Test Report

FCC Part15 Subpart C

Product Name	:	WiFi socket
Model No.	:	SW5231,SW5232
FCC ID	:	2AB5K-SW5231

Applicant	:	LUMI LEGEND ELECTRICAL CO.,LTD
Address	:	No.18,Lane239,Beihai Road,Jiangbei,Ningbo,China

Date of Receipt	:	Jun. 21, 2017
Test Date	:	Jun. 22, 2017~ Sept. 01, 2017
Issued Date	:	Jan. 18, 2018
Report No.	:	1762096R-RF- US-P06V02
Report Version	:	V1.1

Test Report Certification

Issued Date : Jan. 18, 2018
Report No. : 1762096R-RF-US-P06V02

Product Name	:	WiFi socket
Applicant	:	LUMI LEGEND ELECTRICAL CO.,LTD.
Address	:	No.18,Lane239,Beihai Road,Jiangbei,Ningbo,China
Manufacturer	:	LUMI LEGEND ELECTRICAL CO.,LTD.
Address	:	No.18,Lane239,Beihai Road,Jiangbei,Ningbo,China
Model No.	:	SW5231,SW5232
FCC ID	:	2AB5K-SW5231
EUT Voltage	:	AC 100V-240V 50/60Hz
Test Voltage		AC 120V/60Hz
Brand Name	:	LUMITEK，ANKUOO
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C ANSI C63.4:2014; ANSI C63.10:2013; KDB 558074 D01v03r05
Test Result	:	Complied
Performed Location	:	DEKRA Testing and Certification (Suzhou) Co., Ltd. No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392; IC Lab Code: 4075B

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(Adm. Specialist: Kitty Li)

Reviewed By : Jack Zhang

(Senior Engineer: Jack Zhang)

Approved By : Harry Zhao

(Engineering Manager: Harry Zhao)

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1762096R-RF-US-P06V02	V1.0	Initial Issued Report	Sept. 01, 2017
1762096R-RF-US-P06V02	V1.1	1, Page 16-17, change FCC 15.107 to 15.207. 2, Page 24-47, add 1-18G test plots and data. 3, Page 10, update worst case list	Jan. 18, 2018

1. General Information

1.1. EUT Description

Product Name	WiFi socket
Brand Name	LUMITEK，ANKUOO
Model No.	SW5231,SW5232
EUT Voltage	AC 100V-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 150 Mbps
Channel Control	Auto

Note: The two samples have same the WIFI module and PCB layout, just the number of jacks and appearance differences. We have evaluated two samples, shown in the report is the worst data(SW5232).

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	2.18dBi					

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)

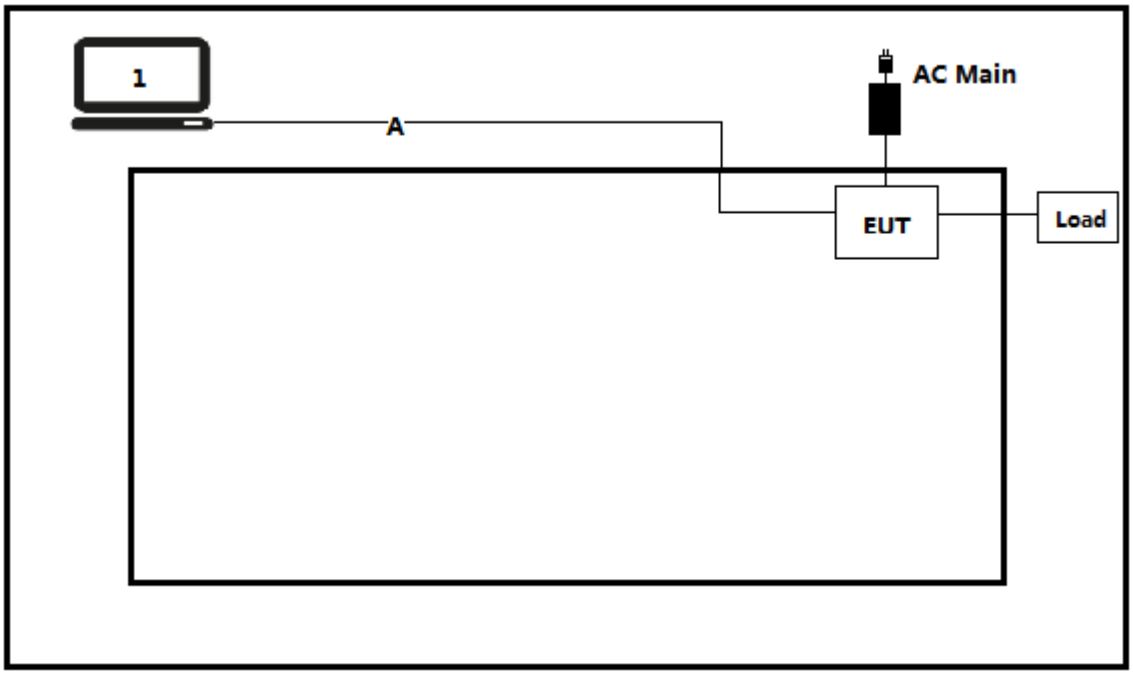
1.6. Tested System Details

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

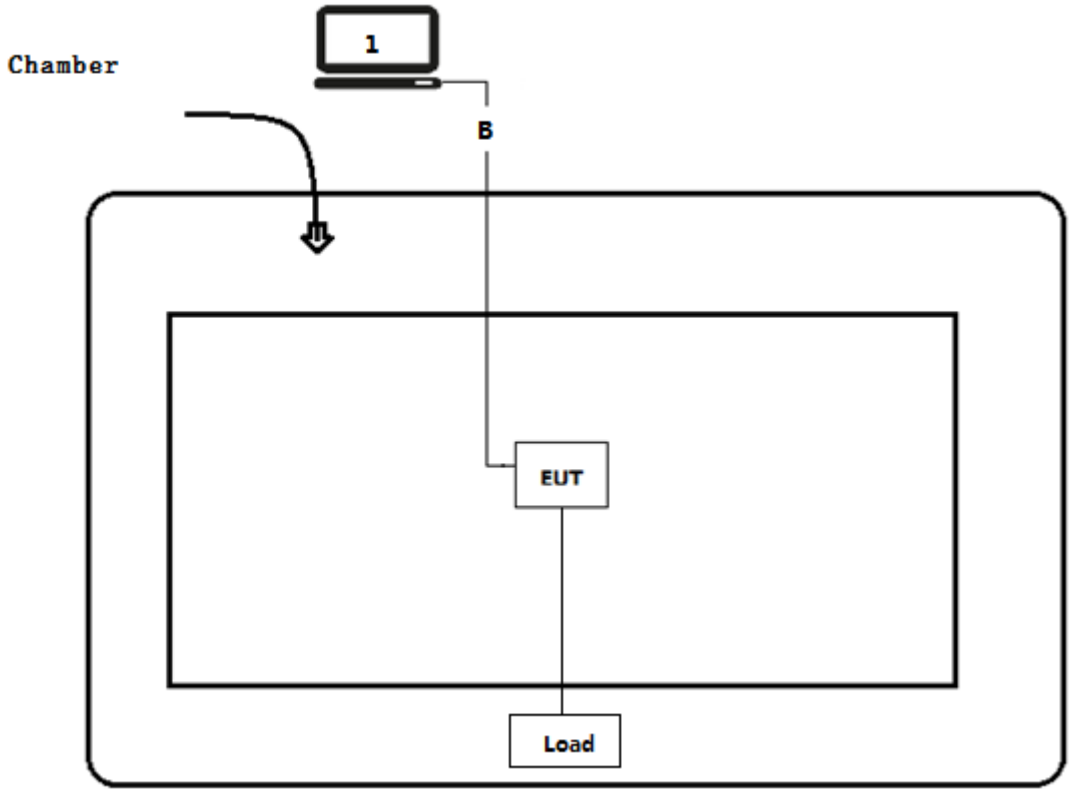
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Think Pad	2526	LV-A3285	Power by adapter
A	USB Cable	N/A	N/A	N/A	Shield, 0.75m
B	USB Cable	N/A	N/A	N/A	Shield, 10m

1.7. Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



2. Technical Test

2.1. Summary of Test Result

For FCC Rule:

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 4	⩾20dBc	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2015 15.247(d)	Mode 4	FCC 15.209	PASS
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(2)	Mode 1	⩾500kHz	PASS
Fundamental emission output power	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(b)(3)	Mode 4	⩽30dBm	PASS
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(e)	Mode 1	⩽8dBm/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	SecureCRT_5.50	
Modulation Mode	Test Frequency	Ant 1
802.11b	2412	0
	2437	0
	2462	0
802.11g	2412	0
	2437	0
	2462	32
802.11n(20MHz)	2412	0
	2437	0
	2462	32
802.11n(40MHz)	2422	0
	2437	0
	2452	32

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

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

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	±2.02dB
Radiated Emission	Below 1GHz ±3.8 dB
	Above 1GHz ±3.9 dB
RF Antenna Port Conducted Emission	±1.27dB
Radiated Emission Band Edge	±3.9dB
Occupied Bandwidth	±1kHz
Power Spectral Density	±1.27dB

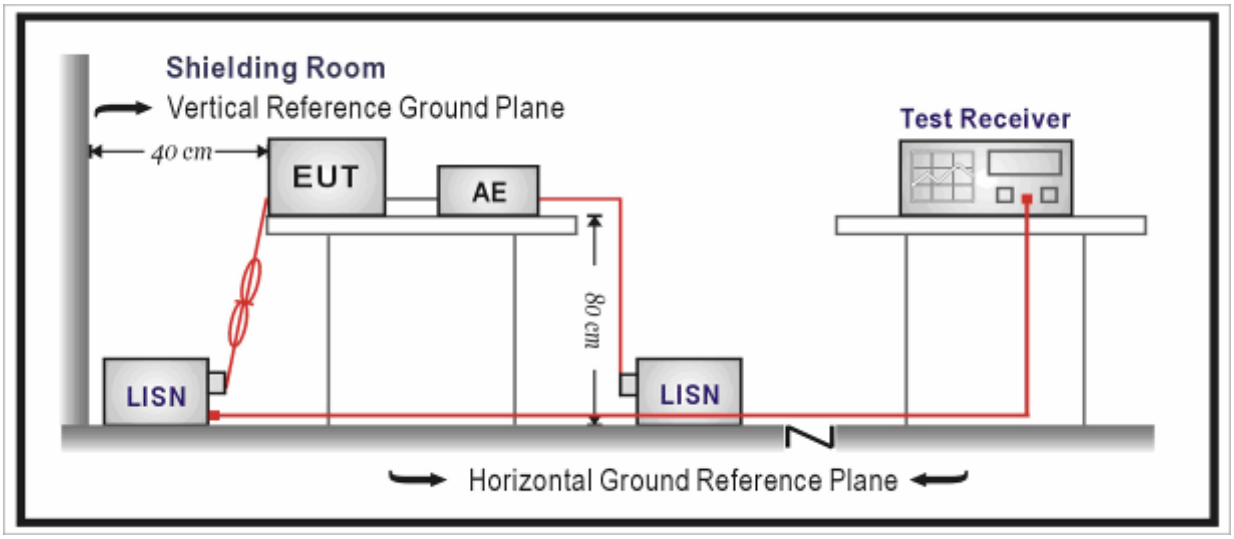
3. AC Power Line Conducted Emission

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	2017.07.16	2018.07.15
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

AC Power Line Conducted Emission test setup



3.3. Limit

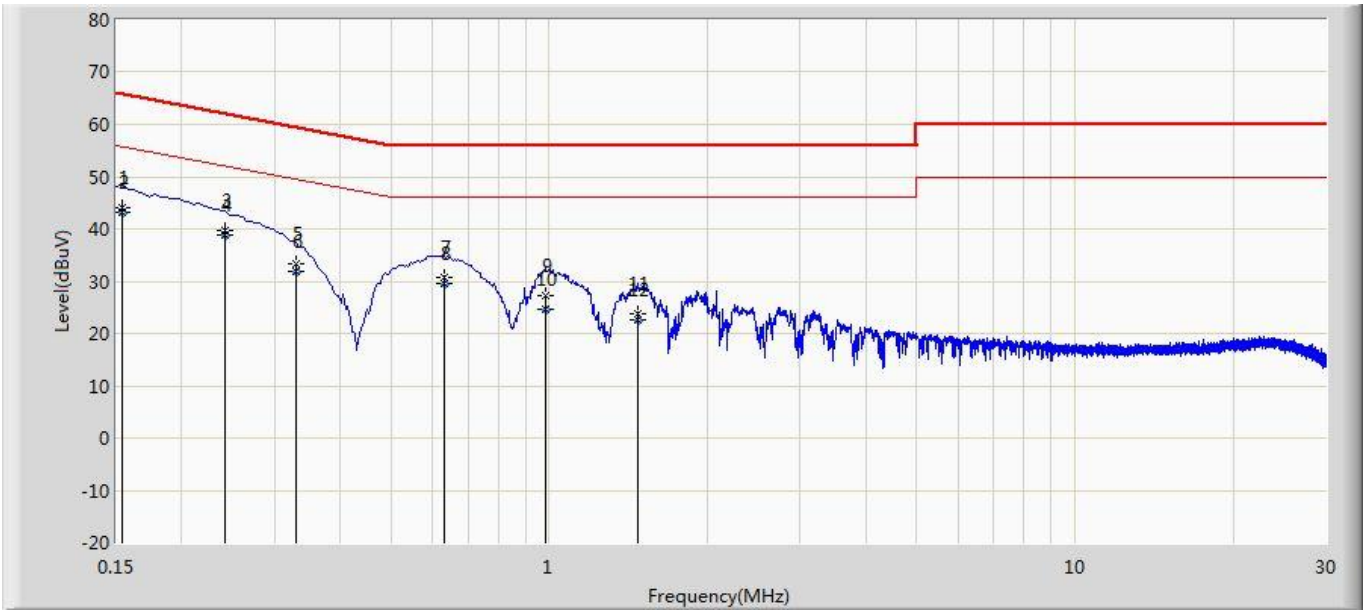
Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dBμV)	Average(dBμV)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50
Note 1: The lower limit shall apply at the transition frequencies. Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

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: 2017/09/01 - 09:24
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b	

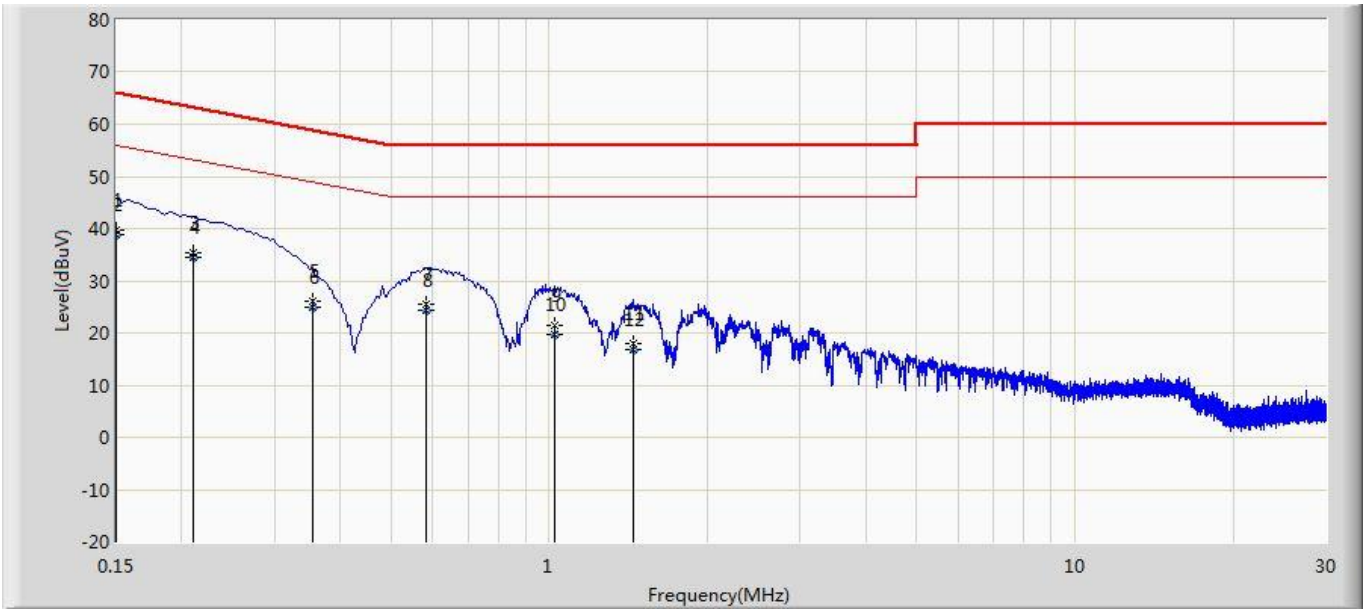


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.154	44.155	34.520	-21.627	65.781	9.609	0.025	0.000	QP
2	*	0.154	43.182	33.548	-12.599	55.781	9.609	0.025	0.000	AV
3		0.242	39.628	29.997	-22.400	62.027	9.600	0.030	0.000	QP
4		0.242	38.827	29.196	-13.201	52.027	9.600	0.030	0.000	AV
5		0.330	33.288	23.653	-26.163	59.451	9.600	0.035	0.000	QP
6		0.330	31.770	22.135	-17.682	49.451	9.600	0.035	0.000	AV
7		0.630	30.644	20.996	-25.356	56.000	9.600	0.048	0.000	QP
8		0.630	29.525	19.877	-16.475	46.000	9.600	0.048	0.000	AV
9		0.982	27.217	17.548	-28.783	56.000	9.609	0.060	0.000	QP
10		0.982	24.690	15.021	-21.310	46.000	9.609	0.060	0.000	AV
11		1.478	23.908	14.224	-32.092	56.000	9.610	0.073	0.000	QP
12		1.478	22.668	12.985	-23.332	46.000	9.610	0.073	0.000	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: TR1	Time: 2017/09/01 - 09:27
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	39.570	29.952	-26.430	66.000	9.594	0.025	0.000	QP
2	*	0.150	38.820	29.201	-17.180	56.000	9.594	0.025	0.000	AV
3		0.210	35.242	25.614	-27.964	63.205	9.599	0.029	0.000	QP
4		0.210	34.462	24.834	-18.743	53.205	9.599	0.029	0.000	AV
5		0.354	25.958	16.327	-32.910	58.868	9.594	0.036	0.000	QP
6		0.354	24.862	15.231	-24.006	48.868	9.594	0.036	0.000	AV
7		0.582	25.533	15.898	-30.467	56.000	9.590	0.045	0.000	QP
8		0.582	24.399	14.764	-21.601	46.000	9.590	0.045	0.000	AV
9		1.022	21.461	11.810	-34.539	56.000	9.591	0.060	0.000	QP
10		1.022	19.738	10.087	-26.262	46.000	9.591	0.060	0.000	AV
11		1.446	17.876	8.204	-38.124	56.000	9.599	0.073	0.000	QP
12		1.446	16.669	6.997	-29.331	46.000	9.599	0.073	0.000	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

4. Emissions in restricted frequency bands

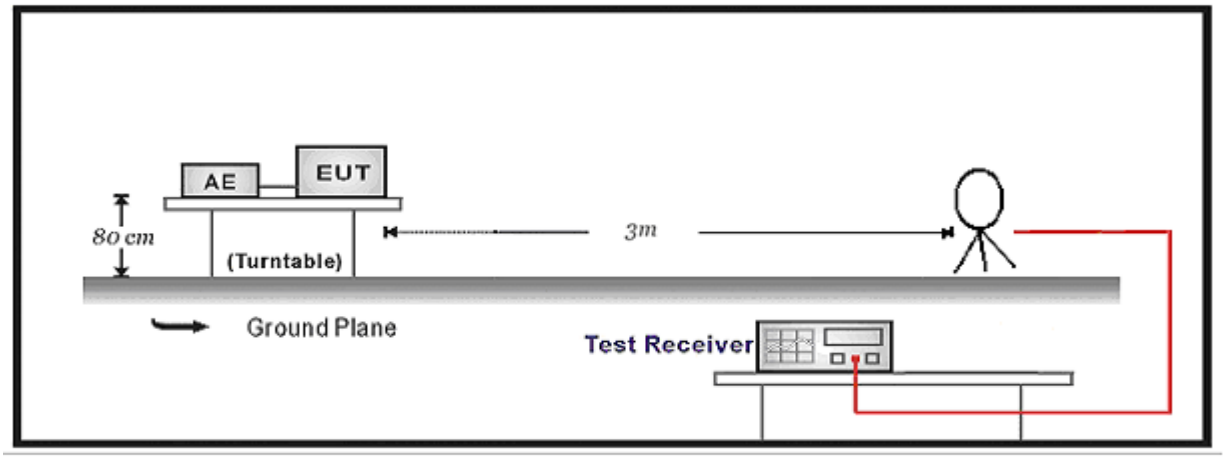
4.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2017.03.29	2018.03.28
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.					

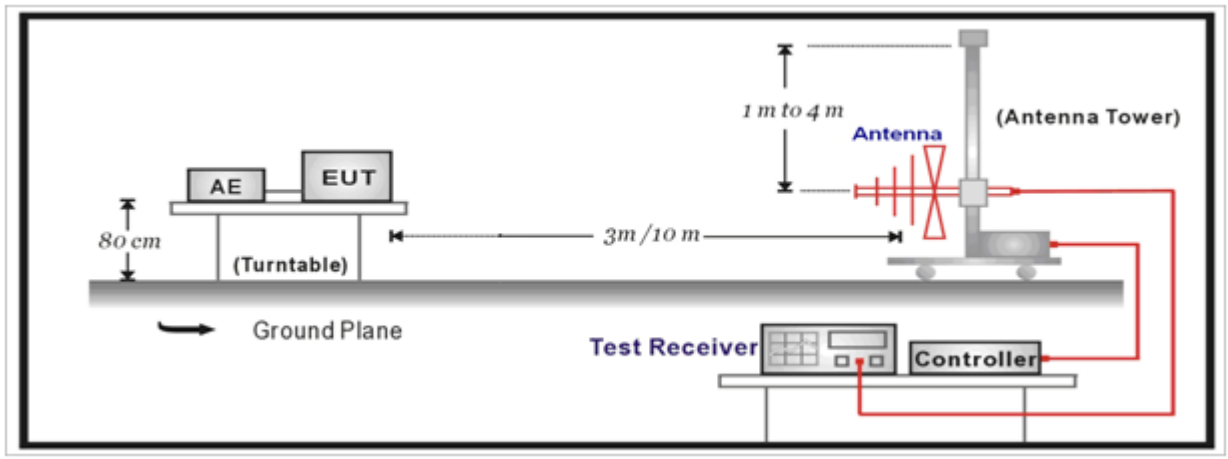
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.03	2018.01.02
Preamplifier	Miteq	NSP1800-25	1364185	2017.05.06	2018.05.05
Preamplifier	DEKRA Testing and Certification (Suzhou) Co., Ltd.	AP-040G	CHM-0906001	2017.05.06	2018.05.05
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	2017.06.10	2018.06.09
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

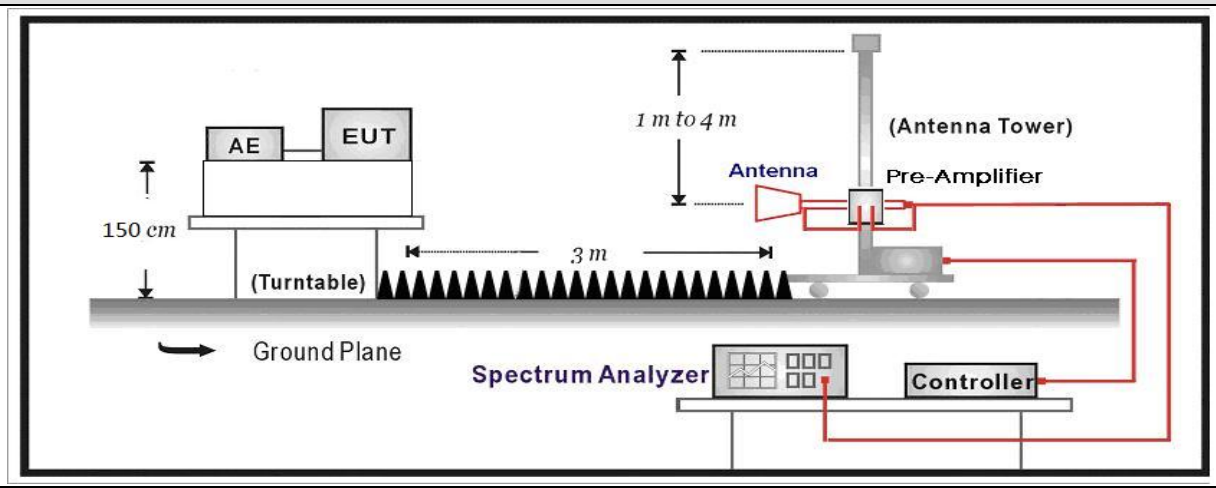
Below 30MHz Test Setup:



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)

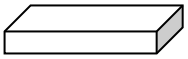
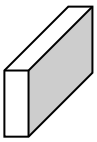
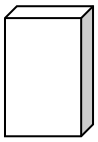
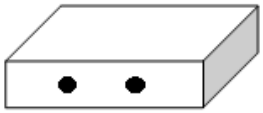
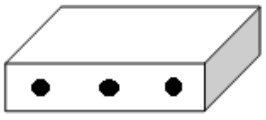
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed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

<table>
<tr><td>Item</td><td colspan="4">Emissions in restricted frequency bands</td></tr>
<tr><td rowspan="2">Device Category</td><td>☒</td><td colspan="3">Fixed position use</td></tr>
<tr><td>☐</td><td colspan="3">Mobile position use</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1~4</td></tr>
<tr><td rowspan="13">Test method</td><td>☒</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="3"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>Worst Axis ☐</td><td>Worst Axis ☐</td><td>Worst Axis ☒</td></tr>
<tr><td>☐</td><td colspan="3">Conducted</td></tr>
<tr><td>☐</td><td colspan="3">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td colspan="2">Chain 2</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
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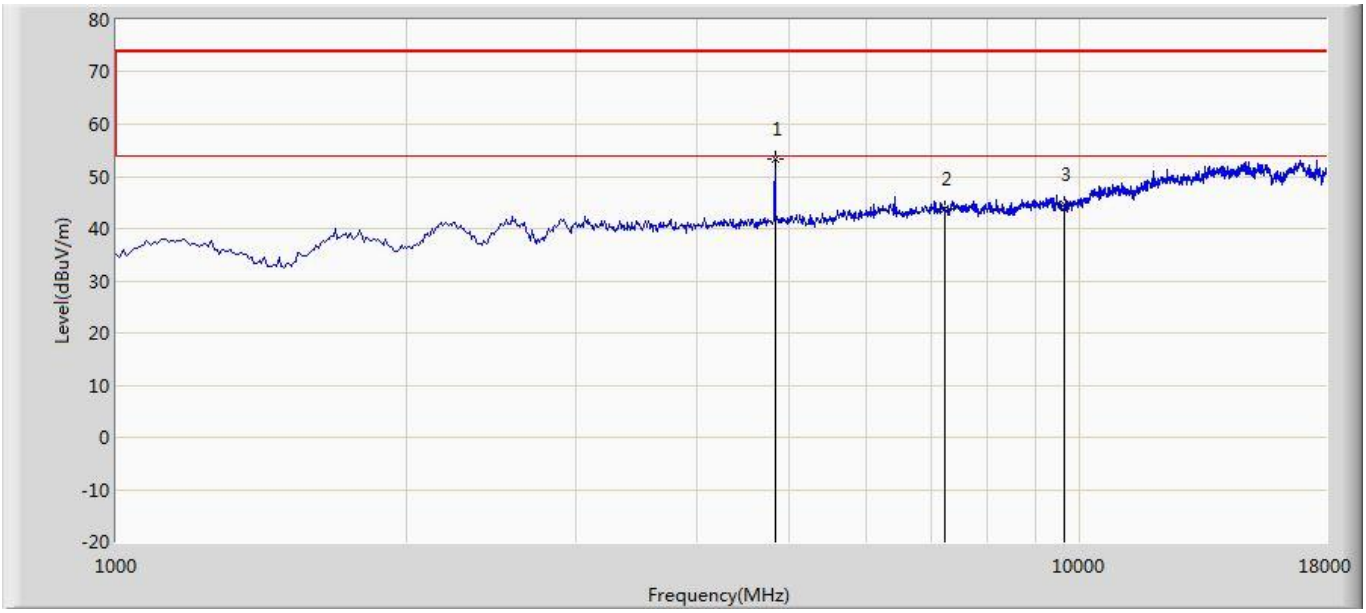
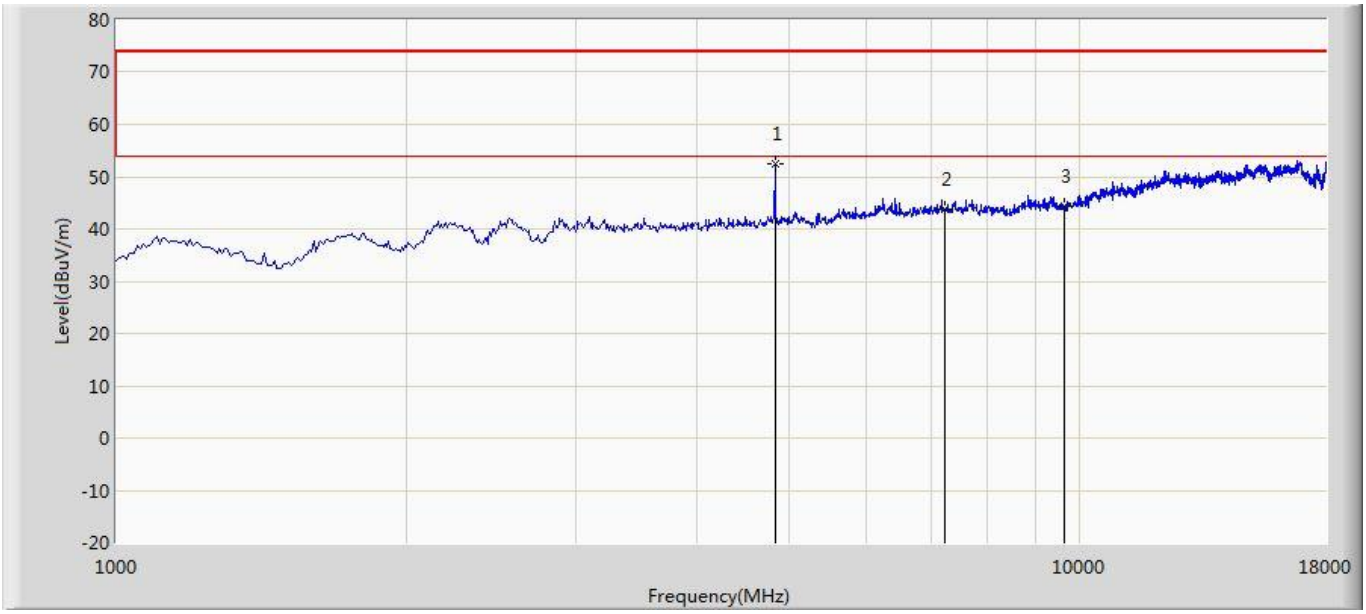
4.6. Test Result

Profile: 1762096R	Page No.: 57
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 11:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11B	



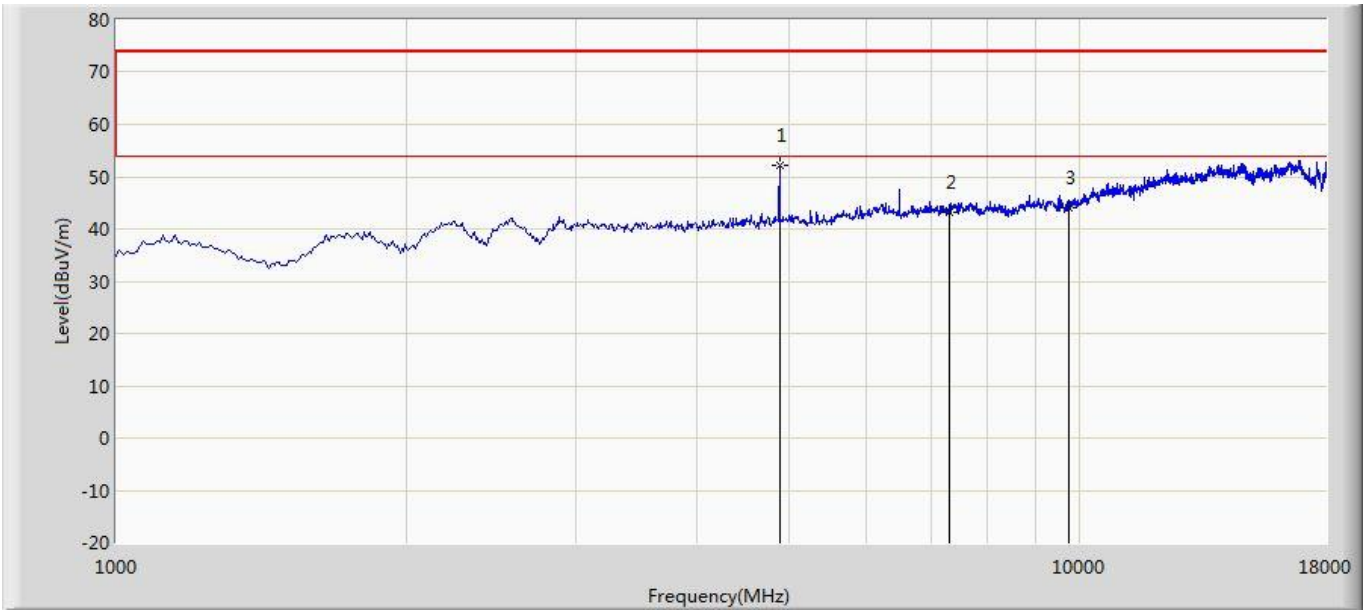
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4825.000	53.301	48.804	-20.699	74.000	4.497	PK
2		7236.000	43.756	36.097	-30.244	74.000	7.659	PK
3		9648.000	44.563	35.010	-29.437	74.000	9.553	PK

Profile: 1762096R	Page No.: 58
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 11:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11B	



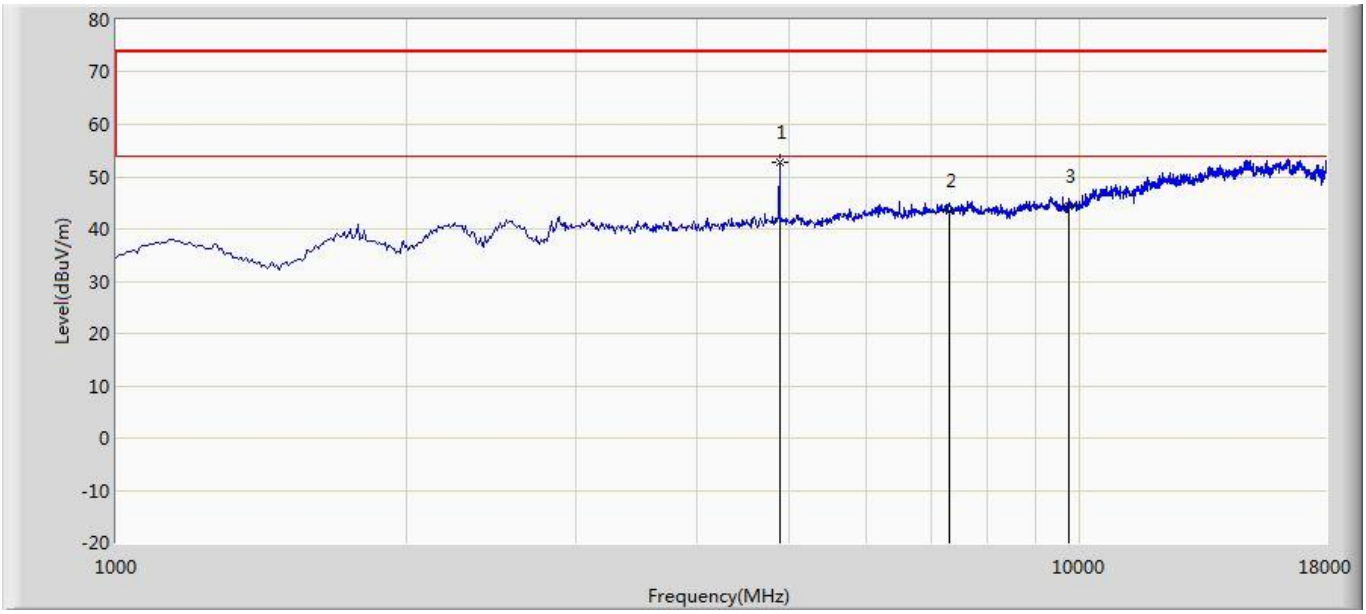
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4825.000	52.368	47.871	-21.632	74.000	4.497	PK
2		7236.000	43.737	36.078	-30.263	74.000	7.659	PK
3		9648.000	44.300	34.747	-29.700	74.000	9.553	PK

Profile: 1762096R	Page No.: 59
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 11:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11B	



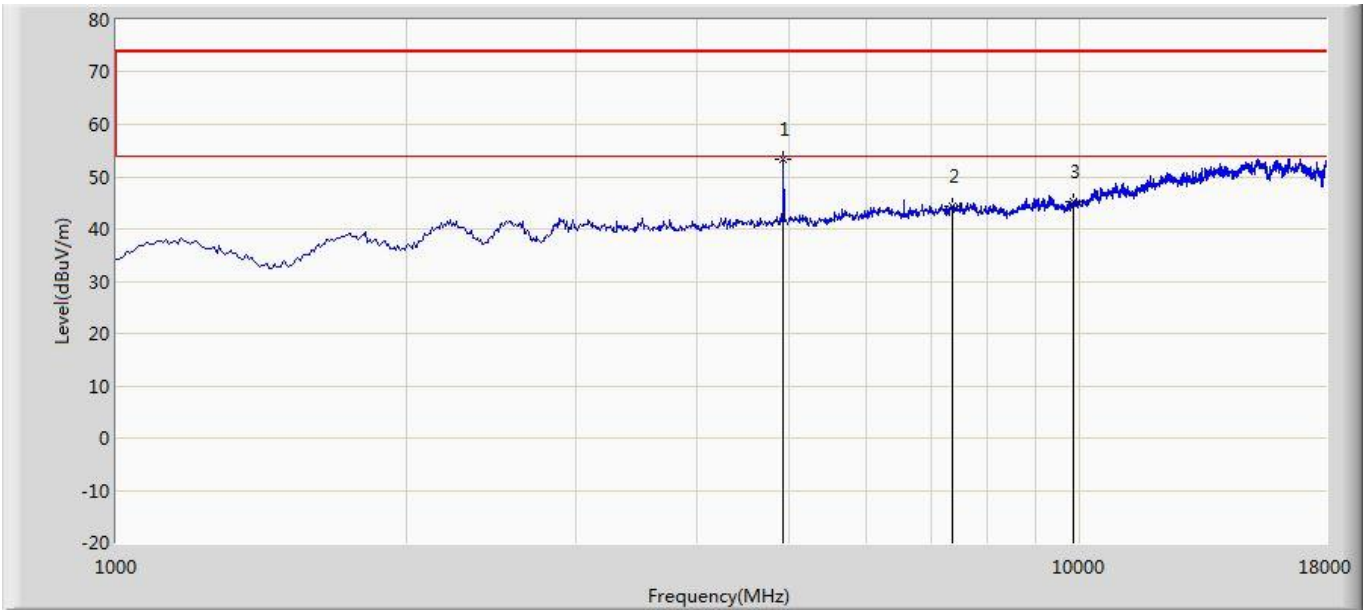
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	52.070	47.422	-21.930	74.000	4.648	PK
2		7311.000	43.153	35.408	-30.847	74.000	7.745	PK
3		9748.000	44.164	34.293	-29.836	74.000	9.871	PK

Profile: 1762096R	Page No.: 60
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 11:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11B	



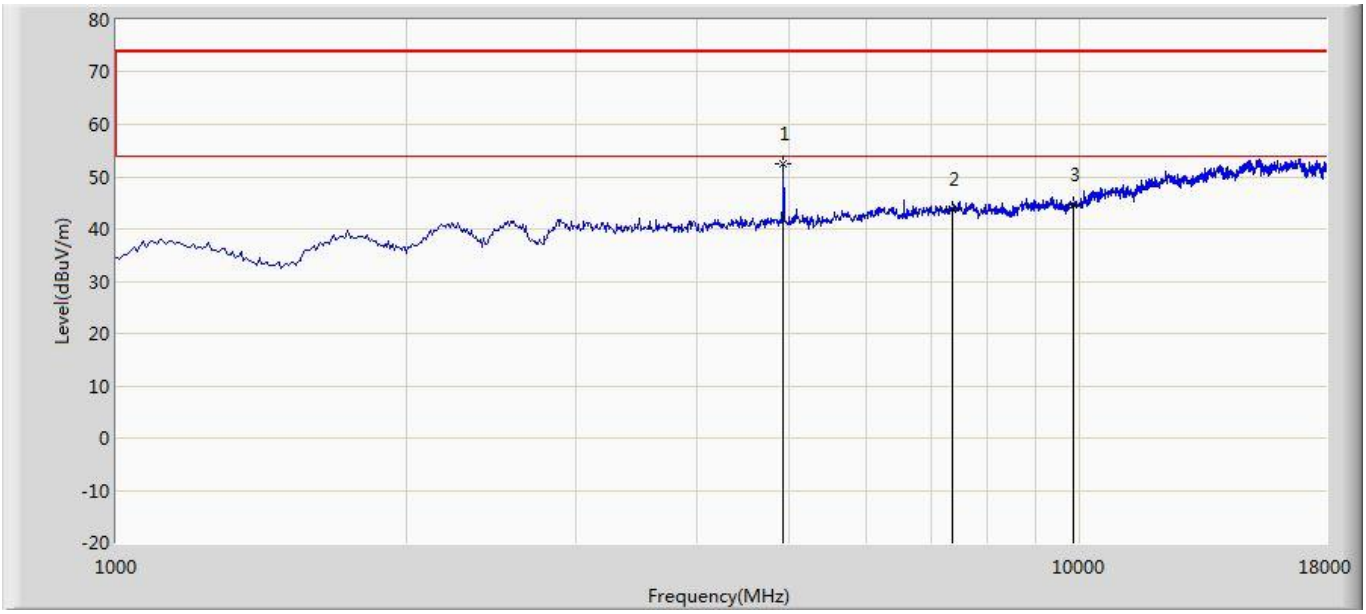
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	52.753	48.105	-21.247	74.000	4.648	PK
2		7311.000	43.526	35.781	-30.474	74.000	7.745	PK
3		9748.000	44.268	34.397	-29.732	74.000	9.871	PK

Profile: 1762096R	Page No.: 61
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 11:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11B	



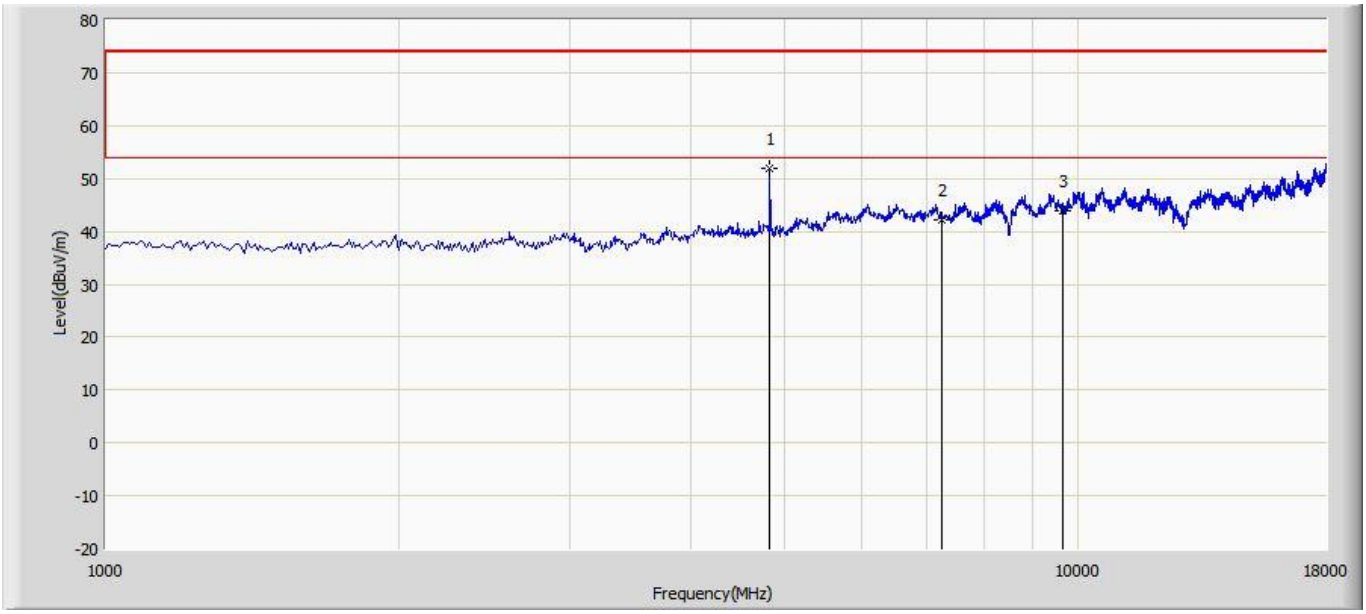
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4927.000	53.247	48.615	-20.753	74.000	4.632	PK
2		7386.000	44.279	36.415	-29.721	74.000	7.864	PK
3		9848.000	45.185	34.864	-28.815	74.000	10.321	PK

Profile: 1762096R	Page No.: 62
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 11:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11B	



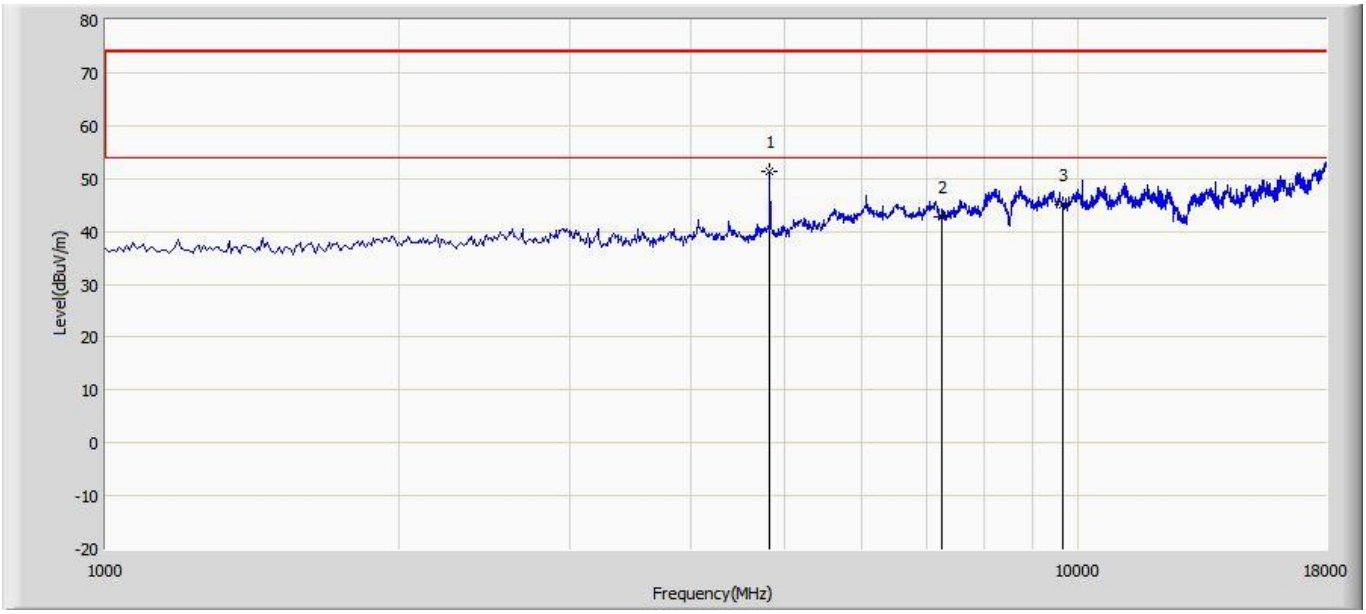
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4927.000	52.570	47.938	-21.430	74.000	4.632	PK
2		7386.000	43.909	36.045	-30.091	74.000	7.864	PK
3		9848.000	44.545	34.224	-29.455	74.000	10.321	PK

Profile: 1762096R	Page No.: 1
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11G	



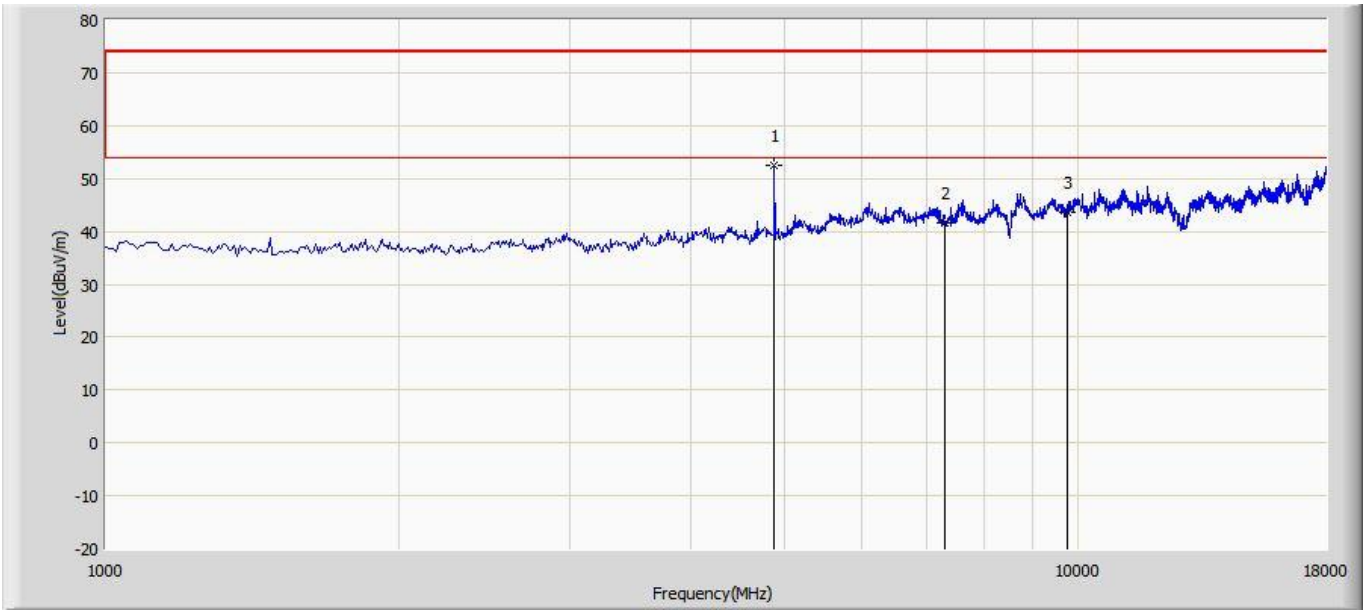
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4825.000	51.894	51.364	-22.106	74.000	0.530	PK
2		7236.000	42.224	38.511	-31.776	74.000	3.713	PK
3		9648.000	43.970	35.403	-30.030	74.000	8.567	PK

Profile: 1762096R	Page No.: 2
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11G	



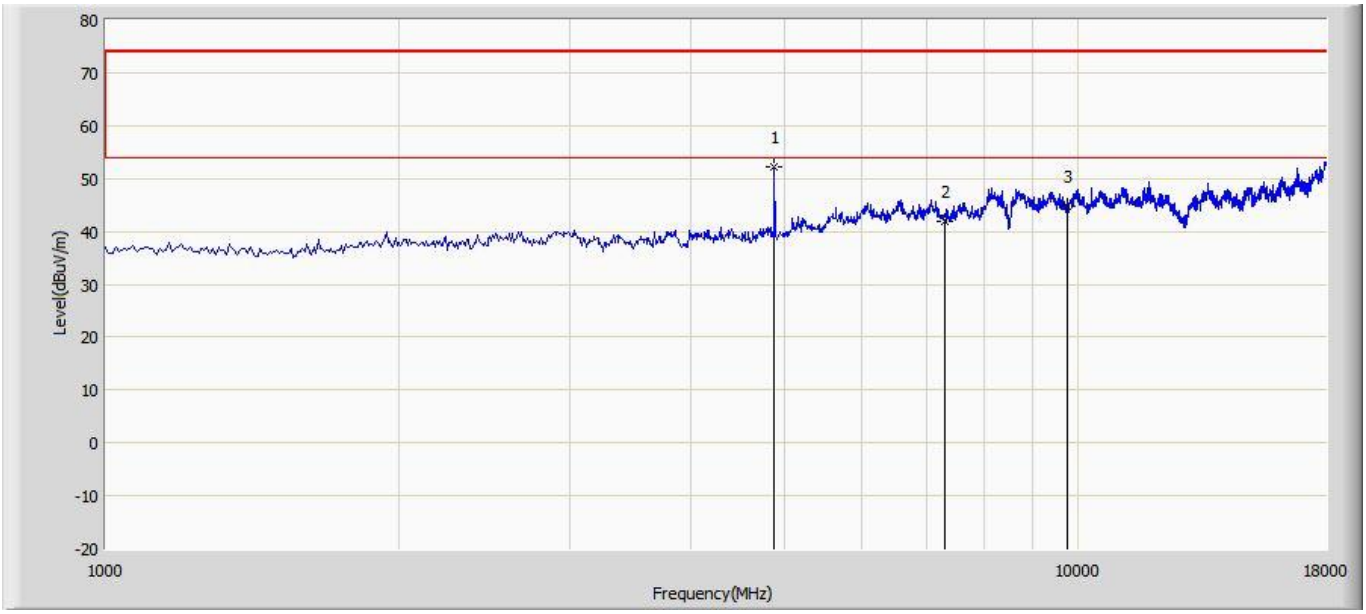
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4825.000	51.237	50.490	-22.763	74.000	0.747	PK
2		7236.000	42.714	38.317	-31.286	74.000	4.397	PK
3		9648.000	45.109	35.503	-28.891	74.000	9.606	PK

Profile: 1762096R	Page No.: 3
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11G	



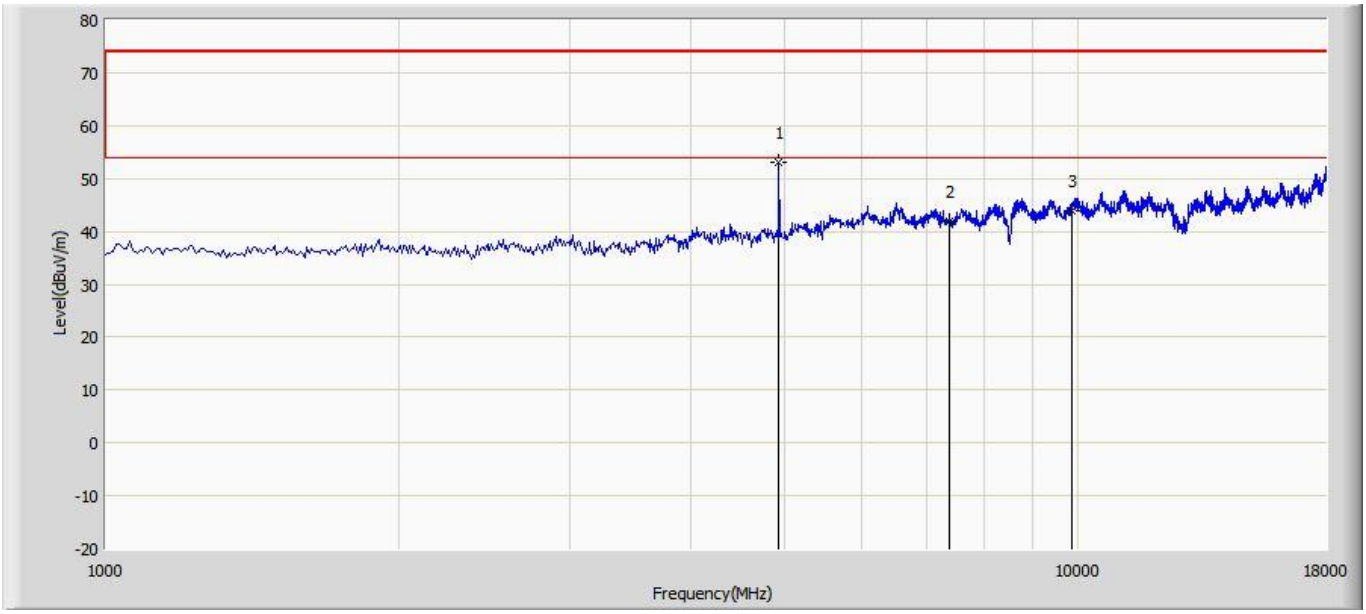
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	52.531	51.865	-21.469	74.000	0.666	PK
2		7311.000	41.692	37.886	-32.308	74.000	3.806	PK
3		9748.000	43.706	35.028	-30.294	74.000	8.678	PK

Profile: 1762096R	Page No.: 4
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11G	



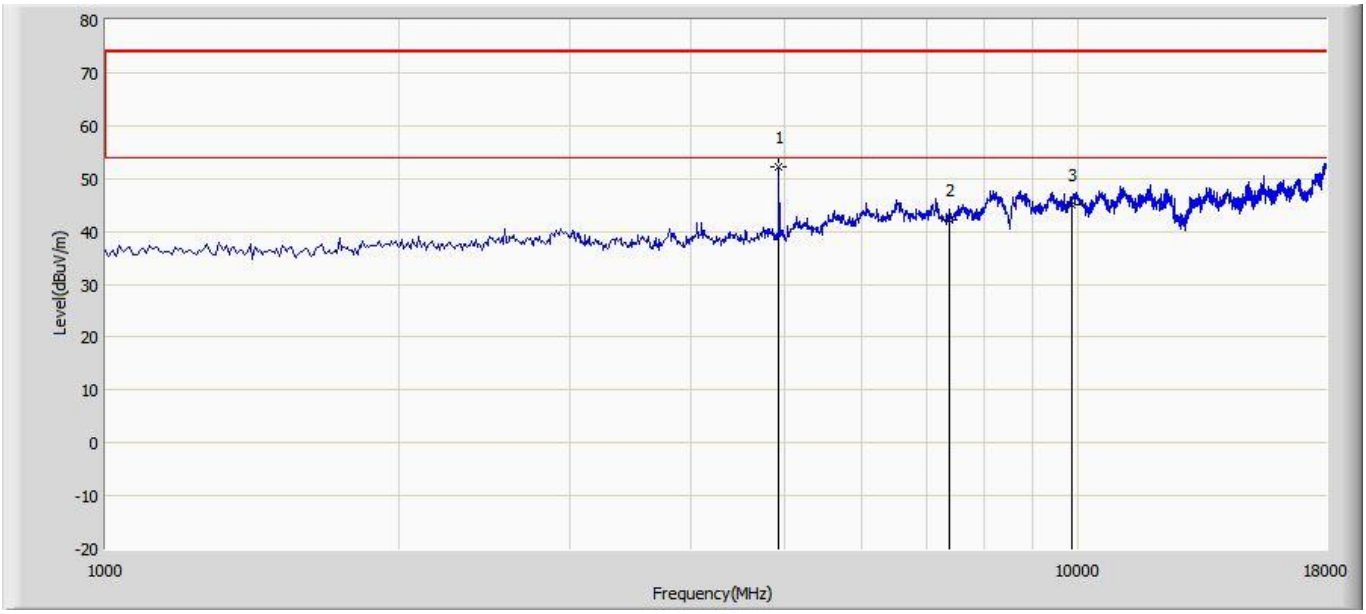
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	52.165	51.353	-21.835	74.000	0.812	PK
2		7311.000	41.848	37.333	-32.152	74.000	4.515	PK
3		9748.000	44.725	35.044	-29.275	74.000	9.681	PK

Profile: 1762096R	Page No.: 5
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11G	



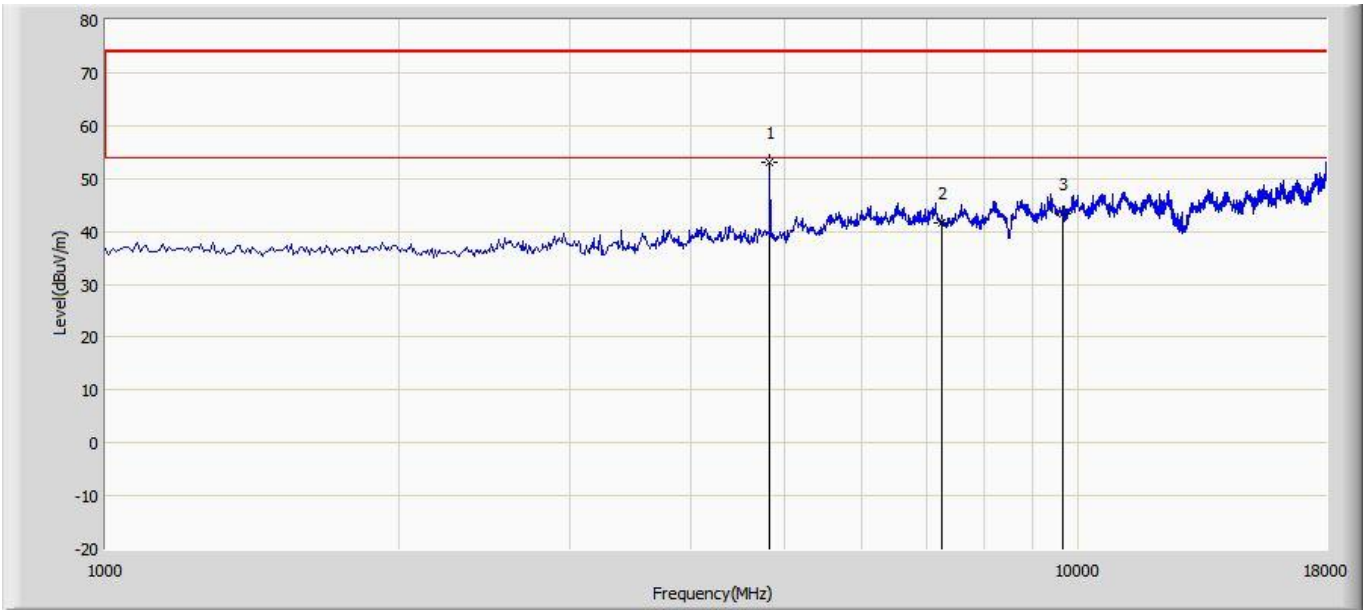
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4927.000	53.126	52.385	-20.874	74.000	0.741	PK
2		7386.000	42.008	38.088	-31.992	74.000	3.920	PK
3		9848.000	43.976	35.242	-30.024	74.000	8.734	PK

Profile: 1762096R	Page No.: 6
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11G	



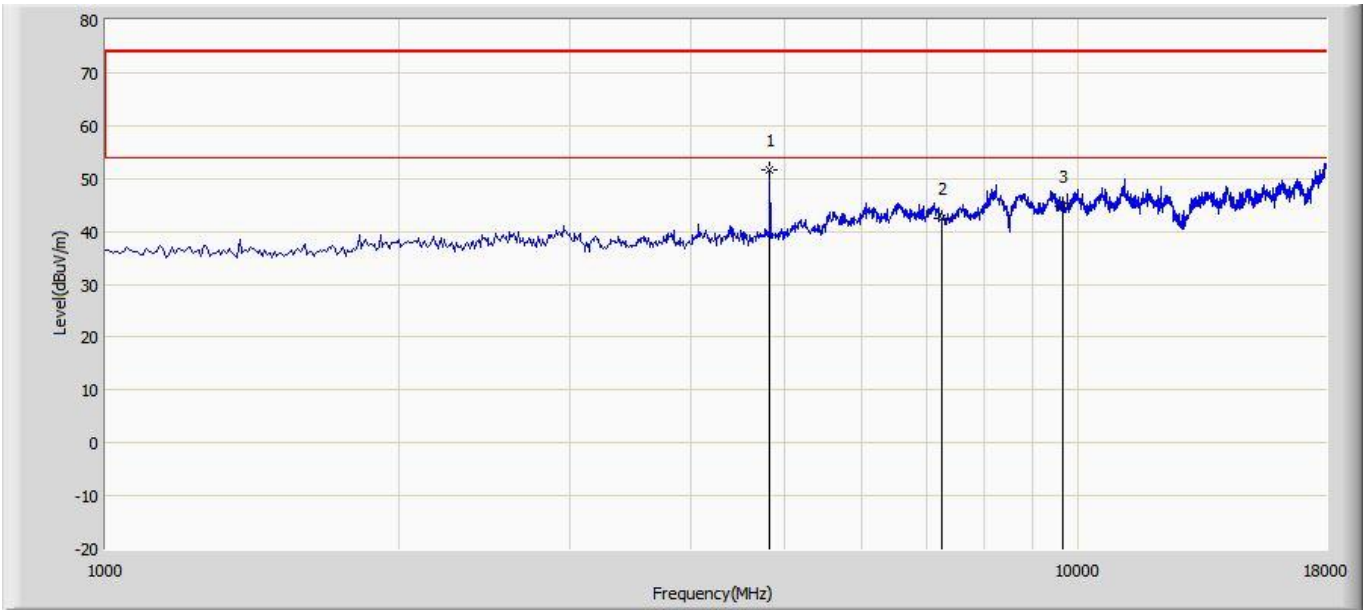
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4927.000	52.234	51.185	-21.766	74.000	1.049	PK
2		7386.000	42.227	37.483	-31.773	74.000	4.744	PK
3		9848.000	45.107	35.329	-28.893	74.000	9.778	PK

Profile: 1762096R	Page No.: 7
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11N20	



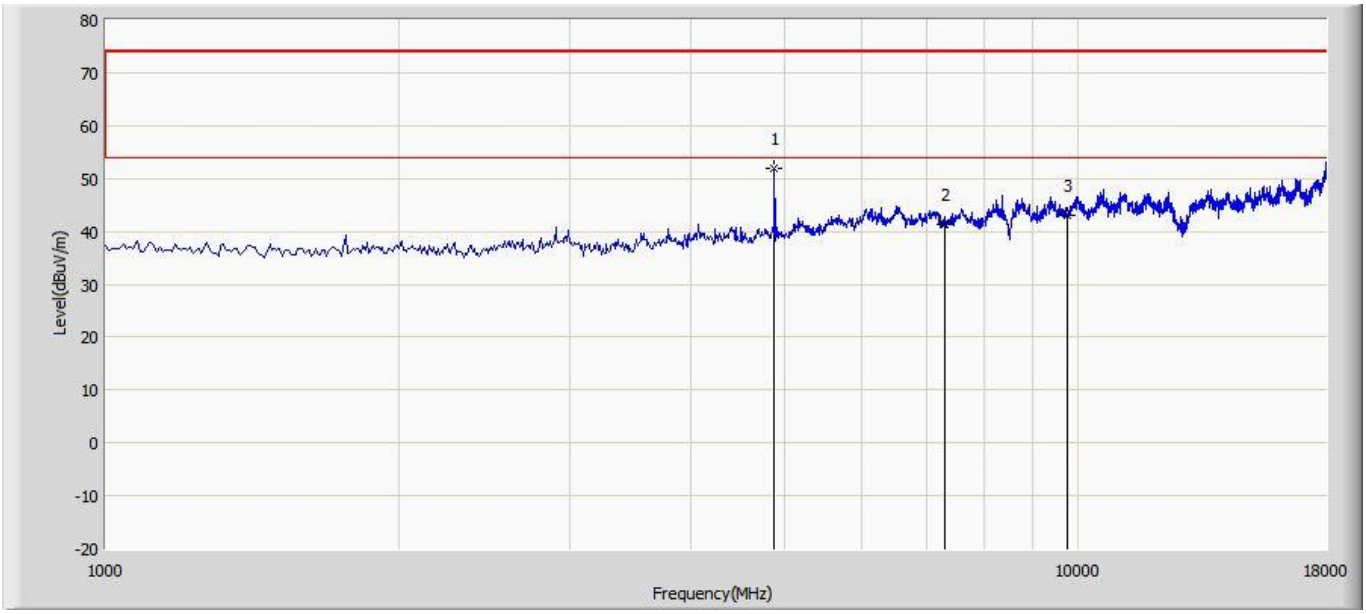
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4825.000	53.114	52.584	-20.886	74.000	0.530	PK
2		7236.000	41.671	37.958	-32.329	74.000	3.713	PK
3		9648.000	43.421	34.854	-30.579	74.000	8.567	PK

Profile: 1762096R	Page No.: 8
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11N20	



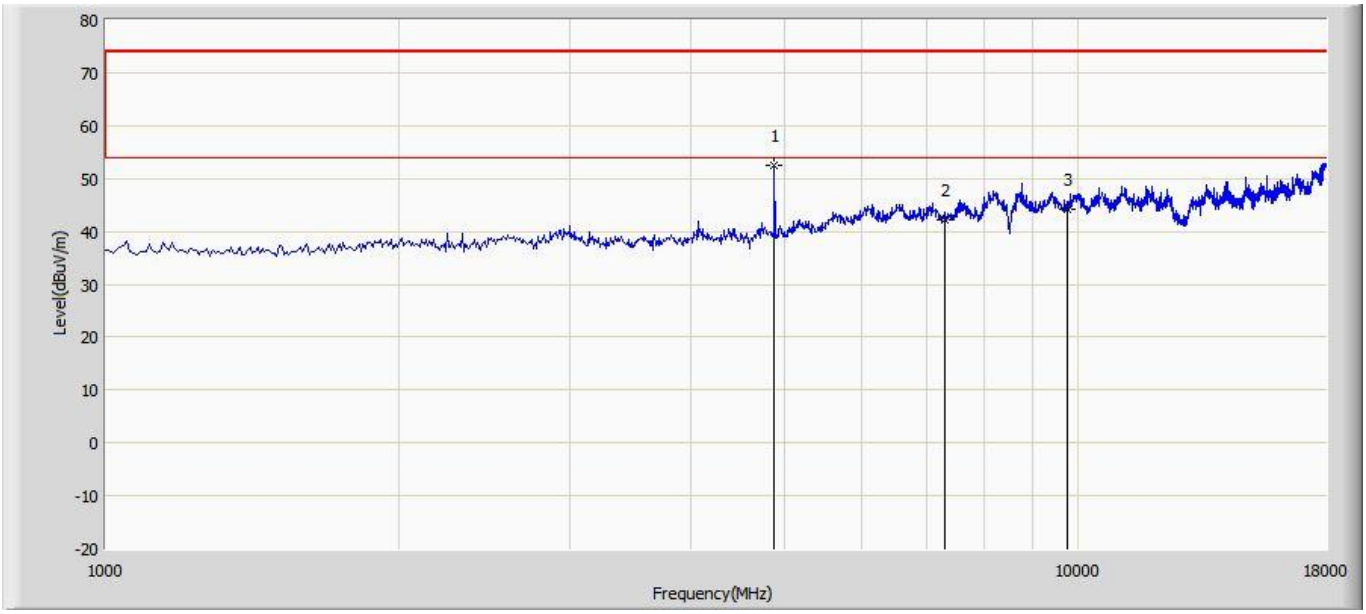
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4825.000	51.632	50.885	-22.368	74.000	0.747	PK
2		7236.000	42.505	38.108	-31.495	74.000	4.397	PK
3		9648.000	44.764	35.158	-29.236	74.000	9.606	PK

Profile: 1762096R	Page No.: 9
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11N20	



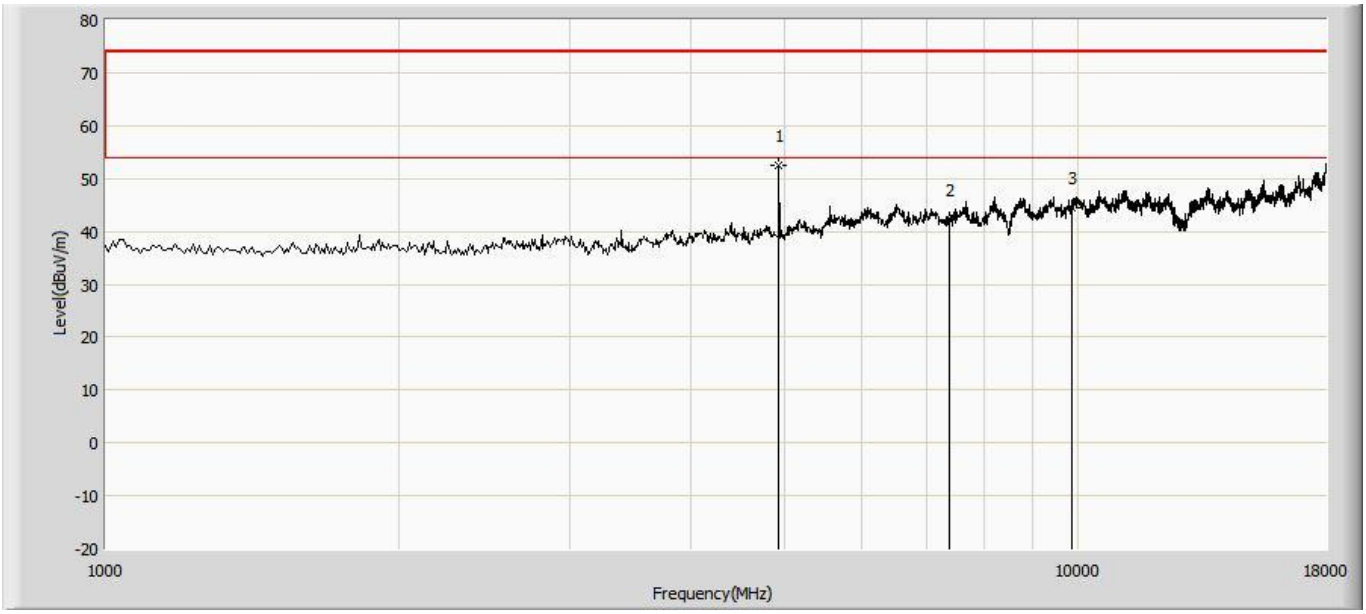
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	51.789	51.123	-22.211	74.000	0.666	PK
2		7311.000	41.236	37.430	-32.764	74.000	3.806	PK
3		9748.000	43.043	34.365	-30.957	74.000	8.678	PK

Profile: 1762096R	Page No.: 10
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 13:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11N20	



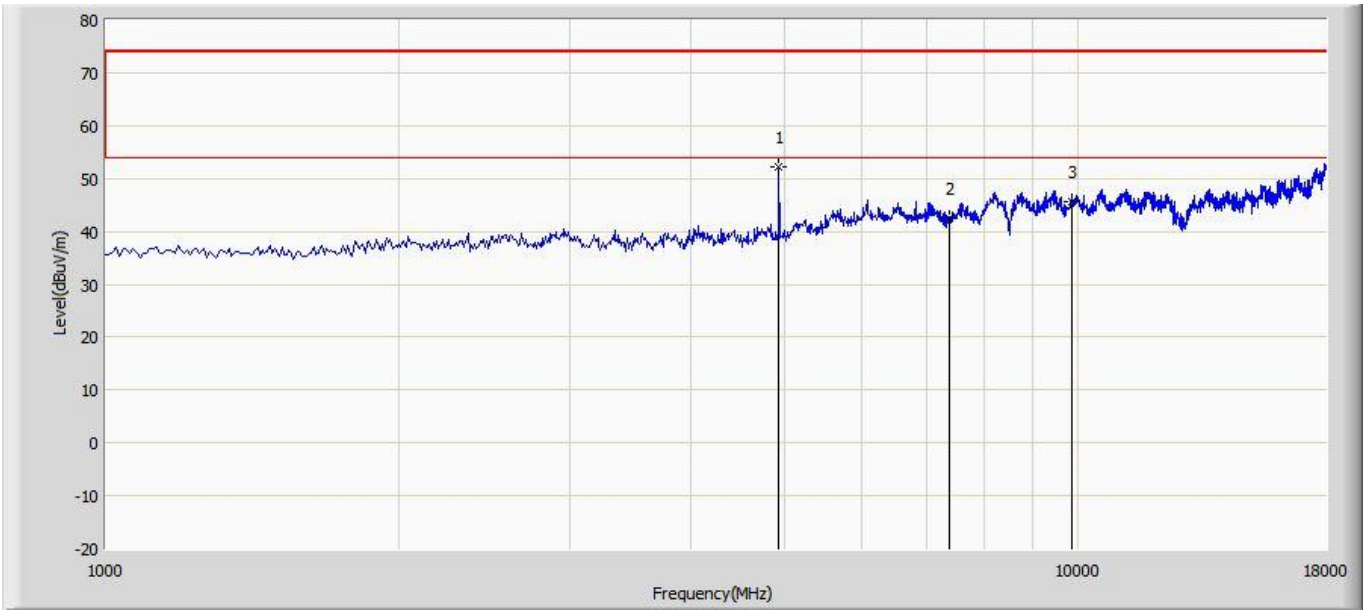
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	52.441	51.629	-21.559	74.000	0.812	PK
2		7311.000	42.052	37.537	-31.948	74.000	4.515	PK
3		9748.000	44.187	34.506	-29.813	74.000	9.681	PK

Profile: 1762096R	Page No.: 11
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11N20	



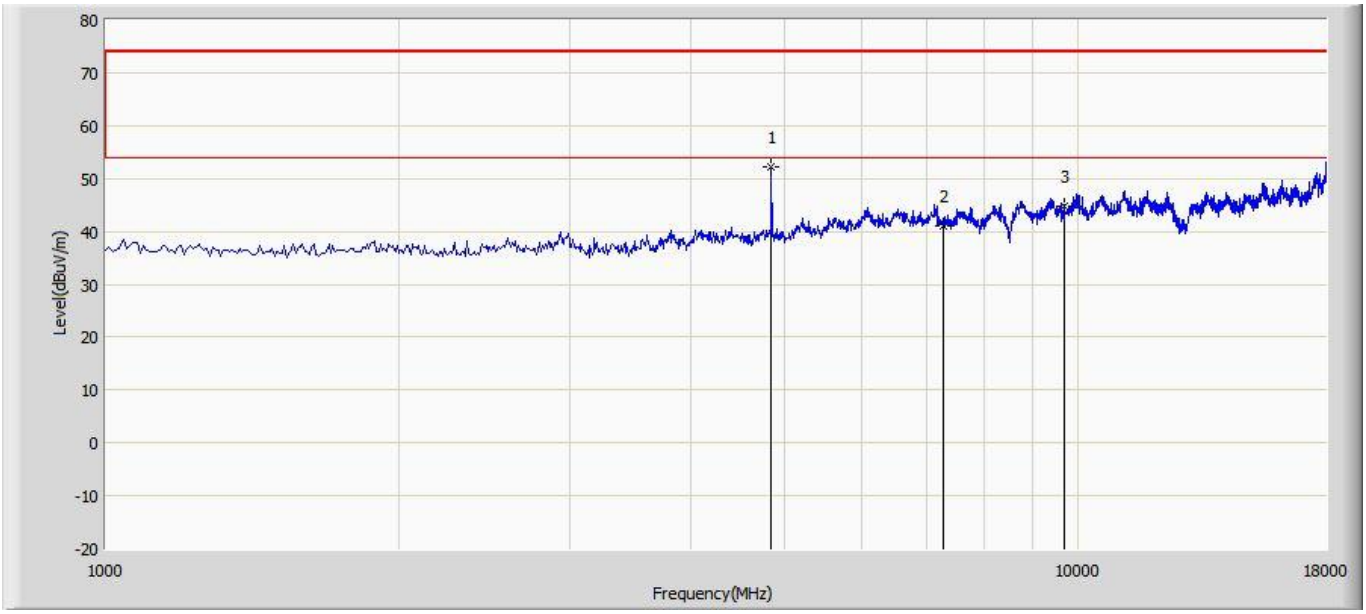
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4927.000	52.483	51.742	-21.517	74.000	0.741	PK
2		7386.000	42.163	38.243	-31.837	74.000	3.920	PK
3		9848.000	44.578	35.844	-29.422	74.000	8.734	PK

Profile: 1762096R	Page No.: 12
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11N20	



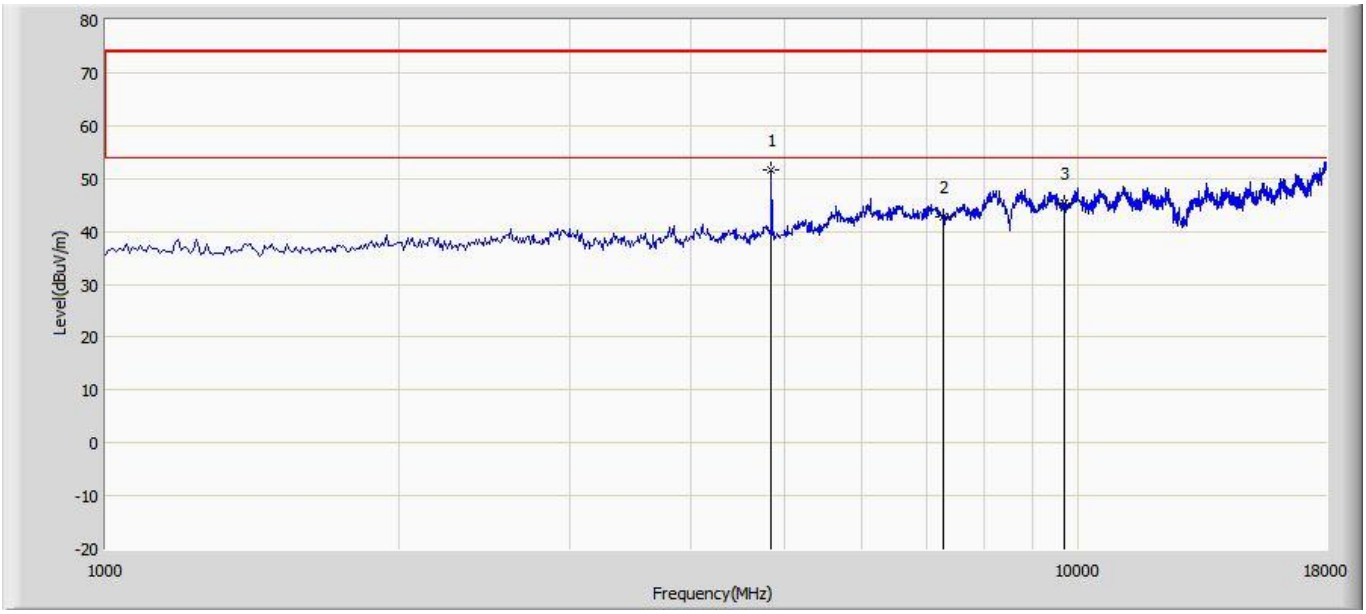
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4927.000	52.153	51.104	-21.847	74.000	1.049	PK
2		7386.000	42.332	37.588	-31.668	74.000	4.744	PK
3		9848.000	45.557	35.779	-28.443	74.000	9.778	PK

Profile: 1762096R	Page No.: 13
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11N40	



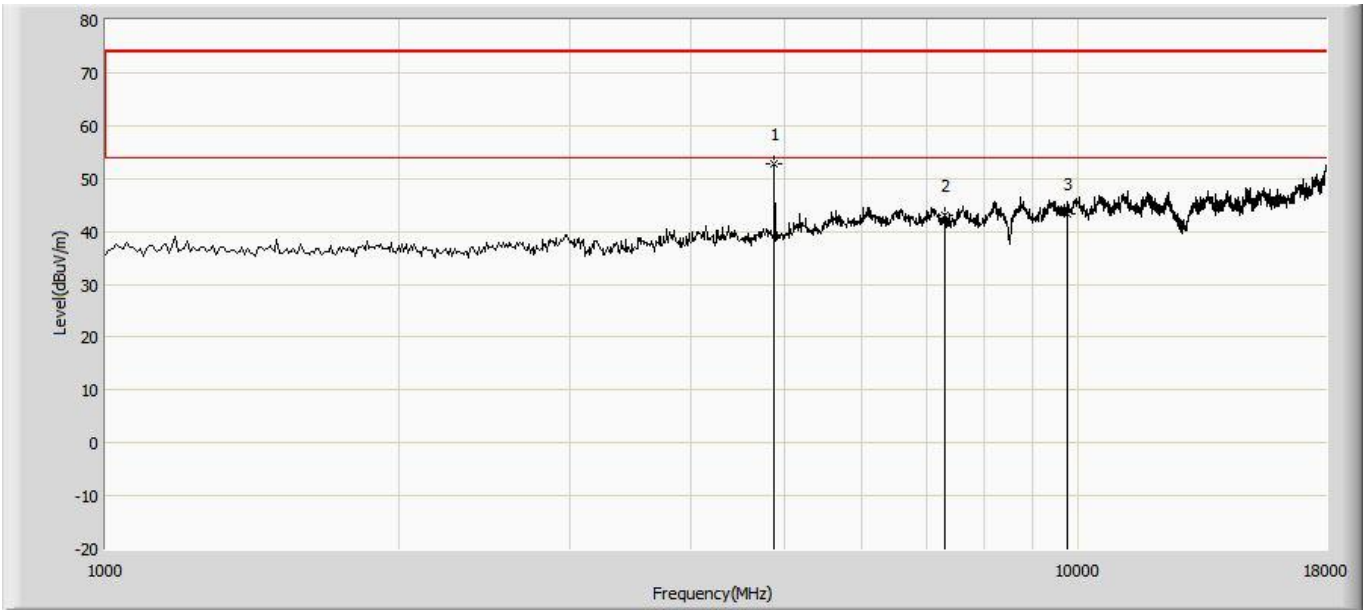
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4842.000	52.227	51.662	-21.773	74.000	0.565	PK
2		7266.000	41.105	37.345	-32.895	74.000	3.760	PK
3		9688.000	44.806	36.194	-29.194	74.000	8.612	PK

Profile: 1762096R	Page No.: 14
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11N40	



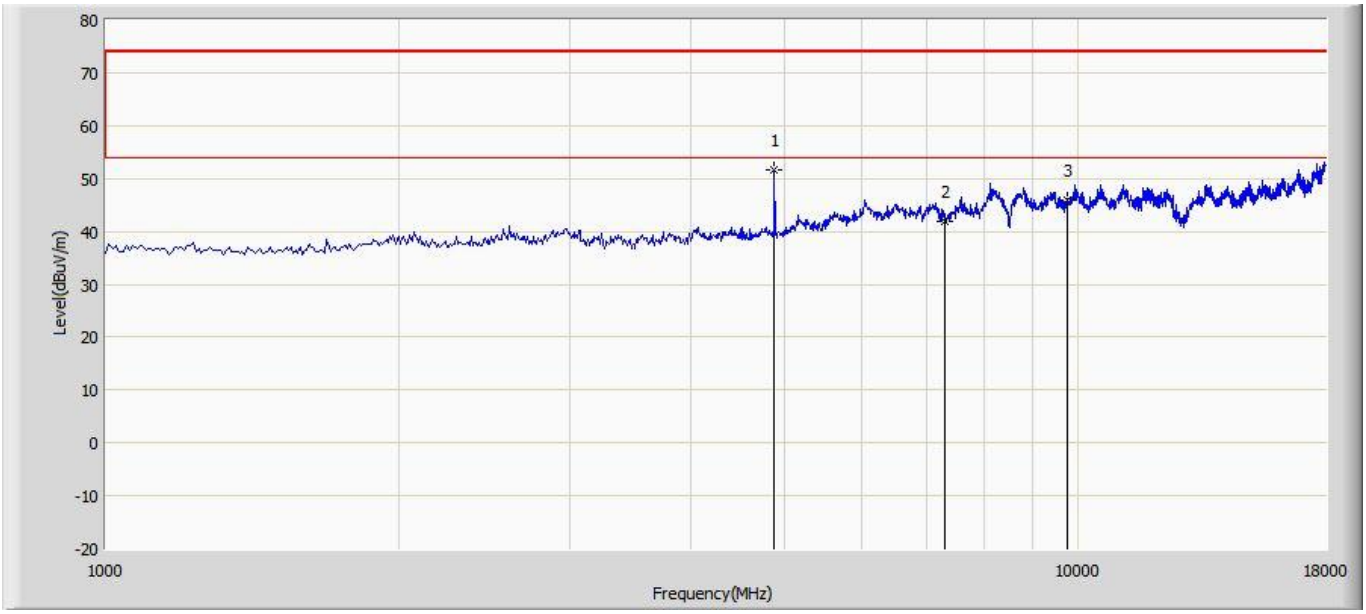
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4842.000	51.674	50.908	-22.326	74.000	0.766	PK
2		7266.000	42.813	38.406	-31.187	74.000	4.407	PK
3		9688.000	45.429	35.802	-28.571	74.000	9.627	PK

Profile: 1762096R	Page No.: 15
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11N40	



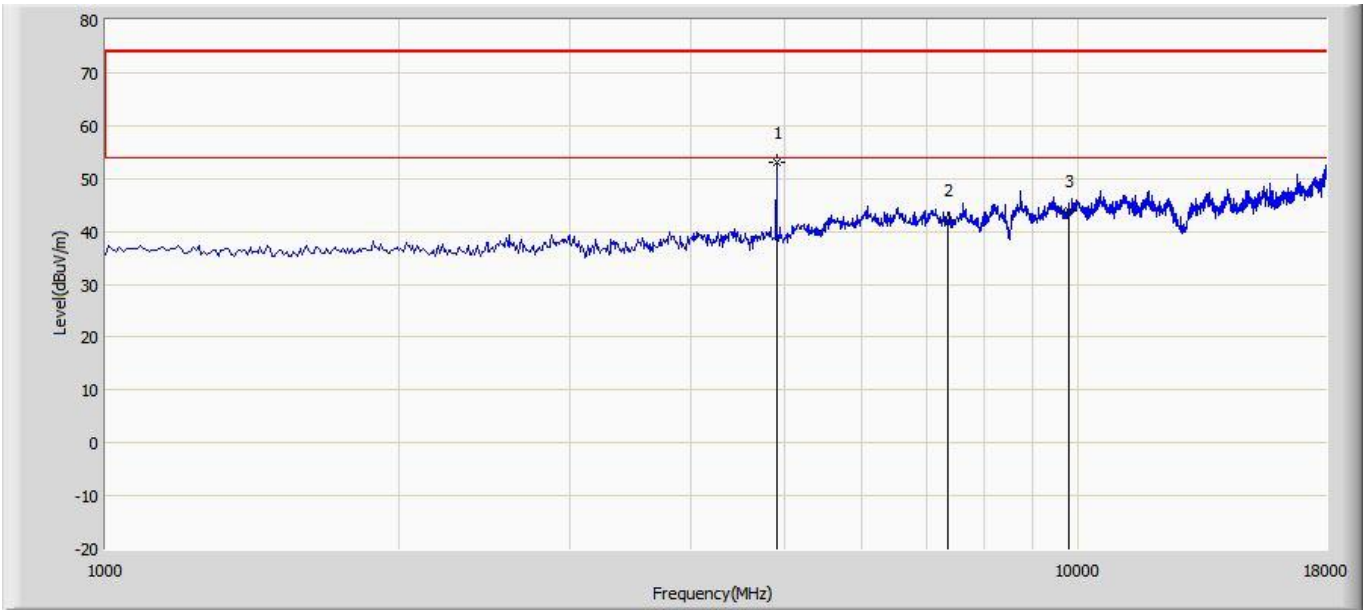
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	52.662	51.996	-21.338	74.000	0.666	PK
2		7311.000	43.039	39.233	-30.961	74.000	3.806	PK
3		9748.000	43.463	34.785	-30.537	74.000	8.678	PK

Profile: 1762096R	Page No.: 16
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11N40	



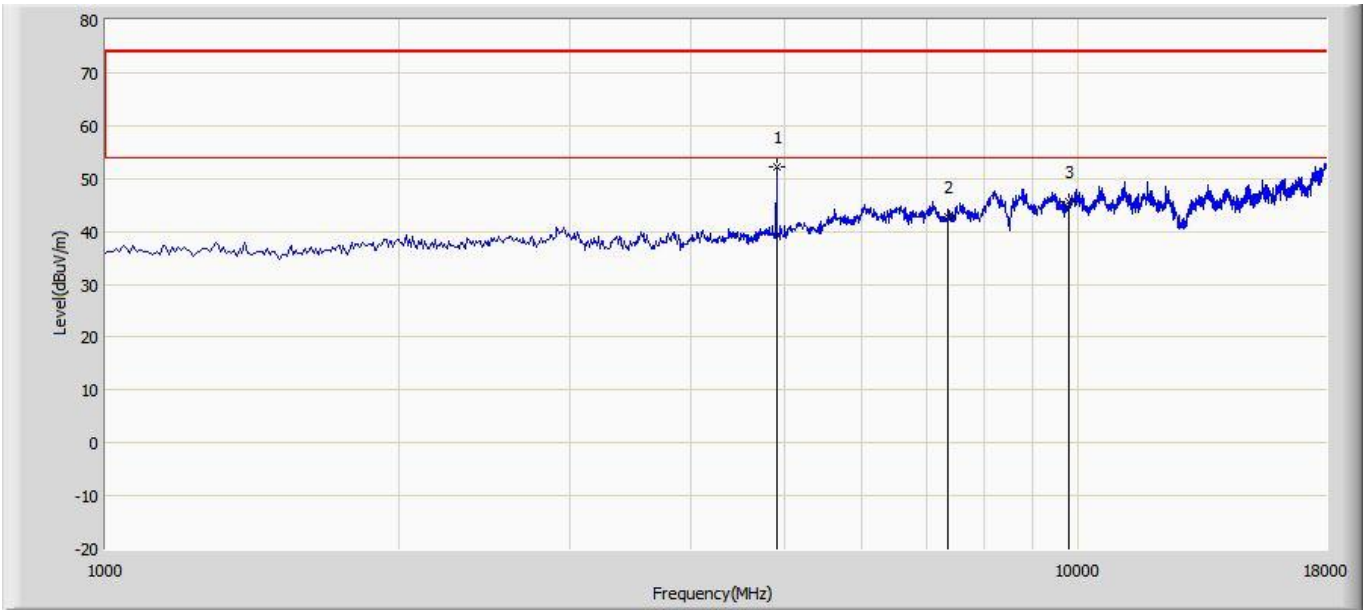
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	51.638	50.826	-22.362	74.000	0.812	PK
2		7311.000	41.920	37.405	-32.080	74.000	4.515	PK
3		9748.000	45.930	36.249	-28.070	74.000	9.681	PK

Profile: 1762096R	Page No.: 17
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	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	*	4901.500	53.163	52.428	-20.837	74.000	0.735	PK
2		7356.000	42.067	38.180	-31.933	74.000	3.887	PK
3		9808.000	43.955	35.233	-30.045	74.000	8.722	PK

Profile: 1762096R	Page No.: 18
Engineer: Simon	
Site: AC5	Time: 2017/06/30 - 14:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	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	*	4901.500	52.317	51.356	-21.683	74.000	0.961	PK
2		7356.000	42.853	38.142	-31.147	74.000	4.711	PK
3		9808.000	45.531	35.807	-28.469	74.000	9.724	PK

Note:

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

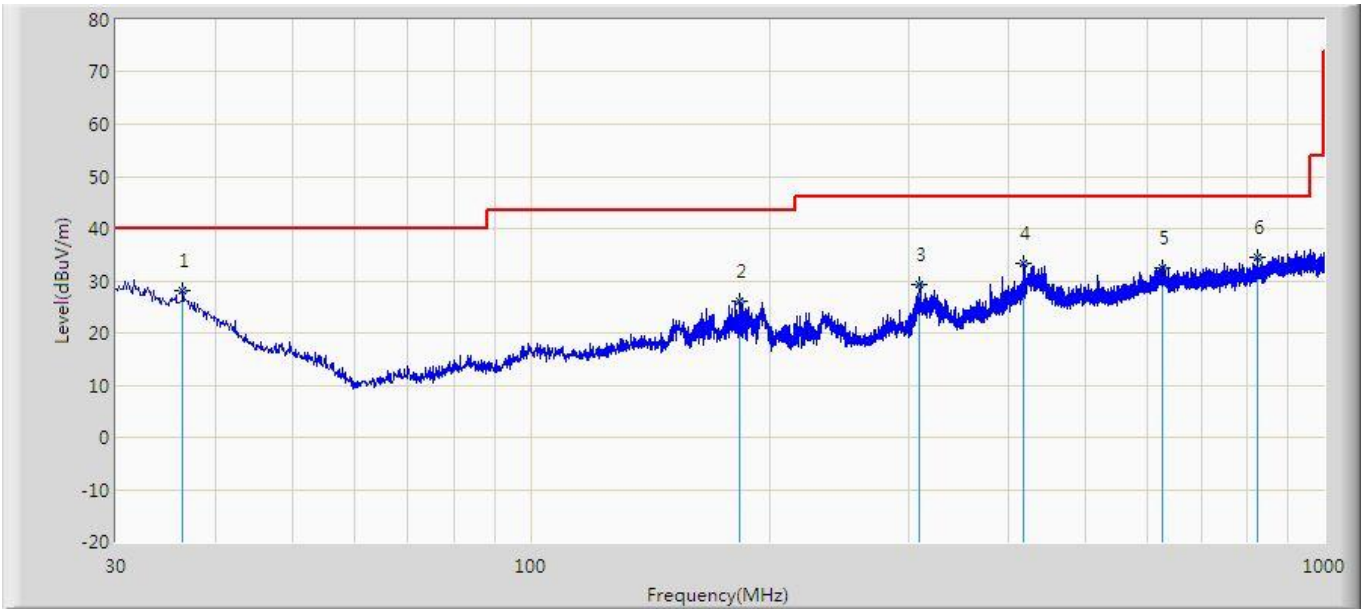
Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

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 set up, see Clause 6.6.

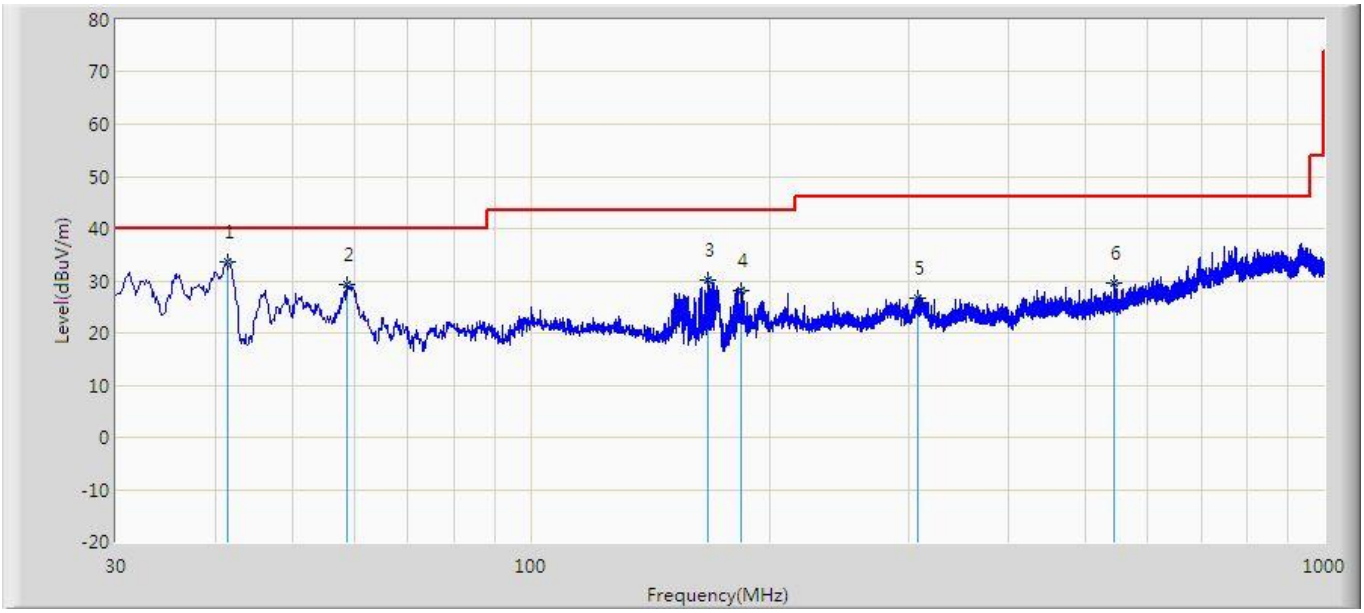
The worst case of Radiated Emission below 1GHz:

Site: TR1	Time: 2017/06/25 - 15:10
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 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		36.417	28.038	2.779	-11.962	40.000	25.260	QP
2		183.011	26.104	8.917	-17.396	43.500	17.187	QP
3		308.711	29.364	8.411	-16.636	46.000	20.953	QP
4		418.598	33.227	6.276	-12.773	46.000	26.951	QP
5		626.470	32.608	2.789	-13.392	46.000	29.819	QP
6	*	823.317	34.416	3.689	-11.584	46.000	30.727	QP

Site: TR1	Time: 2017/06/25 - 15:14
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 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	*	41.489	33.533	15.645	-6.467	40.000	17.888	QP
2		58.736	29.325	12.874	-10.675	40.000	16.451	QP
3		167.009	30.265	11.741	-13.235	43.500	18.524	QP
4		184.007	28.147	7.984	-15.353	43.500	20.163	QP
5		307.789	26.634	1.498	-19.366	46.000	25.135	QP
6		544.008	29.555	3.578	-16.445	46.000	25.976	QP

Note:

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

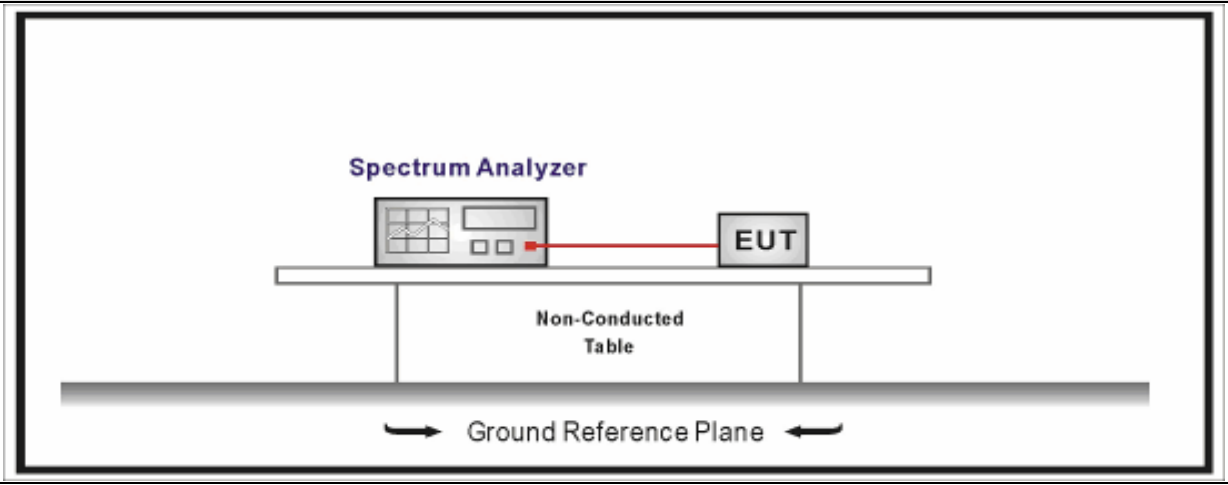
5. Emissions in non-restricted frequency bands

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	2017.04.09	2018.04.08
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

5.2. Test Setup

Occupied Bandwidth 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)

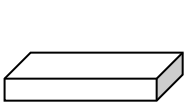
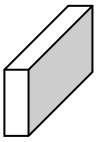
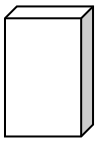
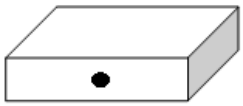
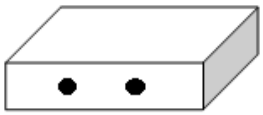
Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

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

<table>
<tr><td>Item</td><td colspan="4">Emissions in non-restricted frequency bands</td></tr>
<tr><td rowspan="2">Device Category</td><td>☒</td><td colspan="3">Fixed position use</td></tr>
<tr><td>☐</td><td colspan="3">Mobile position use</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1 ~ Mode 4</td></tr>
<tr><td rowspan="13">Test method</td><td>☐</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="3"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>Worst Axis ☐</td><td>Worst Axis ☐</td><td>Worst Axis ☐</td></tr>
<tr><td>☒</td><td colspan="3">Conducted</td></tr>
<tr><td>☒</td><td colspan="3">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td colspan="2">Chain 2</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

5.6. Test Result

Product Name	:	WiFi socket	Power	:	AC 120V/60Hz
Test Mode	:	Mode1~4	Test Site	:	TR8
Test Date	:	2017.06.30			

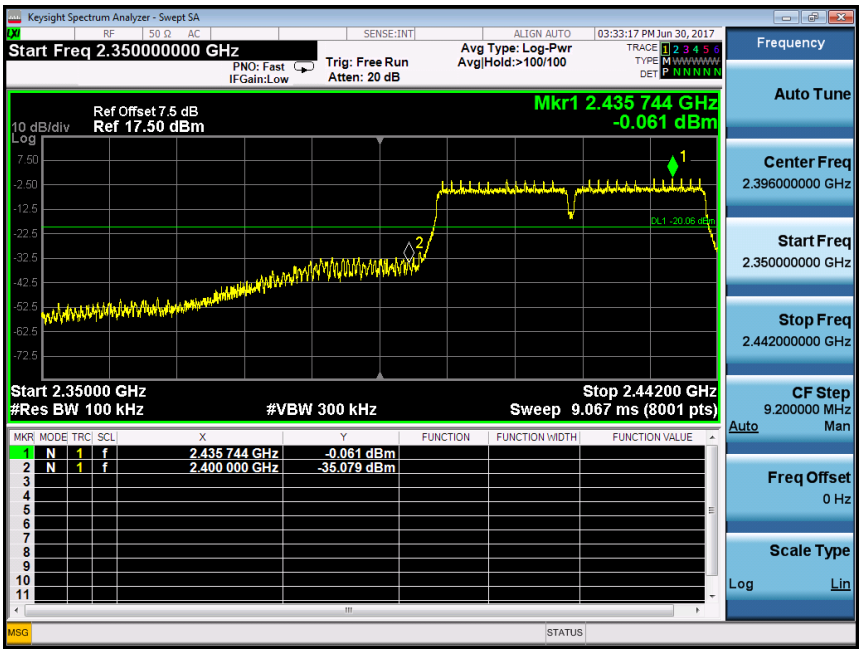
Antenna #0

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	8.086	2400	-35.292	43.378	>20	Pass
1	11	2462	9.080	2500	-56.666	65.746	>20	Pass
2	01	2412	7.125	2400	-35.160	42.285	>20	Pass
2	11	2462	6.159	2500	-43.700	49.859	>20	Pass
3	01	2412	3.752	2400	-33.355	37.107	>20	Pass
3	11	2462	4.815	2500	-50.531	55.346	>20	Pass
4	03	2422	-0.061	2395.8	-35.079	35.018	>20	Pass
4	09	2452	0.906	2500	-42.150	43.056	>20	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.

Mode 4 CH03(2422MHz)



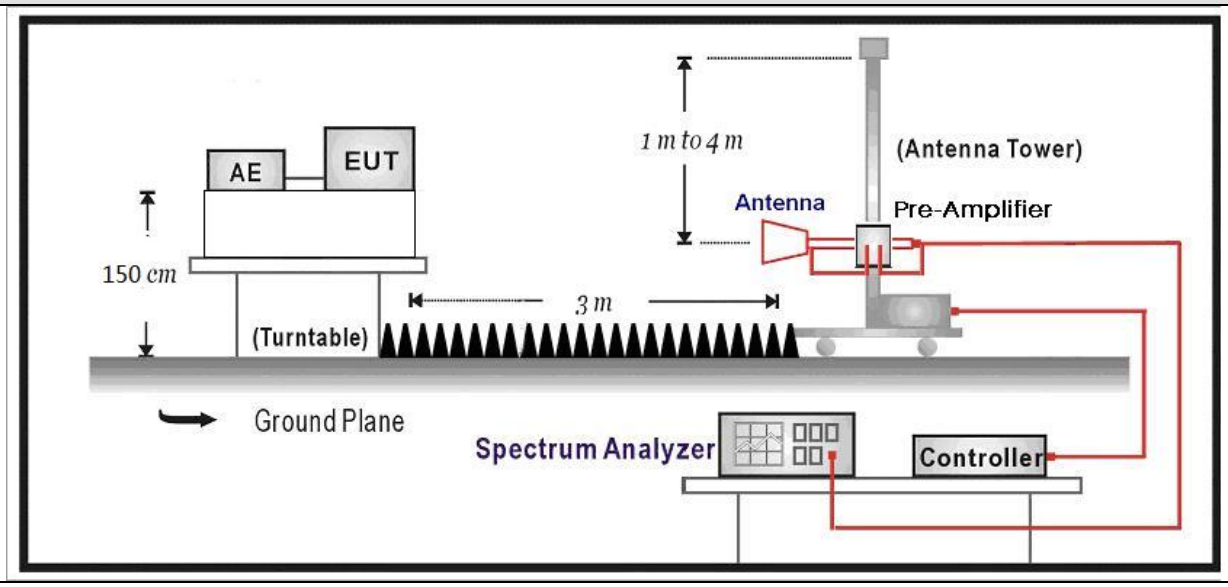
6. Radiated Emission Band Edge

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	2017.05.03	2018.05.02
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 μV/m)	RBW (MHz)	Distance (m)
2310-2390 2483.5-2500	PK	74	1	3
	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
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☒	ANSI C63.10				6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
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		☒	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

<table>
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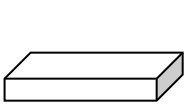
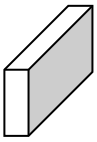
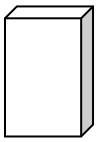
<tr><td>☐</td><td colspan="3">Mobile position use</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1~4</td></tr>
<tr><td rowspan="12">Test method</td><td>☒</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="3"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
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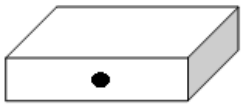
<tr><td>☐</td><td colspan="3">Conducted</td></tr>
<tr><td>☐</td><td colspan="3">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
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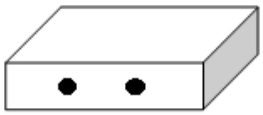
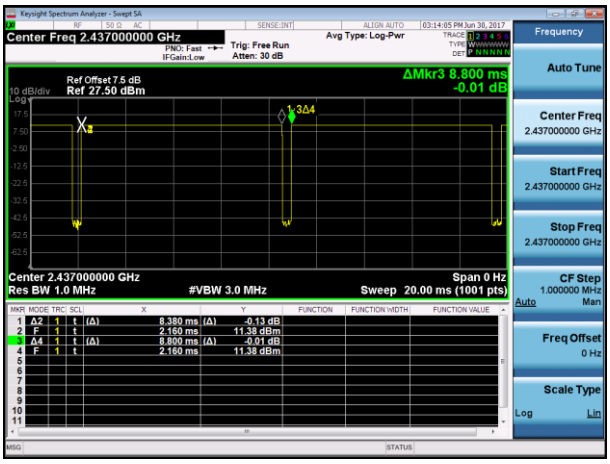
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

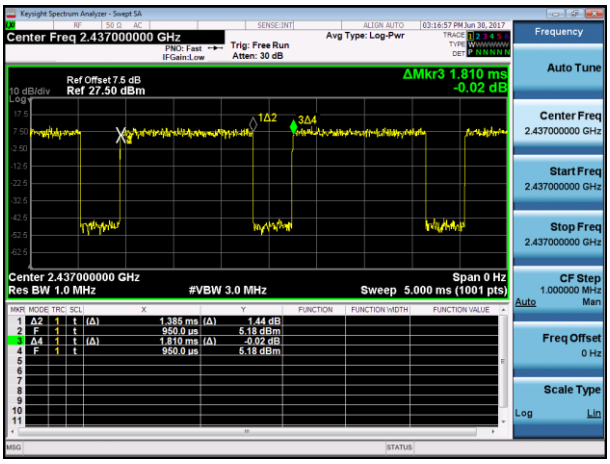
6.6. Duty Cycle

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11b	8.38	0.420	120Hz	8.800	95.23%
802.11g	1.385	0.425	750Hz	1.810	76.52%
802.11n(20MHz)	1.290	0.425	870Hz	1.715	75.22%
802.11n(40MHz)	0.615	0.450	1.8KHz	1.065	57.75%

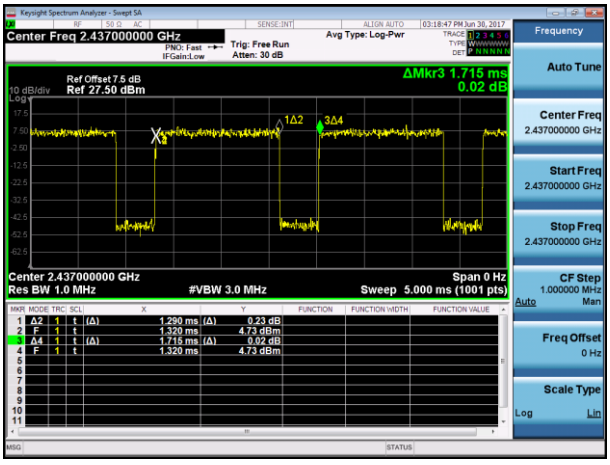
802.11b



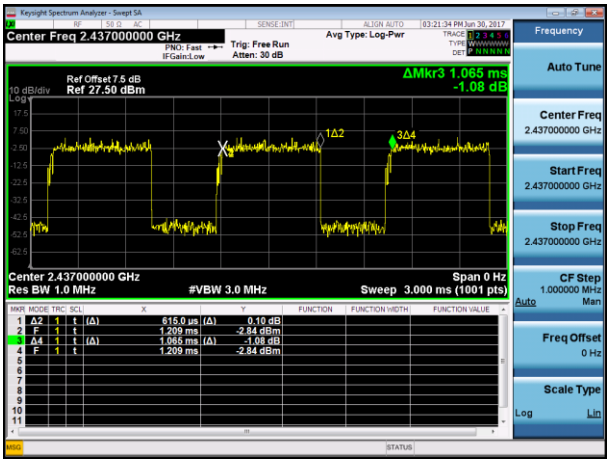
802.11g



802.11n(20MHz)

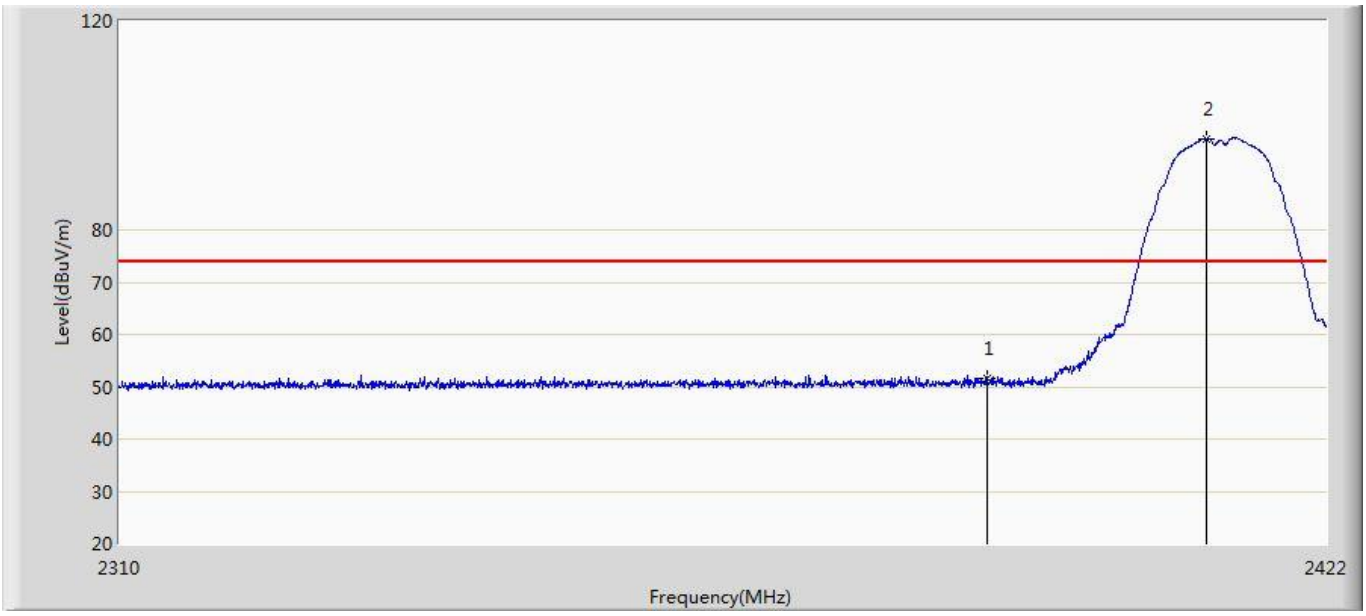


802.11n(40MHz)



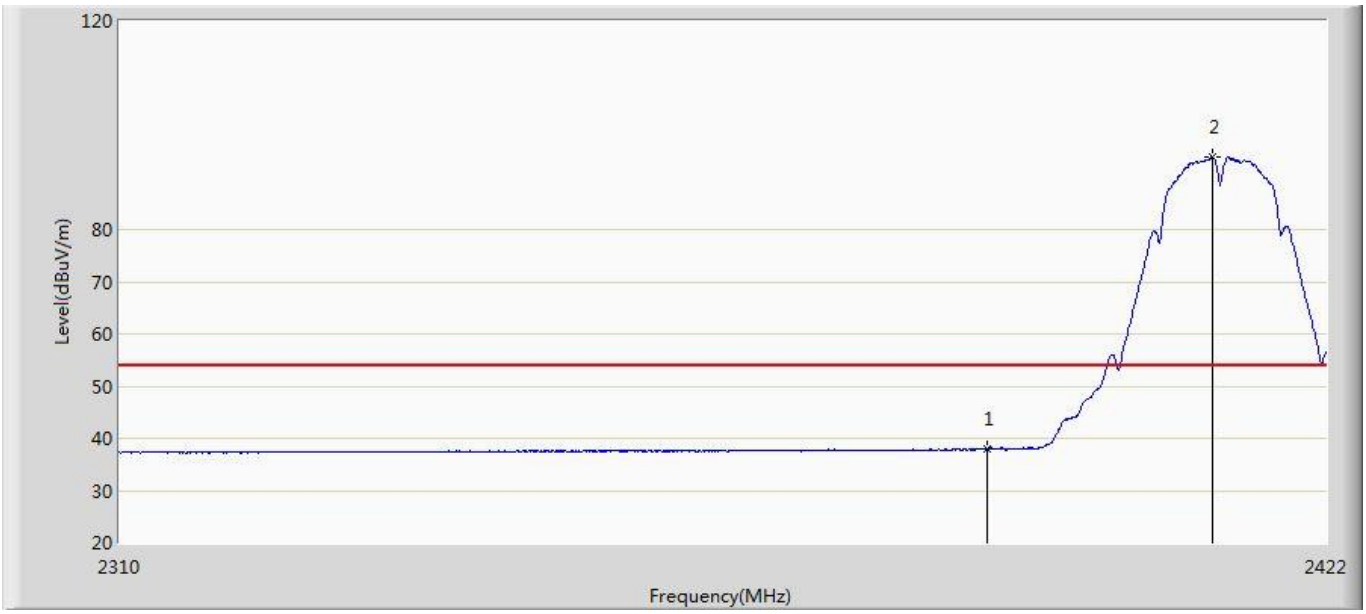
6.7. Test Result

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11B	



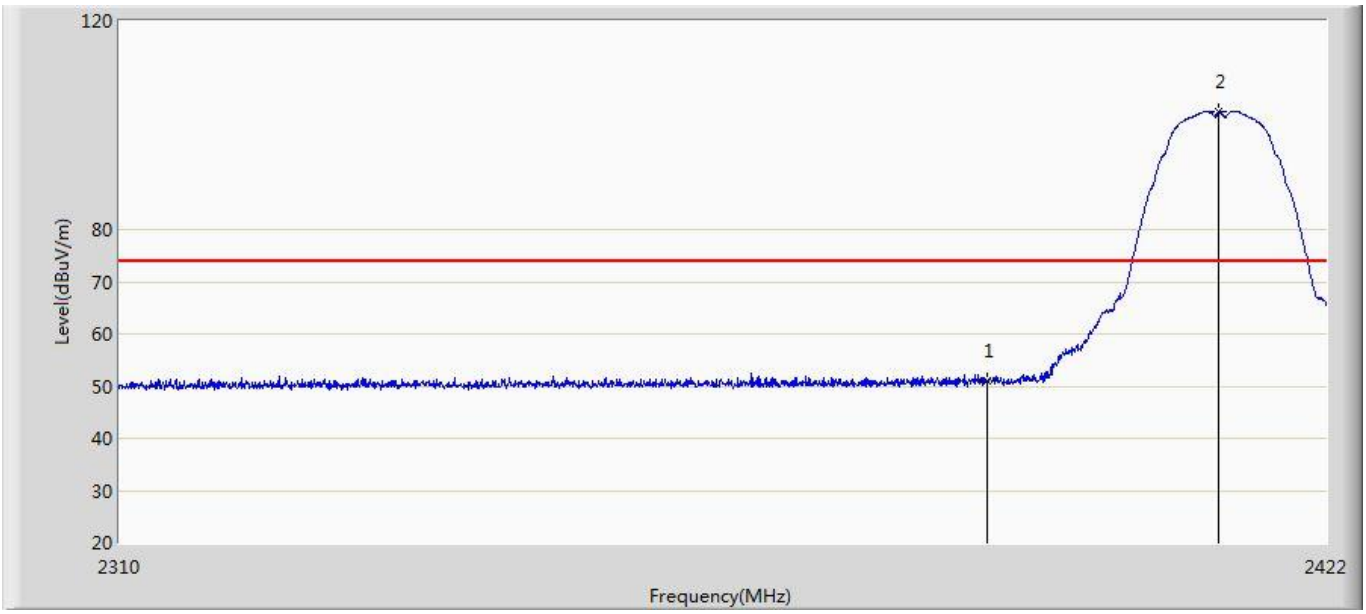
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.482	15.800	-22.518	74.000	35.682	PK
2	*	2410.688	97.491	61.755	N/A	N/A	35.737	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11B	



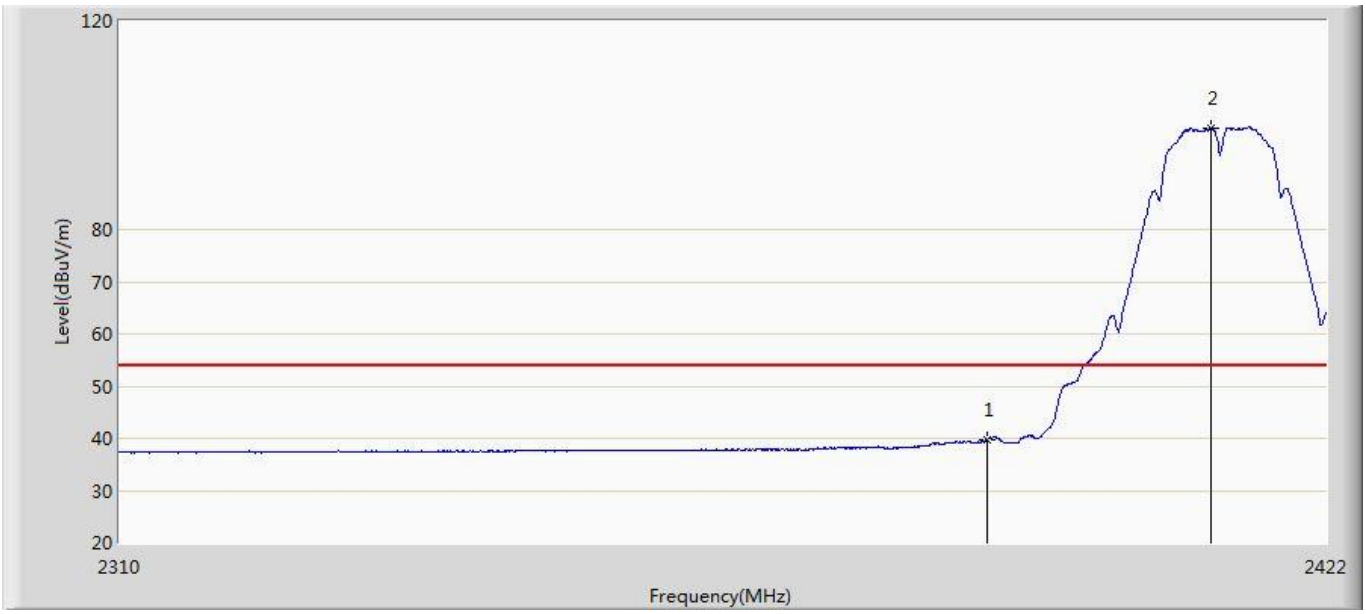
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.067	2.385	-15.933	54.000	35.682	AV
2	*	2411.192	93.834	58.096	N/A	N/A	35.738	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11B	



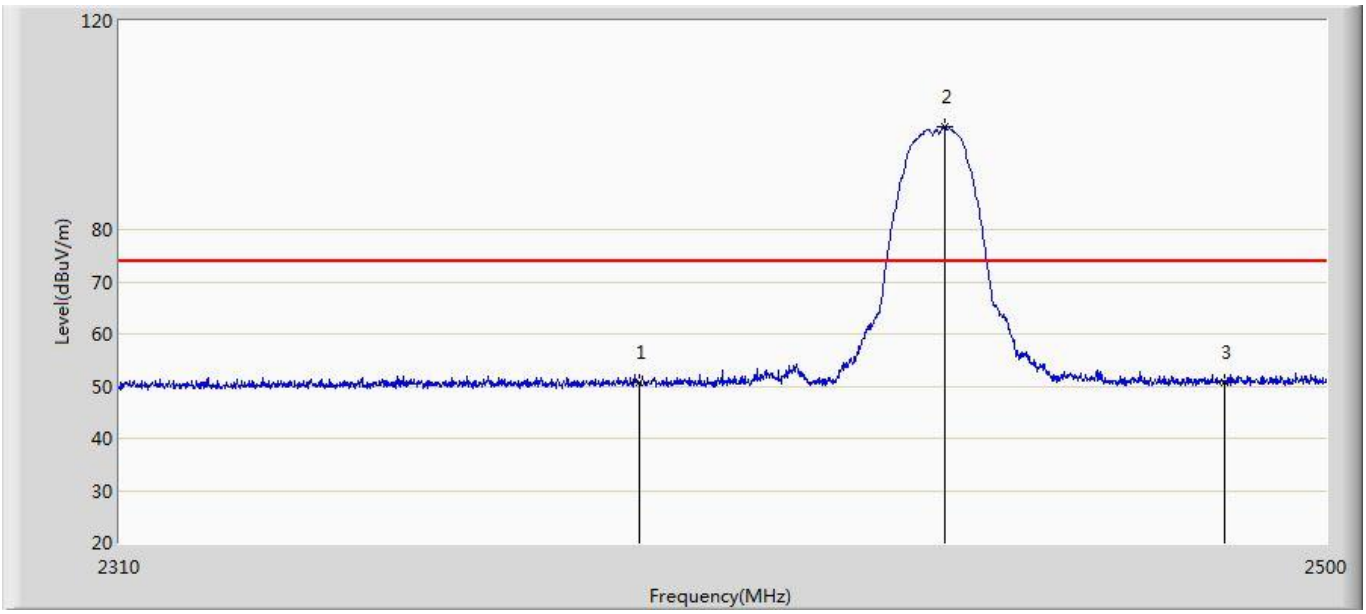
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.882	15.200	-23.118	74.000	35.682	PK
2	*	2411.864	102.527	66.786	N/A	N/A	35.741	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11B	



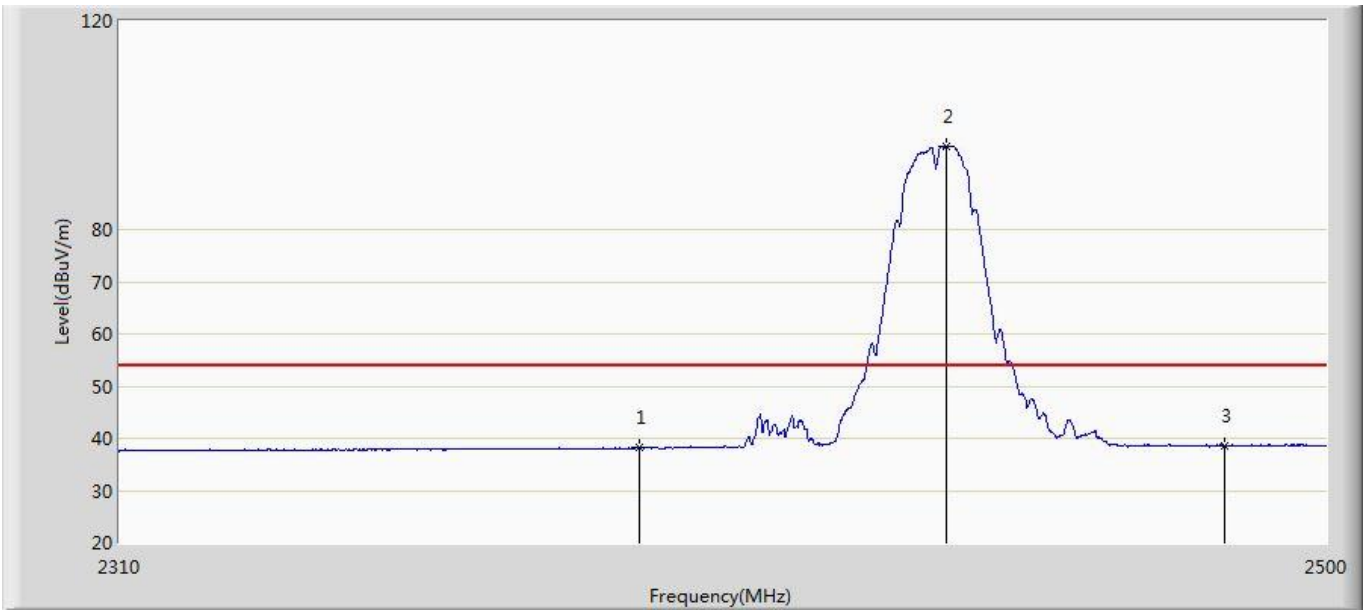
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	39.752	4.070	-14.248	54.000	35.682	AV
2	*	2411.080	99.425	63.687	N/A	N/A	35.737	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11B	



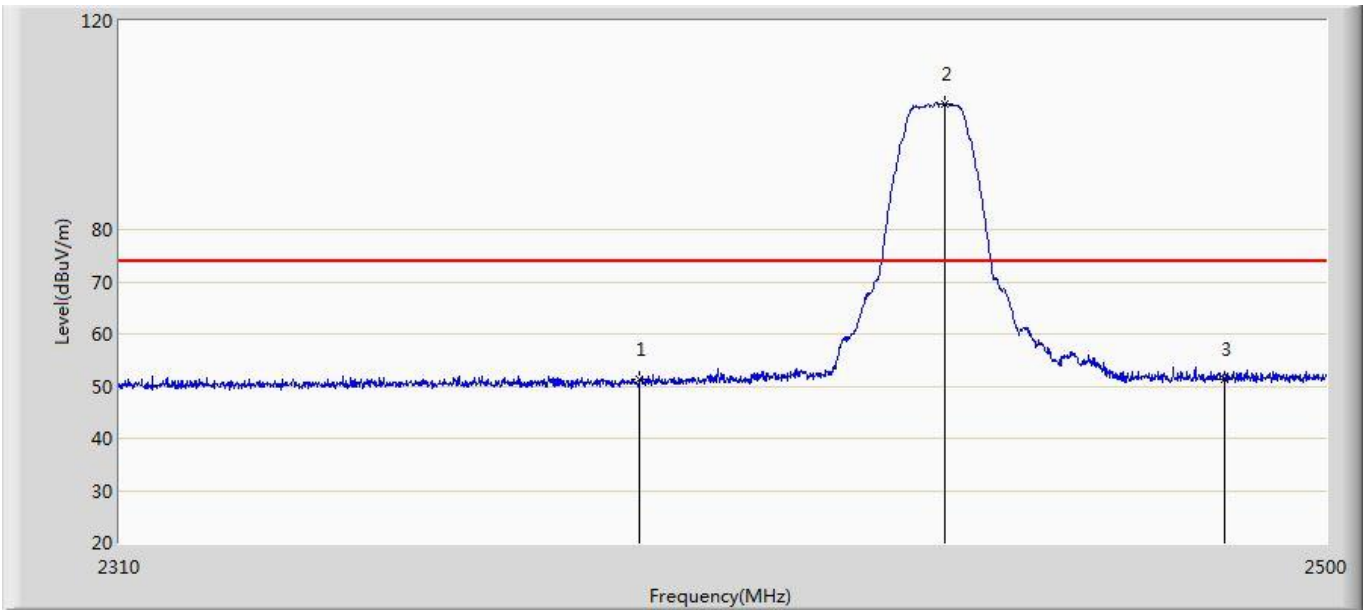
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.608	14.926	-23.392	74.000	35.682	PK
2	*	2438.250	99.813	64.007	N/A	N/A	35.806	PK
3		2483.500	50.832	14.940	-23.168	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11B	



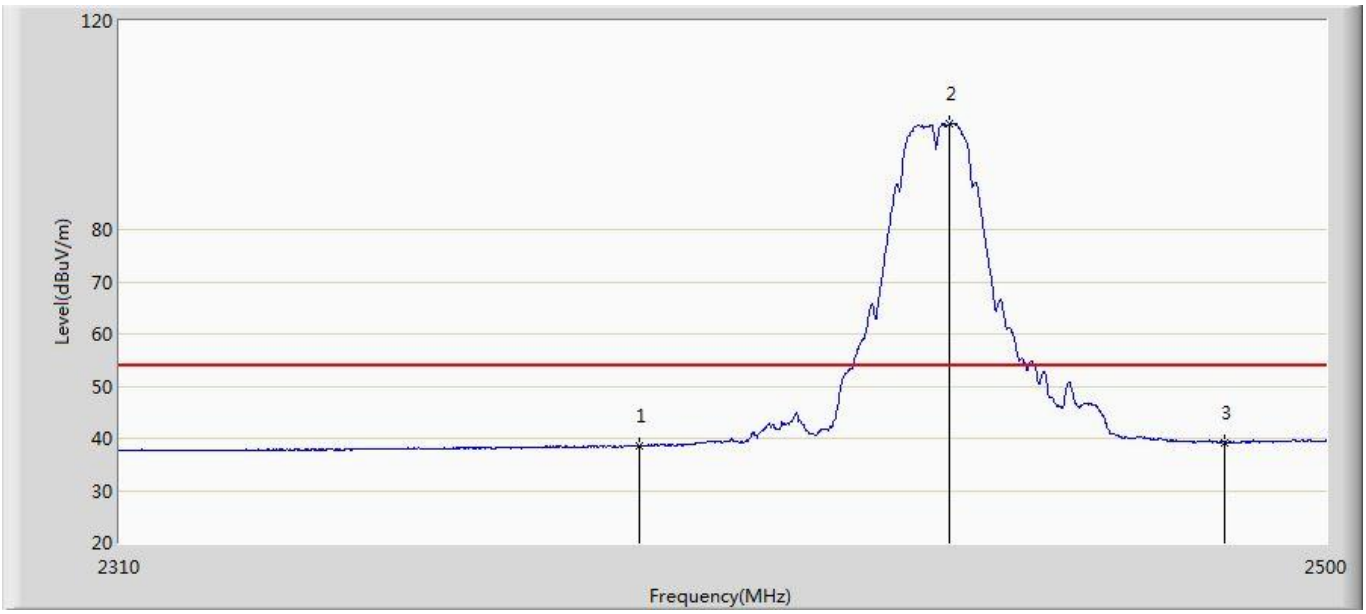
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.236	2.554	-15.764	54.000	35.682	AV
2	*	2438.535	95.823	60.017	N/A	N/A	35.805	AV
3		2483.500	38.524	2.632	-15.476	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11B	



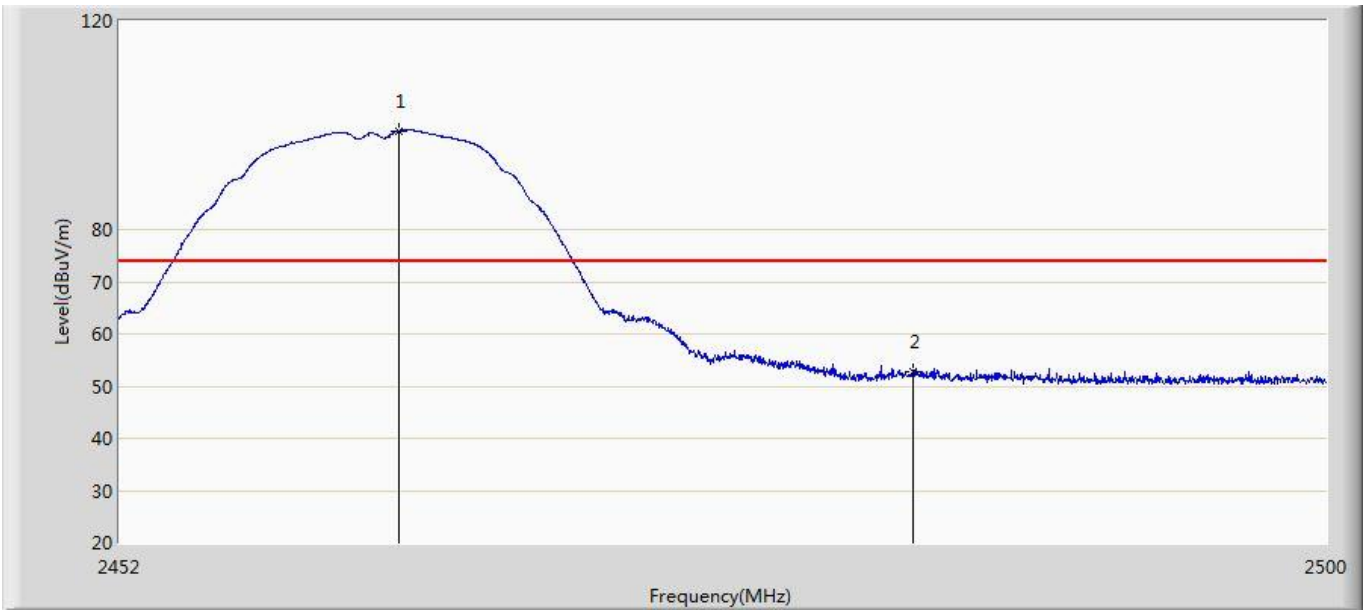
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.257	15.575	-22.743	74.000	35.682	PK
2	*	2438.250	104.170	68.364	N/A	N/A	35.806	PK
3		2483.500	51.313	15.421	-22.687	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 09:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11B	



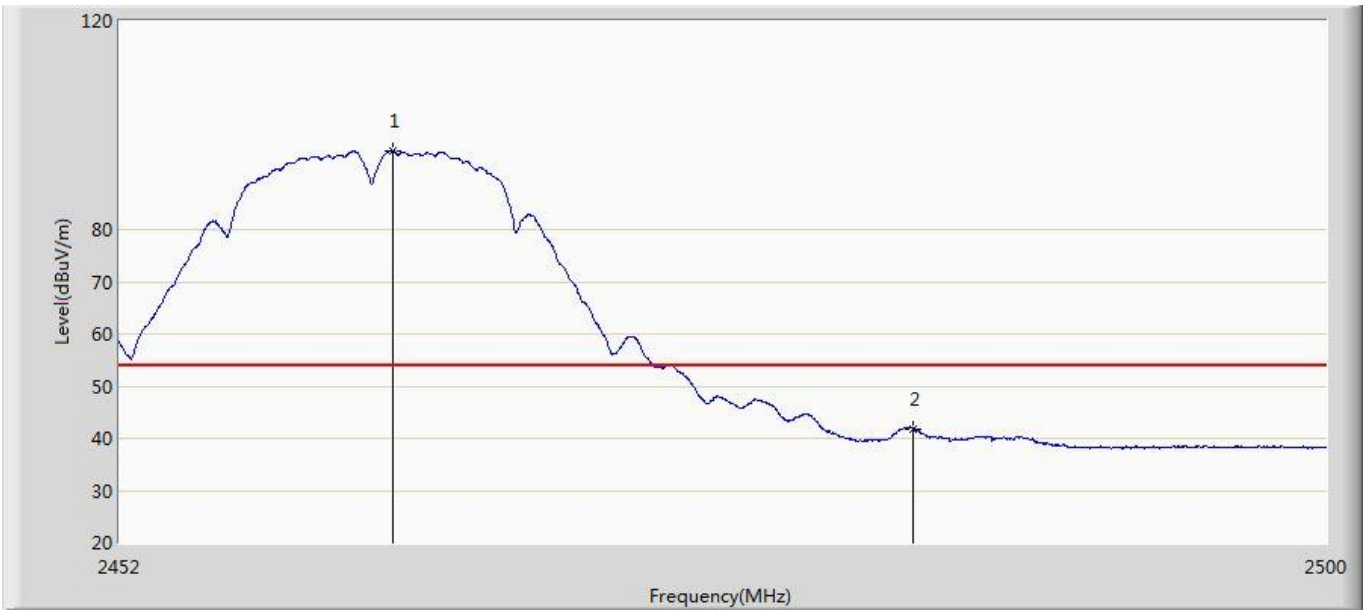
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.482	2.800	-15.518	54.000	35.682	AV
2	*	2439.105	100.153	64.347	N/A	N/A	35.805	AV
3		2483.500	39.266	3.374	-14.734	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11B	



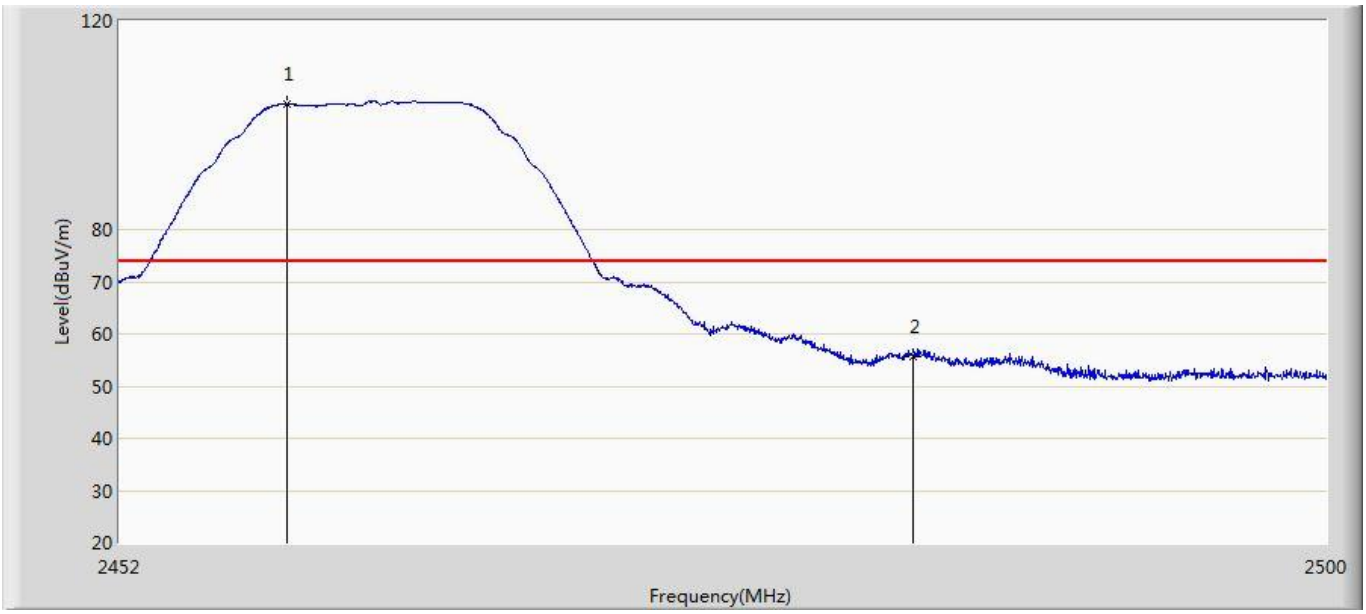
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.016	98.876	62.999	N/A	N/A	35.877	PK
2		2483.500	52.817	16.925	-21.183	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11B	



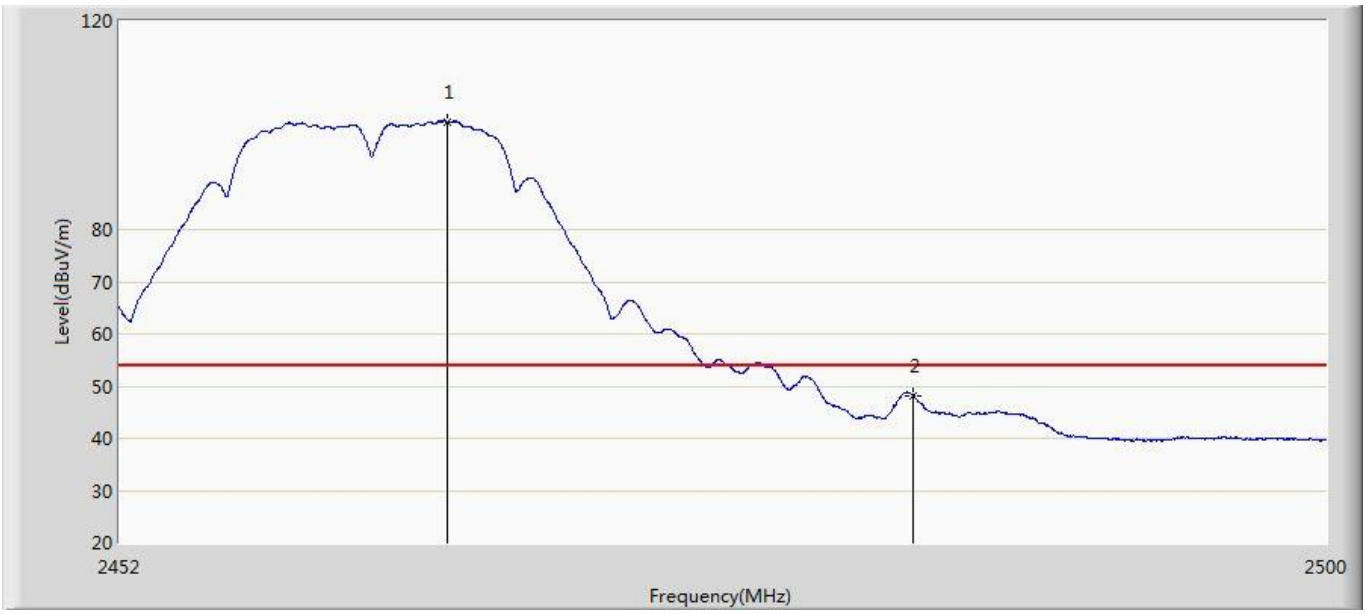
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.776	95.123	59.246	N/A	N/A	35.877	AV
2		2483.500	41.857	5.965	-12.143	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11B	



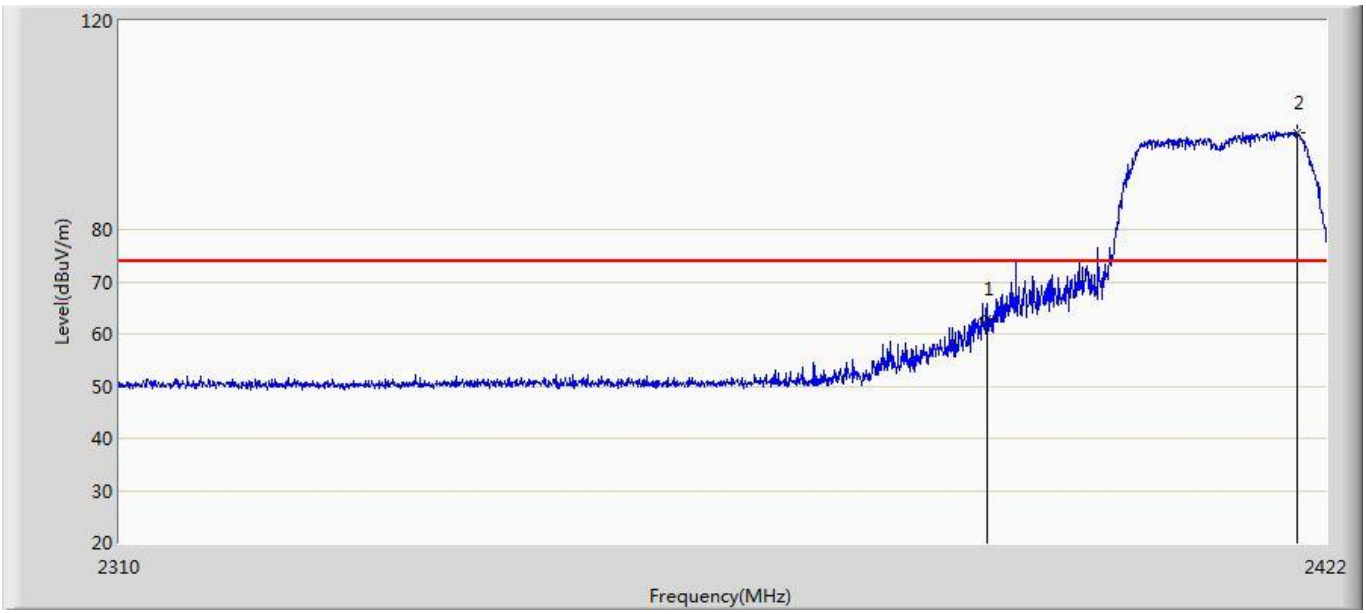
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.600	104.149	68.286	N/A	N/A	35.863	PK
2		2483.500	55.644	19.752	-18.356	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11B	



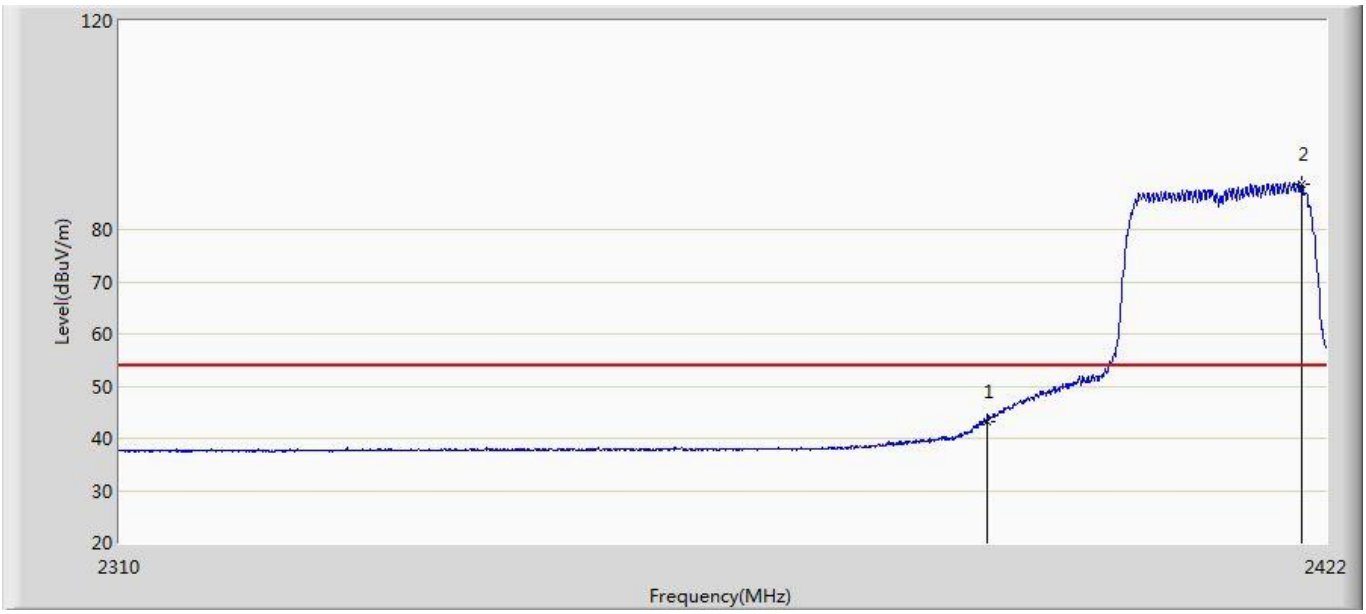
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.960	100.591	64.716	N/A	N/A	35.875	AV
2		2483.500	48.160	12.268	-5.840	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11G	



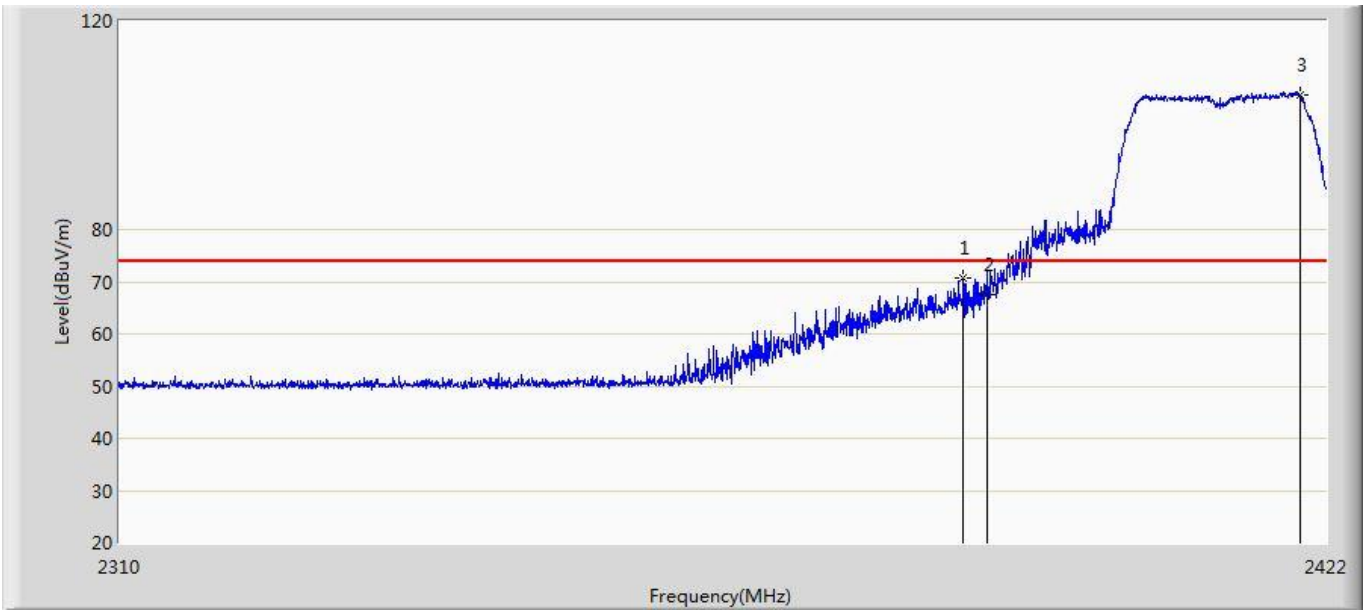
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.798	27.116	-11.202	74.000	35.682	PK
2	*	2419.312	98.432	62.660	N/A	N/A	35.772	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11G	



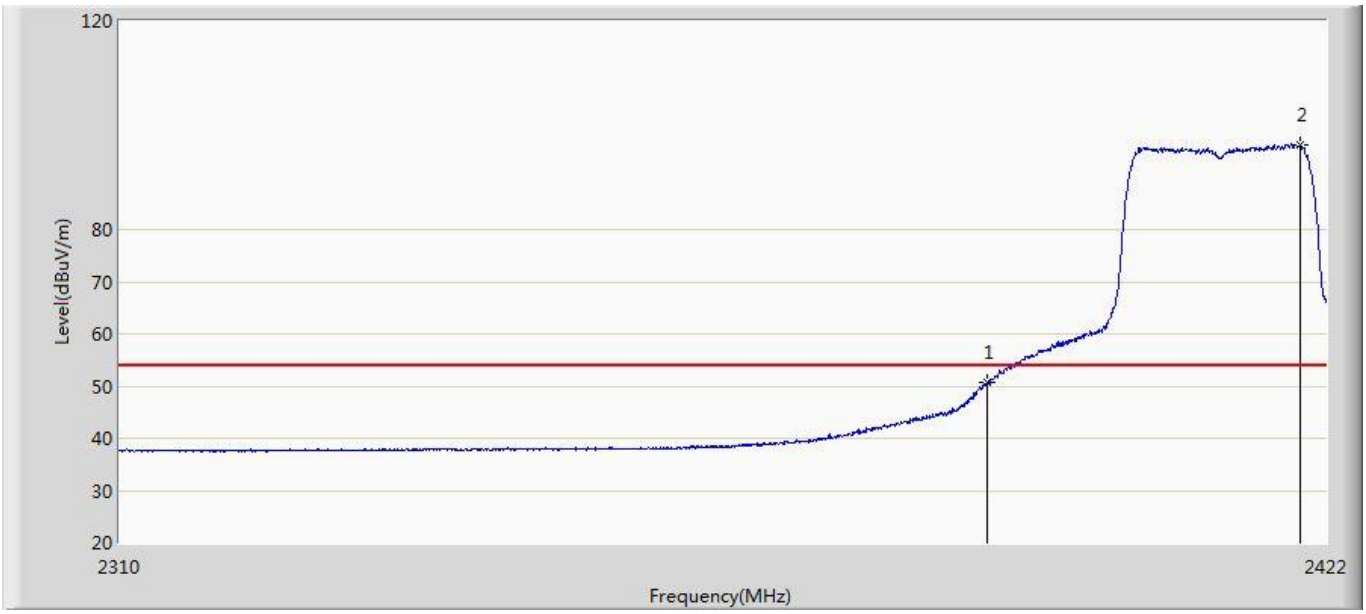
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	43.173	7.491	-10.827	54.000	35.682	AV
2	*	2419.760	88.638	52.864	N/A	N/A	35.774	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 13:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11G	



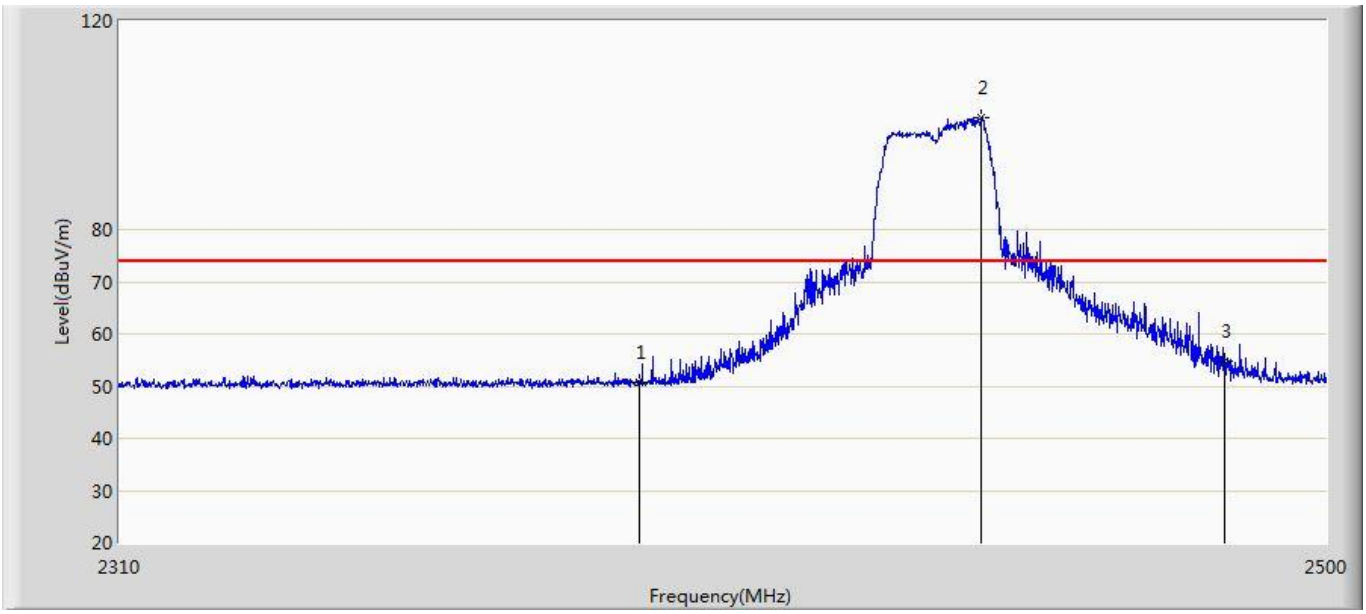
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.784	70.712	35.035	-3.288	74.000	35.677	PK
2		2390.000	67.560	31.878	-6.440	74.000	35.682	PK
3	*	2419.592	105.654	69.880	N/A	N/A	35.774	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11G	



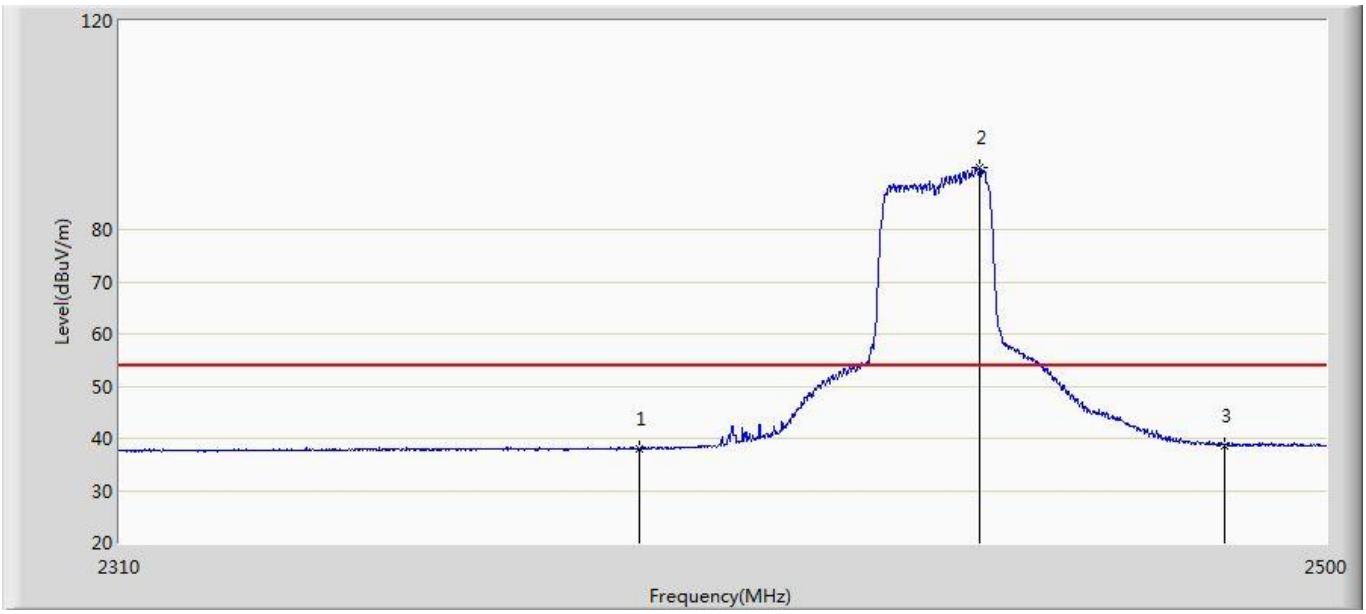
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.658	14.976	-3.342	54.000	35.682	AV
2	*	2419.592	96.259	60.486	N/A	N/A	35.774	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11G	



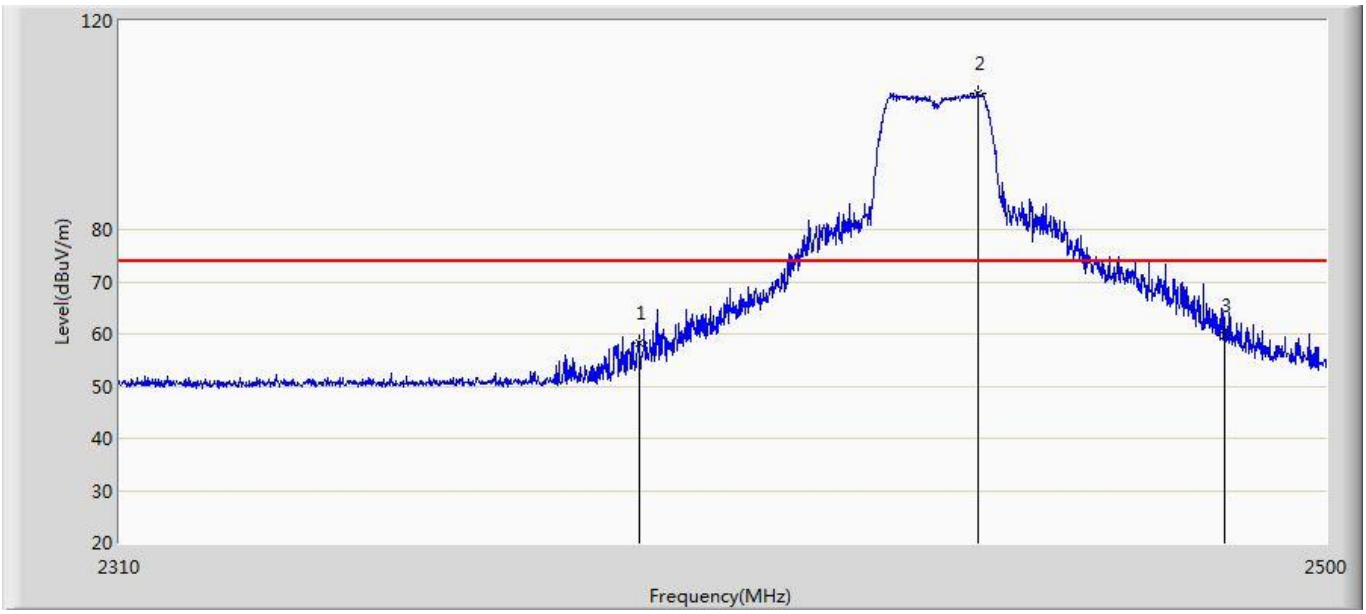
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.662	14.980	-23.338	74.000	35.682	PK
2	*	2444.235	101.541	65.737	N/A	N/A	35.804	PK
3		2483.500	54.801	18.909	-19.199	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11G	



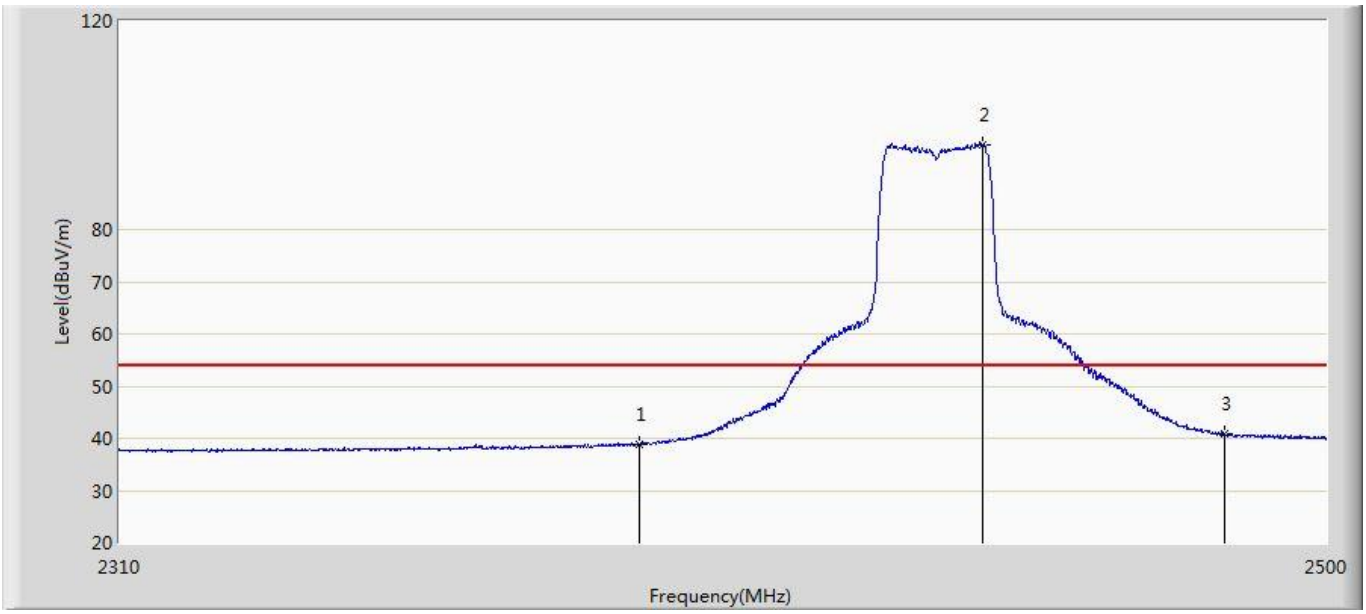
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.032	2.350	-15.968	54.000	35.682	AV
2	*	2444.045	91.818	56.014	N/A	N/A	35.804	AV
3		2483.500	38.586	2.694	-15.414	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11G	



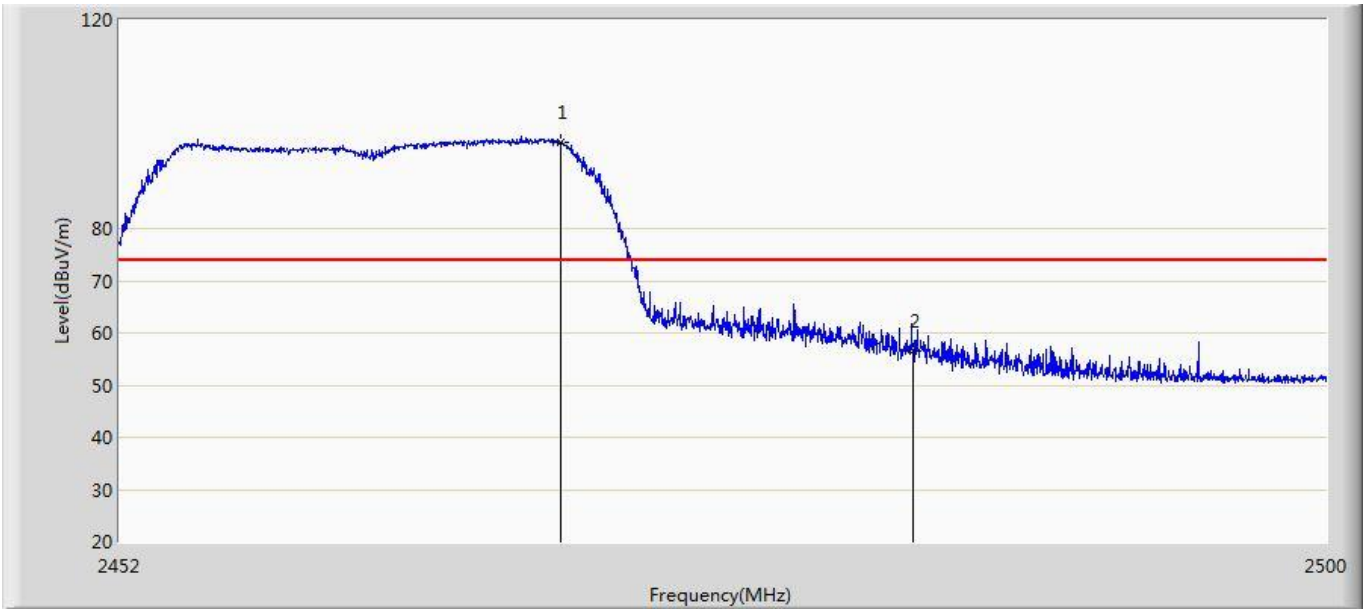
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	58.290	22.608	-15.710	74.000	35.682	PK
2	*	2443.665	106.214	70.410	N/A	N/A	35.804	PK
3		2483.500	59.805	23.913	-14.195	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11G	



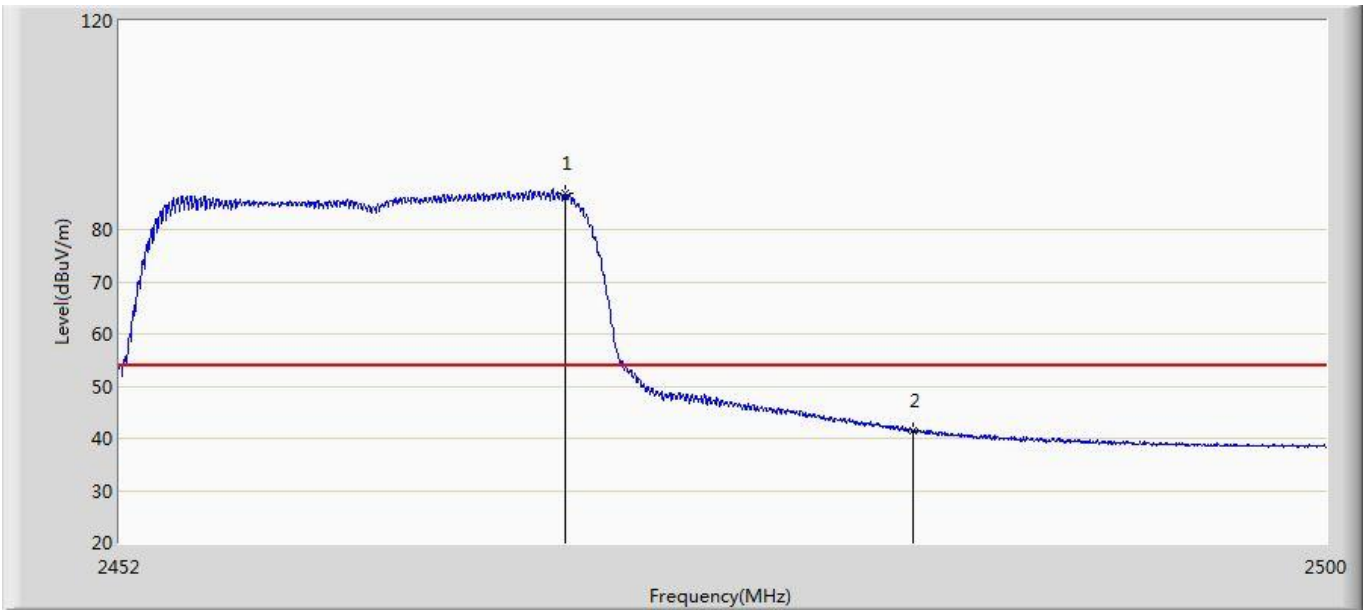
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.880	3.198	-15.120	54.000	35.682	AV
2	*	2444.520	96.353	60.549	N/A	N/A	35.804	AV
3		2483.500	40.772	4.880	-13.228	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11G	



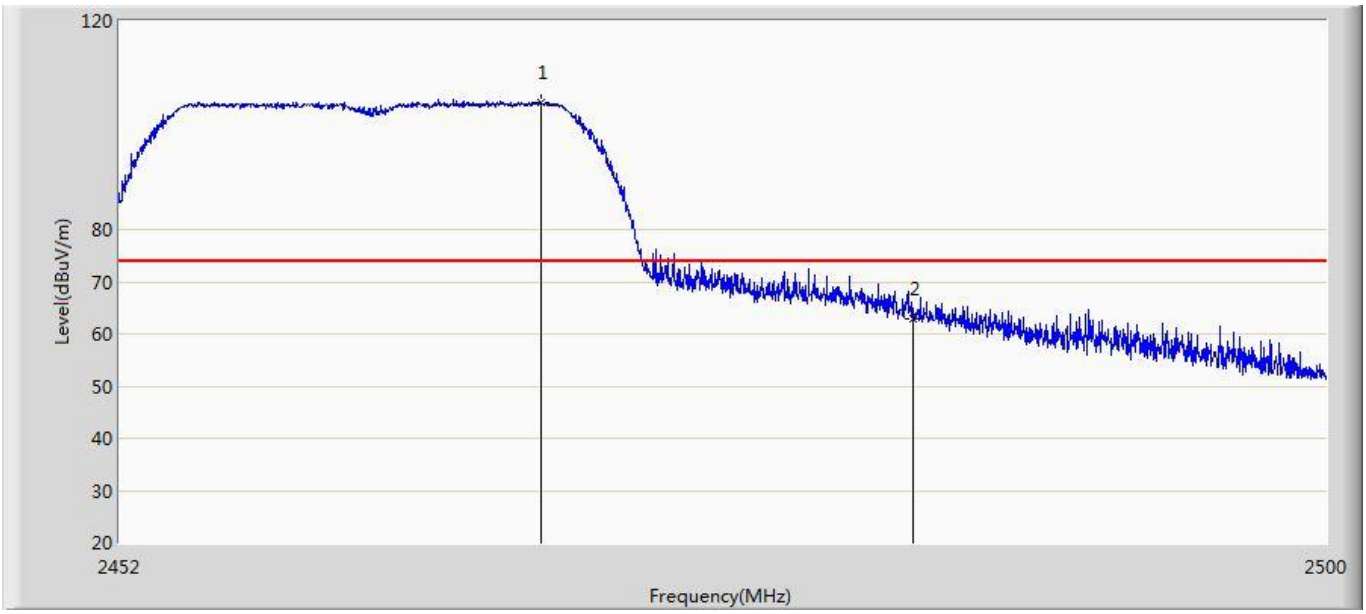
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.448	96.606	60.736	N/A	N/A	35.870	PK
2		2483.500	56.586	20.694	-17.414	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11G	



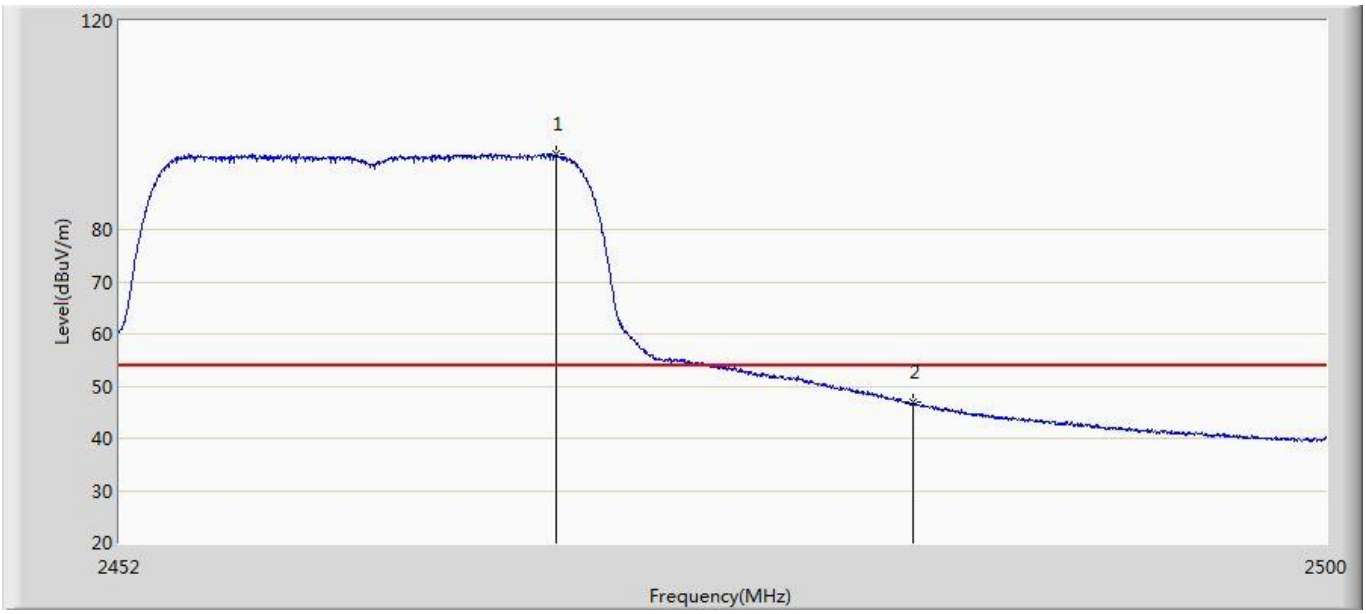
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.616	86.992	51.122	N/A	N/A	35.869	AV
2		2483.500	41.503	5.611	-12.497	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11G	



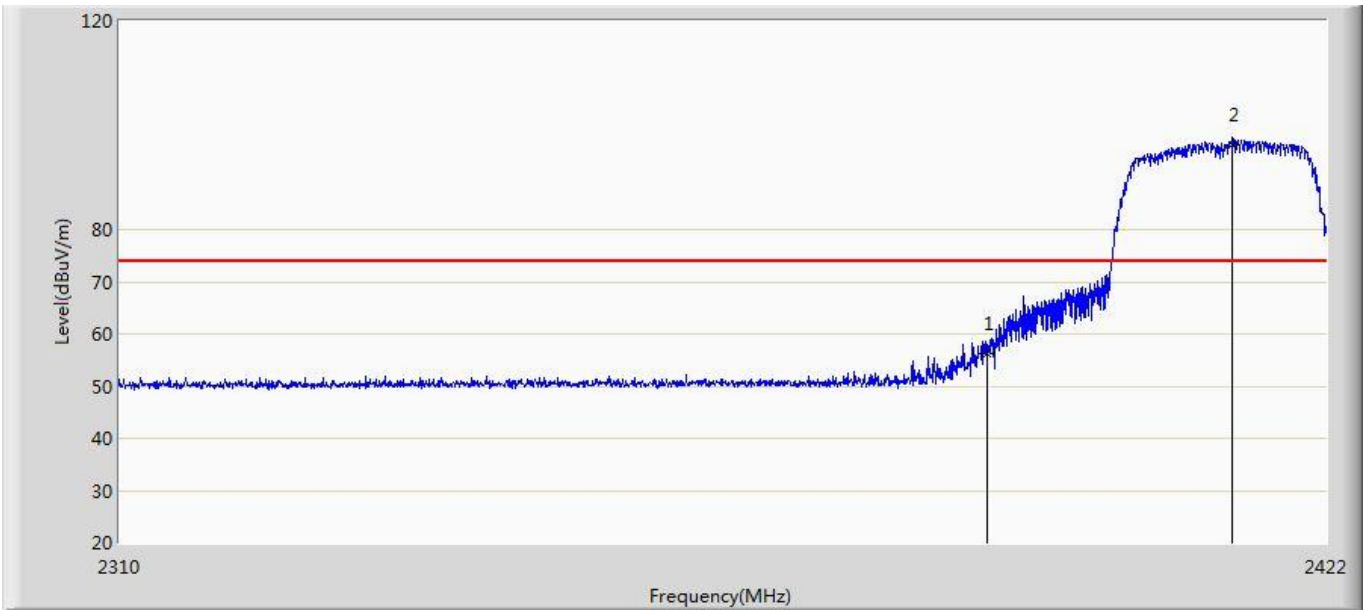
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.704	104.413	68.542	N/A	N/A	35.870	PK
2		2483.500	62.909	27.017	-11.091	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 10:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11G	



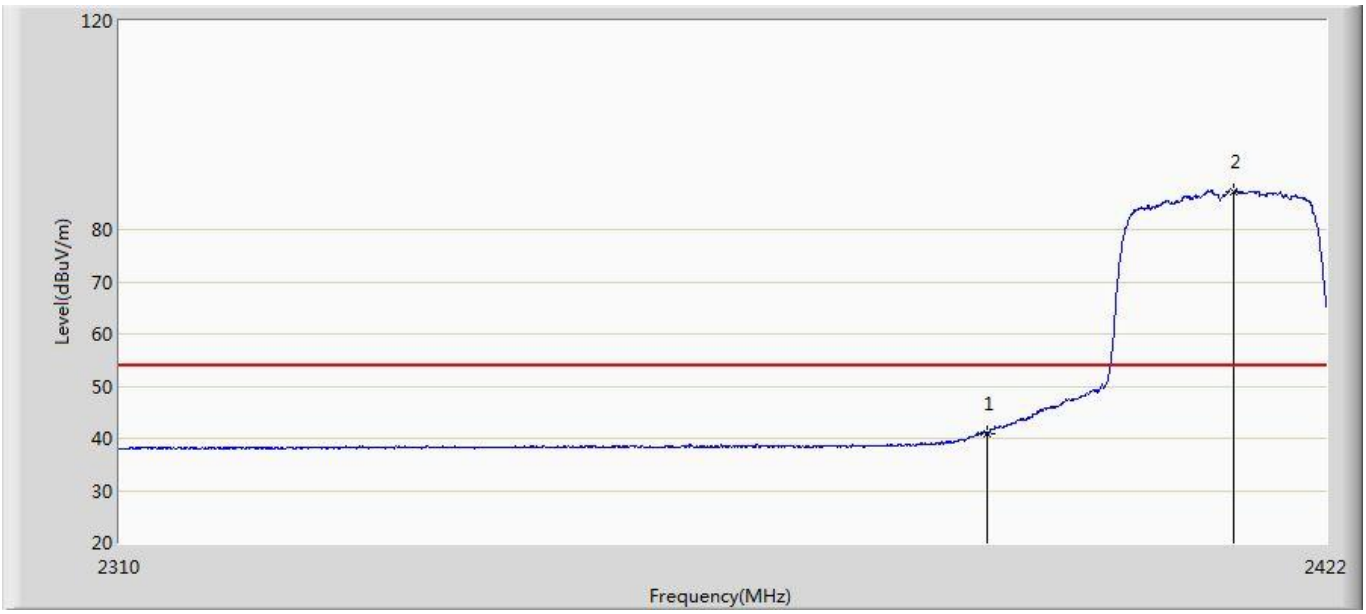
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.280	94.396	58.526	N/A	N/A	35.870	AV
2		2483.500	46.839	10.947	-7.161	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11N20	



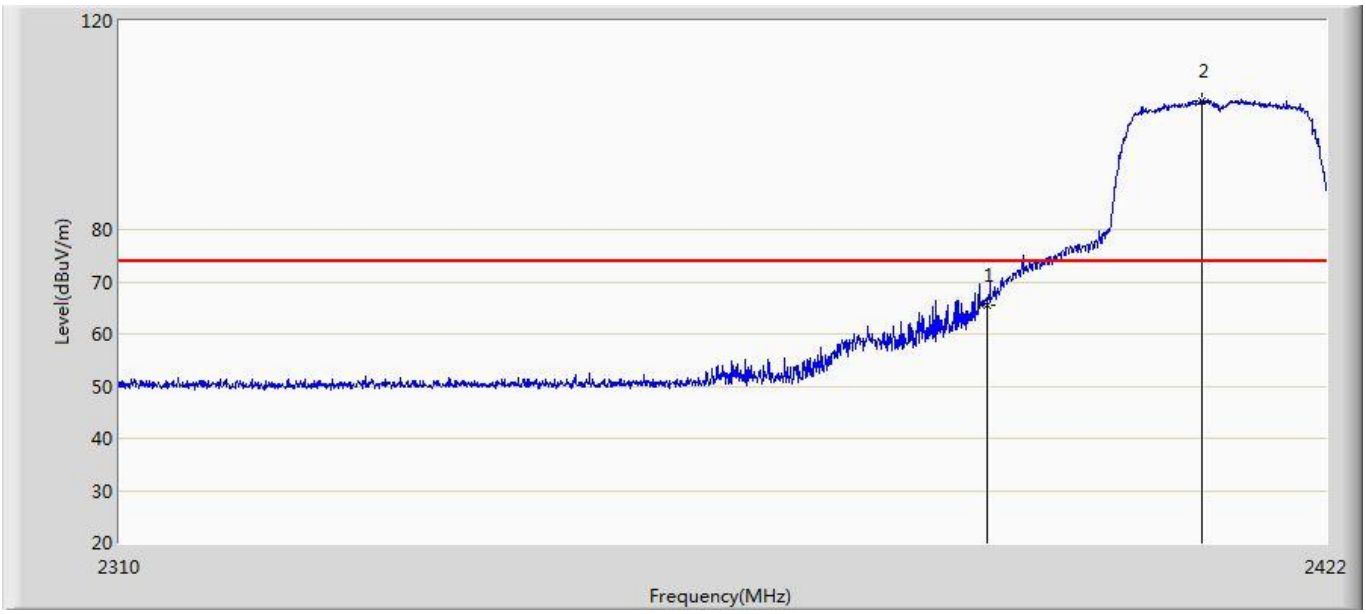
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	56.240	20.558	-17.760	74.000	35.682	PK
2	*	2413.152	96.278	60.532	N/A	N/A	35.747	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11N20	



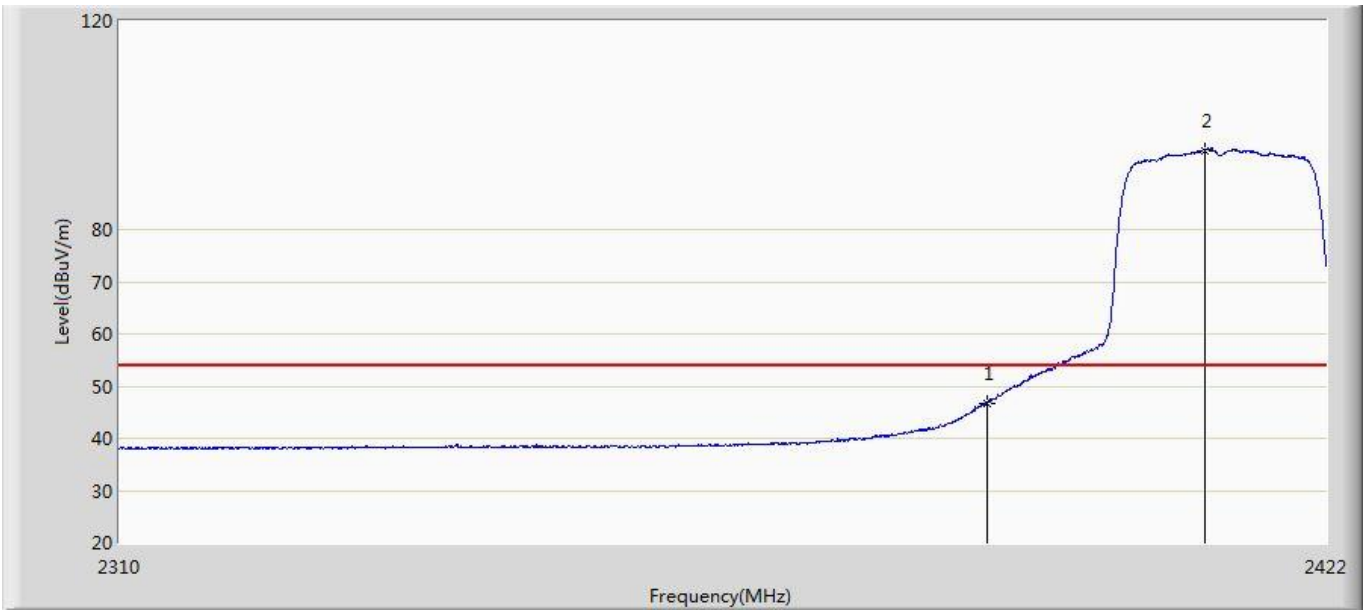
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	40.898	5.216	-13.102	54.000	35.682	AV
2	*	2413.320	87.258	51.511	N/A	N/A	35.747	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11N20	



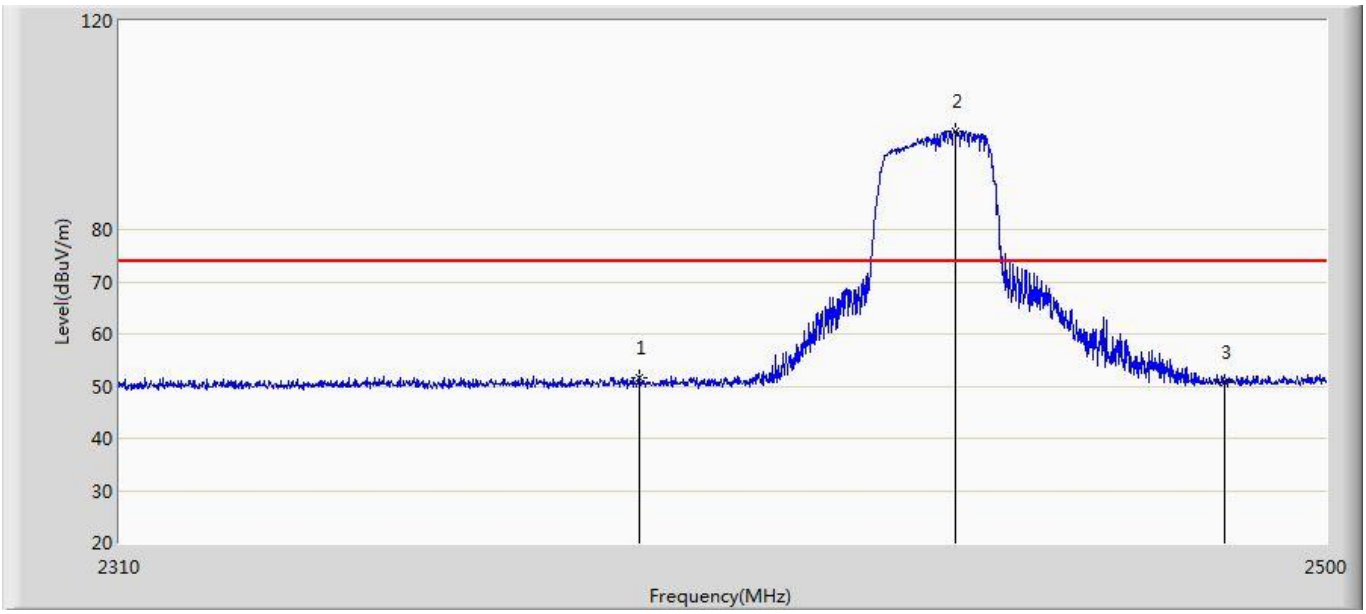
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	65.646	29.964	-8.354	74.000	35.682	PK
2	*	2410.296	104.593	68.858	N/A	N/A	35.735	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11N20	



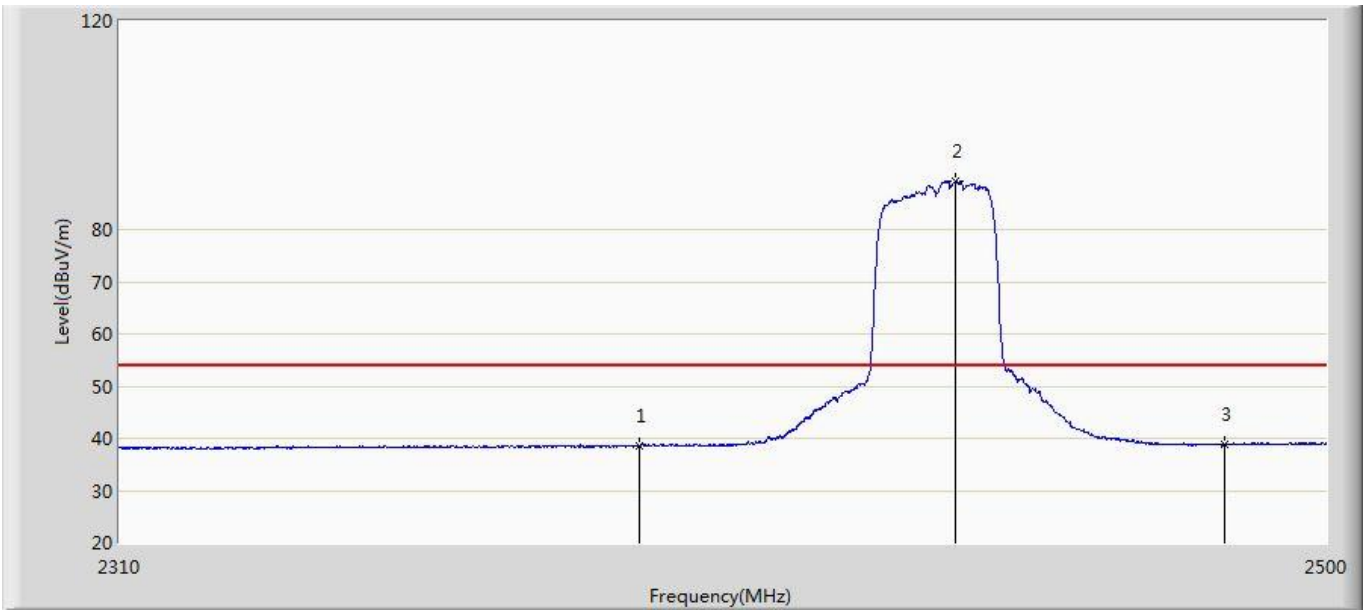
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.690	11.008	-7.310	54.000	35.682	AV
2	*	2410.464	95.027	59.291	N/A	N/A	35.735	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11N20	



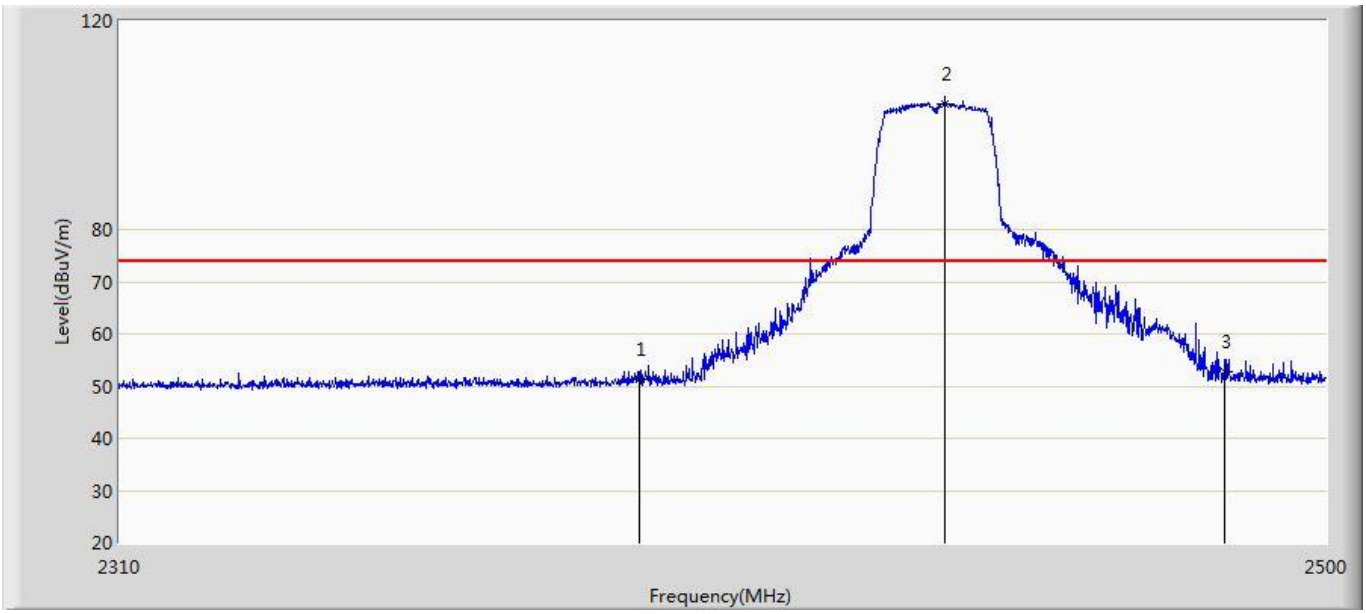
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.628	15.946	-22.372	74.000	35.682	PK
2	*	2440.055	98.894	63.089	N/A	N/A	35.805	PK
3		2483.500	50.608	14.716	-23.392	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11N20	



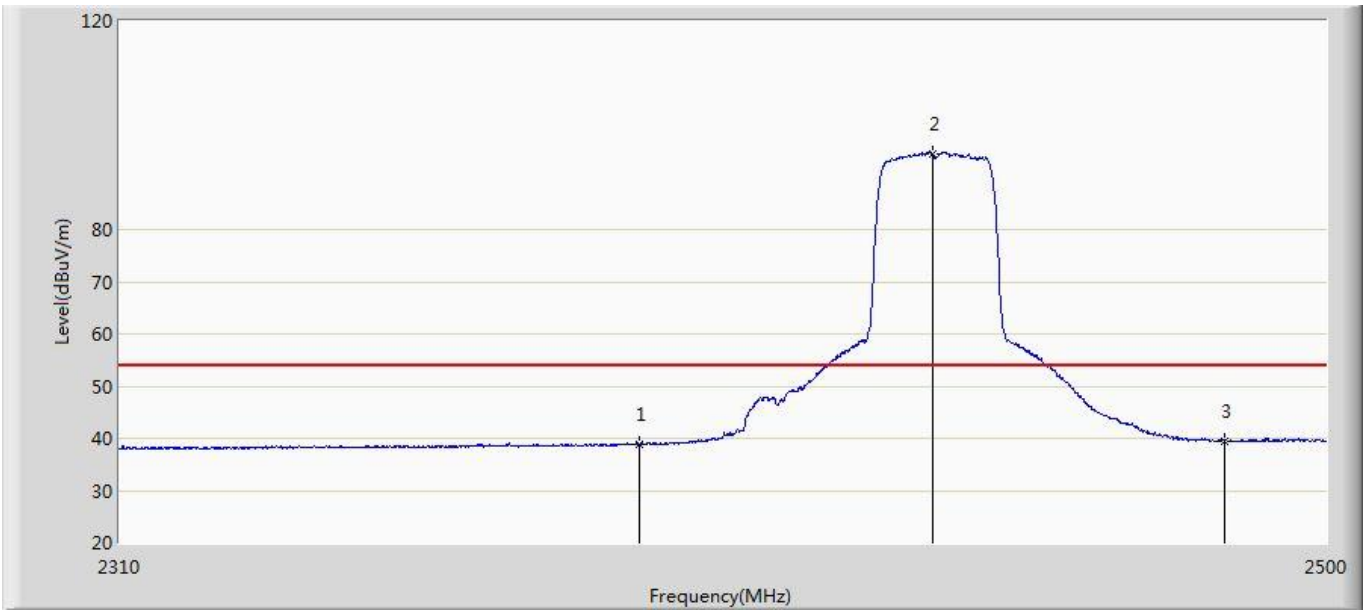
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.528	2.846	-15.472	54.000	35.682	AV
2	*	2440.055	89.205	53.400	N/A	N/A	35.805	AV
3		2483.500	38.772	2.880	-15.228	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11N20	



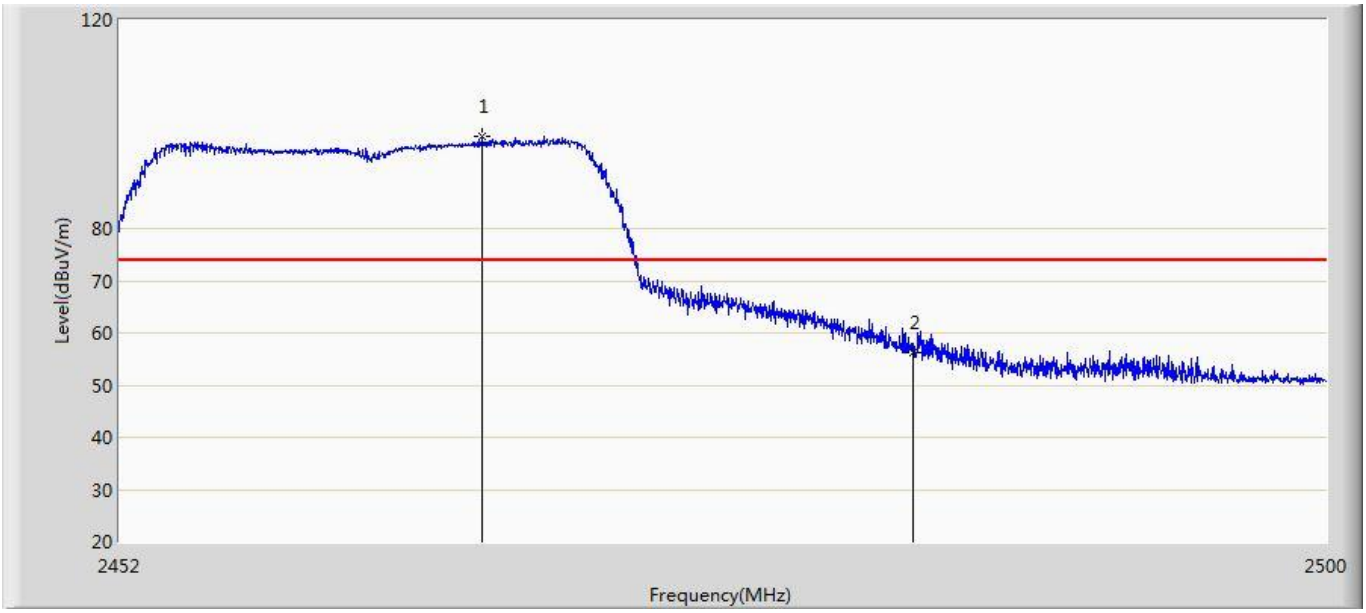
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.252	15.570	-22.748	74.000	35.682	PK
2	*	2438.250	104.049	68.243	N/A	N/A	35.806	PK
3		2483.500	52.632	16.740	-21.368	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11N20	



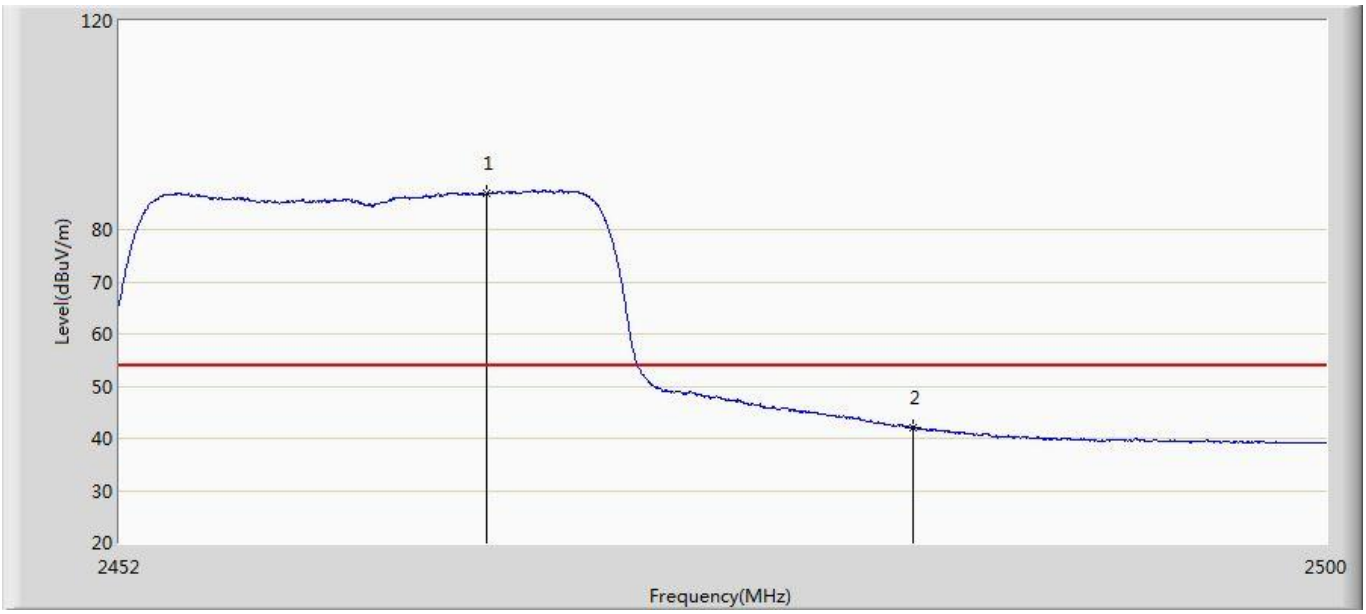
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.790	3.108	-15.210	54.000	35.682	AV
2	*	2436.350	94.454	58.648	N/A	N/A	35.806	AV
3		2483.500	39.558	3.666	-14.442	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11N20	



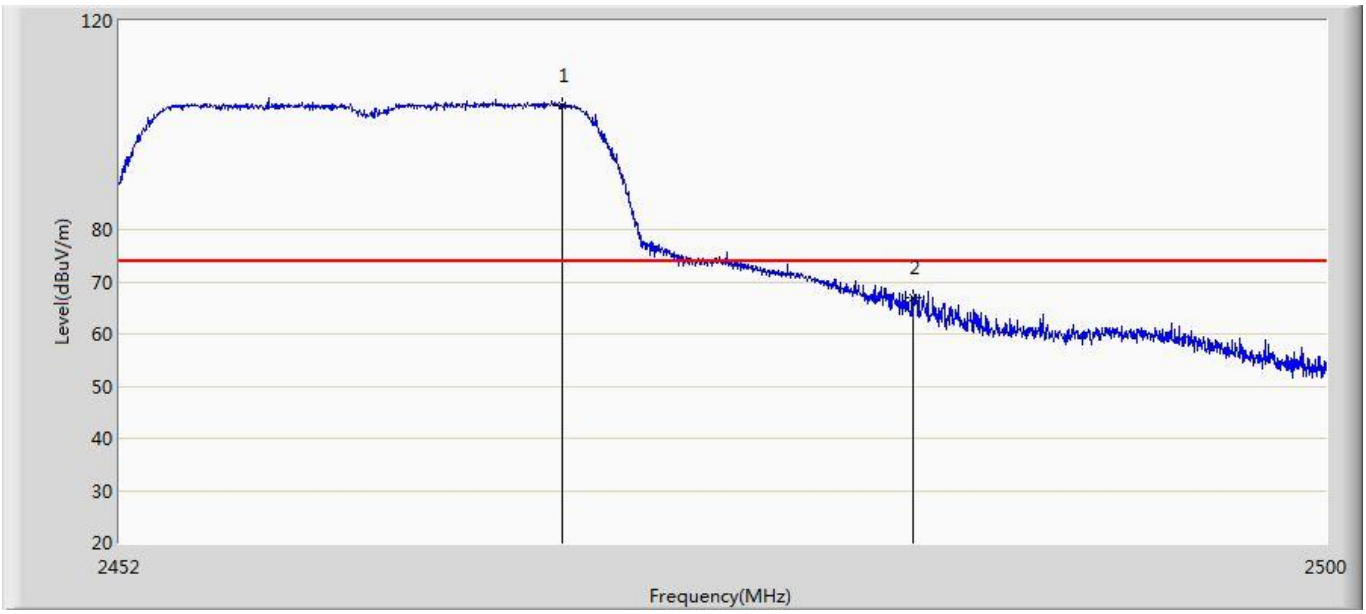
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2466.352	97.639	61.766	N/A	N/A	35.873	PK
2		2483.500	56.319	20.427	-17.681	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11N20	



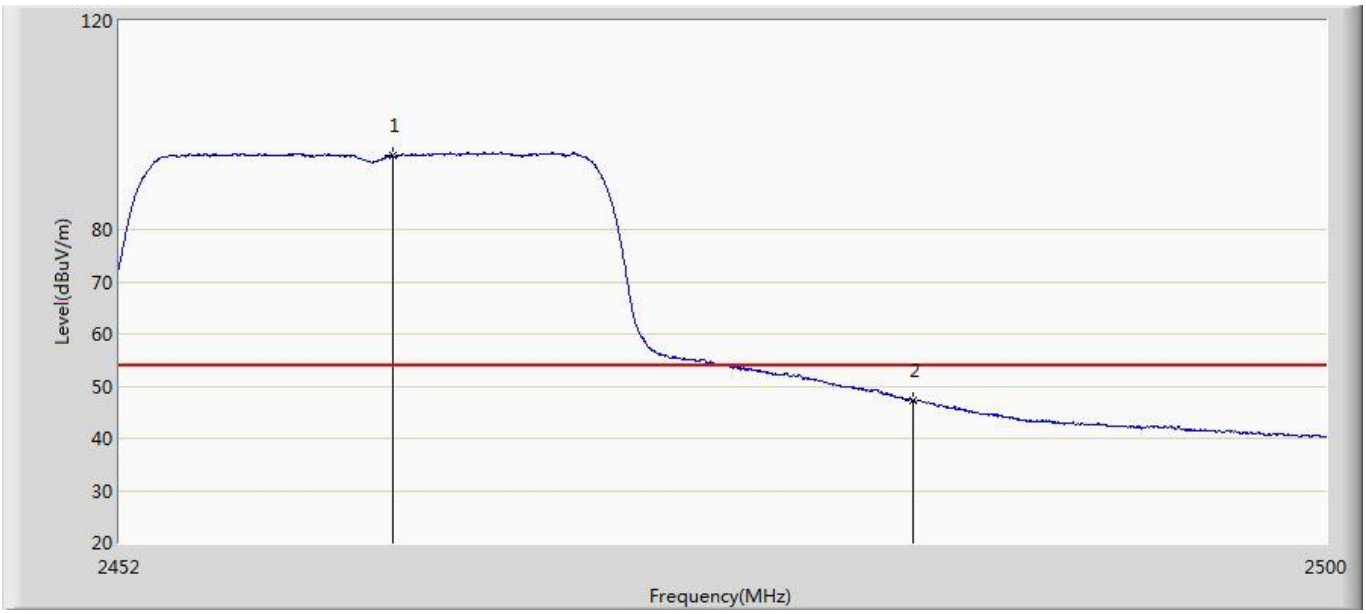
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2466.520	86.876	51.003	N/A	N/A	35.874	AV
2		2483.500	42.148	6.256	-11.852	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11N20	



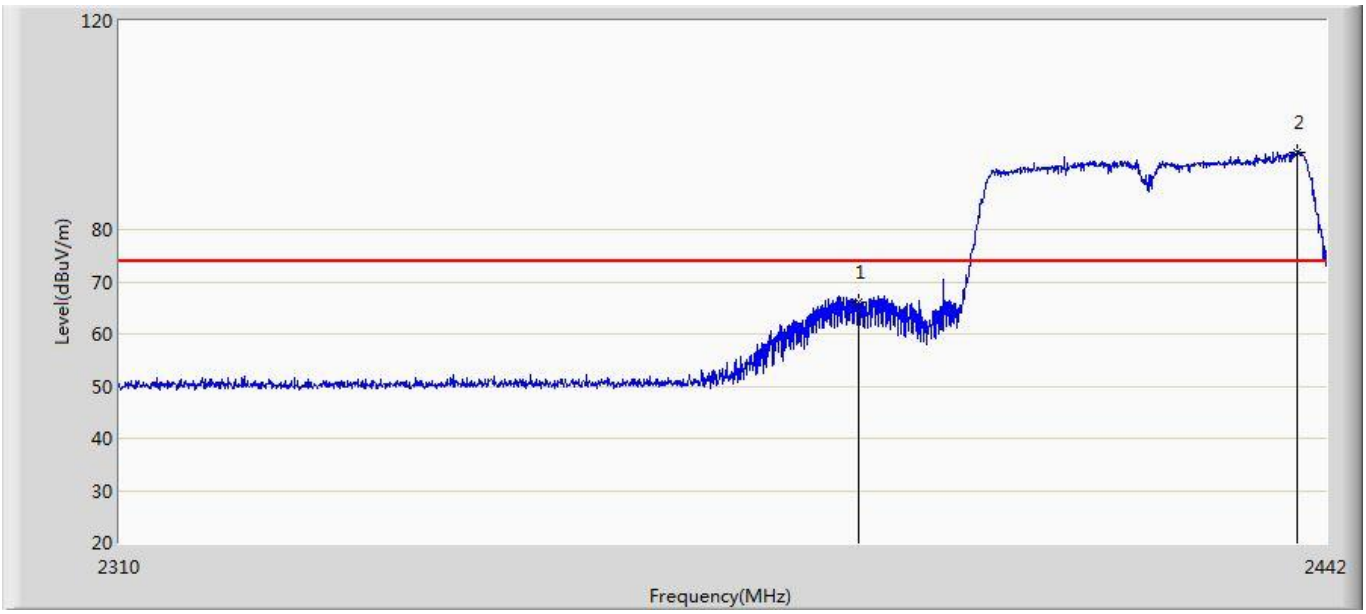
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.520	103.743	67.873	N/A	N/A	35.870	PK
2		2483.500	66.874	30.982	-7.126	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11N20	



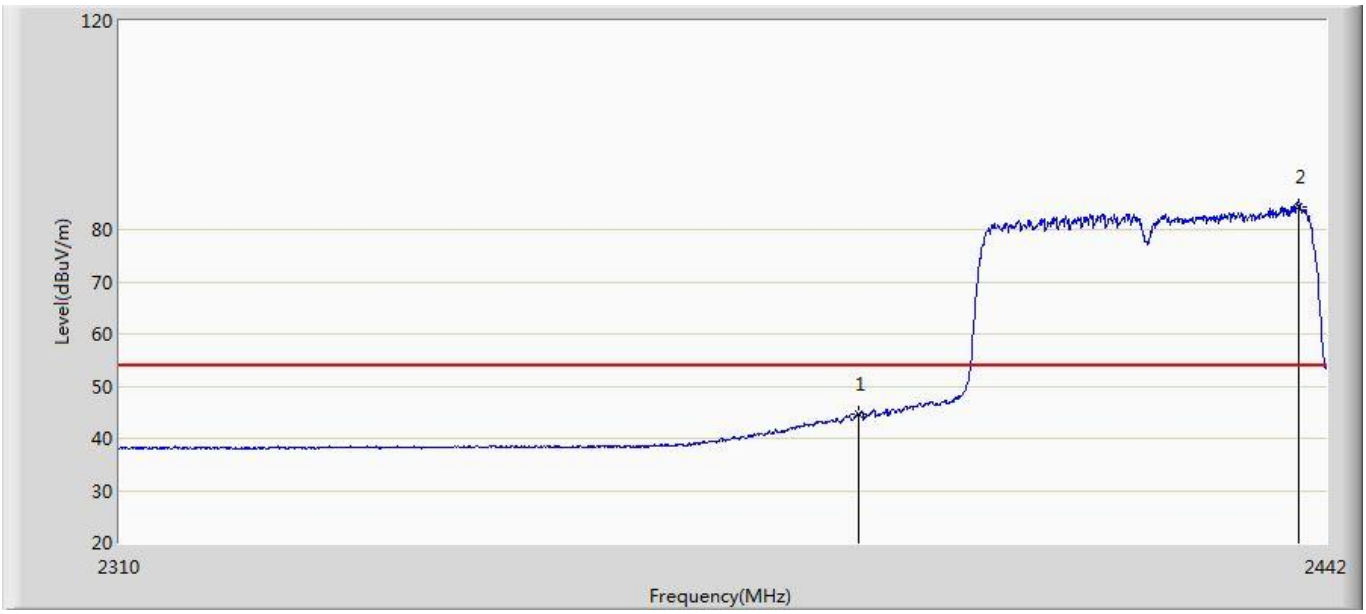
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.776	94.213	58.336	N/A	N/A	35.877	AV
2		2483.500	47.267	11.375	-6.733	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11N40	



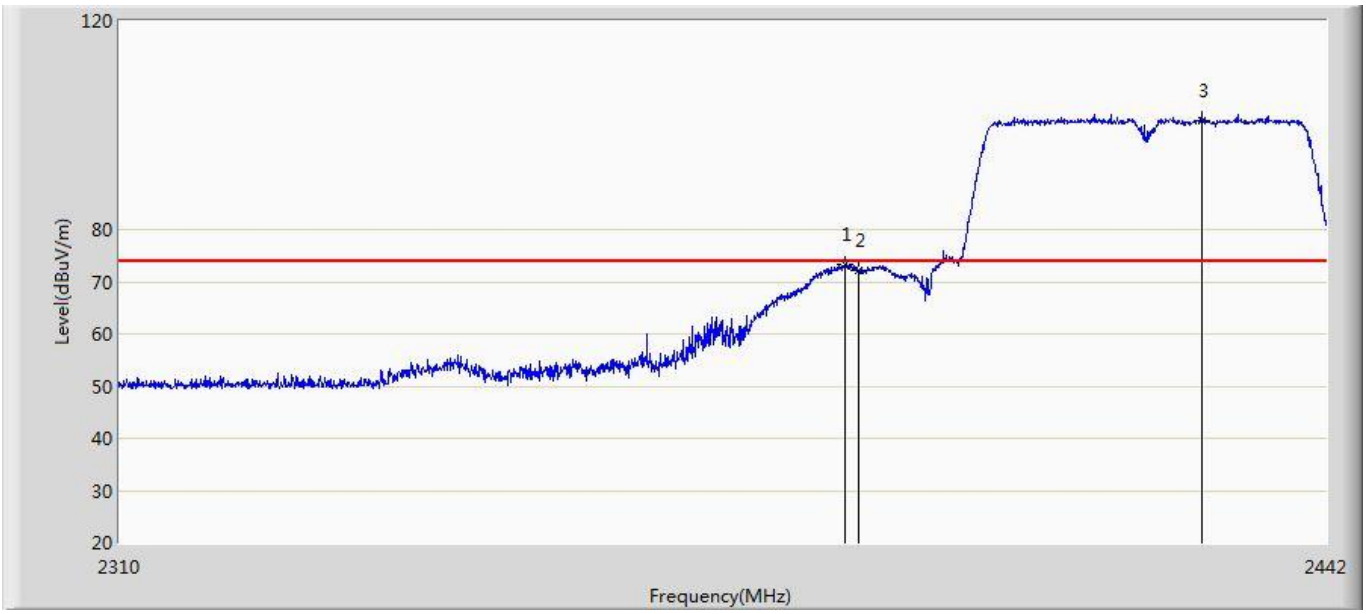
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	65.949	30.267	-8.051	74.000	35.682	PK
2	*	2438.832	94.646	58.840	N/A	N/A	35.806	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11N40	



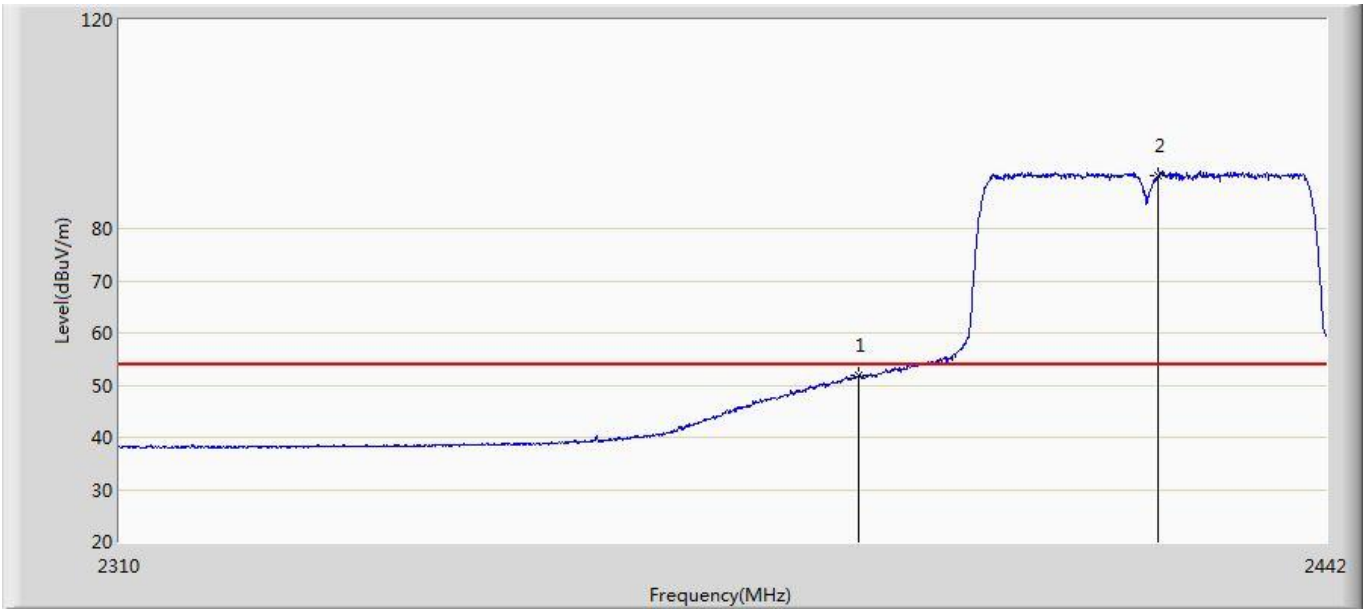
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	44.719	9.037	-9.281	54.000	35.682	AV
2	*	2438.964	84.428	48.622	N/A	N/A	35.806	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 14:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11N40	



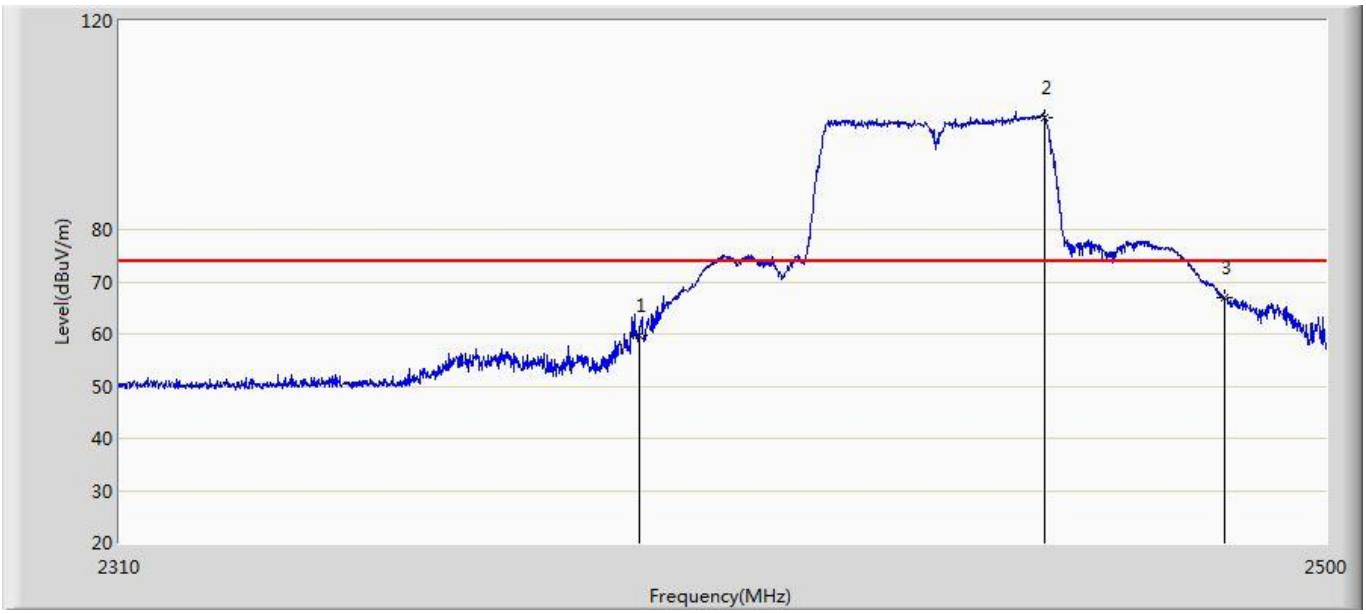
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2388.474	73.355	37.677	-0.645	74.000	35.678	PK
2		2390.000	72.127	36.445	-1.873	74.000	35.682	PK
3	*	2428.140	100.981	65.173	N/A	N/A	35.808	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2422MHz by 802.11N40	



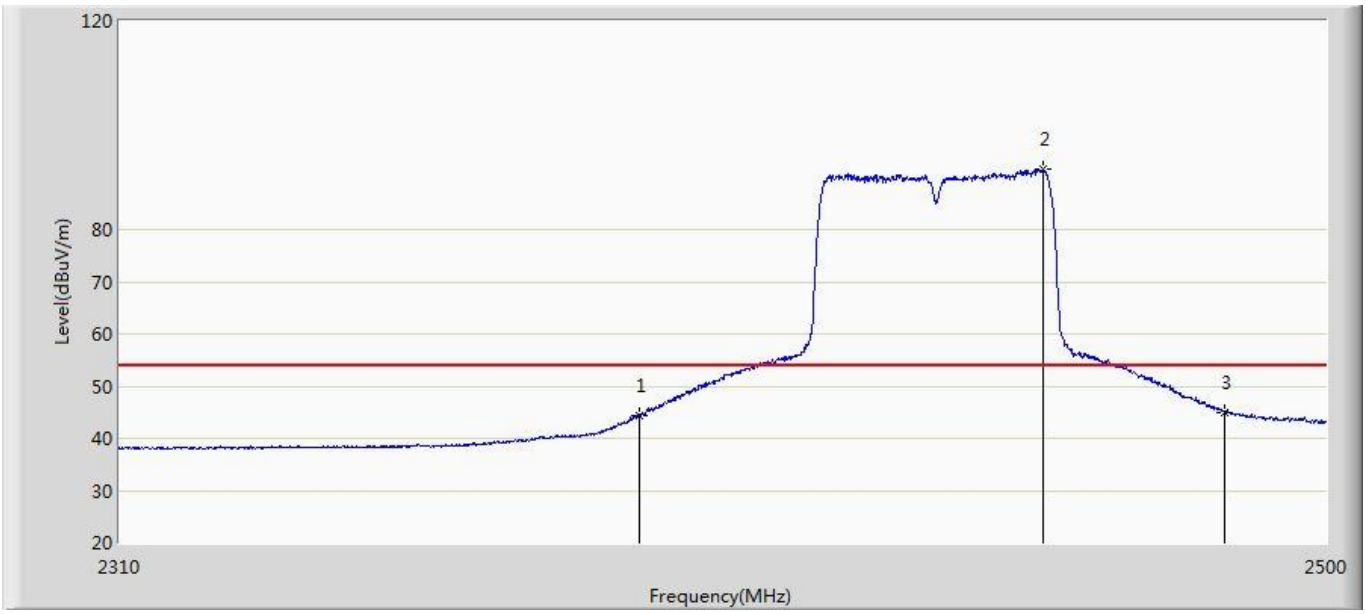
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.838	16.156	-2.162	54.000	35.682	AV
2	*	2423.190	90.148	54.360	N/A	N/A	35.788	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11N40	



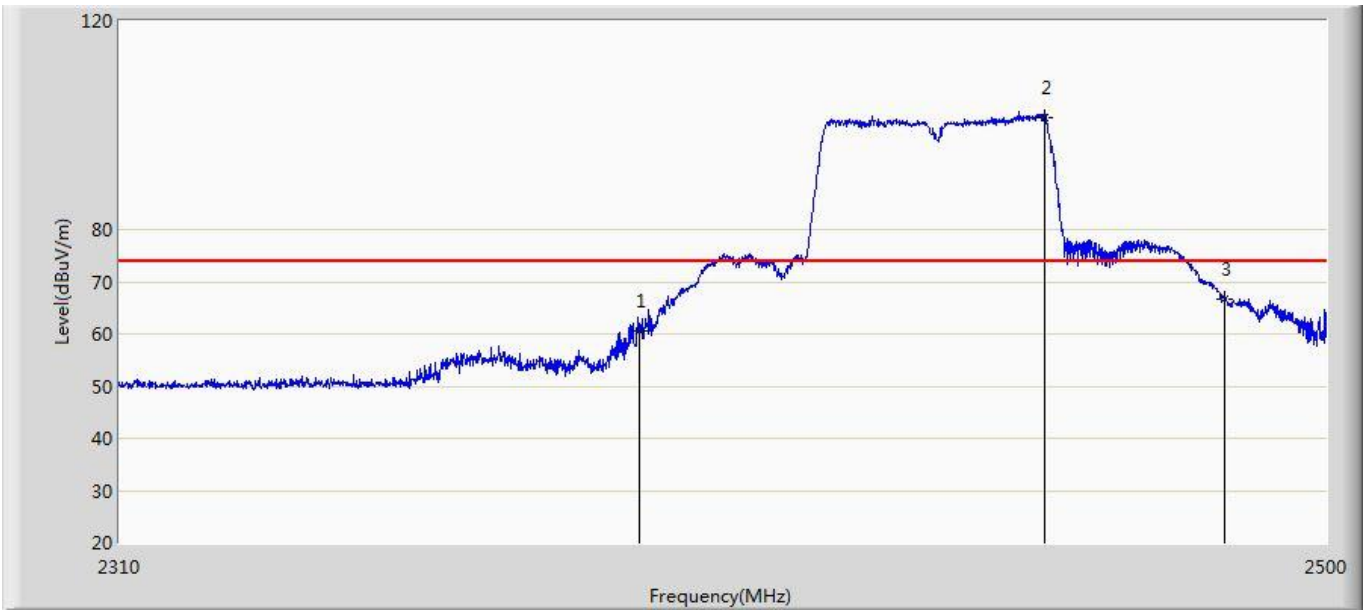
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.816	24.134	-14.184	74.000	35.682	PK
2	*	2454.400	101.420	65.575	N/A	N/A	35.845	PK
3		2483.500	66.816	30.924	-7.184	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11N40	



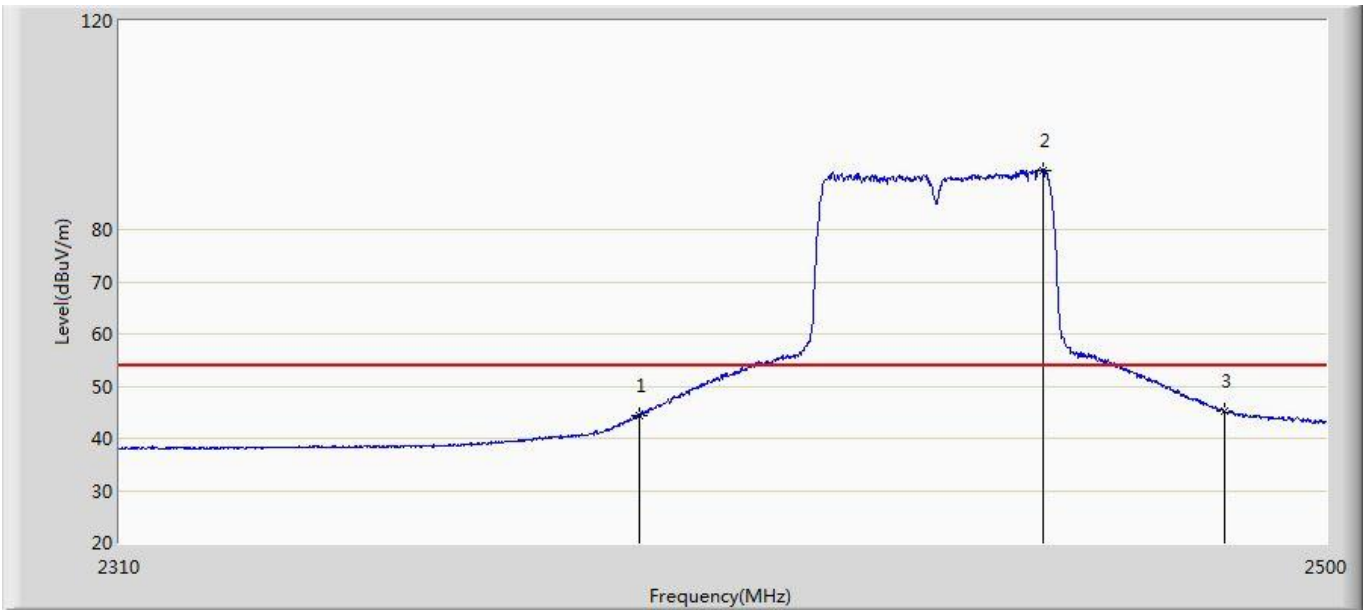
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	44.347	8.665	-9.653	54.000	35.682	AV
2	*	2454.020	91.548	55.705	N/A	N/A	35.844	AV
3		2483.500	45.061	9.169	-8.939	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11N40	



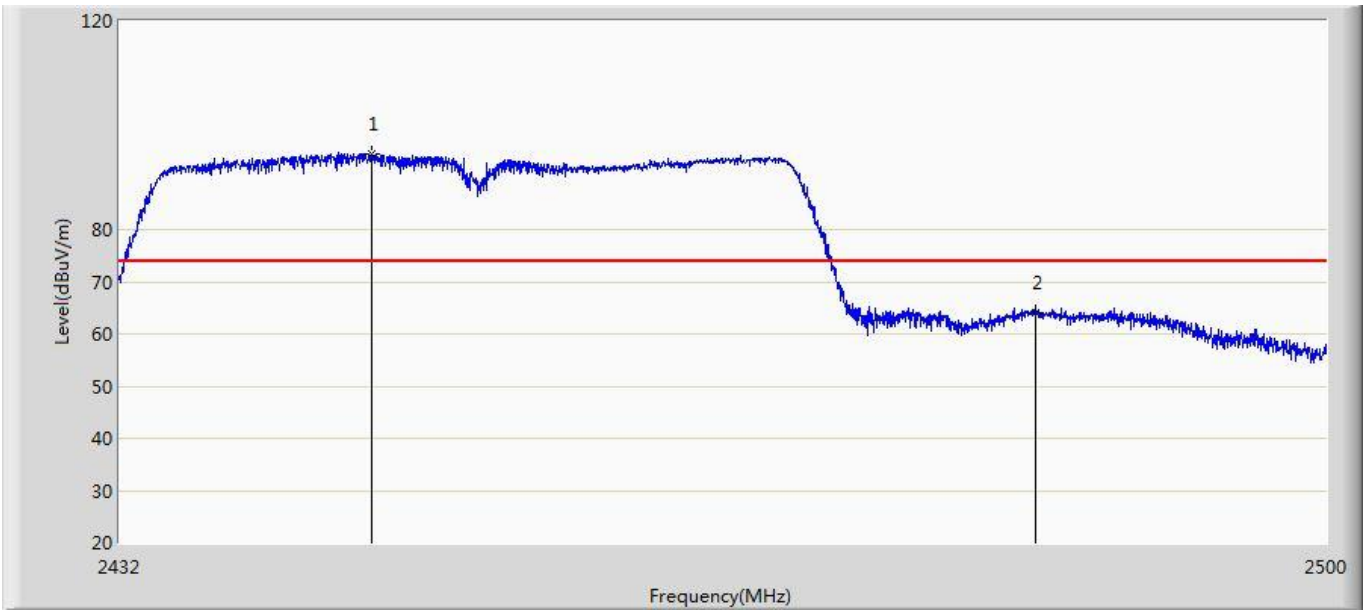
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	60.568	24.886	-13.432	74.000	35.682	PK
2	*	2454.305	101.569	65.724	N/A	N/A	35.845	PK
3		2483.500	66.694	30.802	-7.306	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11N40	



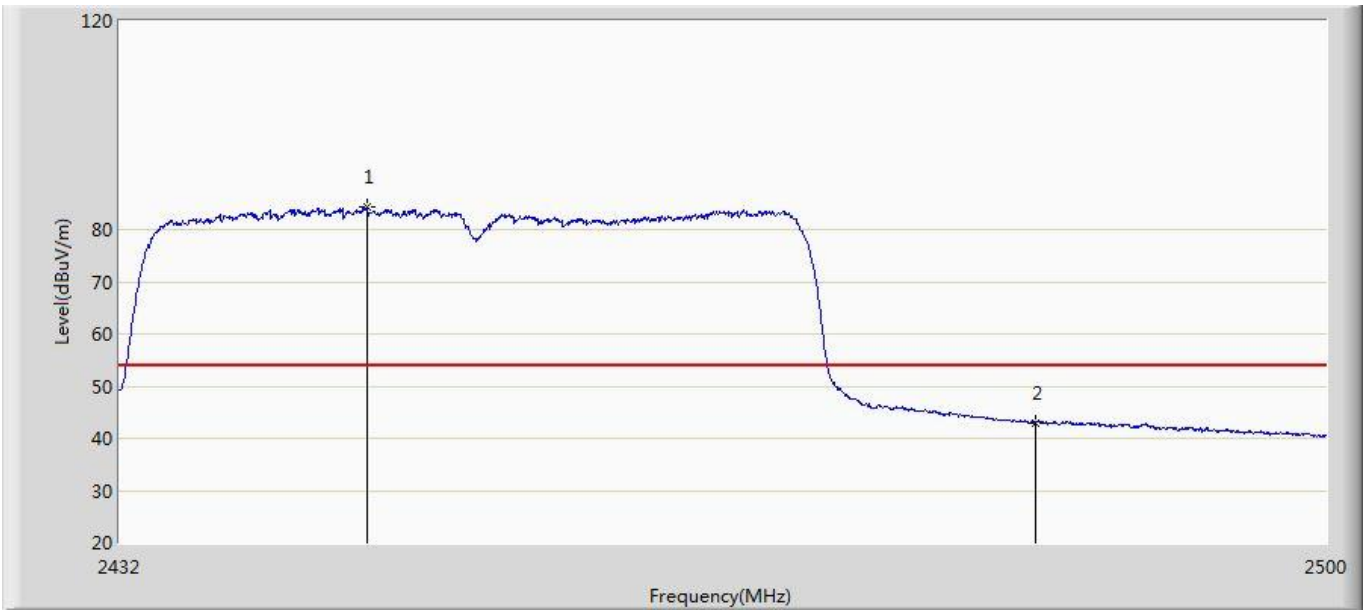
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	44.275	8.593	-9.725	54.000	35.682	AV
2	*	2454.210	91.288	55.444	N/A	N/A	35.844	AV
3		2483.500	45.141	9.249	-8.859	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 12:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11N40	



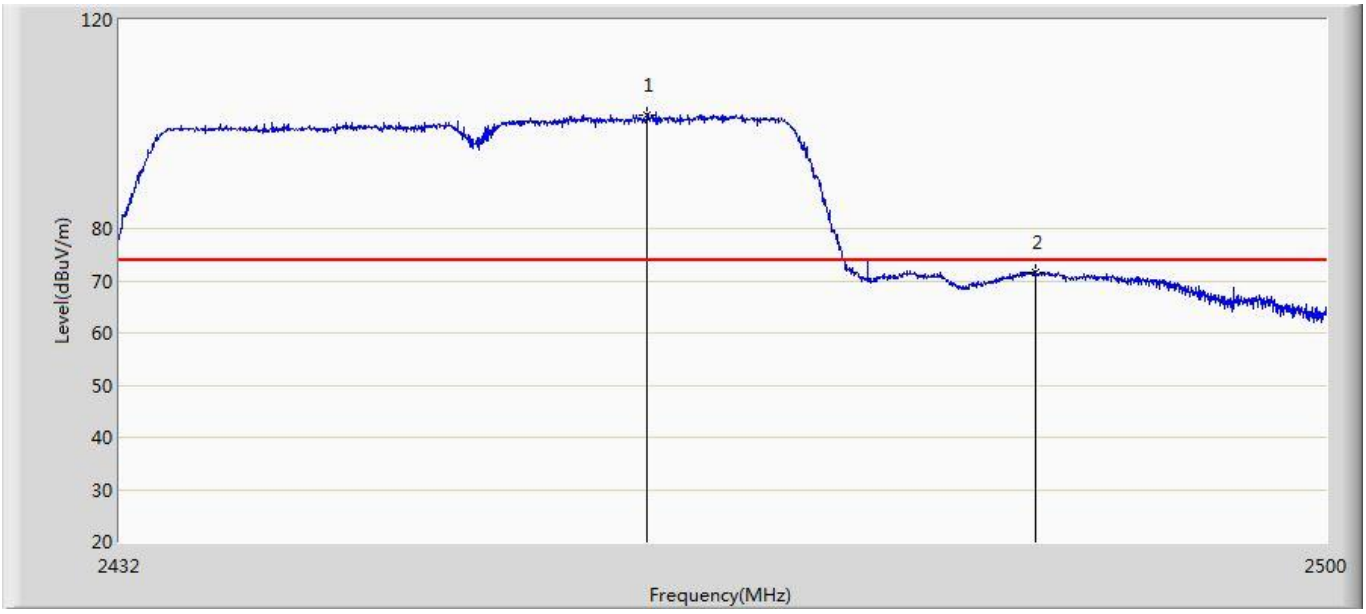
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2446.042	94.554	58.745	N/A	N/A	35.808	PK
2		2483.500	63.939	28.047	-10.061	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 12:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: WiFi socket	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2452MHz by 802.11N40	



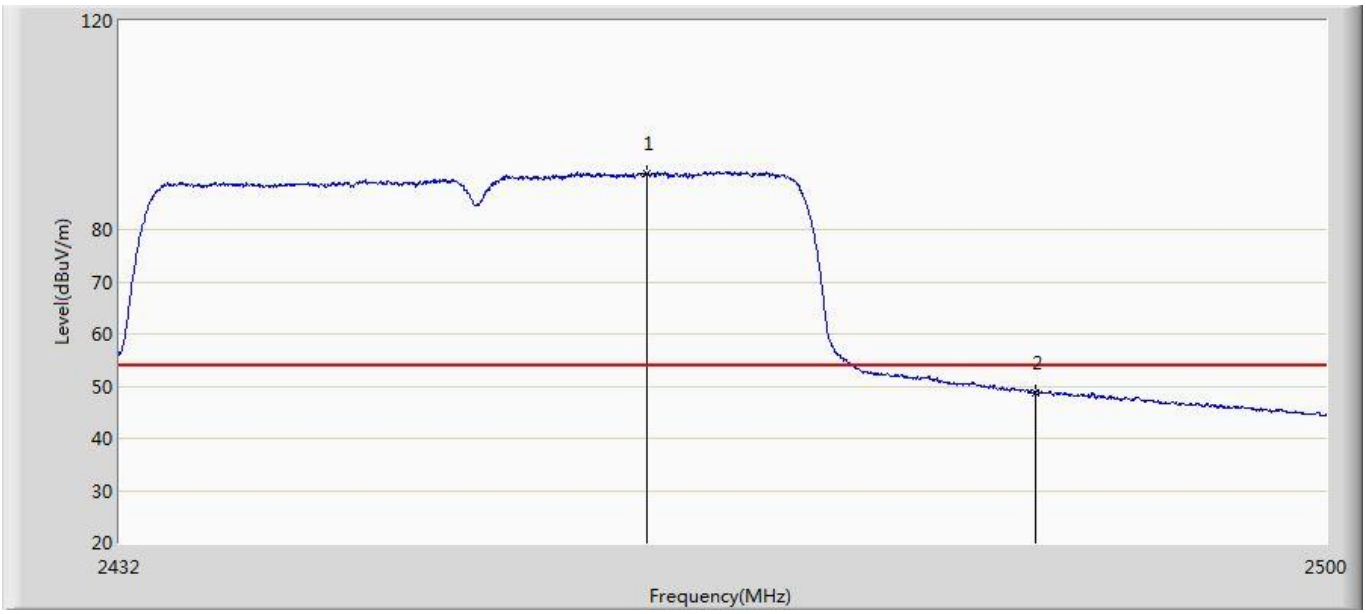
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2445.804	84.327	48.520	N/A	N/A	35.808	AV
2		2483.500	43.036	7.144	-10.964	54.000	35.891	AV

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 11:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	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	*	2461.546	101.837	65.961	N/A	N/A	35.876	PK
2		2483.500	71.494	35.602	-2.506	74.000	35.891	PK

Engineer: Simon	
Site: AC5	Time: 2017/07/10 - 12:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: WiFi socket	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	*	2461.546	90.741	54.865	N/A	N/A	35.876	AV
2		2483.500	48.755	12.863	-5.245	54.000	35.891	AV

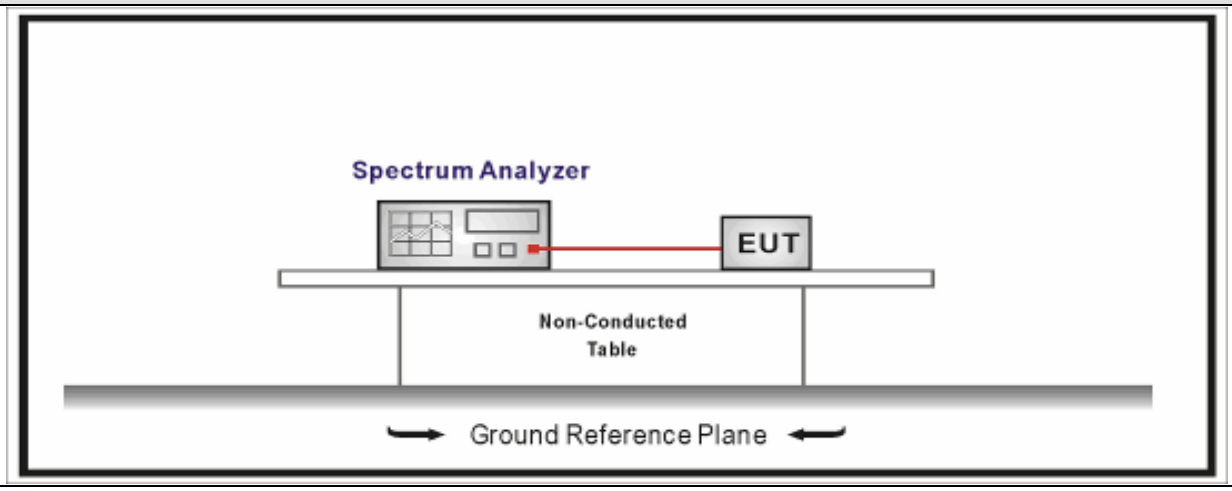
7. Occupied Bandwidth

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	2017.04.09	2018.04.08
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

7.2. Test Setup

Occupied Bandwidth test setup:



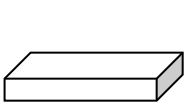
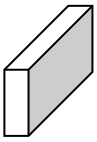
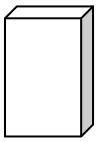
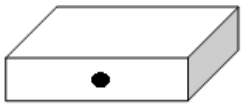
7.3. Limit

Occupied Bandwidth
Systems using digital modulation techniques operate in the2400-2483.5 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

<table>
<tr><td>Item</td><td colspan="4">Occupied Bandwidth</td></tr>
<tr><td rowspan="2">Device Category</td><td>☒</td><td colspan="3">Fixed position use</td></tr>
<tr><td>☐</td><td colspan="3">Mobile position use</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1~4</td></tr>
<tr><td rowspan="13">Test method</td><td>☐</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="3"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>Worst Axis ☐</td><td>Worst Axis ☐</td><td>Worst Axis ☐</td></tr>
<tr><td>☒</td><td colspan="3">Conducted</td></tr>
<tr><td>☒</td><td colspan="3">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
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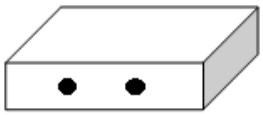
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

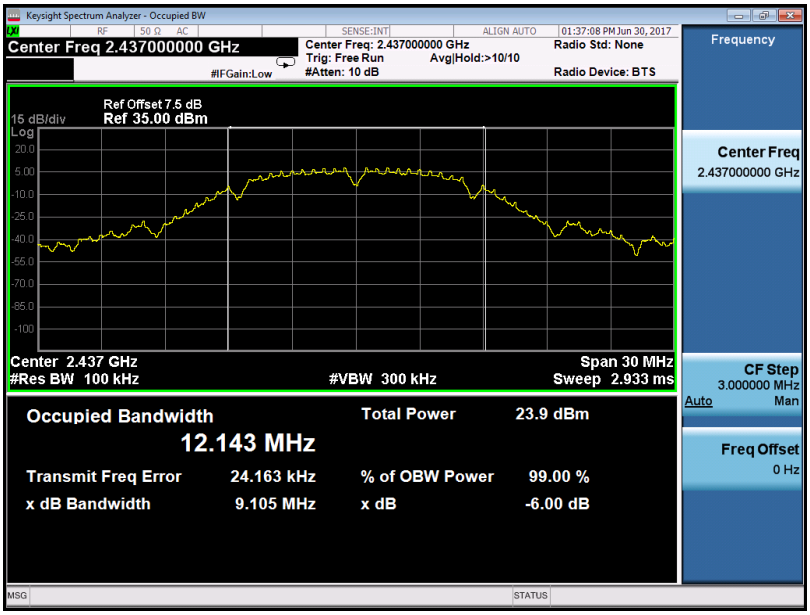
7.6. Test Result

Product Name	:	WiFi socket	Power	:	AC 120V/60Hz
Test Mode	:	Mode1~4	Test Site	:	TR8
Test Date	:	2017.06.30			

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
			Ant0	Ant0		
1	01	2412	12.149	9.115	>500	Pass
1	06	2437	12.143	9.105	>500	Pass
1	11	2462	12.143	9.115	>500	Pass
2	01	2412	16.542	16.40	>500	Pass
2	06	2437	16.553	16.45	>500	Pass
2	11	2462	16.554	16.39	>500	Pass
3	01	2412	17.581	15.99	>500	Pass
3	06	2437	17.574	16.01	>500	Pass
3	11	2462	17.569	16.11	>500	Pass
4	03	2422	36.081	36.10	>500	Pass
4	06	2437	36.111	36.09	>500	Pass
4	09	2452	36.114	35.85	>500	Pass

Note : The worst case of Occupied Bandwidth as below:

Mode 1 CH06 (2437MHz) Ant0



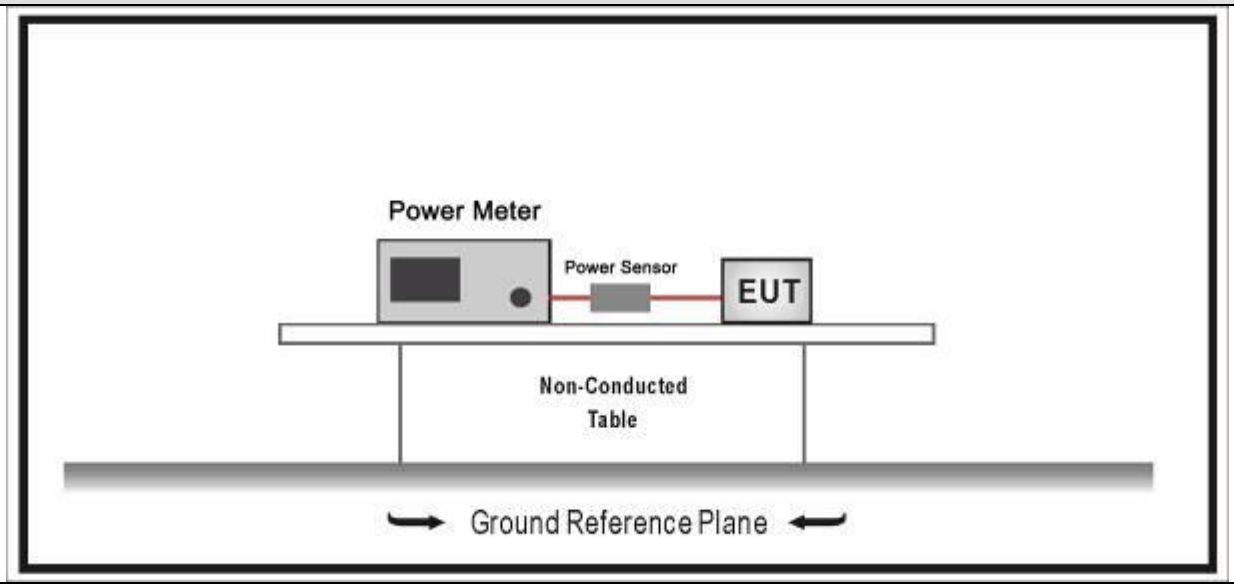
8. Fundamental emission output power

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	2017.04.10	2018.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

8.2. Test Setup

Fundamental emission output power test setup



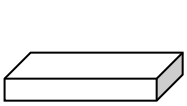
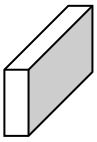
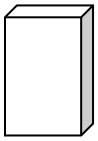
8.3. Limit

Fundamental emission output power Limit			
☒	G_{TX} ＜6dBi		P_{out}≤30dBm
☐	G_{TX} ＞6dBi		
	☒	Non-Fix point-point	P_{out}≤30-(G_{TX} -6)
	☐	Fix point-point	P_{out}≤30-[(G_{TX}-6)]/3
	☐	emits multiple directional beams but does not do emit multiple directional beams simultaneously	P_{out}≤30-[(G_{TX}-6)]/3
	☐	operates simultaneously on multiple directional beams using the same or different frequency channels	P_{out}≤30-[(G_{TX}-6)]/3+8dB
	☐	single directional beam	P_{out}≤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

8.5. EUT test definition

<table>
<tr><td>Item</td><td colspan="4">Fundamental emission output power</td></tr>
<tr><td rowspan="2">Device Category</td><td>☒</td><td colspan="3">Fixed position use</td></tr>
<tr><td>☐</td><td colspan="3">Mobile position use</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1~4</td></tr>
<tr><td rowspan="11">Test method</td><td>☐</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="3"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>Worst Axis ☐</td><td>Worst Axis ☐</td><td>Worst Axis ☐</td></tr>
<tr><td>☒</td><td colspan="3">Conducted</td></tr>
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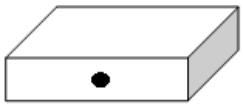
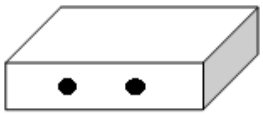
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td colspan="2">Chain 2</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
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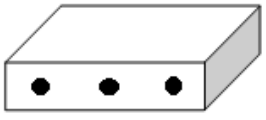
<tr><td></td><td colspan="3">  </td></tr>
</table>

8.6. Test Result

Product Name	:	WiFi socket	Power	:	AC 120V/60Hz
Test Mode	:	Mode1~4	Test Site	:	TR8
Test Date	:	2017.06.30			

Mode	Channel	Test Frequency (MHz)	Peak Power Output (dBm)	Antenna Gain (dBi)	Limit (dBm)	Result
1	01	2412	18.61	2.18	30	Pass
1	06	2437	19.23	2.18	30	Pass
1	11	2462	19.73	2.18	30	Pass
2	01	2412	20.84	2.18	30	Pass
2	06	2437	21.63	2.18	30	Pass
2	11	2462	21.84	2.18	30	Pass
3	01	2412	20.72	2.18	30	Pass
3	06	2437	21.45	2.18	30	Pass
3	11	2462	21.94	2.18	30	Pass
4	03	2422	20.93	2.18	30	Pass
4	06	2437	21.61	2.18	30	Pass
4	09	2452	22.16	2.18	30	Pass

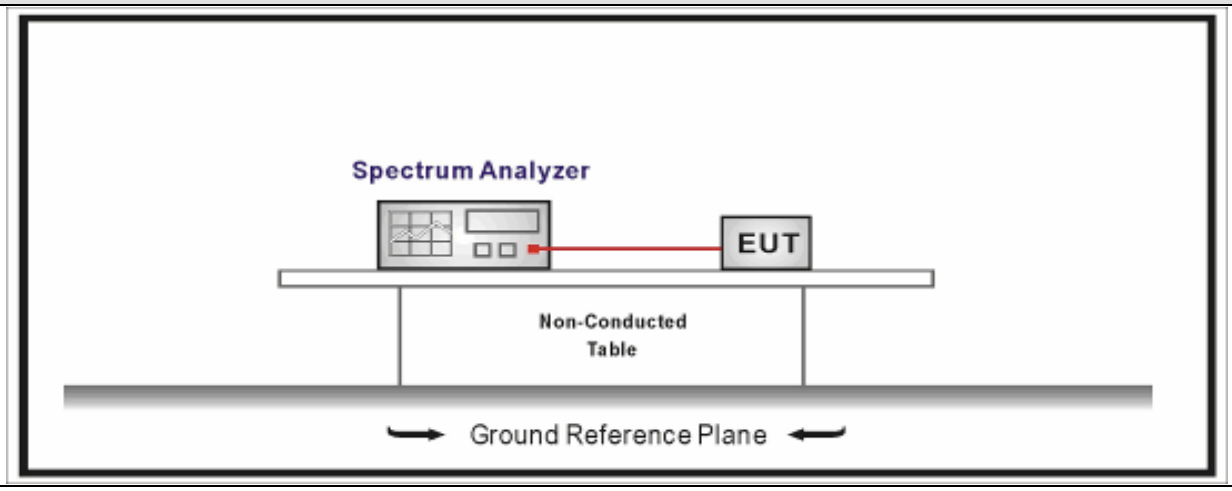
9. Power Spectral Density

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	2017.04.09	2018.04.08
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

9.2. Test Setup

Power Spectral Density test setup



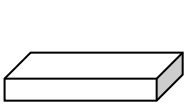
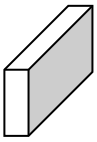
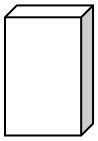
9.3. Limit

Power Spectral Density Limit
Power Spectral Density≤8dBm/3kHz

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≥98%)
	☐	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle≥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

9.5. EUT test definition

<table>
<tr><td>Item</td><td colspan="4">Power Spectral Density Test Method</td></tr>
<tr><td rowspan="2">Device Category</td><td>☒</td><td colspan="3">Fixed position use</td></tr>
<tr><td>☐</td><td colspan="3">Mobile position use</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1~4</td></tr>
<tr><td rowspan="13">Test method</td><td>☐</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="3"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>Worst Axis ☐</td><td>Worst Axis ☐</td><td>Worst Axis ☐</td></tr>
<tr><td>☒</td><td colspan="3">Conducted</td></tr>
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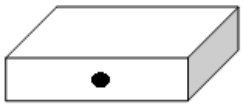
<tr><td></td><td colspan="3">  </td></tr>
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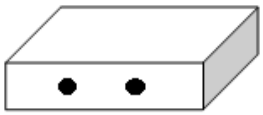
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
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9.6. Test Result

Product Name	:	WiFi socket	Power	:	AC 120V/60Hz
Test Mode	:	Mode1~4	Test Site	:	TR8
Test Date	:	2017.06.30			

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz) Ant1	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	01	2412	-6.968	-6.968	8.0	Pass
1	06	2437	-6.780	-6.780	8.0	Pass
1	11	2462	-6.003	-6.003	8.0	Pass
2	01	2412	-10.847	-10.847	8.0	Pass
2	06	2437	-9.975	-9.975	8.0	Pass
2	11	2462	-7.660	-7.660	8.0	Pass
3	01	2412	-12.541	-12.541	8.0	Pass
3	06	2437	-11.028	-11.028	8.0	Pass
3	11	2462	-11.438	-11.438	8.0	Pass
4	03	2422	-15.857	-15.857	8.0	Pass
4	06	2437	-13.317	-13.317	8.0	Pass
4	09	2452	-12.262	-12.262	8.0	Pass

Note : The worst case of Occupied Bandwidth as below:

Mode 1 CH11 (2462MHz) 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

The EUT use permanently attached antennas and comply with FCC 15.203.

The End