	Fixed position use		
	☐	Mobile position use		
Test mode	Mode 1~4			
Test method	☒	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☒
	☐	Conducted		
	☐	Chain 1		
				
	☐	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

6.6. Duty Cycle

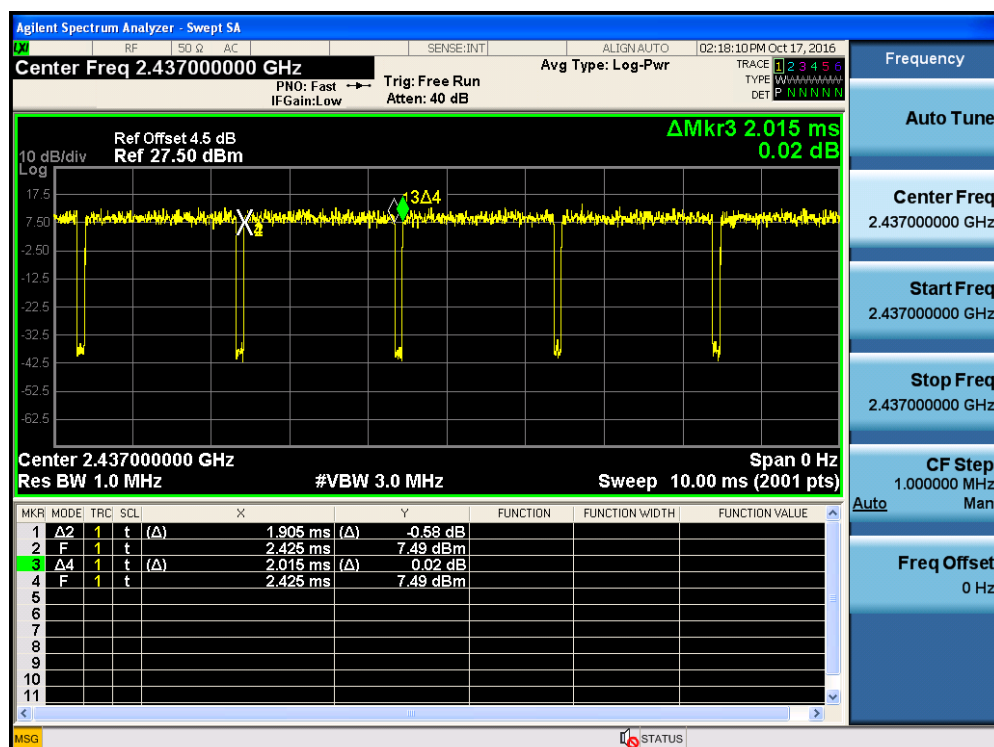
Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11b	12.42	0.640	82Hz	13.06	95.10%
802.11g	2.055	0.125	510Hz	2.180	94.27%
802.11n(20MHz)	1.905	0.110	560Hz	2.015	94.54%
802.11n(40MHz)	0.945	0.098	1.1KHz	1.043	90.60%



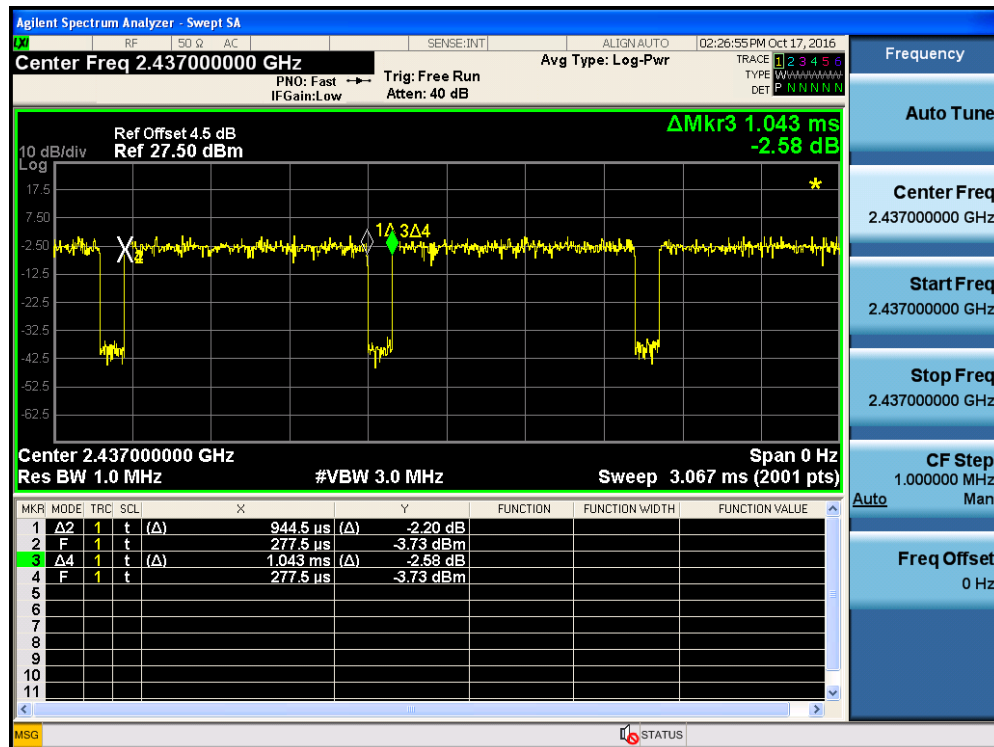
802.11g



802.11n(20MHz)

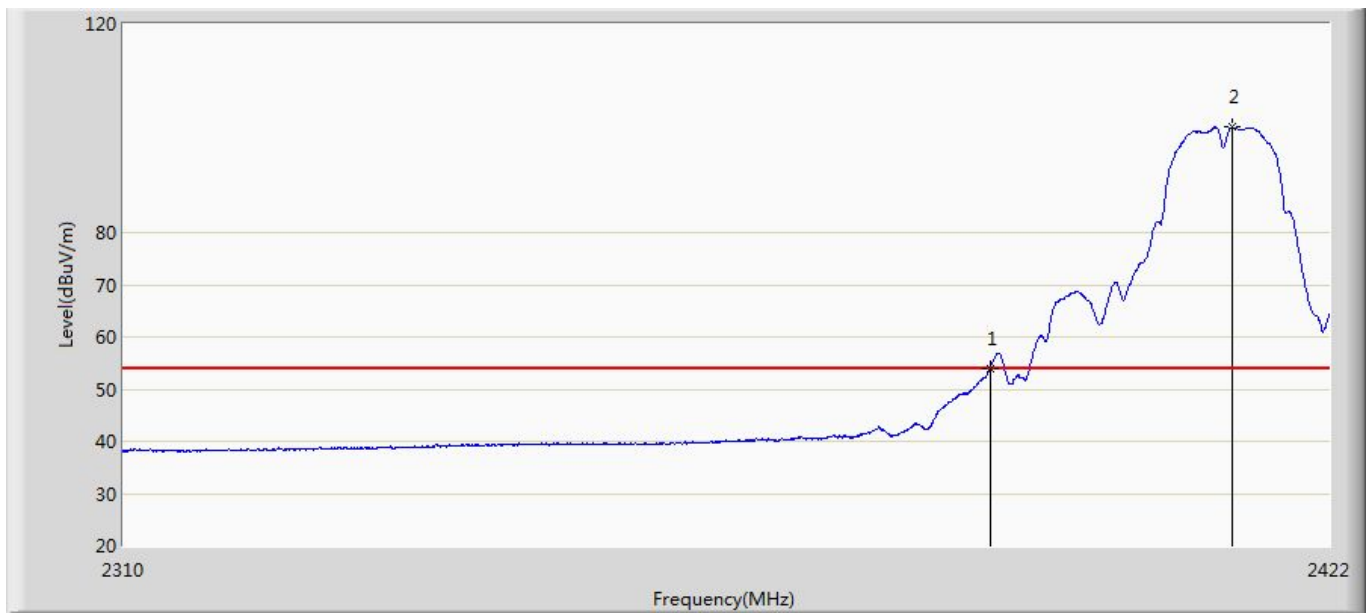


802.11n(40MHz)



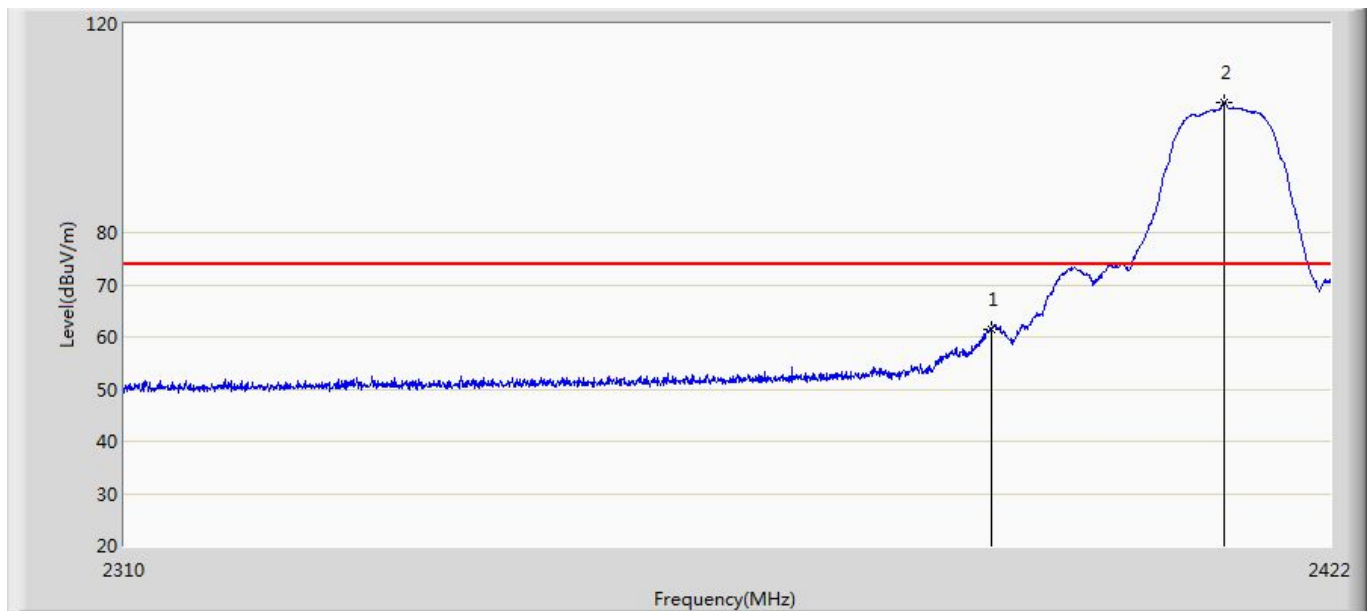
6.7. Test Result

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 10:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



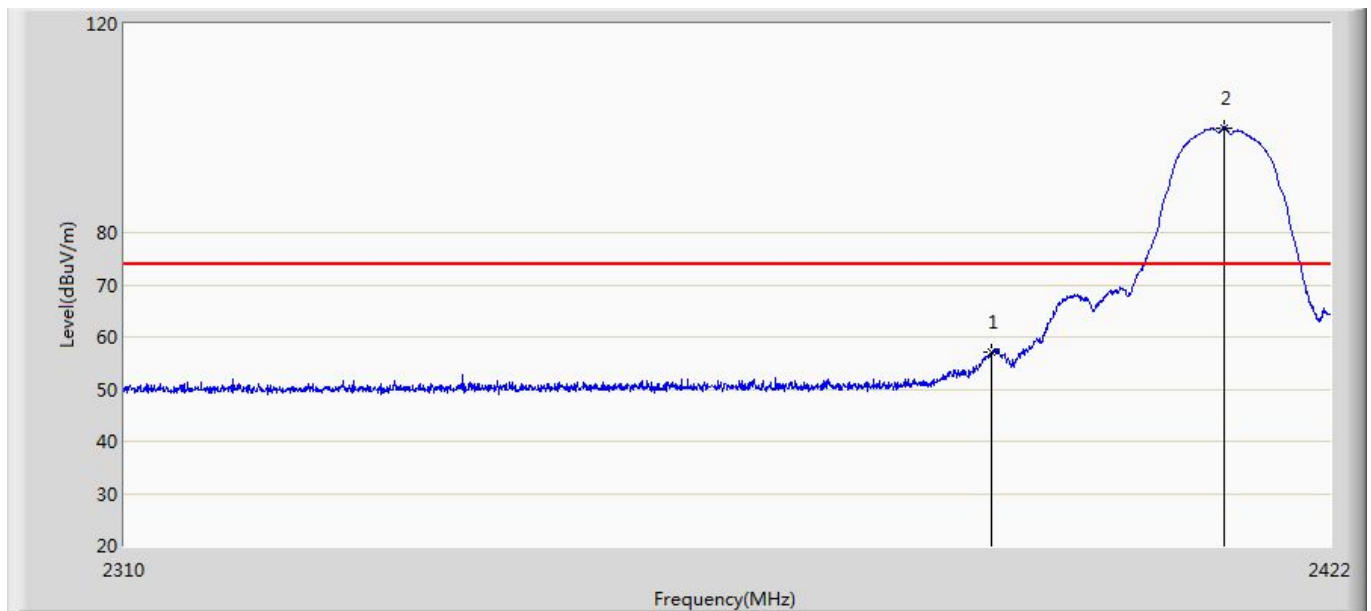
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.985	18.303	-0.015	54.000	35.682	AV
2	*	2412.816	100.192	64.447	46.192	54.000	35.745	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 10:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



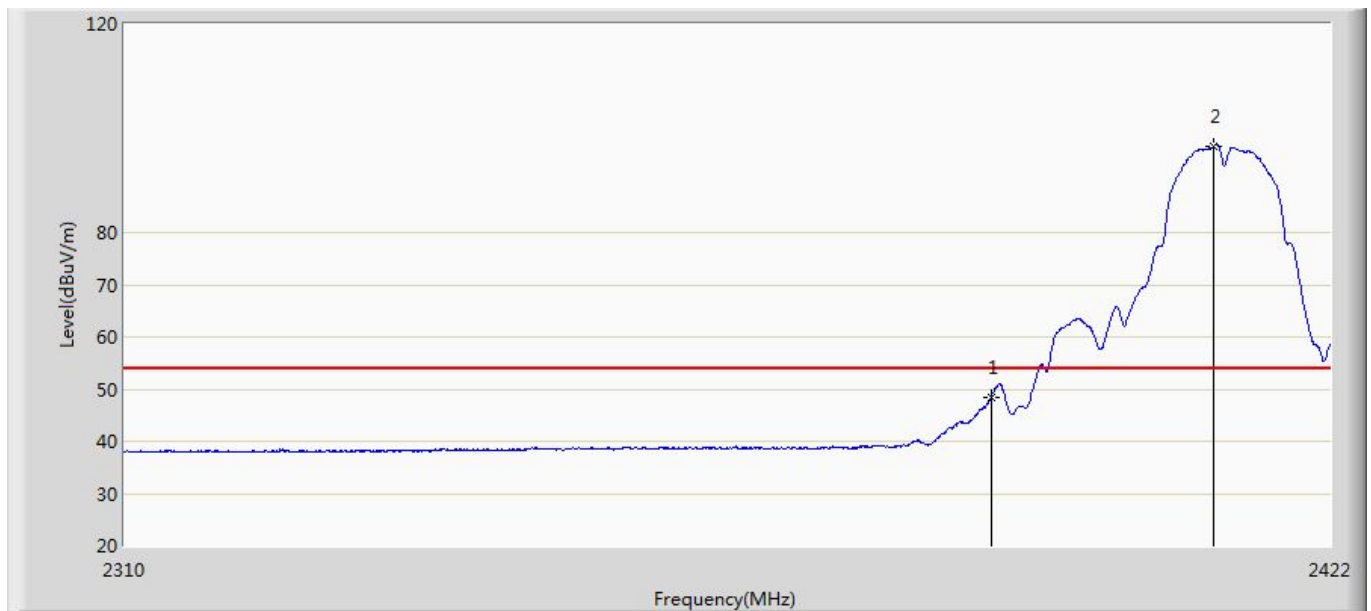
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.386	25.704	-12.614	74.000	35.682	PK
2	*	2411.976	104.941	69.200	30.941	74.000	35.741	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 11:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2412MHz by 802.11b	



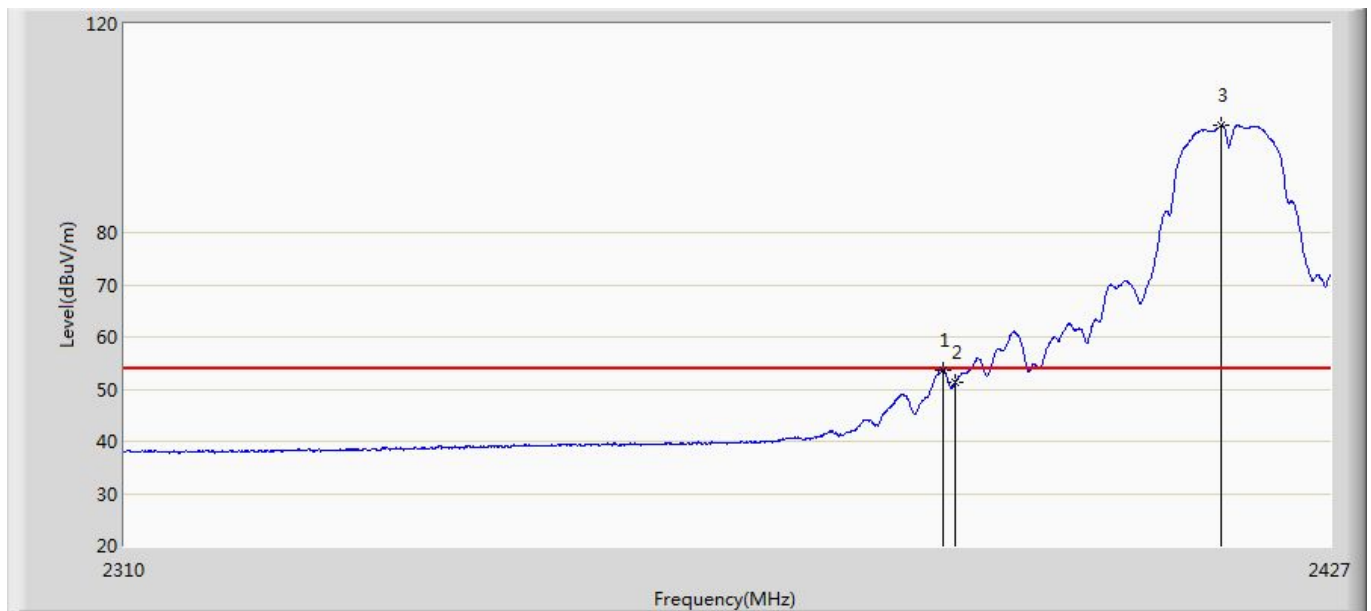
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	57.132	21.450	-16.868	74.000	35.682	PK
2	*	2411.920	100.143	64.402	26.143	74.000	35.741	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 11:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



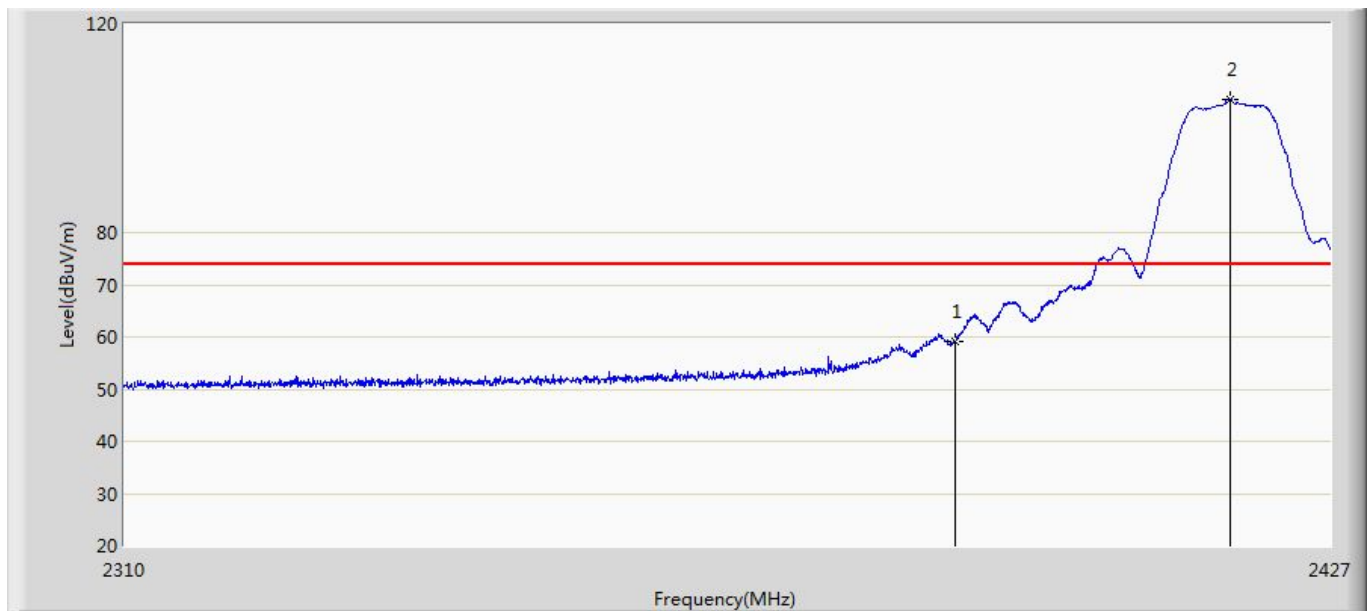
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.495	12.813	-5.505	54.000	35.682	AV
2	*	2411.024	96.615	60.878	42.615	54.000	35.737	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 11:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2417MHz by 802.11b	



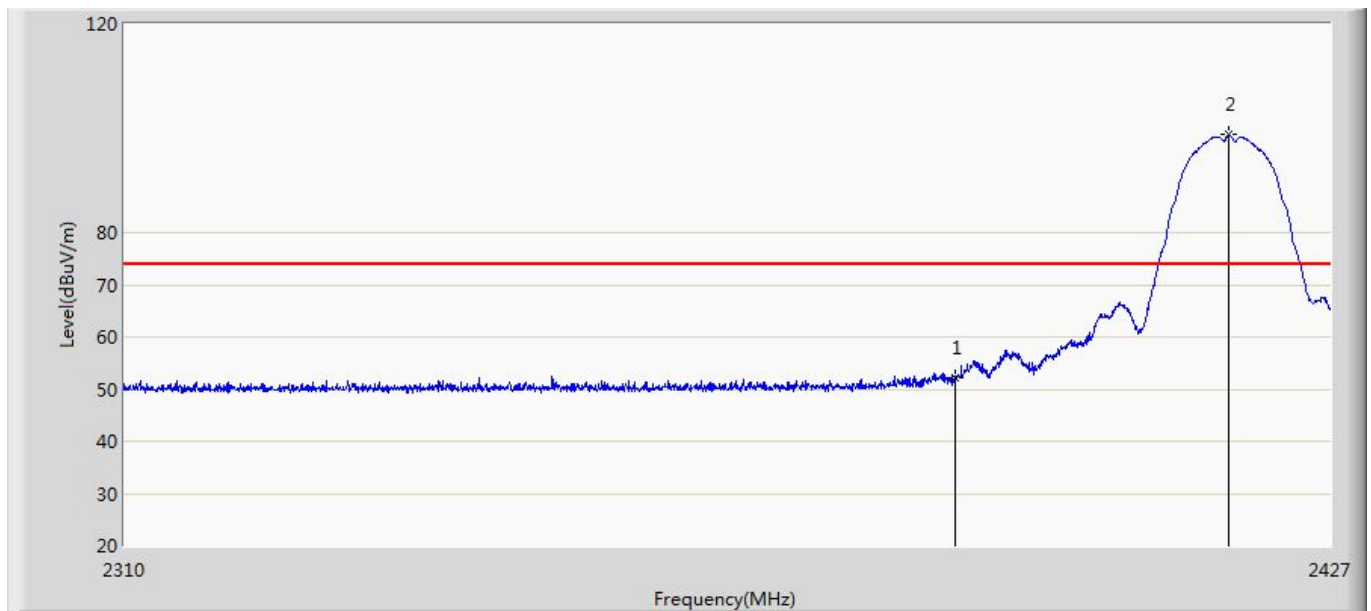
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2388.800	53.737	18.058	-0.263	54.000	35.680	AV
2		2390.000	51.191	15.509	-2.809	54.000	35.682	AV
3	*	2416.236	100.522	64.763	46.522	54.000	35.759	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 13:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2417MHz by 802.11b	



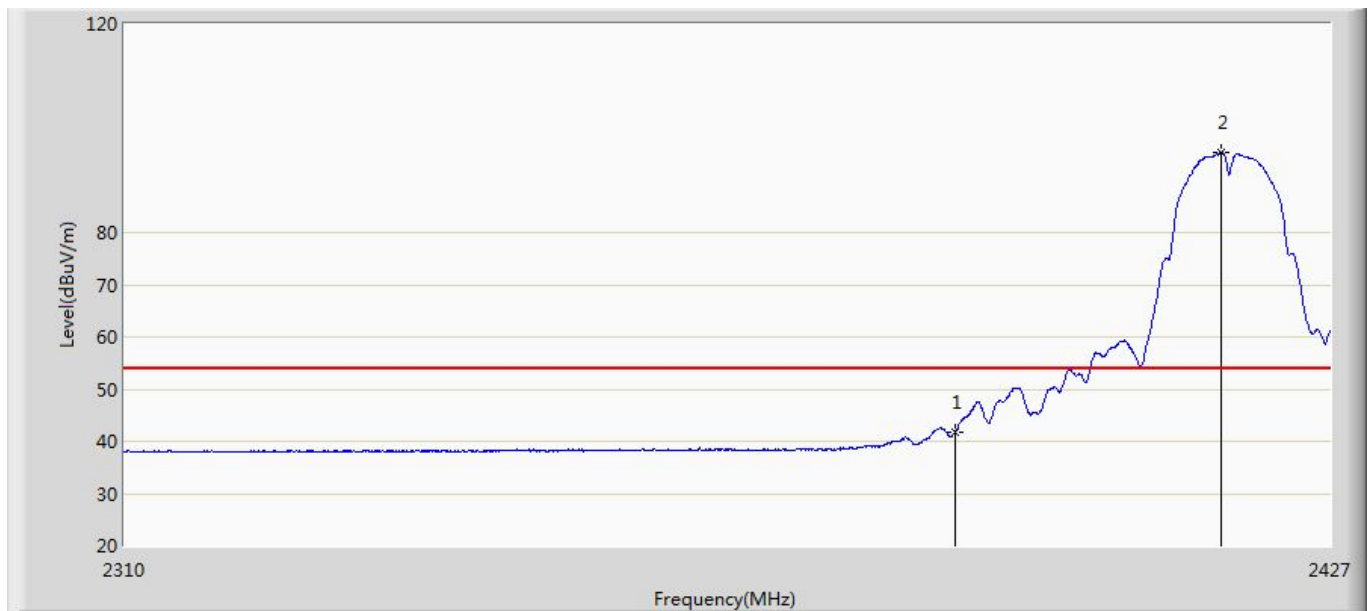
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.192	23.510	-14.808	74.000	35.682	PK
2	*	2417.172	105.521	69.758	31.521	74.000	35.763	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 13:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2417MHz by 802.11b	



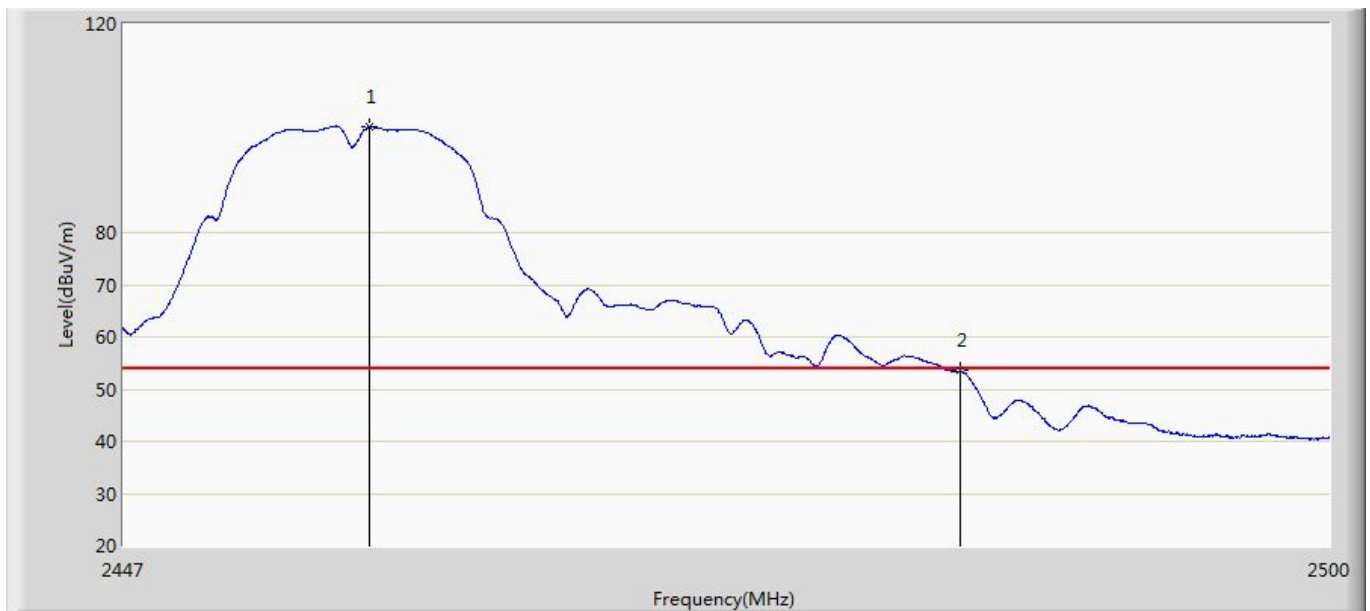
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.149	16.467	-21.851	74.000	35.682	PK
2	*	2416.938	98.765	63.003	24.765	74.000	35.762	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 13:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2417MHz by 802.11b	



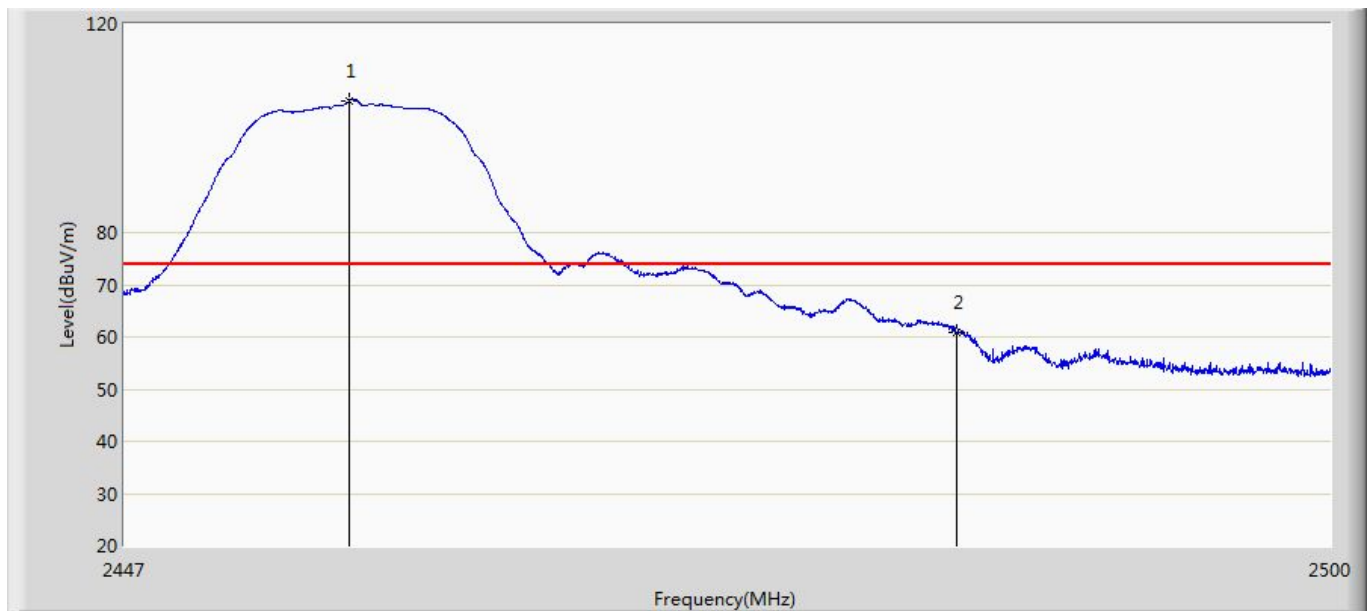
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	41.859	6.177	-12.141	54.000	35.682	AV
2	*	2416.236	95.503	59.744	41.503	54.000	35.759	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 13:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2457MHz by 802.11b	



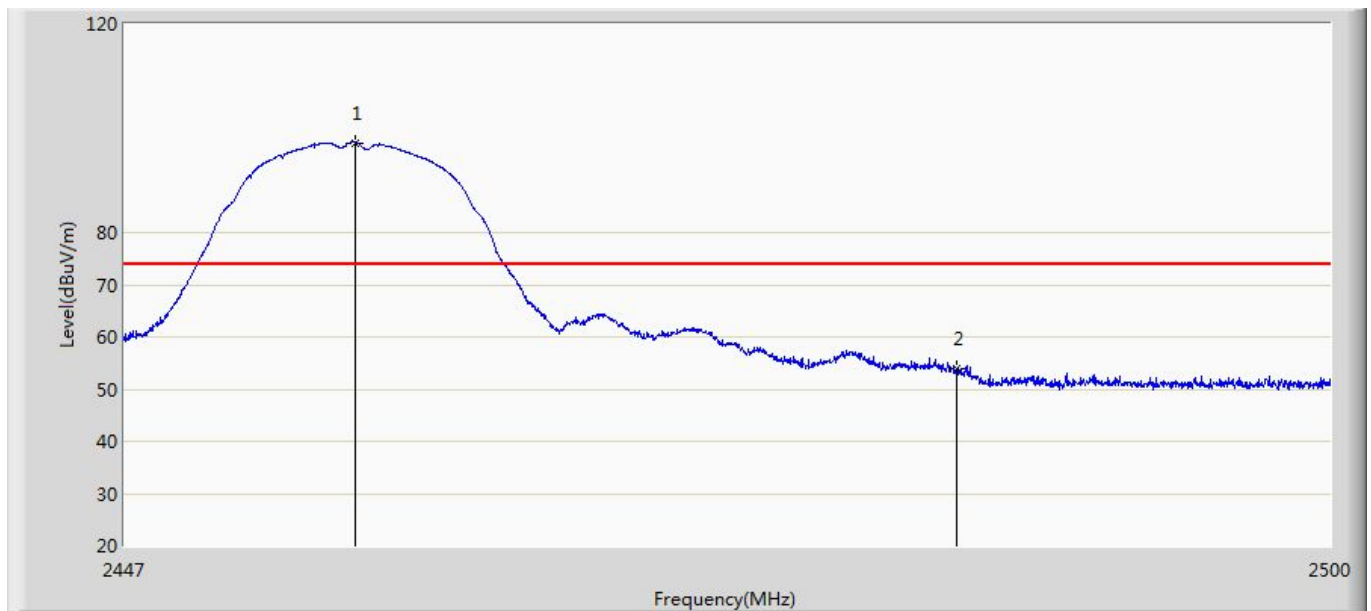
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.732	100.252	64.392	46.252	54.000	35.860	AV
2		2483.650	53.743	17.850	-0.257	54.000	35.892	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2457MHz by 802.11b	



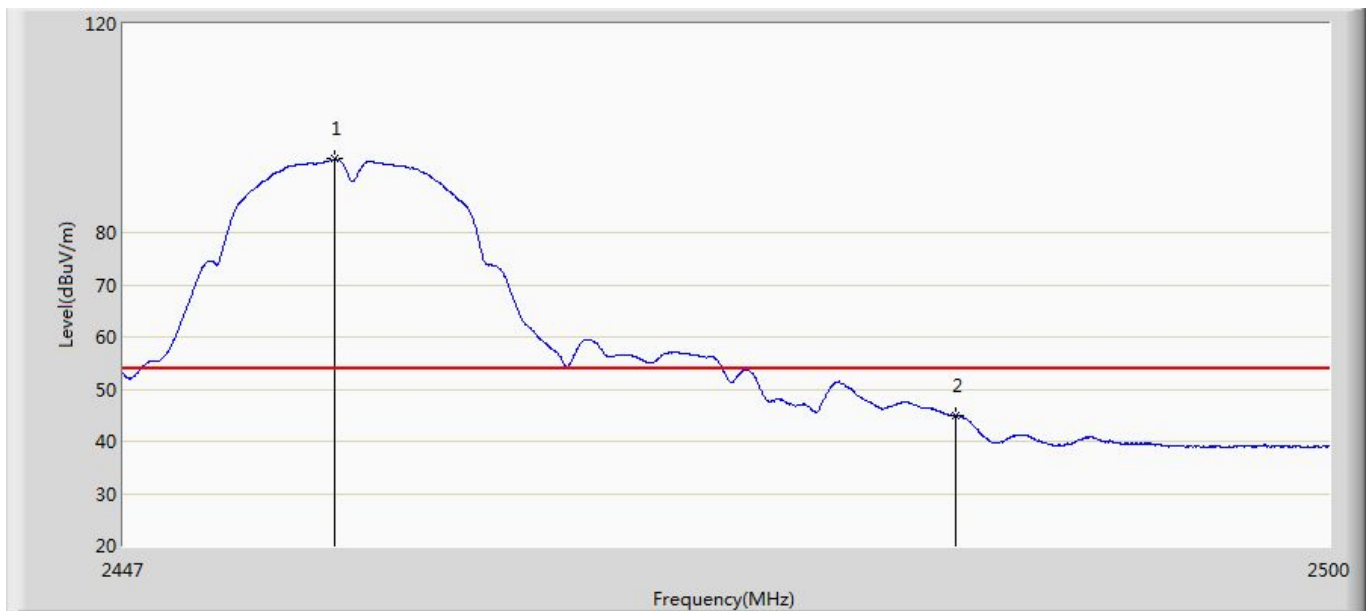
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.805	105.274	69.418	31.274	74.000	35.856	PK
2		2483.500	60.957	25.065	-13.043	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2457MHz by 802.11b	



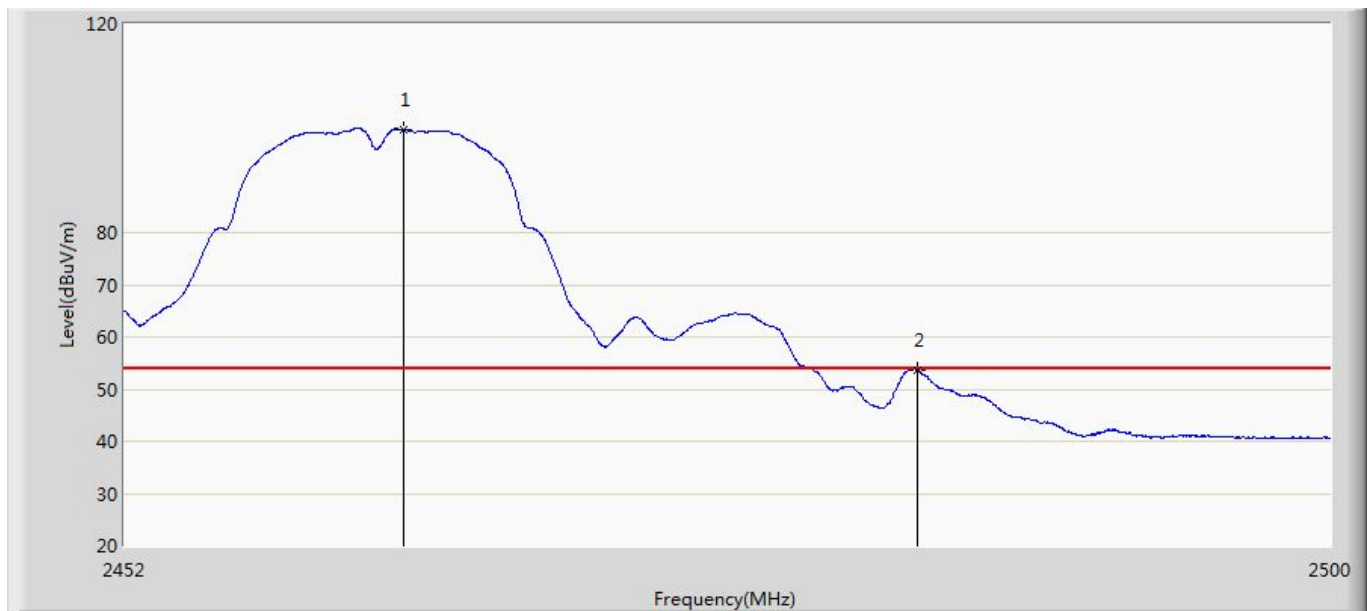
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.096	97.238	61.381	23.238	74.000	35.857	PK
2		2483.500	53.852	17.960	-20.148	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2457MHz by 802.11b	



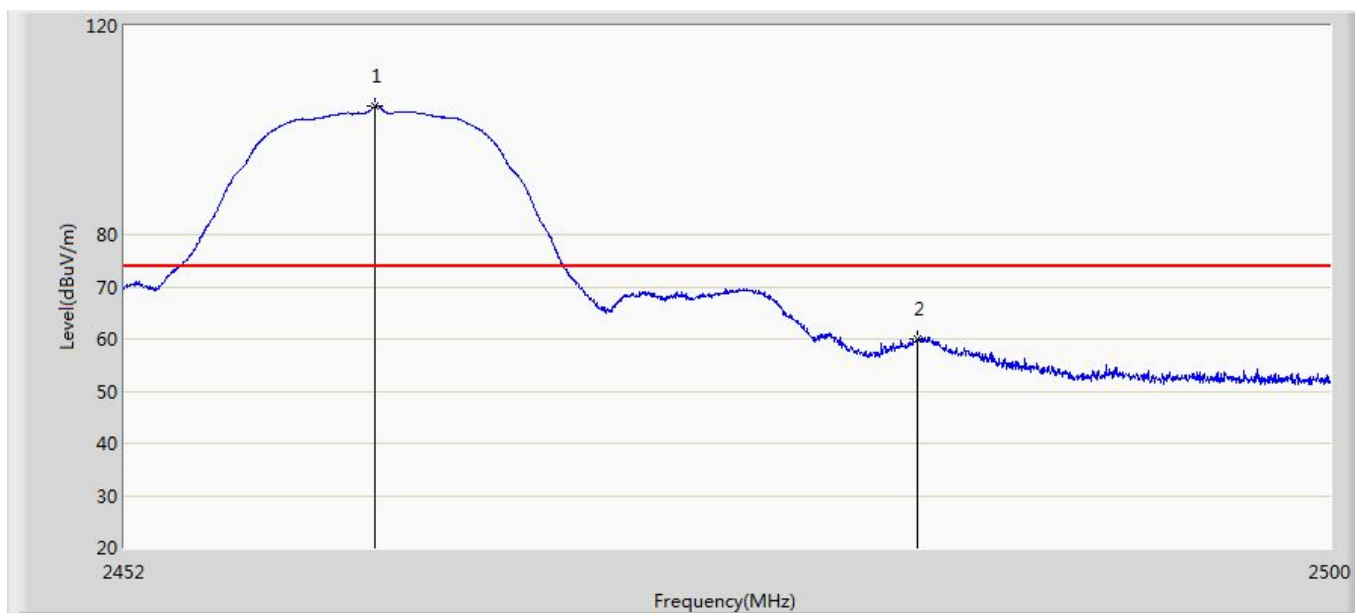
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.222	94.072	58.219	40.072	54.000	35.853	AV
2		2483.500	44.827	8.935	-9.173	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



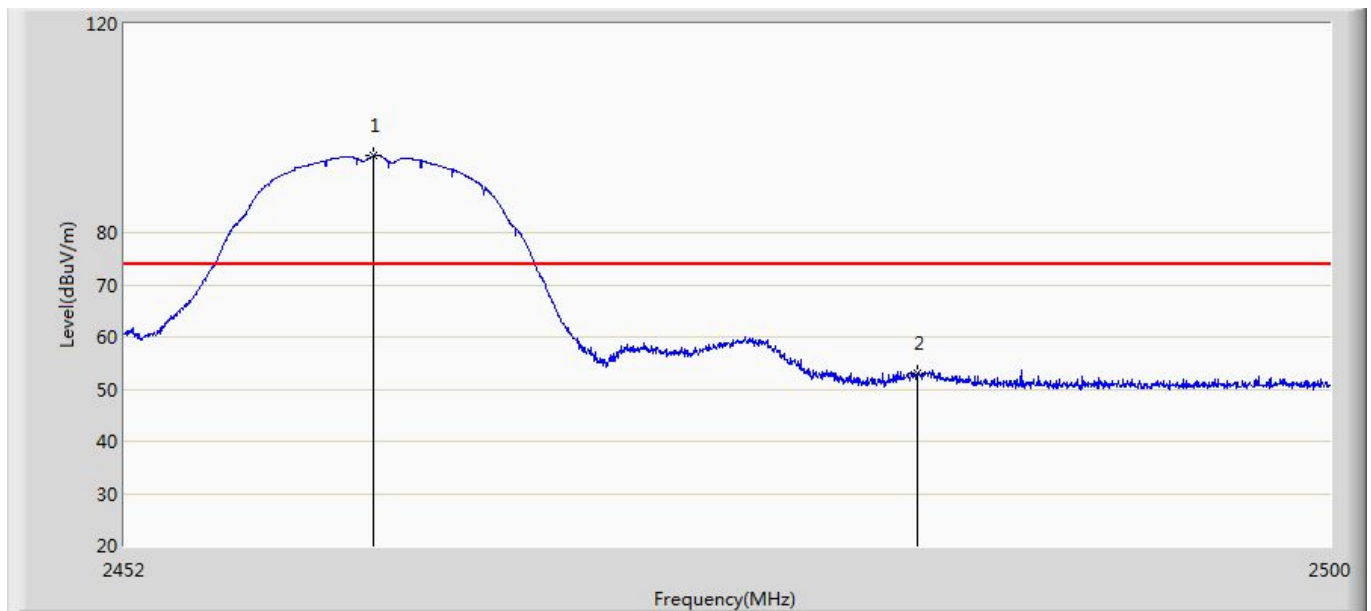
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.016	99.722	63.845	45.722	54.000	35.877	AV
2		2483.500	53.719	17.827	-0.281	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2462MHz by 802.11b	



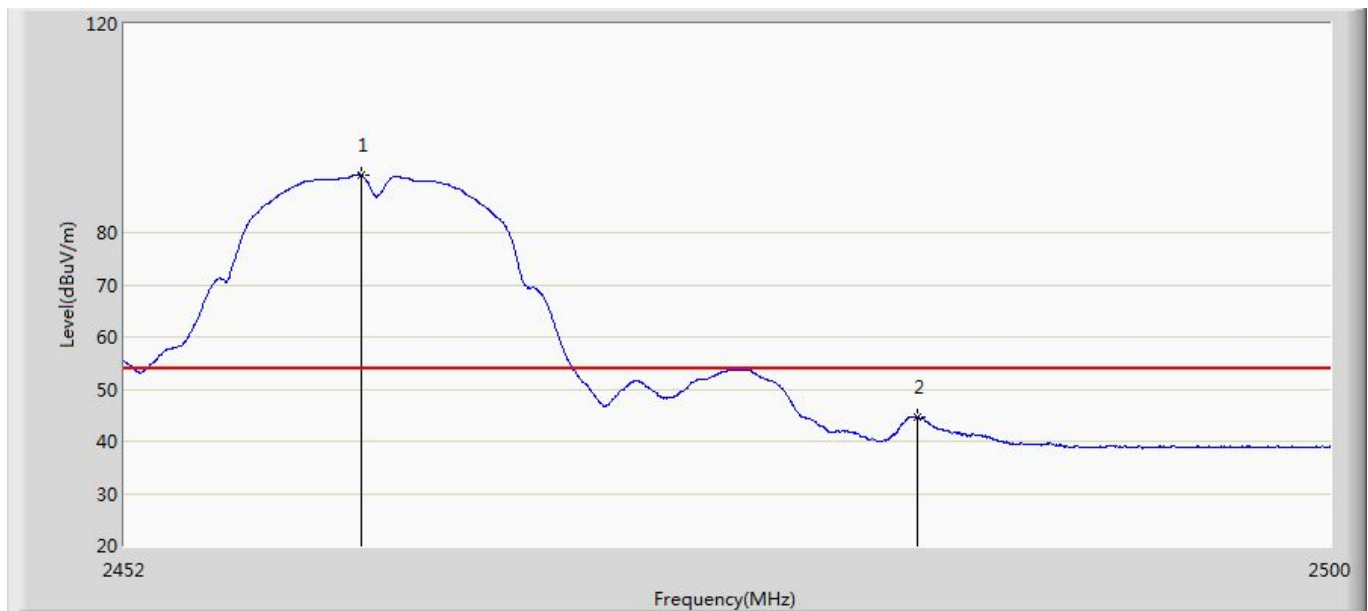
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.912	104.645	68.767	30.645	74.000	35.878	PK
2		2483.500	59.948	24.056	-14.052	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2462MHz by 802.11b	



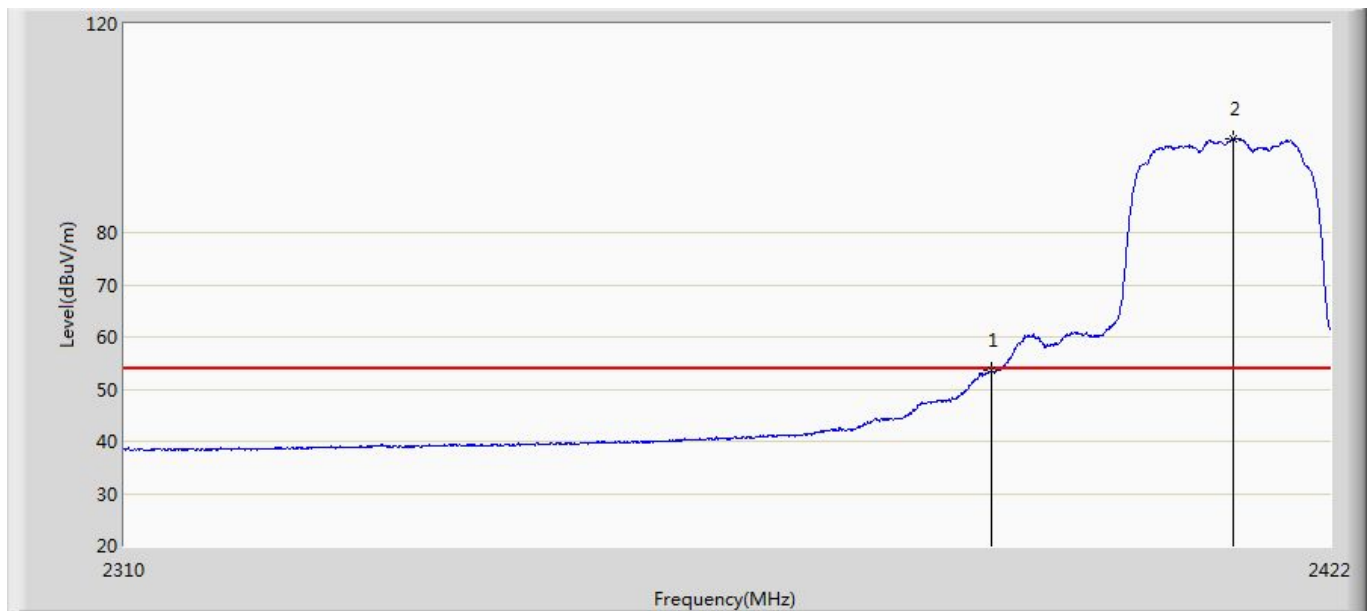
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.864	94.723	58.845	20.723	74.000	35.878	PK
2		2483.500	52.981	17.089	-21.019	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 1: Transmit at 2462MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.360	91.025	55.150	37.025	54.000	35.875	AV
2		2483.500	44.618	8.726	-9.382	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



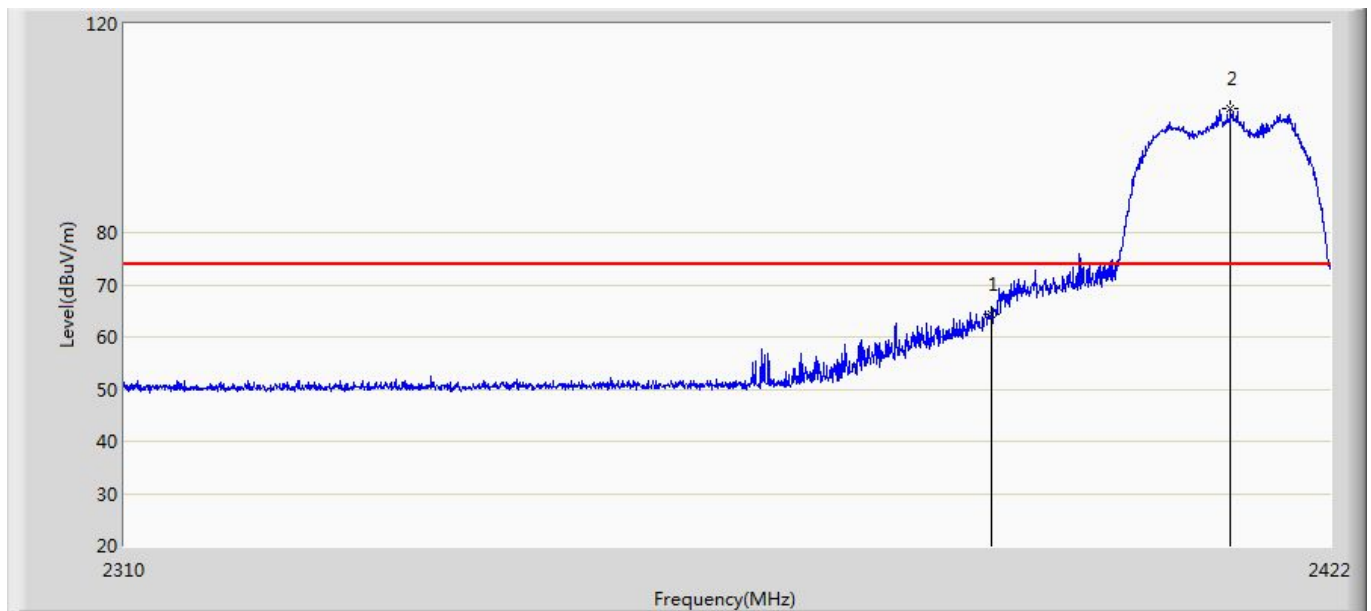
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.694	18.012	-0.306	54.000	35.682	AV
2	*	2412.816	98.086	62.341	44.086	54.000	35.745	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



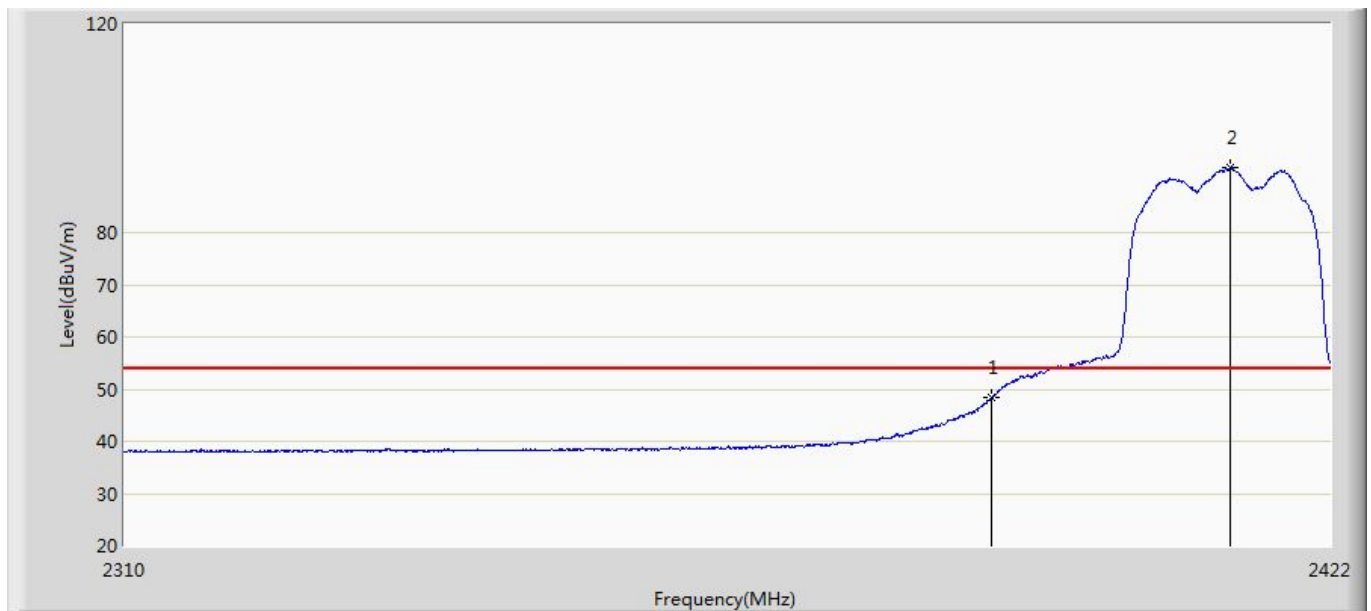
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2388.064	73.285	37.607	-0.715	74.000	35.678	PK
2		2390.000	71.784	36.102	-2.216	74.000	35.682	PK
3	*	2413.152	107.481	71.735	33.481	74.000	35.747	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



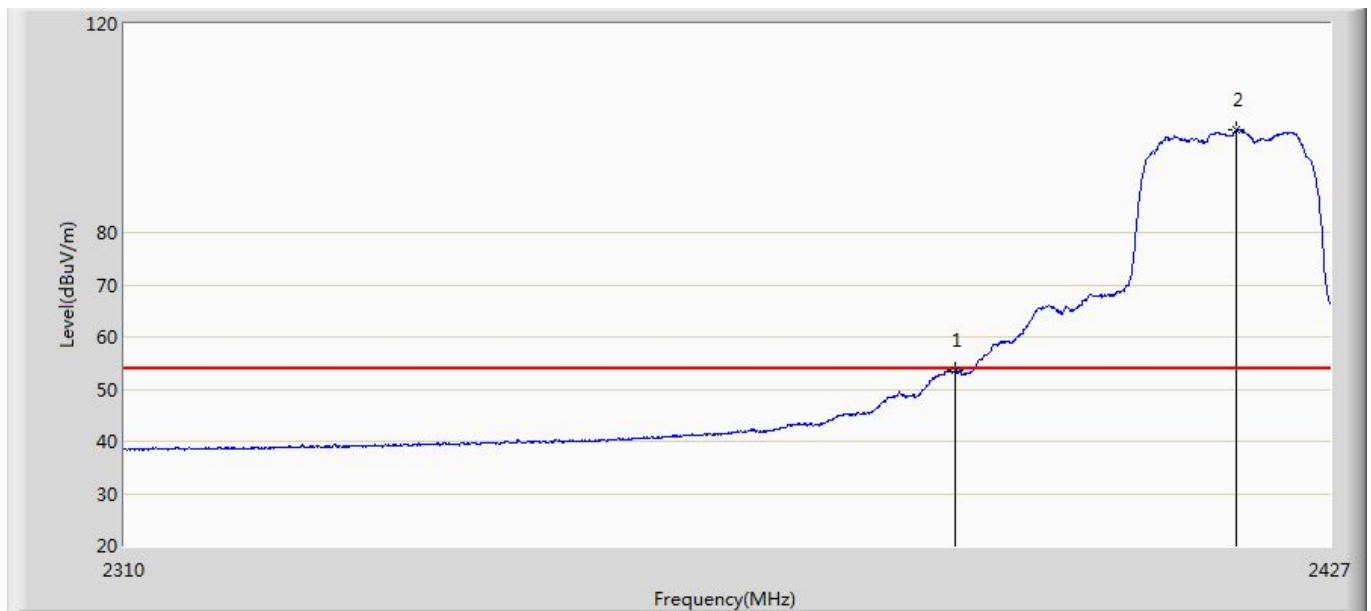
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	64.298	28.616	-9.702	74.000	35.682	PK
2	*	2412.592	103.886	68.142	29.886	74.000	35.744	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



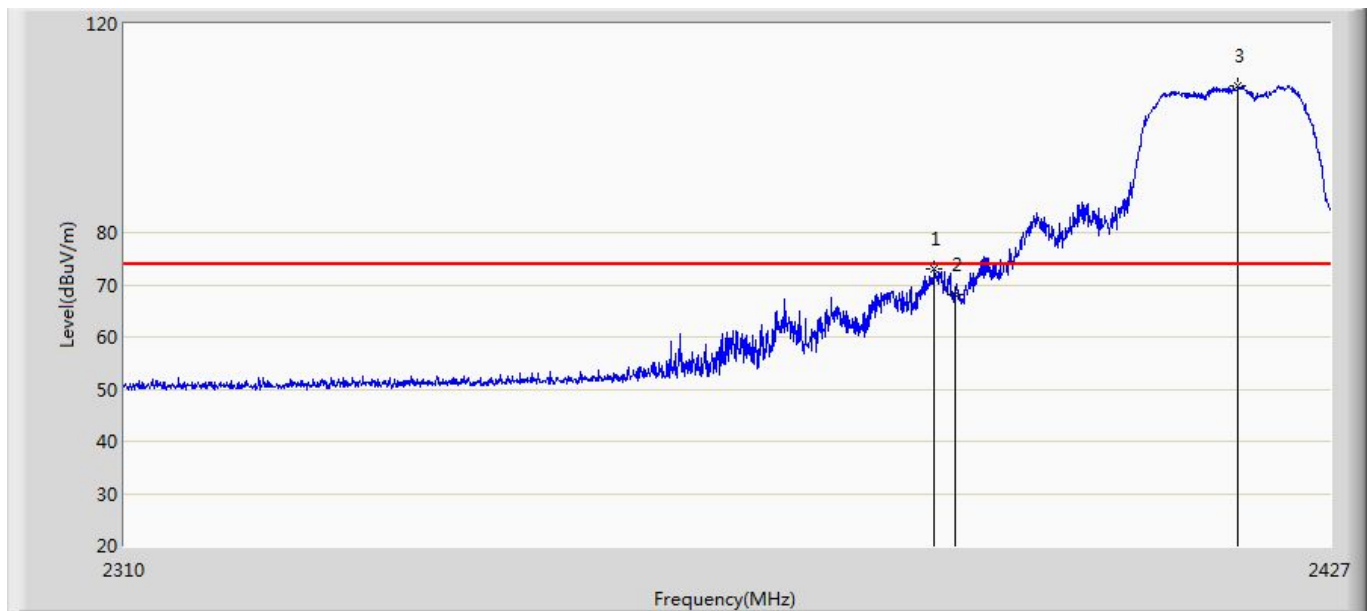
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.299	12.617	-5.701	54.000	35.682	AV
2	*	2412.592	92.533	56.789	38.533	54.000	35.744	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2417MHz by 802.11g	



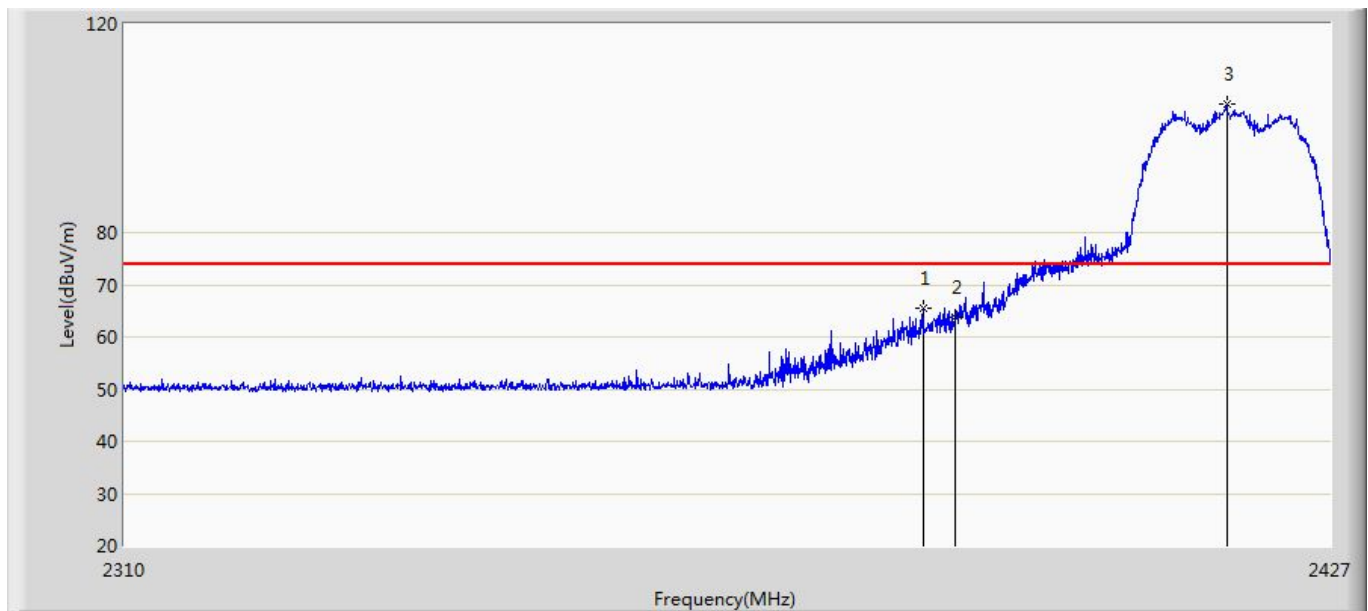
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.645	17.963	-0.355	54.000	35.682	AV
2	*	2417.757	99.801	64.035	45.801	54.000	35.765	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2417MHz by 802.11g	



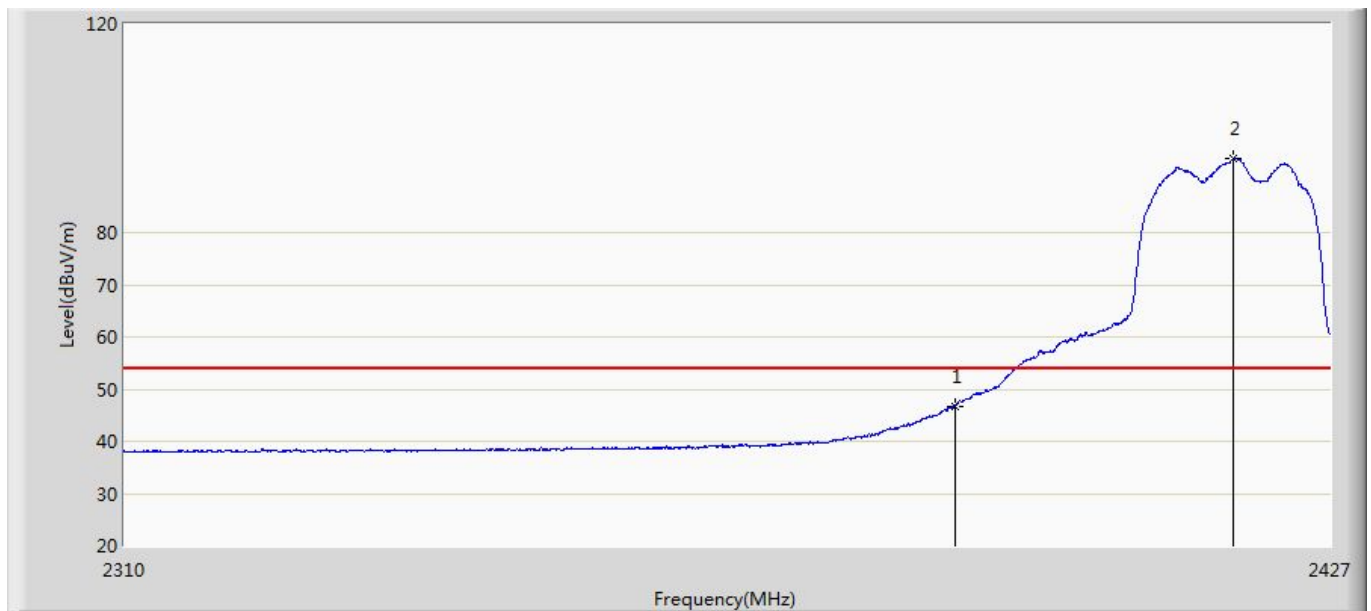
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.980	73.035	37.358	-0.965	74.000	35.678	PK
2		2390.000	68.055	32.373	-5.945	74.000	35.682	PK
3	*	2417.874	108.046	72.280	34.046	74.000	35.766	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2417MHz by 802.11g	



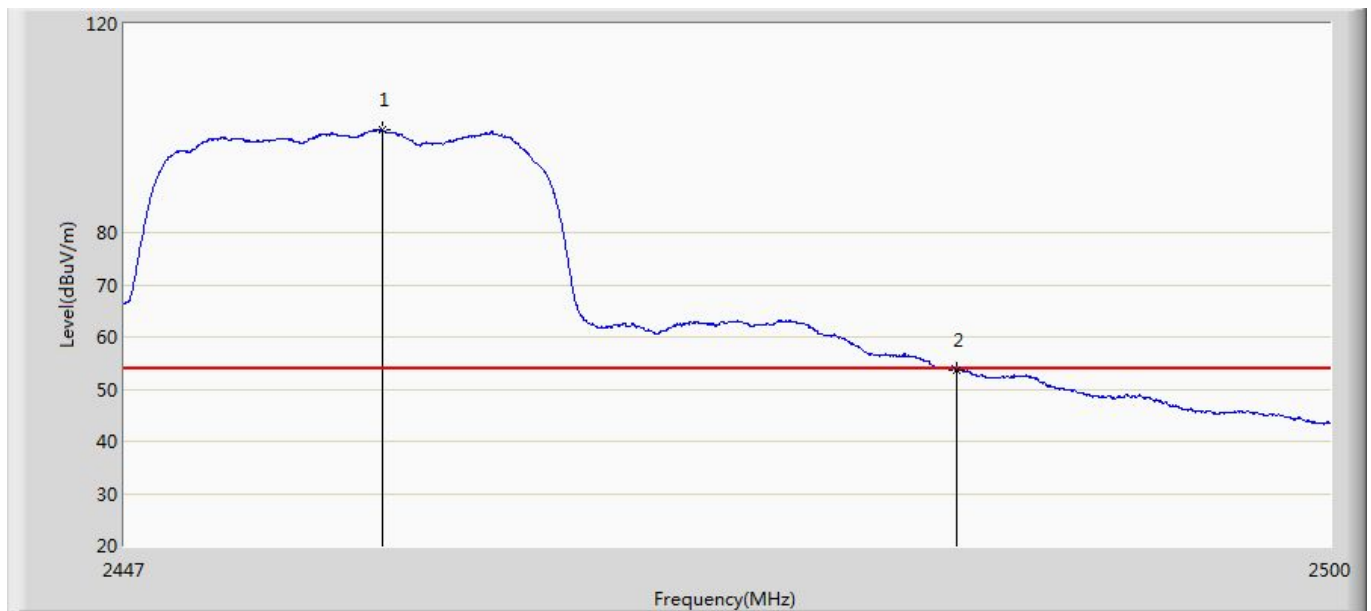
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.869	65.486	29.811	-8.514	74.000	35.675	PK
2		2390.000	63.885	28.203	-10.115	74.000	35.682	PK
3	*	2416.762	104.642	68.881	30.642	74.000	35.761	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 14:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2417MHz by 802.11g	



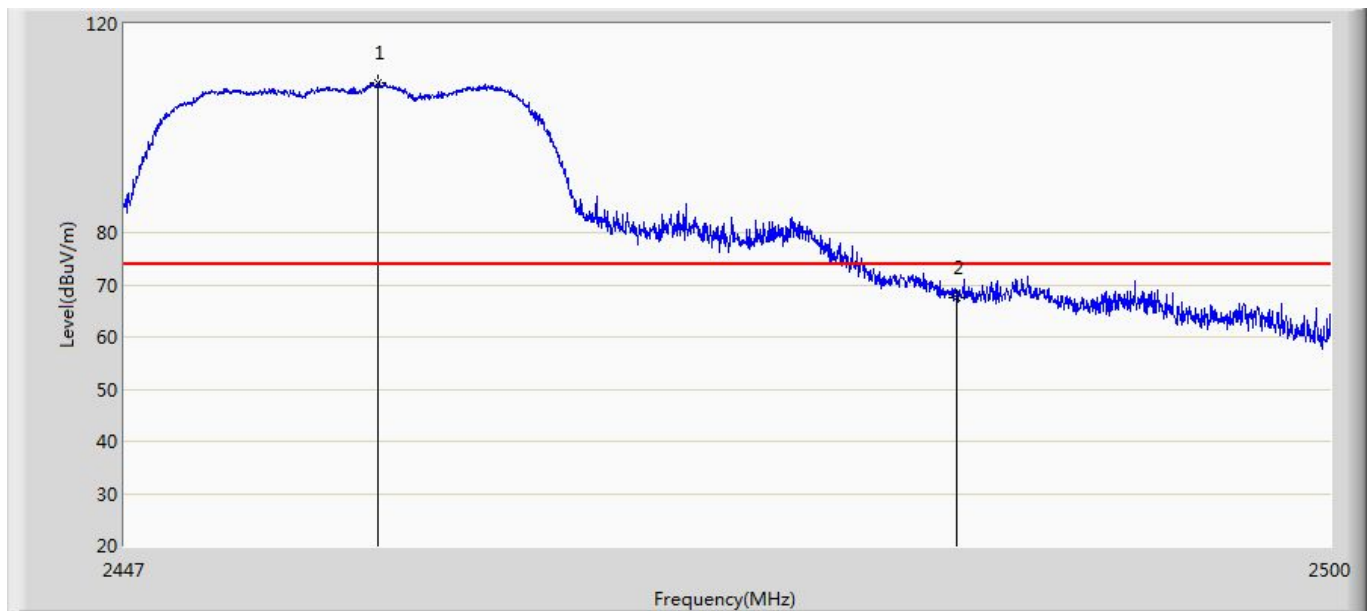
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.643	10.961	-7.357	54.000	35.682	AV
2	*	2417.406	94.133	58.369	40.133	54.000	35.764	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2457MHz by 802.11g	



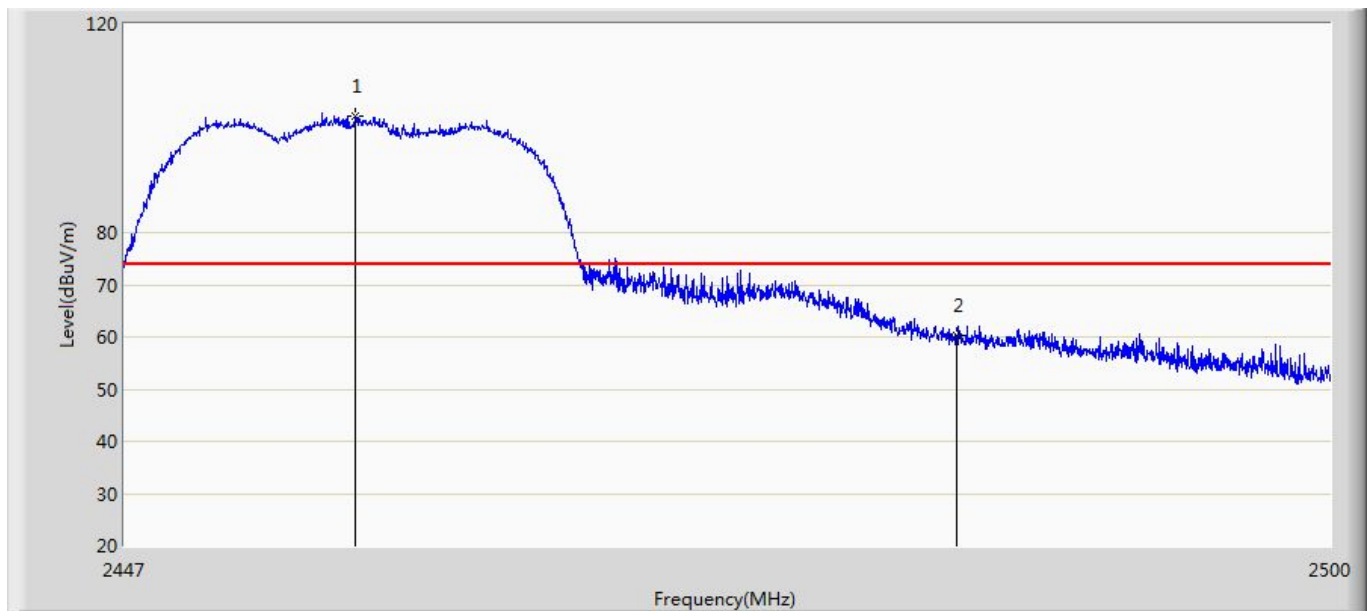
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.236	99.672	63.810	45.672	54.000	35.862	AV
2		2483.500	53.700	17.808	-0.300	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2457MHz by 802.11g	



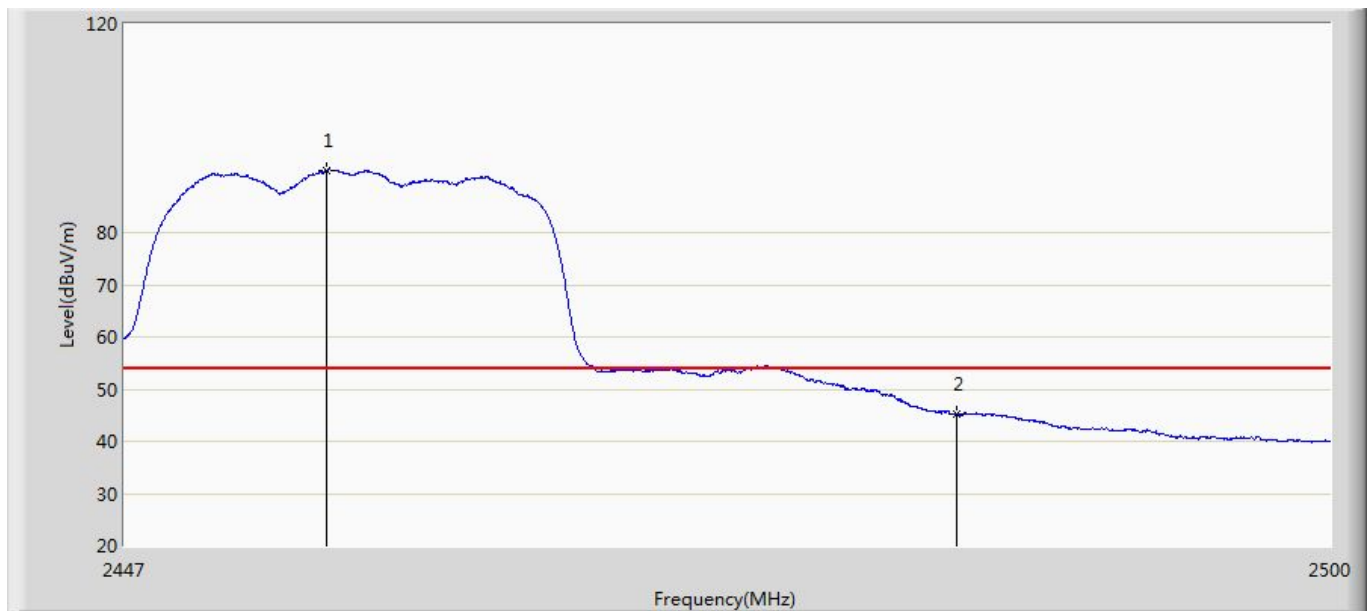
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.077	108.734	72.873	34.734	74.000	35.861	PK
2		2483.500	67.401	31.509	-6.599	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2: Transmit at 2457MHz by 802.11g	



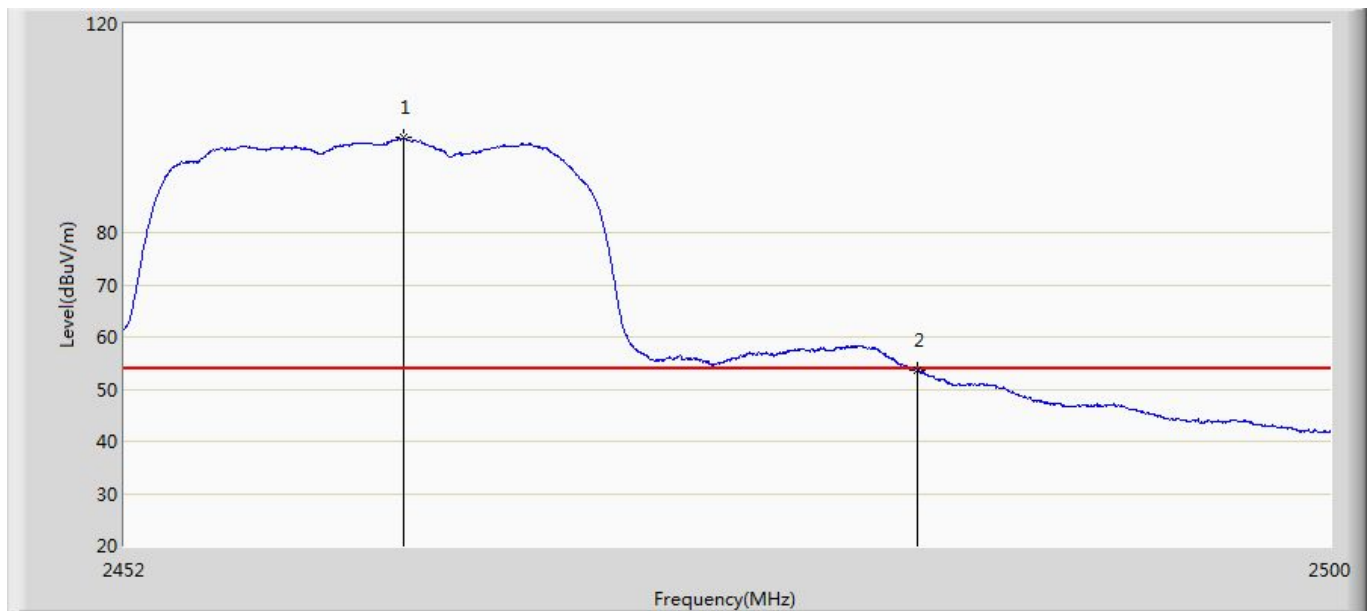
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.043	102.462	66.605	28.462	74.000	35.856	PK
2		2483.500	60.278	24.386	-13.722	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2457MHz by 802.11g	



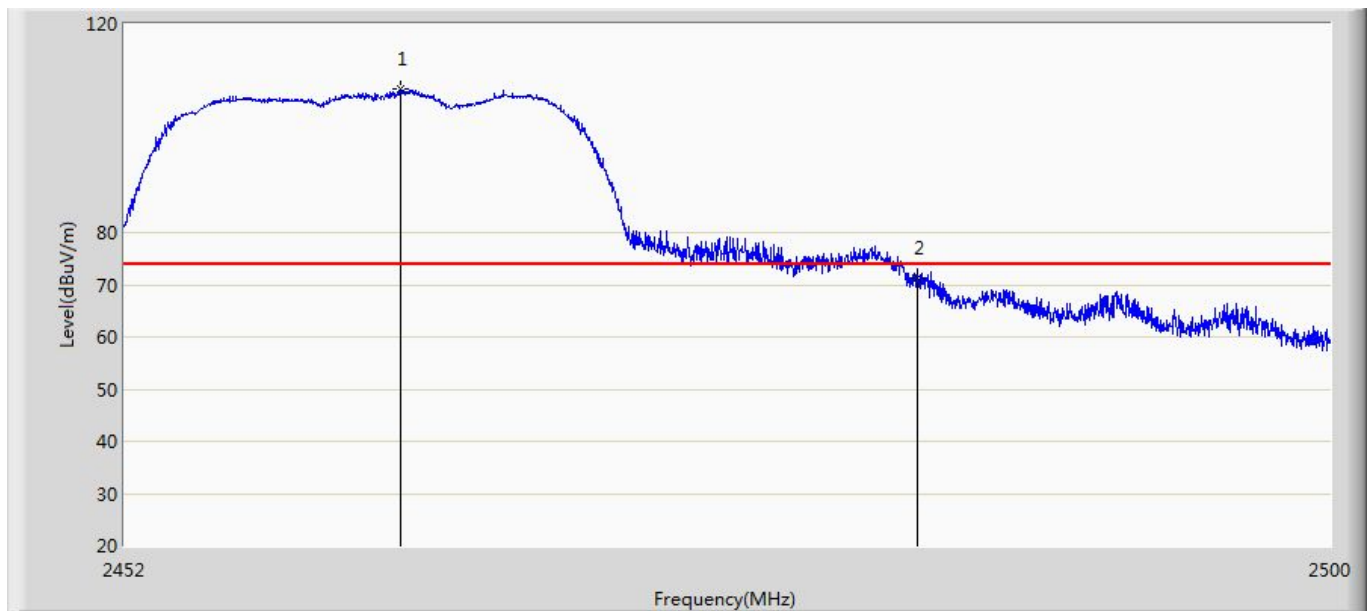
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2455.798	91.942	56.091	37.942	54.000	35.851	AV
2		2483.500	45.118	9.226	-8.882	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



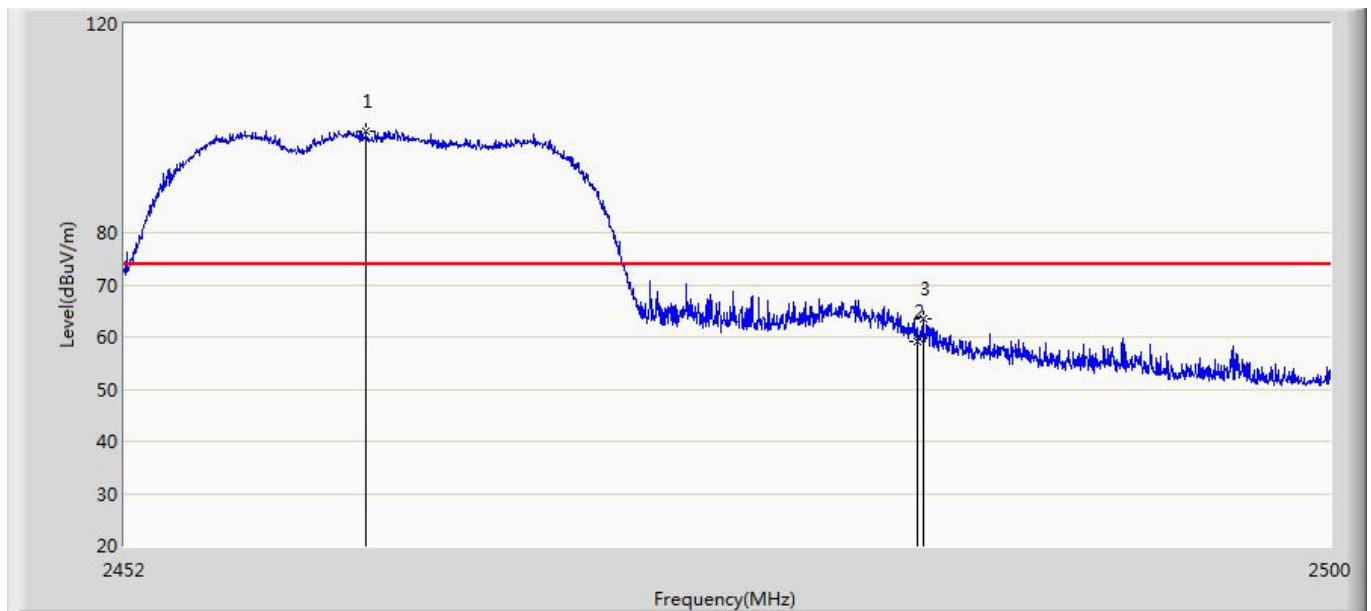
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.016	98.134	62.257	44.134	54.000	35.877	AV
2		2483.500	53.661	17.769	-0.339	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



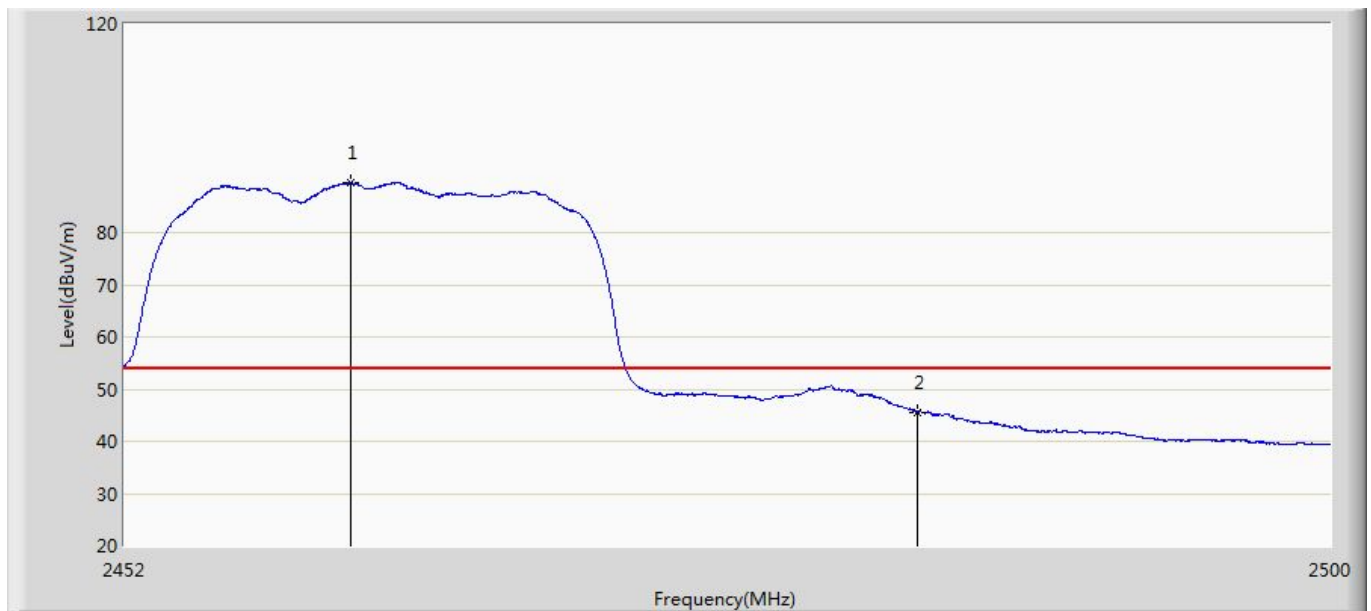
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.944	107.471	71.594	33.471	74.000	35.877	PK
2		2483.500	71.234	35.342	-2.766	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



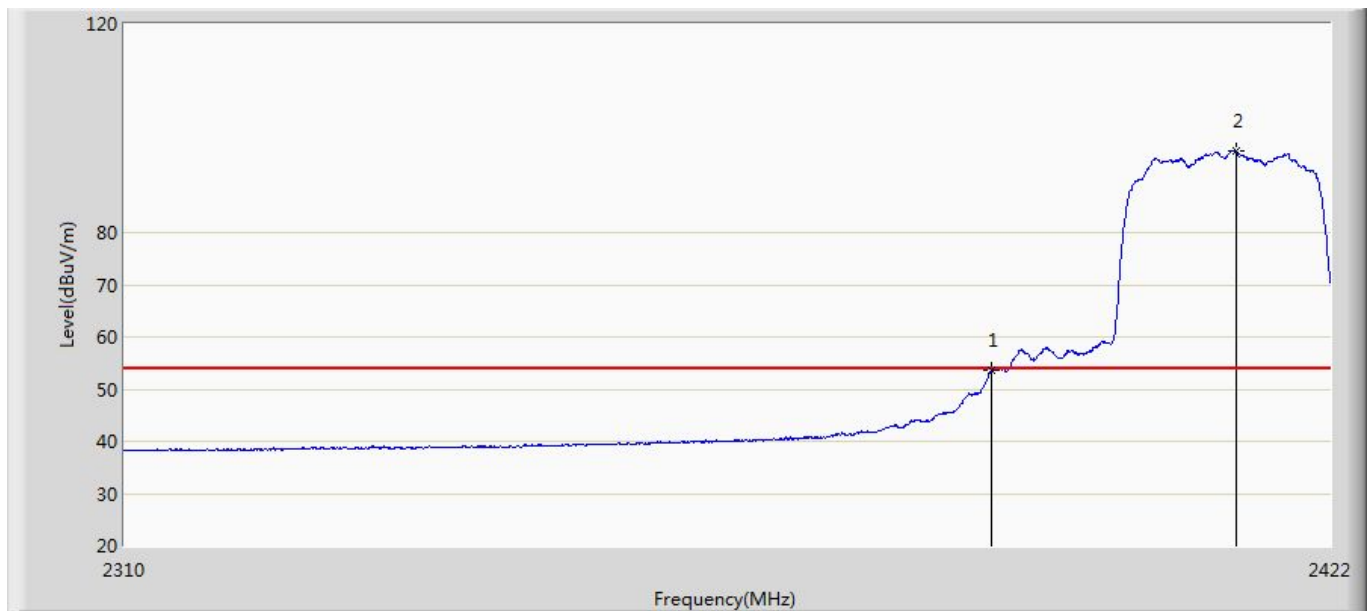
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.576	99.560	63.684	25.560	74.000	35.877	PK
2		2483.500	59.179	23.287	-14.821	74.000	35.891	PK
3		2483.704	63.617	27.724	-10.383	74.000	35.894	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 2: Transmit at 2462MHz by 802.11g	



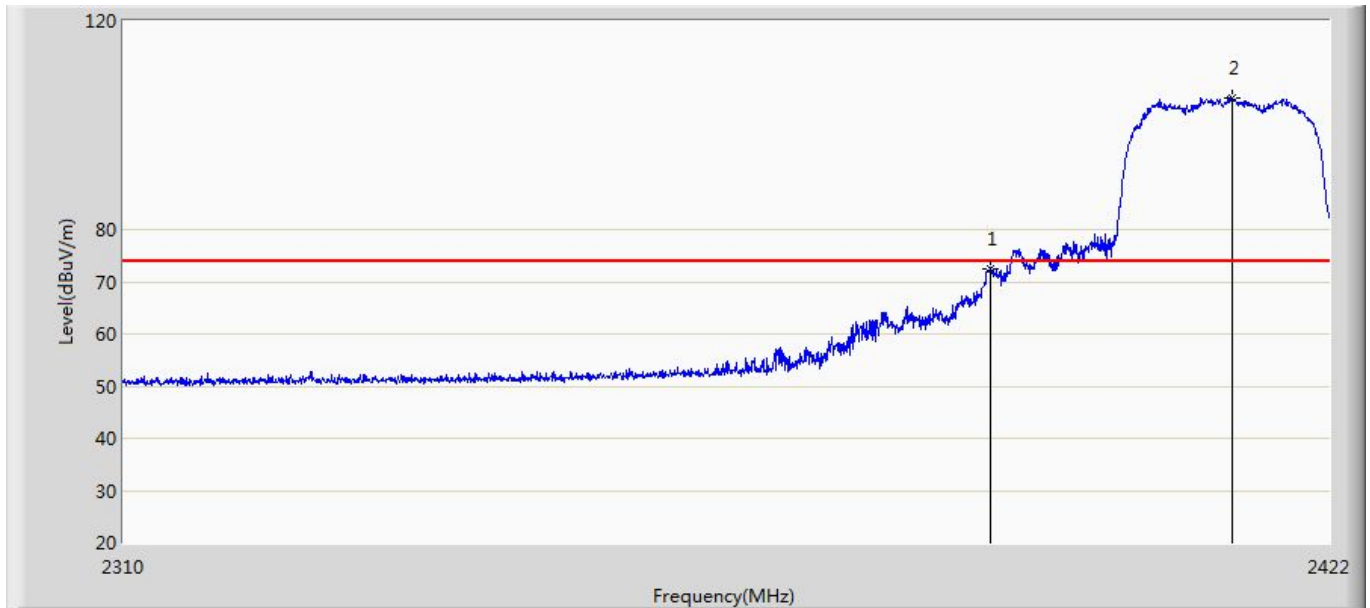
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.928	89.453	53.579	35.453	54.000	35.874	AV
2		2483.500	45.621	9.729	-8.379	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n20	



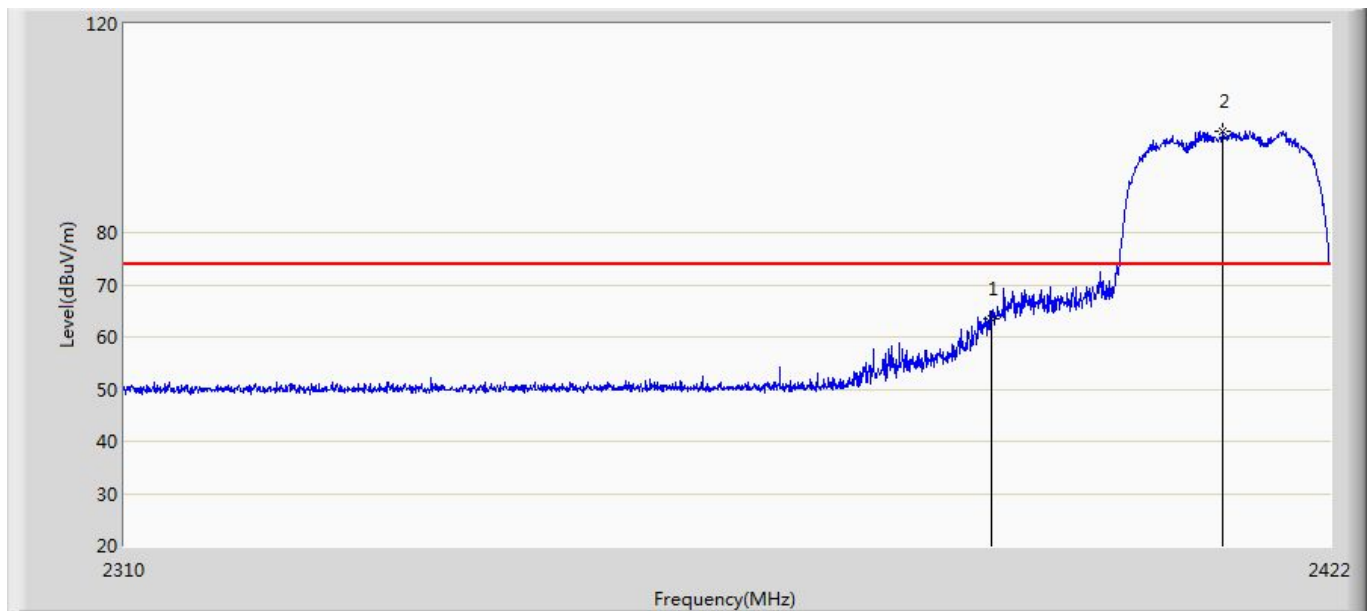
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.716	18.034	-0.284	54.000	35.682	AV
2	*	2413.040	95.657	59.911	41.657	54.000	35.746	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n20	



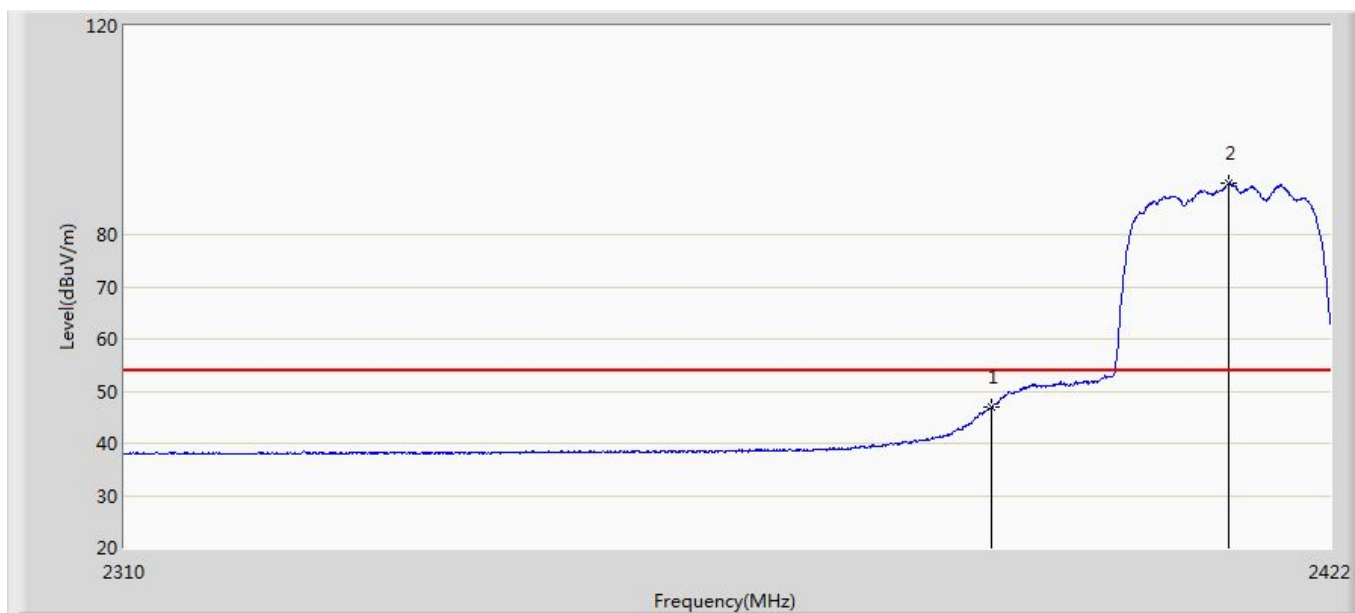
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	72.547	36.865	-1.453	74.000	35.682	PK
2	*	2412.760	105.267	69.522	31.267	74.000	35.744	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 15:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n20	



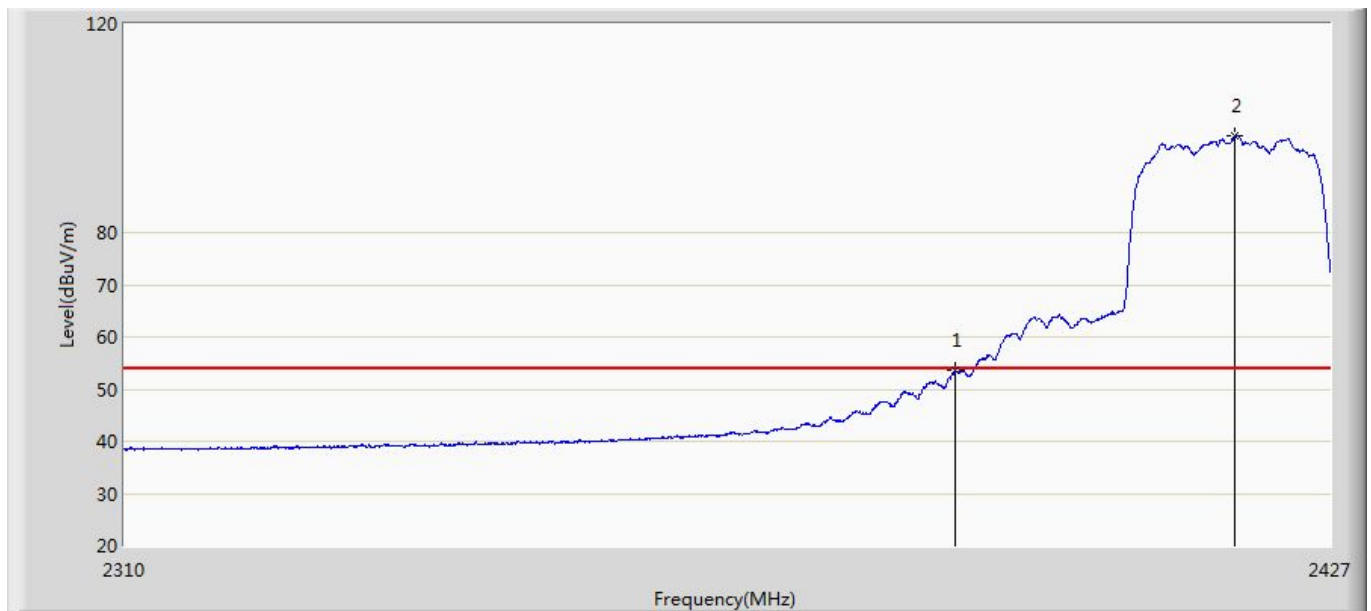
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.554	27.872	-10.446	74.000	35.682	PK
2	*	2411.864	99.447	63.706	25.447	74.000	35.741	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n20	



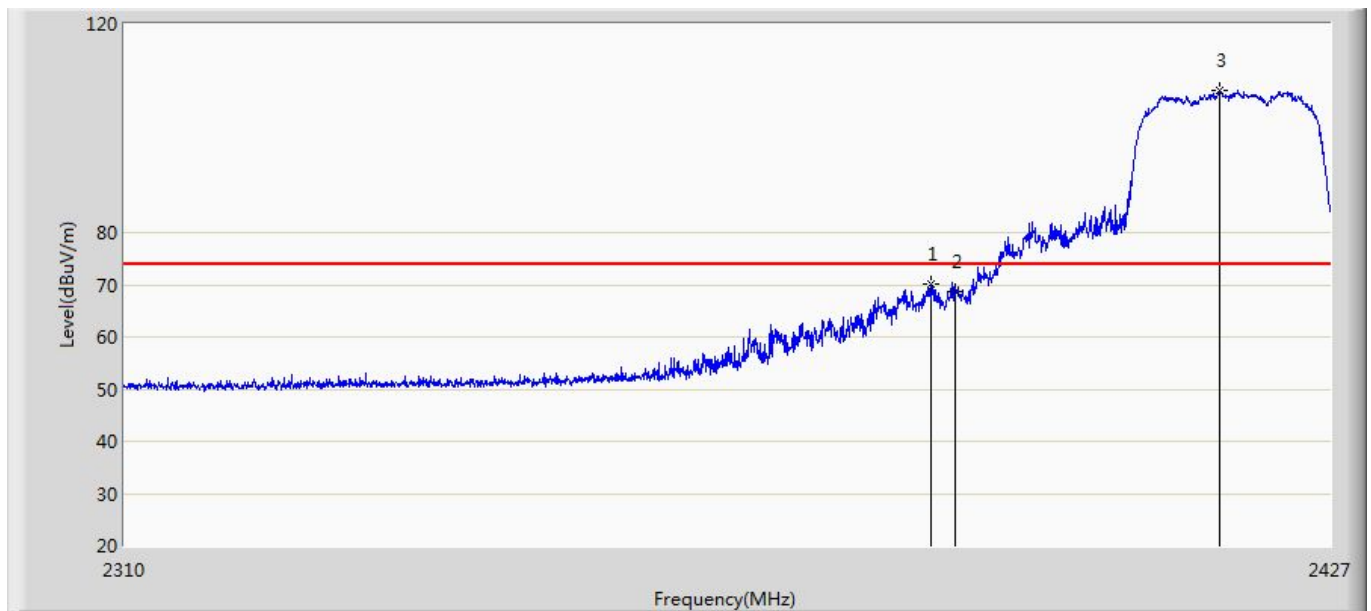
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.828	11.146	-7.172	54.000	35.682	AV
2	*	2412.368	89.721	53.978	35.721	54.000	35.743	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2417MHz by 802.11n20	



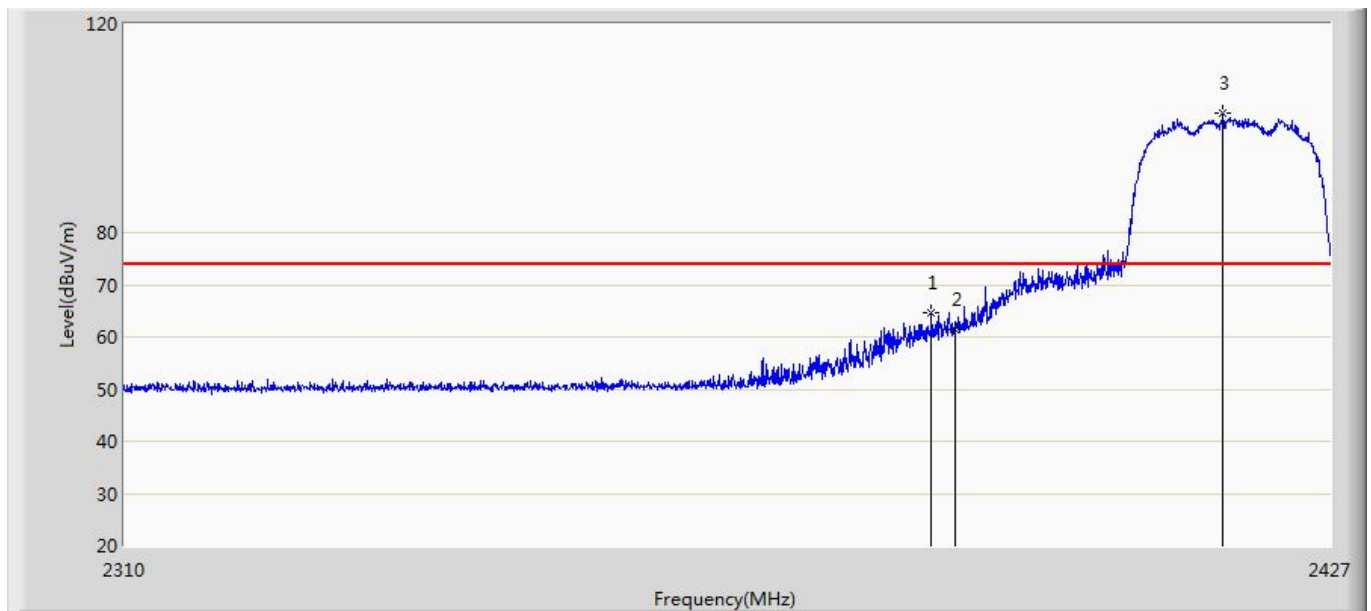
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.683	18.001	-0.317	54.000	35.682	AV
2	*	2417.582	98.458	62.693	44.458	54.000	35.765	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2417MHz by 802.11n20	



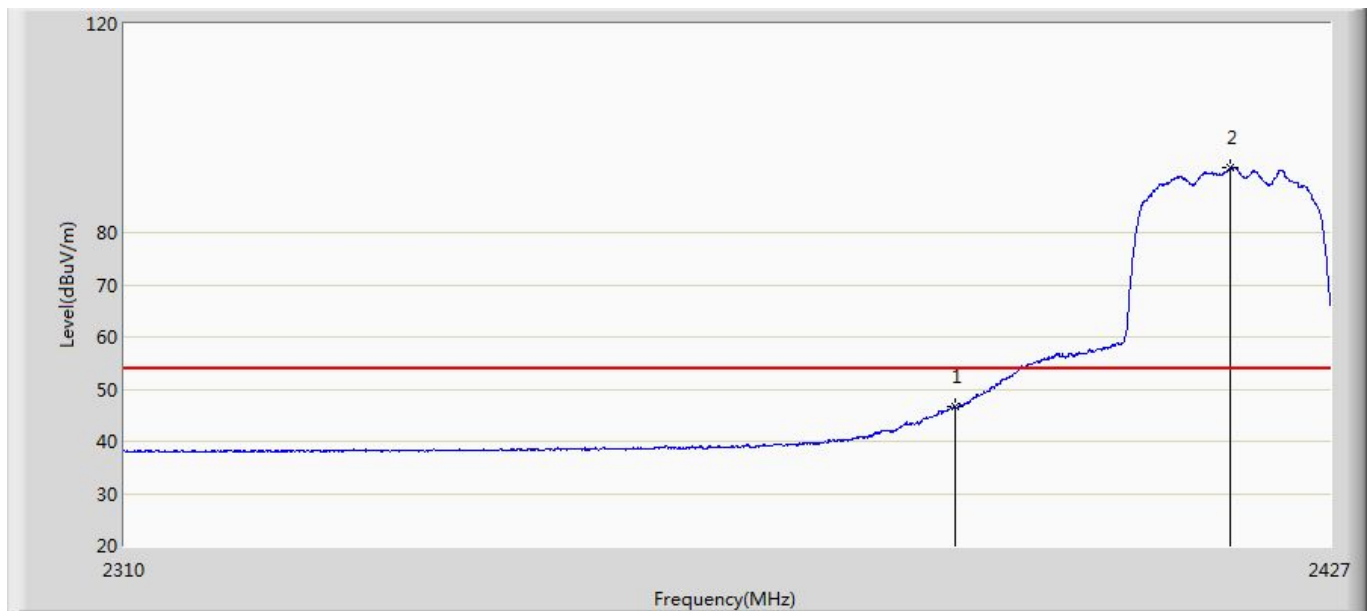
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.629	70.020	34.343	-3.980	74.000	35.676	PK
2		2390.000	68.567	32.885	-5.433	74.000	35.682	PK
3	*	2416.002	107.203	71.445	33.203	74.000	35.758	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2417MHz by 802.11n20	



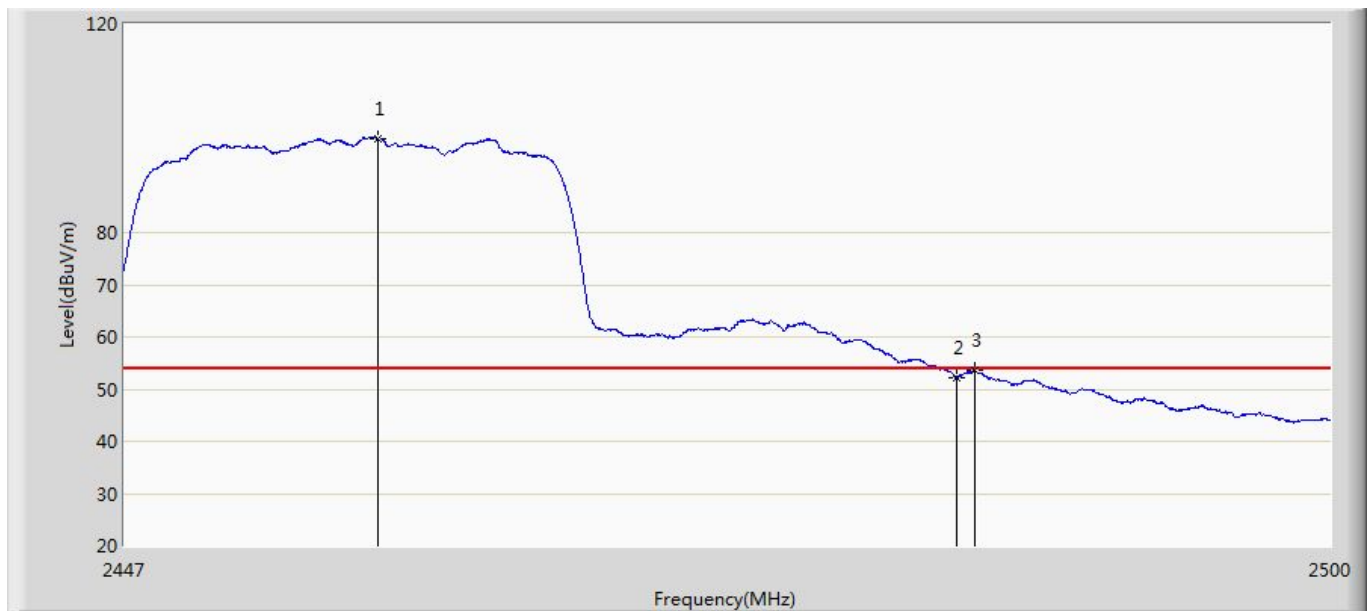
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.688	64.509	28.832	-9.491	74.000	35.676	PK
2		2390.000	61.454	25.772	-12.546	74.000	35.682	PK
3	*	2416.412	102.950	67.190	28.950	74.000	35.760	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2417MHz by 802.11n20	



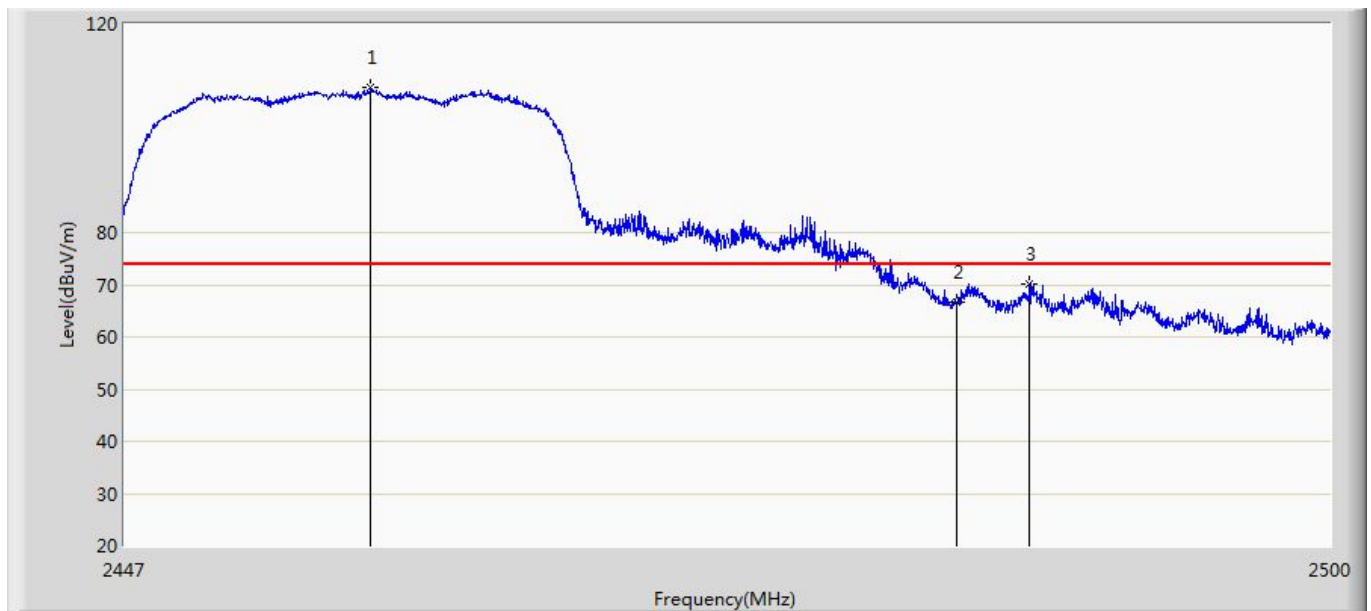
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.546	10.864	-7.454	54.000	35.682	AV
2	*	2417.172	92.546	56.783	38.546	54.000	35.763	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2457MHz by 802.11n20	



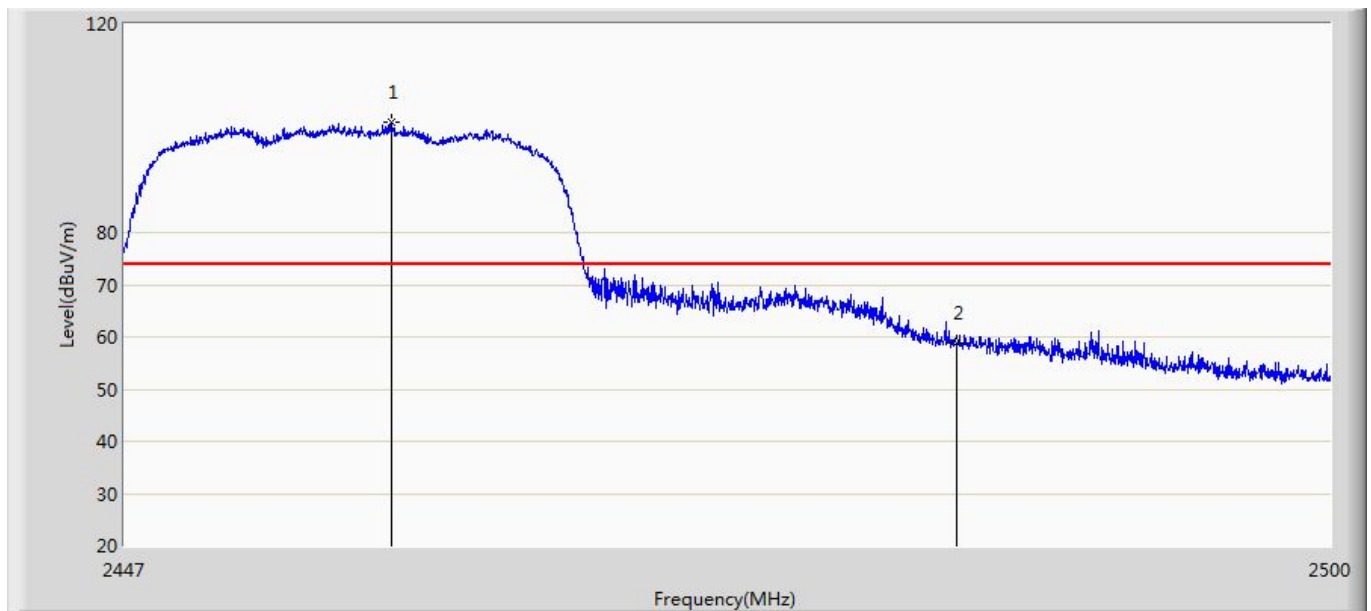
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.077	98.113	62.252	44.113	54.000	35.861	AV
2		2483.500	52.177	16.285	-1.823	54.000	35.891	AV
3		2484.259	53.722	17.825	-0.278	54.000	35.897	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2457MHz by 802.11n20	



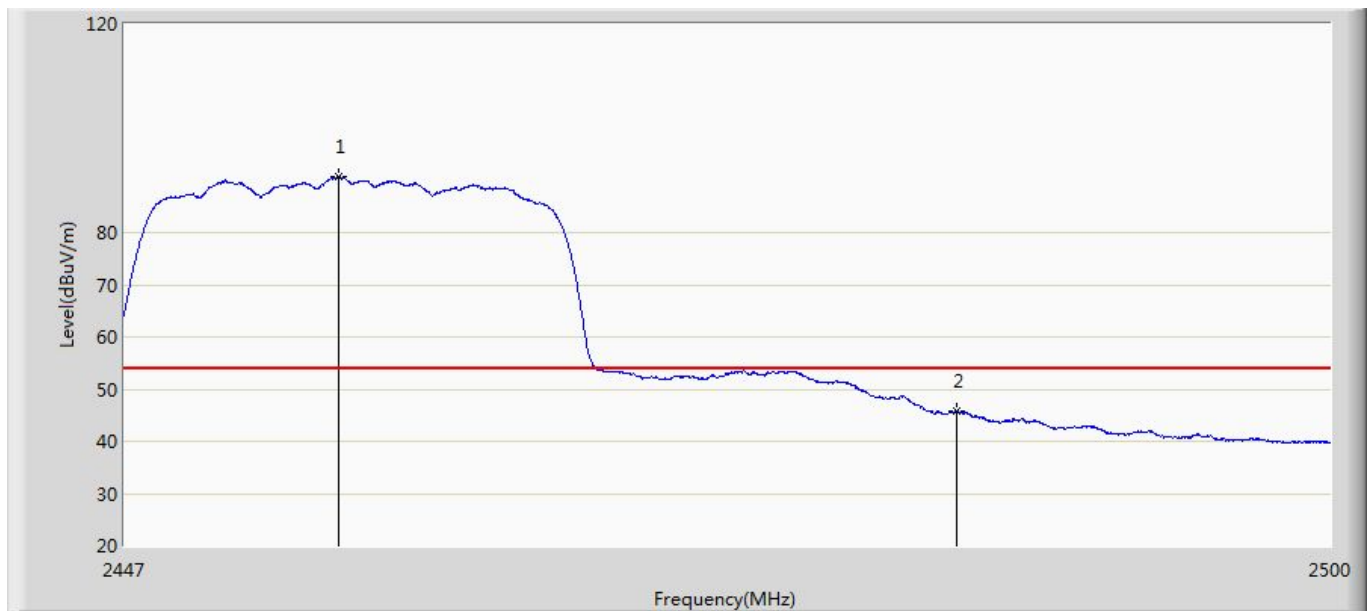
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.732	107.754	71.894	33.754	74.000	35.860	PK
2		2483.500	66.669	30.777	-7.331	74.000	35.891	PK
3		2486.697	70.221	34.306	-3.779	74.000	35.915	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2457MHz by 802.11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.687	101.092	65.228	27.092	74.000	35.864	PK
2		2483.500	58.713	22.821	-15.287	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2457MHz by 802.11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.354	90.662	54.808	36.662	54.000	35.853	AV
2		2483.500	45.732	9.840	-8.268	54.000	35.891	AV

Engineer: Scott

Site: AC5

Time: 2017/02/03 - 16:40

Limit: FCC_Part15.209_RE(3m)

Margin: 0

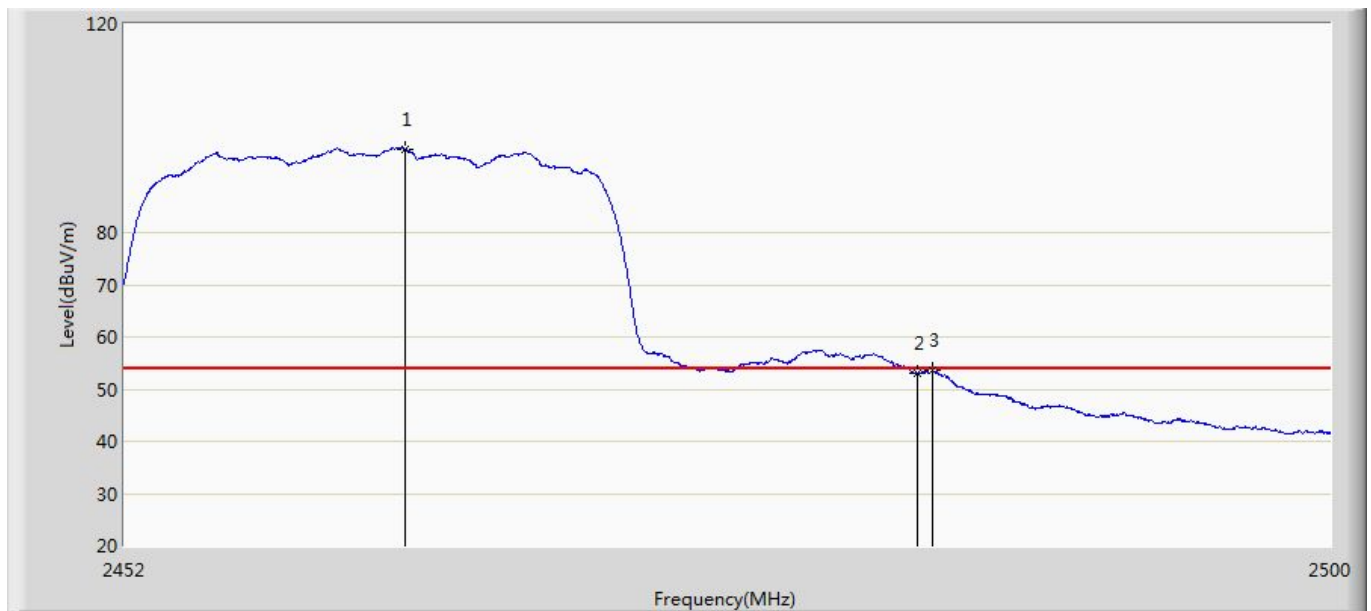
Probe: Horn_3117_00167055(1-18GHz)

Polarity: Vertical

EUT: AC1200 Wireless Dual Band Gigabit Router

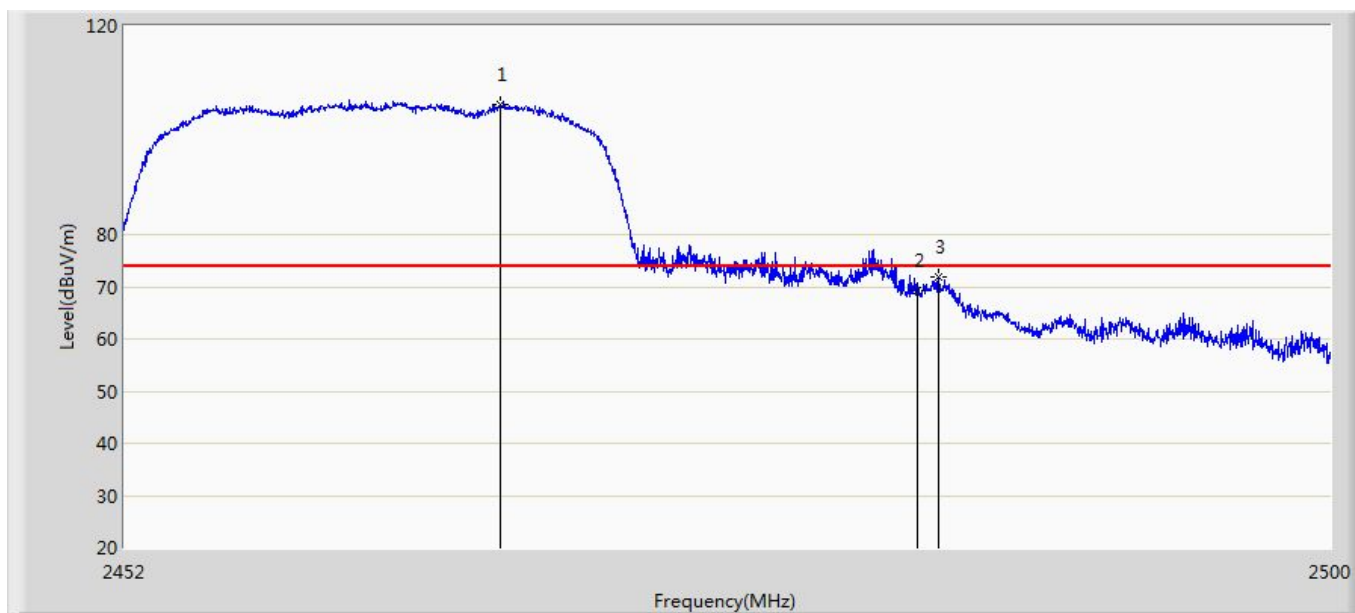
Power: AC 120V/60Hz

Note: Mode 3:Transmit at 2462MHz by 802.11n20



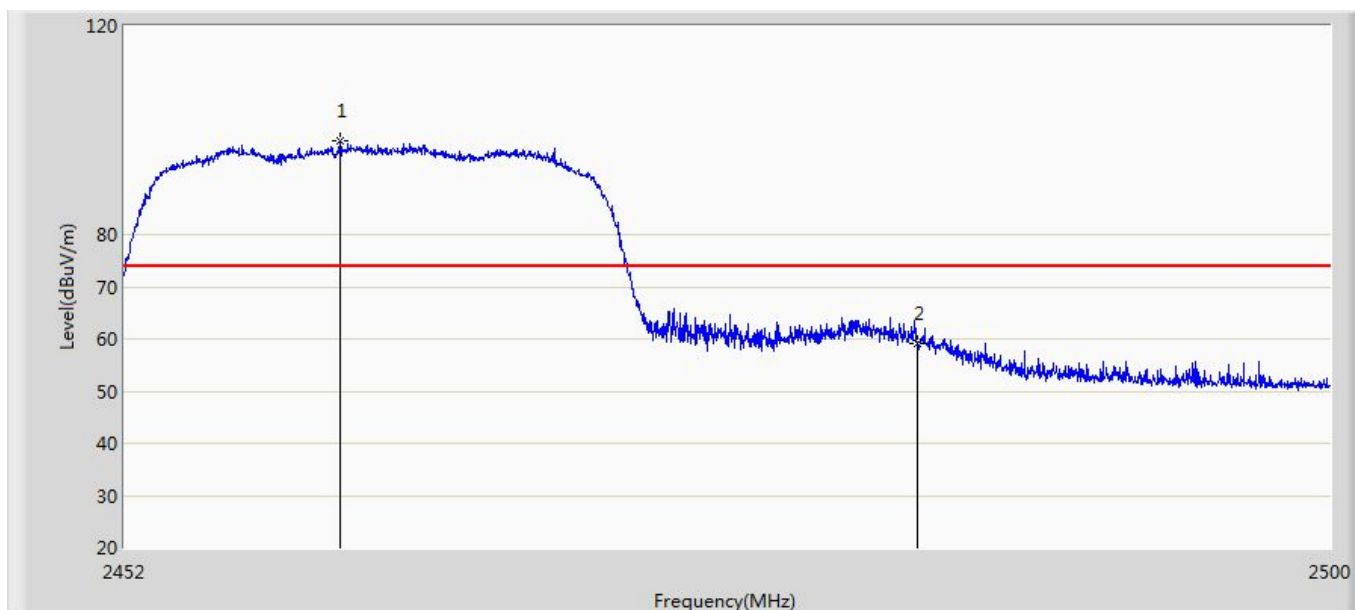
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.088	95.962	60.085	41.962	54.000	35.877	AV
2		2483.500	52.919	17.027	-1.081	54.000	35.891	AV
3		2484.088	53.739	17.843	-0.261	54.000	35.896	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n20	



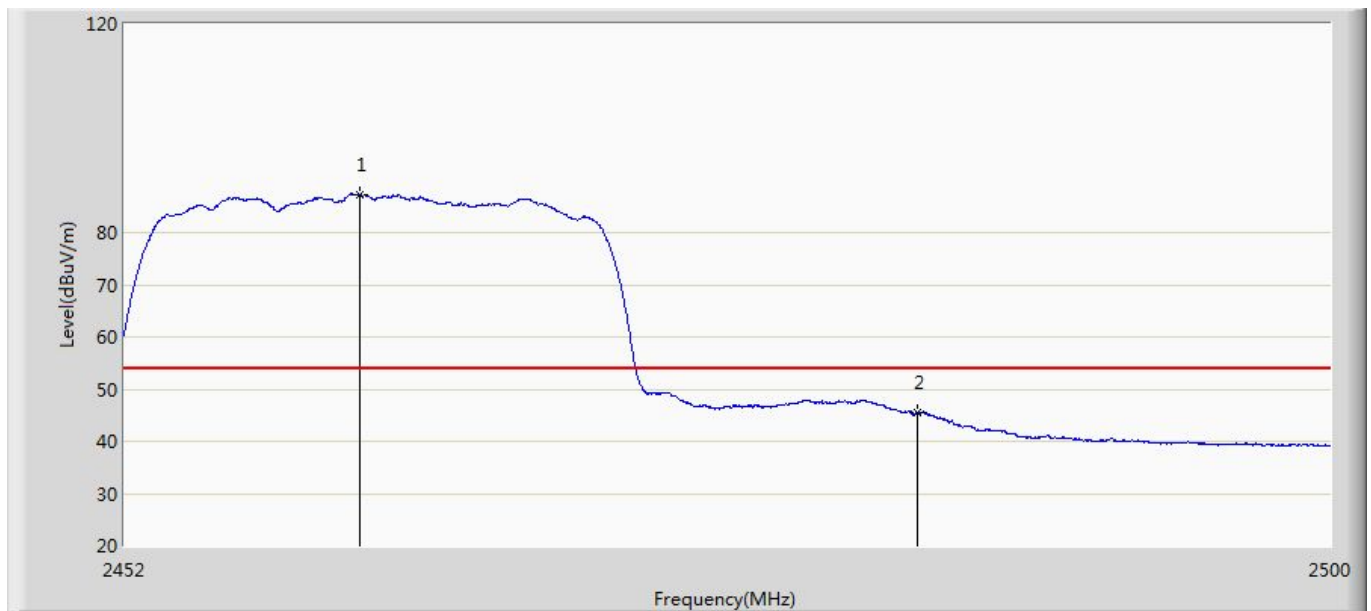
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2466.904	105.043	69.170	31.043	74.000	35.873	PK
2		2483.500	69.196	33.304	-4.804	74.000	35.891	PK
3		2484.304	71.949	36.052	-2.051	74.000	35.897	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 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: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n20	



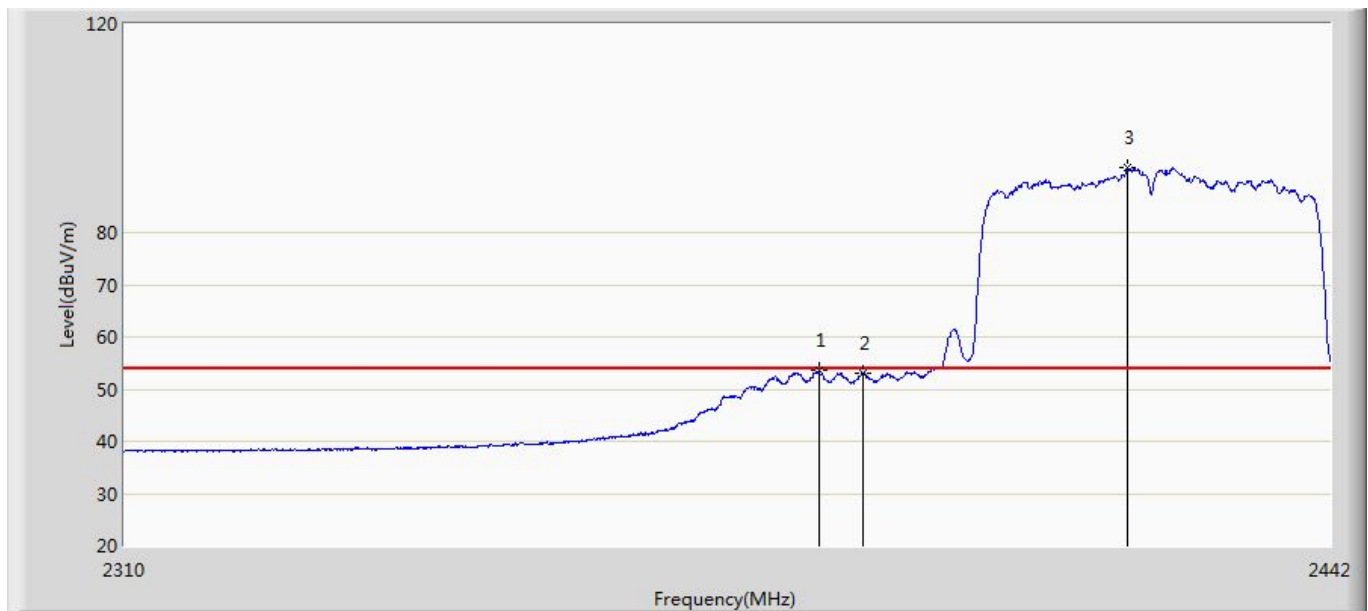
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.544	97.991	62.119	23.991	74.000	35.872	PK
2		2483.500	59.081	23.189	-14.919	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n20	



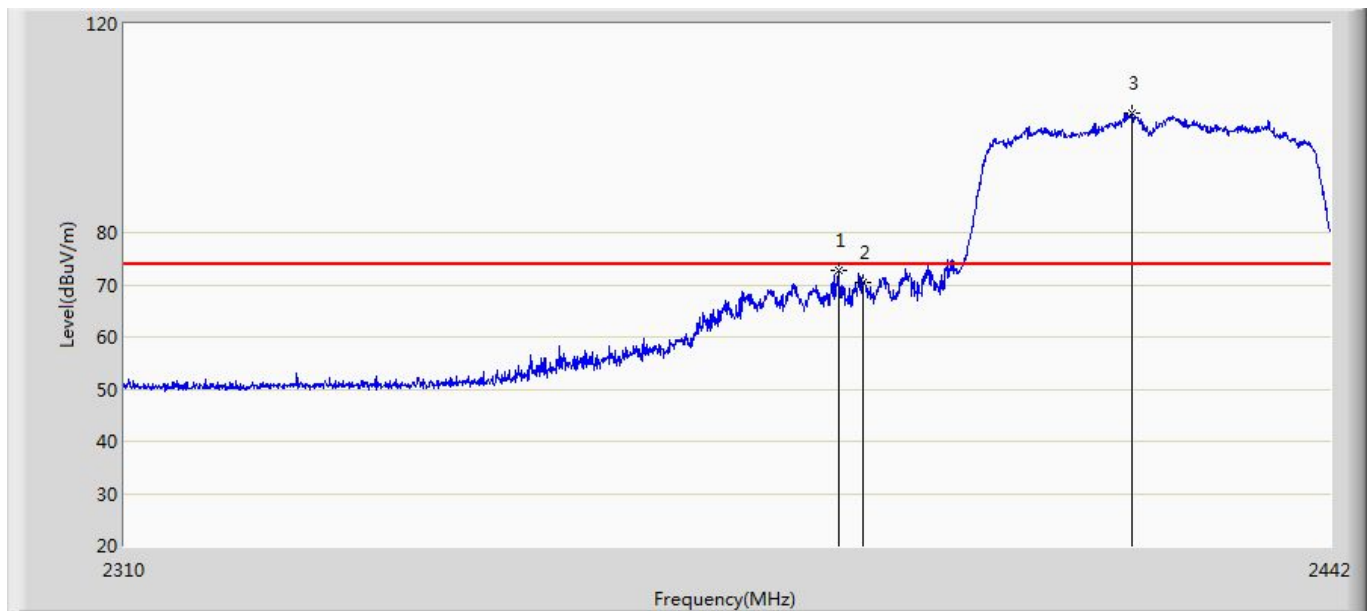
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.288	87.277	51.402	33.277	54.000	35.875	AV
2		2483.500	45.372	9.480	-8.628	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n40	



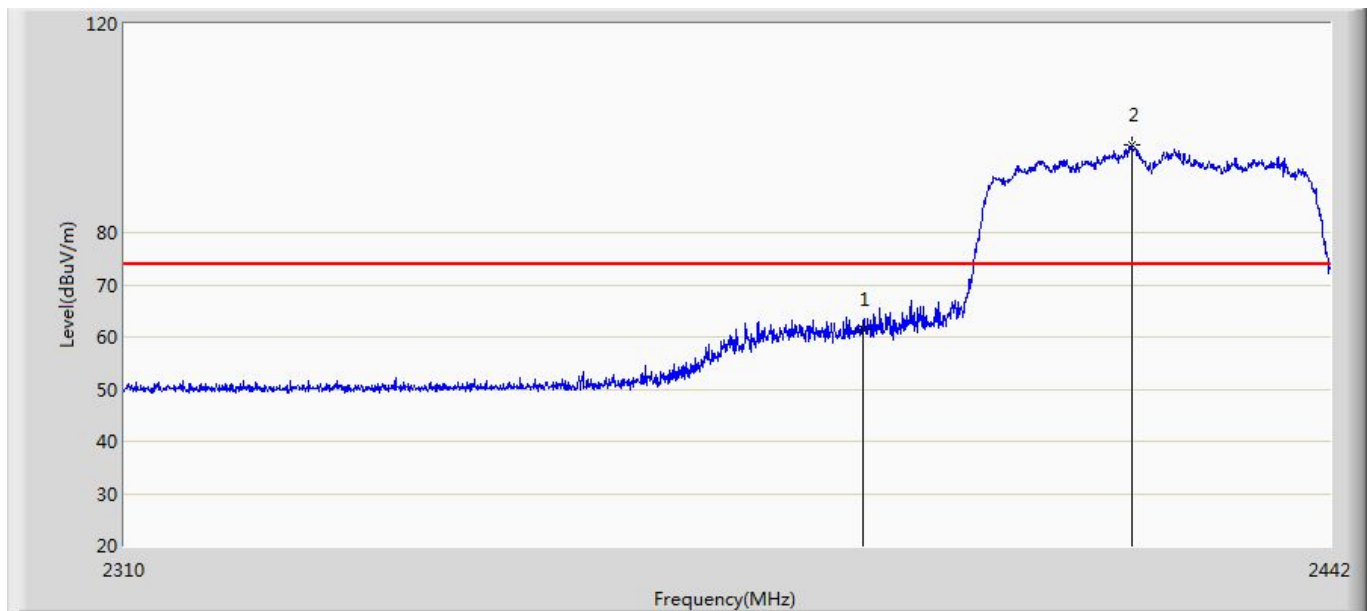
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.240	53.627	17.956	-0.373	54.000	35.671	AV
2		2390.000	53.077	17.395	-0.923	54.000	35.682	AV
3	*	2419.362	92.544	56.772	38.544	54.000	35.772	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n40	



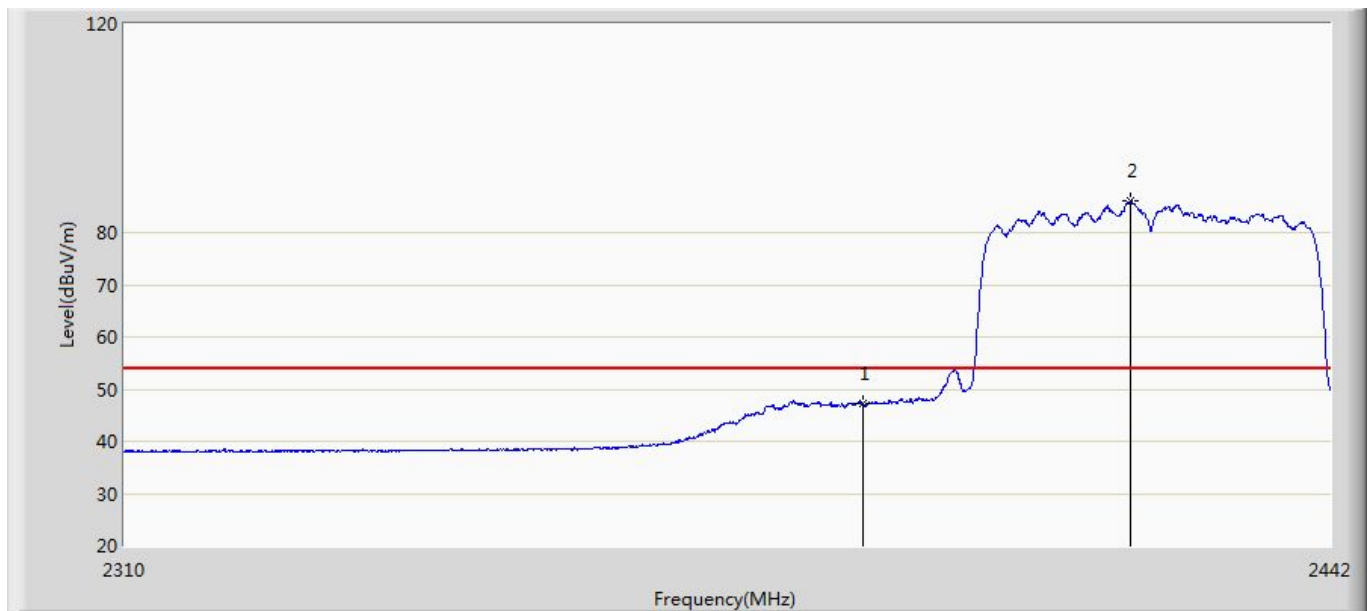
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.286	72.786	37.110	-1.214	74.000	35.676	PK
2		2390.000	70.326	34.644	-3.674	74.000	35.682	PK
3	*	2419.758	102.775	67.001	28.775	74.000	35.774	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 16:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11n40	



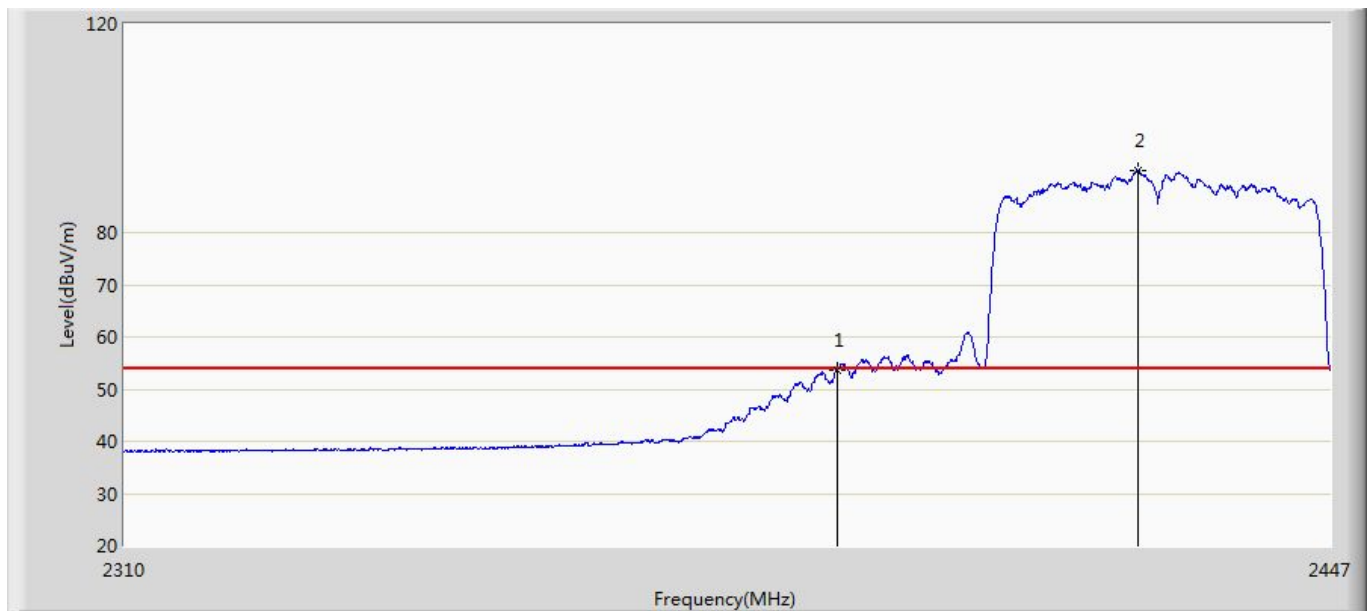
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.341	25.659	-12.659	74.000	35.682	PK
2	*	2419.758	96.772	60.998	22.772	74.000	35.774	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4: Transmit at 2422MHz by 802.11n40	



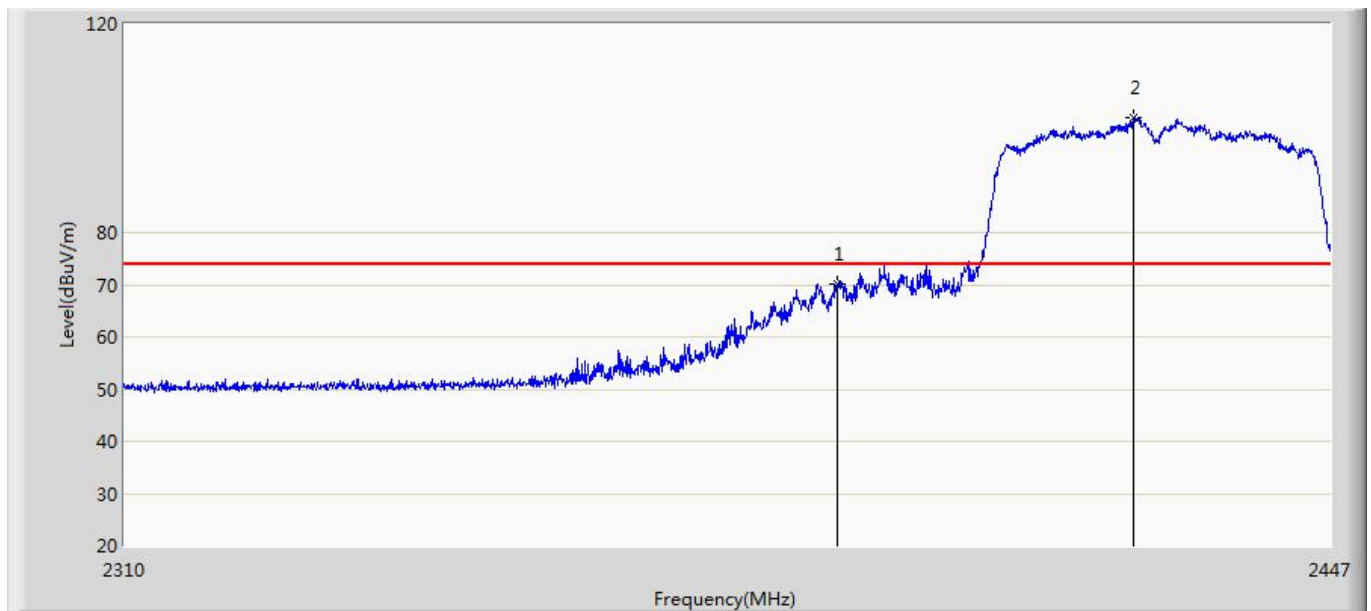
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	47.149	11.467	-6.851	54.000	35.682	AV
2	*	2419.692	86.135	50.361	32.135	54.000	35.774	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2427MHz by 802.11n40	



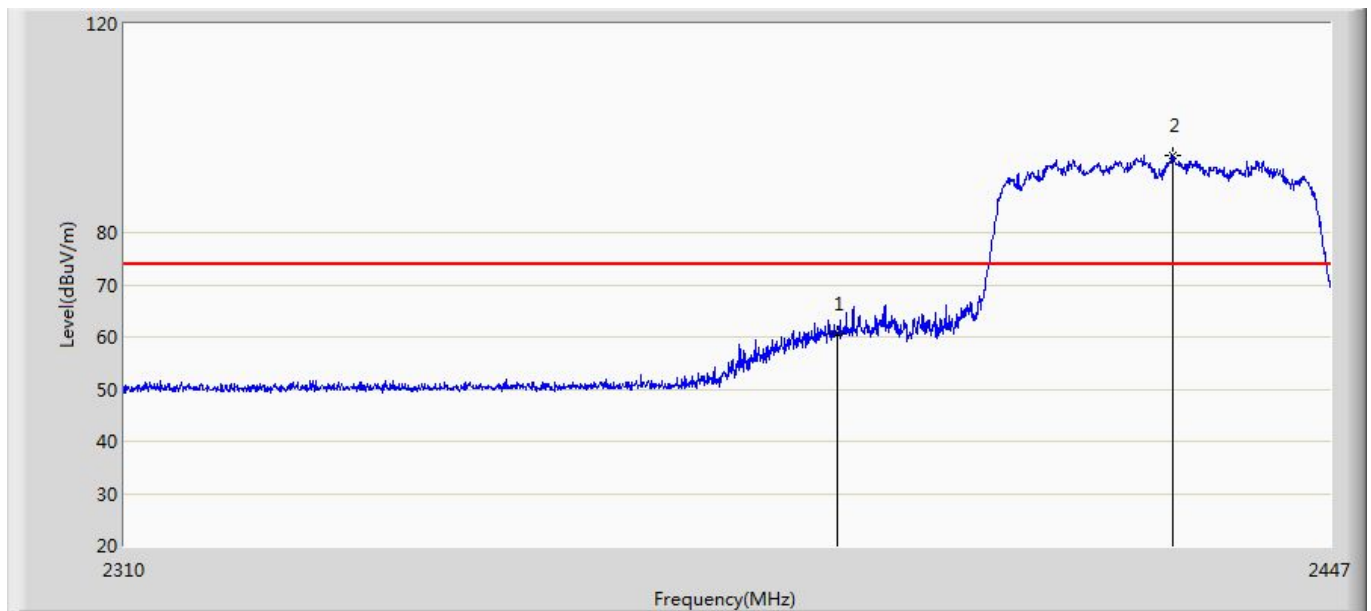
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.692	18.010	-0.308	54.000	35.682	AV
2	*	2424.669	91.906	56.111	37.906	54.000	35.795	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2427MHz by 802.11n40	



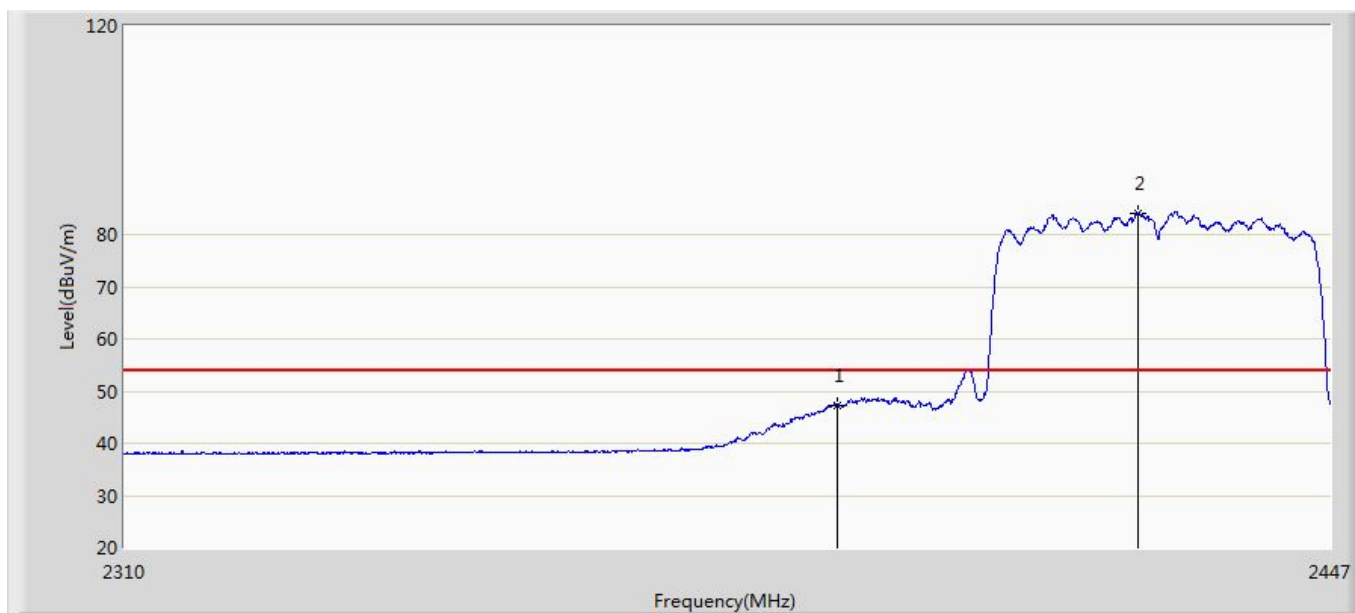
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	70.077	34.395	-3.923	74.000	35.682	PK
2	*	2424.121	101.940	66.148	27.940	74.000	35.792	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 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: AC 120V/60Hz
Note: Mode 4:Transmit at 2427MHz by 802.11n40	



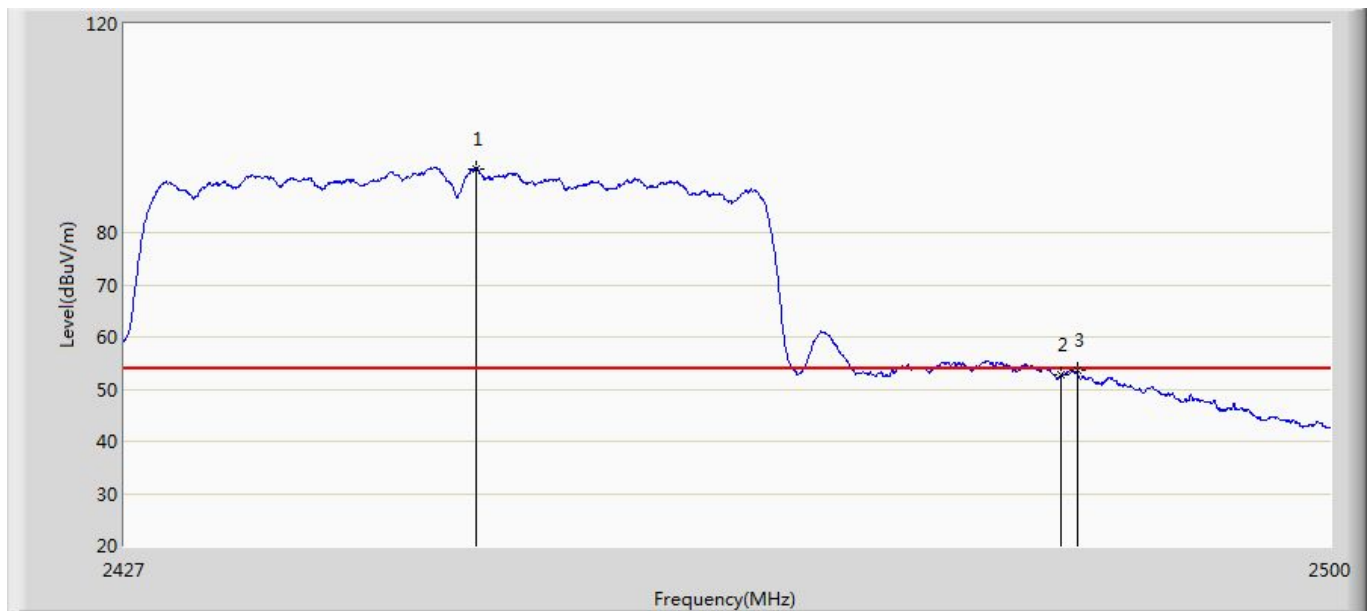
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	60.599	24.917	-13.401	74.000	35.682	PK
2	*	2428.779	94.758	58.950	20.758	74.000	35.808	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4: Transmit at 2427MHz by 802.11n40	



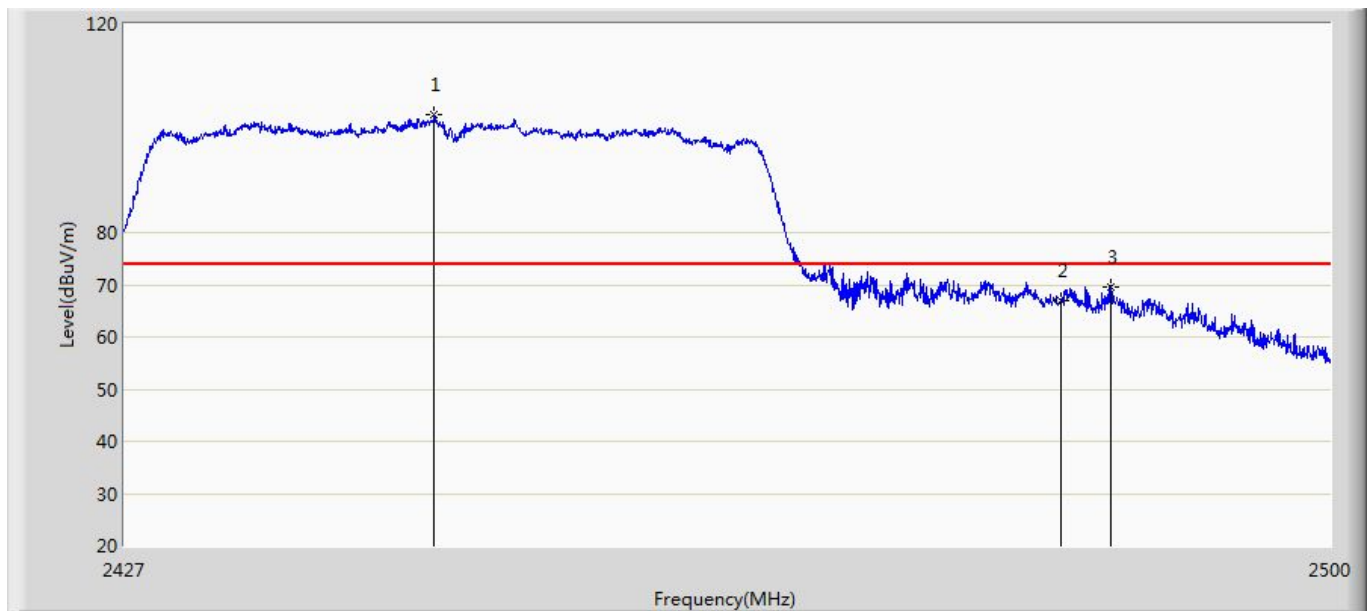
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	47.363	11.681	-6.637	54.000	35.682	AV
2	*	2424.669	84.180	48.385	30.180	54.000	35.795	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 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: AC 120V/60Hz
Note: Mode 4:Transmit at 2447MHz by 802.11n40	



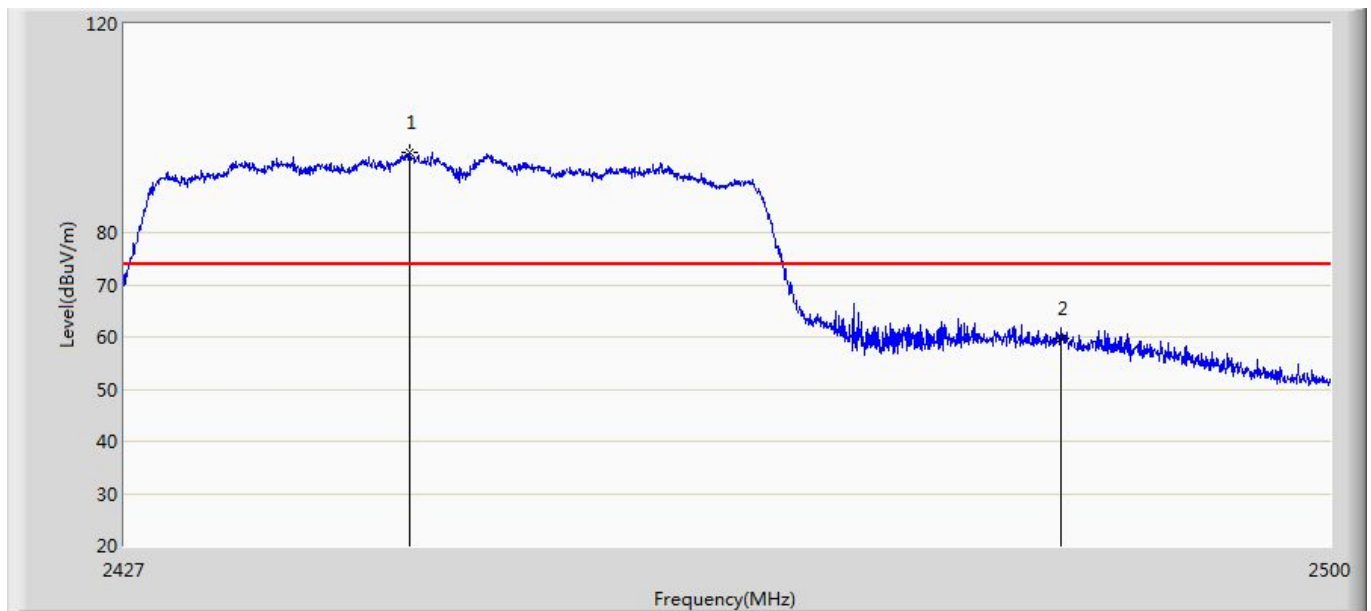
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2448.097	92.296	56.479	38.296	54.000	35.818	AV
2		2483.500	52.654	16.762	-1.346	54.000	35.891	AV
3		2484.524	53.561	17.662	-0.439	54.000	35.899	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4: Transmit at 2447MHz by 802.11n40	



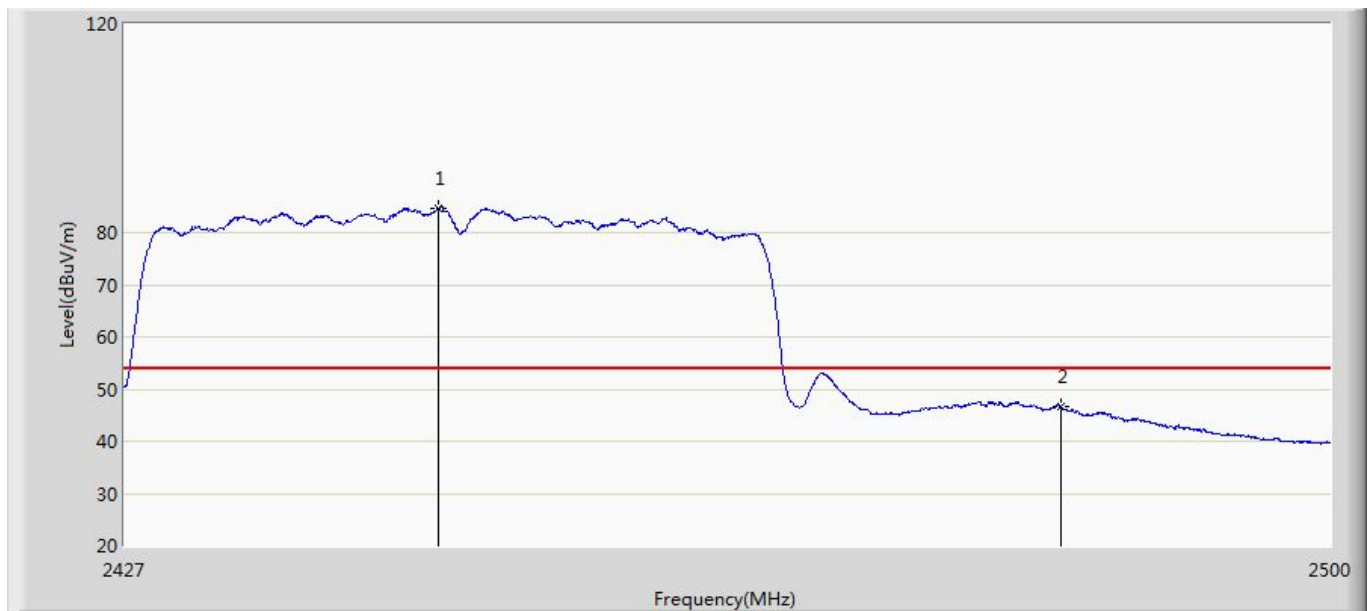
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2445.579	102.607	66.801	28.607	74.000	35.807	PK
2		2483.500	66.907	31.015	-7.093	74.000	35.891	PK
3		2486.531	69.557	33.643	-4.443	74.000	35.914	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2447MHz by 802.11n40	



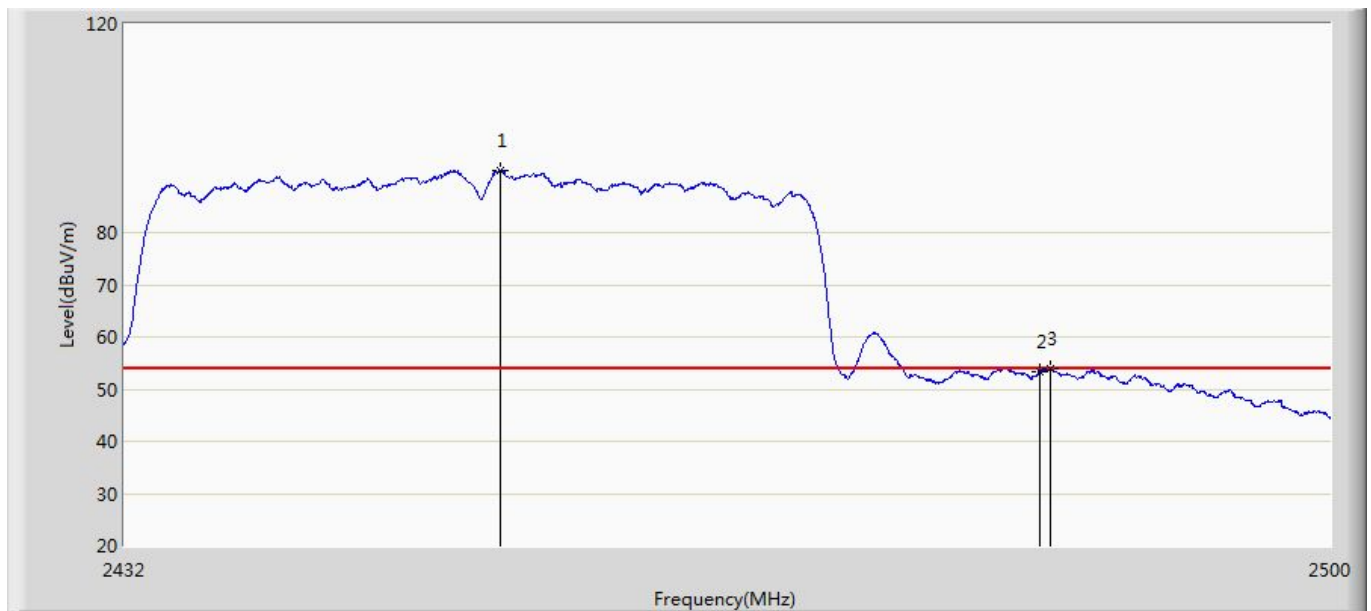
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2444.082	95.377	59.573	21.377	74.000	35.804	PK
2		2483.500	59.640	23.748	-14.360	74.000	35.891	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4: Transmit at 2447MHz by 802.11n40	



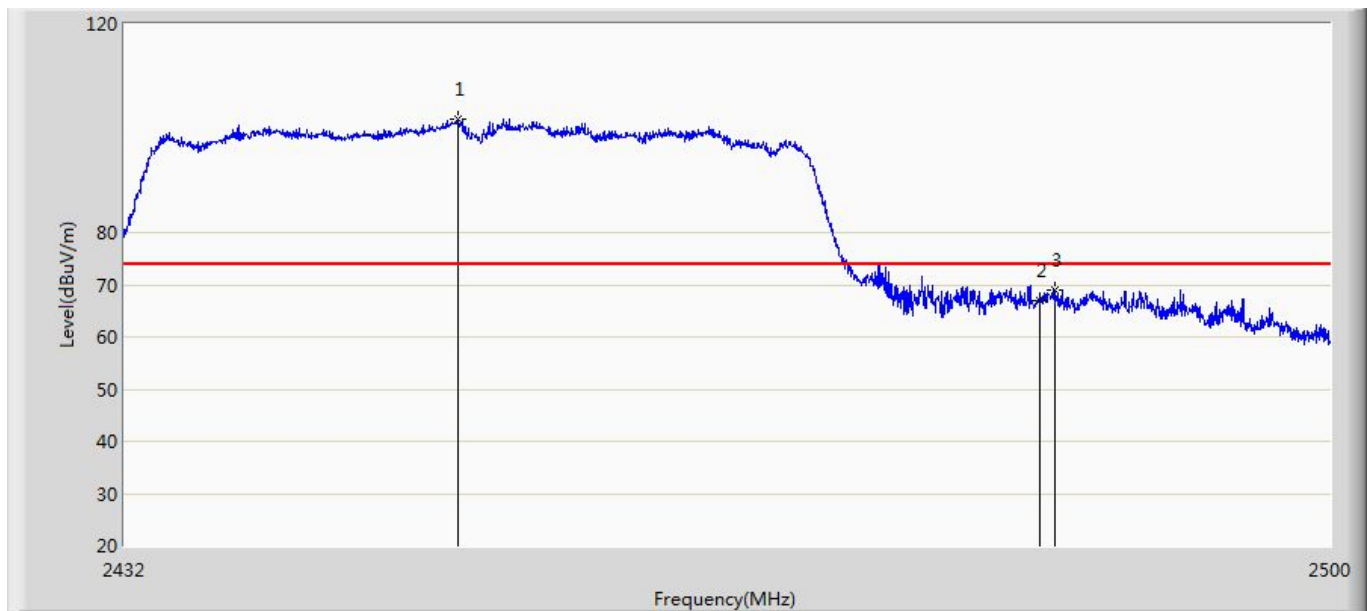
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2445.834	84.758	48.950	30.758	54.000	35.808	AV
2		2483.500	46.691	10.799	-7.309	54.000	35.891	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 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: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11n40	



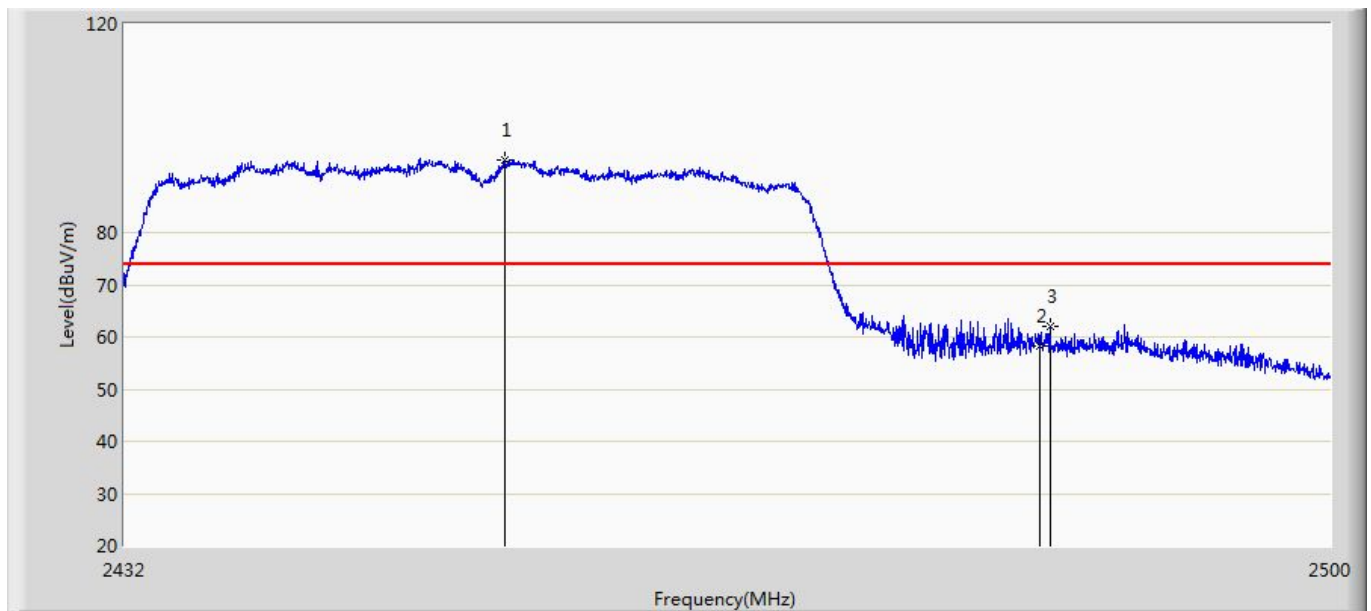
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2452.978	91.910	56.071	37.910	54.000	35.838	AV
2		2483.500	53.447	17.555	-0.553	54.000	35.891	AV
3		2484.054	53.946	18.050	-0.054	54.000	35.896	AV

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11n40	



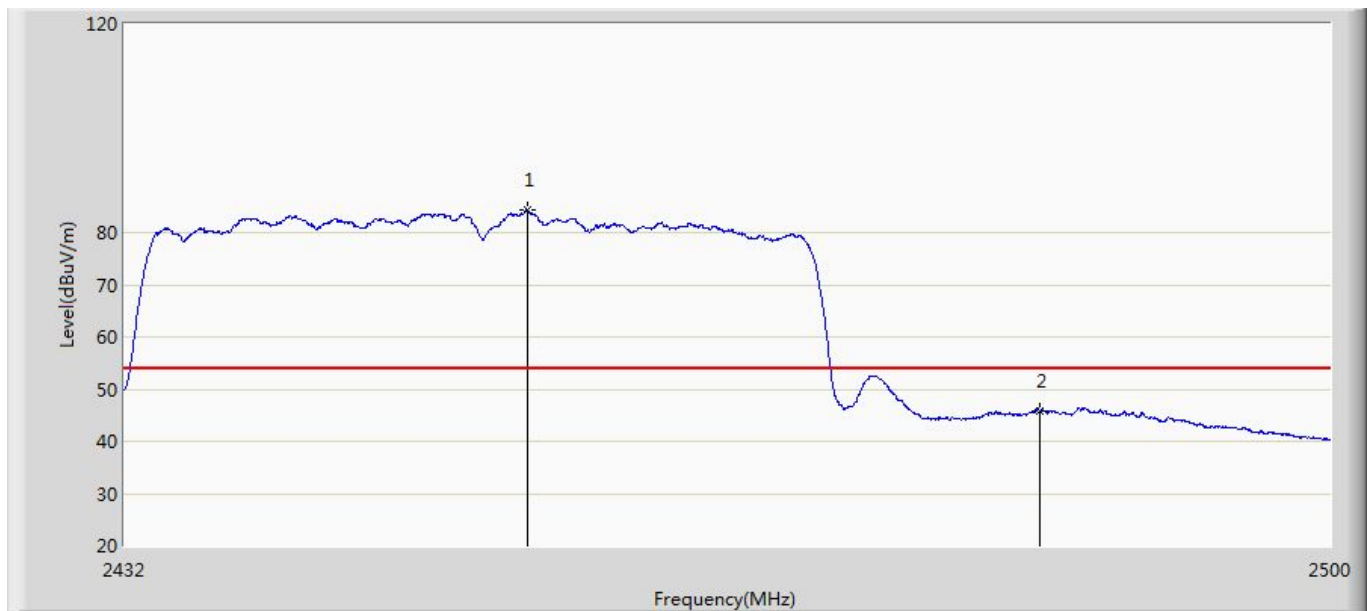
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2450.632	101.801	65.972	27.801	74.000	35.829	PK
2		2483.500	66.882	30.990	-7.118	74.000	35.891	PK
3		2484.360	69.001	33.103	-4.999	74.000	35.898	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 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: AC 120V/60Hz
Note: Mode 4: Transmit at 2452MHz by 802.11n40	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2453.284	93.828	57.988	19.828	74.000	35.840	PK
2		2483.500	58.184	22.292	-15.816	74.000	35.891	PK
3		2484.054	62.153	26.257	-11.847	74.000	35.896	PK

Engineer: Scott	
Site: AC5	Time: 2017/02/03 - 17:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AC1200 Wireless Dual Band Gigabit Router	Power: AC 120V/60Hz
Note: Mode 4: Transmit at 2452MHz by 802.11n40	



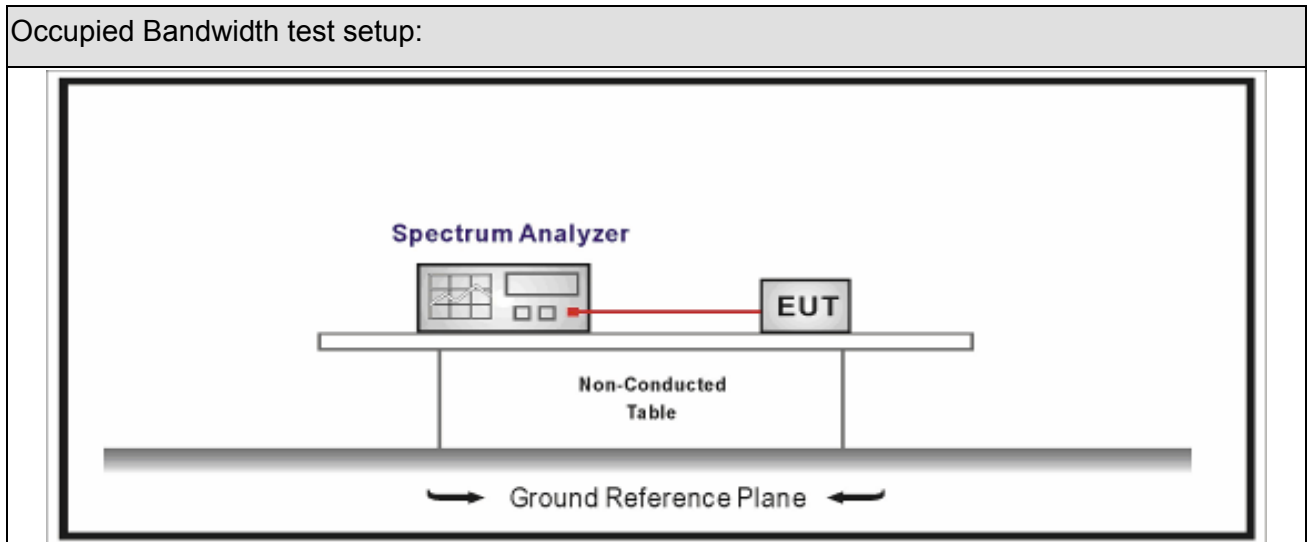
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.542	84.418	48.572	30.418	54.000	35.845	AV
2		2483.500	45.735	9.843	-8.265	54.000	35.891	AV

7. Occupied Bandwidth

7.1. Test Equipment

Occupied Bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.08
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

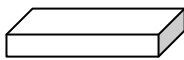
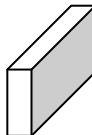
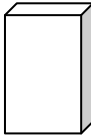
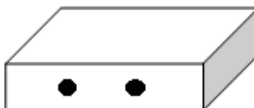
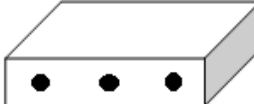
Occupied Bandwidth

Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

7.4. Test Procedure

Test Method				
	Reference Rule		Chapter	Description
☒	ANSI C63.10		11.8	DTS bandwidth
	☐	ANSI C63.10	11.8.1	Option 1
	☒	ANSI C63.10	11.8.2	Option 2

7.5. EUT test definition

Item	Occupied Bandwidth			
Device Category	☒	Fixed position use		
	☐	Mobile position use		
Test mode	Mode 1~4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

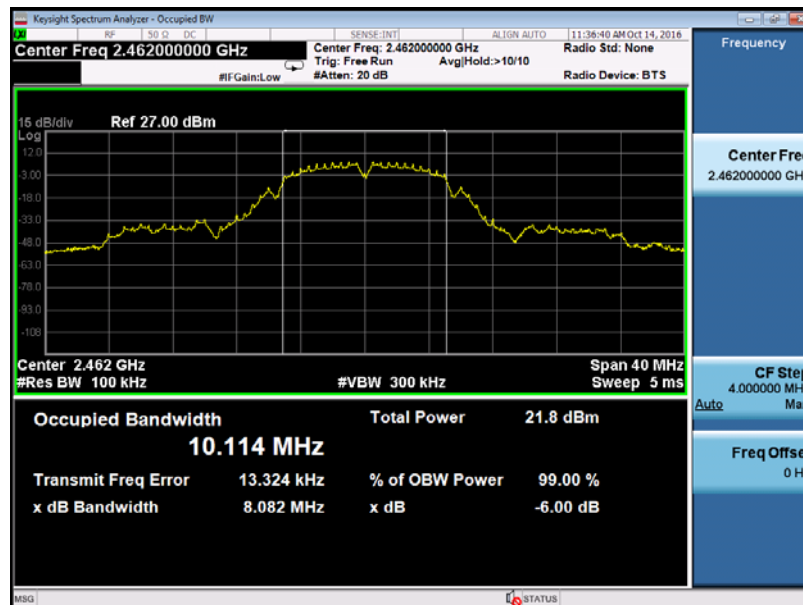
7.6. Test Result

Product Name	: AC1200 Wireless Dual Band Gigabit Router	Power	: AC 120V/60Hz
Test Mode	: Mode1~4	Test Site	: TR8
Test Date	: 2017.01.31		

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)		6dB Occupied Bandwidth (MHz)		Limit (kHz)	Result
			Ant0	Ant1	Ant0	Ant1		
1	01	2412	10.106	N/A	8.137	N/A	>500	Pass
1	06	2437	10.161	N/A	8.791	N/A	>500	Pass
1	11	2462	10.114	N/A	8.082	N/A	>500	Pass
2	01	2412	16.277	16.286	15.06	15.10	>500	Pass
2	06	2437	16.315	16.298	15.09	15.10	>500	Pass
2	11	2462	16.279	16.325	15.07	15.08	>500	Pass
3	01	2412	17.426	17.438	15.09	15.10	>500	Pass
3	06	2437	17.443	18.265	15.11	17.26	>500	Pass
3	11	2462	17.423	17.433	15.09	16.26	>500	Pass
4	03	2422	36.069	36.114	35.11	35.65	>500	Pass
4	06	2437	36.090	36.187	35.08	36.29	>500	Pass
4	09	2452	36.080	36.140	35.09	36.05	>500	Pass

Note : The worst case of Occupied Bandwidth as below:

Mode 1 CH11 (2462MHz) Ant0



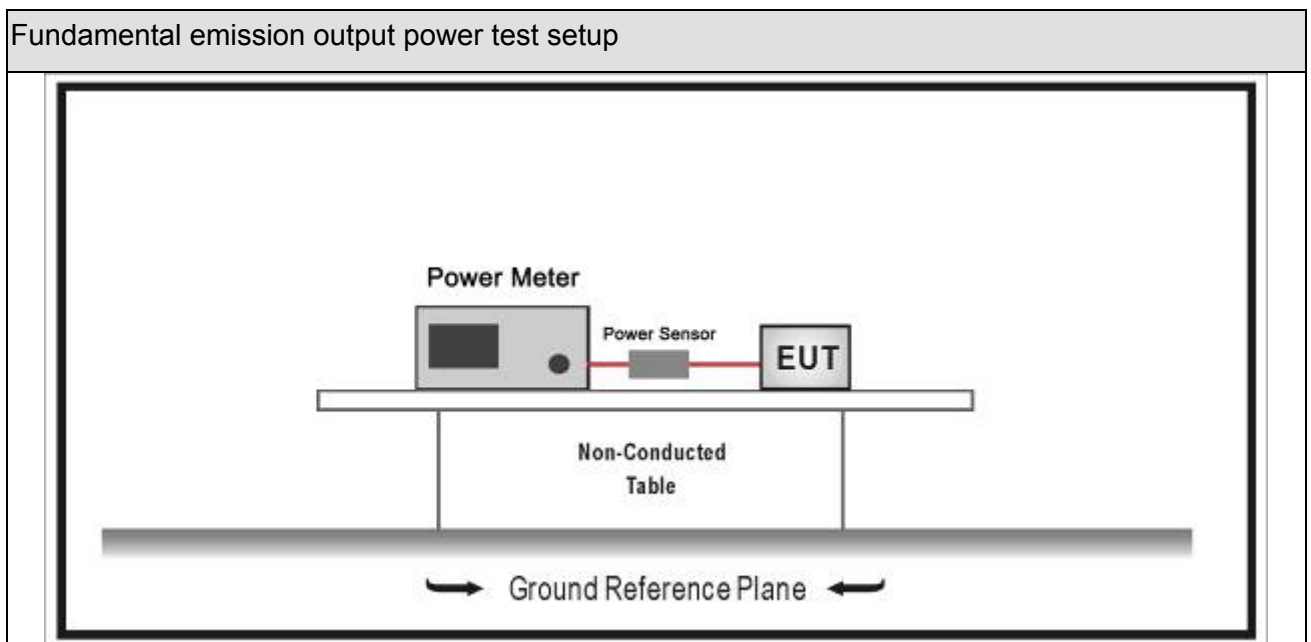
8. Fundamental emission output power

8.1. Test Equipment

Fundamental emission output power/ TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.03	2018.01.02
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2016.10.14	2017.10.13
Power Sensor	Anritsu	MA2411B	0846014	2016.10.14	2017.10.13
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

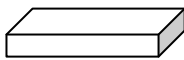
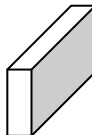
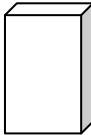
Fundamental emission output power Limit		
☒	$G_{TX} < 6\text{dBi}$	$P_{out} \leq 30\text{dBm}$
☒	$G_{TX} > 6\text{dBi}$	
☒	Non-Fix point-point	$P_{out} \leq 30 - (G_{TX} - 6)$
☐	Fix point-point	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
☐	emits multiple directional beams but does not do emit multiple directional beams simultaneously	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
☐	operates simultaneously on multiple directional beams using the same or different frequency channels	$P_{out} \leq 30 - [(G_{TX} - 6)]/3 + 8\text{dB}$
☐	single directional beam	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
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			11.9	Fundamental emission output power	
	☐	ANSI C63.10		11.9.1	Maximum peak conducted output power	
		☐	ANSI C63.10	11.9.1.1	RBW ≥ DTS bandwidth	
		☐	ANSI C63.10	11.9.1.2	Integrated band power method	
		☐	ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method	
	☒	ANSI C63.10		11.9.2	Maximum conducted (average) output power	
		☐	ANSI C63.10		11.9.2.2	Measurement using a spectrum analyzer (SA)
			☐	ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle≥98%)
			☐	ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle≥98%)
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle≤98%)
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle≤98%)
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-3
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-3A
		☒	ANSI C63.10		11.9.2.3	Measurement using a power meter (PM)
			☐	ANSI C63.10	11.9.2.3.1	Method AVGPM
			☒	ANSI C63.10	11.9.2.3.2	Method AVGPM-G

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
	☐	KDB 662911	F2)c) (i)	Cross-polarized antennas with NANT = 2.
	☐	KDB 662911	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. EUT test definition

Item	Fundamental emission output power			
Device Category	☒	Fixed position use		
	☐	Mobile position use		
Test mode	Mode 1~4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

8.6. Test Result

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Mode	:	Mode1~4	Test Site	:	TR8
Test Date	:	2017.01.31			

Mode	Channel	Test Frequency (MHz)	Average Power Output (dBm)		Total Average (dBm)	Antenna Gain (dBi)	Limit (dBm)	Result
			Ant0	Ant1				
1	1	2412	18.76	N/A	18.76	1.5	30	Pass
1	2	2417	20.61	N/A	20.61	1.5	30	Pass
1	6	2437	21.29	N/A	21.29	1.5	30	Pass
1	10	2457	18.67	N/A	18.67	1.5	30	Pass
1	11	2462	16.68	N/A	16.68	1.5	30	Pass
2	1	2412	13.88	14.39	17.15	1.5	30	Pass
2	2	2417	15.14	15.61	18.39	1.5	30	Pass
2	6	2437	20.01	19.93	22.98	1.5	30	Pass
2	10	2457	15.21	15.26	18.25	1.5	30	Pass
2	11	2462	12.19	12.65	15.44	1.5	30	Pass
3	1	2412	12.46	13.01	15.75	1.5	30	Pass
3	2	2417	15.01	15.35	18.19	1.5	30	Pass
3	6	2437	19.08	19.21	22.16	1.5	30	Pass
3	10	2457	14.69	14.48	17.60	1.5	30	Pass
3	11	2462	11.18	11.76	14.49	1.5	30	Pass

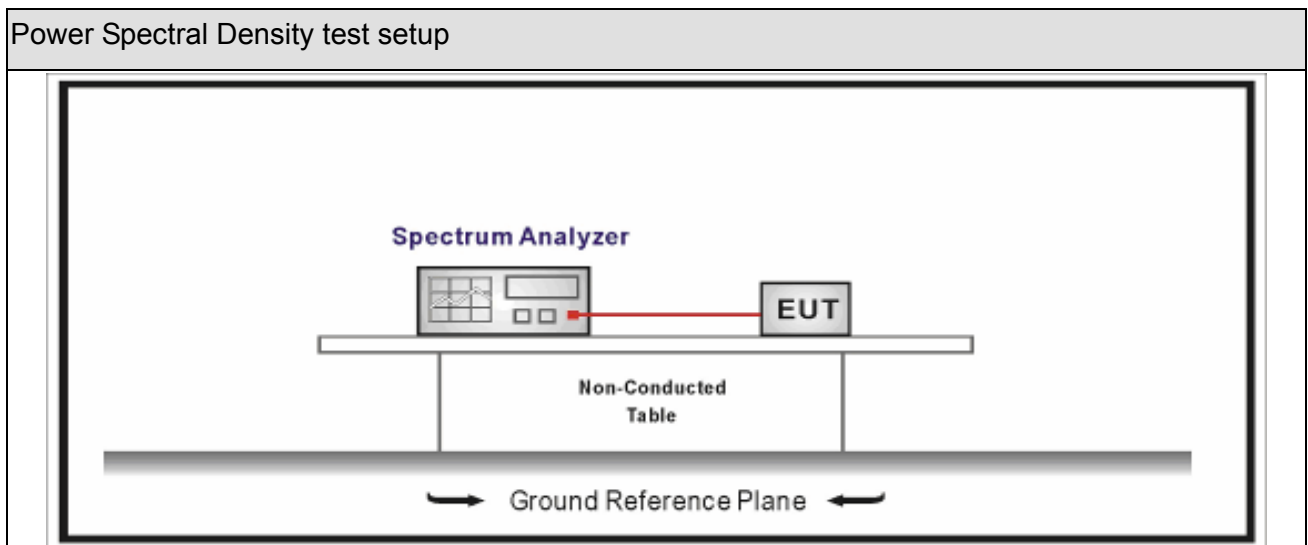
4	3	2422	10.76	11.24	14.02	1.5	30	Pass
4	4	2427	10.08	10.43	13.27	1.5	30	Pass
4	6	2437	12.14	12.97	15.59	1.5	30	Pass
4	8	2447	10.77	11.28	14.04	1.5	30	Pass
4	9	2452	9.96	10.58	13.29	1.5	30	Pass

9. Power Spectral Density

9.1. Test Equipment

Power Spectral Density / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.08
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.					

9.2. Test Setup



9.3. Limit

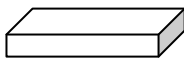
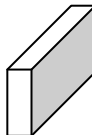
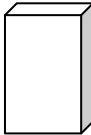
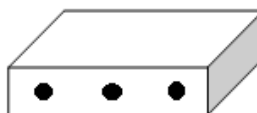
Power Spectral Density Limit
Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

9.4. Test Procedure

Power Spectral Density Test Method				
	References Rule		Chapter	Description
☒	ANSI C63.10		11.10	Maximum power spectral density level in the fundamental emission
	☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	☐	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle $\geq$ 98%)
	☐	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle $\geq$ 98%)
	☐	ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle $<$ 98%)
	☐	ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle $<$ 98%)
	☐	ANSI C63.10	11.10.7	Method AVGPSD-3
	☐	ANSI C63.10	11.10.8	Method AVGPSD-3A

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
	☐	KDB 662911	F2)c) (i)	Cross-polarized antennas with NANT = 2.
	☐	KDB 662911	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

9.5. EUT test definition

Item	Power Spectral Density Test Method			
Device Category	☒	Fixed position use		
	☐	Mobile position use		
Test mode	Mode 1~4			
Test method	☐	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis ☐	Worst Axis ☐	Worst Axis ☐
	☒	Conducted		
	☐	Chain 1		
				
	☒	Chain 1	Chain 2	
				
	☐	Chain 1	Chain 2	Chain 3
				

9.6. Test Result

Product Name	: AC1200 Wireless Dual Band Gigabit Router	Power	: AC 120V/60Hz
Test Mode	: Mode1~4	Test Site	: TR8
Test Date	: 2017.01.31		

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Directional Gain (dBi)	Limit (dBm/3kHz)	Result
			Ant0	Ant1				
1	01	2412	-4.303	N/A	-4.30	1.5	8.0	Pass
1	06	2437	-2.024	N/A	-2.02	1.5	8.0	Pass
1	11	2462	-7.065	N/A	-7.07	1.5	8.0	Pass
2	01	2412	-14.526	-14.429	-14.53	1.5	8.0	Pass
2	06	2437	-7.561	-7.992	-7.56	1.5	8.0	Pass
2	11	2462	-16.747	-15.002	-16.75	1.5	8.0	Pass
3	01	2412	-16.008	-14.316	-16.01	1.5	8.0	Pass
3	06	2437	-8.701	-6.496	-8.70	1.5	8.0	Pass
3	11	2462	-17.904	-15.944	-17.90	1.5	8.0	Pass
4	03	2422	-20.671	-19.170	-20.67	1.5	8.0	Pass
4	06	2437	-17.876	-15.287	-17.88	1.5	8.0	Pass
4	09	2452	-21.070	-20.063	-21.07	1.5	8.0	Pass

Mode 1 CH06(2437MHz) Ant0



10. Antenna Requirement

10.1. Limit

Antenna Requirement Limit	
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.	

10.2. Antenna Connector Construction

Antenna Connector Construction	
☐	The use of a permanently attached antenna
☐	The antenna use of a unique coupling to the intentional radiator
☒	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document "Internal Photograph" to show the antenna connector.	

_____ The End _____