Test Report

FCC Part15 Subpart C & RSS-247 Issue 2

Product Name	:	Wireless Access Point
Model No.	:	AP650
FCC ID	:	WBV-AP650
IC	:	7774A- AP650

Applicant	:	Aerohive Networks, Inc
Address	:	Aerohive Networks1011 McCarthy Boulevard Milpitas, CA 95035 United States

Date of Receipt	:	Apr. 04, 2018
Test Date	:	May. 15, 2018 ~ Aug. 15, 2018
Issued Date	:	Aug. 23, 2018
Report No.	:	1842038R-RF-US-P06V01
Report Version	:	V1.1

Test Report Certification

Issued Date : Aug. 23, 2018
Report No. : 1842038R-RF-US-P06V01

Product Name	:	Wireless Access Point
Applicant	:	Aerohive Networks, Inc.
Address	:	Aerohive Networks, 1011 McCarthy Boulevard, Milpitas, CA 95035, United States
Manufacturer	:	Aerohive Networks, Inc.
Address	:	Aerohive Networks, 1011 McCarthy Boulevard, Milpitas, CA 95035, United States
Model No.	:	AP650
FCC ID	:	WBV-AP650
IC		7774A- AP650
EUT Voltage	:	POE 48V
Test Voltage	:	AC 120V/60Hz
Brand Name	:	Aerohive
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C ANSI C63.10:2013; KDB 558074 D01v04 KDB 662911 D01 Multiple Transmitter Output v02r01 RSS-Gen Issue 5 / RSS-247 Issue 2
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 Designation Number: CN1199; ISED Lab Code: 4075B

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Approved By : Harry Zhao

(Engineering Manager: Harry Zhao)

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1842038R-RF-US-P06V01	V1.0	Initial Issued Report	July. 30, 2018
1842038R-RF-US-P06V01	V1.1	Modified RF output power at Section 8.	Aug. 23, 2018

1. General Information

1.1. EUT Description

Product Name	Wireless Access Point
Brand Name	Aerohive
Model No.	AP650
EUT Voltage	AC 120V/60Hz
Frequency Range	For 2.4GHz Band 802.11b/g/n/ac/ax(20MHz): 2412~2462MHz 802.11n/ac/ax(40MHz): 2422~2452MHz
Channel Number	For 2.4GHz Band 802.11b/g/n/ac/ax(20MHz): 11 802.11n/ac/ax(40MHz): 7
Type of Modulation	802.11b: DSSS-DBPSK, DQPSK, CCK
	802.11g/n/ac/ax: OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Data Rate	802.11b: 1/2/5.5/11 Mbps
	802.11g: 6/9/12/18/24/36/48/54 Mbps
	802.11n: up to 600 Mbps
	802.11ac: up to 800 Mbps
	802.11ax: up to 1148 Mbps
Channel Control	Auto

Note: The maximum power of 802.11ac/ax was lower than 802.11n, so the PSD/RE of 802.11ac/ax didn’t showed in this report.

1.2. Working Frequency of Each Channel:

802.11b/g/n/ac/ax(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/ac/ax(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. Antenna information

Model No.	N/A							
Antenna manufacturer	N/A							
Antenna Delivery	☒	1*TX+1*RX	☒	2*TX+2*RX	☒	3*TX+3*RX	☒	4*TX+4*RX
Antenna technology	☒	SISO						
	☒	MIMO	☐	Basic				
			☒	CDD				
			☐	Sectorized				
			☒	Beam-forming				
Antenna Type	☐	External	☐	Dipole				
			☐	Sectorized				
	☒	Internal	☐	PIFA				
			☐	PCB				
			☐	Ceramic Chip Antenna				
			☒	Metal plate type F antenna				

Antenna Technology(2*TX+2*RX)	Ant Gain (dBi)	Directional Gain (dBi)	
		For Power	For PSD
☒ CDD	5	5	8
☒ Beam-forming		8	8

Antenna Technology(4*TX+4*RX)	Ant Gain (dBi)	Directional Gain (dBi)	
		For Power	For PSD
☒ CDD	5	5	11
☒ Beam-forming		11	11

1.4. 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)
Mode 5: Transmit by 802.11ac(20MHz)
Mode 6: Transmit by 802.11ac(40MHz)
Mode 7: Transmit by 802.11ax(20MHz)
Mode 8: Transmit by 802.11ax(40MHz)

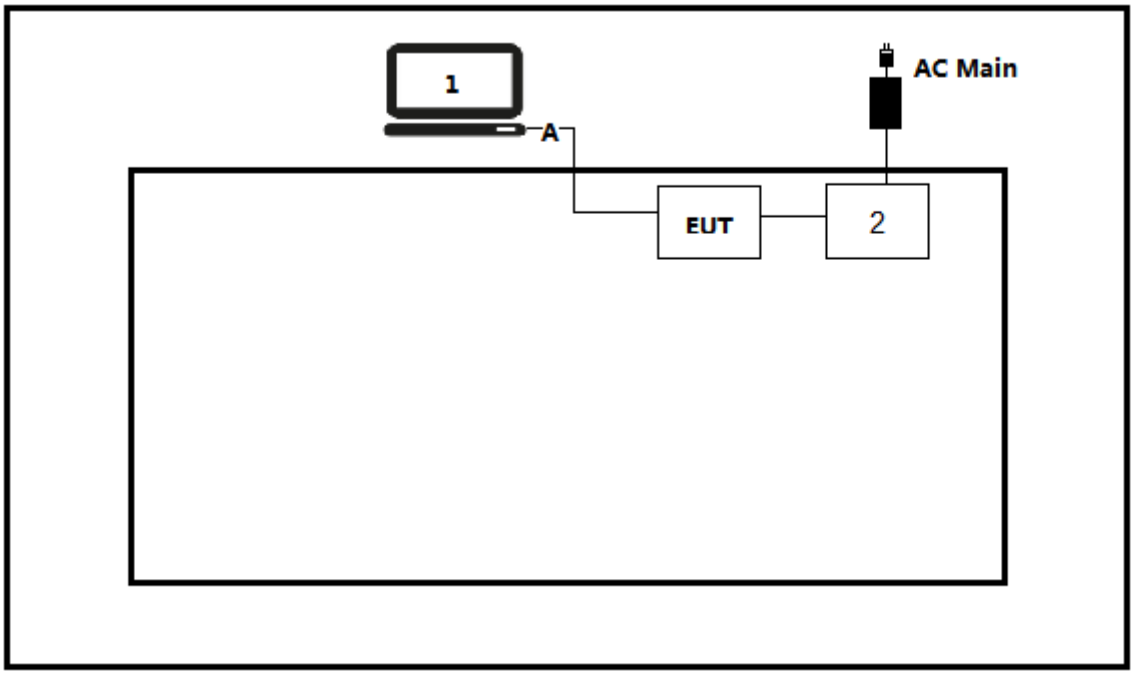
1.5. Tested System Details

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

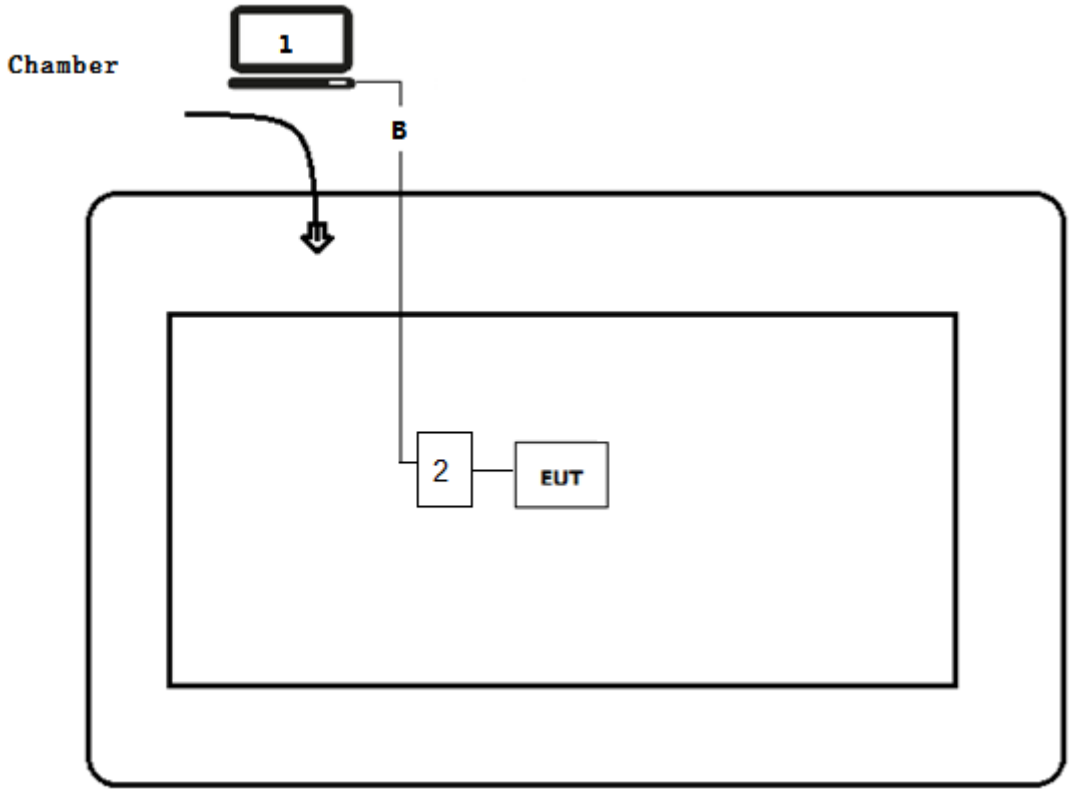
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	Think pad x220	SUA0600195	Non-shielded
2	PoE	HUAWEI	PoE35-54A	2102220369ARDB000358	N/A
A	LAN cable	N/A	N/A	N/A	Shielded, 0.5m
B	LAN cable	N/A	N/A	N/A	Shielded, 10m

1.6. Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



1.7. EUT Exercise Software

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

2. Technical Test

2.2. Summary of Test Result

For FCC rule:

Performed Test Item	Normative References	Limit	Result
AC Power Line Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: Section 15.207	FCC 15.207	PASS
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: Section 15.209	FCC 15.209	PASS
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(d)	≥20dBc	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 15.247(d)	FCC 15.209	PASS
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(a)(2)	≥500kHz	PASS
Fundamental emission output power	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(b)(3)	≤30dBm	PASS
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: Section 15.247(e)	≤8dBm/3kHz	PASS
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: Section 15.203	FCC 15.203	PASS

For ISED rule:

Performed Test Item	Normative References	Limit	Result
AC Power Line Conducted Emission	RSS-Gen Issue 5 Section 8.8	RSS-Gen	N/A
Emissions in restricted frequency bands	RSS-Gen Issue 5 Section 8.10	RSS-Gen	PASS
Emissions in non-restricted frequency bands	RSS-247 Issue 2 Section A5.5	≥20dBc	PASS
Radiated Emission Band Edge	RSS-247 Issue 2 Section A5.5	RSS-247	PASS
Occupied Bandwidth	RSS-Gen Issue 5 Section 6.7 RSS-247 Issue 2 Section A5.2(1)	≥500kHz	PASS
Fundamental emission output power	RSS-247 Issue 2 Section A5.4(4)	≤30dBm	PASS
Power Spectral Density	RSS-247 Issue 2 Section A5.2(2)	≤8dBm/3kHz	PASS
Antenna Requirement	RSS-Gen Issue 5 Section 6.8	RSS-Gen	PASS

2.3. Test Frequency configuration:

Modulation Mode	Channel	Frequency	Channel	Frequency	Channel	Frequency
802.11b	01	2412 MHz	06	2437MHz	11	2462MHz
802.11g	01	2412 MHz	06	2437MHz	11	2462MHz
802.11n/ac/ax(20MHz)	01	2412 MHz	06	2437MHz	11	2462MHz
802.11n/ac/ax(40MHz)	03	2422 MHz	06	2437MHz	09	2452MHz

Note: The 1*1 and 3*3 power setting are same with 2*2 and 4*4, so we only test 2*2 and 4*4 for compliance.

2.4. Power vs Data Rate

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)						
		802.11b	802.11g	802.11a	20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
0	1	1	6	6	6.5	7.2	13.5	15.0
1	1	2	9	9	13.0	14.4	27.0	30.0
2	1	5.5	12	12	19.5	21.7	40.5	45.0
3	1	11	18	18	26.0	28.9	54.0	60.0
4	1	---	24	24	39.0	43.3	81.0	90.0
5	1	---	36	36	52.0	57.8	108.0	120.0
6	1	---	48	48	58.5	65.0	121.5	135.0
7	1	---	54	54	65.0	72.2	135.0	150.0
8	2	---	---	---	13.0	14.4	27.0	30.0
9	2	---	---	---	26.0	28.9	54.0	60.0
10	2	---	---	---	39.0	43.3	81.0	90.0
11	2	---	---	---	52.0	57.8	108.0	120.0
12	2	---	---	---	78.0	86.7	162.0	180.0
13	2	---	---	---	104.0	115.6	216.0	240.0
14	2	---	---	---	117.0	130.0	243.0	270.0
15	2	---	---	---	130.0	144.0	270.0	300.0
16	3	---	---	---	19.5	21.6	40.5	45.0
17	3	---	---	---	39.0	43.2	81.0	90.0
18	3	---	---	---	58.5	65.1	121.5	135.0
19	3	---	---	---	78.0	86.7	162.0	180.0
20	3	---	---	---	117.0	129.9	243.0	270.0
21	3	---	---	---	156.0	173.4	324.0	360.0
22	3	---	---	---	175.5	195.0	364.5	405.0
23	3	---	---	---	195.0	216.6	405.0	450.0
24	4	---	---	---	26.0	28.8	54.0	60.0
25	4	---	---	---	52.0	57.6	108.0	120.0
26	4	---	---	---	78.0	86.8	162.0	180.0
27	4	---	---	---	104.0	115.6	216.0	240.0
28	4	---	---	---	156.0	173.2	324.0	360.0
29	4	---	---	---	208.0	231.2	432.0	480.0
30	4	---	---	---	234.0	260.0	486.0	540.0

31	**4**	**---**	**---**	**---**	**260.0**	**288.8**	**540.0**	**600.0**

Note1: The blue form is the maximum power data rate.

2: The EUT supports four spatial streams.

Spatial Streams (Note1)	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)					
				20MHz		40MHz		80MHz	
				Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5
	1	QPSK	1/2	13	14.4	27	30	58.5	65
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5
	3	16-QAM	1/2	26	28.9	54	60	117	130
	4	16-QAM	3/4	39	43.3	81	90	175.5	195
	5	64-QAM	2/3	52	57.8	108	120	234	260
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5
	7	64-QAM	5/6	65	72.2	135	150	292.5	325
	8	256-QAM	3/4	78	86.7	162	180	351	390
	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3
2	10	BPSK	1/2	13.0	14.4	27.0	30.0	58.6	65.0
	11	QPSK	1/2	26.0	28.8	54.0	60.0	117.0	130.0
	12	QPSK	3/4	39.0	43.4	81.0	90.0	175.6	195.0
	13	16-QAM	1/2	52.0	57.8	108.0	120.0	234.0	260.0
	14	16-QAM	3/4	78.0	86.6	162.0	180.0	351.0	390.0
	15	64-QAM	2/3	104.0	115.6	216.0	240.0	468.0	520.0
	16	64-QAM	3/4	117.0	130.0	243.0	270.0	526.6	585.0
	17	64-QAM	5/6	130.0	144.4	270.0	300.0	585.0	650.0
	18	256-QAM	3/4	156.0	173.4	324.0	360.0	702.0	780.0
	19	256-QAM	5/6	N/A	N/A	360.0	400.0	780.0	866.6
3	20	BPSK	1/2	19.5	21.6	40.5	45.0	87.9	97.5
	21	QPSK	1/2	39.0	43.2	81.0	90.0	175.5	195.0
	22	QPSK	3/4	58.5	65.1	121.5	135.0	263.4	292.5
	23	16-QAM	1/2	78.0	86.7	162.0	180.0	351.0	390.0
	24	16-QAM	3/4	117.0	129.9	243.0	270.0	526.5	585.0
	25	64-QAM	2/3	156.0	173.4	324.0	360.0	702.0	780.0
	26	64-QAM	3/4	175.5	195.0	364.5	405.0	789.9	877.5
	27	64-QAM	5/6	195.0	216.6	405.0	450.0	877.5	975.0
	28	256-QAM	3/4	234.0	260.1	486.0	540.0	1053.0	1170.0
	29	256-QAM	5/6	N/A	N/A	540.0	600.0	1170.0	1299.9
4	30	BPSK	1/2	26.0	28.8	54.0	60.0	117.2	130.0
	31	QPSK	1/2	52.0	57.6	108.0	120.0	234.0	260.0
	32	QPSK	3/4	78.0	86.8	162.0	180.0	351.2	390.0

	33	**16-QAM**	**1/2**	**104.0**	**115.6**	**216.0**	**240.0**	**468.0**	**520.0**
	34	**16-QAM**	**3/4**	**156.0**	**173.2**	**324.0**	**360.0**	**702.0**	**780.0**
	35	**64-QAM**	**2/3**	**208.0**	**231.2**	**432.0**	**480.0**	**936.0**	**1040.0**
	36	**64-QAM**	**3/4**	**234.0**	**260.0**	**486.0**	**540.0**	**1053.2**	**1170.0**
	37	**64-QAM**	**5/6**	**260.0**	**288.8**	**540.0**	**600.0**	**1170.0**	**1300.0**
	38	**256-QAM**	**3/4**	**312.0**	**346.8**	**648.0**	**720.0**	**1404.0**	**1560.0**
	39	**256-QAM**	**5/6**	**N/A**	**N/A**	**720.0**	**800.0**	**1560.0**	**1733.2**
Note 1: The blue form is the maximum power data rate. **2: The EUT supports four spatial streams.**									

Spatial Streams (Note1)	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)							
				20MHz		40MHz		80MHz		160MHz	
				Guard Interval		Guard Interval		Guard Interval		Guard Interval	
				1600 ns GI	800 ns GI	1600 ns GI	800 ns GI	1600 ns GI	800 ns GI	1600 ns GI	800 ns GI
1	0	BPSK	1/2	4	4	8	9	17	18	34	36
	1	QPSK	1/2	16	17	33	34	68	72	136	144
	2	QPSK	3/4	24	26	49	52	102	108	204	216
	3	16-QAM	1/2	33	34	65	69	136	144	272	282
	4	16-QAM	3/4	49	52	98	103	204	216	408	432
	5	64-QAM	2/3	65	69	130	138	272	288	544	576
	6	64-QAM	3/4	73	77	146	155	306	324	613	649
	7	64-QAM	5/6	81	86	163	172	340	360	681	721
	8	256-QAM	3/4	98	103	195	207	408	432	817	865
	9	256-QAM	5/6	108	115	217	229	453	480	907	961
	10	1024-QAM	3/4	122	129	244	258	510	540	1021	1081
	11	1024-QAM	5/6	135	143	271	287	567	600	1134	1201
2	12	BPSK	1/2	8	8	16	18	34	36	68	72
	13	QPSK	1/2	32	34	66	68	136	144	272	288
	14	QPSK	3/4	48	52	98	104	204	216	408	432
	15	16-QAM	1/2	66	68	130	138	272	288	544	564
	16	16-QAM	3/4	98	104	196	206	408	432	816	864
	17	64-QAM	2/3	130	138	260	276	544	576	1088	1152
	18	64-QAM	3/4	146	154	292	310	612	648	1226	1298
	19	64-QAM	5/6	162	172	326	344	680	720	1362	1442
	20	256-QAM	3/4	196	206	390	414	816	864	1634	1730
	21	256-QAM	5/6	216	230	434	458	906	960	1814	1922
	22	1024-QAM	3/4	244	258	488	516	1020	1080	2042	2162
	23	1024-QAM	5/6	270	286	542	574	1134	1200	2268	2402
3	24	BPSK	1/2	12	12	24	27	51	54	102	108
	25	QPSK	1/2	48	51	99	102	204	216	408	432
	26	QPSK	3/4	72	78	147	156	306	324	612	648
	27	16-QAM	1/2	99	102	195	207	408	432	816	846
	28	16-QAM	3/4	147	156	294	309	612	648	1224	1296
	29	64-QAM	2/3	195	207	390	414	816	864	1632	1728
	30	64-QAM	3/4	219	231	438	465	918	972	1839	1947
	31	64-QAM	5/6	243	258	489	516	1020	1080	2043	2163

	32	256-QAM	3/4	294	309	585	621	1224	1296	2451	2595
	33	256-QAM	5/6	324	345	651	687	1359	1440	2721	2883
	34	1024-QAM	3/4	366	387	732	774	1530	1620	3063	3243
	35	1024-QAM	5/6	405	429	813	861	1701	1800	3402	3603
4	36	BPSK	1/2	16	16	32	36	68	72	136	144
	37	QPSK	1/2	64	68	132	136	272	288	544	576
	38	QPSK	3/4	96	104	196	208	408	432	816	864
	39	16-QAM	1/2	132	136	260	276	544	576	1088	1128
	40	16-QAM	3/4	196	208	392	412	816	864	1632	1728
	41	64-QAM	2/3	260	276	520	552	1088	1152	2176	2304
	42	64-QAM	3/4	292	308	584	620	1224	1296	2452	2596
	43	64-QAM	5/6	324	344	652	688	1360	1440	2724	2884
	44	256-QAM	3/4	392	412	780	828	1632	1728	3268	3460
	45	256-QAM	5/6	432	460	868	916	1812	1920	3628	3844
	46	1024-QAM	3/4	488	516	976	1032	2040	2160	4084	4324
	47	1024-QAM	5/6	540	572	1084	1148	2268	2400	4536	4804

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

2: The EUT supports four spatial streams.

2.5. 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

2.6. 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

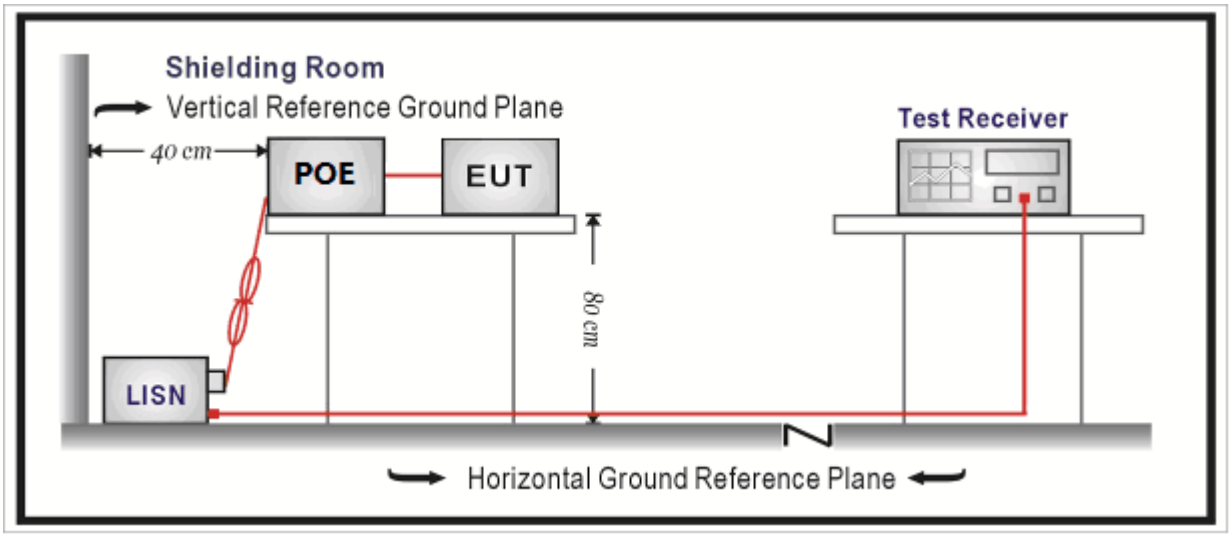
3. AC Power Line Conducted Emission

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	100726	2018.03.29	2019.03.28
Two-Line V-Network	R&S	ENV216	100043	2018.03.29	2019.03.28
Two-Line V-Network	R&S	ENV216	100044	2017.09.17	2018.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2018.03.02	2019.03.01
50ohm Termination	SHX	TF2	07081401	2017.09.17	2018.09.16
Temperature/Humidity Meter	zhichen	ZC1-2	TR1-TH	2018.01.04	2019.01.03
Note: All equipment 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

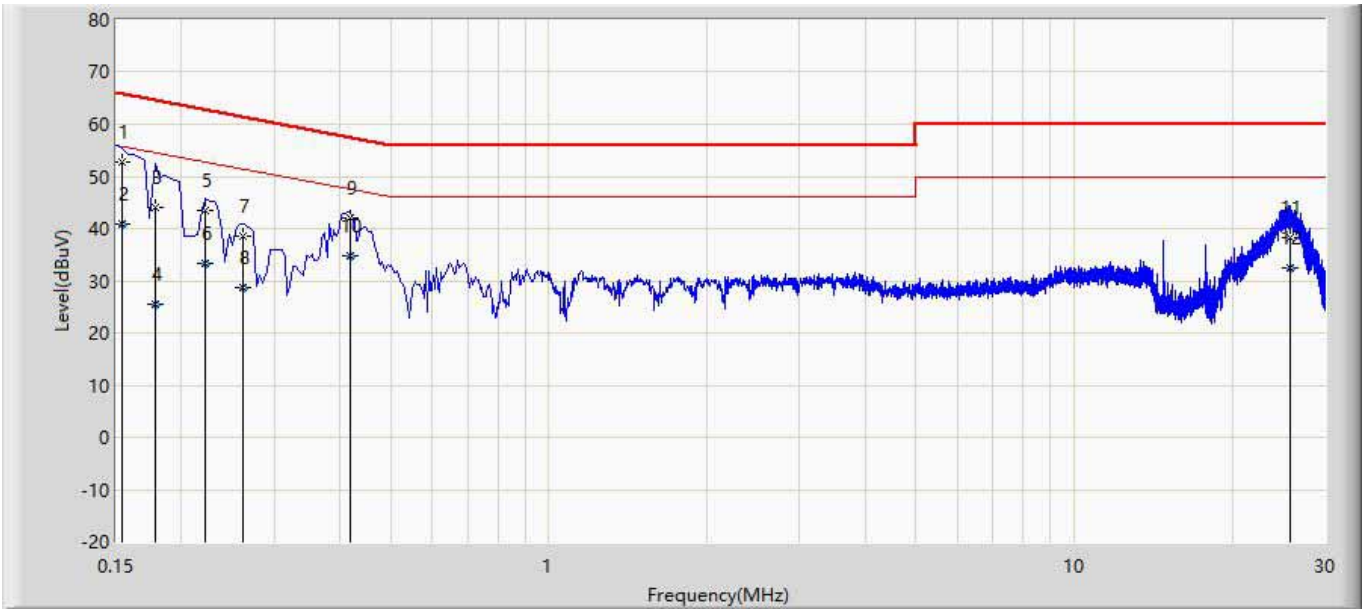
Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dB μ V)	Average(dB μ V)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50
Note 1: The lower limit shall apply at the transition frequencies. Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5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

3.4. Test Procedure

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

3.5. Test Result

Site: TR1	Time: 2018/06/29
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1	



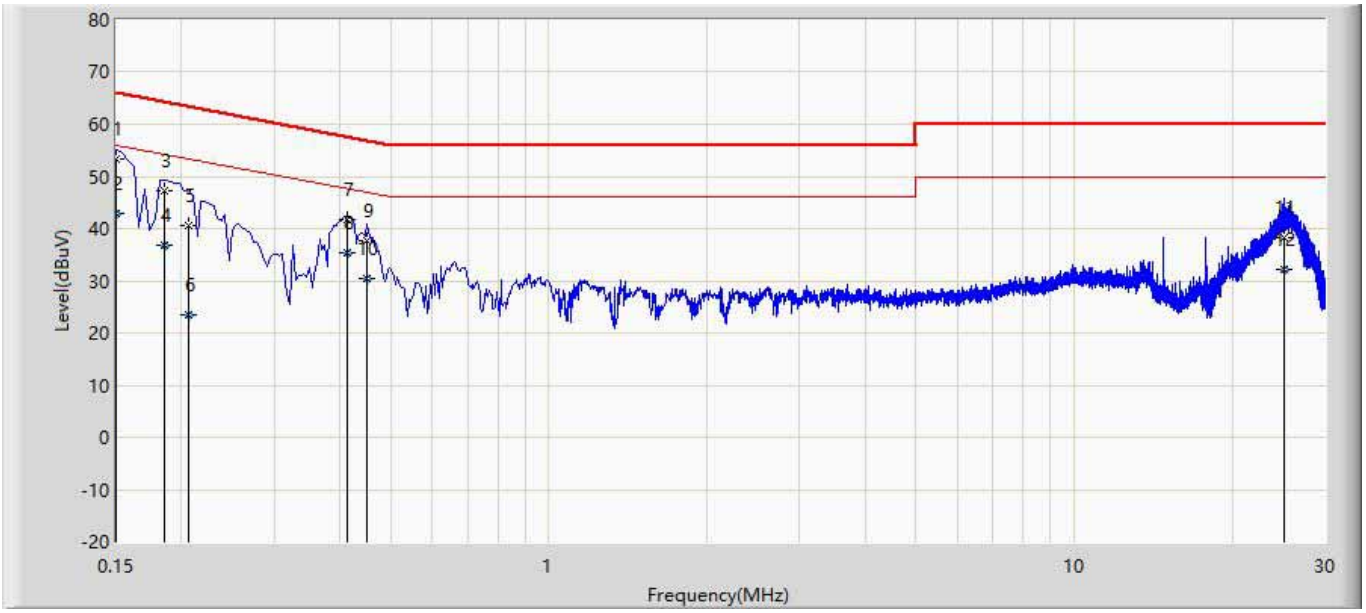
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.154	52.824	43.189	-13.062	65.886	9.609	0.025	0.000	QP
2		0.154	40.753	31.119	-15.133	55.886	9.609	0.025	0.000	AV
3		0.178	44.058	34.426	-21.142	65.200	9.604	0.028	0.000	QP
4		0.178	25.473	15.841	-29.727	55.200	9.604	0.028	0.000	AV
5		0.222	43.573	33.943	-20.370	63.943	9.600	0.029	0.000	QP
6		0.222	33.352	23.723	-20.591	53.943	9.600	0.029	0.000	AV
7		0.262	38.548	28.916	-24.252	62.800	9.600	0.032	0.000	QP
8		0.262	28.749	19.117	-24.051	52.800	9.600	0.032	0.000	AV
9		0.418	41.968	32.329	-16.375	58.343	9.600	0.039	0.000	QP
10		0.418	34.874	25.235	-13.469	48.343	9.600	0.039	0.000	AV
11		25.778	38.206	27.420	-21.794	60.000	10.456	0.330	0.000	QP
12		25.778	32.331	21.545	-17.669	50.000	10.456	0.330	0.000	AV

Note:

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

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

Site: TR1	Time: 2018/06/29
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.150	53.411	43.792	-12.589	66.000	9.594	0.025	0.000	QP
2		0.150	42.996	33.377	-13.004	56.000	9.594	0.025	0.000	AV
3		0.186	47.231	37.605	-17.740	64.971	9.597	0.028	0.000	QP
4		0.186	36.691	27.066	-18.280	54.971	9.597	0.028	0.000	AV
5		0.206	40.708	31.080	-23.692	64.400	9.599	0.029	0.000	QP
6		0.206	23.488	13.861	-30.912	54.400	9.599	0.029	0.000	AV
7		0.414	41.613	31.982	-16.844	58.457	9.592	0.039	0.000	QP
8		0.414	35.339	25.708	-13.118	48.457	9.592	0.039	0.000	AV
9		0.450	37.691	28.058	-19.738	57.429	9.591	0.041	0.000	QP
10		0.450	30.512	20.879	-16.917	47.429	9.591	0.041	0.000	AV
11		25.022	38.172	27.188	-21.828	60.000	10.660	0.324	0.000	QP
12		25.022	32.215	21.231	-17.785	50.000	10.660	0.324	0.000	AV

Note:

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

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

4. Emissions in restricted frequency bands

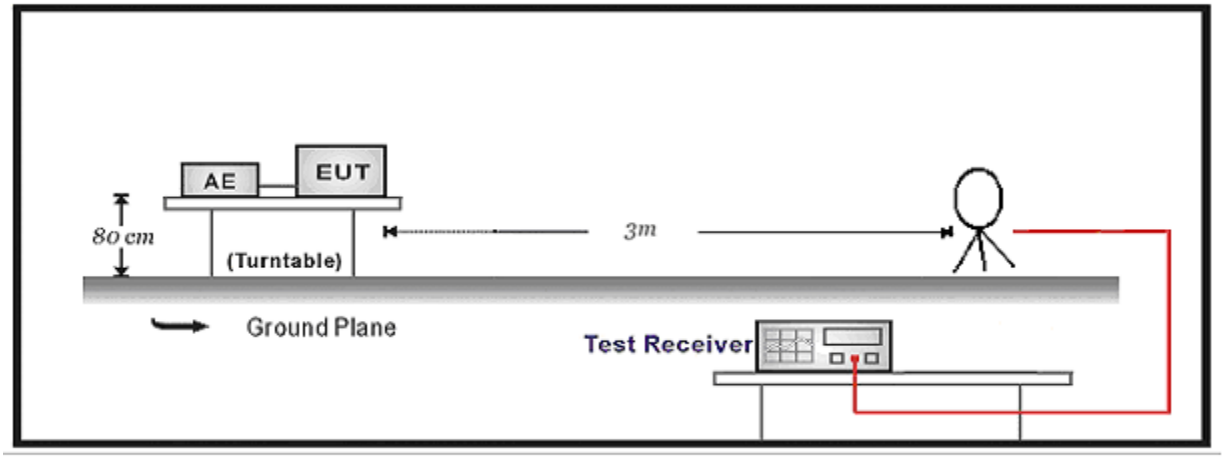
4.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2018.03.29	2019.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2017.11.16	2018.11.15
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2017.10.16	2018.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2018.03.02	2019.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2018.01.04	2019.01.03
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

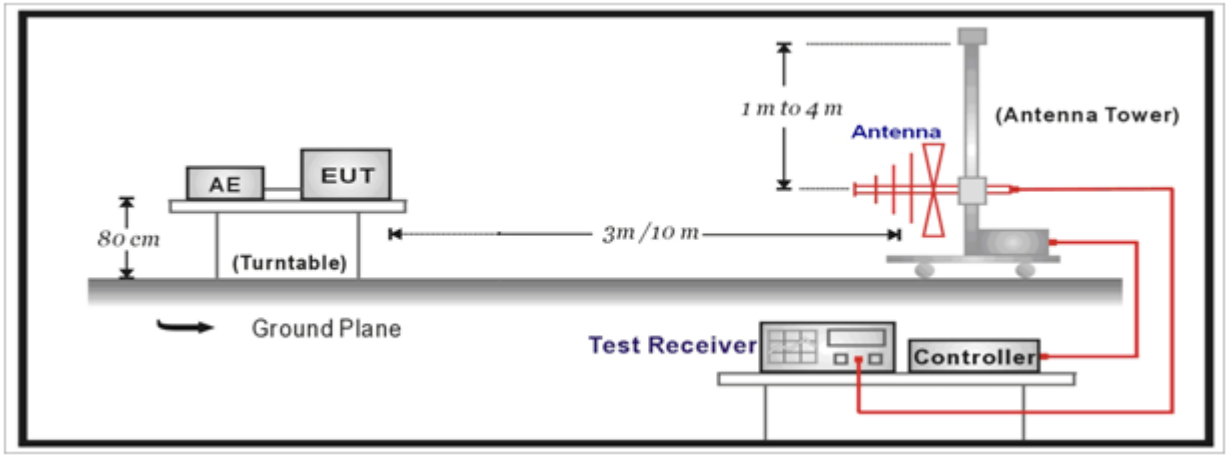
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2018.01.04	2019.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2018.05.06	2019.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2018.05.06	2019.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2018.01.22	2019.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2017.11.25	2018.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2018.03.02	2019.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2018.03.02	2019.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2018.03.02	2019.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2018.06.10	2019.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2018.01.04	2019.01.03
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

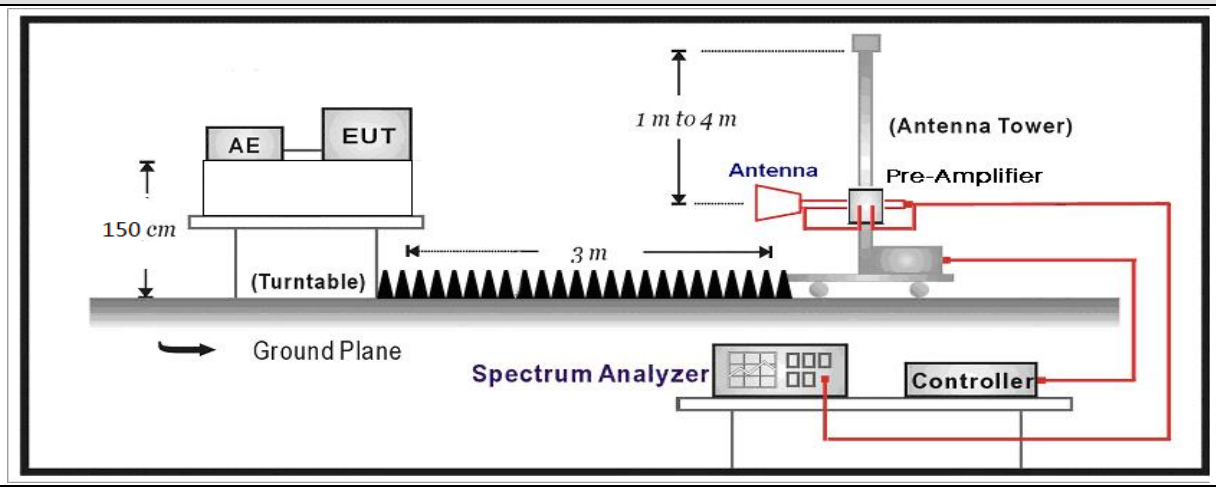
Below 30MHz Test Setup:



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			

For ISED:

Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	
8.41425 - 8.41475	240 - 285	5350 - 5460	
12.29 - 12.293	322 - 335.4	7250 - 7750	
12.51975 - 12.52025	399.9 - 410	8025 - 8500	
12.57675 - 12.57725	608 - 614	--	

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)

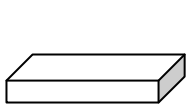
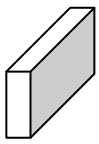
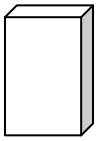
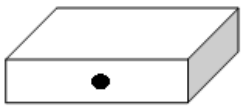
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed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

4.5. EUT test Axis definition

<table>
<tr><th>Item</th><th colspan="4">Emissions in restricted frequency bands</th></tr>
<tr><td rowspan="3">Device Category</td><td>☐</td><td colspan="3">Fixed point-to-point</td></tr>
<tr><td>☐</td><td colspan="3">Emit multiple directional beams, simultaneously or sequentially</td></tr>
<tr><td>☒</td><td colspan="3">Other cases</td></tr>
<tr><td>Test mode</td><td colspan="4">Mode 1~8</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>
<tr><td>☐</td><td colspan="3">Chain 1</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
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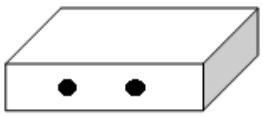
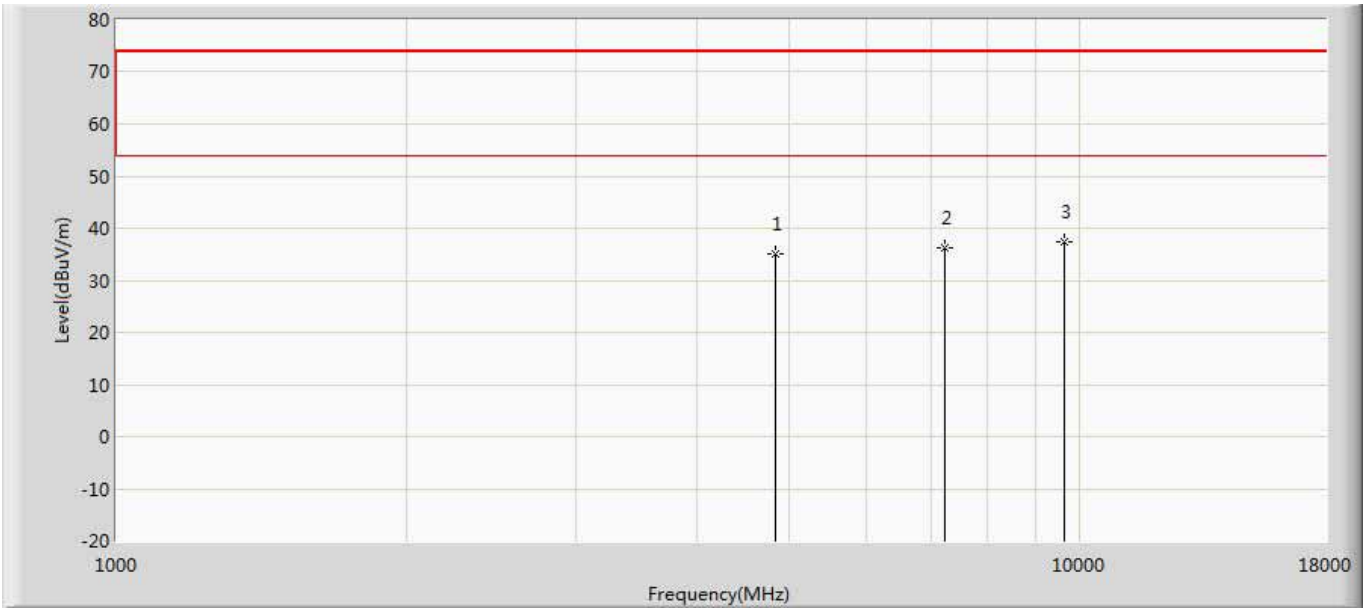
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

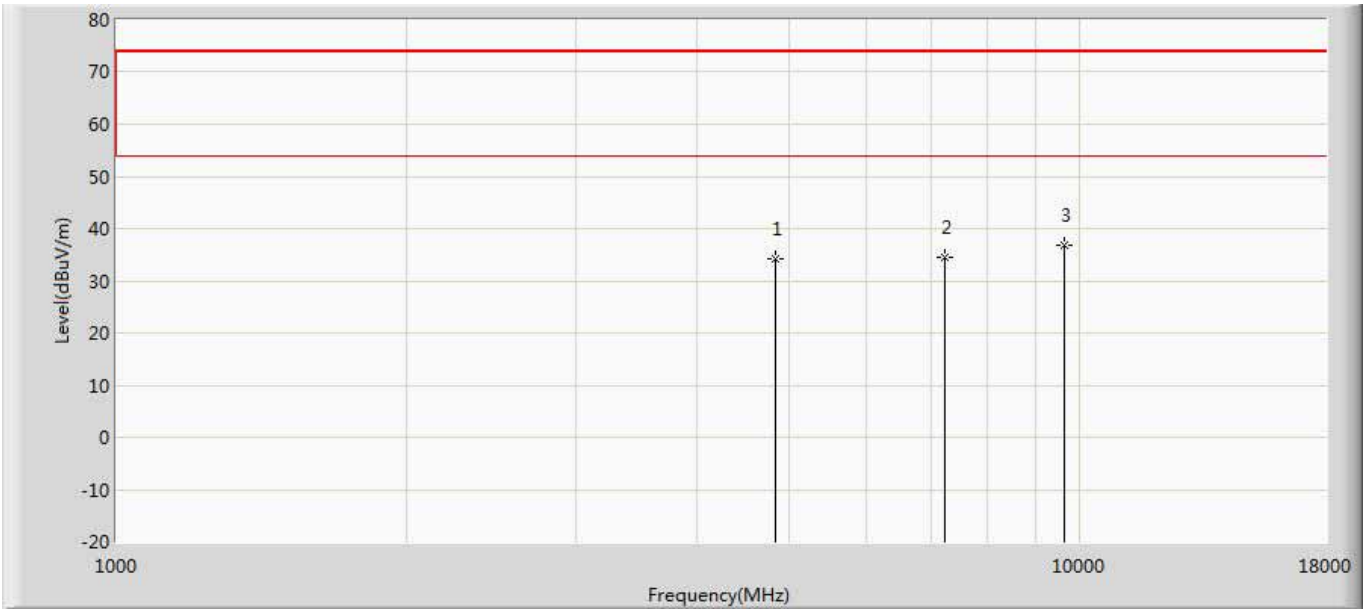
4.6. Test Result

Profile: AP650	Page No.: 1
Engineer: Damon	
Site: AC5AC5	Time: 2018/07/11 - 17:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2412MHz by 802.11B 2X2	



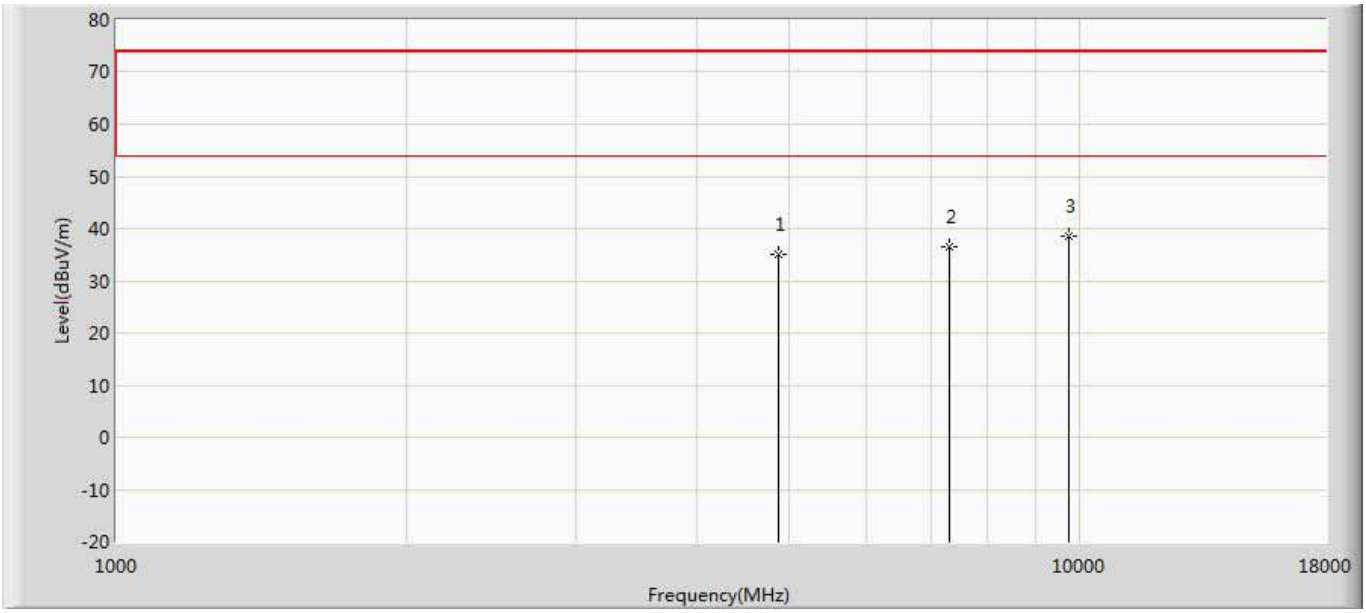
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	35.205	43.542	-38.795	74.000	-8.338	PK
2		7236.000	36.246	41.244	-37.754	74.000	-4.998	PK
3	*	9648.000	37.438	38.225	-36.562	74.000	-0.787	PK

Profile: AP650	Page No.: 2
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2412MHz by 802.11B 2X2	



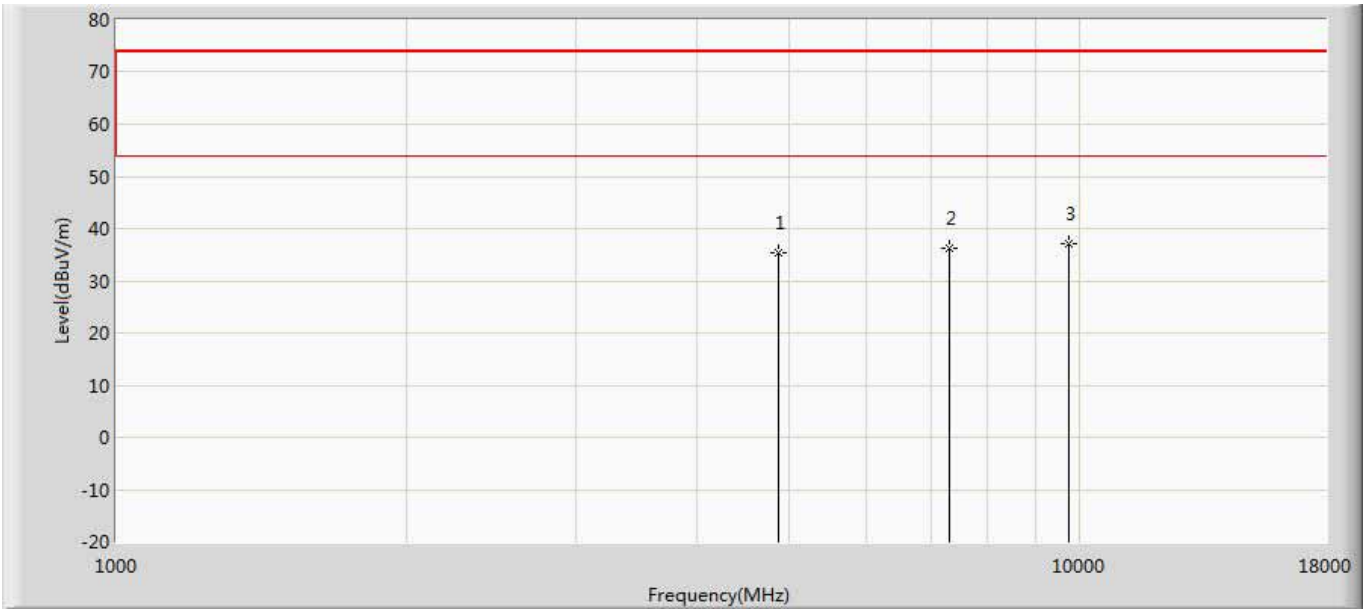
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	34.229	42.566	-39.771	74.000	-8.338	PK
2		7236.000	34.367	39.365	-39.633	74.000	-4.998	PK
3	*	9648.000	36.802	37.589	-37.198	74.000	-0.787	PK

Profile: AP650	Page No.: 3
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2437MHz by 802.11B 2X2	



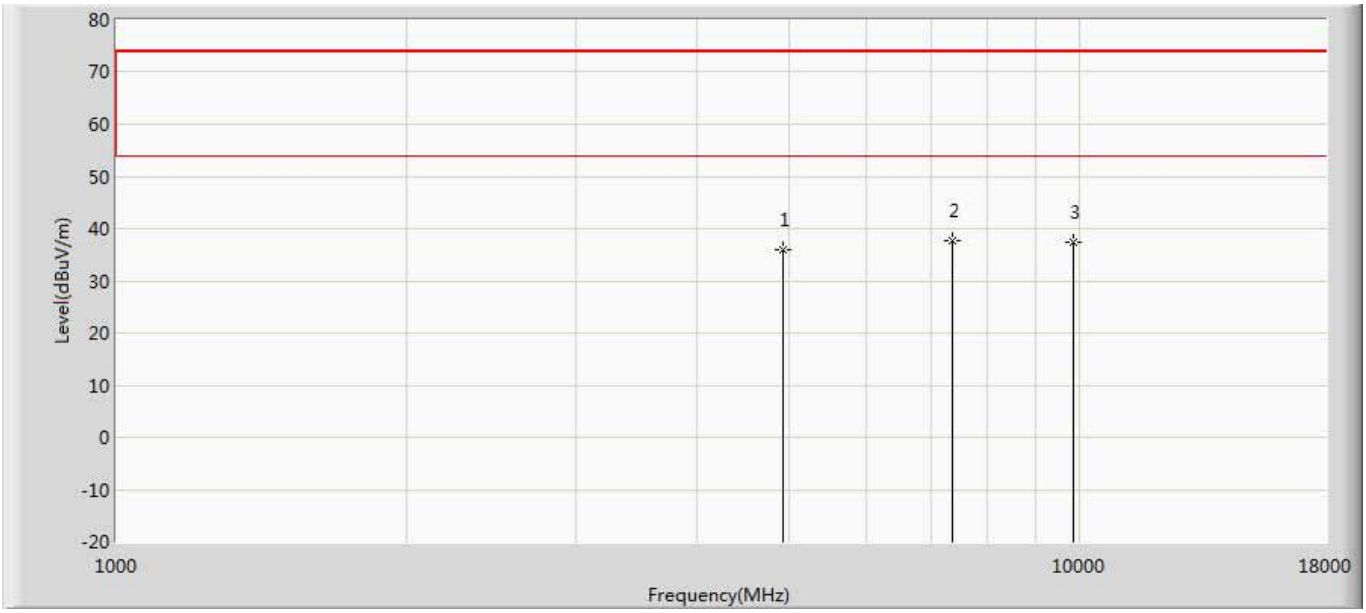
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	35.208	43.566	-38.792	74.000	-8.358	PK
2		7311.000	36.415	41.255	-37.585	74.000	-4.840	PK
3	*	9748.000	38.484	39.550	-35.516	74.000	-1.066	PK

Profile: AP650	Page No.: 4
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2437MHz by 802.11B 2X2	



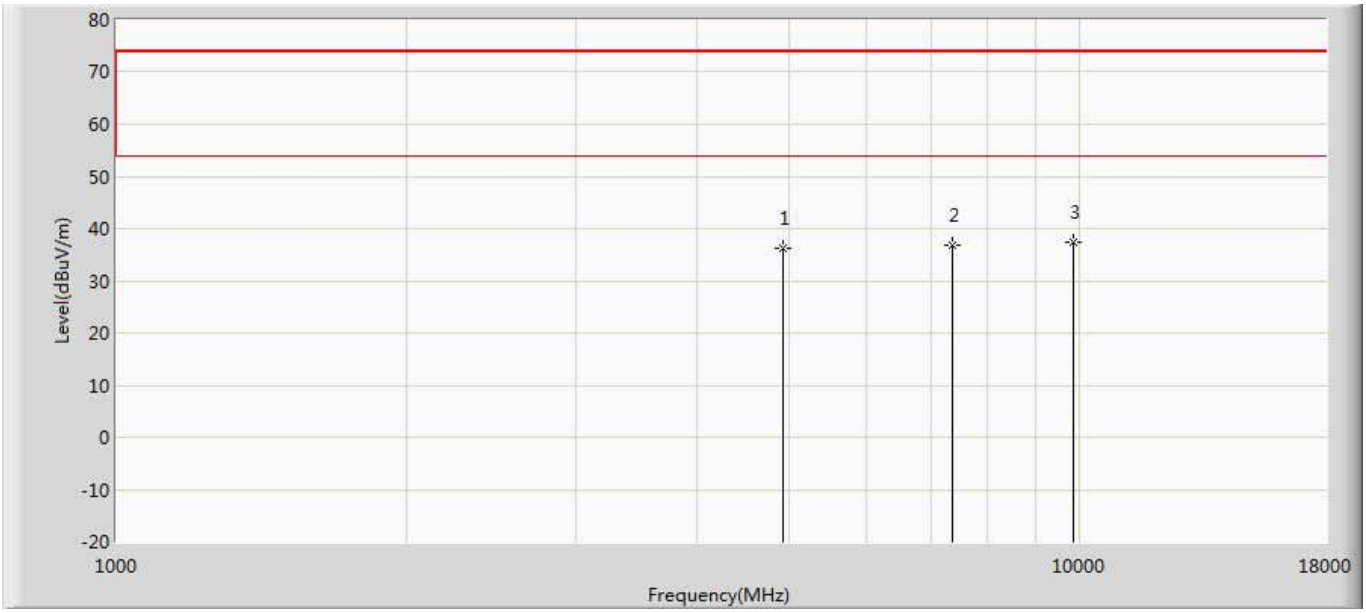
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	35.230	43.588	-38.770	74.000	-8.358	PK
2		7311.000	36.182	41.022	-37.818	74.000	-4.840	PK
3	*	9748.000	37.188	38.254	-36.812	74.000	-1.066	PK

Profile: AP650	Page No.: 5
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2462MHz by 802.11B 2X2	



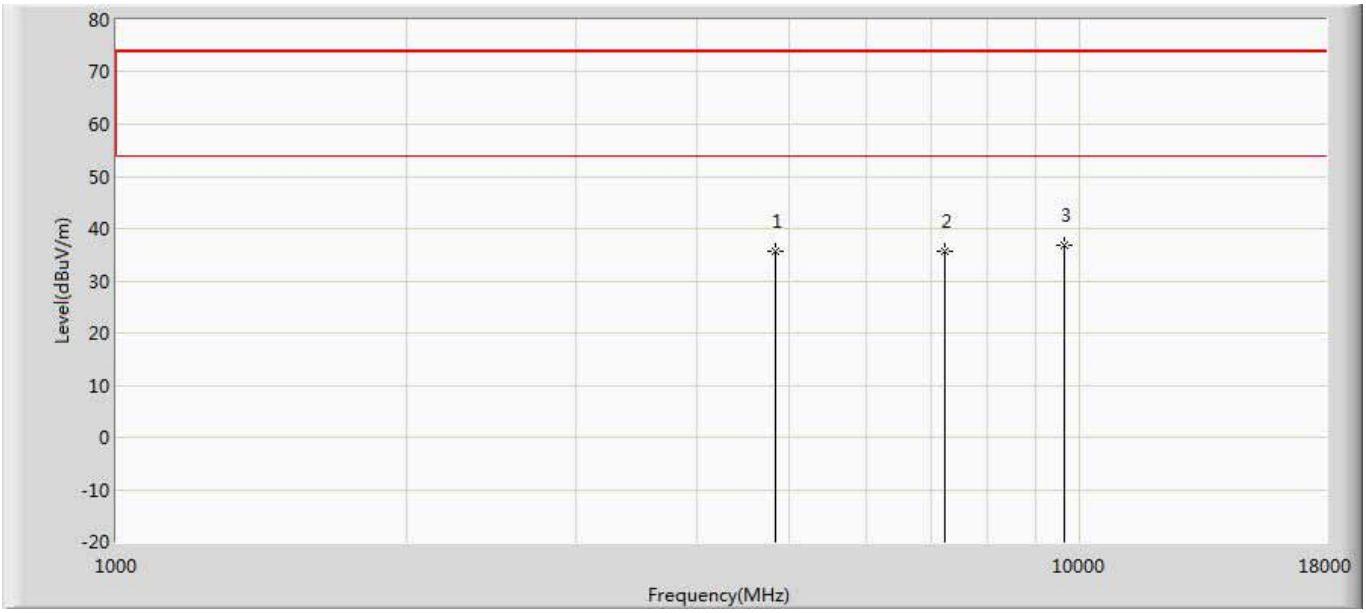
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	35.926	44.255	-38.074	74.000	-8.330	PK
2	*	7386.000	37.600	42.056	-36.400	74.000	-4.456	PK
3		9848.000	37.376	38.415	-36.624	74.000	-1.039	PK

Profile: AP650	Page No.: 6
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2462MHz by 802.11B 2X2	



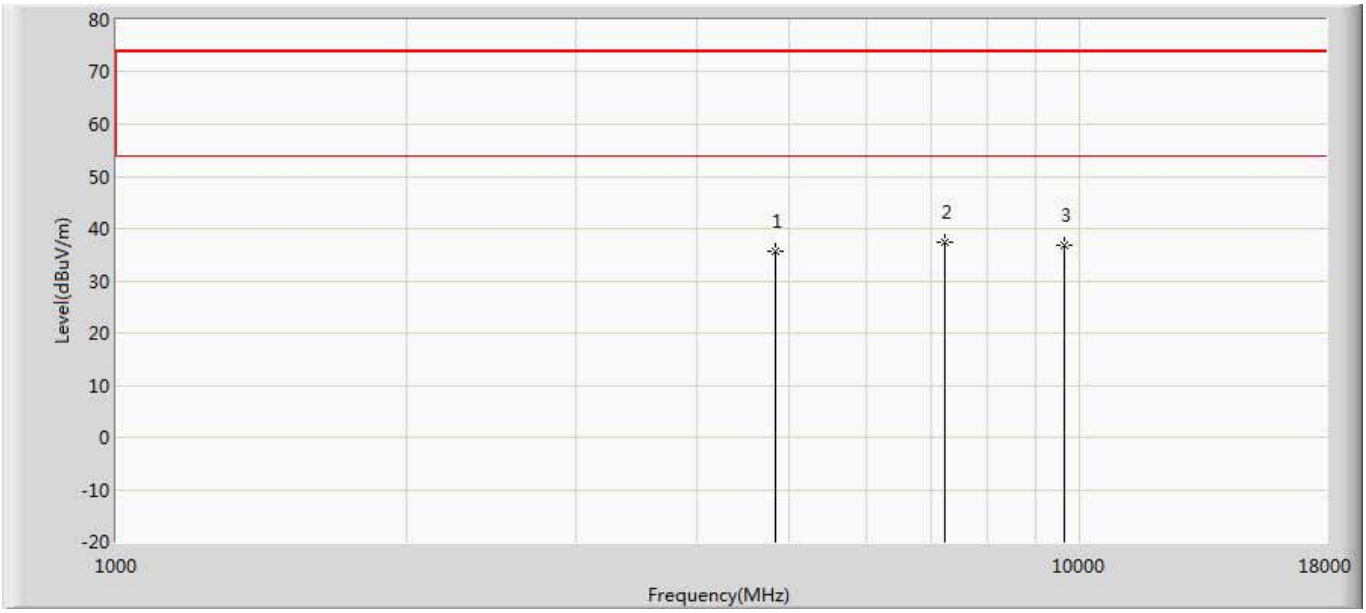
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.192	44.521	-37.808	74.000	-8.330	PK
2		7386.000	36.800	41.256	-37.200	74.000	-4.456	PK
3	*	9848.000	37.373	38.412	-36.627	74.000	-1.039	PK

Profile: AP650	Page No.: 7
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2412MHz by 802.11G 2X2	



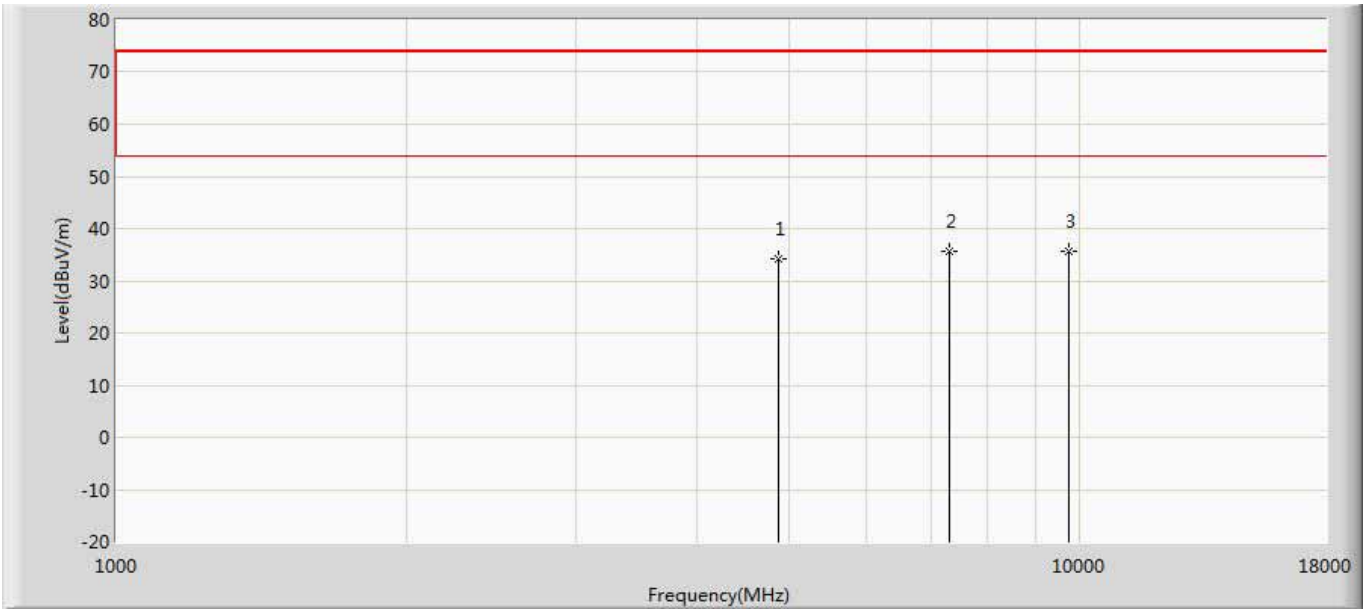
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	35.688	44.025	-38.312	74.000	-8.338	PK
2		7236.000	35.586	40.584	-38.414	74.000	-4.998	PK
3	*	9648.000	36.737	37.524	-37.263	74.000	-0.787	PK

Profile: AP650	Page No.: 8
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2412MHz by 802.11G 2X2	



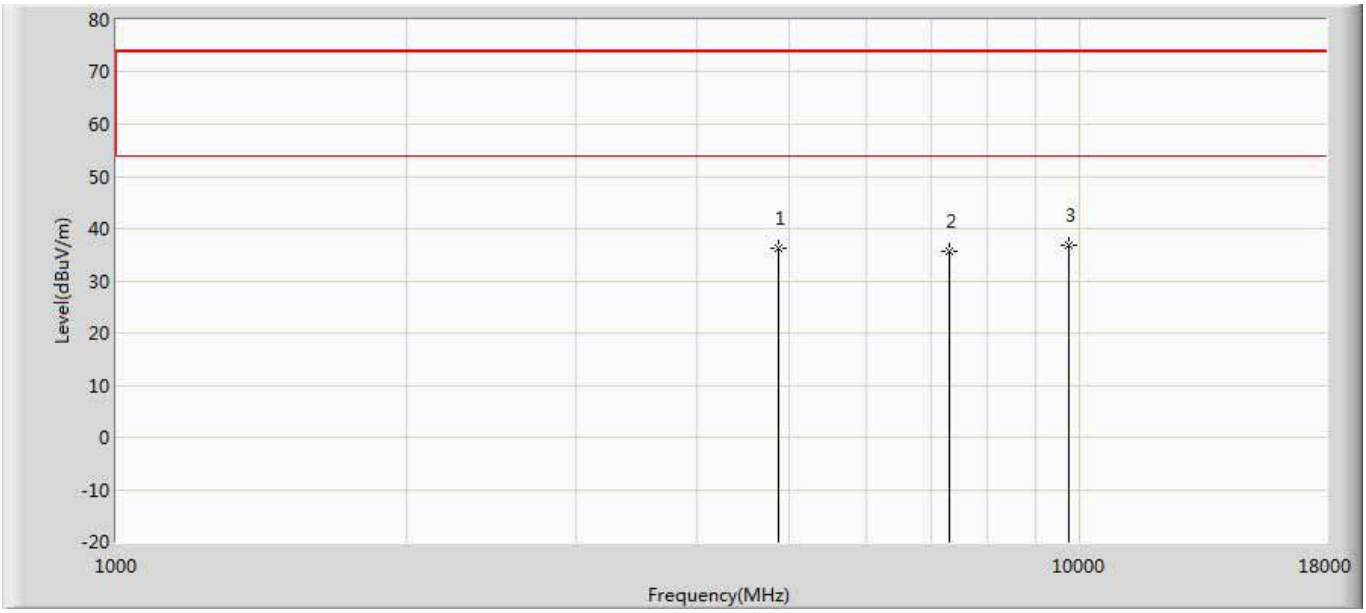
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	35.715	44.052	-38.285	74.000	-8.338	PK
2	*	7236.000	37.534	42.532	-36.466	74.000	-4.998	PK
3		9648.000	36.754	37.541	-37.246	74.000	-0.787	PK

Profile: AP650	Page No.: 9
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2437MHz by 802.11G 2X2	



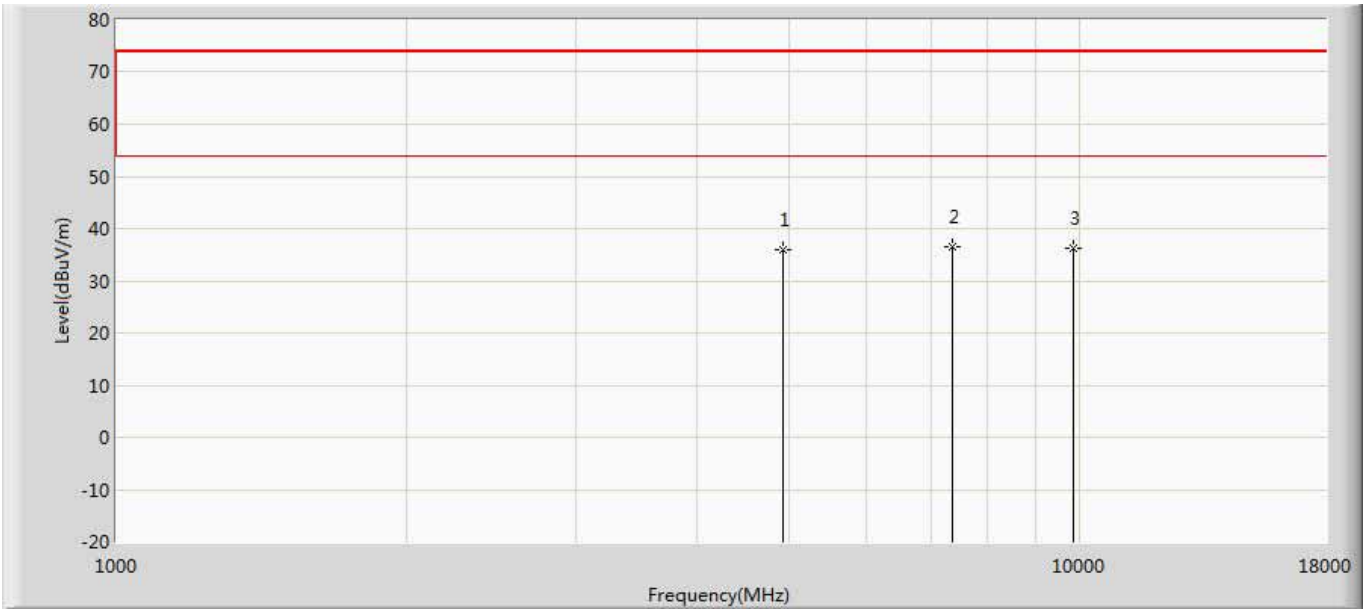
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	34.166	42.524	-39.834	74.000	-8.358	PK
2	*	7311.000	35.744	40.584	-38.256	74.000	-4.840	PK
3		9748.000	35.516	36.582	-38.484	74.000	-1.066	PK

Profile: AP650	Page No.: 10
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2437MHz by 802.11G 2X2	



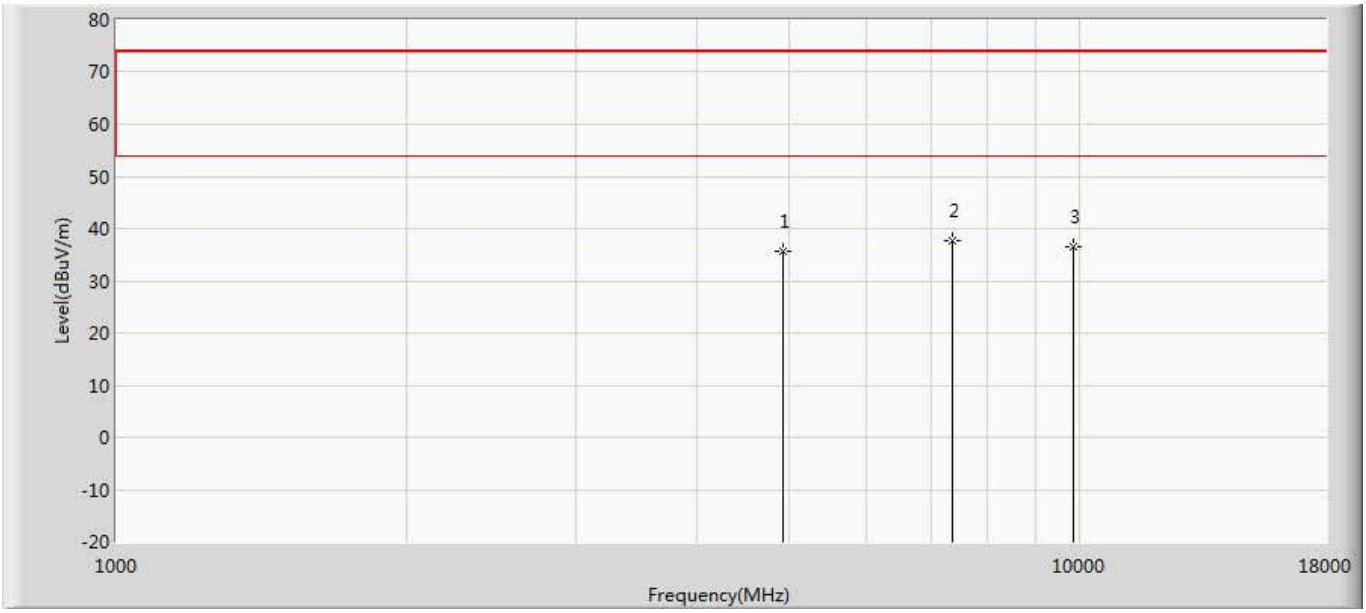
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.168	44.526	-37.832	74.000	-8.358	PK
2		7311.000	35.686	40.526	-38.314	74.000	-4.840	PK
3	*	9748.000	36.786	37.852	-37.214	74.000	-1.066	PK

Profile: AP650	Page No.: 11
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2462MHz by 802.11G 2X2	



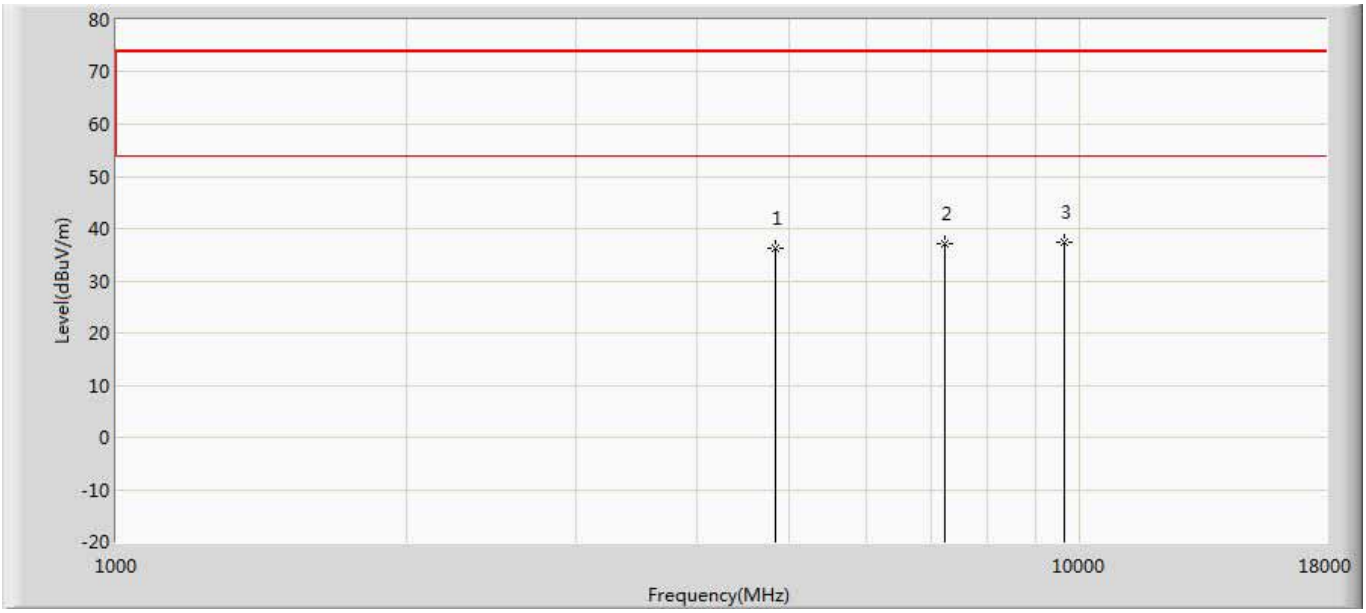
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	35.922	44.251	-38.078	74.000	-8.330	PK
2	*	7386.000	36.400	40.856	-37.600	74.000	-4.456	PK
3		9848.000	36.373	37.412	-37.627	74.000	-1.039	PK

Profile: AP650	Page No.: 12
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2462MHz by 802.11G 2X2	



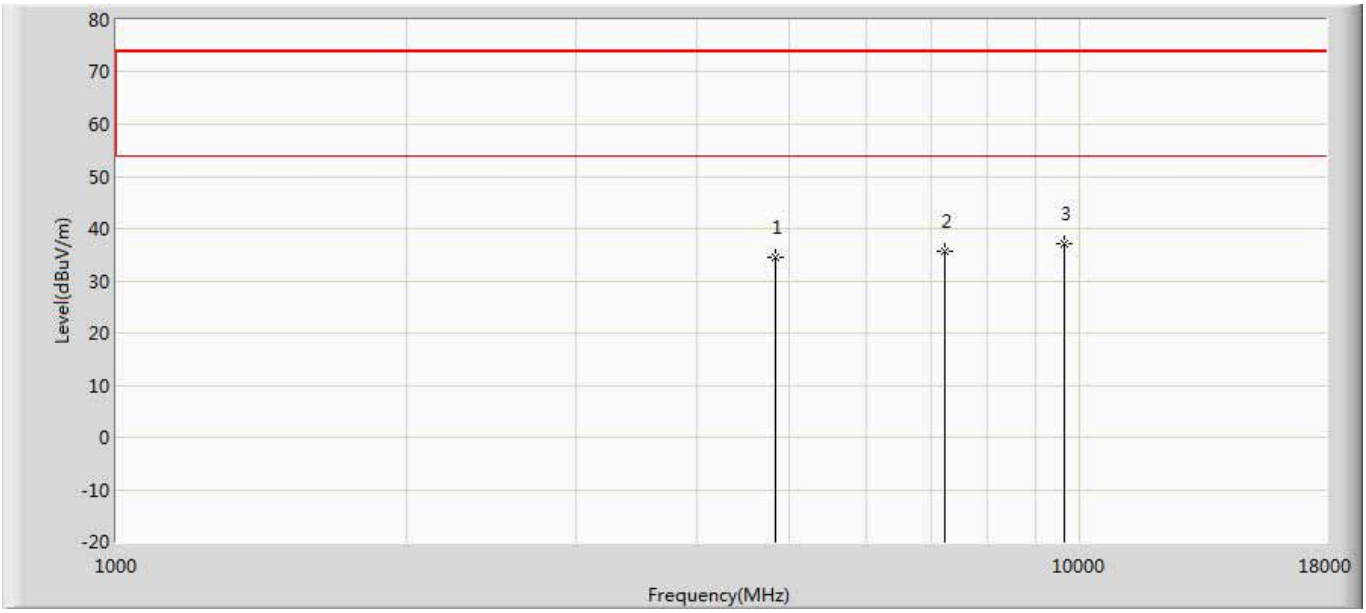
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	35.696	44.025	-38.304	74.000	-8.330	PK
2	*	7386.000	37.600	42.056	-36.400	74.000	-4.456	PK
3		9848.000	36.438	37.477	-37.562	74.000	-1.039	PK

Profile: AP650	Page No.: 13
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11N20 2X2	



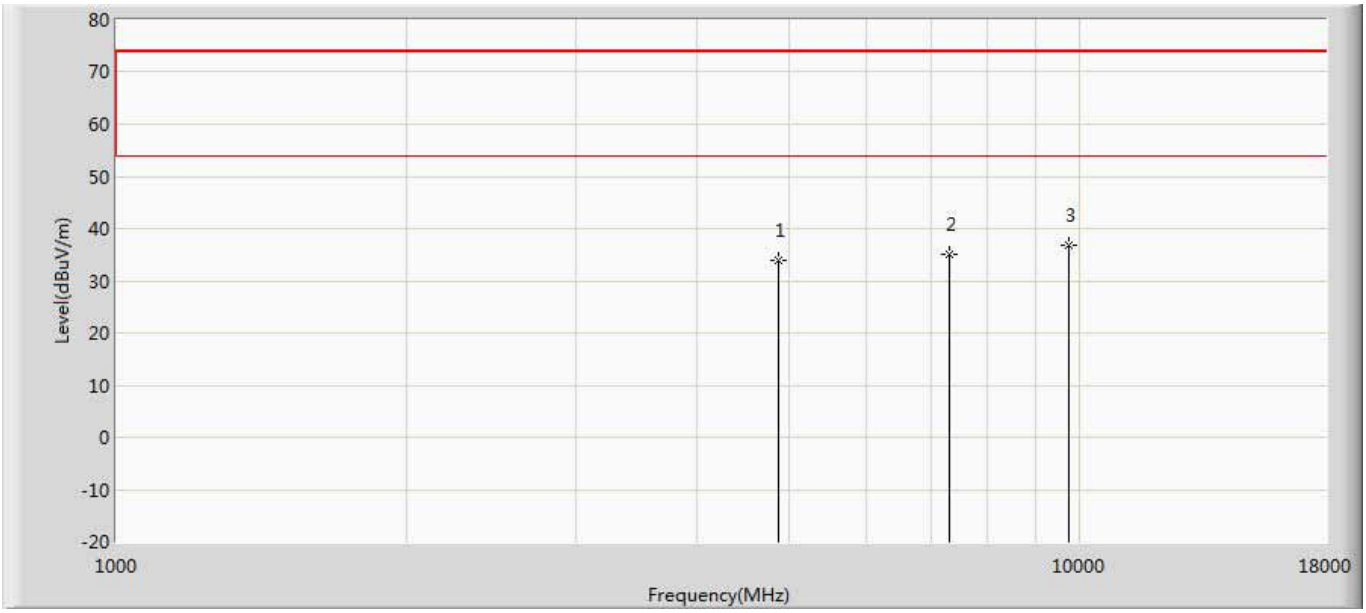
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.184	44.521	-37.816	74.000	-8.338	PK
2		7236.000	37.027	42.025	-36.973	74.000	-4.998	PK
3	*	9648.000	37.467	38.254	-36.533	74.000	-0.787	PK

Profile: AP650	Page No.: 14
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11N20 2X2	



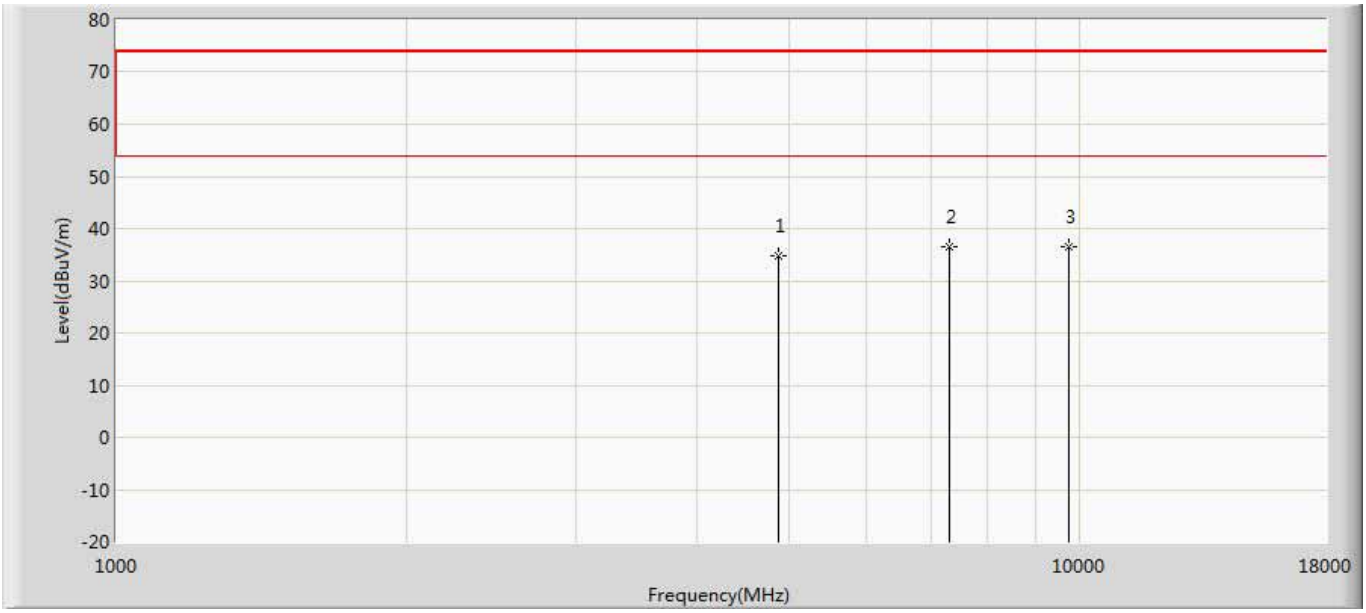
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	34.625	42.962	-39.375	74.000	-8.338	PK
2		7236.000	35.524	40.522	-38.476	74.000	-4.998	PK
3	*	9648.000	37.098	37.885	-36.902	74.000	-0.787	PK

Profile: AP650	Page No.: 15
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2437MHz by 802.11N20 2X2	



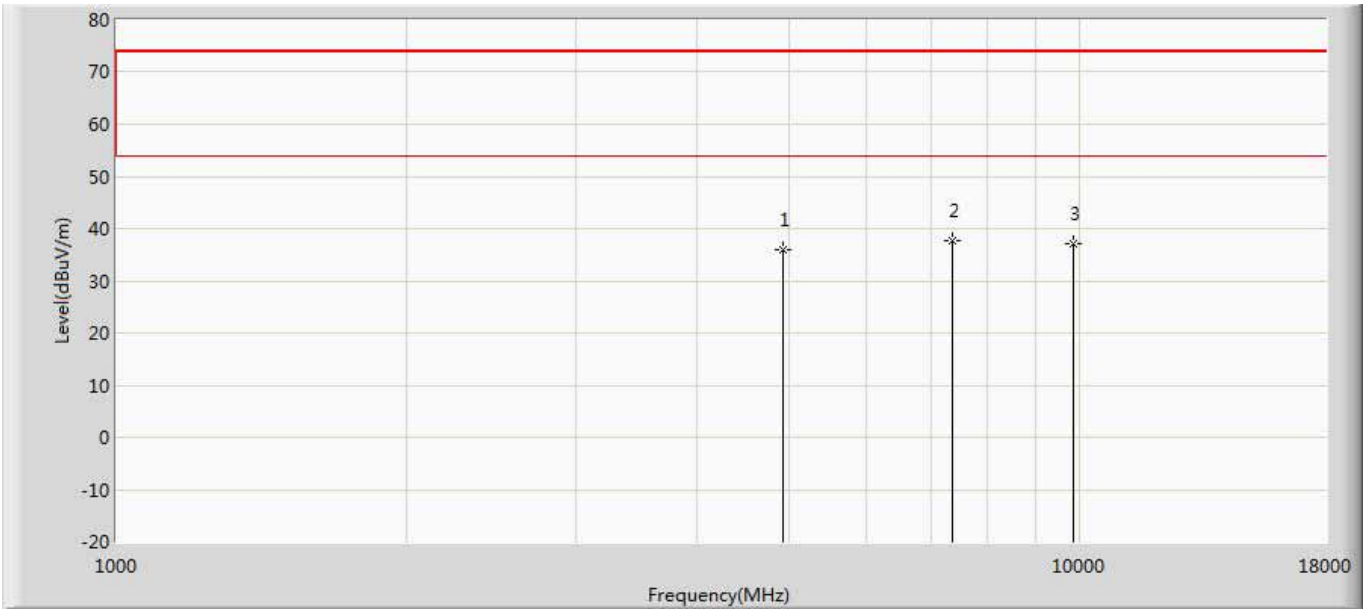
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	33.897	42.255	-40.103	74.000	-8.358	PK
2		7311.000	35.212	40.052	-38.788	74.000	-4.840	PK
3	*	9748.000	36.708	37.774	-37.292	74.000	-1.066	PK

Profile: AP650	Page No.: 16
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2437MHz by 802.11N20 2X2	



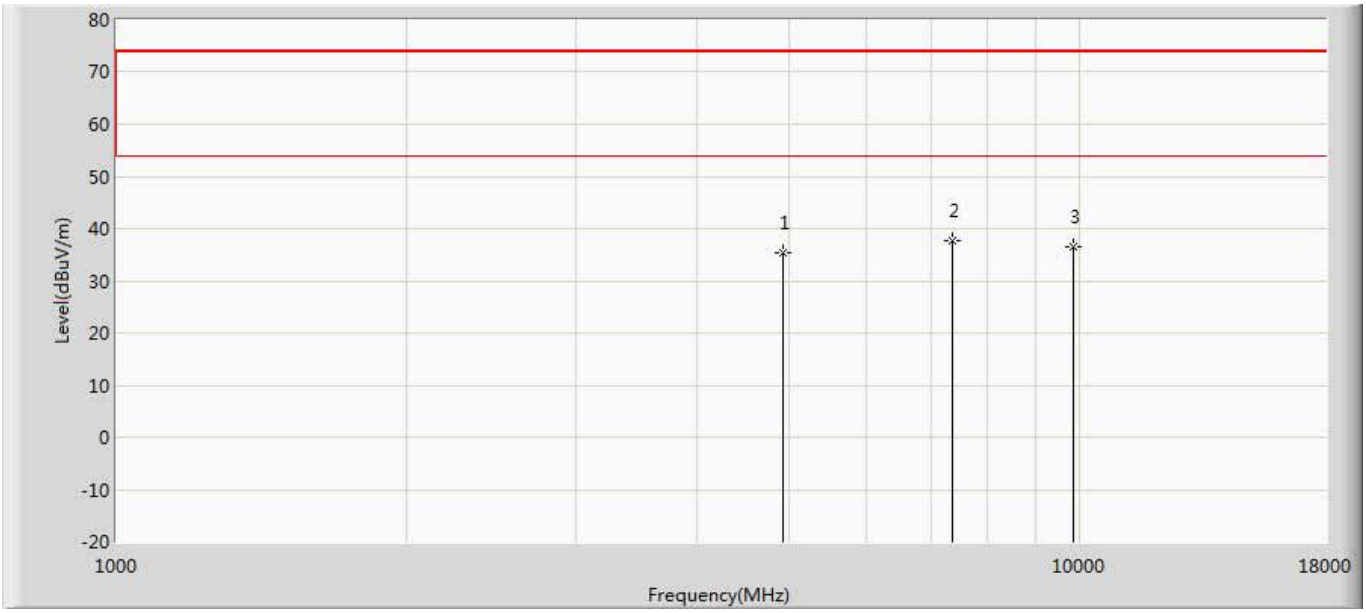
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	34.897	43.255	-39.103	74.000	-8.358	PK
2		7311.000	36.416	41.256	-37.584	74.000	-4.840	PK
3	*	9748.000	36.496	37.562	-37.504	74.000	-1.066	PK

Profile: AP650	Page No.: 17
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11N20 2X2	



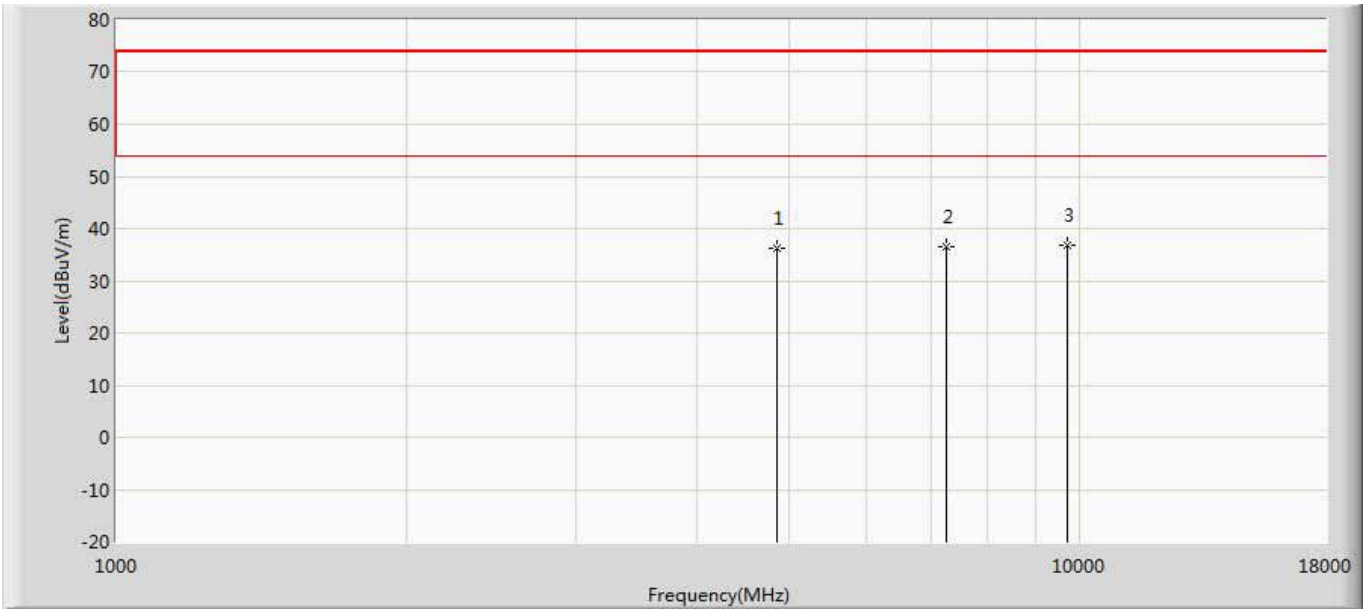
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	35.922	44.251	-38.078	74.000	-8.330	PK
2	*	7386.000	37.799	42.255	-36.201	74.000	-4.456	PK
3		9848.000	37.215	38.254	-36.785	74.000	-1.039	PK

Profile: AP650	Page No.: 18
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11N20 2X2	



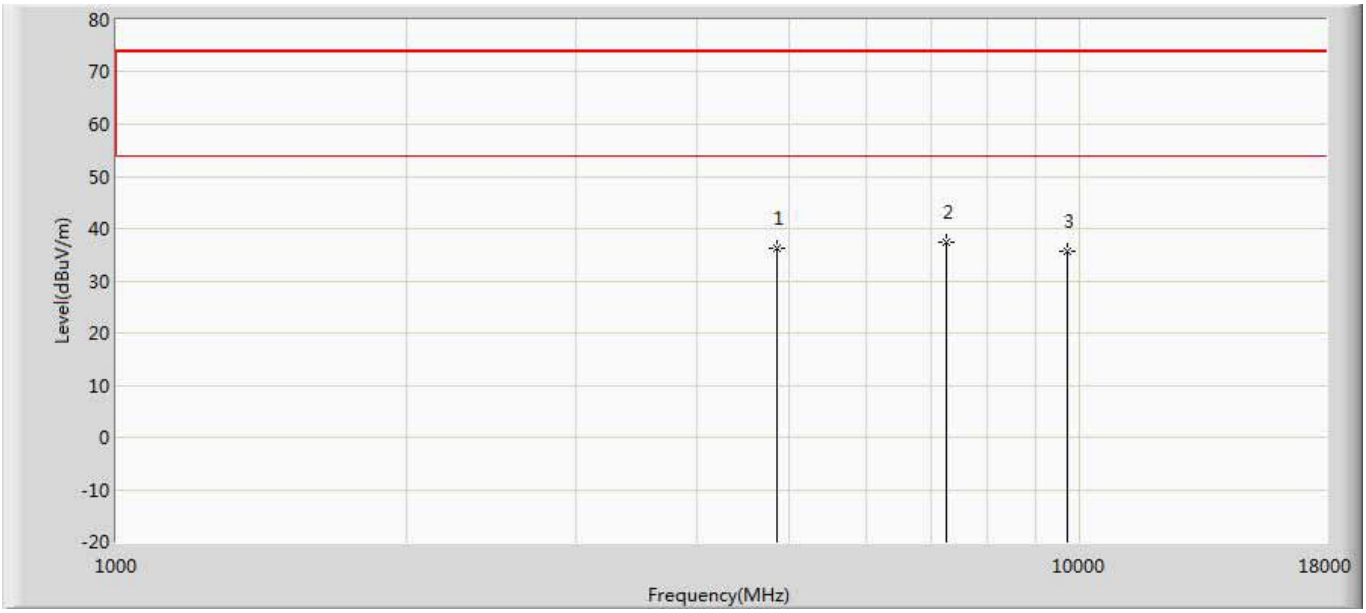
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	35.293	43.622	-38.707	74.000	-8.330	PK
2	*	7386.000	37.799	42.255	-36.201	74.000	-4.456	PK
3		9848.000	36.419	37.458	-37.581	74.000	-1.039	PK

Profile: AP650	Page No.: 19
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11N40 2X2	



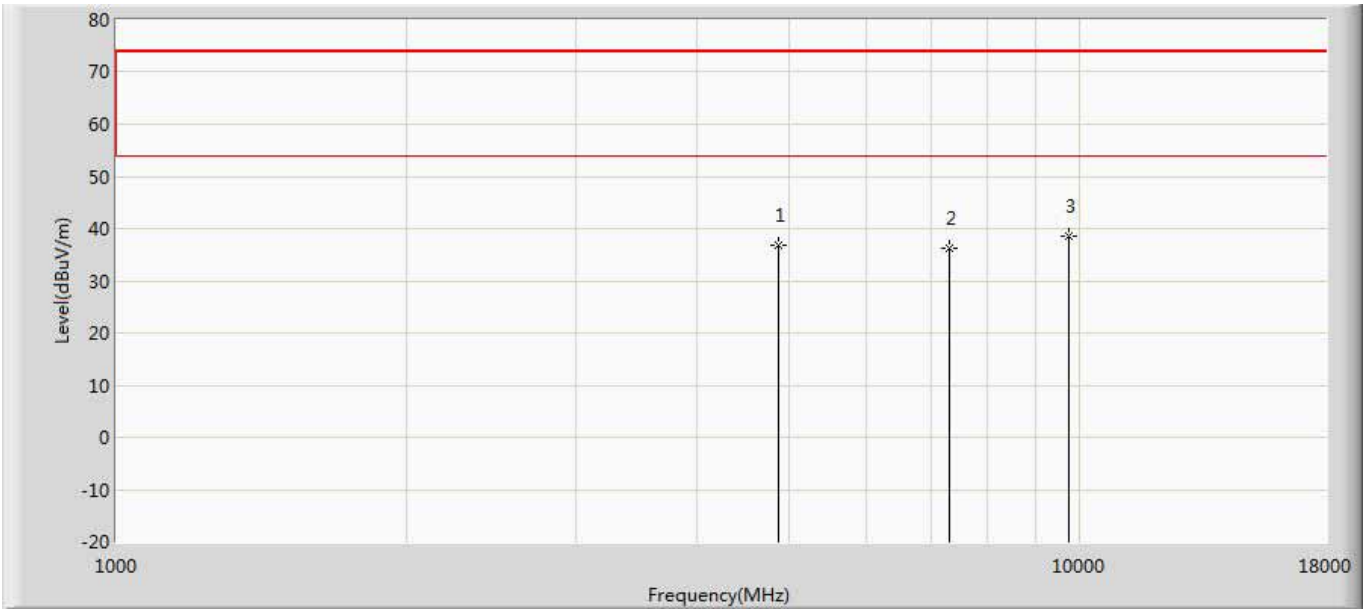
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	36.243	44.525	-37.757	74.000	-8.283	PK
2		7266.000	36.549	41.252	-37.451	74.000	-4.702	PK
3	*	9688.000	36.914	37.854	-37.086	74.000	-0.941	PK

Profile: AP650	Page No.: 20
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11N40 2X2	



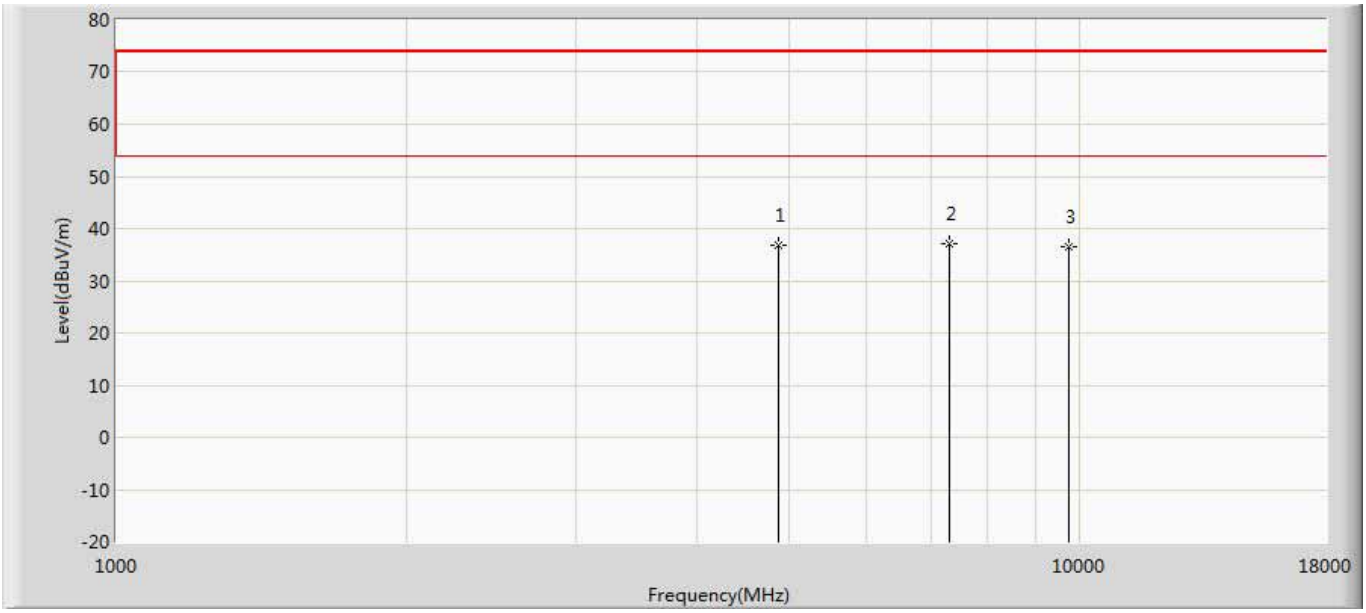
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	36.243	44.525	-37.757	74.000	-8.283	PK
2	*	7266.000	37.411	42.114	-36.589	74.000	-4.702	PK
3		9688.000	35.604	36.544	-38.396	74.000	-0.941	PK

Profile: AP650	Page No.: 21
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2437MHz by 802.11N40 2X2	



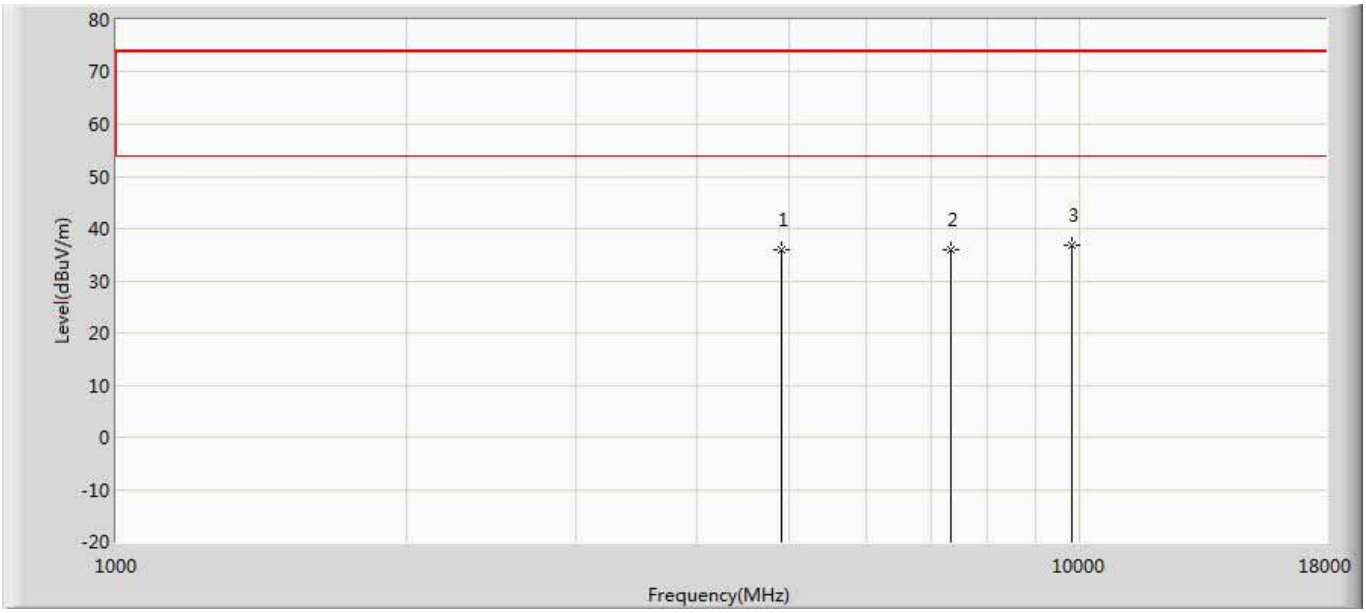
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.853	45.211	-37.147	74.000	-8.358	PK
2		7311.000	36.185	41.025	-37.815	74.000	-4.840	PK
3	*	9748.000	38.586	39.652	-35.414	74.000	-1.066	PK

Profile: AP650	Page No.: 22
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2437MHz by 802.11N40 2X2	



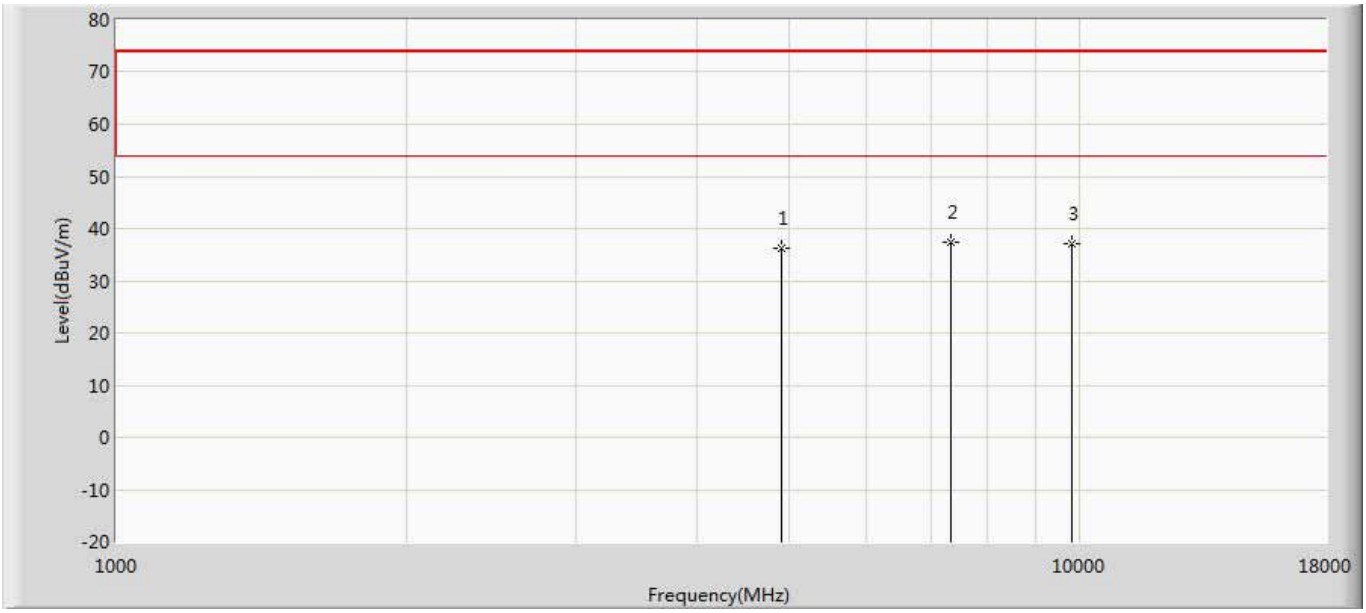
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.883	45.241	-37.117	74.000	-8.358	PK
2	*	7311.000	37.186	42.026	-36.814	74.000	-4.840	PK
3		9748.000	36.389	37.455	-37.611	74.000	-1.066	PK

Profile: AP650	Page No.: 23
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11N40 2X2	



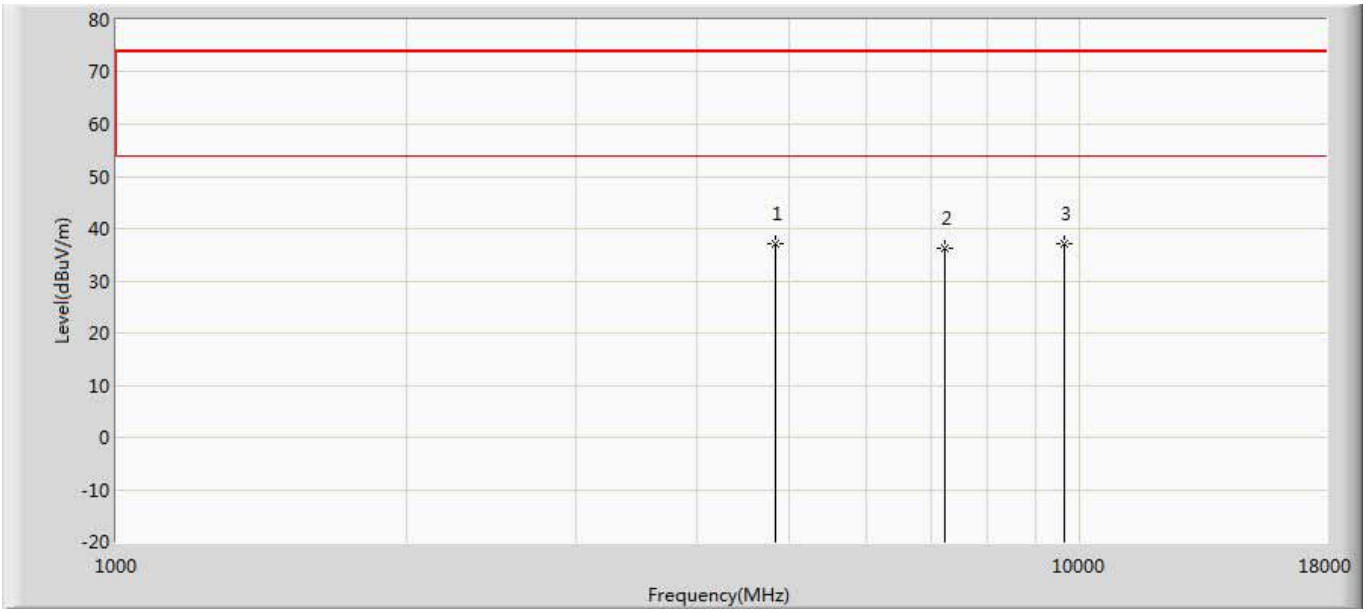
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4904.000	35.981	44.252	-38.019	74.000	-8.270	PK
2		7356.000	35.823	40.521	-38.177	74.000	-4.698	PK
3	*	9808.000	36.695	37.552	-37.305	74.000	-0.858	PK

Profile: AP650	Page No.: 24
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11N40 2X2	



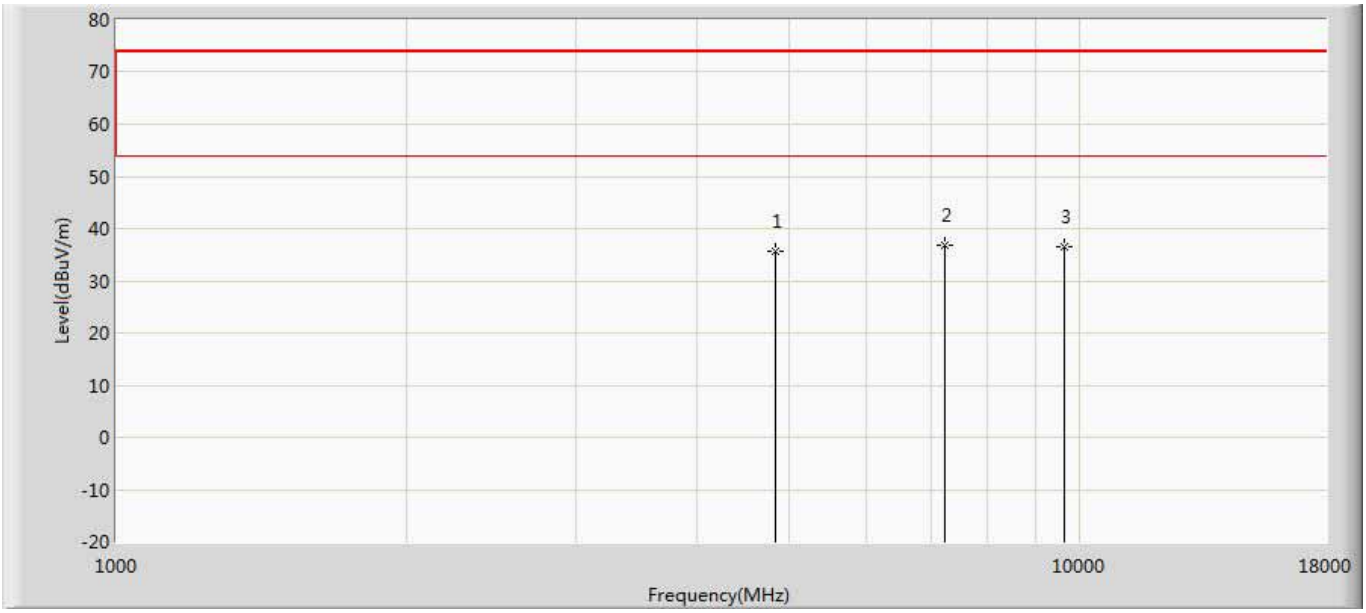
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4904.000	36.250	44.521	-37.750	74.000	-8.270	PK
2	*	7356.000	37.446	42.144	-36.554	74.000	-4.698	PK
3		9808.000	36.984	37.841	-37.016	74.000	-0.858	PK

Profile: AP650	Page No.: 25
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2412MHz by 802.11B 4X4	



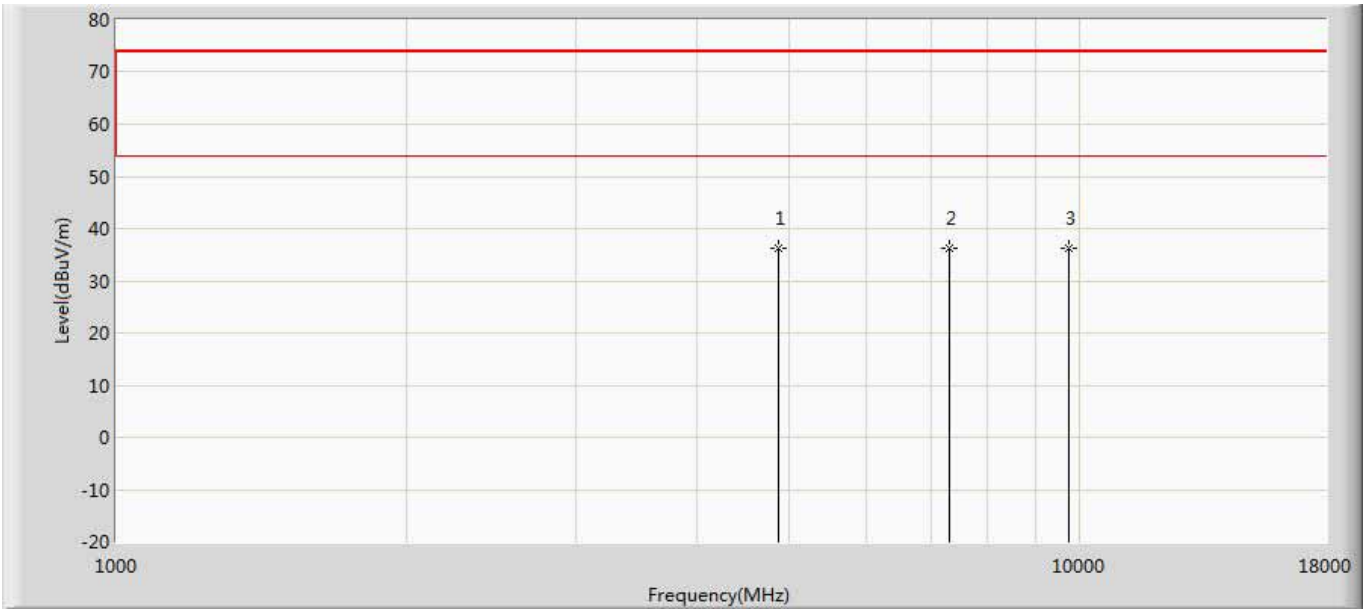
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4824.000	37.187	45.524	-36.813	74.000	-8.338	PK
2		7236.000	36.114	41.112	-37.886	74.000	-4.998	PK
3		9648.000	36.957	37.744	-37.043	74.000	-0.787	PK

Profile: AP650	Page No.: 26
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2412MHz by 802.11B 4X4	



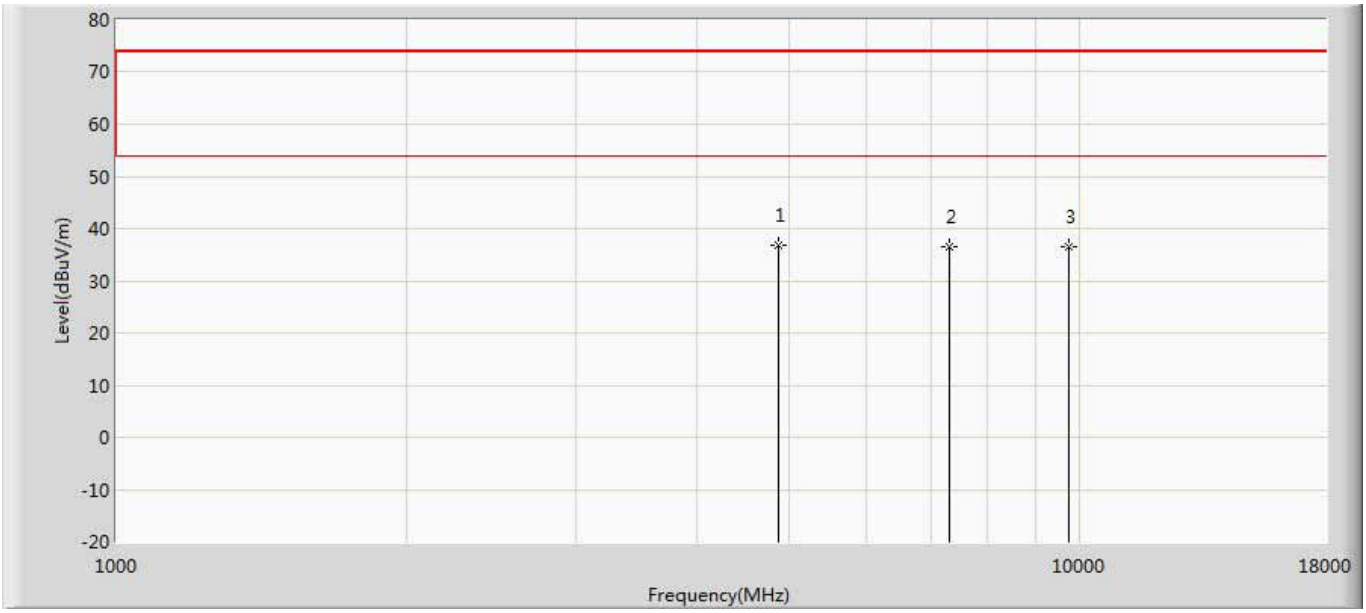
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	35.704	44.041	-38.296	74.000	-8.338	PK
2	*	7236.000	36.743	41.741	-37.257	74.000	-4.998	PK
3		9648.000	36.654	37.441	-37.346	74.000	-0.787	PK

Profile: AP650	Page No.: 27
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2437MHz by 802.11B 4X4	



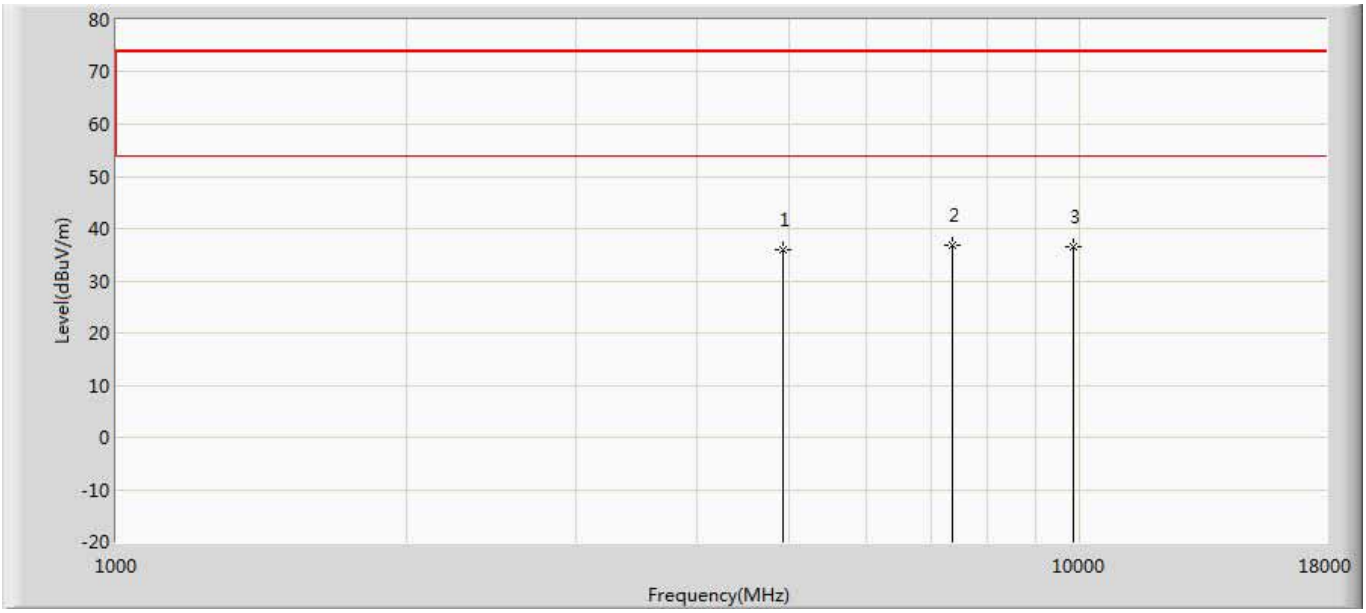
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.154	44.512	-37.846	74.000	-8.358	PK
2		7311.000	36.174	41.014	-37.826	74.000	-4.840	PK
3	*	9748.000	36.346	37.412	-37.654	74.000	-1.066	PK

Profile: AP650	Page No.: 28
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2437MHz by 802.11B 4X4	



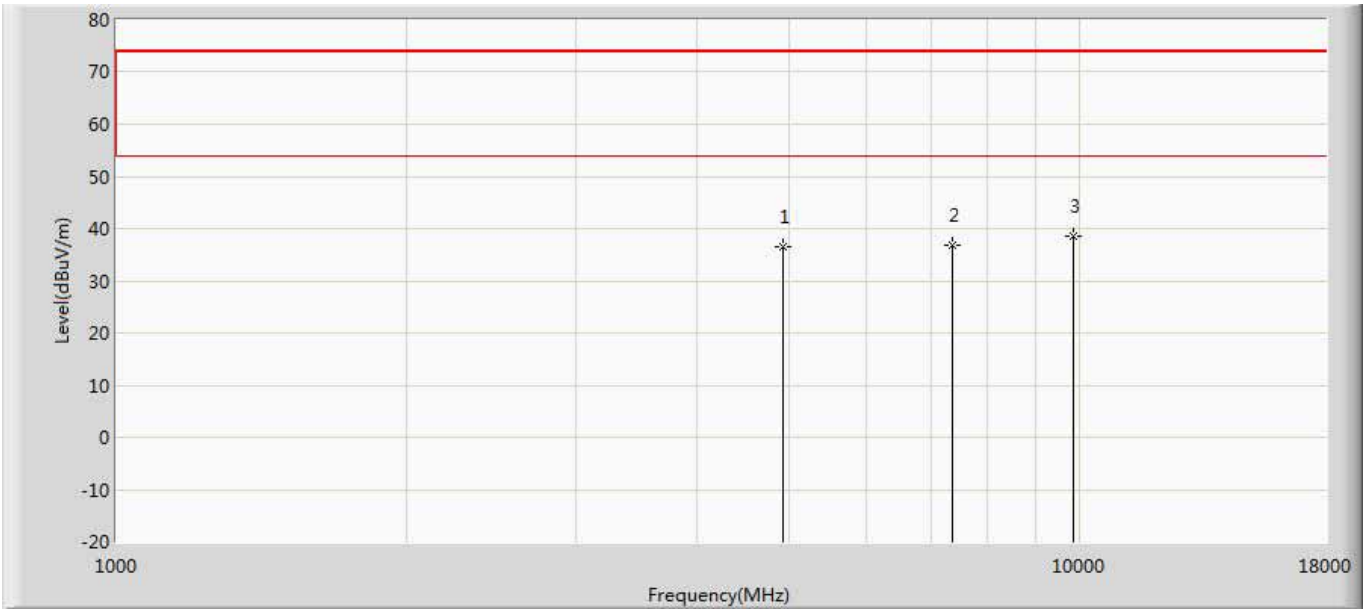
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4874.000	36.896	45.254	-37.104	74.000	-8.358	PK
2		7311.000	36.416	41.256	-37.584	74.000	-4.840	PK
3		9748.000	36.385	37.451	-37.615	74.000	-1.066	PK

Profile: AP650	Page No.: 29
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2462MHz by 802.11B 4X4	



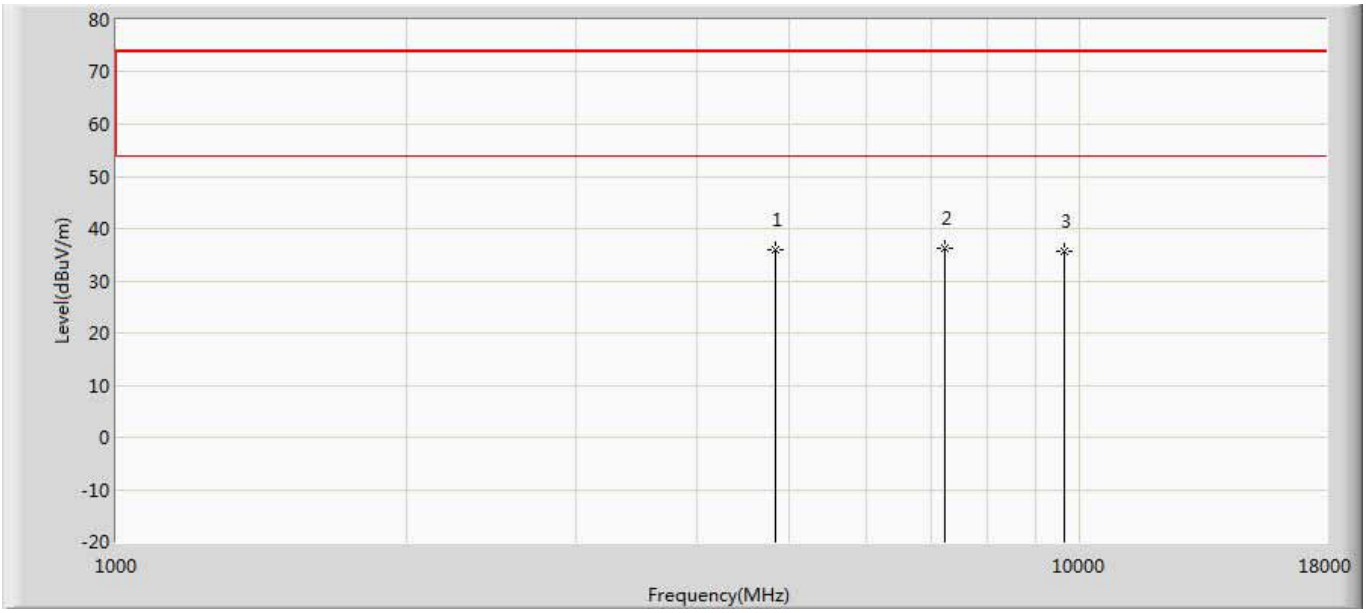
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.016	44.345	-37.984	74.000	-8.330	PK
2	*	7386.000	36.798	41.254	-37.202	74.000	-4.456	PK
3		9848.000	36.545	37.584	-37.455	74.000	-1.039	PK

Profile: AP650	Page No.: 30
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2462MHz by 802.11B 4X4	



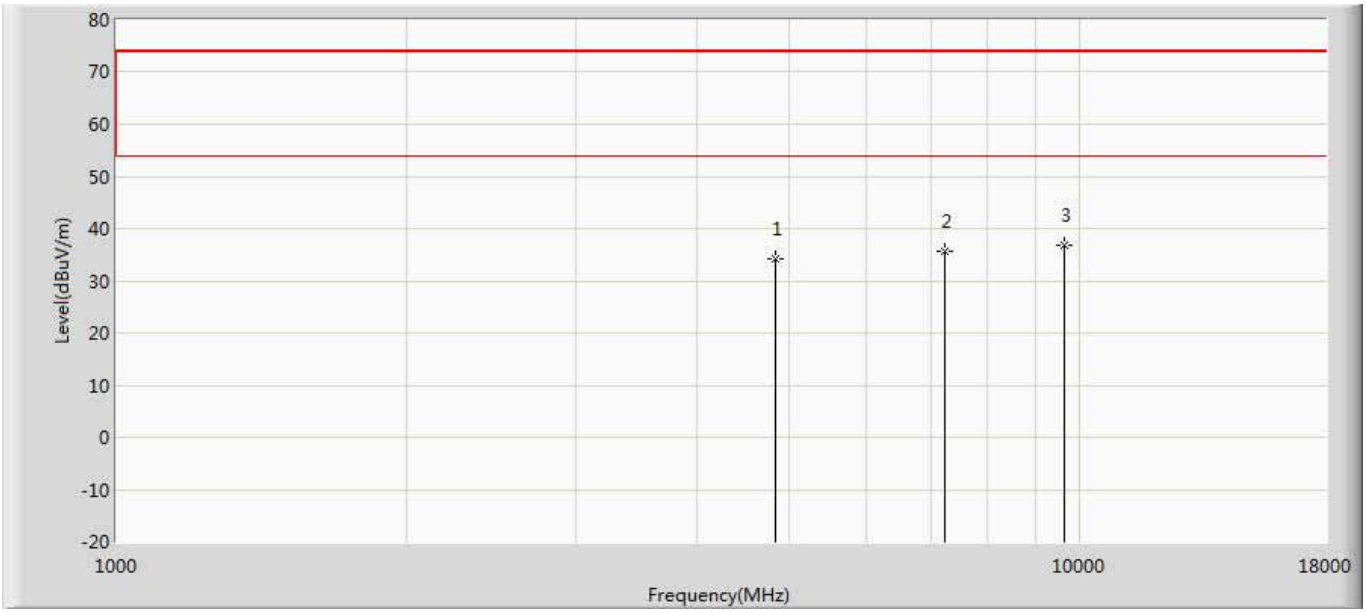
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.412	44.741	-37.588	74.000	-8.330	PK
2		7386.000	36.798	41.254	-37.202	74.000	-4.456	PK
3	*	9848.000	38.482	39.521	-35.518	74.000	-1.039	PK

Profile: AP650	Page No.: 31
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2412MHz by 802.11G 4X4	



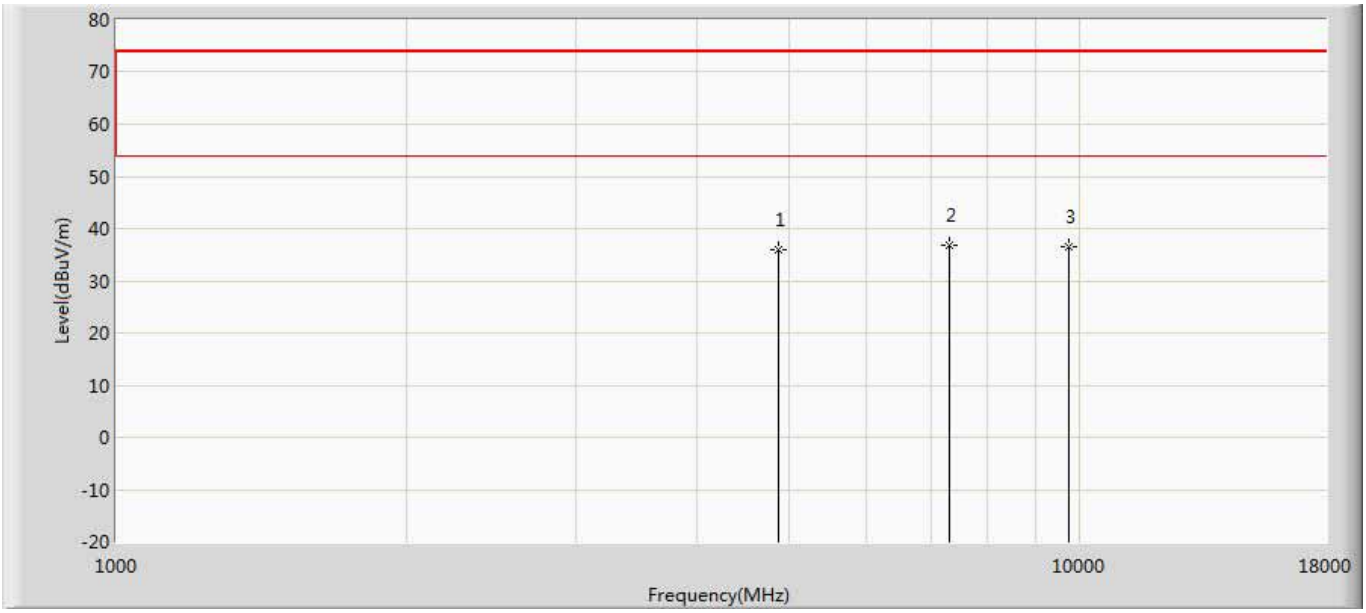
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	35.877	44.214	-38.123	74.000	-8.338	PK
2	*	7236.000	36.257	41.255	-37.743	74.000	-4.998	PK
3		9648.000	35.754	36.541	-38.246	74.000	-0.787	PK

Profile: AP650	Page No.: 32
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2412MHz by 802.11G 4X4	



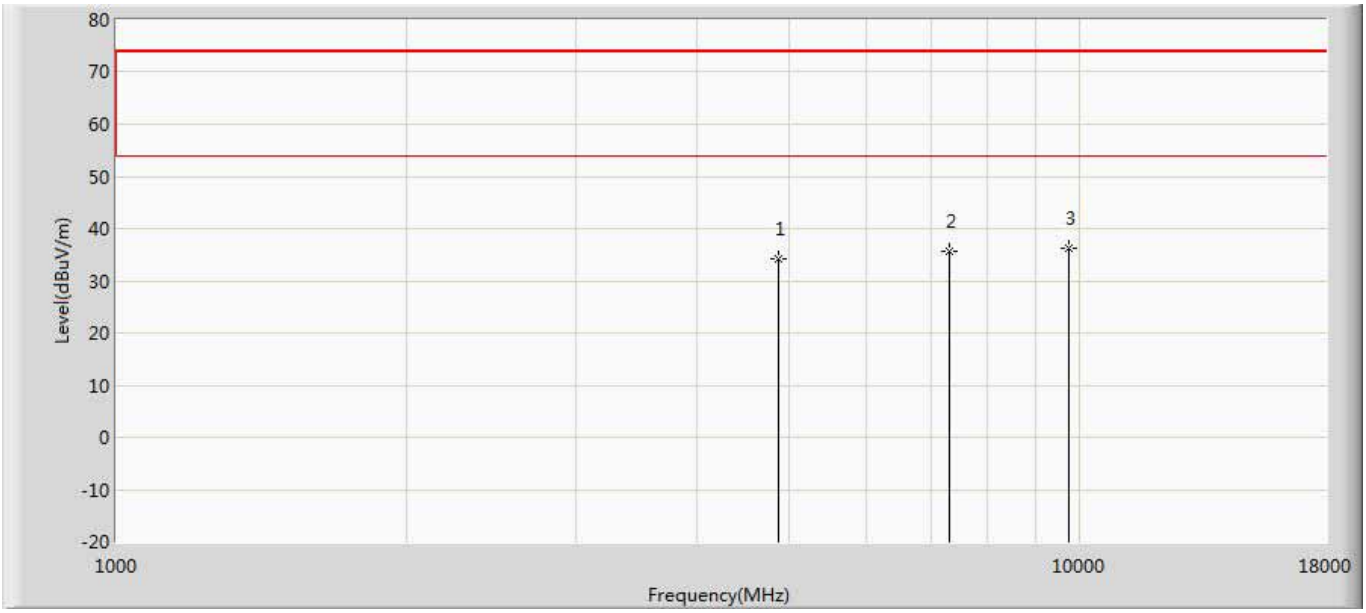
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	34.252	42.589	-39.748	74.000	-8.338	PK
2		7236.000	35.584	40.582	-38.416	74.000	-4.998	PK
3	*	9648.000	36.737	37.524	-37.263	74.000	-0.787	PK

Profile: AP650	Page No.: 33
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2437MHz by 802.11G 4X4	



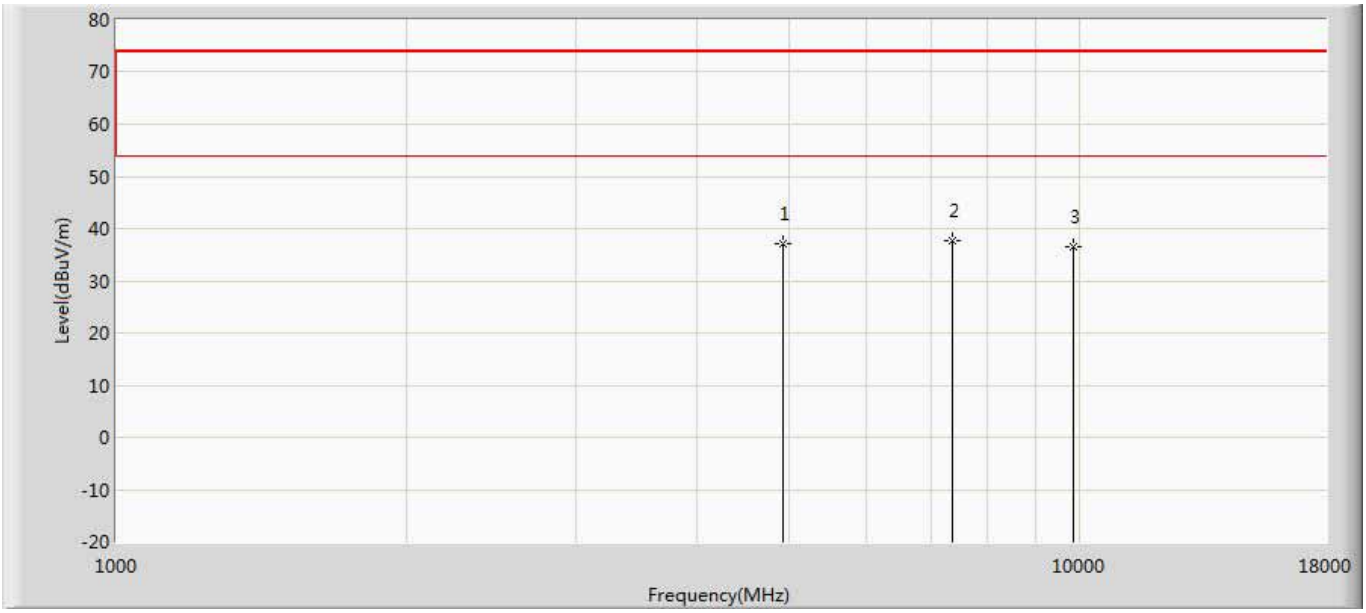
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	35.854	44.212	-38.146	74.000	-8.358	PK
2	*	7311.000	36.745	41.585	-37.255	74.000	-4.840	PK
3		9748.000	36.386	37.452	-37.614	74.000	-1.066	PK

Profile: AP650	Page No.: 34
Engineer: Damon	
Site: AC5	Time: 2018/07/11 - 17:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2437MHz by 802.11G 4X4	



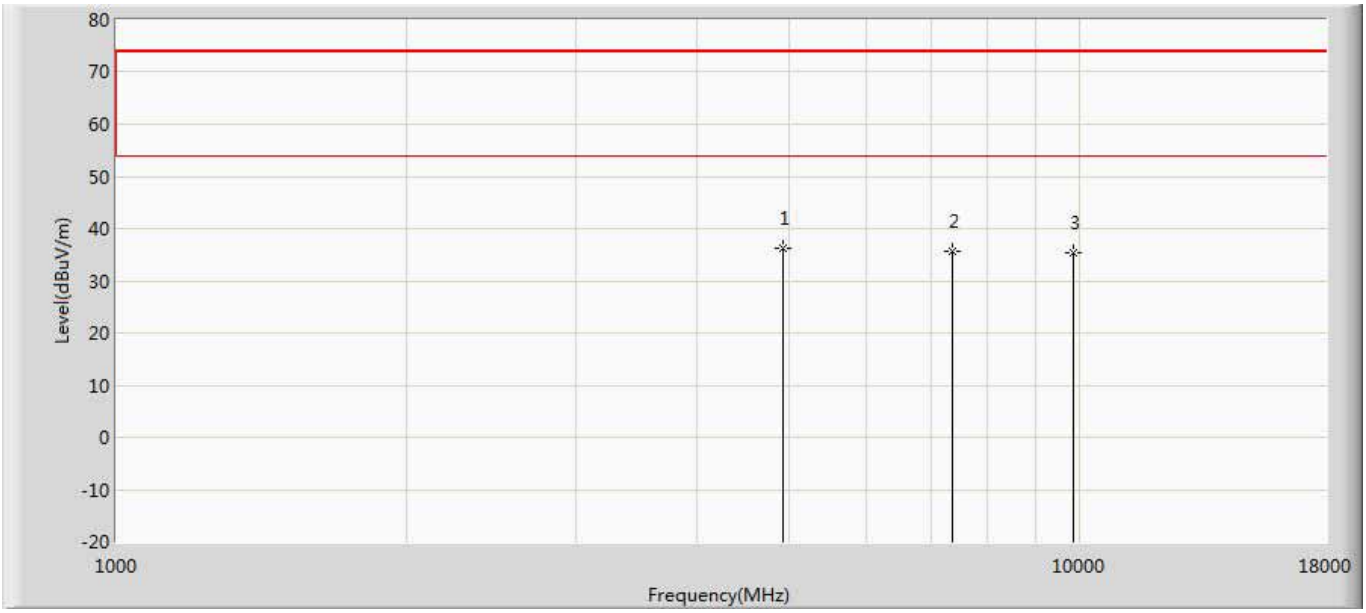
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	34.204	42.562	-39.796	74.000	-8.358	PK
2		7311.000	35.681	40.521	-38.319	74.000	-4.840	PK
3	*	9748.000	36.346	37.412	-37.654	74.000	-1.066	PK

Profile: AP650	Page No.: 35
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2462MHz by 802.11G 4X4	



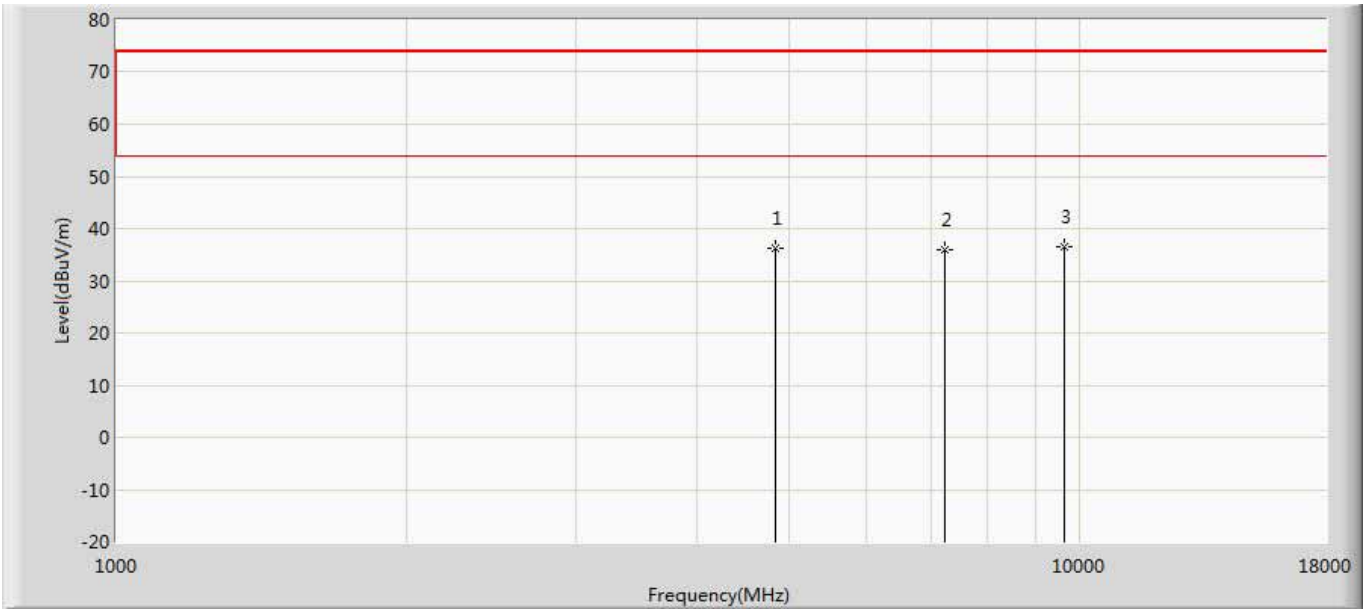
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	37.023	45.352	-36.977	74.000	-8.330	PK
2	*	7386.000	37.798	42.254	-36.202	74.000	-4.456	PK
3		9848.000	36.503	37.542	-37.497	74.000	-1.039	PK

Profile: AP650	Page No.: 36
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2462MHz by 802.11G 4X4	



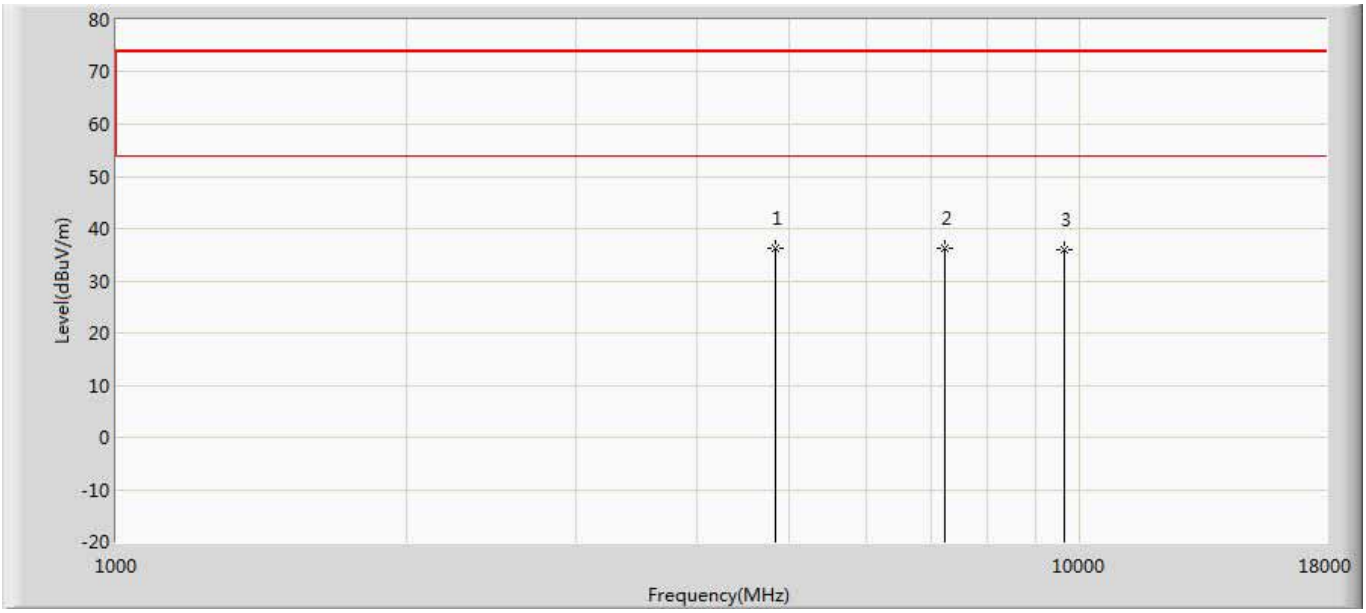
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4924.000	36.192	44.521	-37.808	74.000	-8.330	PK
2		7386.000	35.758	40.214	-38.242	74.000	-4.456	PK
3		9848.000	35.507	36.546	-38.493	74.000	-1.039	PK

Profile: AP650	Page No.: 37
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11N20 4X4	



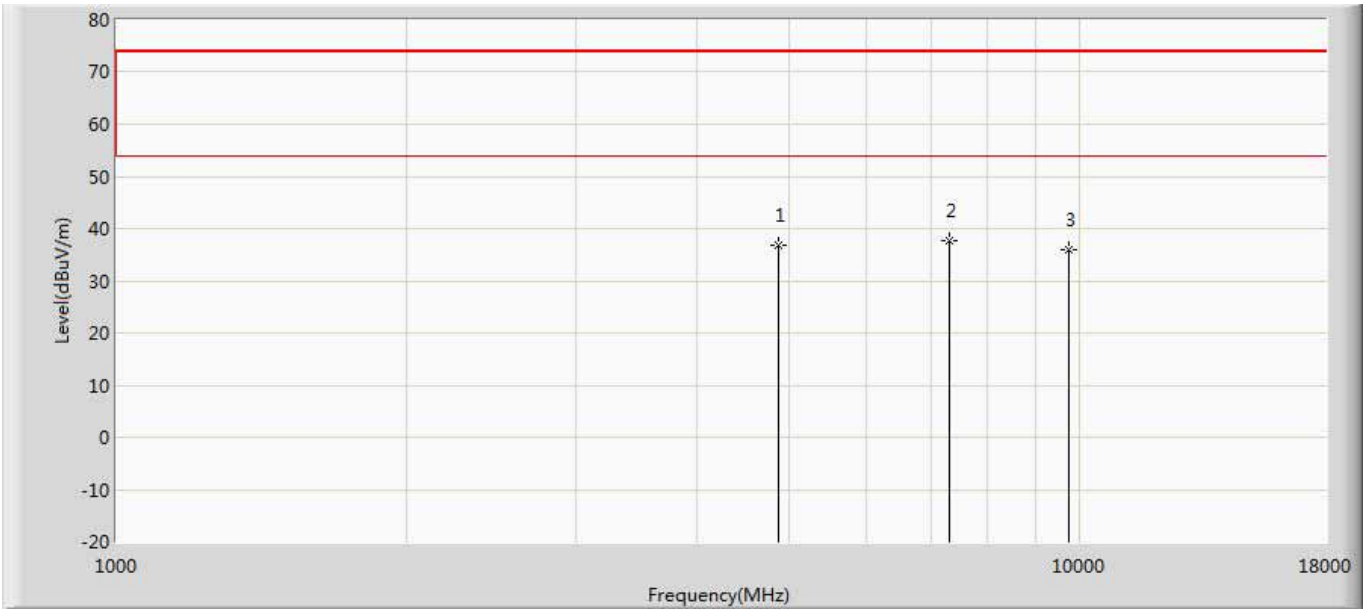
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.204	44.541	-37.796	74.000	-8.338	PK
2		7236.000	36.054	41.052	-37.946	74.000	-4.998	PK
3	*	9648.000	36.664	37.451	-37.336	74.000	-0.787	PK

Profile: AP650	Page No.: 38
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11N20 4X4	



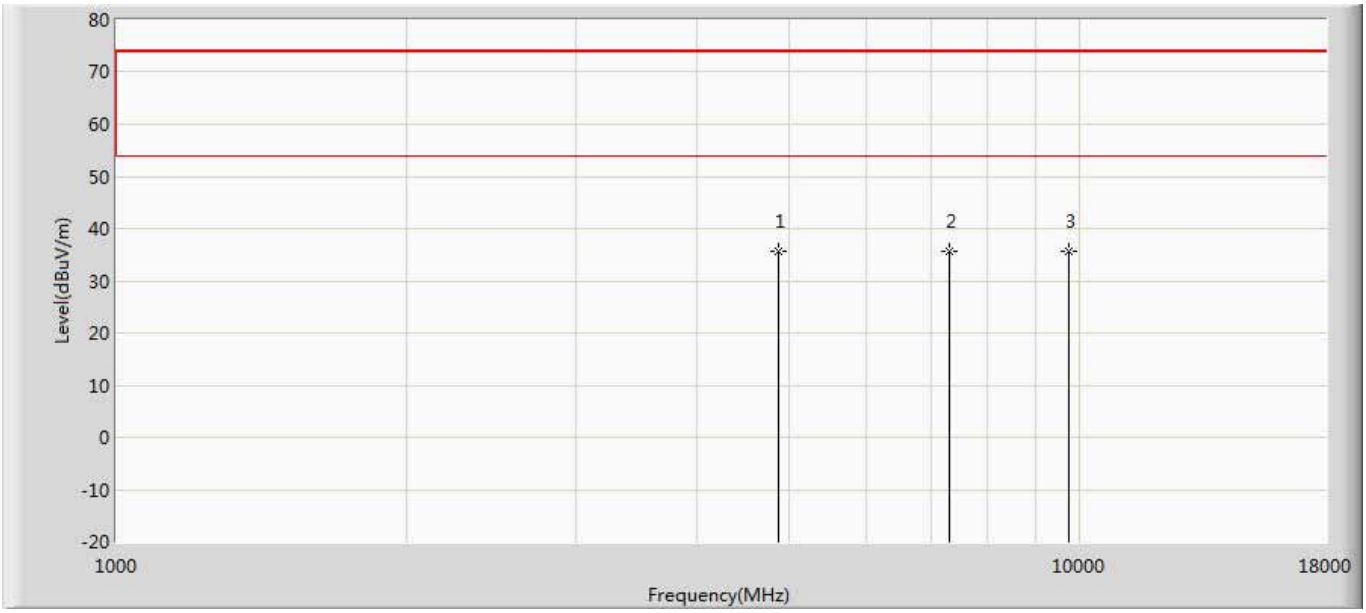
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.236	44.573	-37.764	74.000	-8.338	PK
2	*	7236.000	36.256	41.254	-37.744	74.000	-4.998	PK
3		9648.000	36.054	36.841	-37.946	74.000	-0.787	PK

Profile: AP650	Page No.: 39
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2437MHz by 802.11N20 4X4	



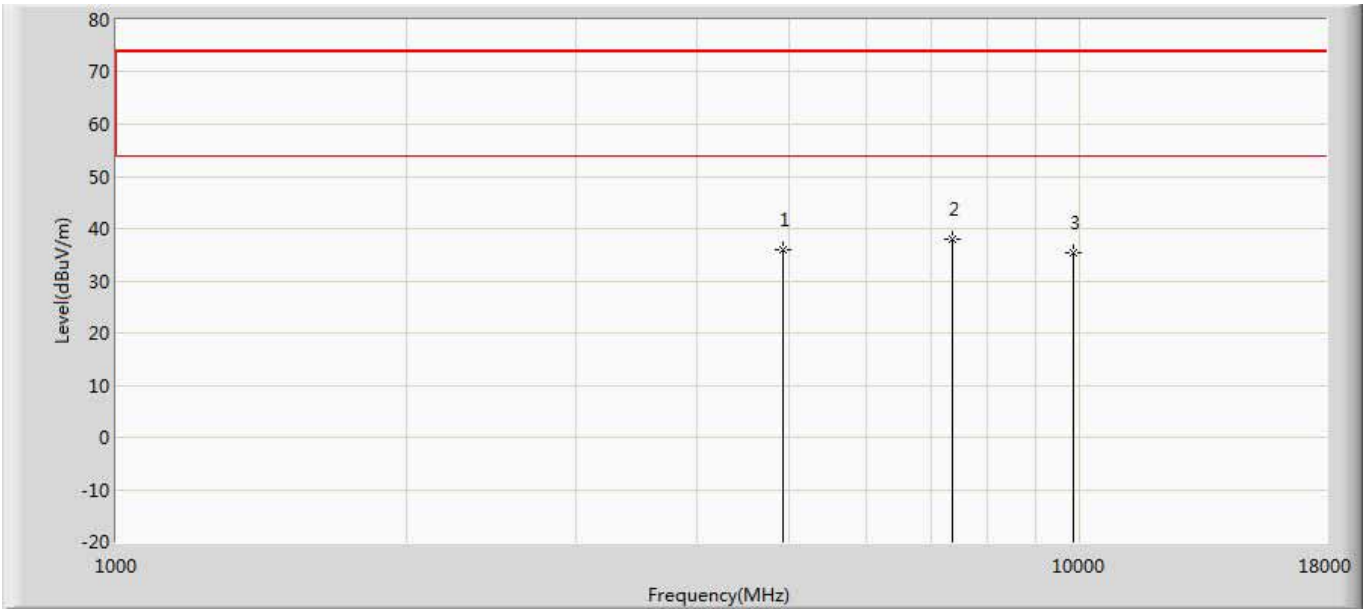
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.667	45.025	-37.333	74.000	-8.358	PK
2	*	7311.000	37.723	42.563	-36.277	74.000	-4.840	PK
3		9748.000	36.076	37.142	-37.924	74.000	-1.066	PK

Profile: AP650	Page No.: 40
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2437MHz by 802.11N20 4X4	



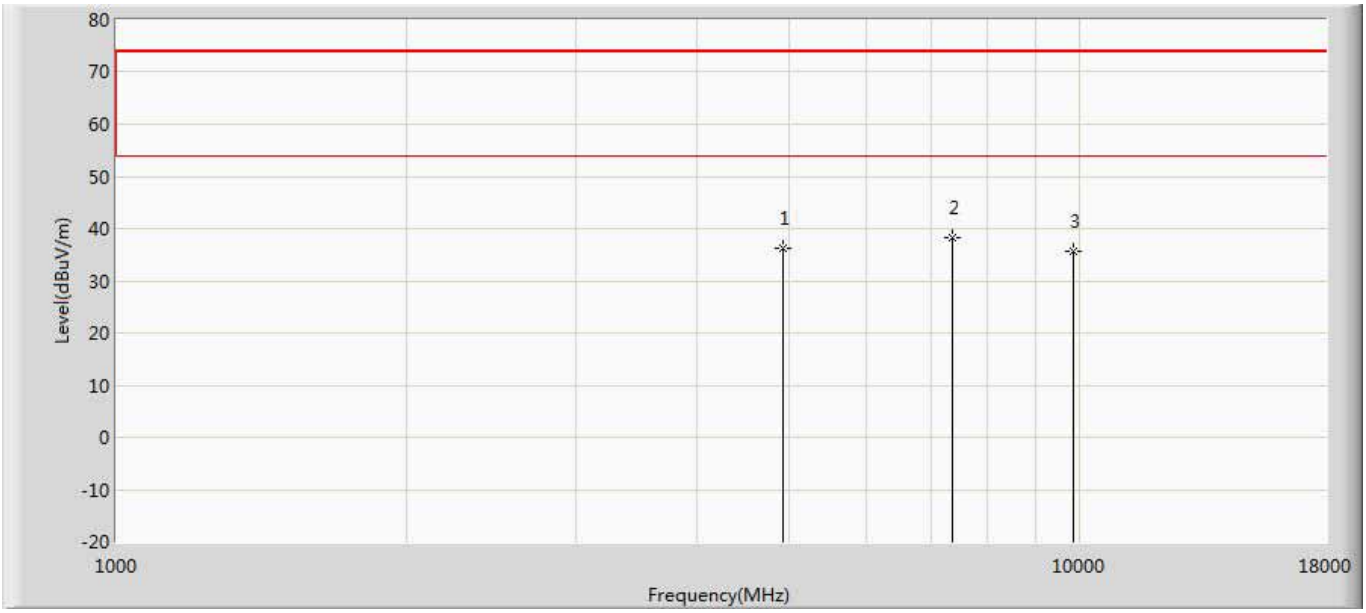
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4874.000	35.794	44.152	-38.206	74.000	-8.358	PK
2		7311.000	35.744	40.584	-38.256	74.000	-4.840	PK
3		9748.000	35.775	36.841	-38.225	74.000	-1.066	PK

Profile: AP650	Page No.: 41
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11N20 4X4	



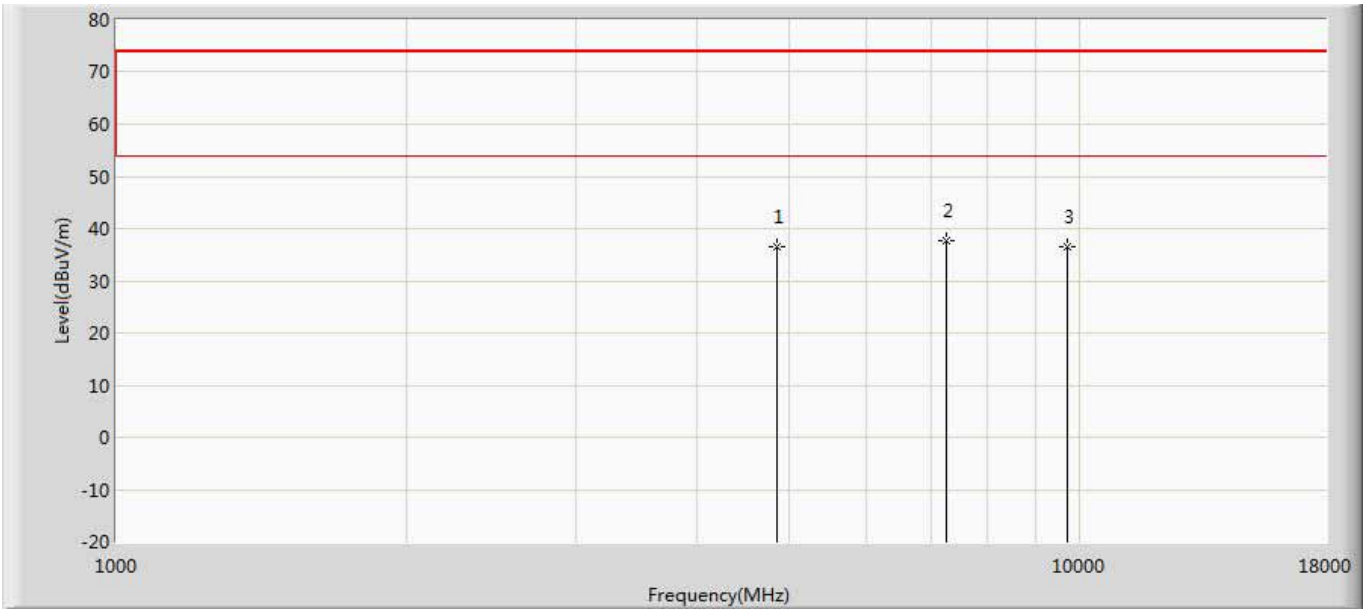
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	35.856	44.185	-38.144	74.000	-8.330	PK
2	*	7386.000	37.956	42.412	-36.044	74.000	-4.456	PK
3		9848.000	35.326	36.365	-38.674	74.000	-1.039	PK

Profile: AP650	Page No.: 42
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11N20 4X4	



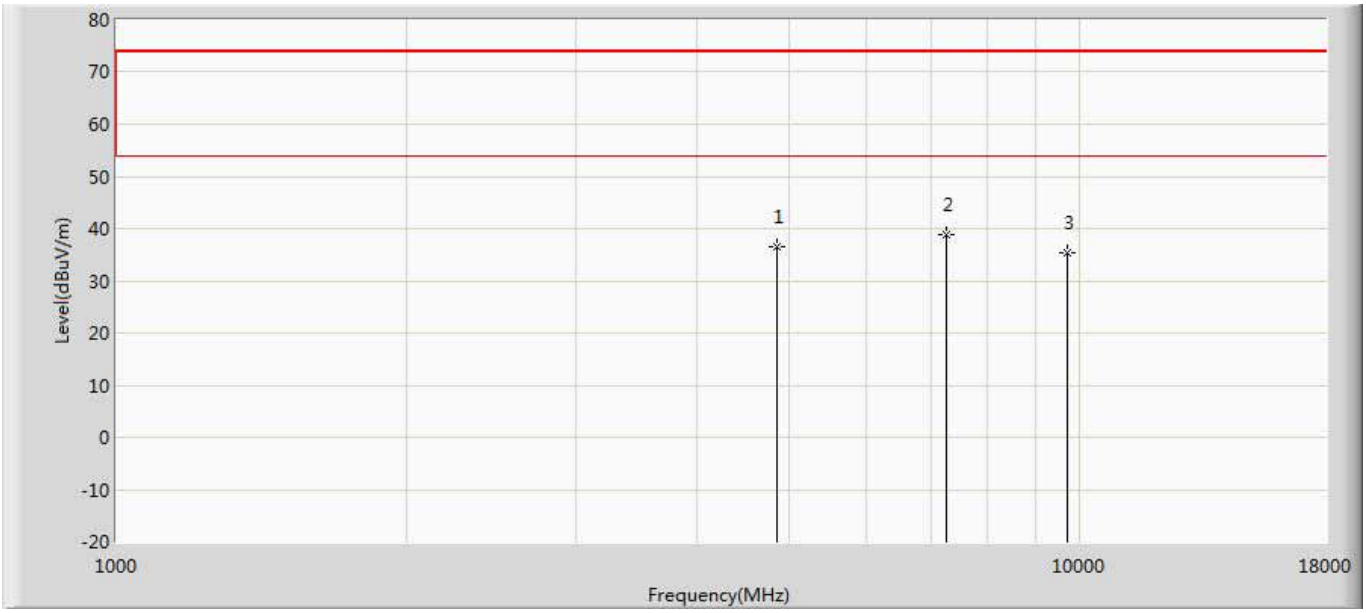
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.192	44.521	-37.808	74.000	-8.330	PK
2	*	7386.000	38.385	42.841	-35.615	74.000	-4.456	PK
3		9848.000	35.545	36.584	-38.455	74.000	-1.039	PK

Profile: AP650	Page No.: 43
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11N40 4X4	



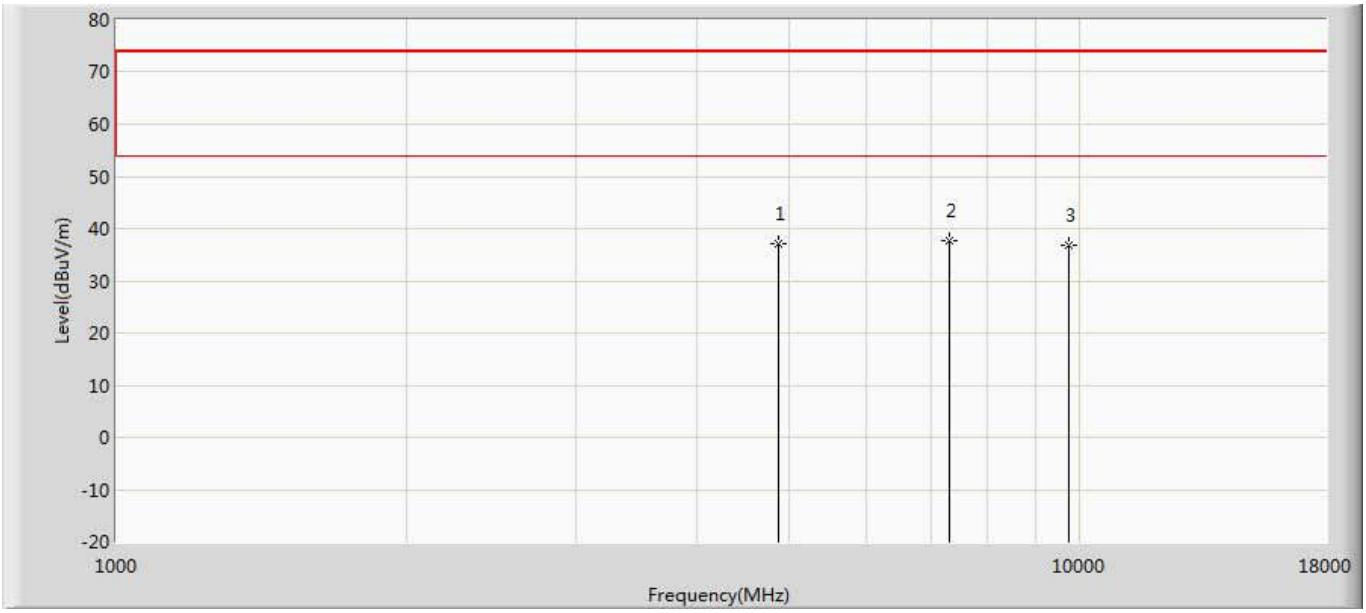
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	36.459	44.741	-37.541	74.000	-8.283	PK
2	*	7266.000	37.820	42.523	-36.180	74.000	-4.702	PK
3		9688.000	36.472	37.412	-37.528	74.000	-0.941	PK

Profile: AP650	Page No.: 44
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11N40 4X4	



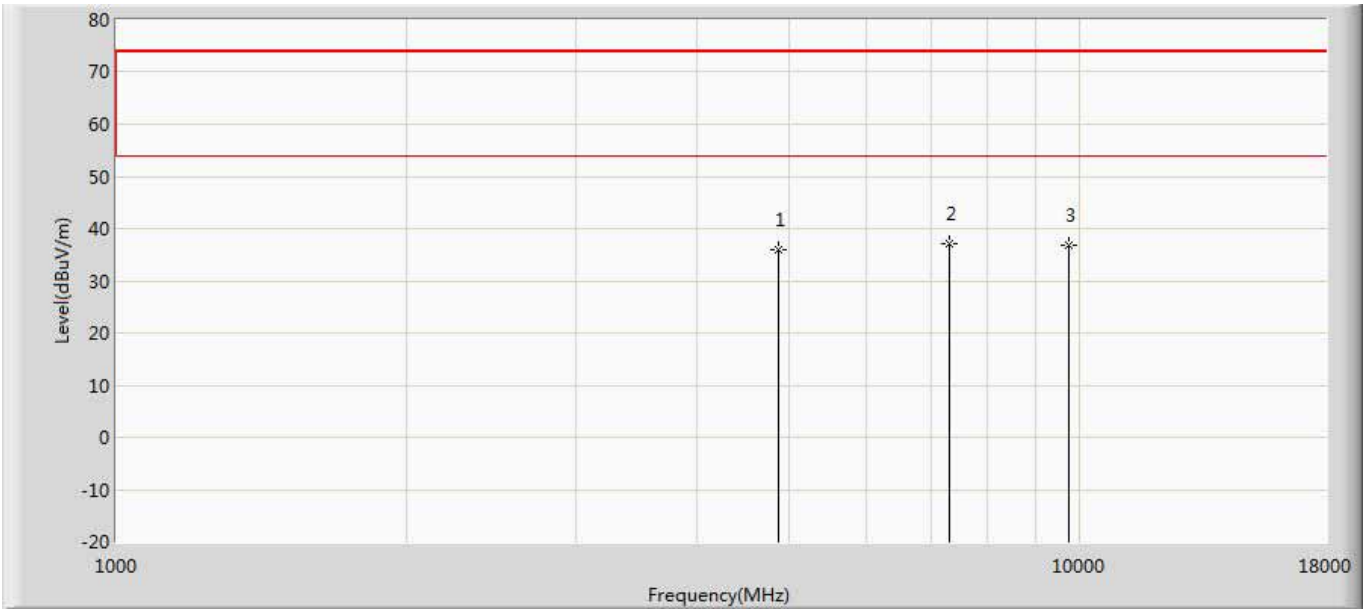
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	36.416	44.698	-37.584	74.000	-8.283	PK
2	*	7266.000	38.929	43.632	-35.071	74.000	-4.702	PK
3		9688.000	35.472	36.412	-38.528	74.000	-0.941	PK

Profile: AP650	Page No.: 45
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2437MHz by 802.11N40 4X4	



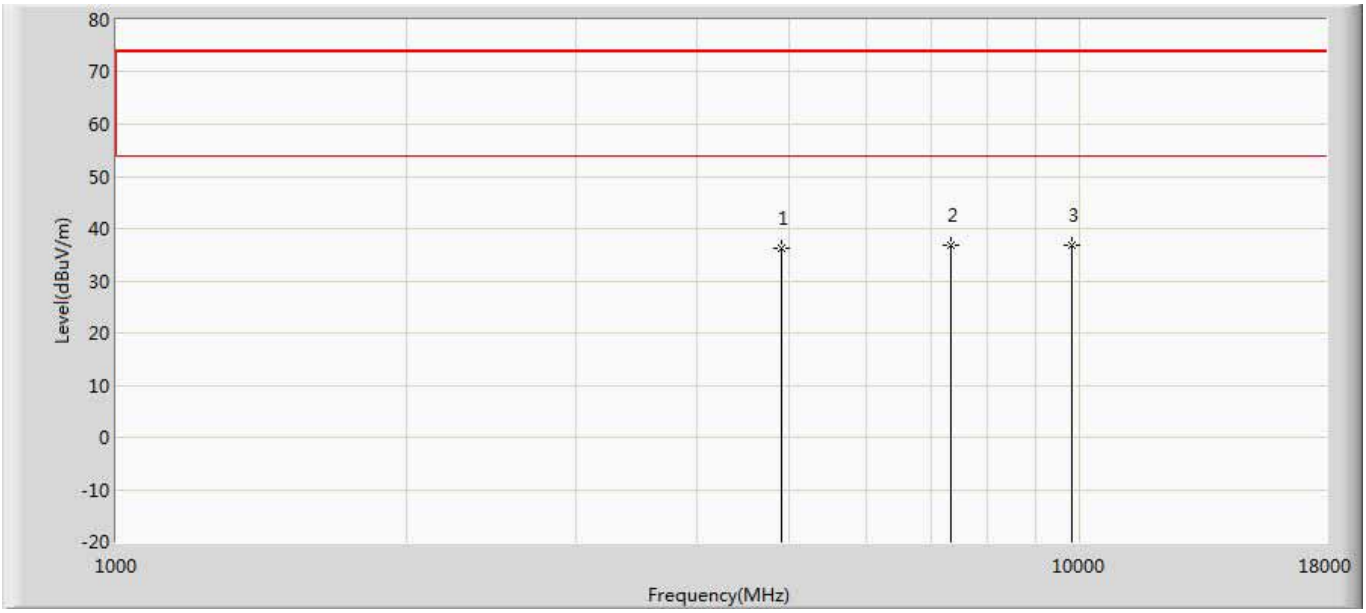
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	37.167	45.525	-36.833	74.000	-8.358	PK
2	*	7311.000	37.724	42.564	-36.276	74.000	-4.840	PK
3		9748.000	36.956	38.022	-37.044	74.000	-1.066	PK

Profile: AP650	Page No.: 46
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2437MHz by 802.11N40 4X4	



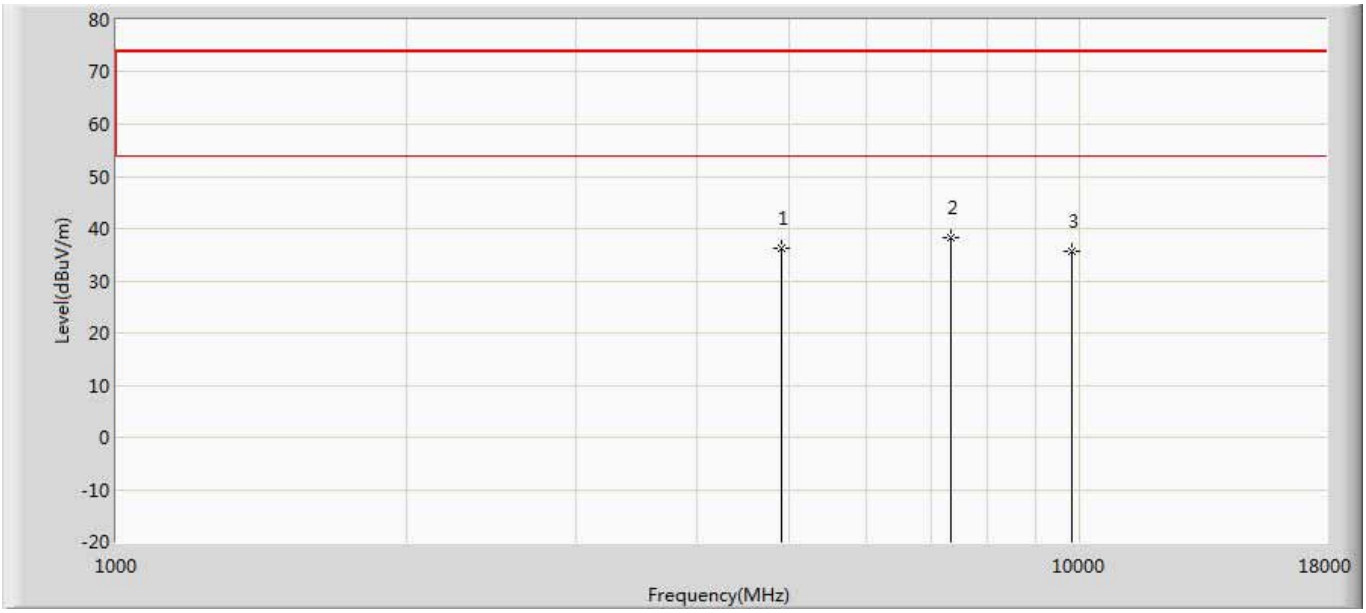
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.085	44.443	-37.915	74.000	-8.358	PK
2	*	7311.000	37.011	41.851	-36.989	74.000	-4.840	PK
3		9748.000	36.788	37.854	-37.212	74.000	-1.066	PK

Profile: AP650	Page No.: 47
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11N40 4X4	



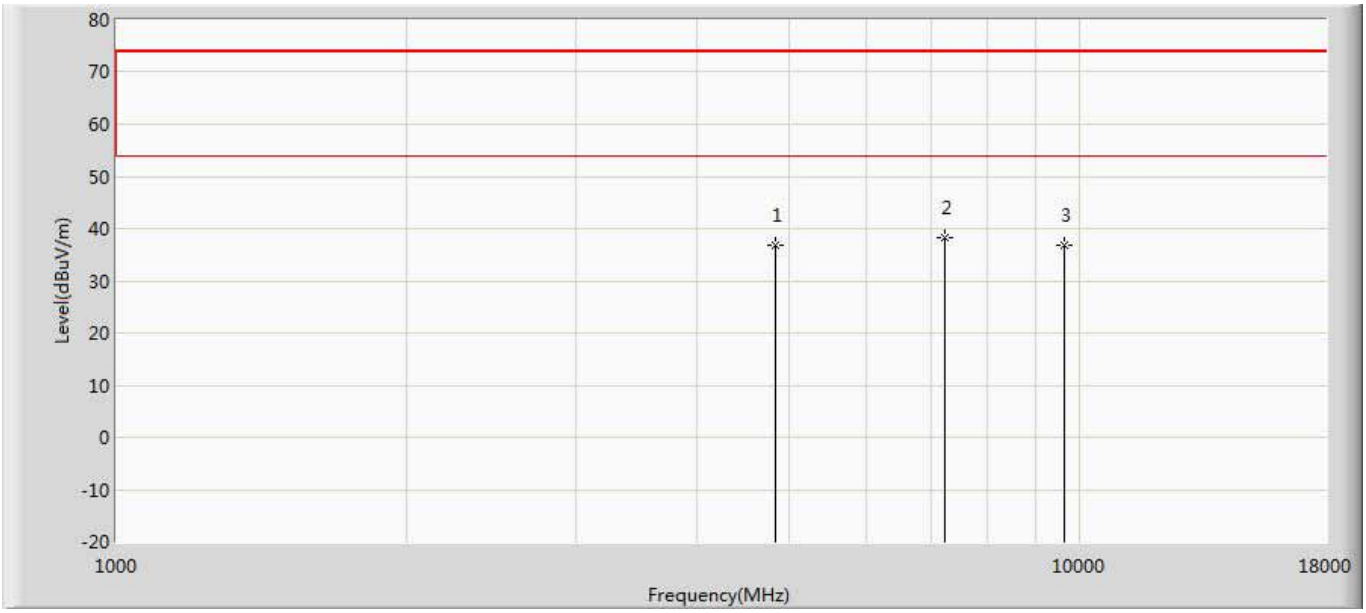
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4904.000	36.270	44.541	-37.730	74.000	-8.270	PK
2	*	7356.000	36.886	41.584	-37.114	74.000	-4.698	PK
3		9808.000	36.684	37.541	-37.316	74.000	-0.858	PK

Profile: AP650	Page No.: 48
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 09:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11N40 4X4	



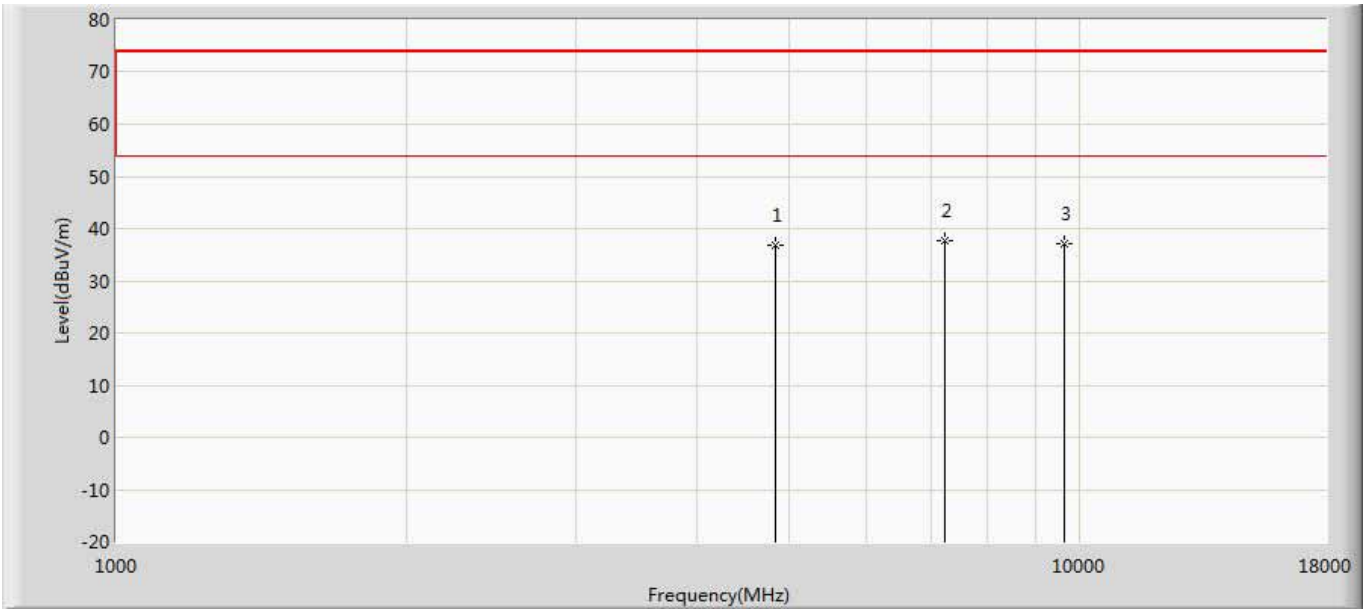
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4904.000	36.292	44.563	-37.708	74.000	-8.270	PK
2	*	7356.000	38.176	42.874	-35.824	74.000	-4.698	PK
3		9808.000	35.690	36.547	-38.310	74.000	-0.858	PK

Profile: AP650	Page No.: 49
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2412MHz by 802.11B 2X2 With CDD	



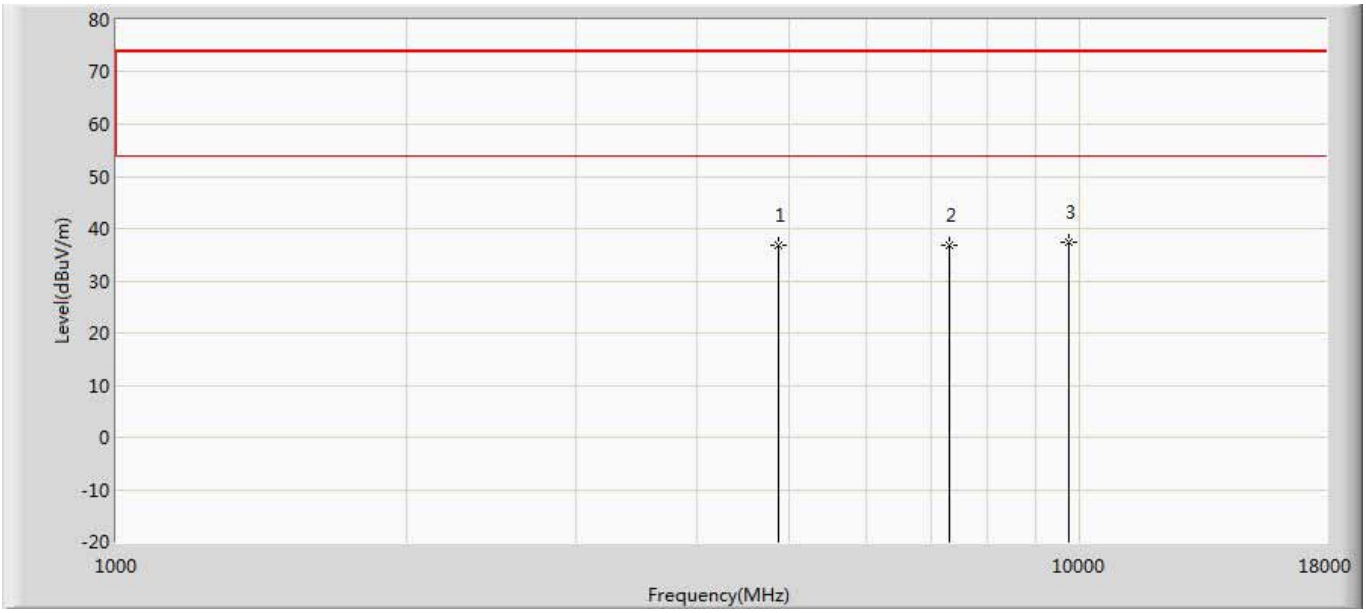
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.914	45.251	-37.086	74.000	-8.338	PK
2	*	7236.000	38.338	43.336	-35.662	74.000	-4.998	PK
3		9648.000	36.754	37.541	-37.246	74.000	-0.787	PK

Profile: AP650	Page No.: 50
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2412MHz by 802.11B 2X2 With CDD	



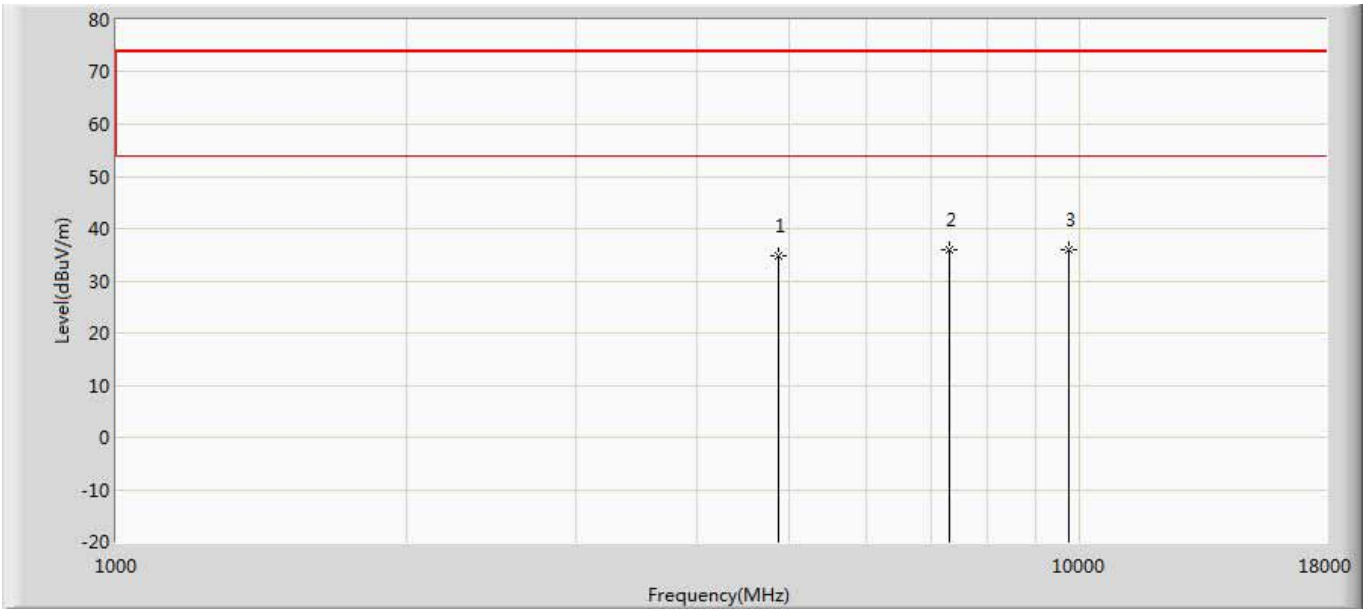
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.689	45.026	-37.311	74.000	-8.338	PK
2	*	7236.000	37.634	42.632	-36.366	74.000	-4.998	PK
3		9648.000	36.987	37.774	-37.013	74.000	-0.787	PK

Profile: AP650	Page No.: 51
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2437MHz by 802.11B 2X2 With CDD	



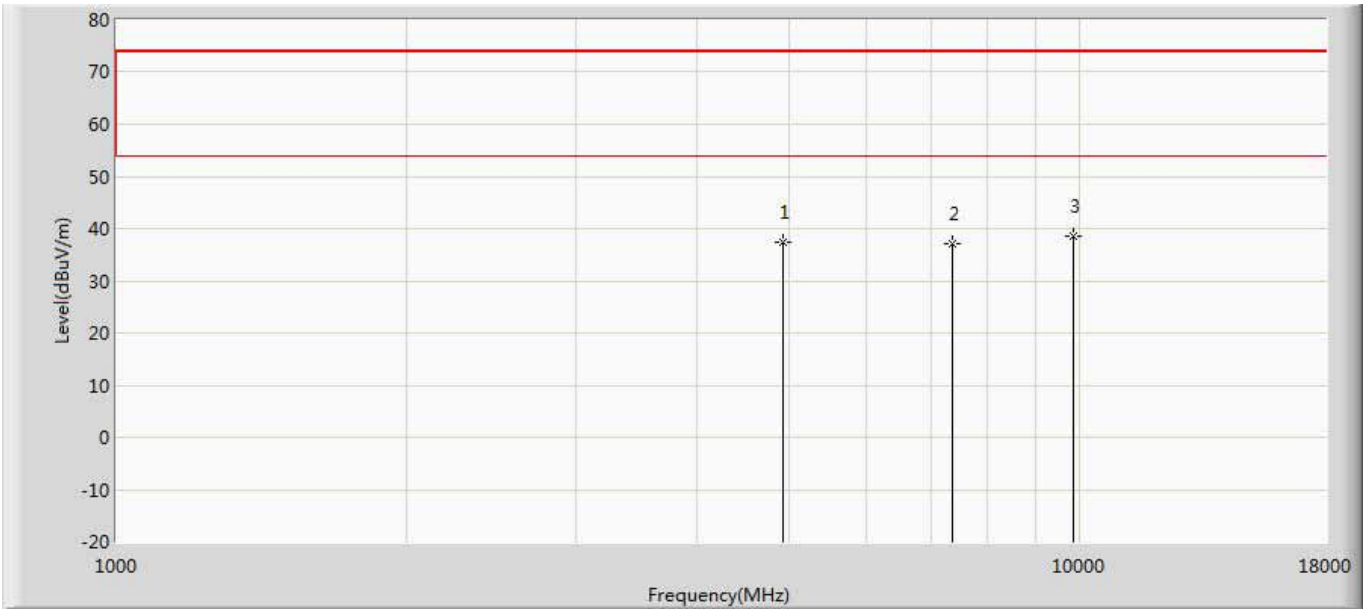
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.705	45.063	-37.295	74.000	-8.358	PK
2		7311.000	36.701	41.541	-37.299	74.000	-4.840	PK
3	*	9748.000	37.476	38.542	-36.524	74.000	-1.066	PK

Profile: AP650	Page No.: 52
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2437MHz by 802.11B 2X2 With CDD	



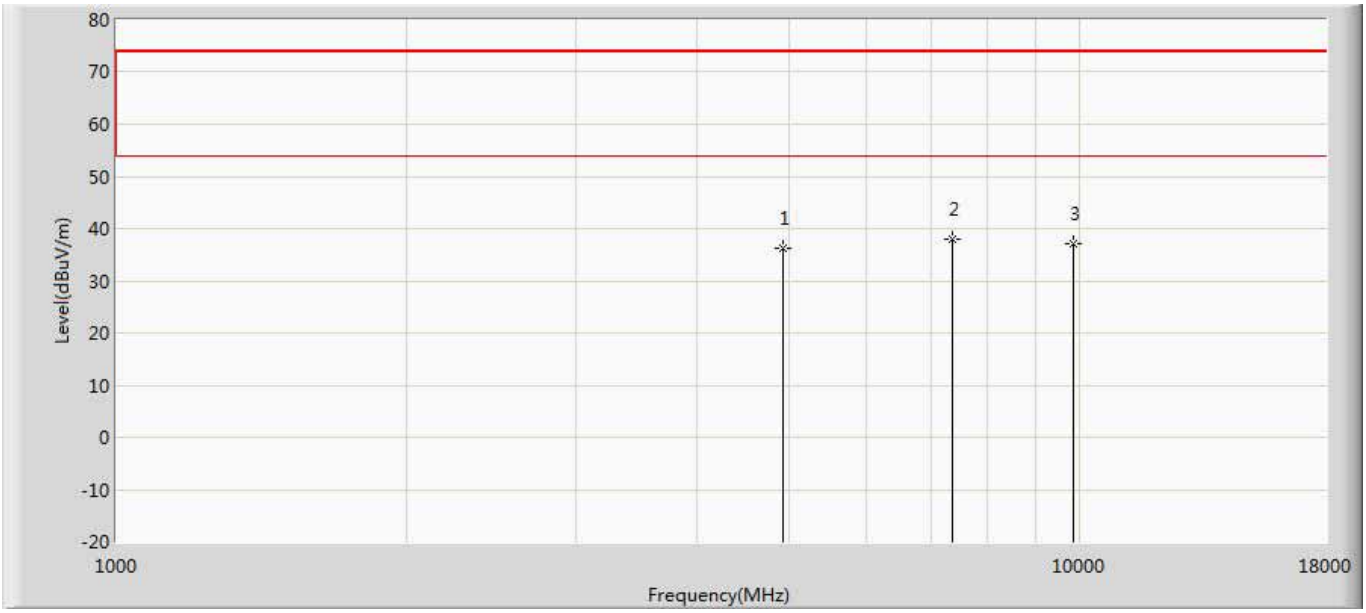
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	34.664	43.022	-39.336	74.000	-8.358	PK
2	*	7311.000	36.056	40.896	-37.944	74.000	-4.840	PK
3		9748.000	35.803	36.869	-38.197	74.000	-1.066	PK

Profile: AP650	Page No.: 53
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2462MHz by 802.11B 2X2 With CDD	



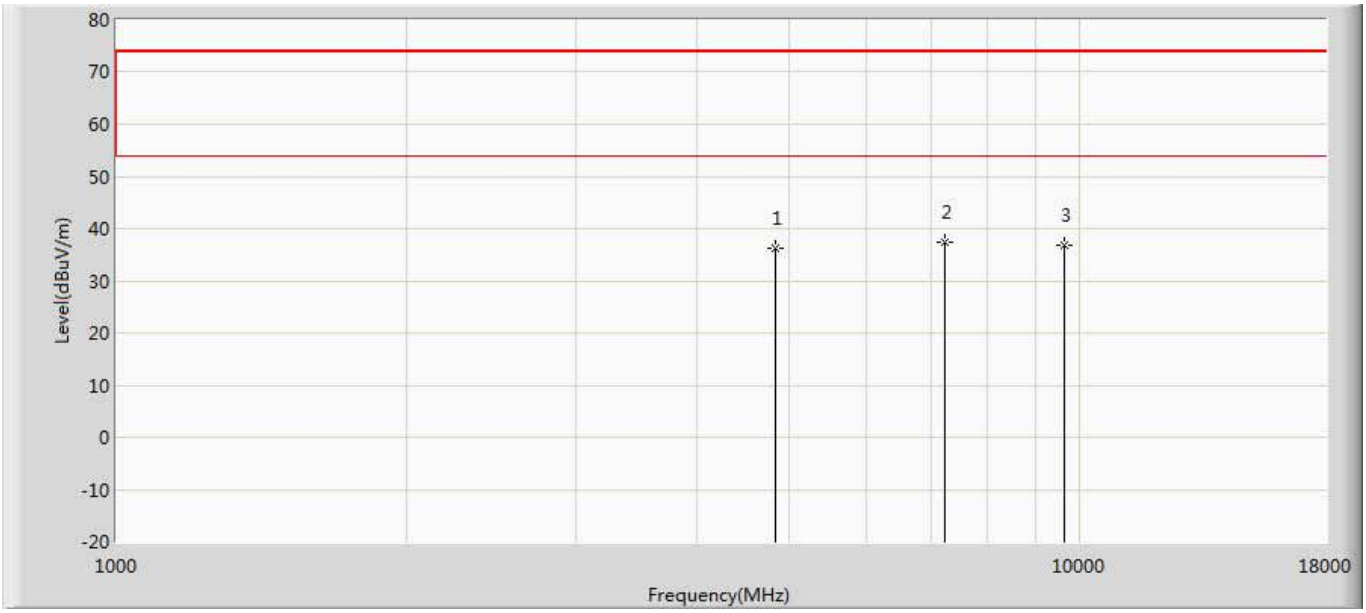
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	37.303	45.632	-36.697	74.000	-8.330	PK
2		7386.000	37.070	41.526	-36.930	74.000	-4.456	PK
3	*	9848.000	38.572	39.611	-35.428	74.000	-1.039	PK

Profile: AP650	Page No.: 54
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1:Transmit at channel 2462MHz by 802.11B 2X2 With CDD	



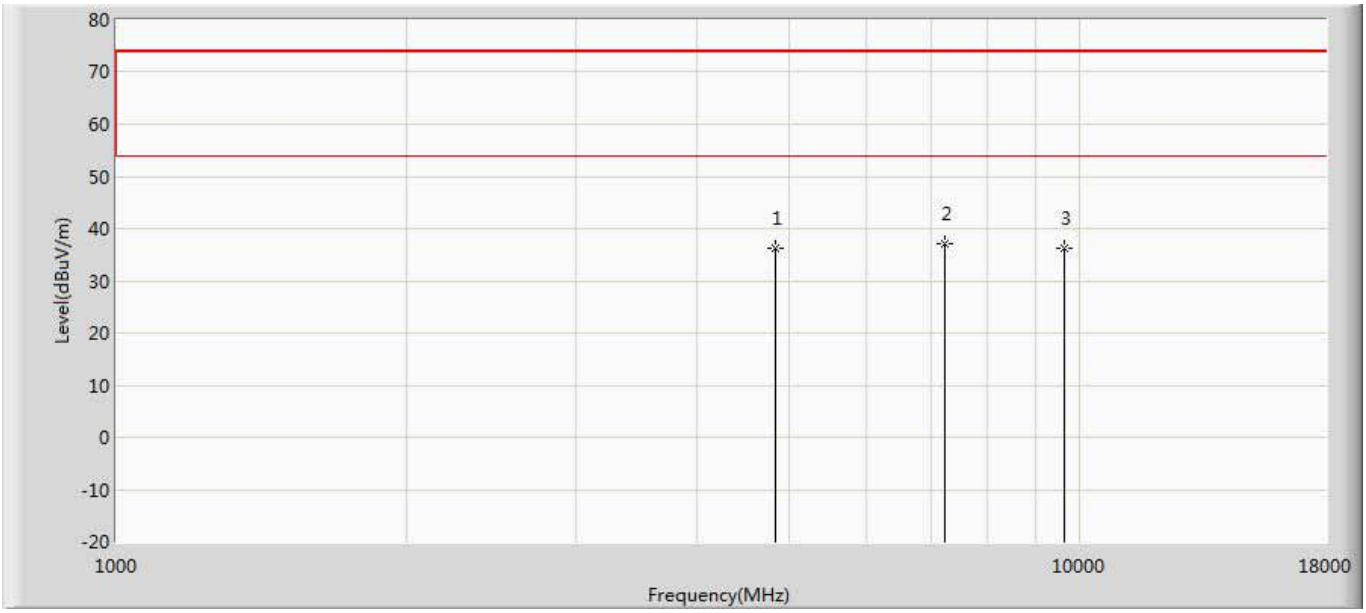
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.148	44.477	-37.852	74.000	-8.330	PK
2	*	7386.000	38.065	42.521	-35.935	74.000	-4.456	PK
3		9848.000	37.216	38.255	-36.784	74.000	-1.039	PK

Profile: AP650	Page No.: 55
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2412MHz by 802.11G 2X2 With CDD	



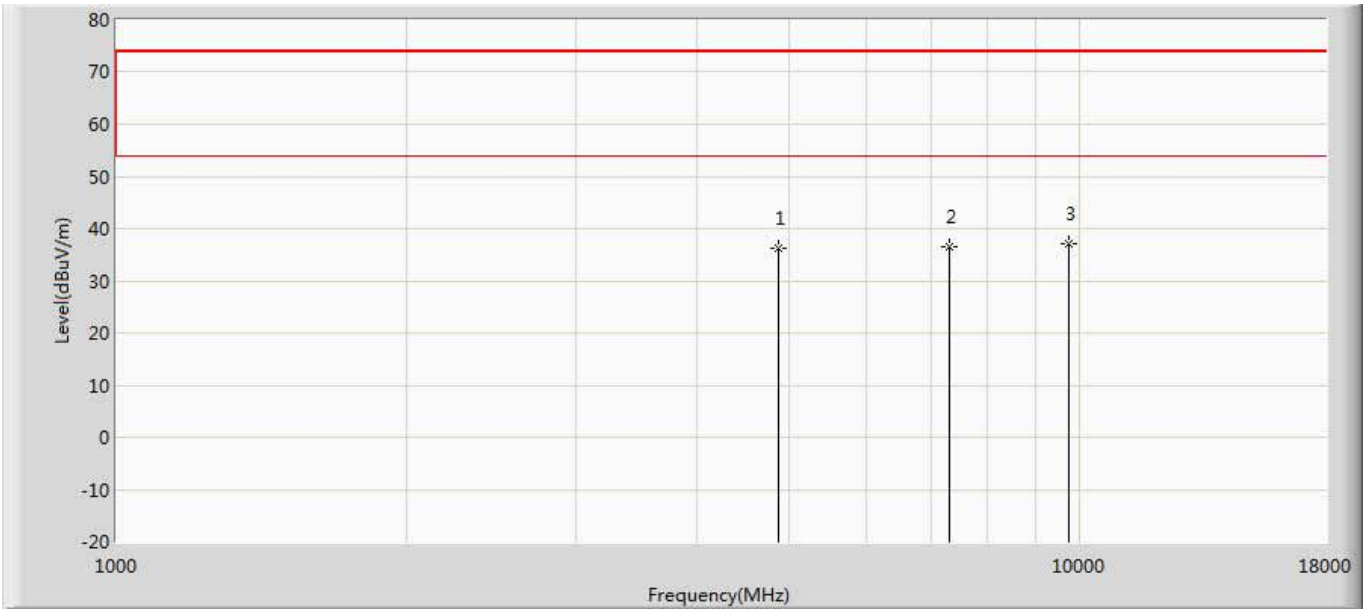
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.219	44.556	-37.781	74.000	-8.338	PK
2	*	7236.000	37.368	42.366	-36.632	74.000	-4.998	PK
3		9648.000	36.954	37.741	-37.046	74.000	-0.787	PK

Profile: AP650	Page No.: 56
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2412MHz by 802.11G 2X2 With CDD	



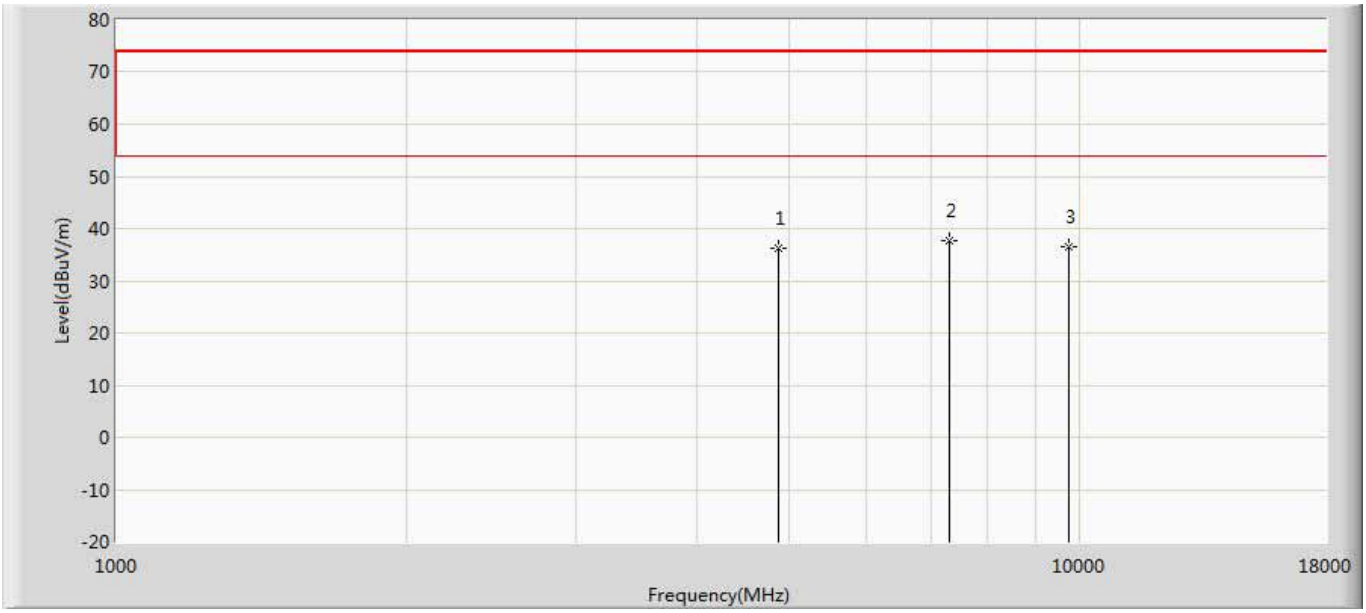
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.229	44.566	-37.771	74.000	-8.338	PK
2	*	7236.000	37.054	42.052	-36.946	74.000	-4.998	PK
3		9648.000	36.097	36.884	-37.903	74.000	-0.787	PK

Profile: AP650	Page No.: 57
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2437MHz by 802.11G 2X2 With CDD	



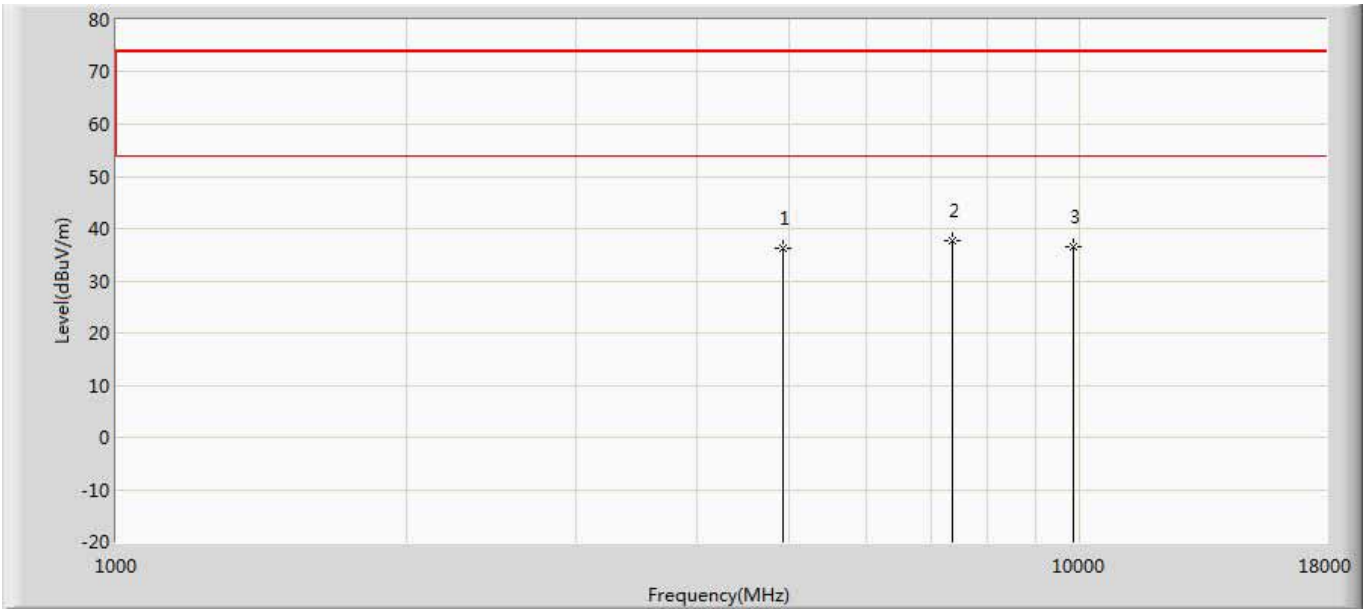
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.168	44.526	-37.832	74.000	-8.358	PK
2		7311.000	36.416	41.256	-37.584	74.000	-4.840	PK
3	*	9748.000	36.997	38.063	-37.003	74.000	-1.066	PK

Profile: AP650	Page No.: 58
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2437MHz by 802.11G 2X2 With CDD	



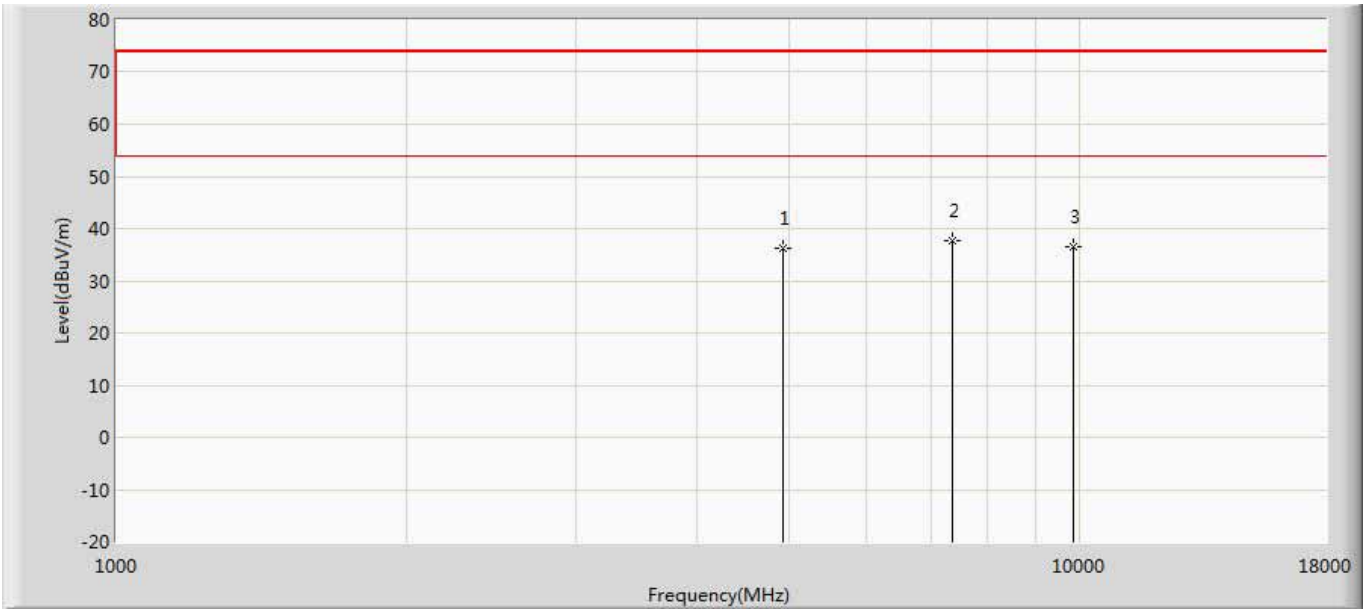
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	36.186	44.544	-37.814	74.000	-8.358	PK
2	*	7311.000	37.573	42.413	-36.427	74.000	-4.840	PK
3		9748.000	36.423	37.489	-37.577	74.000	-1.066	PK

Profile: AP650	Page No.: 59
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2462MHz by 802.11G 2X2 With CDD	



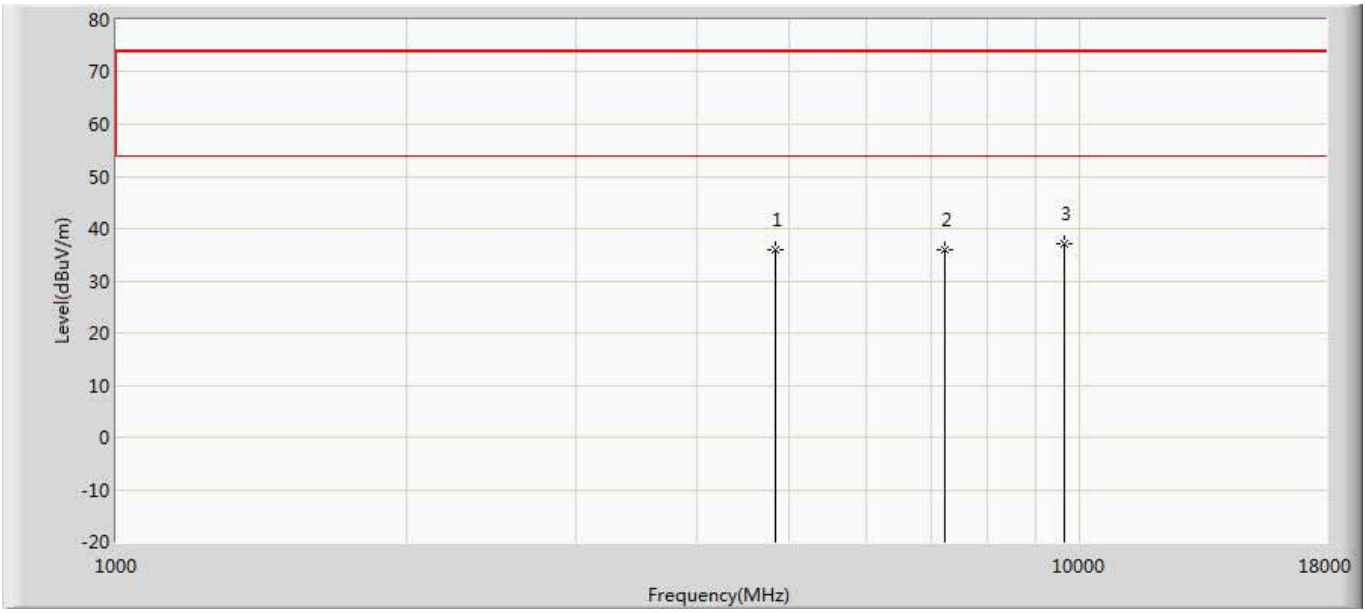
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.192	44.521	-37.808	74.000	-8.330	PK
2	*	7386.000	37.600	42.056	-36.400	74.000	-4.456	PK
3		9848.000	36.502	37.541	-37.498	74.000	-1.039	PK

Profile: AP650	Page No.: 60
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 2:Transmit at channel 2462MHz by 802.11G 2X2 With CDD	



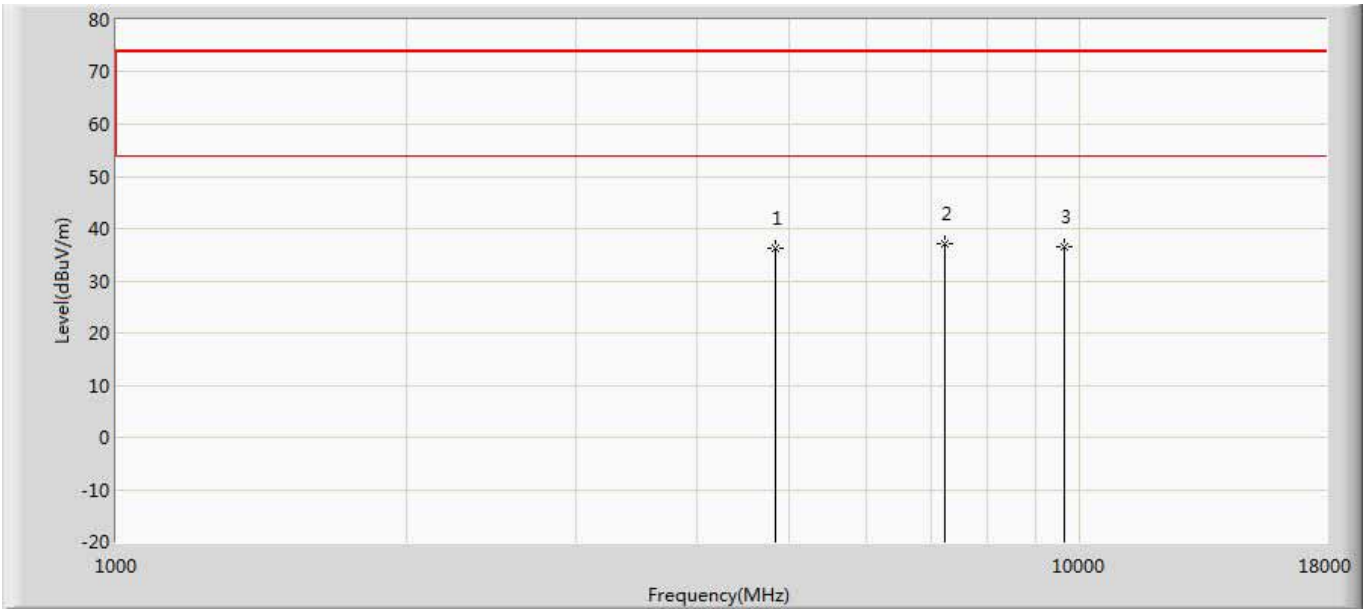
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.303	44.632	-37.697	74.000	-8.330	PK
2	*	7386.000	37.770	42.226	-36.230	74.000	-4.456	PK
3		9848.000	36.557	37.596	-37.443	74.000	-1.039	PK

Profile: AP650	Page No.: 61
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11N20 2X2 With CDD	



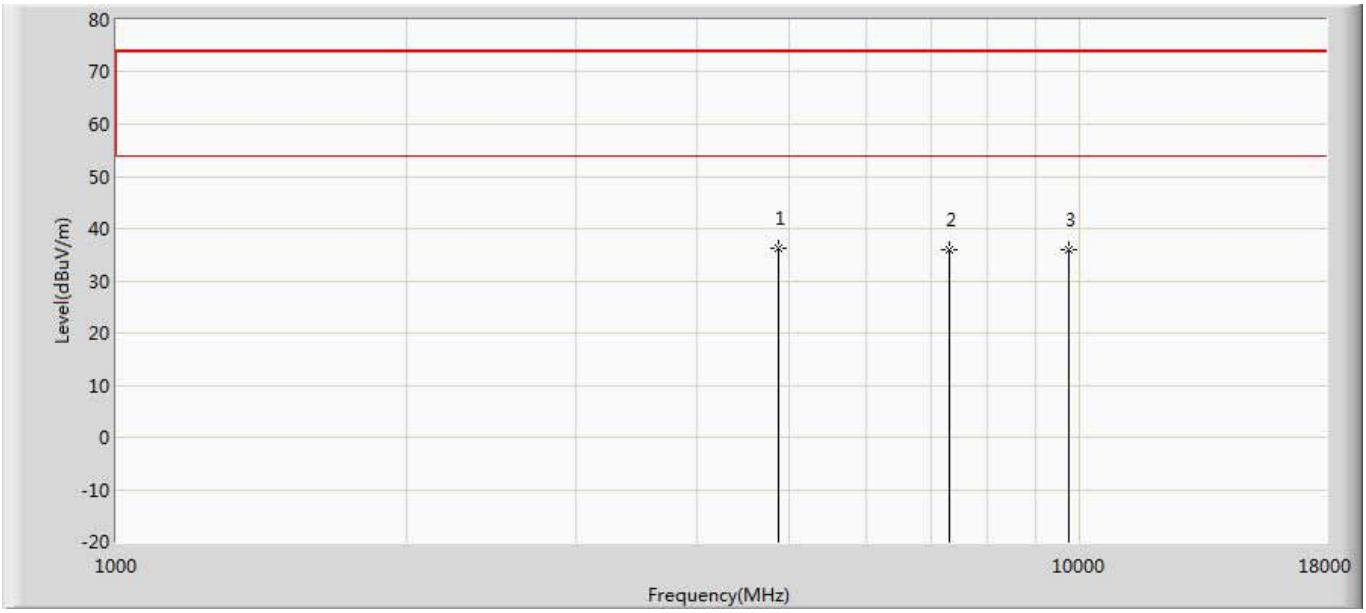
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	35.919	44.256	-38.081	74.000	-8.338	PK
2		7236.000	36.054	41.052	-37.946	74.000	-4.998	PK
3	*	9648.000	36.987	37.774	-37.013	74.000	-0.787	PK

Profile: AP650	Page No.: 62
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11N20 2X2 With CDD	



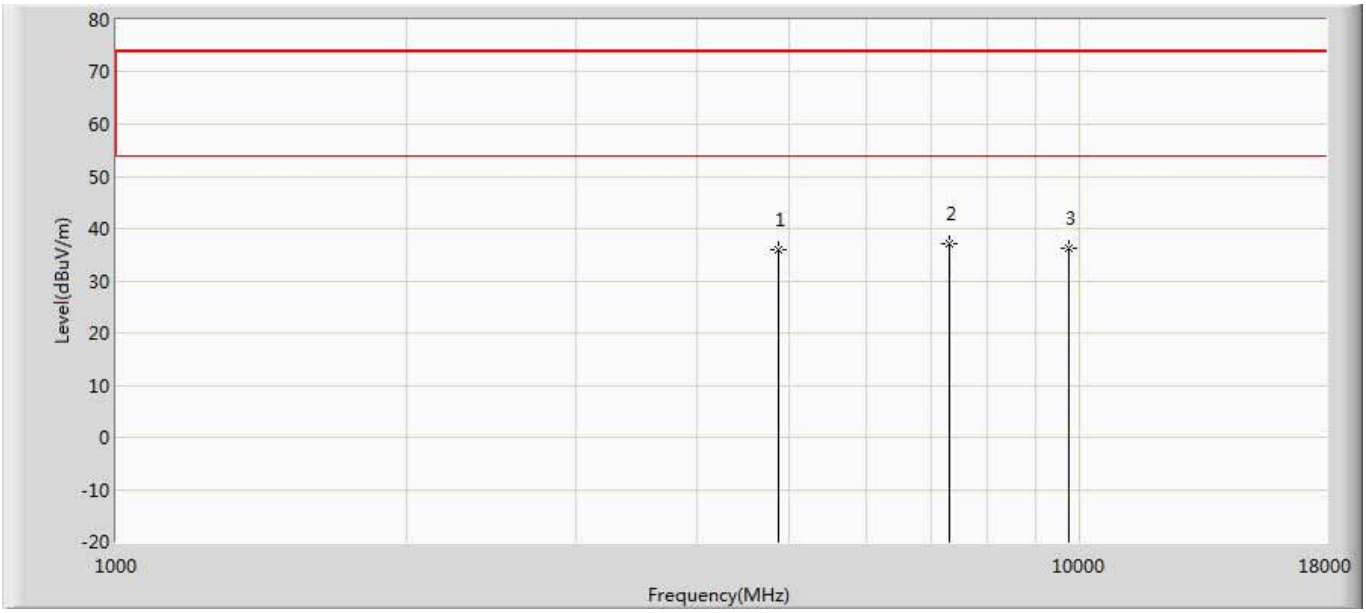
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.191	44.528	-37.809	74.000	-8.338	PK
2	*	7236.000	37.058	42.056	-36.942	74.000	-4.998	PK
3		9648.000	36.662	37.449	-37.338	74.000	-0.787	PK

Profile: AP650	Page No.: 63
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2437MHz by 802.11N20 2X2 With CDD	



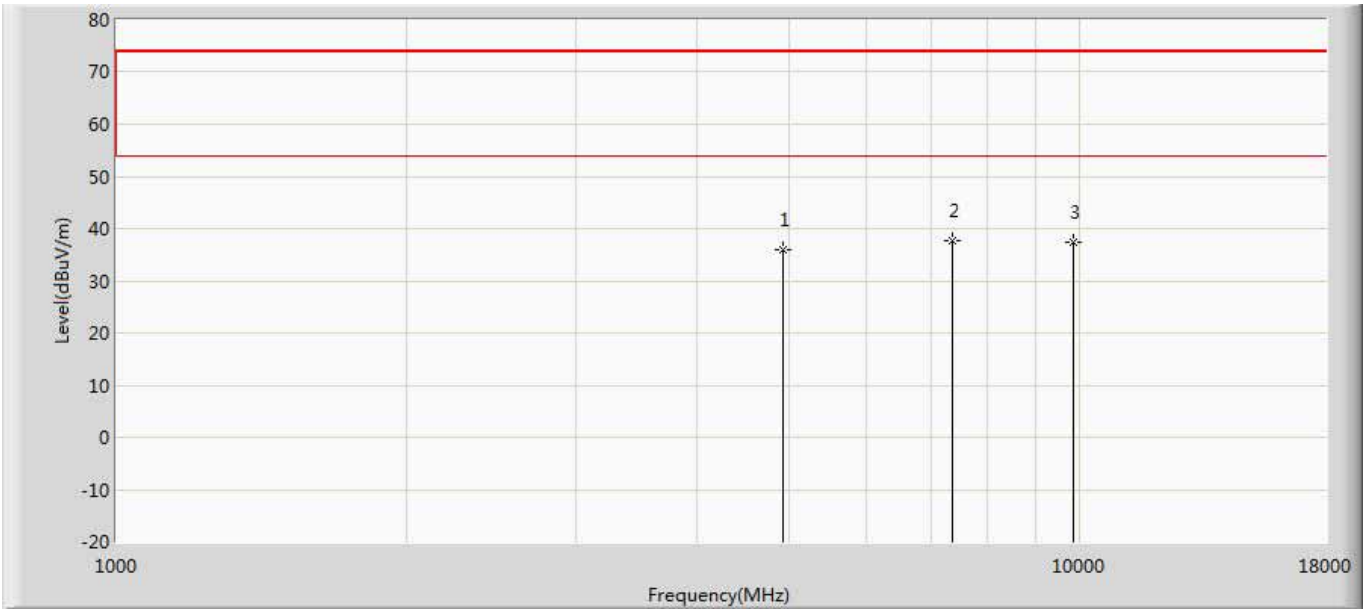
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4874.000	36.201	44.559	-37.799	74.000	-8.358	PK
2		7311.000	36.004	40.844	-37.996	74.000	-4.840	PK
3		9748.000	35.888	36.954	-38.112	74.000	-1.066	PK

Profile: AP650	Page No.: 64
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 10:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2437MHz by 802.11N20 2X2 With CDD	



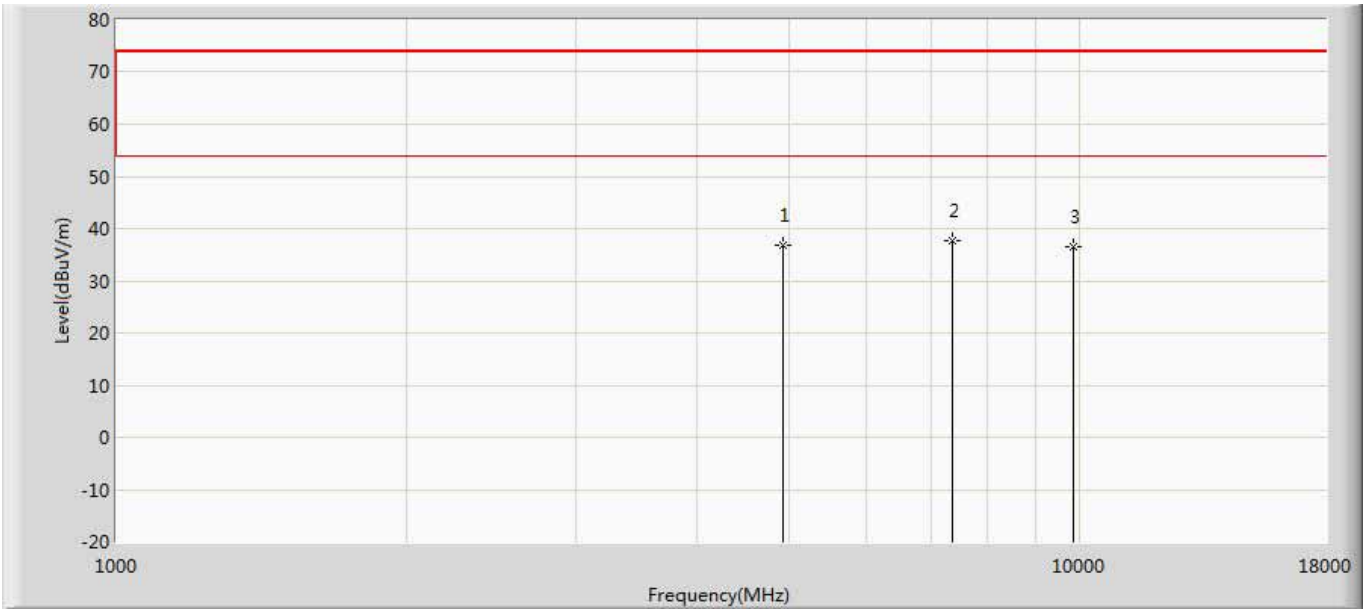
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	35.926	44.284	-38.074	74.000	-8.358	PK
2	*	7311.000	37.195	42.035	-36.805	74.000	-4.840	PK
3		9748.000	36.346	37.412	-37.654	74.000	-1.066	PK

Profile: AP650	Page No.: 65
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 13:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11N20 2X2 With CDD	



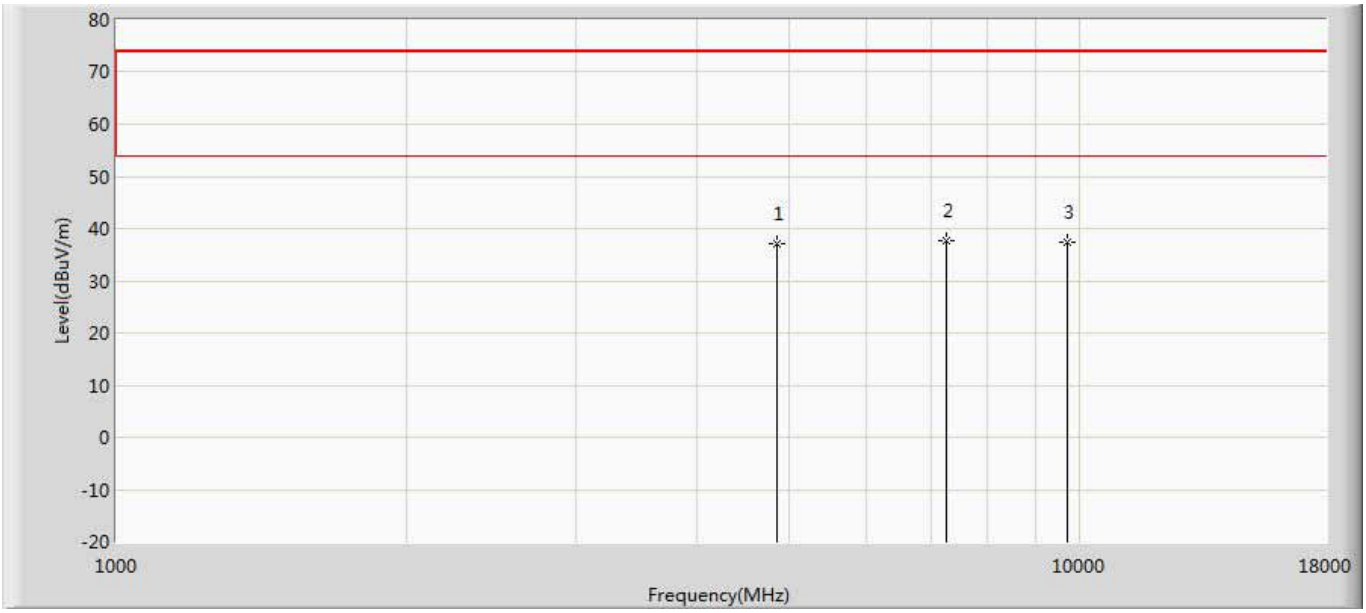
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.036	44.365	-37.964	74.000	-8.330	PK
2	*	7386.000	37.789	42.245	-36.211	74.000	-4.456	PK
3		9848.000	37.482	38.521	-36.518	74.000	-1.039	PK

Profile: AP650	Page No.: 66
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 13:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11N20 2X2 With CDD	



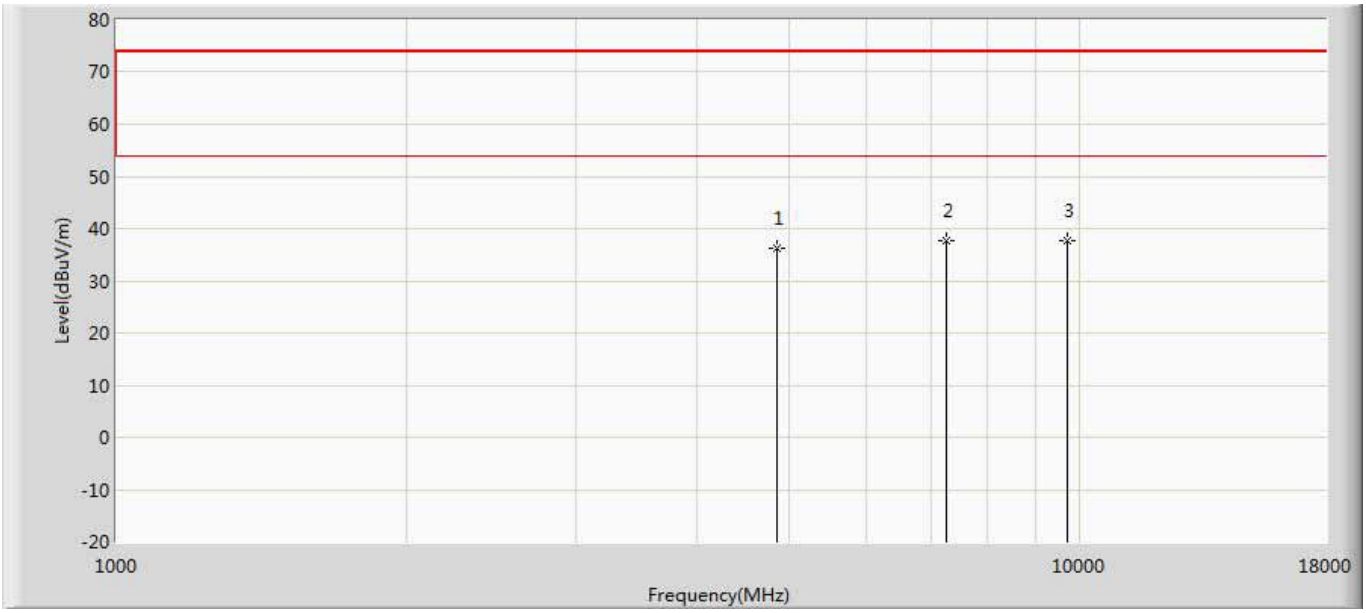
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	36.912	45.241	-37.088	74.000	-8.330	PK
2	*	7386.000	37.770	42.226	-36.230	74.000	-4.456	PK
3		9848.000	36.503	37.542	-37.497	74.000	-1.039	PK

Profile: AP650	Page No.: 67
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 13:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11N40 2X2 With CDD	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	36.959	45.241	-37.041	74.000	-8.283	PK
2	*	7266.000	37.553	42.256	-36.447	74.000	-4.702	PK
3		9688.000	37.323	38.263	-36.677	74.000	-0.941	PK

Profile: AP650	Page No.: 68
Engineer: Damon	
Site: AC5	Time: 2018/07/12 - 13:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11N40 2X2 With CDD	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4844.000	36.193	44.475	-37.807	74.000	-8.283	PK
2	*	7266.000	37.659	42.362	-36.341	74.000	-4.702	PK
3		9688.000	37.601	38.541	-36.399	74.000	-0.941	PK