Test Report

FCC Part15 Subpart C

Product Name	:	Wireless Access Point
Model No.	:	AP410C
FCC ID	:	QXO-AP410CNB

Applicant	:	Extreme Networks, Inc
Address	:	6480 Via Del Oro, San Jose, CA 95119

Date of Receipt	:	Apr. 11, 2022
Test Date	:	Apr. 12, 2022~ Apr. 27, 2022
Issued Date	:	May. 19, 2022
Report No.	:	2230991R-RF-US-P06V01
Report Version	:	V1.1

Note: The EUT used in this report and the 1992128R-RF-US-P06V01 report are the same model. The difference is that the EUT used this time removes the BLE chip. We evaluate Fundamental emission output power and Emissions in restricted frequency bands of the worst channel, and the test results are not worse than 1992128R-RF-US-P06V01, so the test data in this report refers to the data of 1992128R-RF-US-P06V01.

Test Report Certification

Issued Date: May.19, 2022
Report No. : 2230991R-RF-US-P06V01

Product Name	:	Wireless Access Point
Applicant	:	Extreme Networks, Inc
Address	:	6480 Via Del Oro, San Jose, CA 95119
Manufacturer	:	Extreme Networks, Inc
Address	:	6480 Via Del Oro, San Jose, CA 95119
Model No.	:	AP410C
Brand	:	Extreme Networks
FCC ID	:	QXO-AP410CNB
EUT Voltage	:	DC 37~57V
Test Voltage	:	AC 120V/60Hz
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C ANSI C63.10:2013; KDB 558074 D01v05r02 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 CAB identifier: CN0040

Documented By : Tim. Cao

(Project Engineer :Tim Cao)

Approved By : Jack Zhang

(Engineer Supervisor: Jack Zhang)

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
2230991R-RF-US-P06V01	V1.0	Initial Issued Report	May. 05, 2022
2230991R-RF-US-P06V01	V1.1	Page1-2 modified the FCC ID, and page93 added Note.	May. 19, 2022

1. General Information

1.1. EUT Description

Product Name	Wireless Access Point
Model No.	AP410C
EUT Voltage	DC 37~57V
Frequency Range	For 2.4GHz Band 802.11b/g/n/ax(20MHz): 2412~2462MHz
Channel Number	For 2.4GHz Band 802.11b/g/n/ax(20MHz): 11
Type of Modulation	802.11b: DSSS-DBPSK, DQPSK, CCK
	802.11g/n: 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 144.4 Mbps
	802.11ax: up to 286 Mbps
Channel Control	Auto

1.2. Working Frequency of Each Channel:

802.11b/g/n/ax 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

1.3. Antenna information

AP410C:

<table>
<tr><td colspan="3">Antenna Model No.</td><td colspan="5">N/A</td></tr>
<tr><td colspan="3">Antenna Manufacturer</td><td colspan="5">N/A</td></tr>
<tr><td colspan="3">Antenna Delivery</td><td colspan="5">☒ 1*TX+1*RX ☒ 2*TX+2*RX ☐ 3*TX+3*RX</td></tr>
<tr><td colspan="3" rowspan="7">Antenna Technology</td><td>☒</td><td>SISO</td><td colspan="3"></td></tr>
<tr><td rowspan="6">☒</td><td rowspan="6">MIMO</td><td>☐</td><td colspan="3">Basic methodology</td></tr>
<tr><td>☐</td><td colspan="3">Sectorized antenna systems</td></tr>
<tr><td>☐</td><td colspan="3">Cross-polarized antennas</td></tr>
<tr><td>☐</td><td colspan="3">Unequal antenna gains, with equal transmit powers</td></tr>
<tr><td>☒</td><td colspan="3">Spatial Multiplexing</td></tr>
<tr><td>☒</td><td colspan="3">Cyclic Delay Diversity (CDD)</td></tr>
<tr><td colspan="3">Antenna Type</td><td colspan="5">PIFA</td></tr>
<tr><td colspan="8">Antenna Gain(Radio 1)</td></tr>
<tr><td colspan="3">Antenna Technology</td><td colspan="5">Ant Gain
(dBi)</td></tr>
<tr><td colspan="3">Ant 4(Radio 1)</td><td colspan="5">4.00</td></tr>
<tr><td colspan="8">Antenna Gain(Radio 2)</td></tr>
<tr><td colspan="3">Antenna Technology</td><td colspan="5">Ant Gain
(dBi)</td></tr>
<tr><td rowspan="2">☒</td><td rowspan="2">SISO</td><td rowspan="2">☒</td><td>Ant1
(Radio 2)</td><td colspan="4">3.80</td></tr>
<tr><td>☒</td><td>Ant2
(Radio 2)</td><td colspan="4">3.90</td></tr>
<tr><td>☒</td><td colspan="3">CDD</td><td colspan="4">3.90dBi for Power; 6.91dBi for PSD</td></tr>
<tr><td>☒</td><td colspan="3">Beam-forming</td><td colspan="4">6.91dBi for Power; 6.91dBi for PSD</td></tr>
</table>

Note: The device supports 3 radios, radio 1(1*1 2.4GHz & 1*1 5GHz full band); radio 2(2*2 2.4GHz & 2*2 5GHz low band); radio 3(4*4 5GHz full band), and radio 2 & 3 can works with Dual 2.4GHz & 5GHz mode and Dual 5GHz mode. As the 5GHz high band filter is different between two modes, additional Radio 3 5GHz high band mode is tested for compliance.

Dual 2.4GHz & 5GHz mode: Radio 2(2.4GHz 2*2) + Radio 3(5GHz full band 4*4)

Dual 5GHz mode: Radio 2(5GHz low band 2*2) + Radio 3(5GHz high band 4*4)

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 802.11ax(20MHz)
Mode 5: Transmit by 802.11n(20MHz) by Beam-forming
Mode 6: Transmit by 802.11ax(20MHz) by Beam-forming

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

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

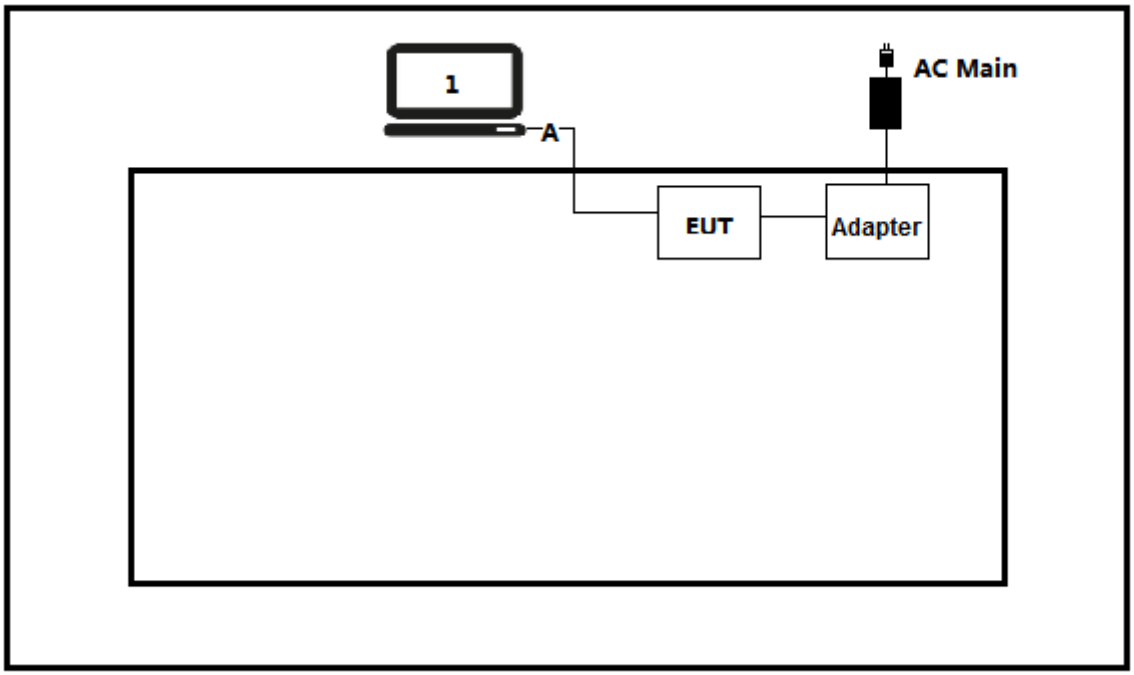
1.5. Tested System Details

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

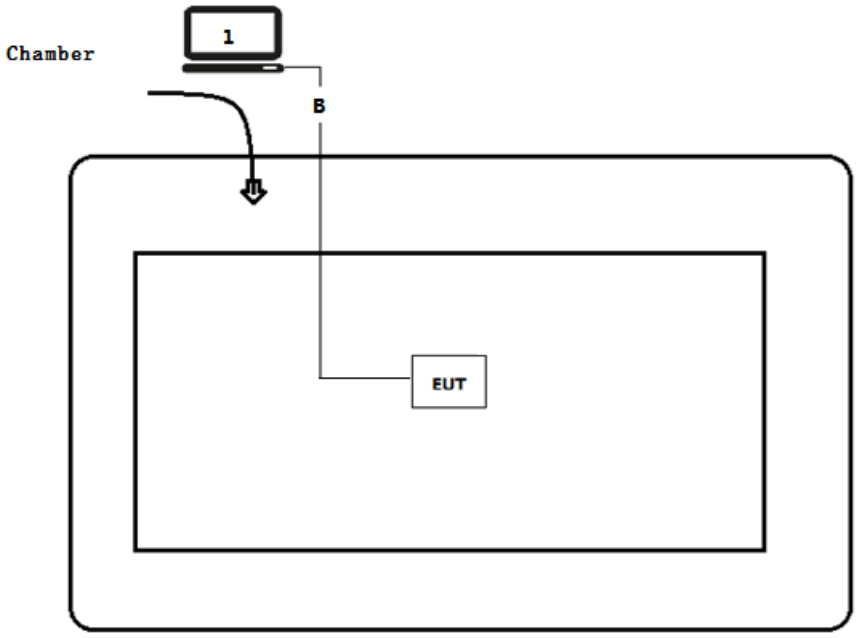
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	Think pad x220	SUA0600195	Non-shielded
A	LAN cable	N/A	N/A	N/A	Shielded, 0.5m
B	LAN cable	N/A	N/A	N/A	Shielded, 10m

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 [MTool], and set the test mode and channel, then press OK to start to continue transmit.

2. Technical Test

2.1. 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)	⩾30dBc	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: Section 15.205	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

2.2. 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(20MHz)	01	2412 MHz	06	2437MHz	11	2462MHz
802.11ax(20MHz)	01	2412 MHz	06	2437MHz	11	2462MHz

2.3. Power vs Data Rate

MCS Index for 802.11n	Spatial Streams (Note1)	Data Rate (Mbps)			
		802.11b	802.11g	20MHz Bandwidth	
				800ns GI	400ns GI
0	1	1	6	6.5	7.2
1	1	2	9	13.0	14.4
2	1	5.5	12	19.5	21.7
3	1	11	18	26.0	28.9
4	1	---	24	39.0	43.3
5	1	---	36	52.0	57.8
6	1	---	48	58.5	65.0
7	1	---	54	65.0	72.2
8	2	---	---	13.0	14.4
9	2	---	---	26.0	28.9
10	2	---	---	39.0	43.3
11	2	---	---	52.0	57.8
12	2	---	---	78.0	86.7
13	2	---	---	104.0	115.6
14	2	---	---	117.0	130.0
15	2	---	---	130.0	144.0

Note 1: The EUT supports all data rate above. The blue form is the maximum power data rate

Note 2: The EUT has two spatial Streams

MCS Index	Spatial Streams (Note1)	Modulation type	Coding rate	Data Rate(Mb/s)	
				20MHz	
				Guard Interval	
				1600 ns GI	800 ns GI
0	1	BPSK	1/2	8	8
1	1	QPSK	1/2	16	17
2	1	QPSK	3/4	24	26
3	1	16-QAM	1/2	33	34
4	1	16-QAM	3/4	49	52
5	1	64-QAM	2/3	65	69
6	1	64-QAM	3/4	73	77
7	1	64-QAM	5/6	81	86
8	1	256-QAM	3/4	98	103
9	1	256-QAM	5/6	108	115
10	1	1024-QAM	3/4	122	129
11	1	1024-QAM	5/6	135	143
12	2	BPSK	1/2	16	16
13	2	QPSK	1/2	32	34
14	2	QPSK	3/4	48	52
15	2	16-QAM	1/2	66	68
16	2	16-QAM	3/4	98	104
17	2	64-QAM	2/3	130	138
18	2	64-QAM	3/4	146	154
19	2	64-QAM	5/6	162	172
20	2	256-QAM	3/4	196	206
21	2	256-QAM	5/6	216	230
22	2	1024-QAM	3/4	244	258
23	2	1024-QAM	5/6	270	286

Note 1: The EUT supports all data rate above. The blue form is the maximum power data rate

Note 2: The EUT has two spatial Streams

2.4. Test Environment

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

2.5. Measurement Uncertainty

Test Items	Uncertainty
AC Power Line Conducted Emission	±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

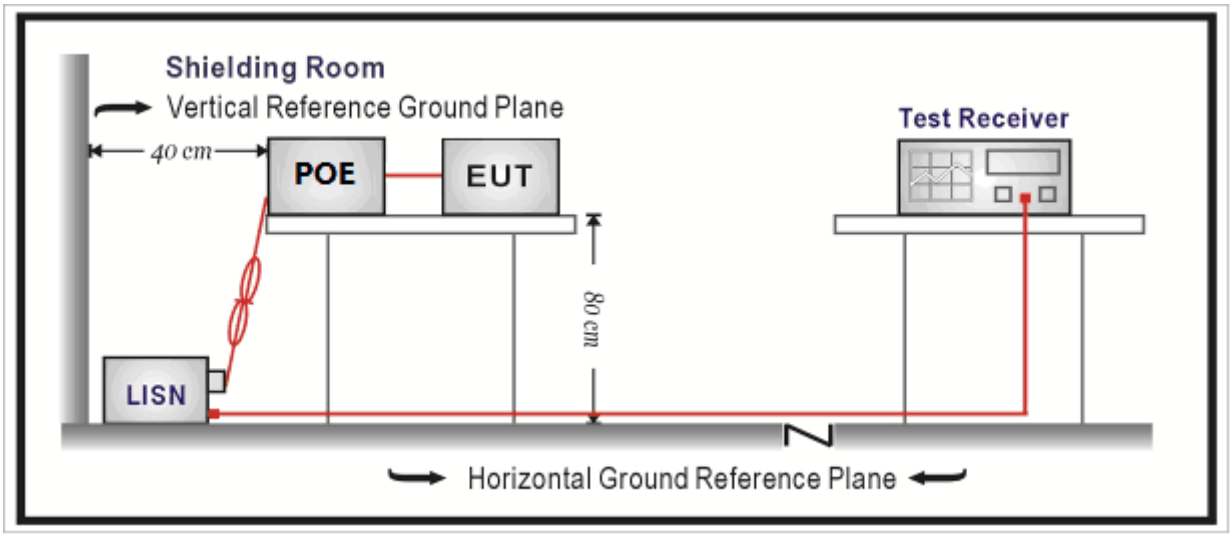
3. AC Power Line Conducted Emission

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	2021.12.15	2022.12.14
Two-Line V-Network	R&S	ENV216	100043	2021.07.11	2022.07.10
Two-Line V-Network	R&S	ENV216	100044	2022.03.12	2023.03.11
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
50ohm Termination	SHX	TF2	07081401	2021.11.17	2022.11.16
Temperature/Humidity Meter	zhichen	ZC1-2	TR1-TH	2021.07.09	2022.07.08
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

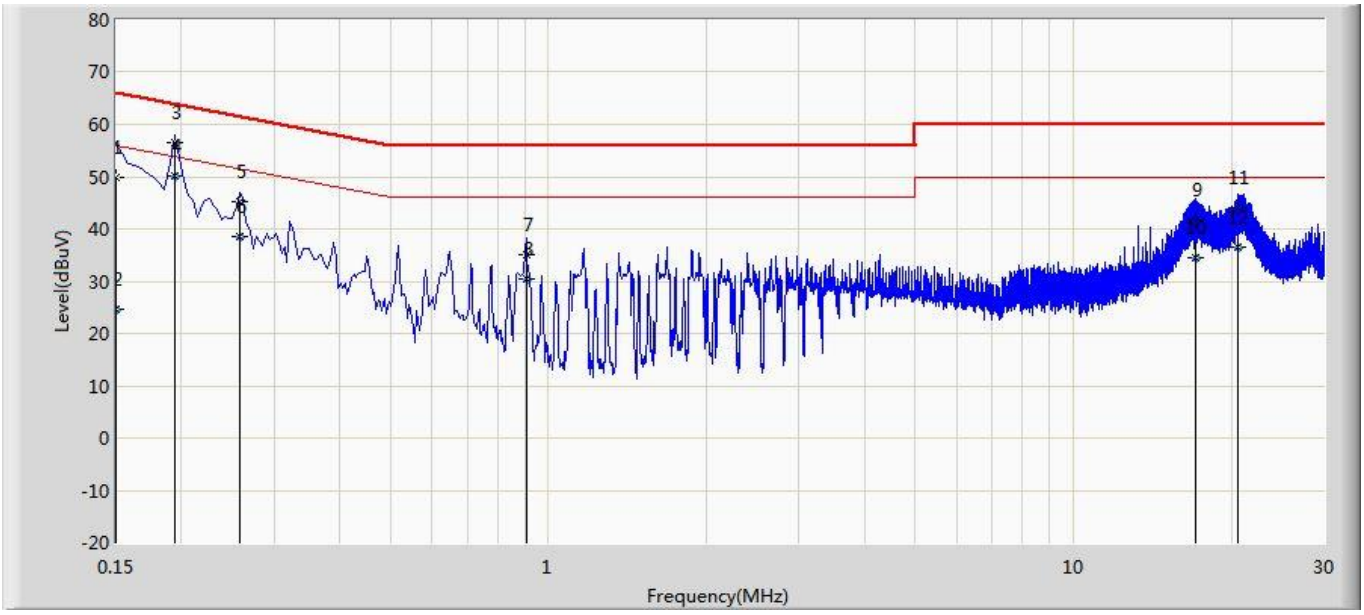
Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dBμV)	Average(dBμV)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50
Note 1: The lower limit shall apply at the transition frequencies. Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

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

3.5. Test Result

Site: TR1	Time: 2019/11/20
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: Simultaneous transmission with 2.4G WIFI + 5G WIFI	

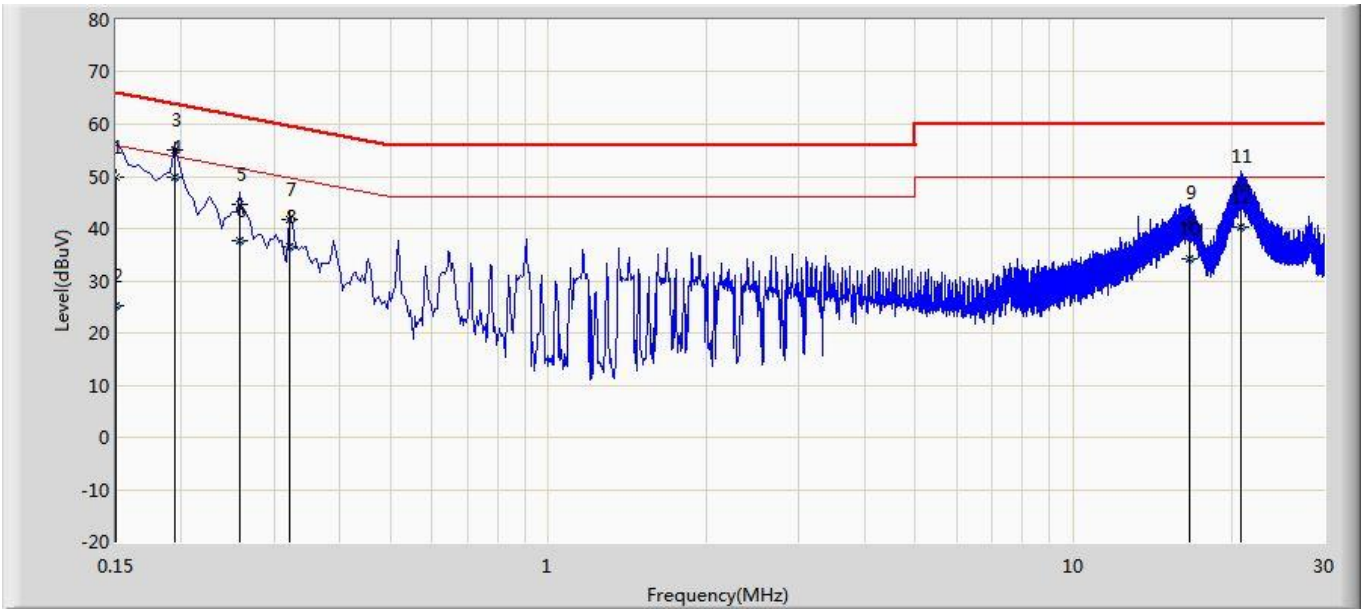


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	49.896	40.296	-16.104	66.000	9.570	0.029	0.000	QP
2		0.150	24.774	15.174	-31.226	56.000	9.570	0.029	0.000	AV
3		0.194	56.574	46.959	-7.290	63.864	9.587	0.028	0.000	QP
4	*	0.194	50.011	40.396	-3.852	53.864	9.587	0.028	0.000	AV
5		0.258	45.104	35.478	-16.392	61.496	9.594	0.032	0.000	QP
6		0.258	38.532	28.906	-12.964	51.496	9.594	0.032	0.000	AV
7		0.906	35.115	25.432	-20.885	56.000	9.627	0.057	0.000	QP
8		0.906	30.304	20.621	-15.696	46.000	9.627	0.057	0.000	AV
9		17.138	41.883	31.681	-18.117	60.000	9.936	0.266	0.000	QP
10		17.138	34.557	24.355	-15.443	50.000	9.936	0.266	0.000	AV
11		20.626	44.123	33.834	-15.877	60.000	9.996	0.293	0.000	QP
12		20.626	36.523	26.233	-13.477	50.000	9.996	0.293	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: 2019/11/20
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: Simultaneous transmission with 2.4G WIFI + 5G WIFI	



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	49.990	40.391	-16.010	66.000	9.570	0.029	0.000	QP
2		0.150	25.204	15.604	-30.796	56.000	9.570	0.029	0.000	AV
3		0.194	55.046	45.431	-8.817	63.864	9.587	0.028	0.000	QP
4	*	0.194	49.937	40.322	-3.926	53.864	9.587	0.028	0.000	AV
5		0.258	44.677	35.051	-16.819	61.496	9.594	0.032	0.000	QP
6		0.258	37.732	28.106	-13.764	51.496	9.594	0.032	0.000	AV
7		0.322	41.694	32.062	-17.961	59.655	9.598	0.035	0.000	QP
8		0.322	36.449	26.816	-13.206	49.655	9.598	0.035	0.000	AV
9		16.618	41.150	30.912	-18.850	60.000	9.976	0.262	0.000	QP
10		16.618	34.167	23.929	-15.833	50.000	9.976	0.262	0.000	AV
11		20.822	48.030	37.667	-11.970	60.000	10.068	0.295	0.000	QP
12		20.822	40.153	29.790	-9.847	50.000	10.068	0.295	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

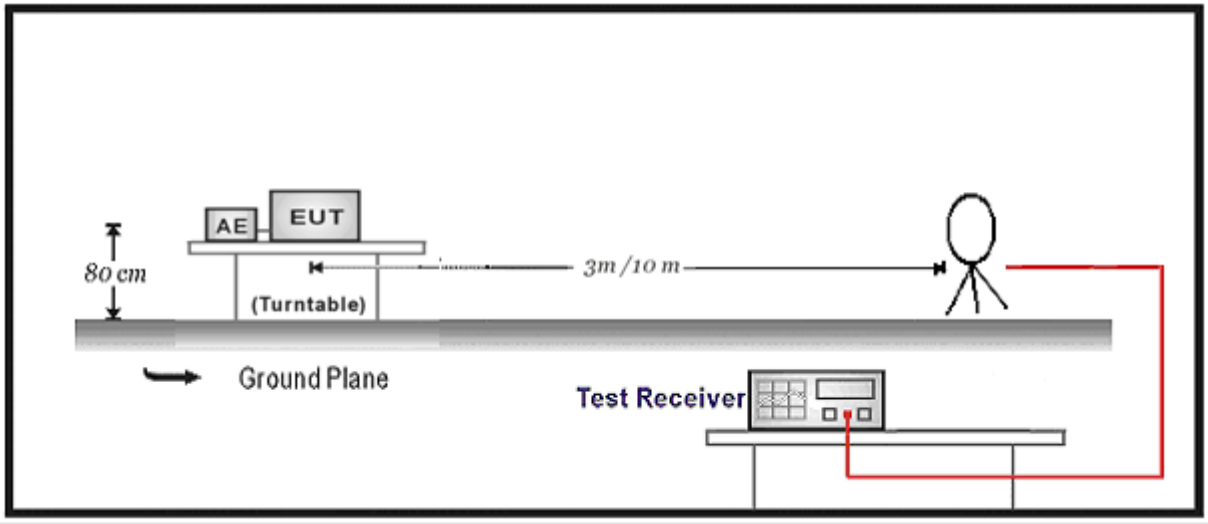
4.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2021.10.30	2022.10.29
Loop Antenna	R&S	HFH2-Z2	833799/003	N/A	N/A
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2021.06.30	2022.06.29
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2021.05.23	2022.05.22
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2021.11.08	2022.11.07
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

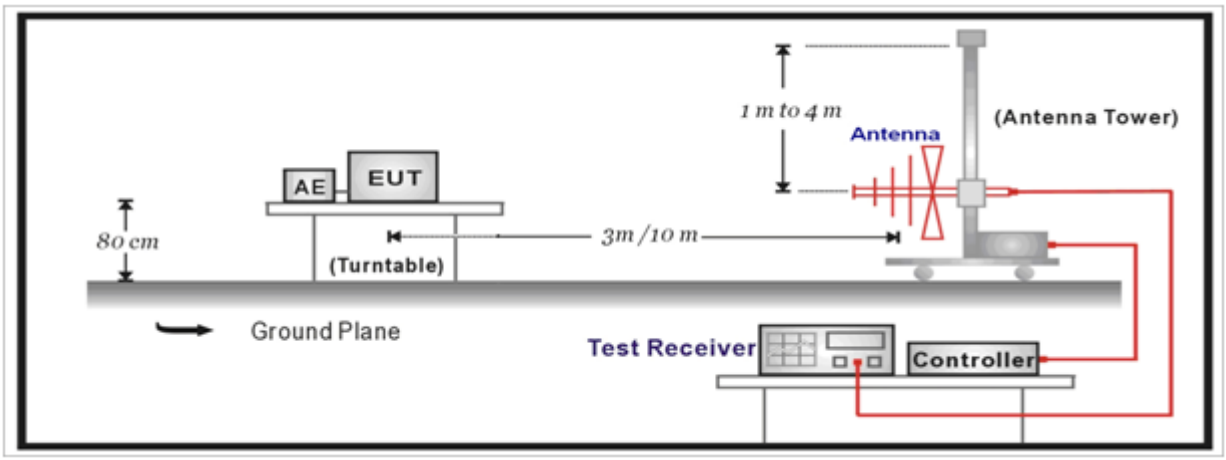
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Pre-Amplifier	SKET	LNPA_0118G-45	SK2021090101	2021.12.13	2022.12.12
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2021.08.23	2022.08.22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2021.08.23	2022.08.22
Coaxial Cable	ROSENBERGER	LA1-C011-2000/3000	AC5-40G	2022.03.21	2023.03.20
MXA Signal Analyzer	Keysight	N9020B	MY60112218	2022.01.09	2023.01.08
Coaxial Cable	ROSENBERGER	LA1-C011-2000/3000	AC5-40G-2	2021.05.22	2022.05.21
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2021.07.09	2022.07.08
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

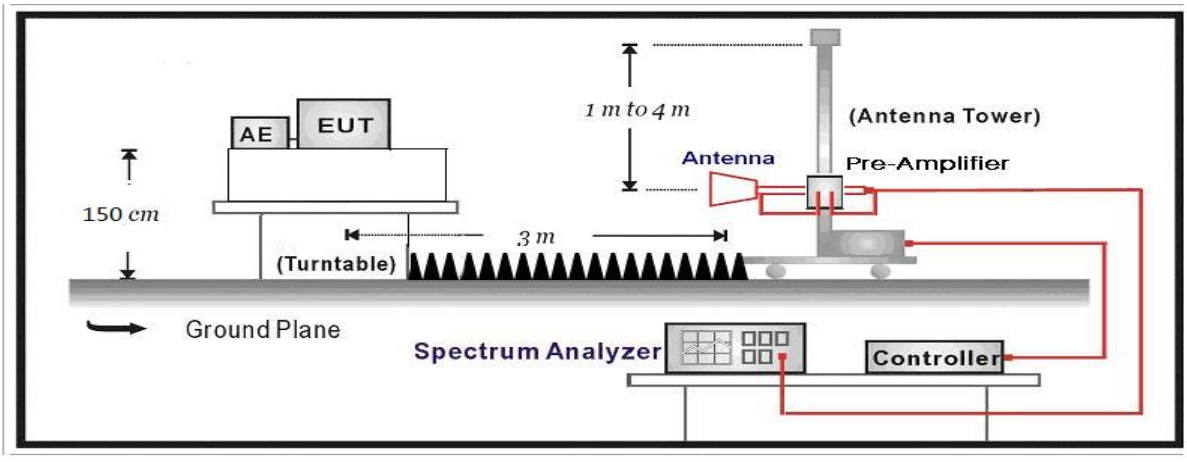
Below 30MHz Test Setup:



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			

Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/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)

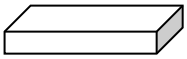
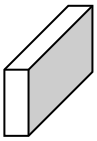
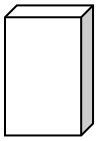
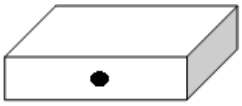
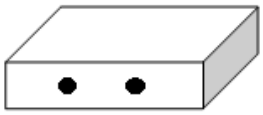
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed 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 1~4</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>
<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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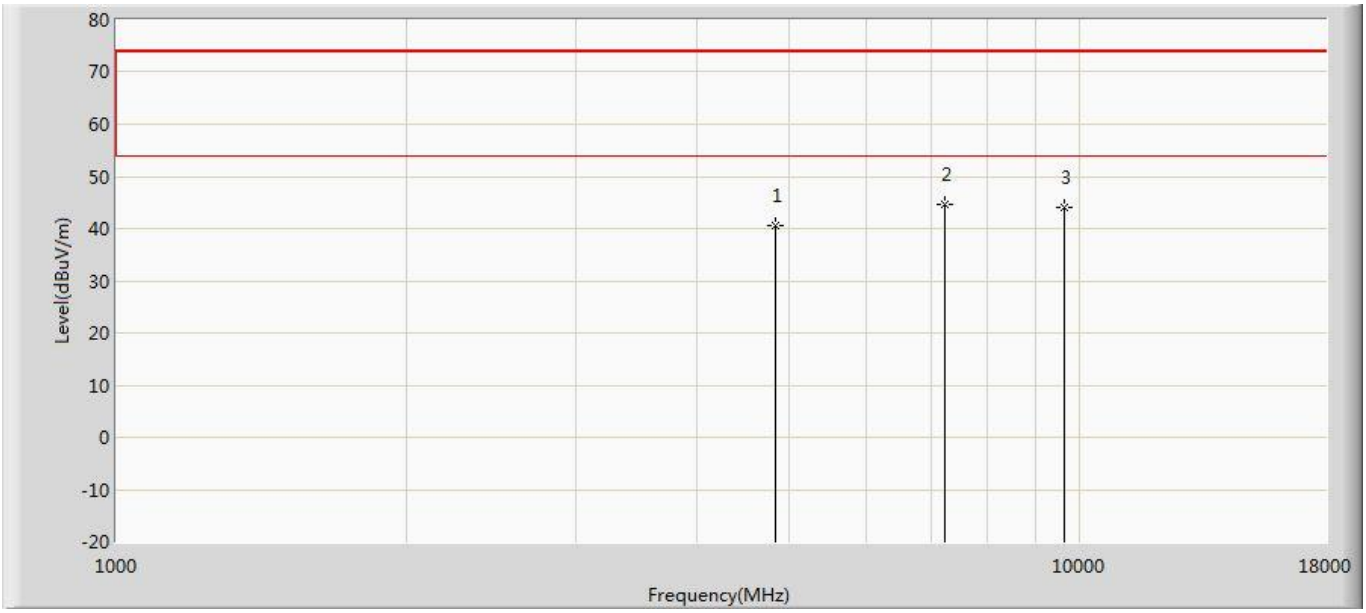
4.6. Test Result

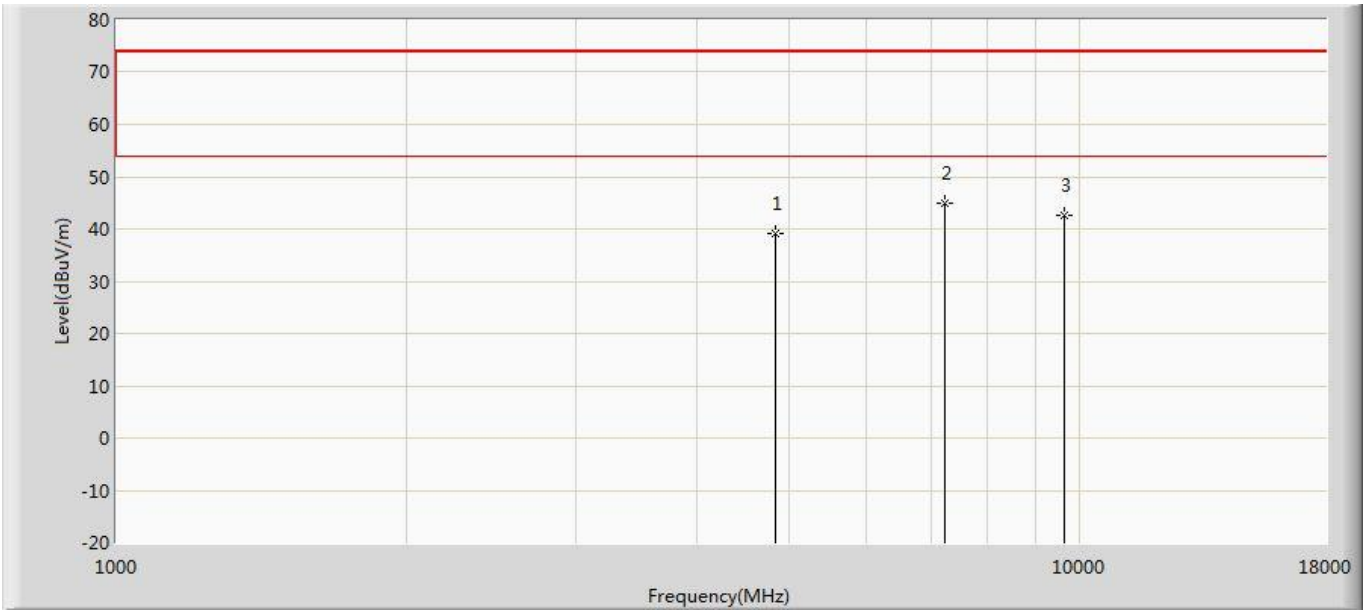
Radio 1:

Profile: 1992128R	Page No.: 25
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



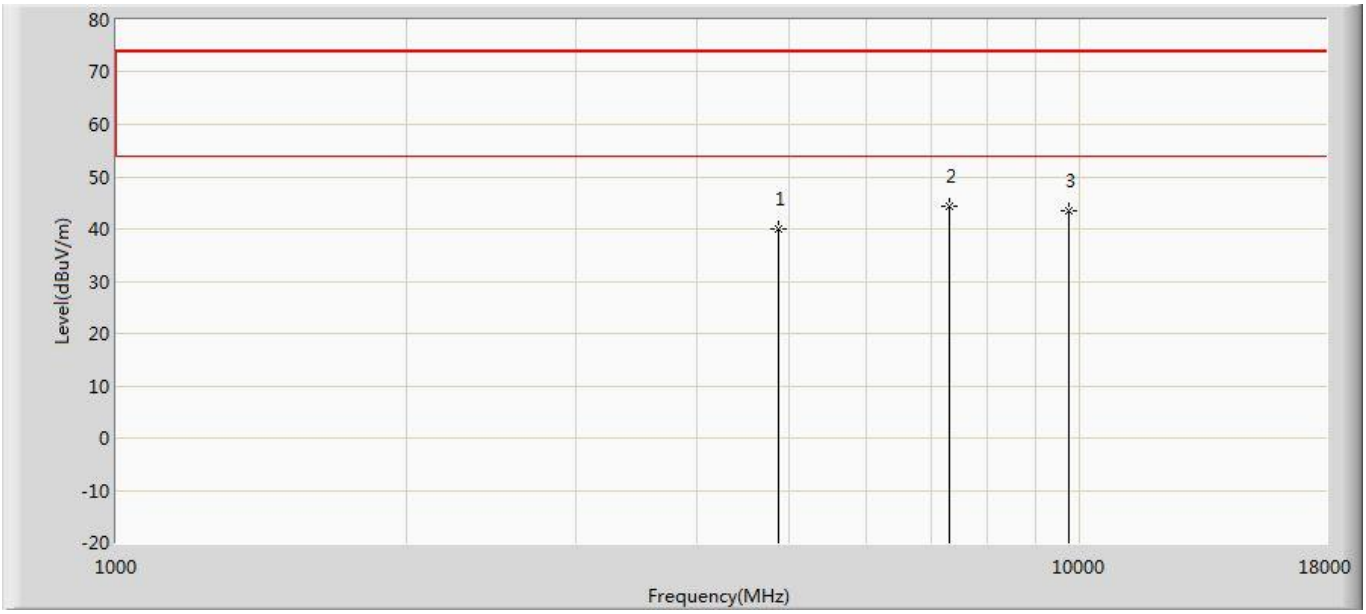
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.665	35.973	-33.335	74.000	4.692	PK
2	*	7236.000	44.752	35.175	-29.248	74.000	9.576	PK
3		9648.000	44.107	34.284	-29.893	74.000	9.823	PK

Profile: 1992128R	Page No.: 26
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



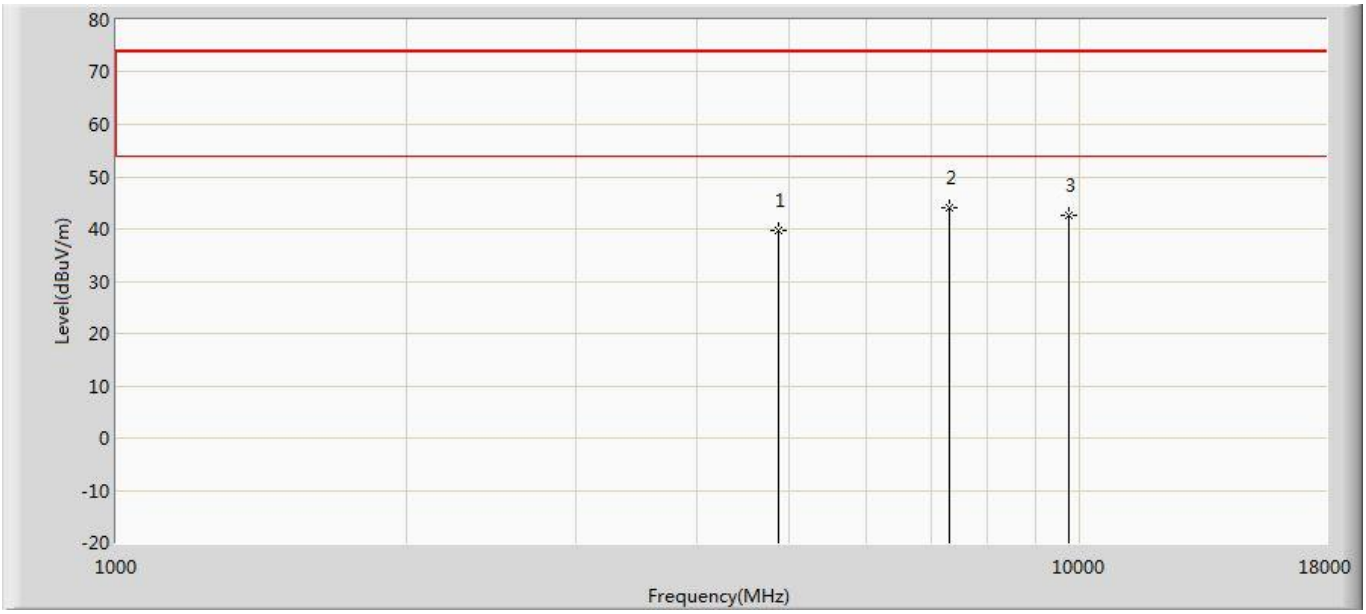
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	39.132	34.440	-34.868	74.000	4.692	PK
2	*	7236.000	44.975	35.398	-29.025	74.000	9.576	PK
3		9648.000	42.495	32.672	-31.505	74.000	9.823	PK

Profile: 1992128R	Page No.: 27
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



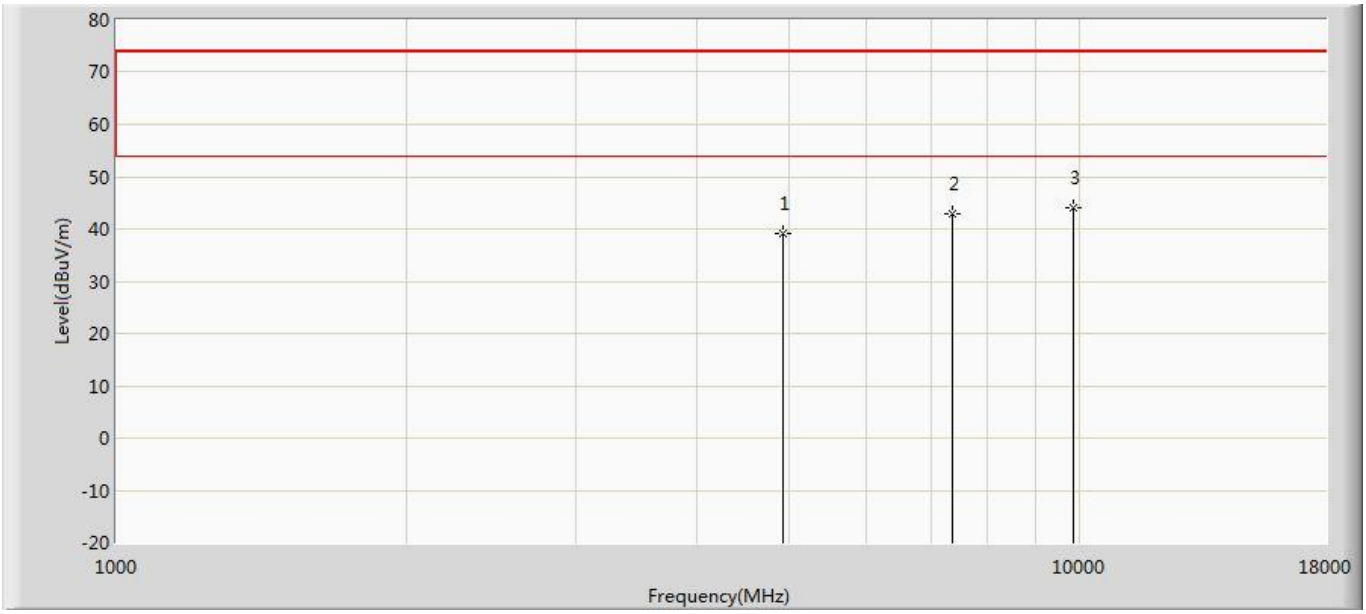
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.963	35.211	-34.037	74.000	4.752	PK
2	*	7311.000	44.431	34.719	-29.569	74.000	9.712	PK
3		9748.000	43.420	33.393	-30.580	74.000	10.026	PK

Profile: 1992128R	Page No.: 28
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



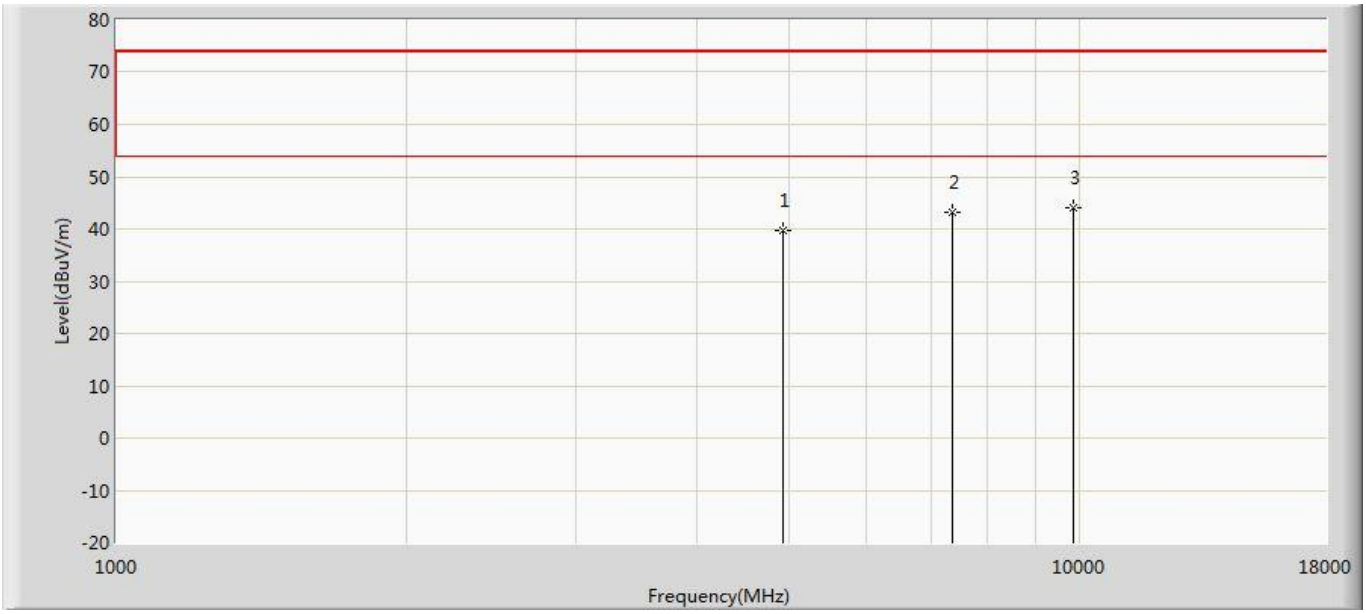
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.817	35.065	-34.183	74.000	4.752	PK
2	*	7311.000	44.069	34.357	-29.931	74.000	9.712	PK
3		9748.000	42.577	32.550	-31.423	74.000	10.026	PK

Profile: 1992128R	Page No.: 29
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



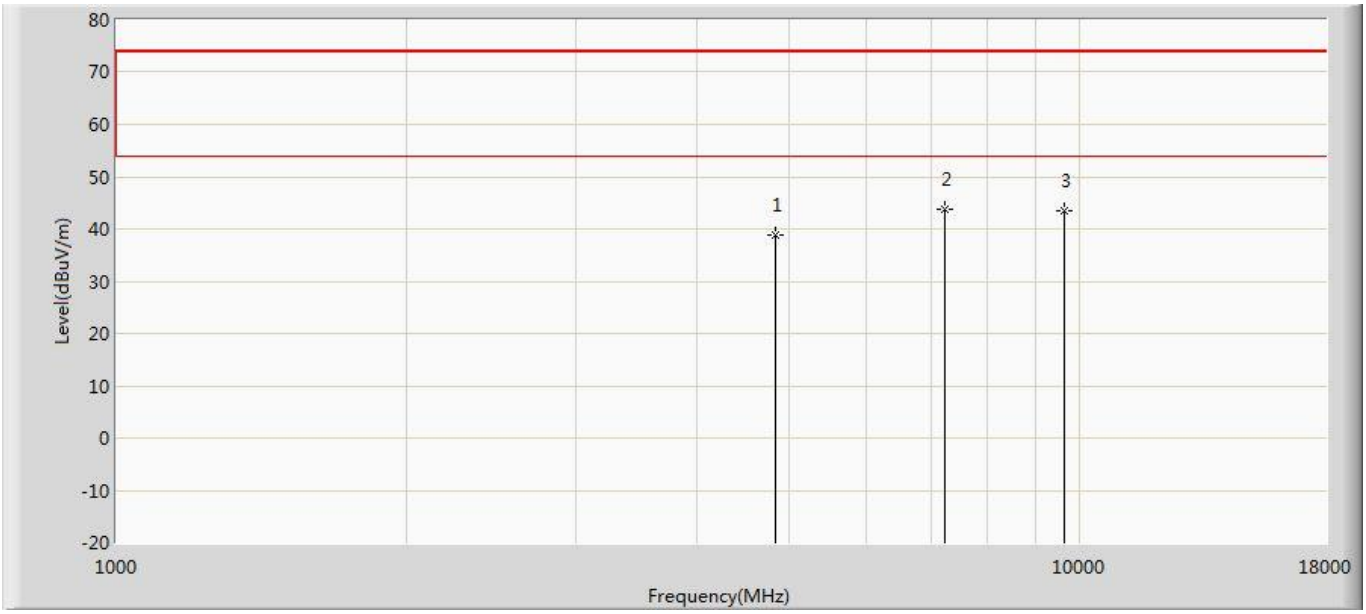
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.209	34.490	-34.791	74.000	4.719	PK
2		7386.000	43.037	33.912	-30.963	74.000	9.125	PK
3	*	9848.000	44.164	33.239	-29.836	74.000	10.925	PK

Profile: 1992128R	Page No.: 30
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



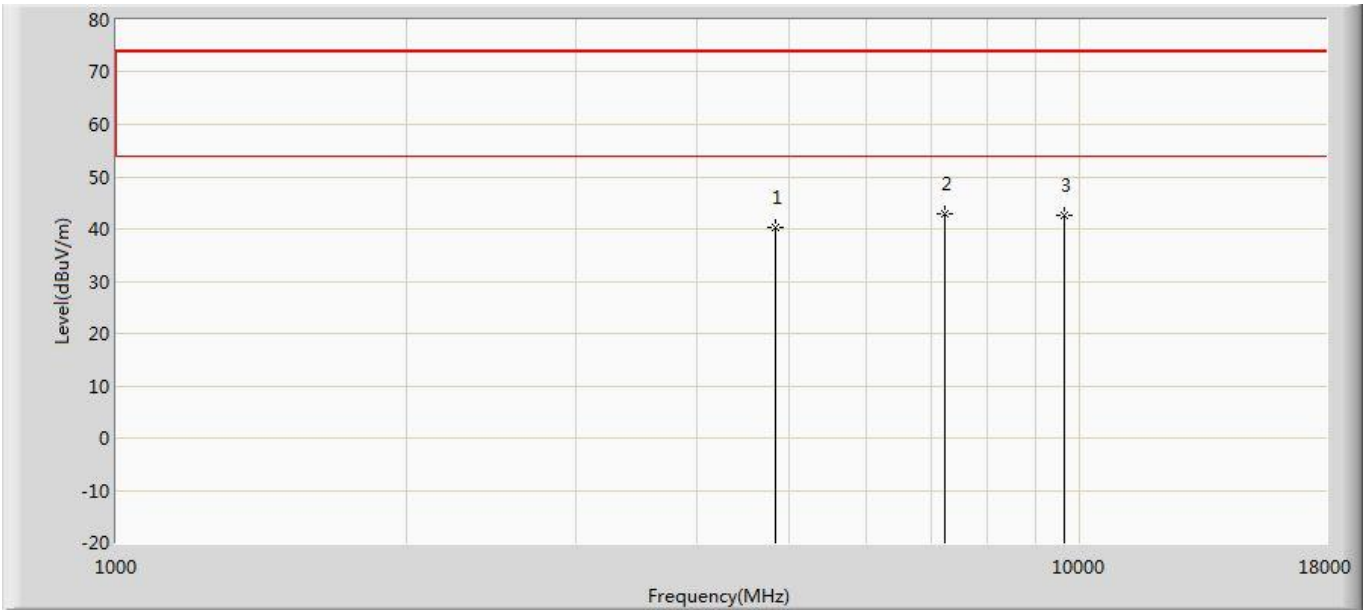
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.571	34.852	-34.429	74.000	4.719	PK
2		7386.000	43.284	34.159	-30.716	74.000	9.125	PK
3	*	9848.000	43.984	33.059	-30.016	74.000	10.925	PK

Profile: 1992128R	Page No.: 31
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



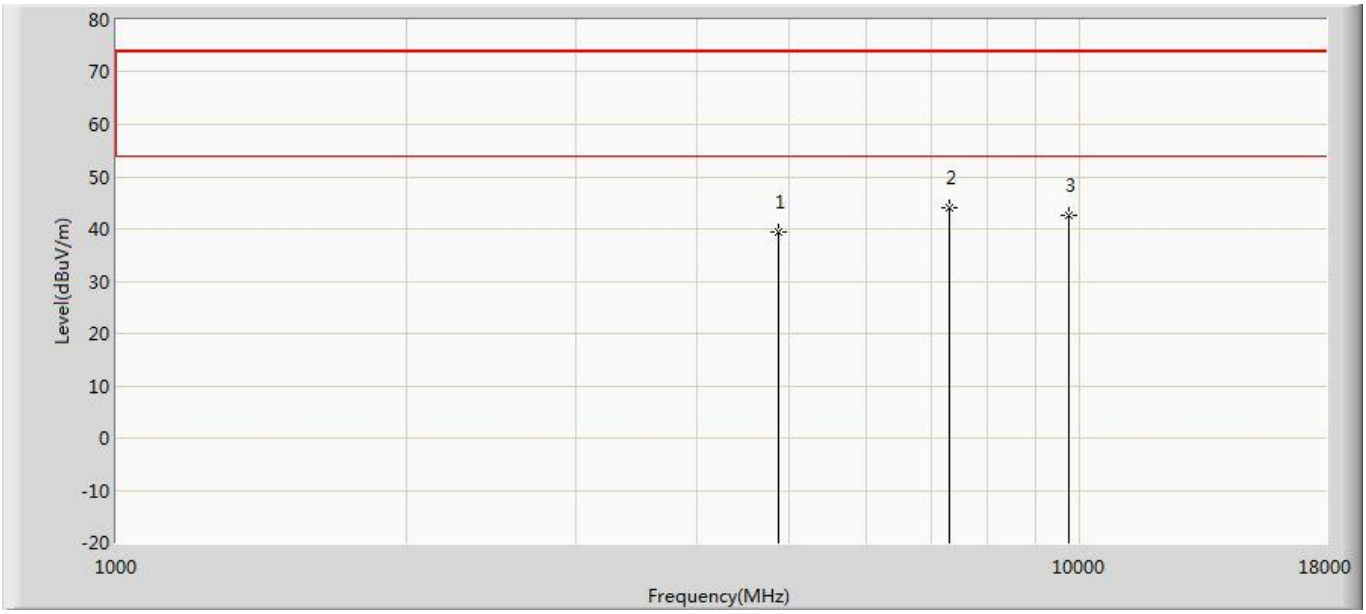
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	38.840	34.148	-35.160	74.000	4.692	PK
2	*	7236.000	43.735	34.158	-30.265	74.000	9.576	PK
3		9648.000	43.376	33.553	-30.624	74.000	9.823	PK

Profile: 1992128R	Page No.: 32
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



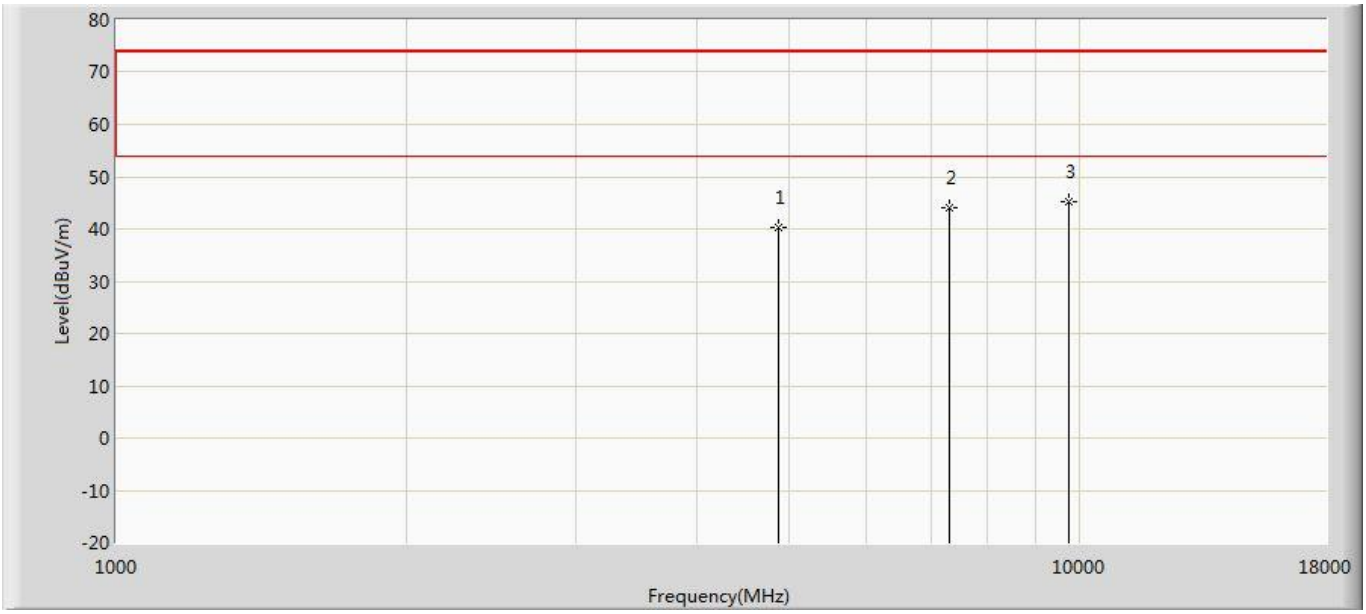
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.195	35.503	-33.805	74.000	4.692	PK
2	*	7236.000	42.905	33.328	-31.095	74.000	9.576	PK
3		9648.000	42.734	32.911	-31.266	74.000	9.823	PK

Profile: 1992128R	Page No.: 33
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



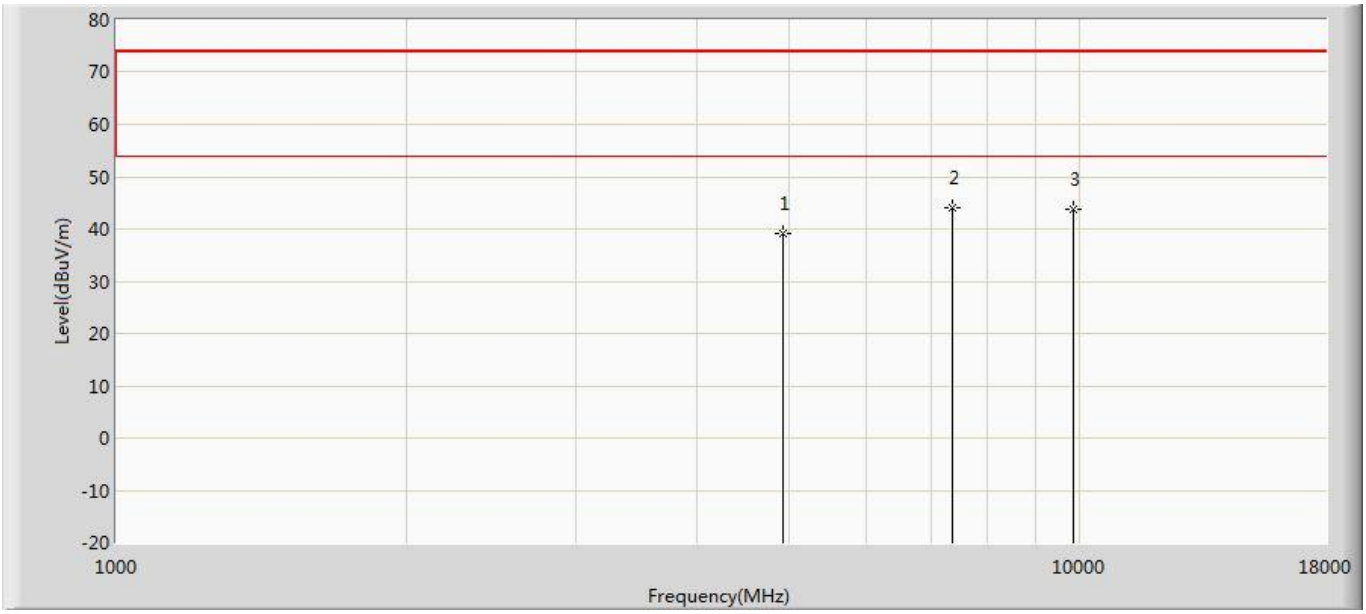
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.282	34.530	-34.718	74.000	4.752	PK
2	*	7311.000	44.157	34.445	-29.843	74.000	9.712	PK
3		9748.000	42.592	32.565	-31.408	74.000	10.026	PK

Profile: 1992128R	Page No.: 34
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



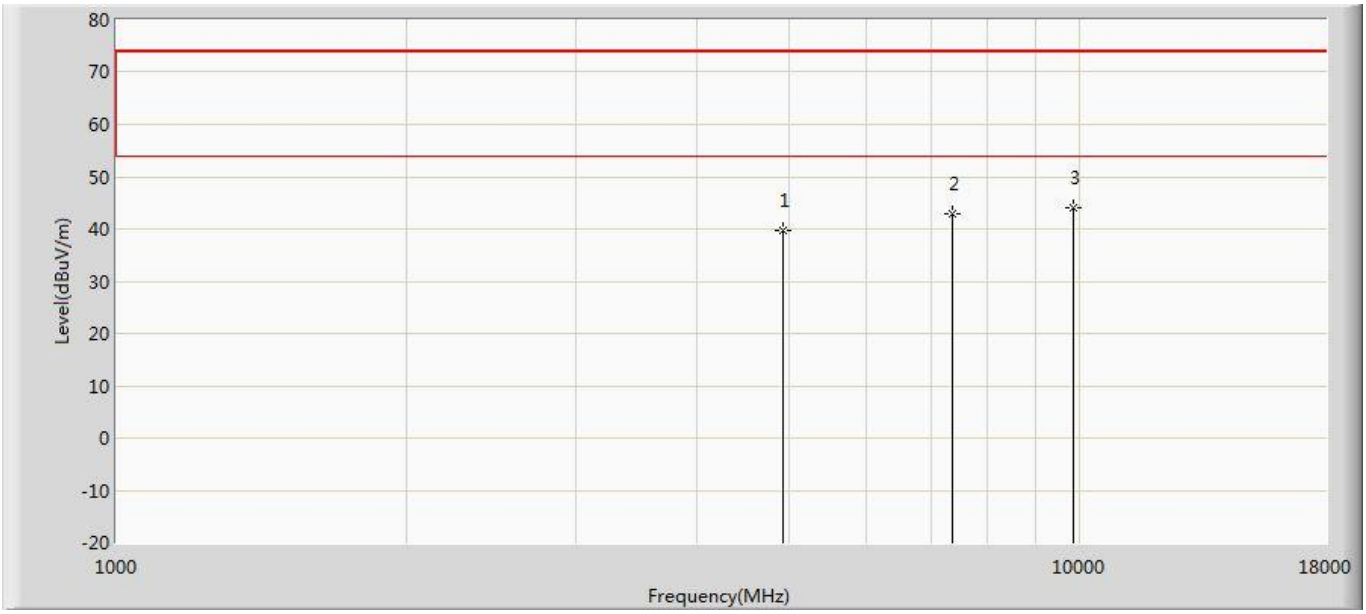
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	40.215	35.463	-33.785	74.000	4.752	PK
2		7311.000	44.068	34.356	-29.932	74.000	9.712	PK
3	*	9748.000	45.177	35.150	-28.823	74.000	10.026	PK

Profile: 1992128R	Page No.: 35
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



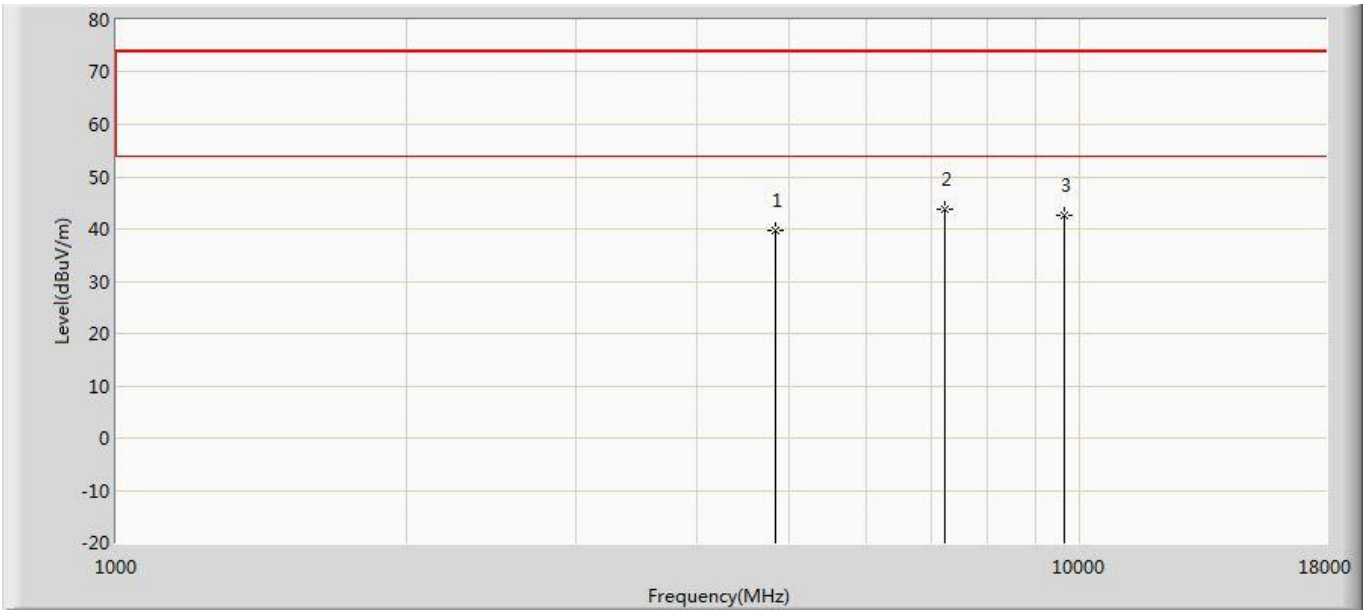
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.163	34.444	-34.837	74.000	4.719	PK
2	*	7386.000	43.987	34.862	-30.013	74.000	9.125	PK
3		9848.000	43.711	32.786	-30.289	74.000	10.925	PK

Profile: 1992128R	Page No.: 36
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



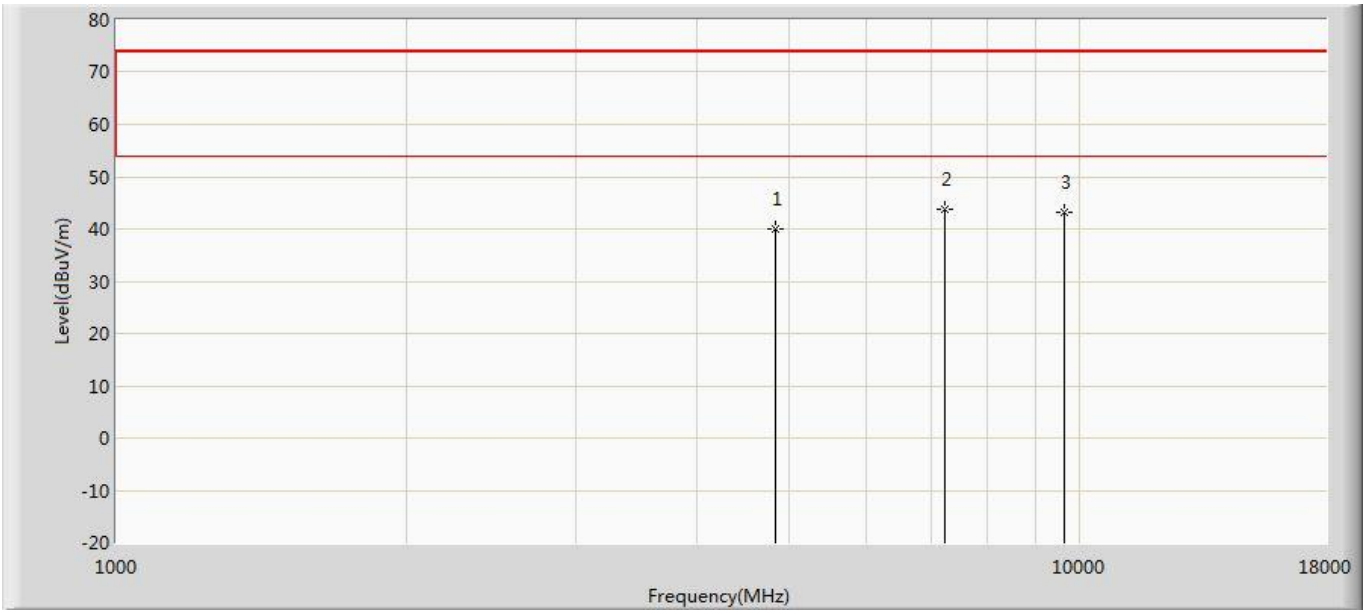
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.732	35.013	-34.268	74.000	4.719	PK
2		7386.000	42.796	33.671	-31.204	74.000	9.125	PK
3	*	9848.000	44.129	33.204	-29.871	74.000	10.925	PK

Profile: 1992128R	Page No.: 37
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



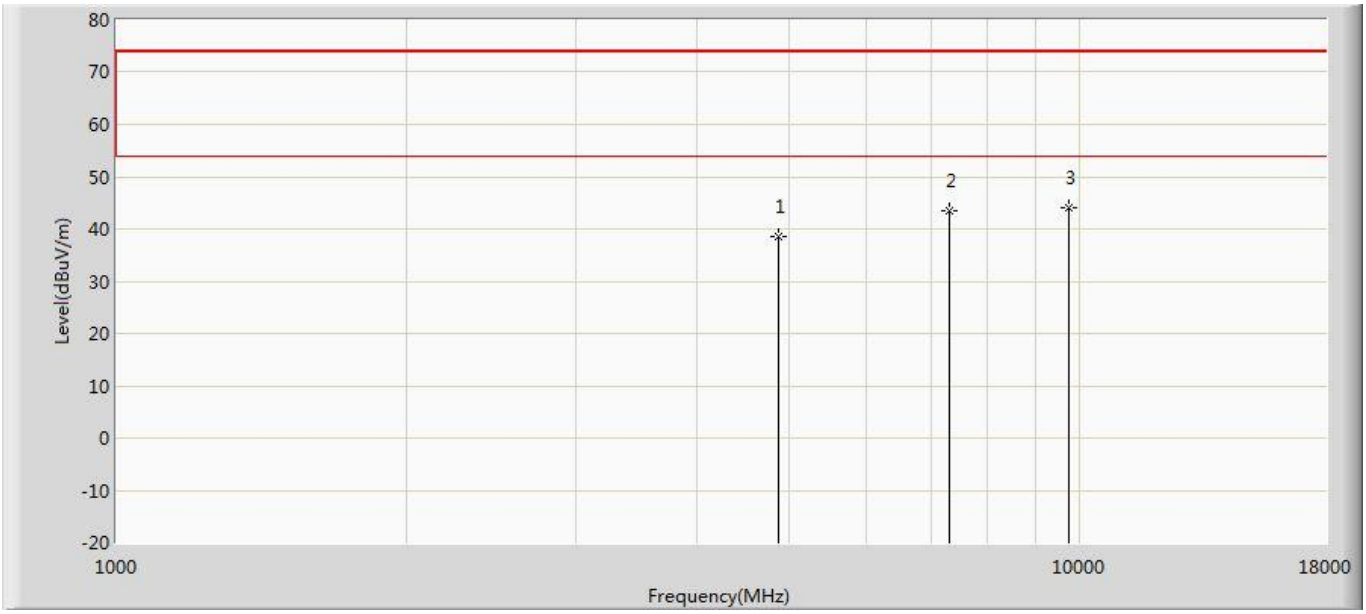
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	39.742	35.050	-34.258	74.000	4.692	PK
2	*	7236.000	43.855	34.278	-30.145	74.000	9.576	PK
3		9648.000	42.652	32.829	-31.348	74.000	9.823	PK

Profile: 1992128R	Page No.: 38
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



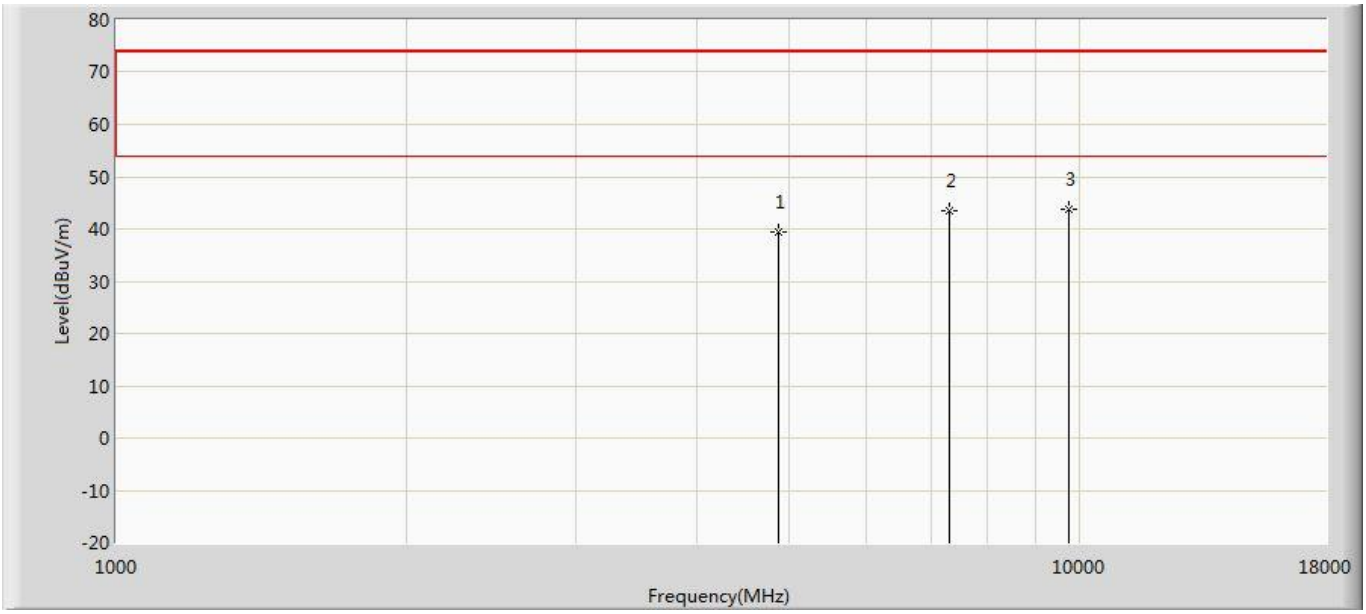
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.092	35.400	-33.908	74.000	4.692	PK
2	*	7236.000	43.889	34.312	-30.111	74.000	9.576	PK
3		9648.000	43.060	33.237	-30.940	74.000	9.823	PK

Profile: 1992128R	Page No.: 39
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



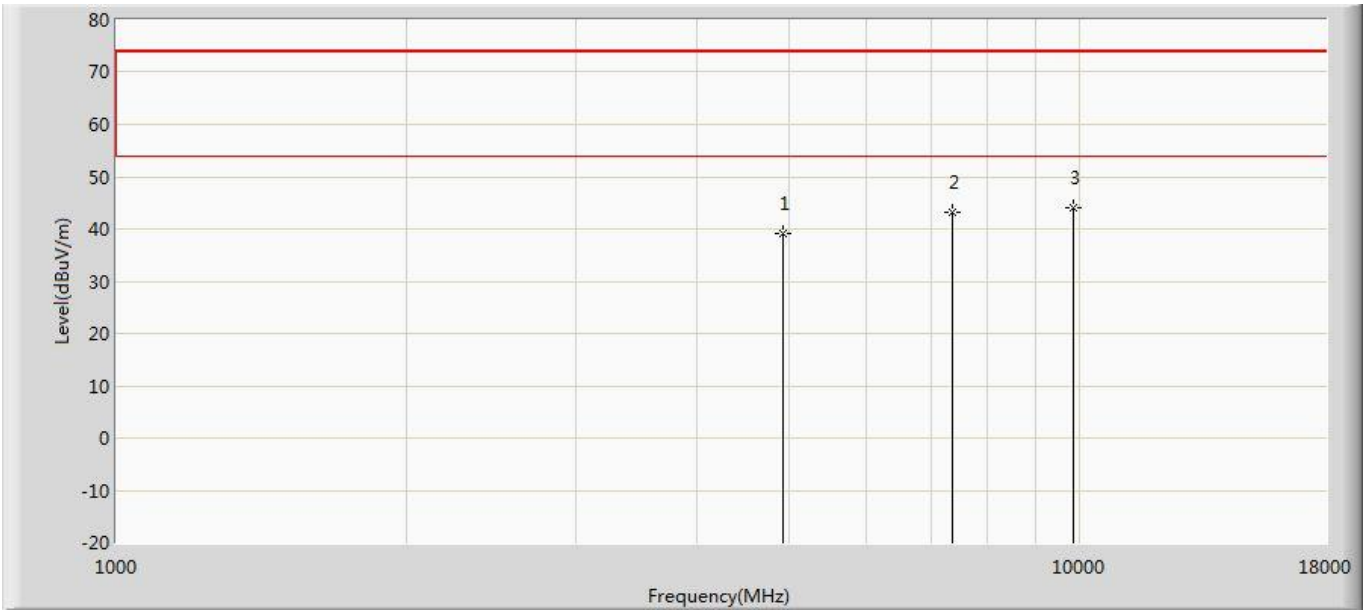
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	38.446	33.694	-35.554	74.000	4.752	PK
2		7311.000	43.379	33.667	-30.621	74.000	9.712	PK
3	*	9748.000	43.963	33.936	-30.037	74.000	10.026	PK

Profile: 1992128R	Page No.: 40
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



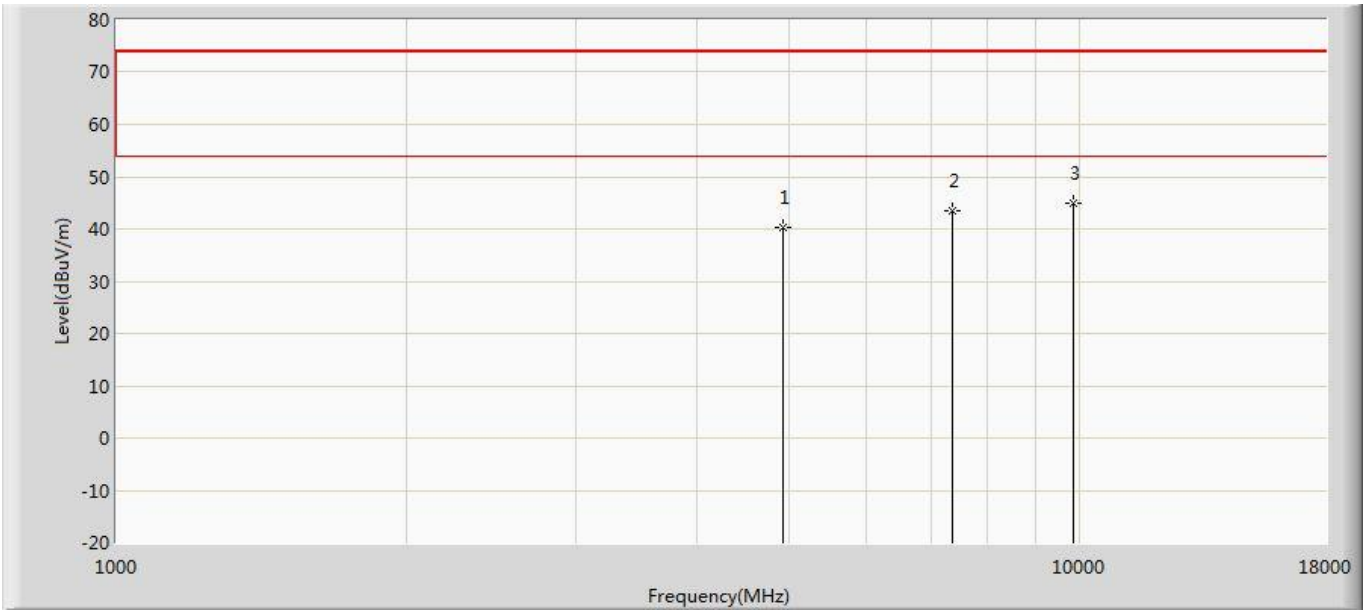
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.346	34.594	-34.654	74.000	4.752	PK
2		7311.000	43.574	33.862	-30.426	74.000	9.712	PK
3	*	9748.000	43.851	33.824	-30.149	74.000	10.026	PK

Profile: 1992128R	Page No.: 41
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



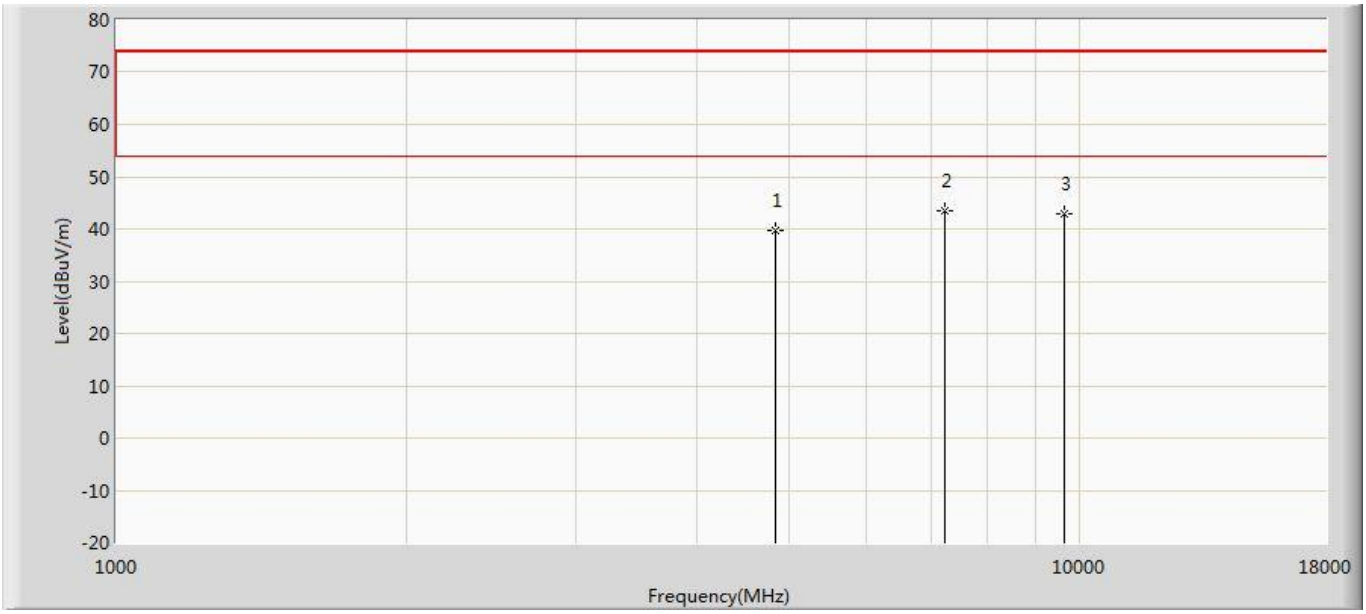
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.033	34.314	-34.967	74.000	4.719	PK
2		7386.000	43.052	33.927	-30.948	74.000	9.125	PK
3	*	9848.000	44.164	33.239	-29.836	74.000	10.925	PK

Profile: 1992128R	Page No.: 42
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



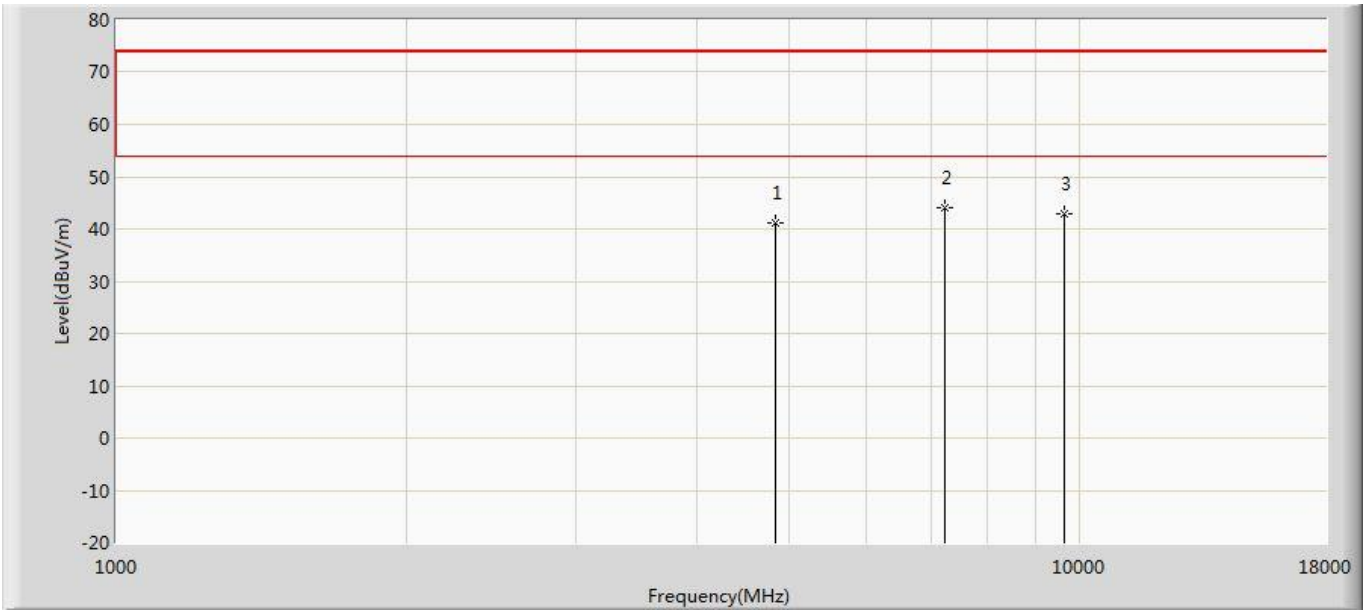
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	40.373	35.654	-33.627	74.000	4.719	PK
2		7386.000	43.499	34.374	-30.501	74.000	9.125	PK
3	*	9848.000	44.984	34.059	-29.016	74.000	10.925	PK

Profile: 1992128R	Page No.: 43
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2412MHz by 802.11ax(20MHz)	



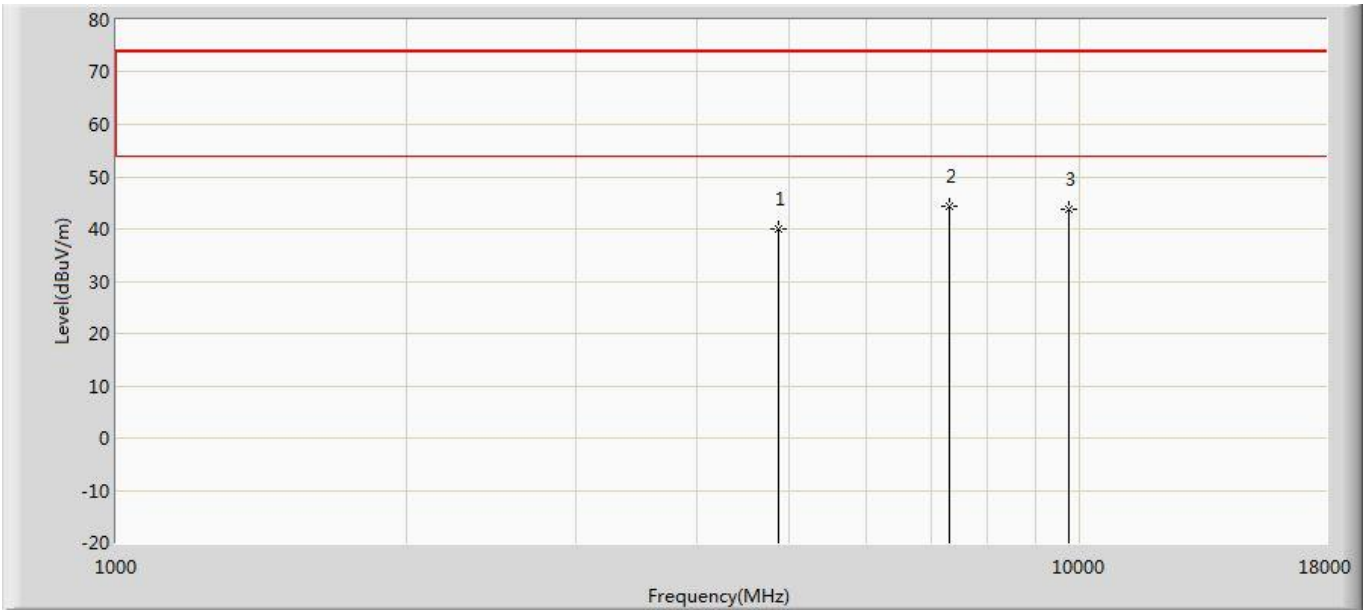
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	39.735	35.043	-34.265	74.000	4.692	PK
2	*	7236.000	43.538	33.961	-30.462	74.000	9.576	PK
3		9648.000	43.007	33.184	-30.993	74.000	9.823	PK

Profile: 1992128R	Page No.: 44
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2412MHz by 802.11ax(20MHz)	



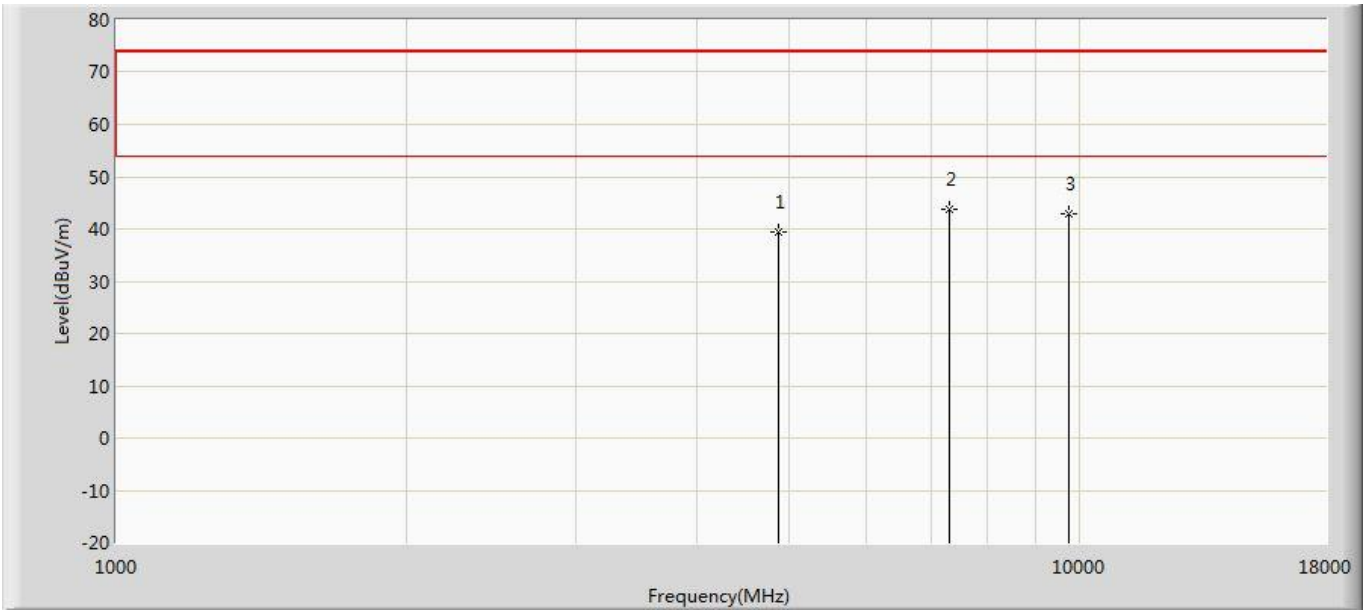
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	41.175	36.483	-32.825	74.000	4.692	PK
2	*	7236.000	43.949	34.372	-30.051	74.000	9.576	PK
3		9648.000	42.779	32.956	-31.221	74.000	9.823	PK

Profile: 1992128R	Page No.: 45
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11ax(20MHz)	



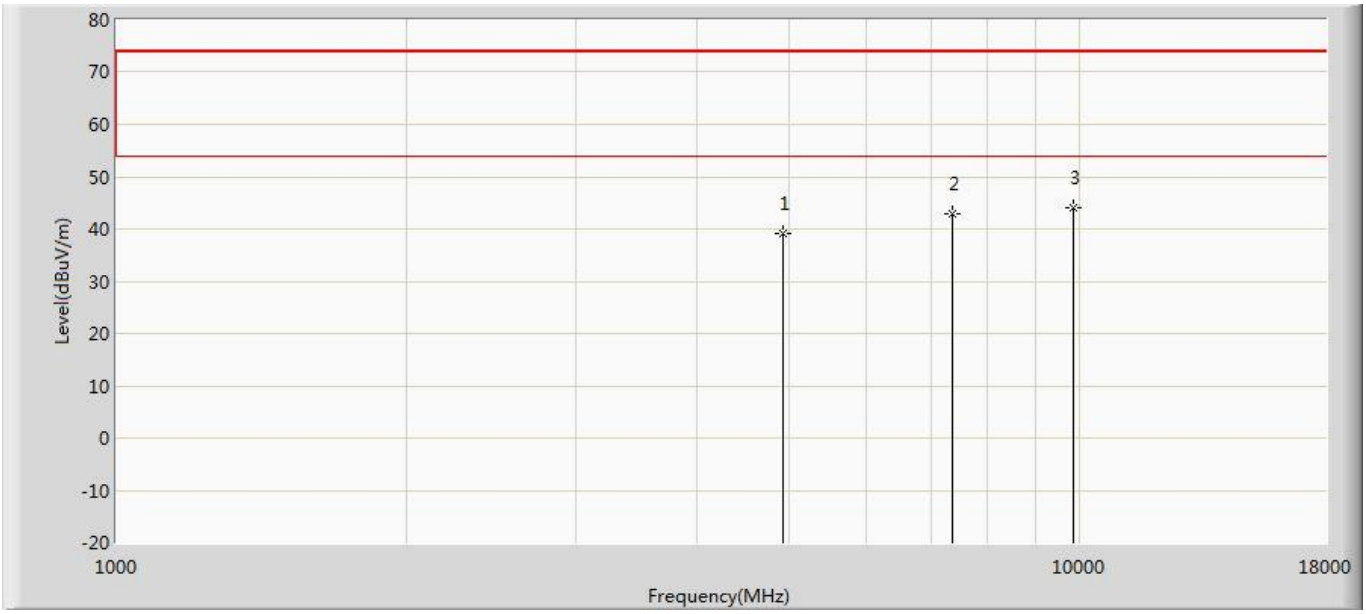
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	40.035	35.283	-33.965	74.000	4.752	PK
2	*	7311.000	44.249	34.537	-29.751	74.000	9.712	PK
3		9748.000	43.864	33.837	-30.136	74.000	10.026	PK

Profile: 1992128R	Page No.: 46
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11ax(20MHz)	



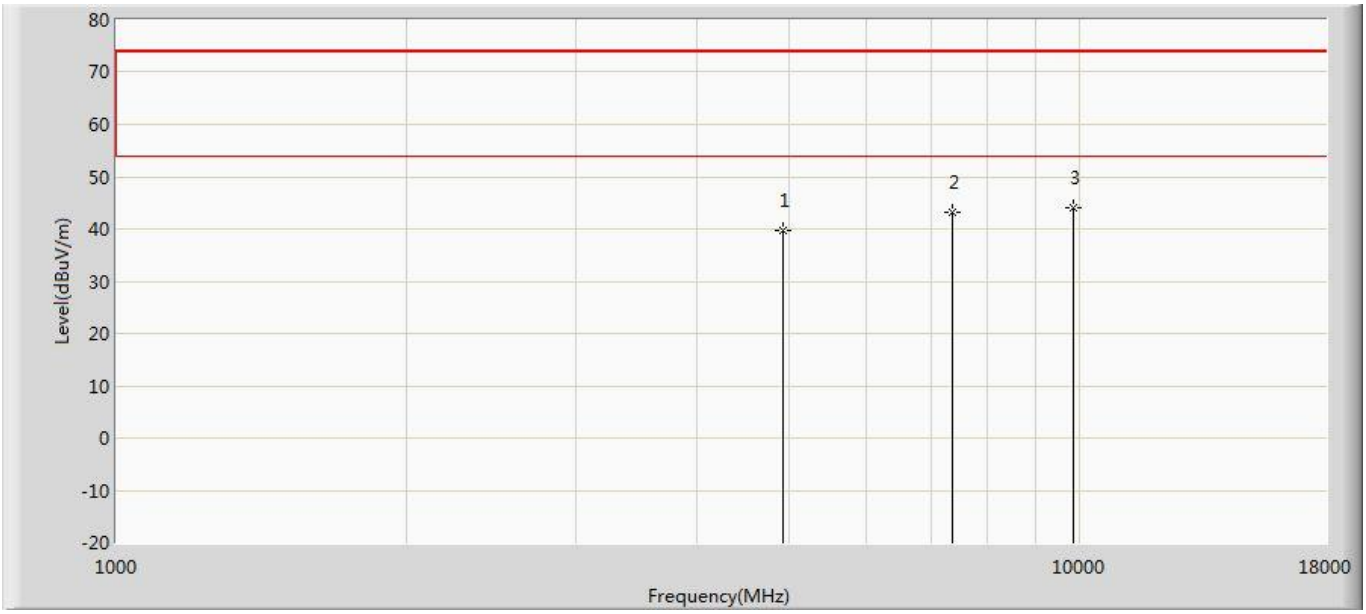
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.523	34.771	-34.477	74.000	4.752	PK
2	*	7311.000	43.677	33.965	-30.323	74.000	9.712	PK
3		9748.000	42.899	32.872	-31.101	74.000	10.026	PK

Profile: 1992128R	Page No.: 47
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2462MHz by 802.11ax(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.119	34.400	-34.881	74.000	4.719	PK
2		7386.000	43.029	33.904	-30.971	74.000	9.125	PK
3	*	9848.000	44.061	33.136	-29.939	74.000	10.925	PK

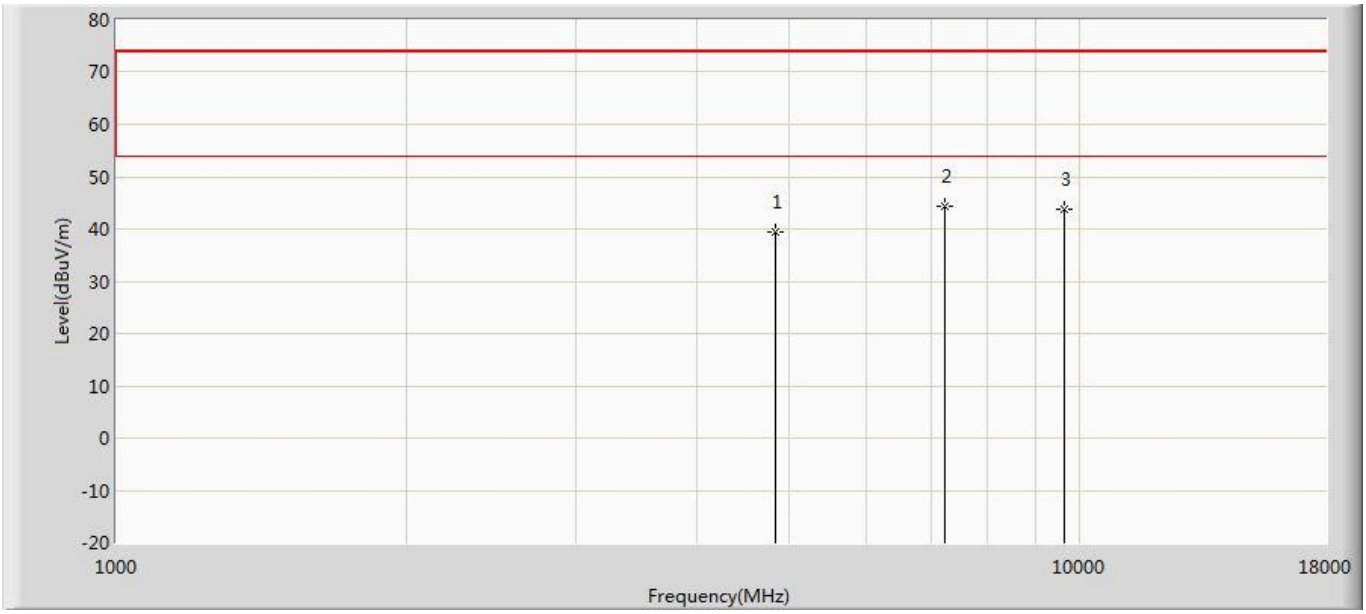
Profile: 1992128R	Page No.: 48
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2462MHz by 802.11ax(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.633	34.914	-34.367	74.000	4.719	PK
2		7386.000	43.249	34.124	-30.751	74.000	9.125	PK
3	*	9848.000	44.096	33.171	-29.904	74.000	10.925	PK

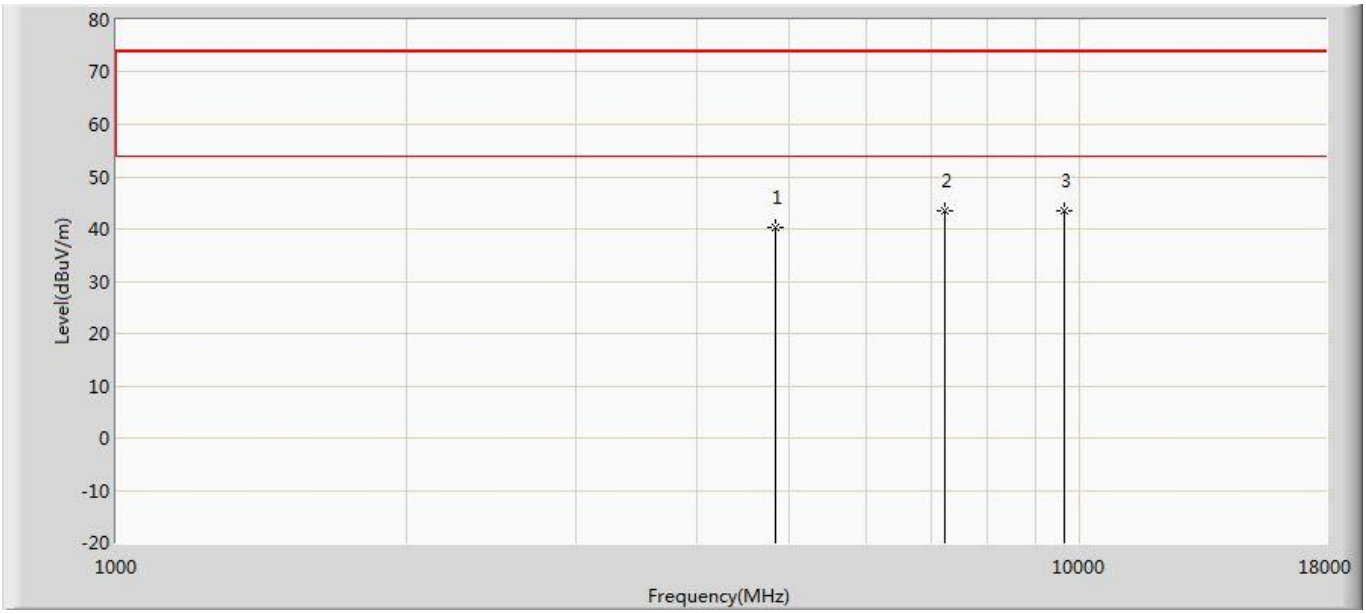
Radio 2:

Profile: 1992128R	Page No.: 25
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



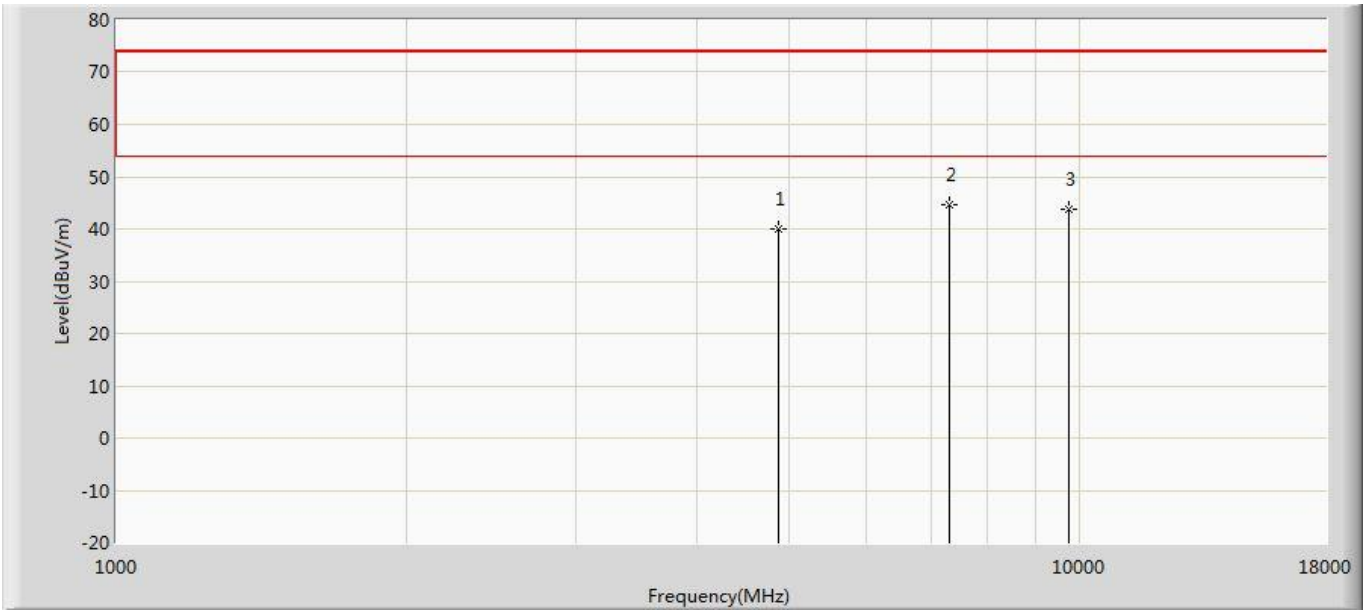
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	39.543	34.851	-34.457	74.000	4.692	PK
2	*	7236.000	44.273	34.696	-29.727	74.000	9.576	PK
3		9648.000	43.866	34.043	-30.134	74.000	9.823	PK

Profile: 1992128R	Page No.: 26
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



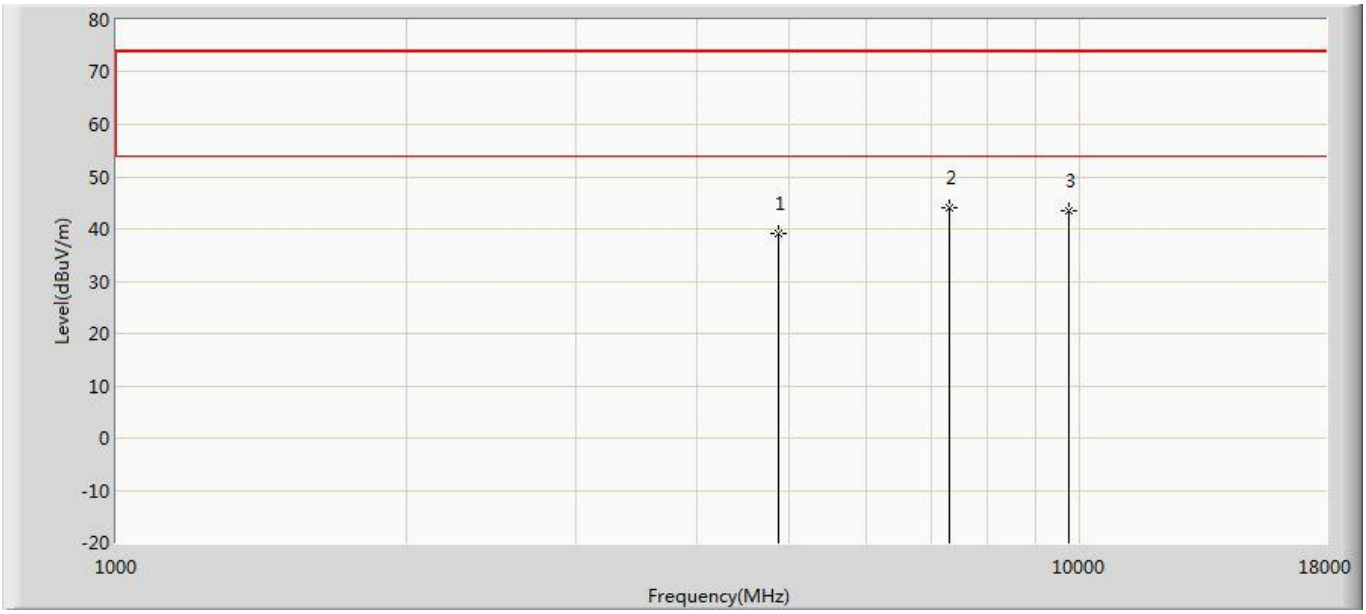
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.428	35.736	-33.572	74.000	4.692	PK
2		7236.000	43.483	33.906	-30.517	74.000	9.576	PK
3	*	9648.000	43.559	33.736	-30.441	74.000	9.823	PK

Profile: 1992128R	Page No.: 27
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



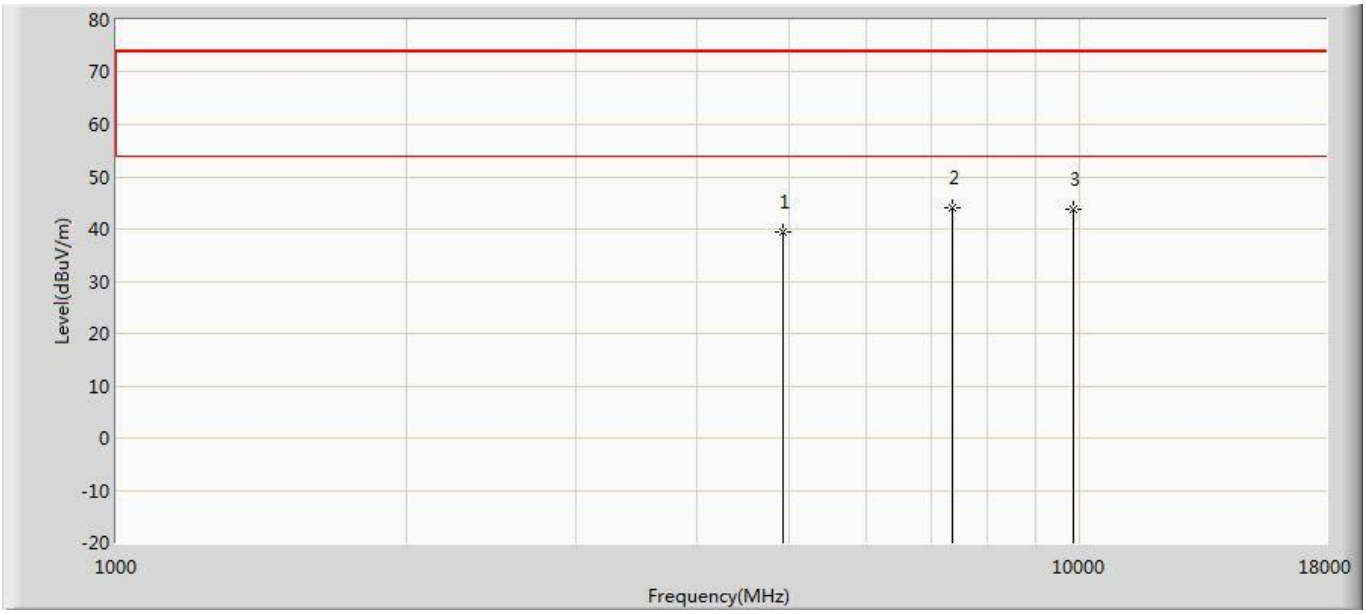
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	40.033	35.281	-33.967	74.000	4.752	PK
2	*	7311.000	44.569	34.857	-29.431	74.000	9.712	PK
3		9748.000	43.639	33.612	-30.361	74.000	10.026	PK

Profile: 1992128R	Page No.: 28
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2437MHz by 802.11b	



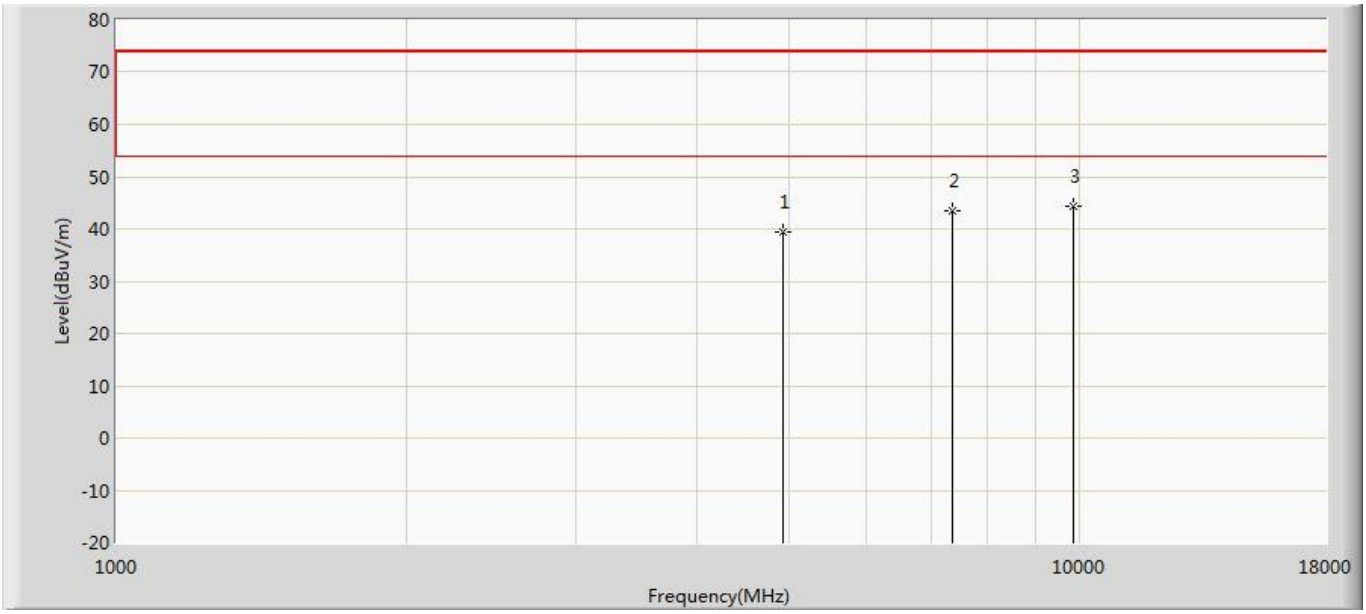
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.035	34.283	-34.965	74.000	4.752	PK
2	*	7311.000	44.040	34.328	-29.960	74.000	9.712	PK
3		9748.000	43.370	33.343	-30.630	74.000	10.026	PK

Profile: 1992128R	Page No.: 29
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



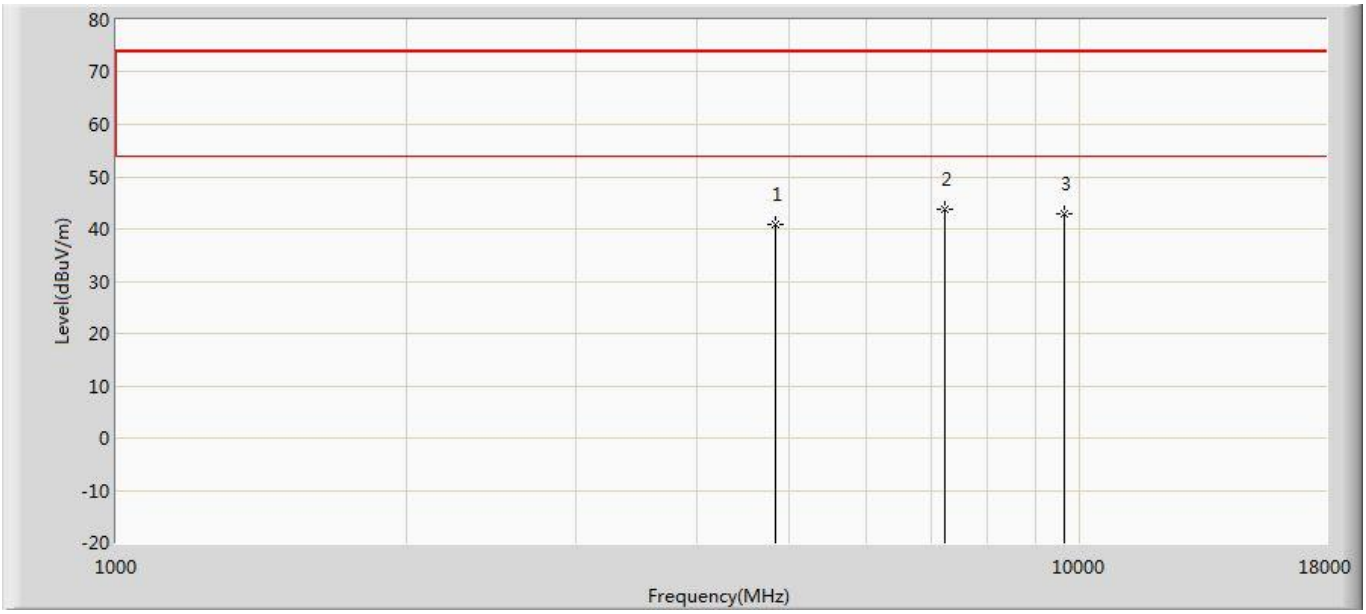
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.323	34.604	-34.677	74.000	4.719	PK
2	*	7386.000	44.170	35.045	-29.830	74.000	9.125	PK
3		9848.000	43.634	32.709	-30.366	74.000	10.925	PK

Profile: 1992128R	Page No.: 30
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2462MHz by 802.11b	



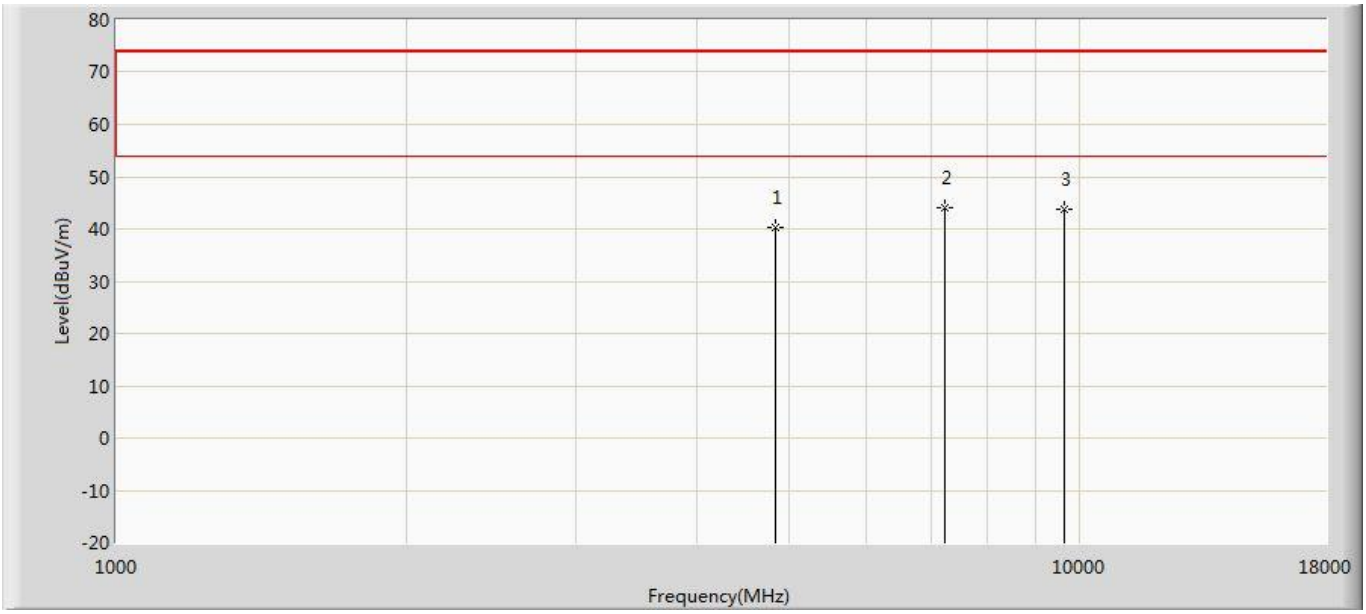
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.339	34.620	-34.661	74.000	4.719	PK
2		7386.000	43.416	34.291	-30.584	74.000	9.125	PK
3	*	9848.000	44.373	33.448	-29.627	74.000	10.925	PK

Profile: 1992128R	Page No.: 31
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



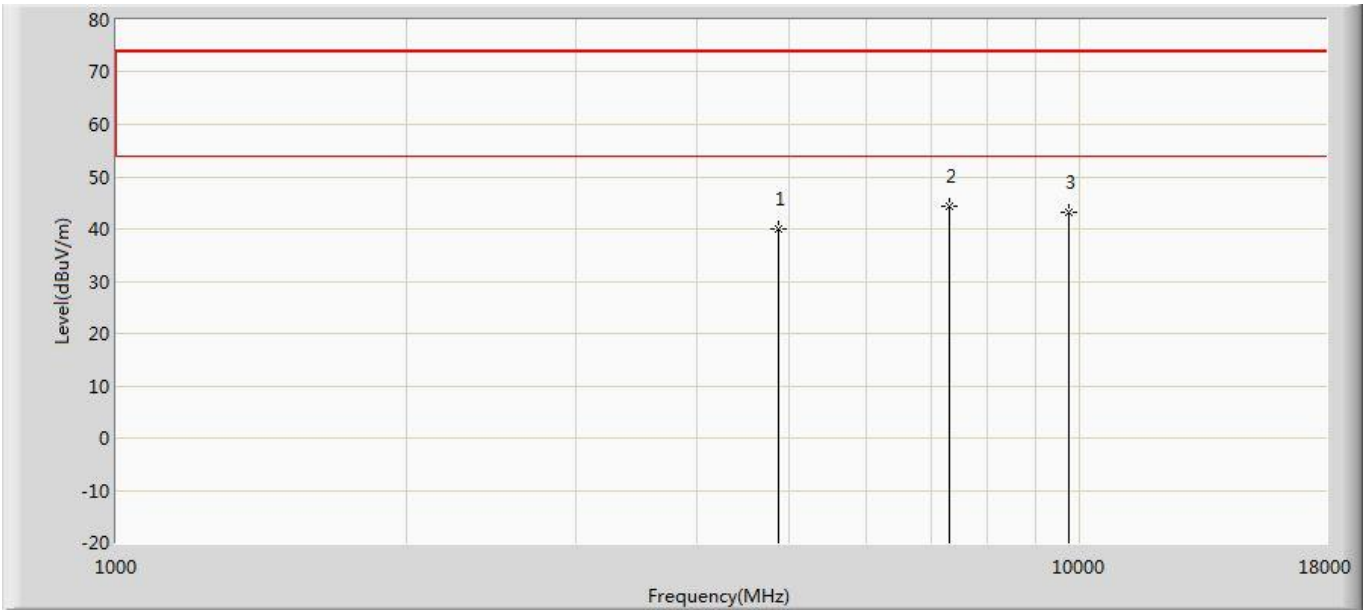
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.774	36.082	-33.226	74.000	4.692	PK
2	*	7236.000	43.688	34.111	-30.312	74.000	9.576	PK
3		9648.000	42.764	32.941	-31.236	74.000	9.823	PK

Profile: 1992128R	Page No.: 32
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2412MHz by 802.11g	



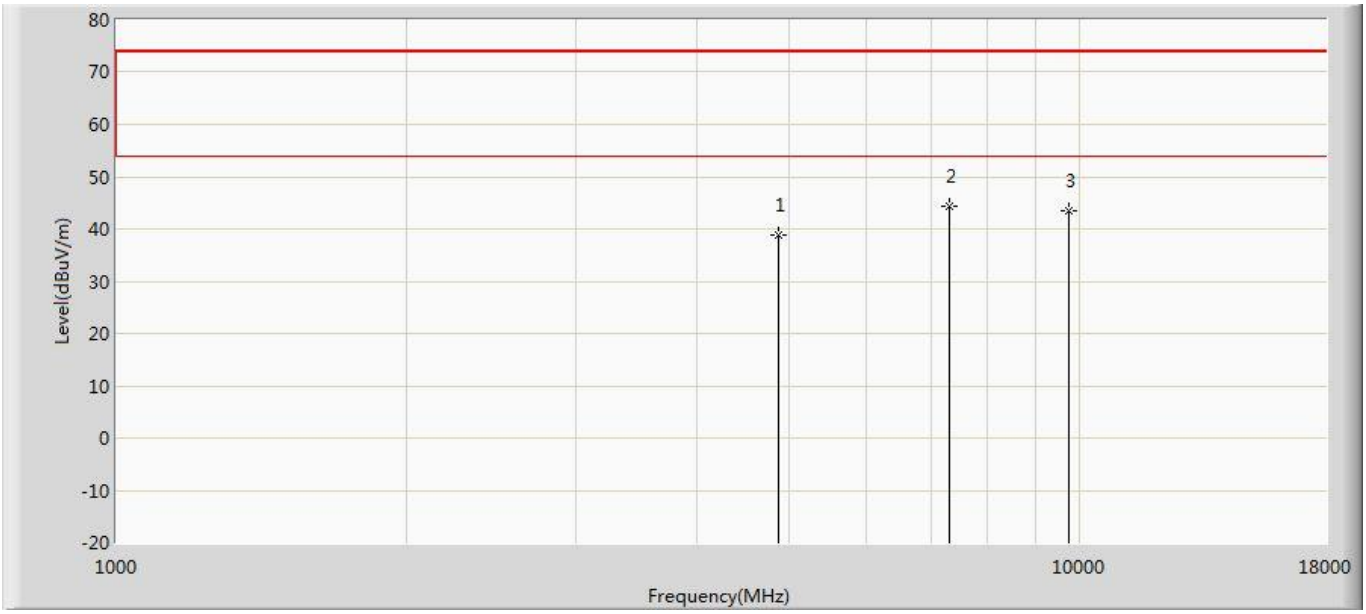
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.322	35.630	-33.678	74.000	4.692	PK
2	*	7236.000	44.200	34.623	-29.800	74.000	9.576	PK
3		9648.000	43.800	33.977	-30.200	74.000	9.823	PK

Profile: 1992128R	Page No.: 33
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



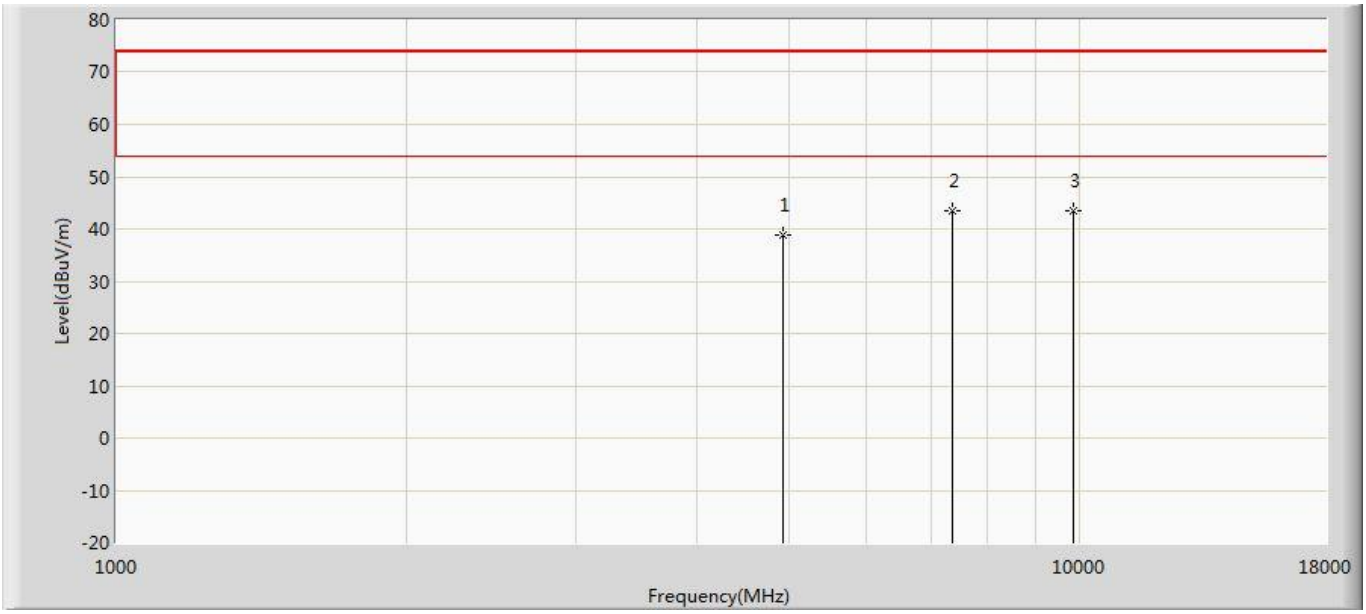
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	40.142	35.390	-33.858	74.000	4.752	PK
2	*	7311.000	44.410	34.698	-29.590	74.000	9.712	PK
3		9748.000	43.155	33.128	-30.845	74.000	10.026	PK

Profile: 1992128R	Page No.: 34
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2437MHz by 802.11g	



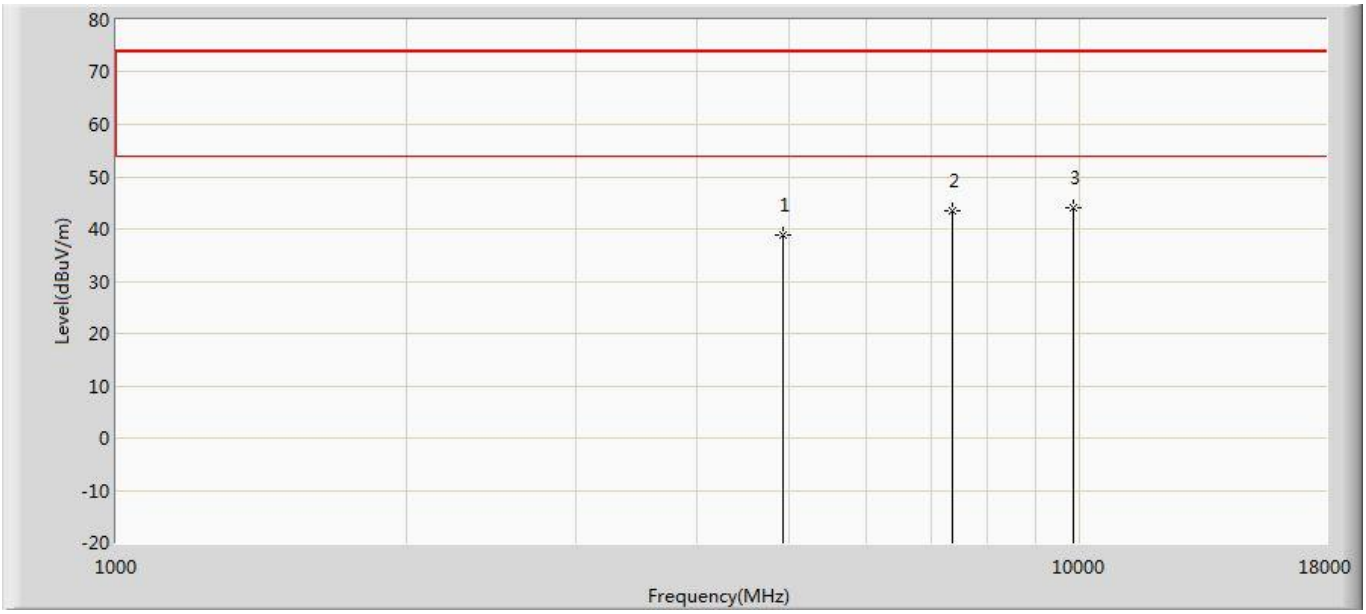
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	38.890	34.138	-35.110	74.000	4.752	PK
2	*	7311.000	44.222	34.510	-29.778	74.000	9.712	PK
3		9748.000	43.457	33.430	-30.543	74.000	10.026	PK

Profile: 1992128R	Page No.: 35
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



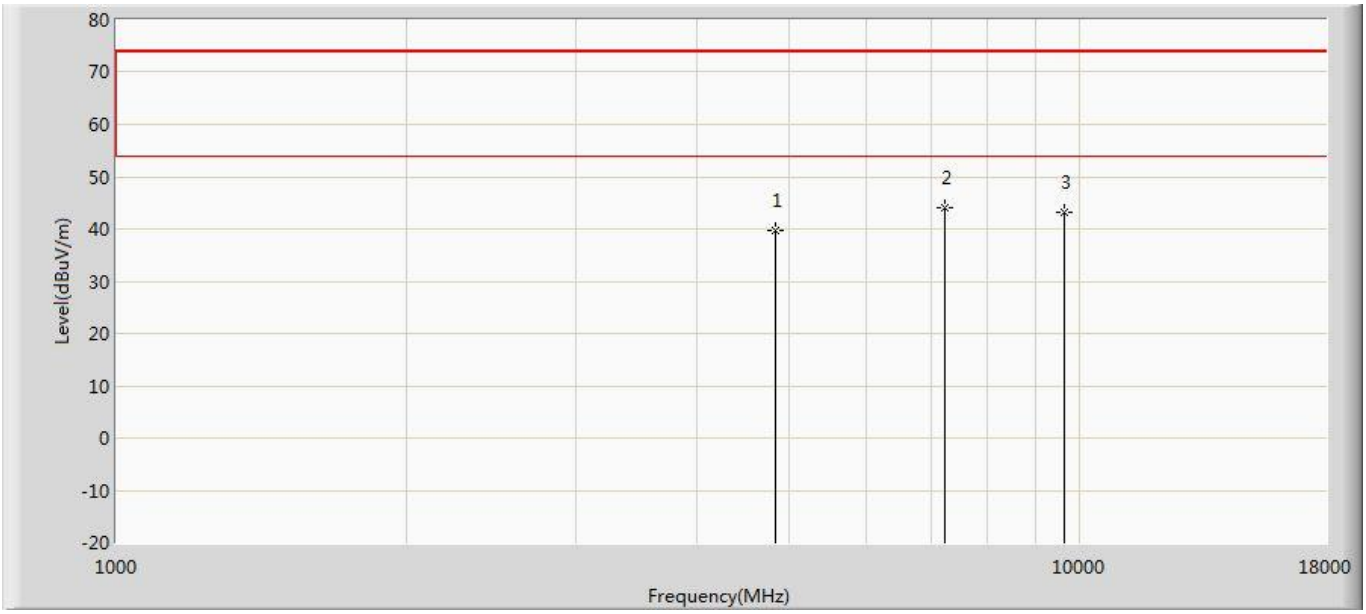
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	38.838	34.119	-35.162	74.000	4.719	PK
2		7386.000	43.335	34.210	-30.665	74.000	9.125	PK
3	*	9848.000	43.405	32.480	-30.595	74.000	10.925	PK

Profile: 1992128R	Page No.: 36
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2462MHz by 802.11g	



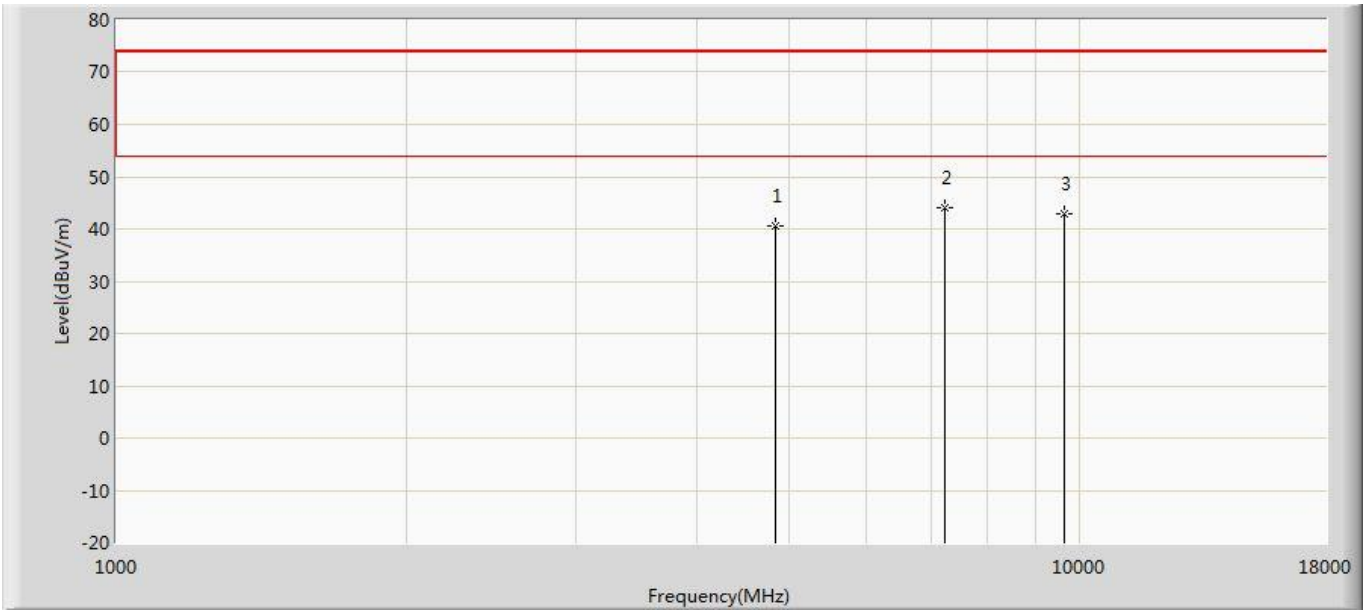
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	38.867	34.148	-35.133	74.000	4.719	PK
2		7386.000	43.377	34.252	-30.623	74.000	9.125	PK
3	*	9848.000	44.120	33.195	-29.880	74.000	10.925	PK

Profile: 1992128R	Page No.: 37
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



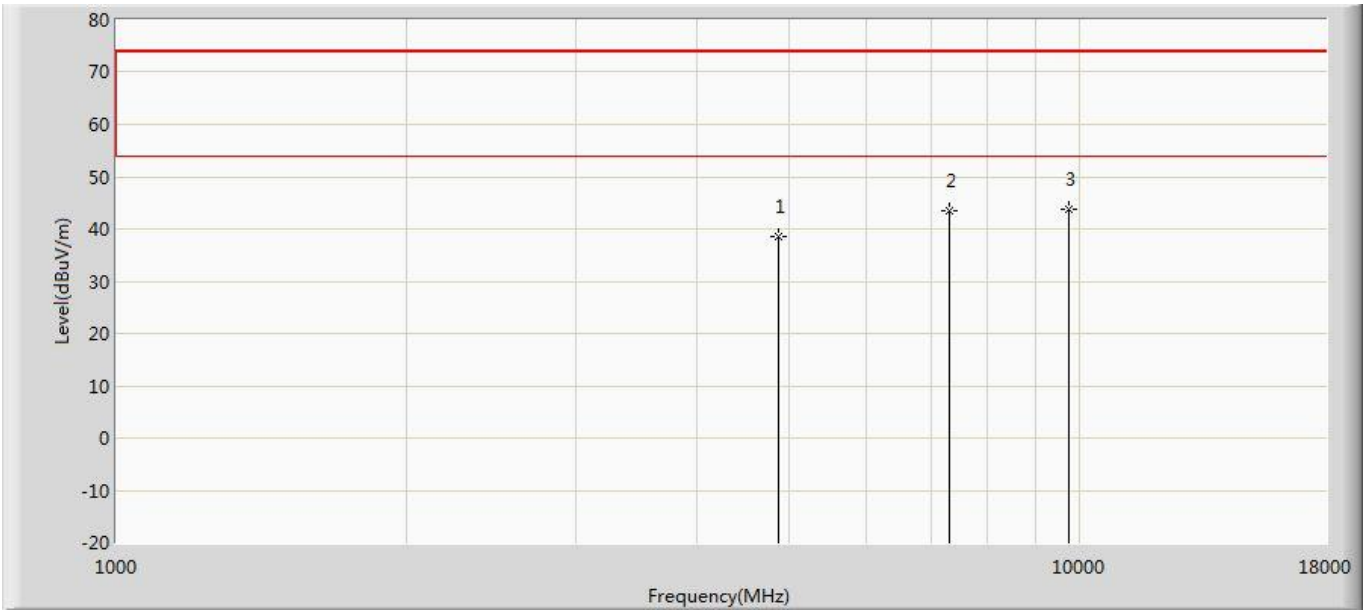
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	39.619	34.927	-34.381	74.000	4.692	PK
2	*	7236.000	44.010	34.433	-29.990	74.000	9.576	PK
3		9648.000	43.133	33.310	-30.867	74.000	9.823	PK

Profile: 1992128R	Page No.: 38
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2412MHz by 802.11n(20MHz)	



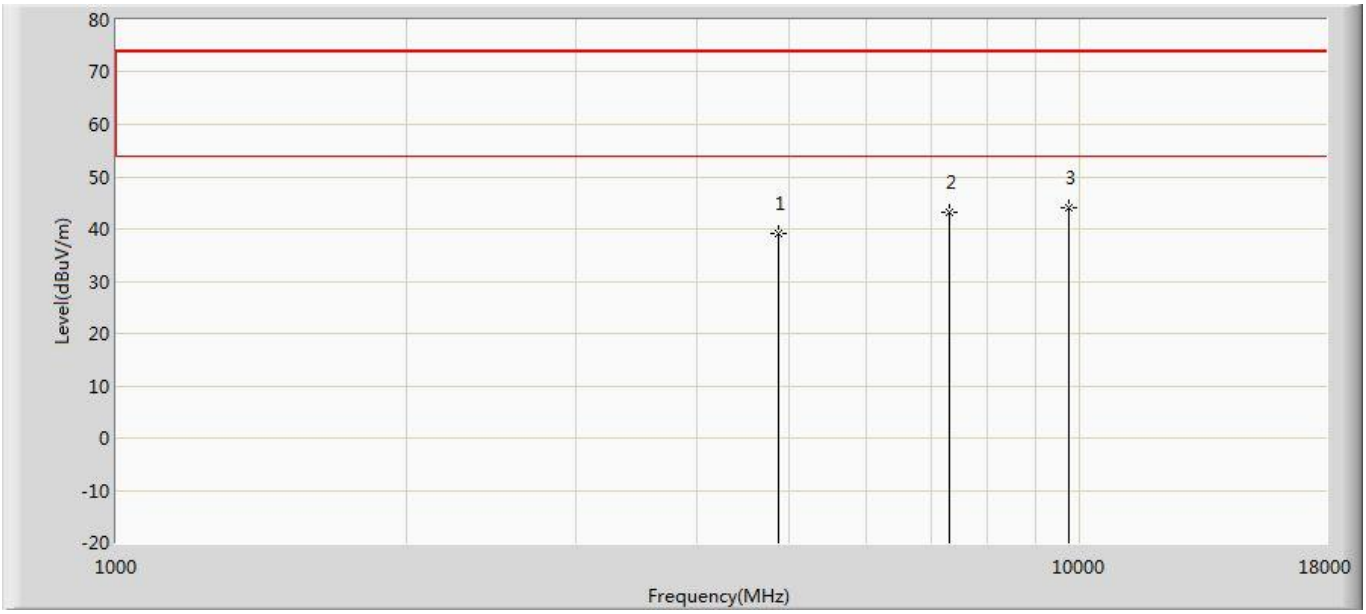
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	40.438	35.746	-33.562	74.000	4.692	PK
2	*	7236.000	43.915	34.338	-30.085	74.000	9.576	PK
3		9648.000	42.932	33.109	-31.068	74.000	9.823	PK

Profile: 1992128R	Page No.: 39
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



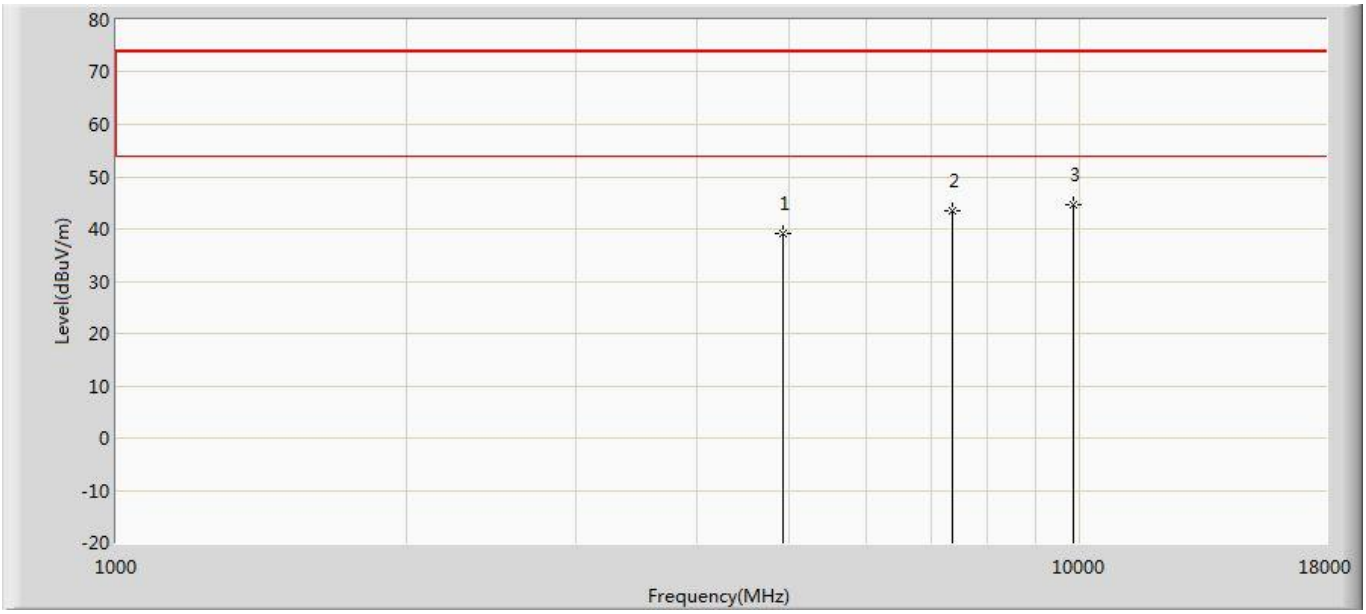
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	38.596	33.844	-35.404	74.000	4.752	PK
2		7311.000	43.388	33.676	-30.612	74.000	9.712	PK
3	*	9748.000	43.740	33.713	-30.260	74.000	10.026	PK

Profile: 1992128R	Page No.: 40
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2437MHz by 802.11n(20MHz)	



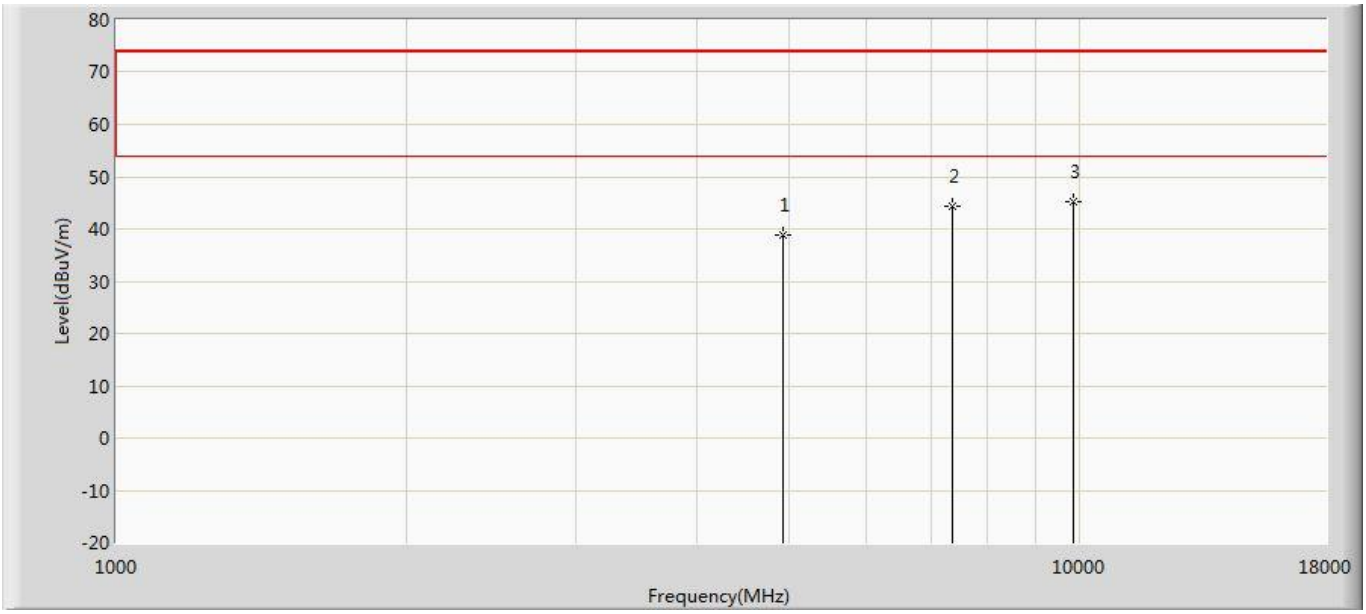
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.053	34.301	-34.947	74.000	4.752	PK
2		7311.000	43.118	33.406	-30.882	74.000	9.712	PK
3	*	9748.000	44.076	34.049	-29.924	74.000	10.026	PK

Profile: 1992128R	Page No.: 41
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



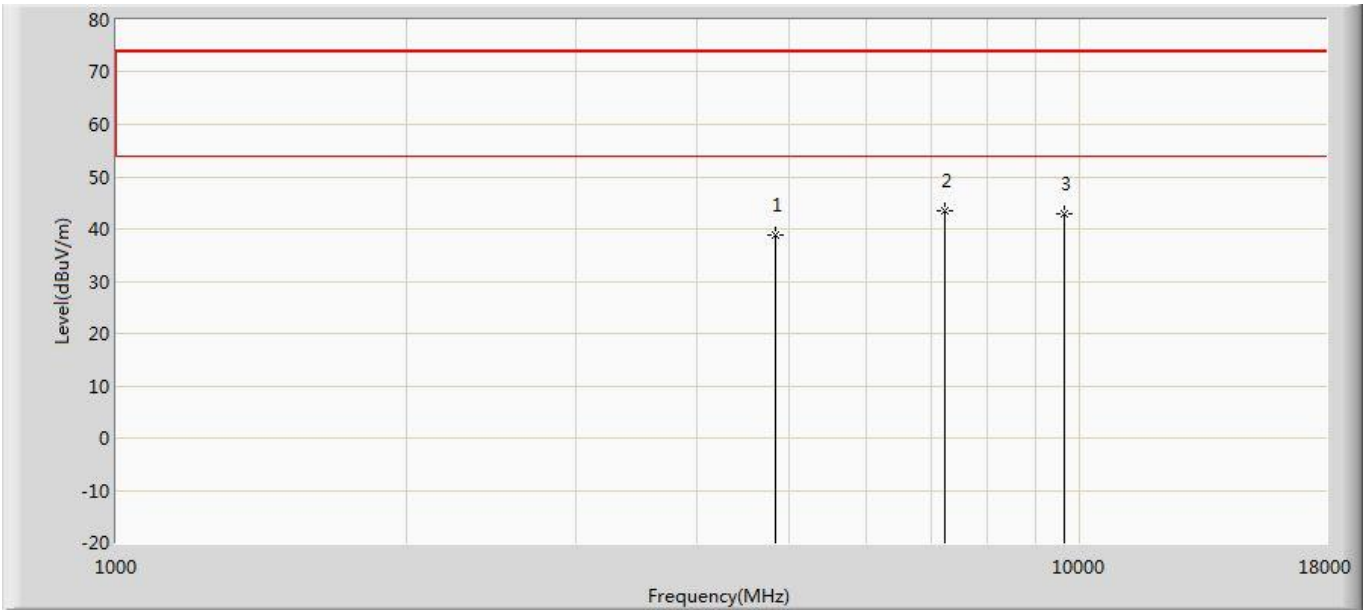
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.176	34.457	-34.824	74.000	4.719	PK
2		7386.000	43.584	34.459	-30.416	74.000	9.125	PK
3	*	9848.000	44.731	33.806	-29.269	74.000	10.925	PK

Profile: 1992128R	Page No.: 42
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2462MHz by 802.11n(20MHz)	



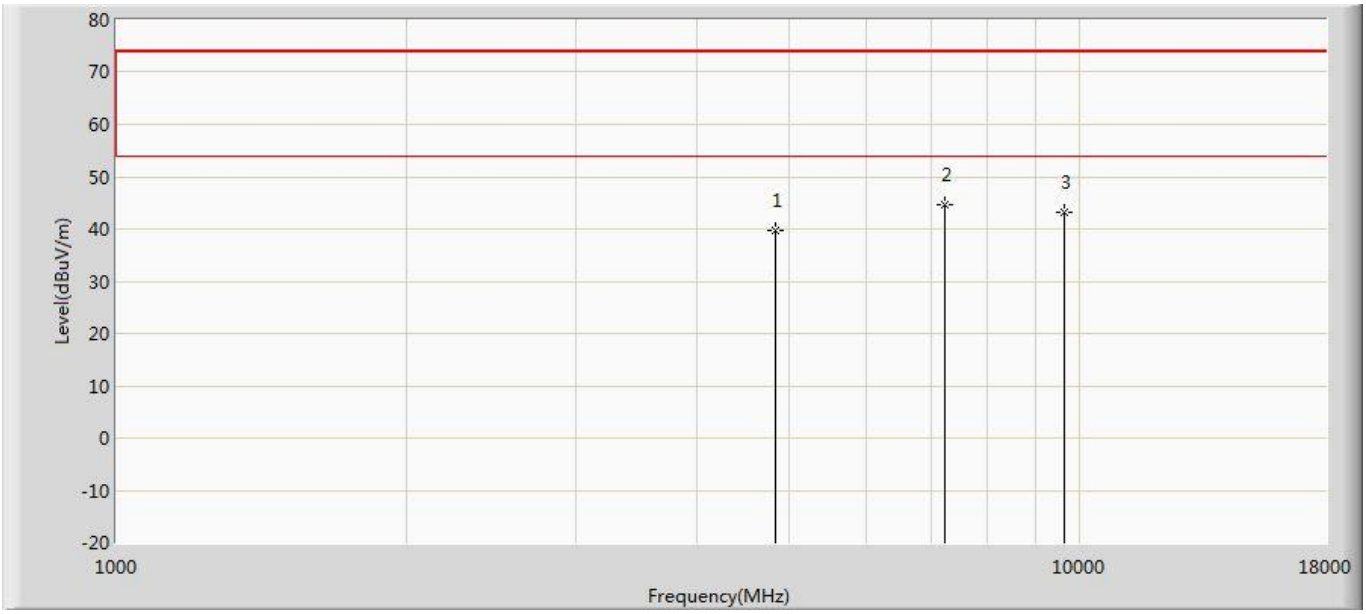
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	38.921	34.202	-35.079	74.000	4.719	PK
2		7386.000	44.337	35.212	-29.663	74.000	9.125	PK
3	*	9848.000	45.108	34.183	-28.892	74.000	10.925	PK

Profile: 1992128R	Page No.: 43
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2412MHz by 802.11ax(20MHz)	



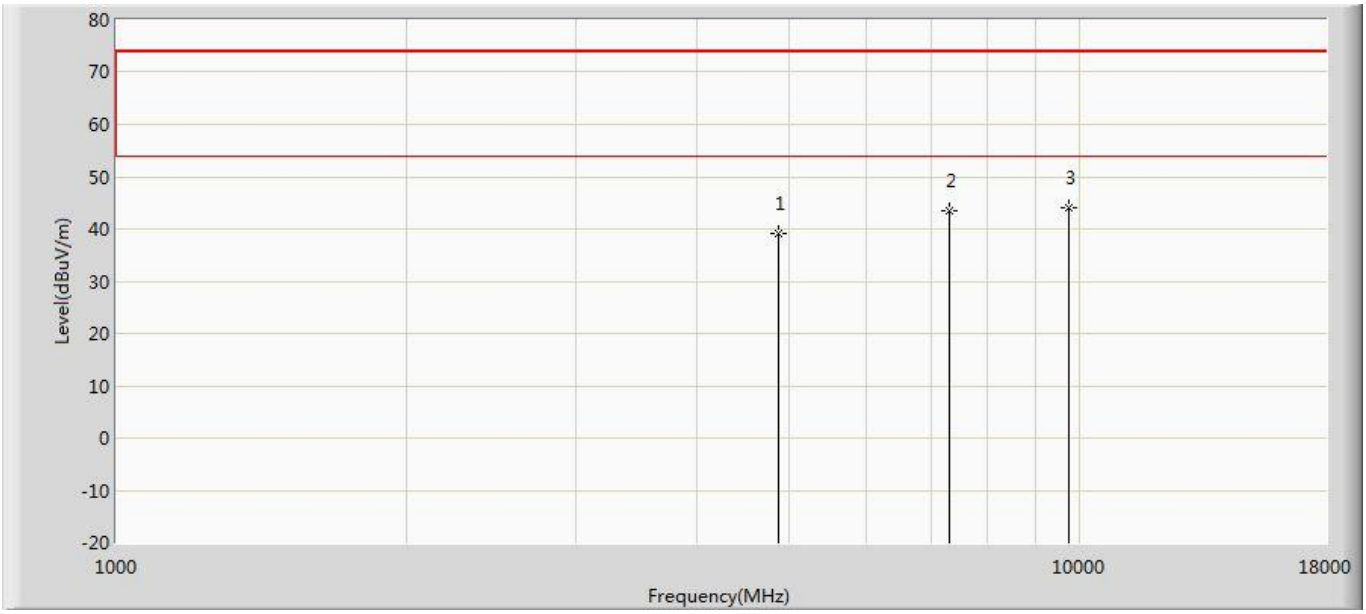
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	38.901	34.209	-35.099	74.000	4.692	PK
2	*	7236.000	43.560	33.983	-30.440	74.000	9.576	PK
3		9648.000	42.969	33.146	-31.031	74.000	9.823	PK

Profile: 1992128R	Page No.: 44
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2412MHz by 802.11ax(20MHz)	



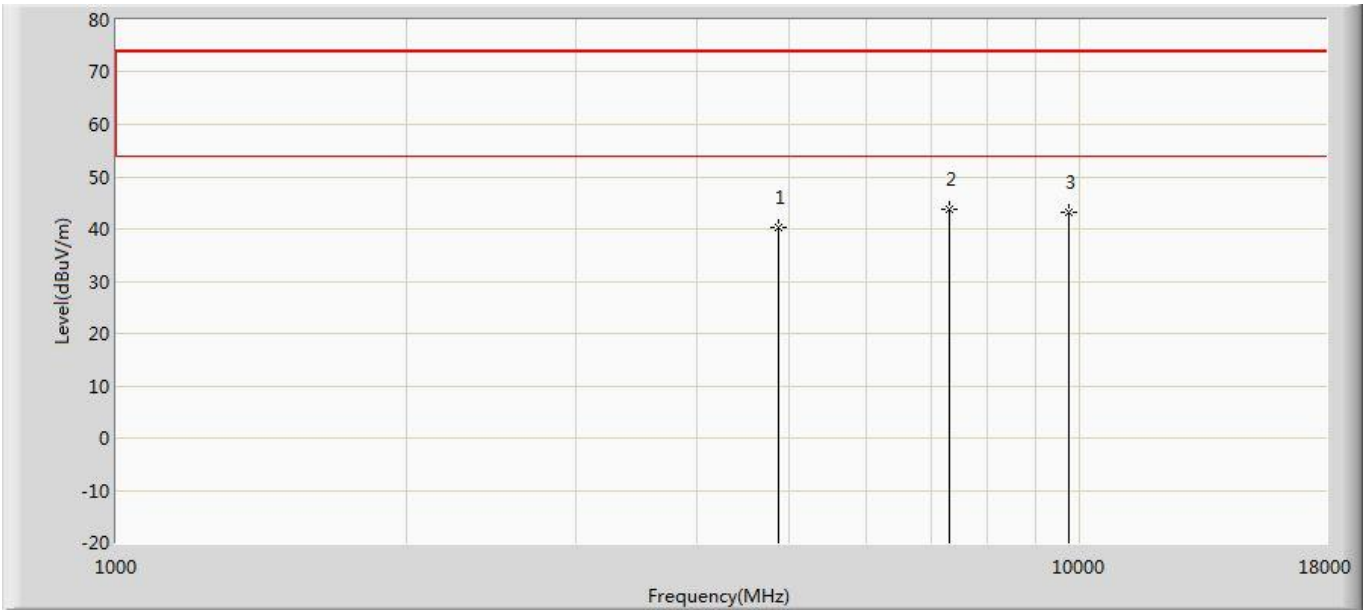
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	39.802	35.110	-34.198	74.000	4.692	PK
2	*	7236.000	44.504	34.927	-29.496	74.000	9.576	PK
3		9648.000	43.099	33.276	-30.901	74.000	9.823	PK

Profile: 1992128R	Page No.: 45
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11ax(20MHz)	



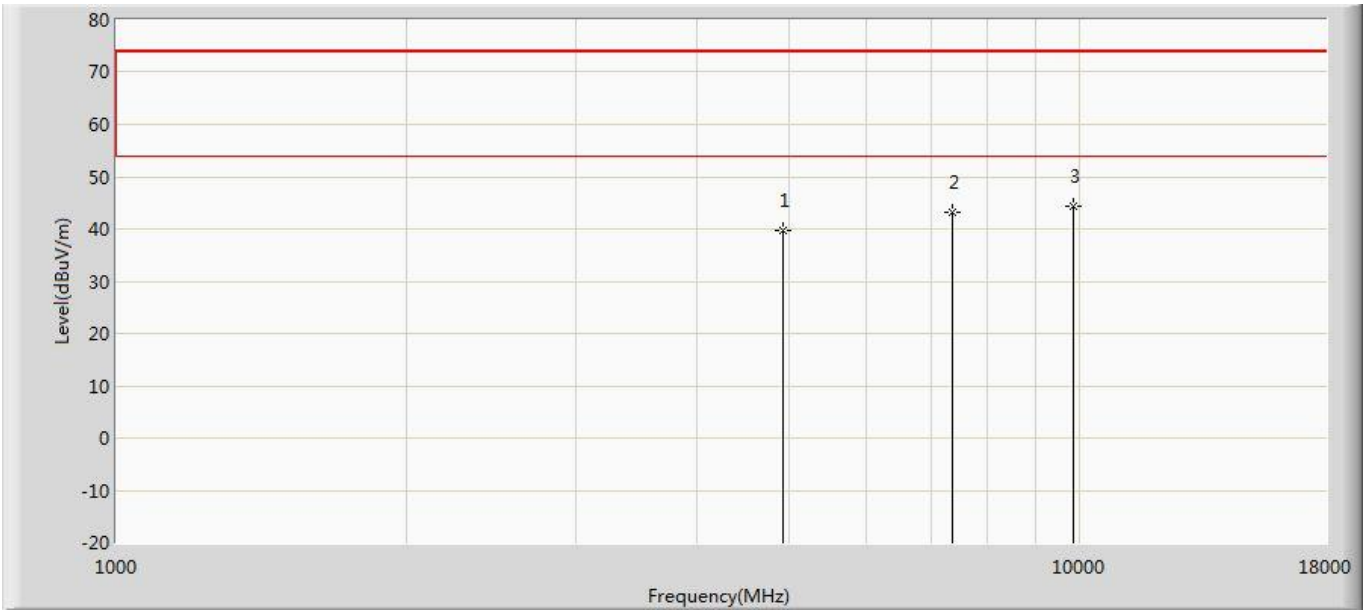
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	39.058	34.306	-34.942	74.000	4.752	PK
2		7311.000	43.560	33.848	-30.440	74.000	9.712	PK
3	*	9748.000	44.125	34.098	-29.875	74.000	10.026	PK

Profile: 1992128R	Page No.: 46
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2437MHz by 802.11ax(20MHz)	



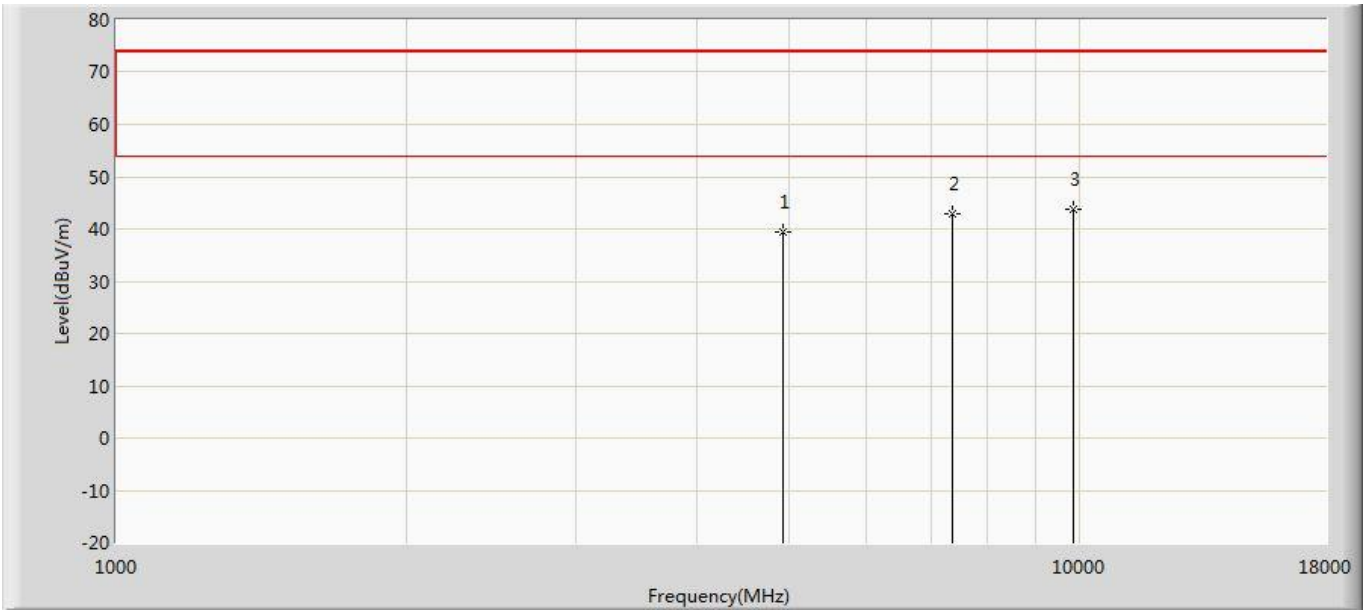
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	40.351	35.599	-33.649	74.000	4.752	PK
2	*	7311.000	43.650	33.938	-30.350	74.000	9.712	PK
3		9748.000	43.077	33.050	-30.923	74.000	10.026	PK

Profile: 1992128R	Page No.: 47
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2462MHz by 802.11ax(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.721	35.002	-34.279	74.000	4.719	PK
2		7386.000	43.241	34.116	-30.759	74.000	9.125	PK
3	*	9848.000	44.220	33.295	-29.780	74.000	10.925	PK

Profile: 1992128R	Page No.: 48
Engineer: YULIU	
Site: AC5	Time: 2019/11/14 - 02:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AP410C	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2462MHz by 802.11ax(20MHz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.497	34.778	-34.503	74.000	4.719	PK
2		7386.000	42.837	33.712	-31.163	74.000	9.125	PK
3	*	9848.000	43.790	32.865	-30.210	74.000	10.925	PK

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

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.

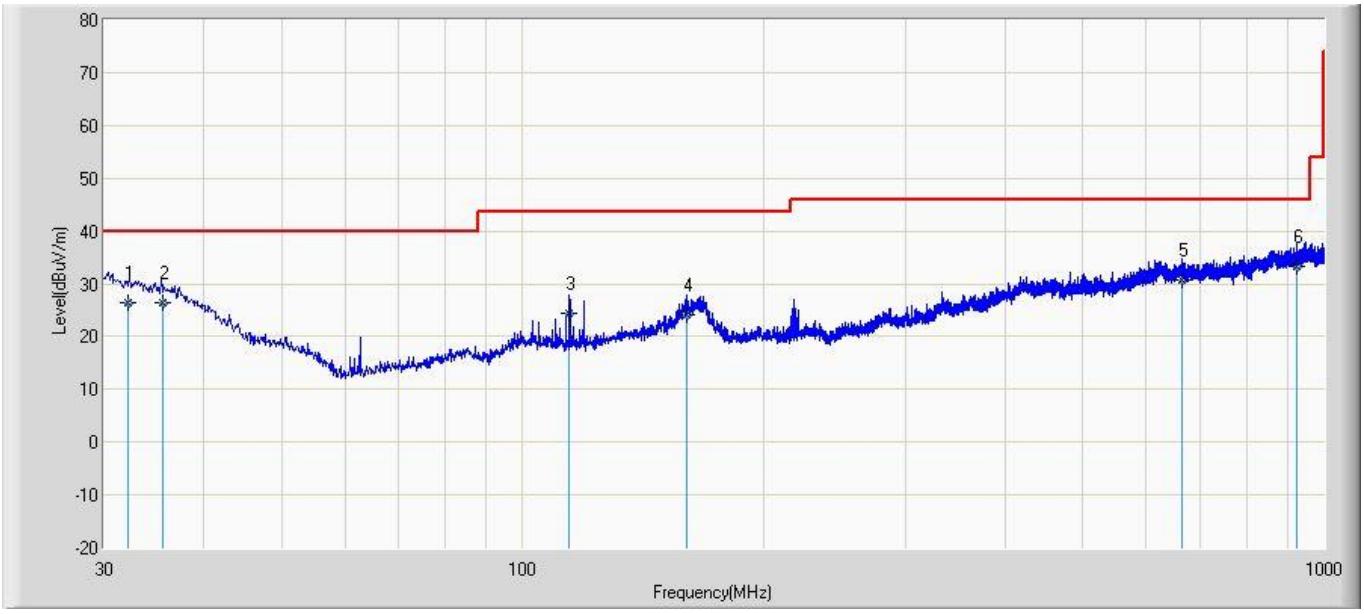
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

4. As the radiated emission was performed, so conducted emission was not tested.

5. The data was too large so was showed in below attached files.

The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2019/11/21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Simultaneous transmission with 2.4G WIFI +5G WIFI	

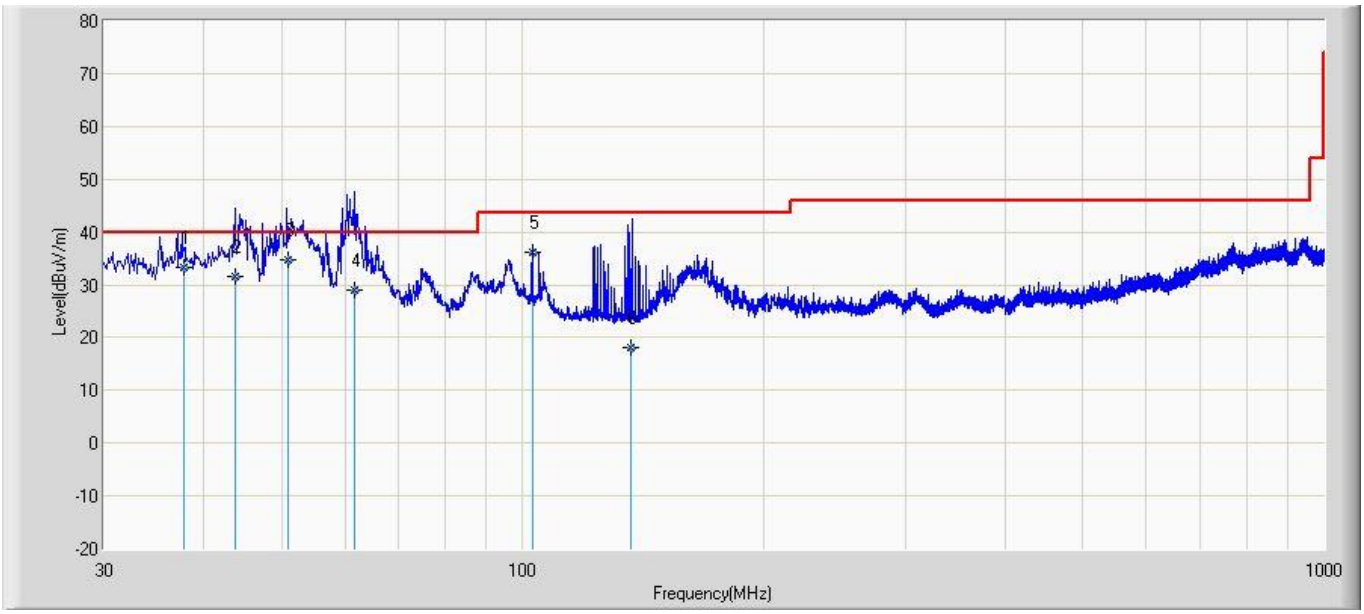


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		32.104	26.446	-0.300	-13.554	40.000	20.281	6.465	0.000	100	0	QP
2		35.463	26.378	0.700	-13.622	40.000	19.184	6.494	0.000	100	121	QP
3		114.365	24.431	8.600	-19.069	43.500	8.911	6.920	0.000	100	310	QP
4		160.234	24.114	6.800	-19.386	43.500	10.187	7.127	0.000	100	144	QP
5		663.850	30.768	1.300	-15.232	46.000	20.883	8.585	0.000	166	360	QP
6	*	924.362	33.239	0.900	-12.761	46.000	23.189	9.150	0.000	100	221	QP

Note:

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

Site: AC2	Time: 2019/11/21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Simultaneous transmission with 2.4G WIFI +5G WIFI	



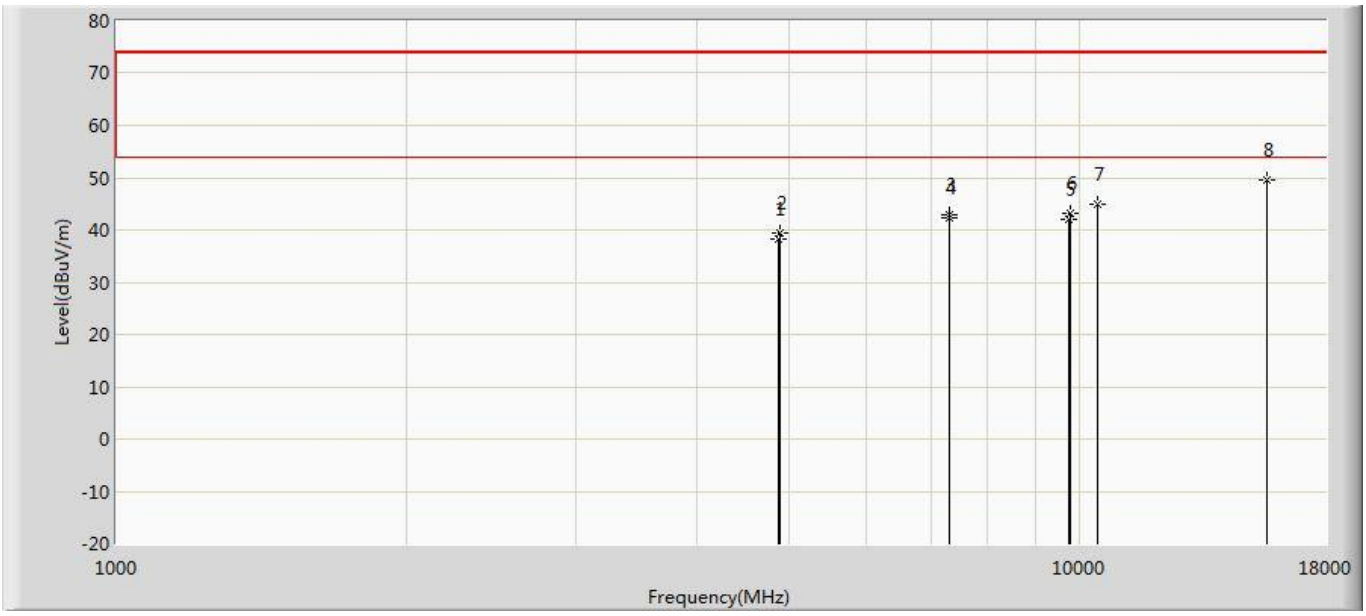
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		37.831	33.304	12.200	-6.696	40.000	14.594	6.511	0.000	100	306	QP
2		43.837	31.557	13.900	-8.443	40.000	11.104	6.552	0.000	100	232	QP
3	*	50.867	34.721	16.700	-5.279	40.000	11.429	6.592	0.000	100	137	QP
4		61.647	29.018	13.100	-10.982	40.000	9.262	6.656	0.000	100	186	QP
5		102.801	36.075	14.000	-7.425	43.500	15.208	6.867	0.000	100	0	QP
6		136.607	18.142	-2.100	-25.358	43.500	13.221	7.021	0.000	200	217	QP

Note:

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

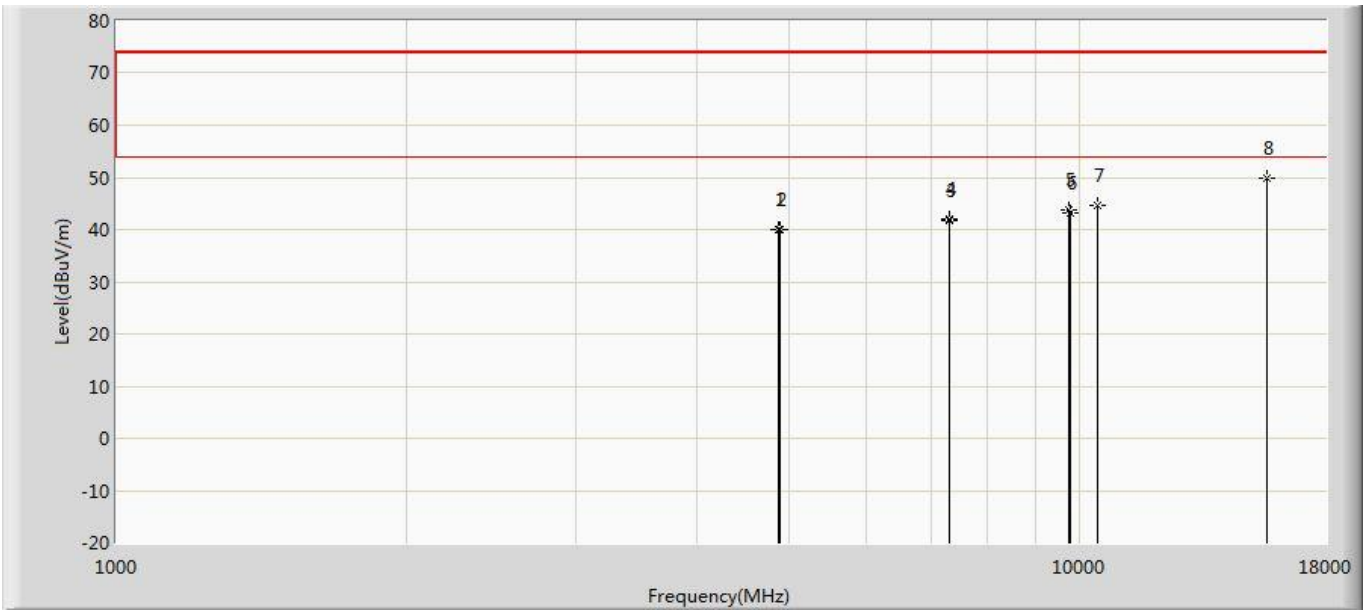
The worst case of Simultaneous Radiated Emission:

Engineer: Simon	
Site: AC5	Time: 2019/11/19
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: Simultaneous transmission with 2.4G WIFI +5G WIFI	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	38.212	33.365	-35.788	74.000	4.846	PK
2		4880.000	39.457	34.678	-34.543	74.000	4.778	PK
3		7311.000	42.834	34.843	-31.166	74.000	7.991	PK
4		7320.000	42.419	34.349	-31.581	74.000	8.071	PK
5		9748.000	42.062	32.357	-31.938	74.000	9.705	PK
6		9760.000	43.252	33.348	-30.748	74.000	9.904	PK
7		10440.000	44.864	32.513	-29.136	74.000	12.351	PK
8	*	15660.000	49.517	31.990	-24.483	74.000	17.527	PK

Engineer: Simon	
Site: AC5	Time: 2019/11/19
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: Simultaneous transmission with 2.4G WIFI +5G WIFI	



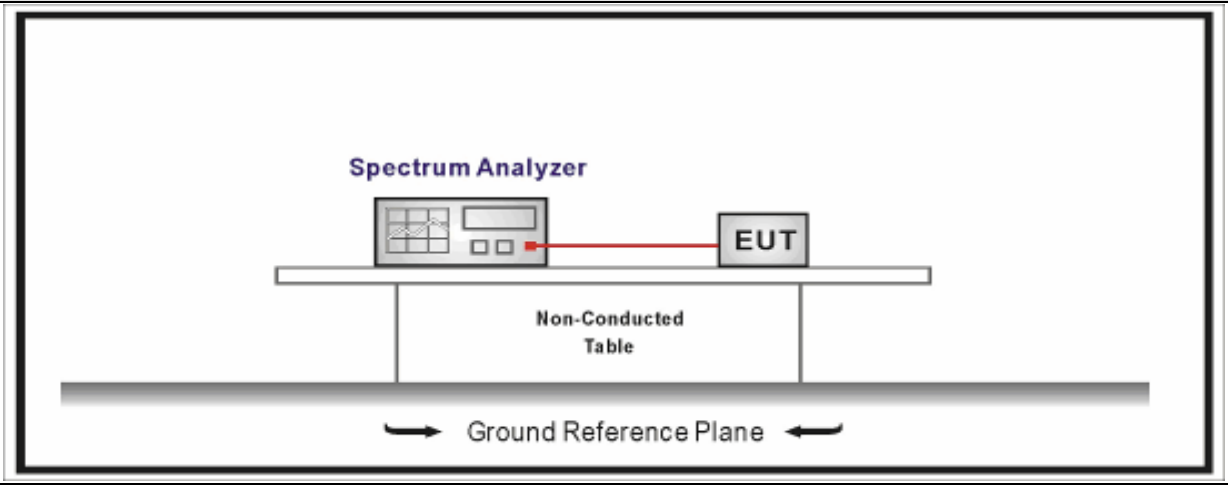
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	40.134	35.287	-33.866	74.000	4.846	PK
2		4880.000	39.918	35.139	-34.082	74.000	4.778	PK
3		7311.000	41.825	33.834	-32.175	74.000	7.991	PK
4		7320.000	42.024	33.954	-31.976	74.000	8.071	PK
5		9748.000	43.739	34.034	-30.261	74.000	9.705	PK
6		9760.000	43.207	33.303	-30.793	74.000	9.904	PK
7		10440.000	44.715	32.364	-29.285	74.000	12.351	PK
8	*	15660.000	49.772	32.245	-24.228	74.000	17.527	PK

5. Emissions in non-restricted frequency bands

5.1. Test Equipment

Emissions in non-restricted frequency bands / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2021.07.11	2022.07.10
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2021.08.12	2022.08.11
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2021.07.11	2022.07.10
Signal analyzer	R&S	FSV30	26/Apr/85	2021.11.18	2022.11.17
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2021.08.04	2022.08.03
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

5.2. Test Setup

Emissions in non-restricted frequency bands


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)

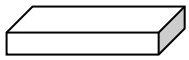
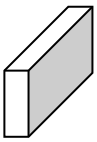
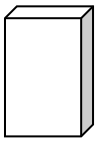
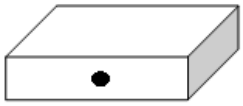
Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

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><th>Item</th><th colspan="4">Emissions in non-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 1~4</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>
<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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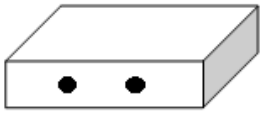
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

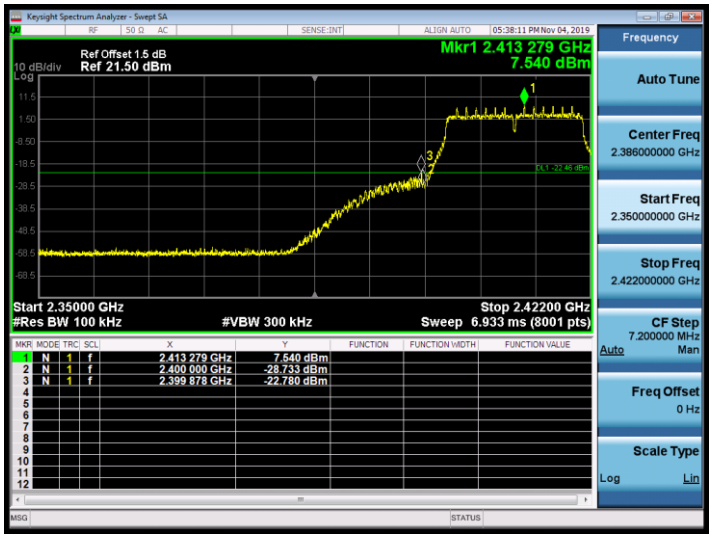
5.6. Test Result

Product Name	:	Wireless Access Point	Power	:	AC 120V/60Hz
Test Mode	:	Mode 1~4(Radio 1)	Test Site	:	TR8
Test Date	:	2019.11.09	Test Engineer	:	Eric

Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	15.013	2398.501	-21.815	36.828	>30	Pass
1	11	2462	15.172	2554.194	-54.738	69.910	>30	Pass
2	01	2412	7.562	2399.176	-25.055	32.617	>30	Pass
2	11	2462	8.376	2577.948	-55.246	63.622	>30	Pass
3	01	2412	7.540	2399.878	-22.780	30.320	>30	Pass
3	11	2462	8.218	2532.845	-54.427	62.645	>30	Pass
4	01	2412	7.533	2399.653	-22.933	30.466	>30	Pass
4	11	2462	8.229	2586.014	-53.611	61.840	>30	Pass

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

Mode 3 CH01(2412MHz)

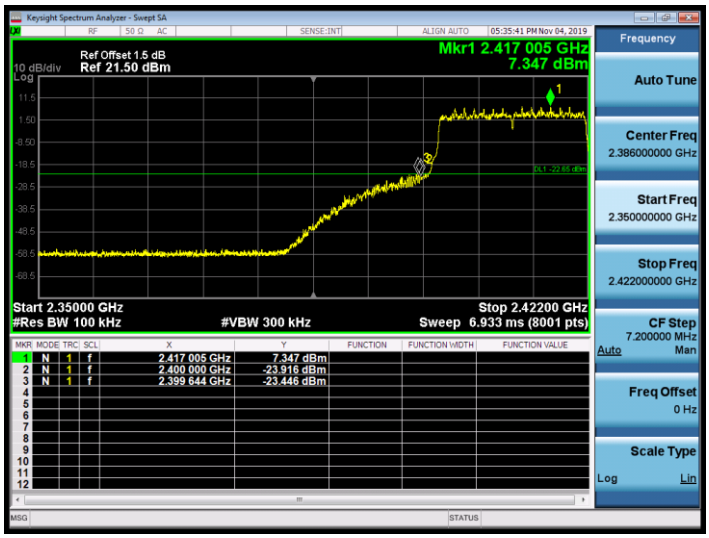


Product Name	:	Wireless Access Point	Power	:	AC 120V/60Hz
Test Mode	:	Mode 1~4(Radio 2)	Test Site	:	TR8
Test Date	:	2019.11.09	Test Engineer	:	Eric

Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	14.900	2398.519	-22.144	37.044	>30	Pass
1	11	2462	15.067	2519.266	-55.876	70.943	>30	Pass
2	01	2412	7.558	2399.176	-25.376	32.934	>30	Pass
2	11	2462	8.340	2536.491	-55.717	64.057	>30	Pass
3	01	2412	7.612	2399.383	-24.098	31.710	>30	Pass
3	11	2462	8.292	2578.669	-55.245	63.537	>30	Pass
4	01	2412	7.347	2399.644	-23.446	30.793	>30	Pass
4	11	2462	8.129	2503.467	-56.196	64.325	>30	Pass

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

Mode 4 CH01(2412MHz)

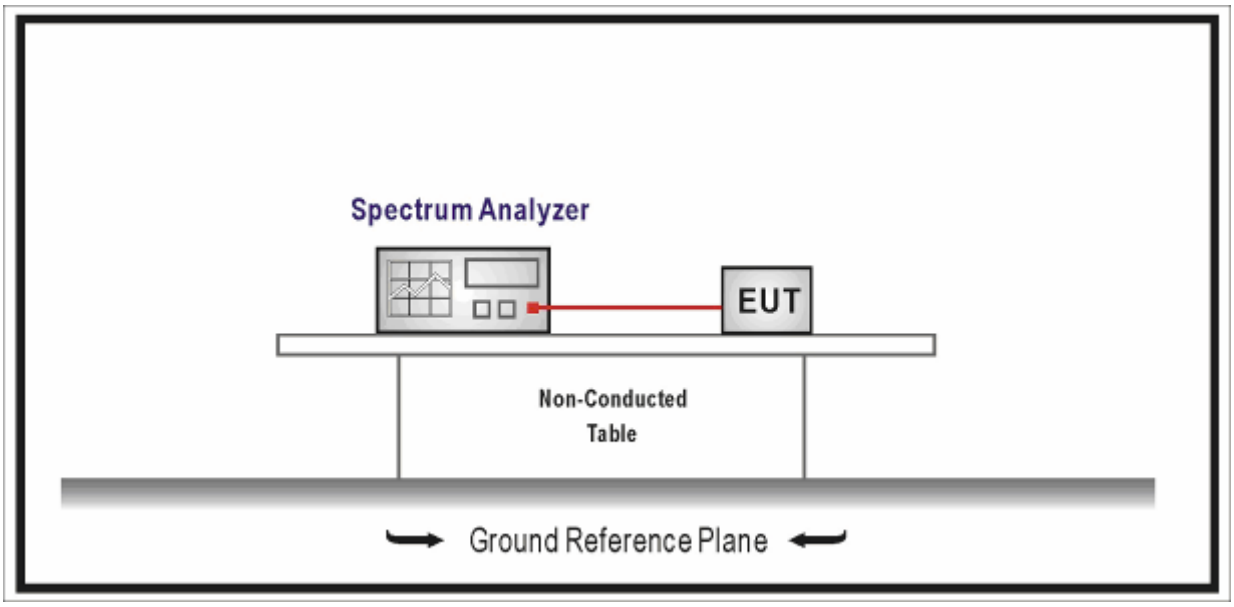


6. Band Edge

6.1. Test Equipment

Emissions in non-restricted frequency bands / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2021.07.11	2022.07.10
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2021.08.12	2022.08.11
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2021.07.11	2022.07.10
Signal analyzer	R&S	FSV30	26/Apr/85	2021.11.18	2022.11.17
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2021.08.04	2022.08.03
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

6.2. Test Setup



6.3. Limit

Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB μ V/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	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>
<tr><th>Item</th><th colspan="4">Radiated Emission Band Edge</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>
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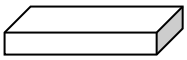
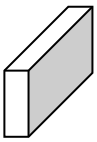
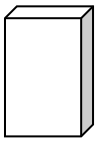
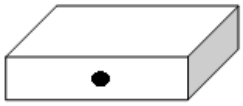
<tr><td>Test mode</td><td colspan="4">Mode 1~4</td></tr>
<tr><td rowspan="13">Test method</td><td>☐</td><td colspan="3">Radiated</td></tr>
<tr><td rowspan="3"></td><td>X Axis</td><td>Y Axis</td><td>Z Axis</td></tr>
<tr><td>  </td><td>  </td><td>  </td></tr>
<tr><td>Worst Axis ☐</td><td>Worst Axis ☐</td><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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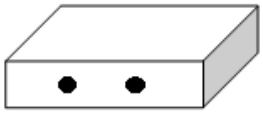
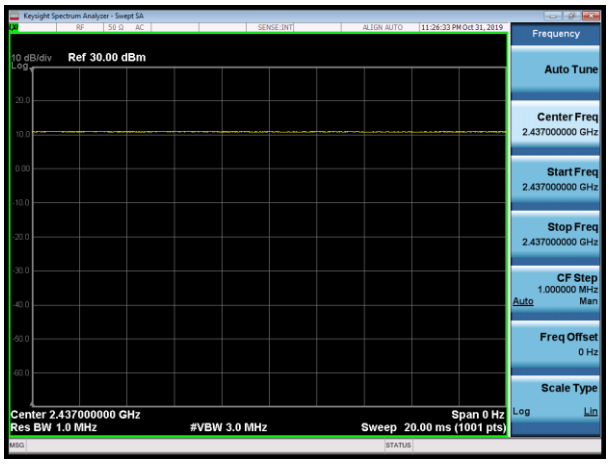
<tr><td></td><td colspan="3">  </td></tr>
<tr><td>☐</td><td>Chain 1</td><td>Chain 2</td><td>Chain 3</td></tr>
<tr><td></td><td colspan="3">  </td></tr>
</table>

6.6. Duty Cycle

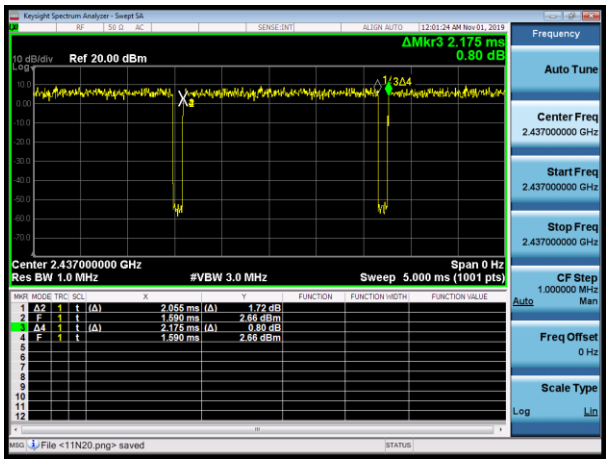
Radio 1

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle (%)
802.11b	N/A	N/A	10Hz	N/A	100.00
802.11g	2.055	0.120	500Hz	2.175	94.48
802.11n(20MHz)	1.915	0.110	1kHz	2.025	94.57
802.11ax(20MHz)	1.476	0.048	1kHz	1.524	96.85

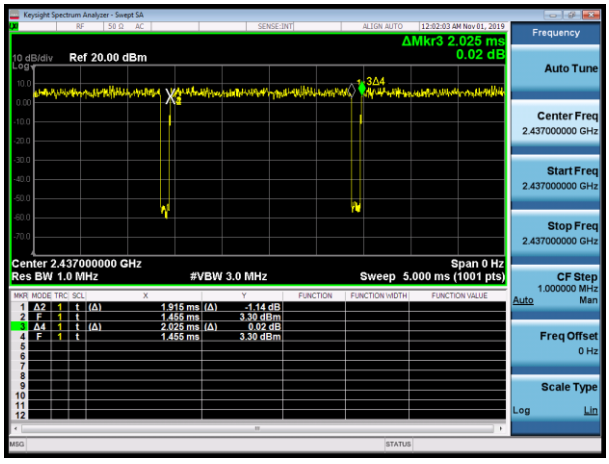
802.11b



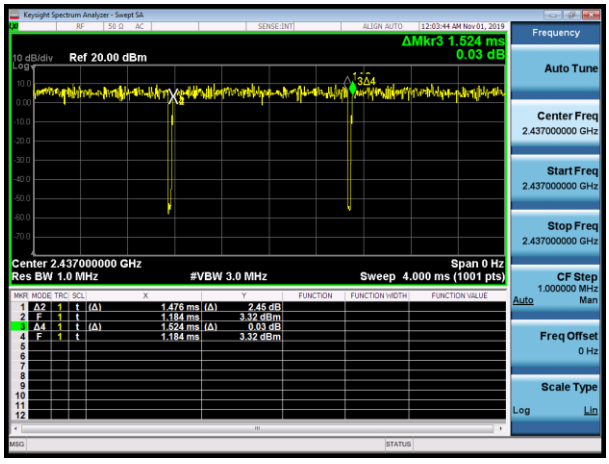
802.11g



802.11n(20MHz)



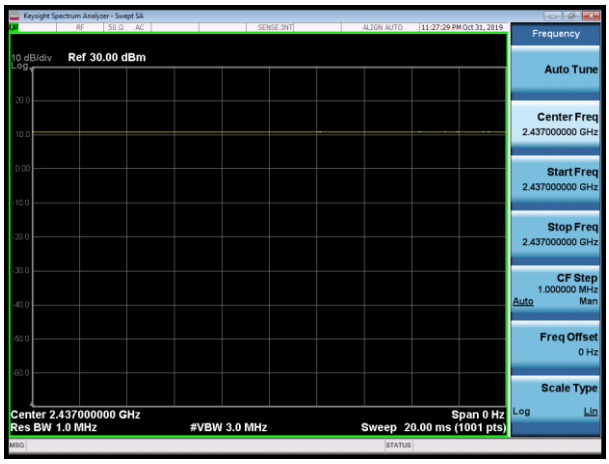
802.11ax(20MHz)



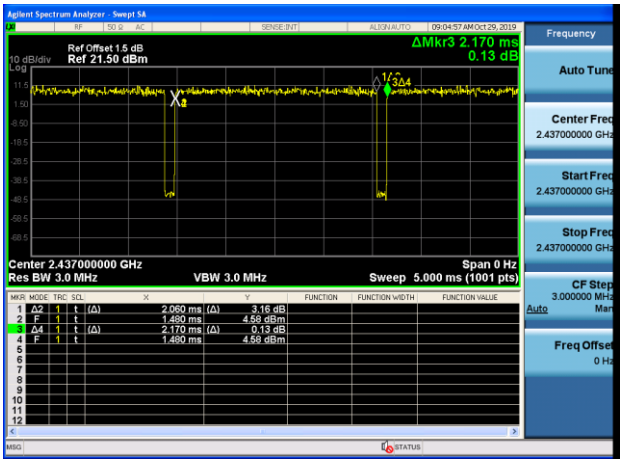
Radio 2

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle (%)
802.11b	N/A	N/A	10Hz	N/A	100.00
802.11g	2.060	0.110	500Hz	2.170	94.93
802.11n(20MHz)	1.925	0.100	1kHz	2.025	95.06
802.11ax(20MHz)	1.488	0.032	1kHz	1.520	97.89
802.11n(20MHz) with Beamforming	1.915	0.110	1kHz	2.025	94.57
802.11ax(20MHz) with Beamforming	1.480	0.040	1kHz	1.520	97.37

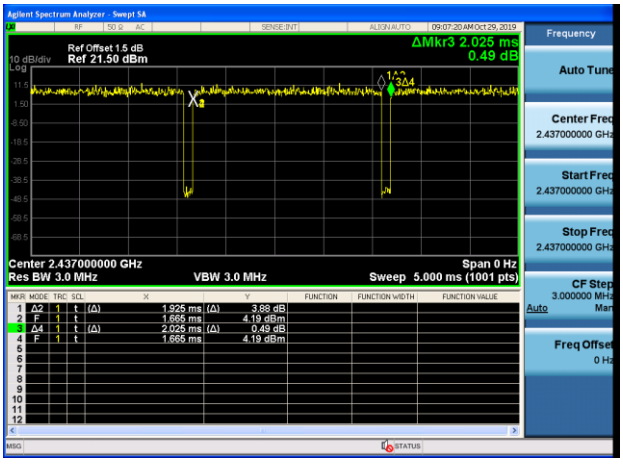
802.11b



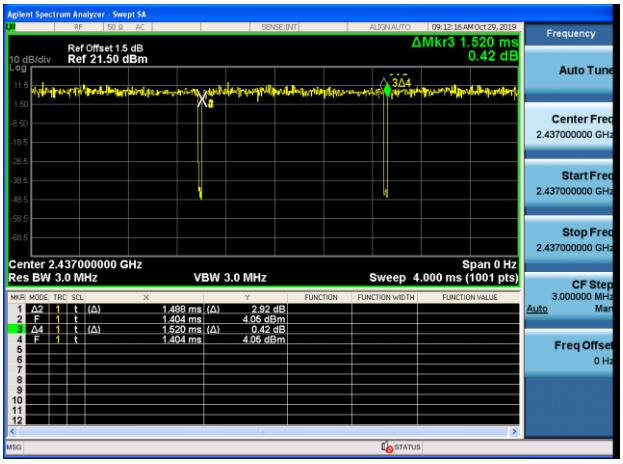
802.11g

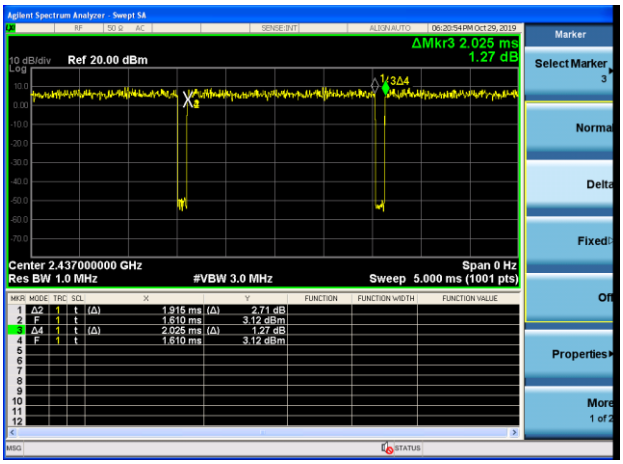
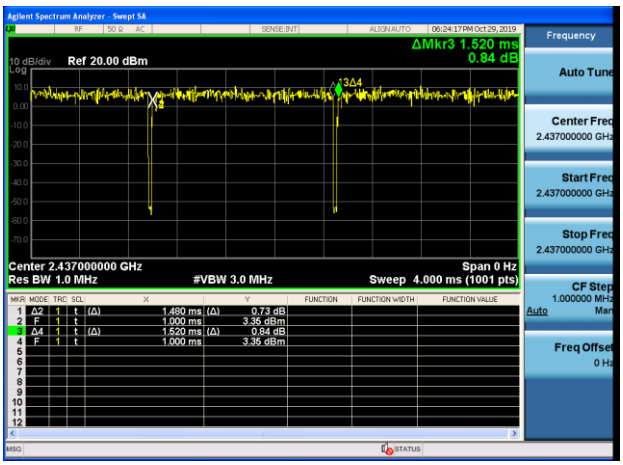


802.11n(20MHz)



802.11ax(20MHz)



802.11n(20MHz) with Beamforming	802.11ax(20MHz) with Beamforming
	

6.7. Test Result

Radio 1：

SISO PK Limit=74dBuV/m-95.2-4(Antenna Gain)=-25.2dBm

SISO AV Limit=54dBuV/m-95.2-4(Antenna Gain)=-45.2dBm

Radio 2：

SISO PK Limit=74dBuV/m-95.2-3.9(Antenna Gain)=-25.1dBm

SISO AV Limit=54dBuV/m-95.2-3.9(Antenna Gain)=-45.1dBm

CDD/Beamforming PK Limit=74dBuV/m-95.2-10lg2(2Tx)-6.91(Directional Gain)=-31.12dBm

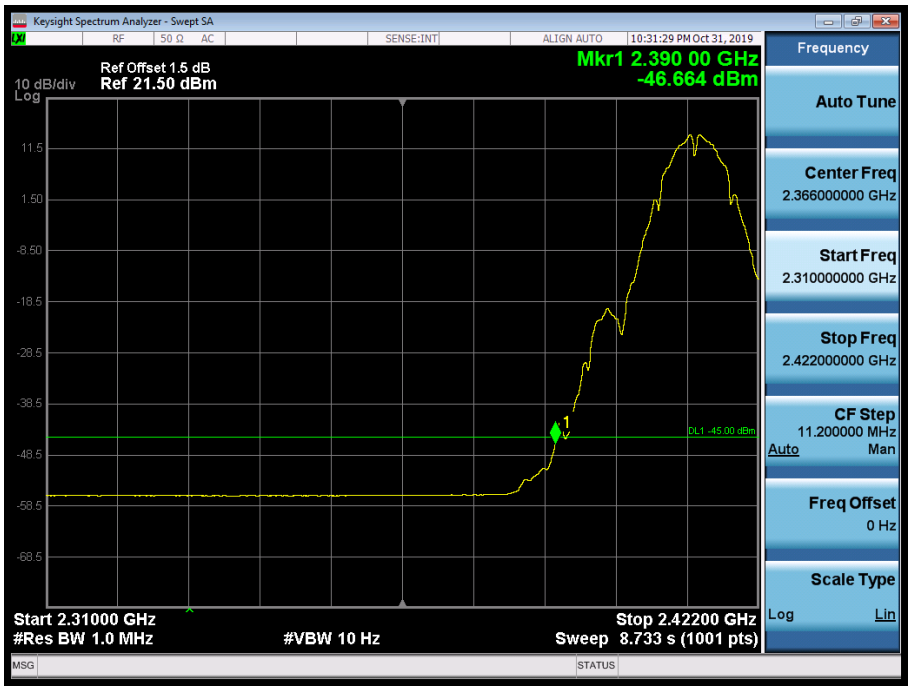
CDD/Beamforming AV Limit=54dBuV/m-95.2-10lg2(2Tx)-6.91(Directional Gain)=-51.12dBm

Note1: Above limit is the worst case of AP410C.

Note2: We tested all conduction edge bands.verification test was performed on the radiating edge band.

Radio 1:

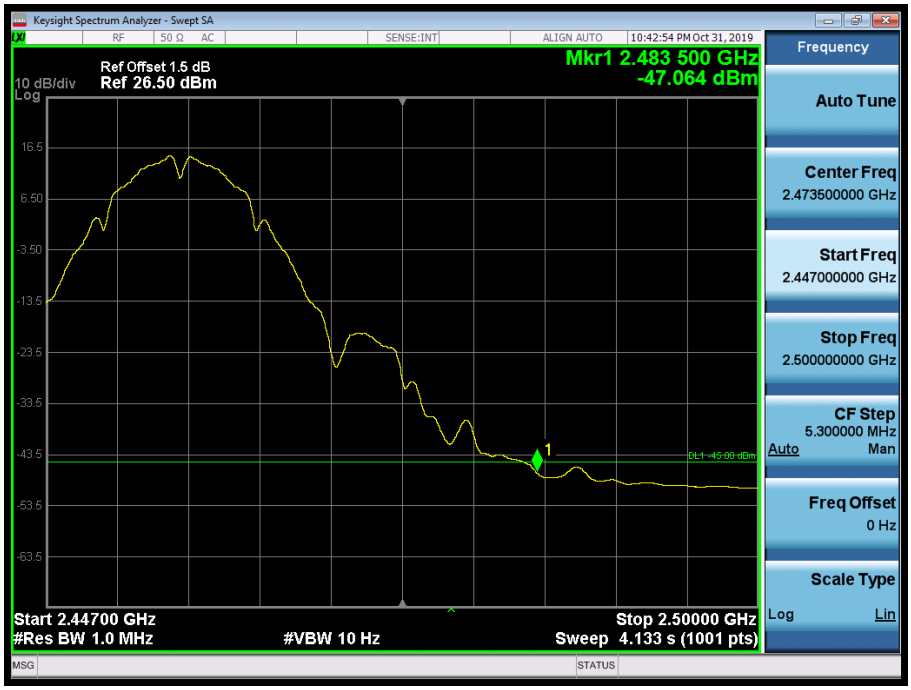
2412MHz by 802.11b:



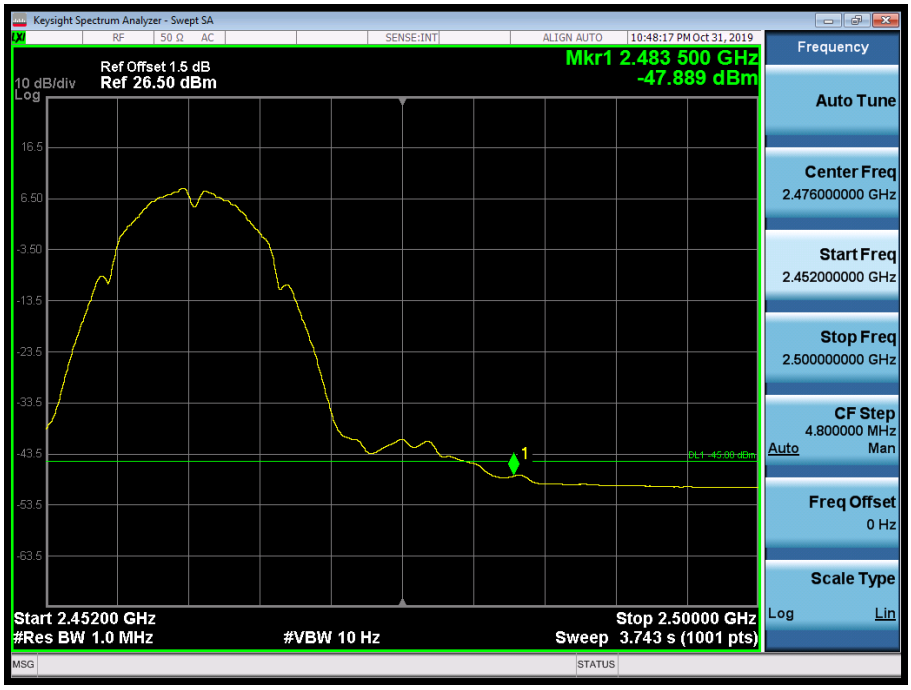
2417MHz by 802.11b:

2437MHz by 802.11b:

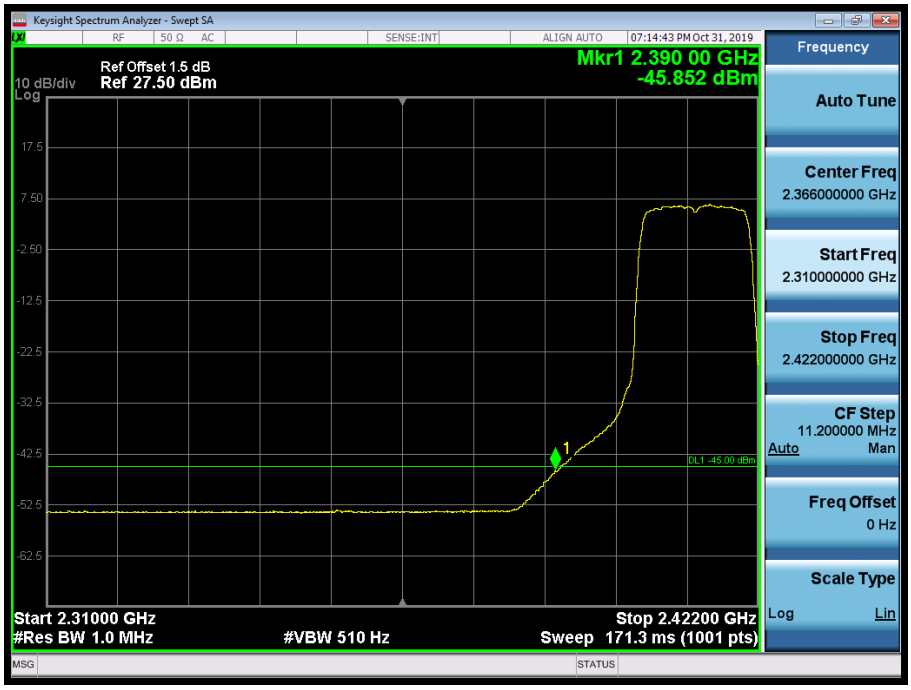
2457MHz by 802.11b:



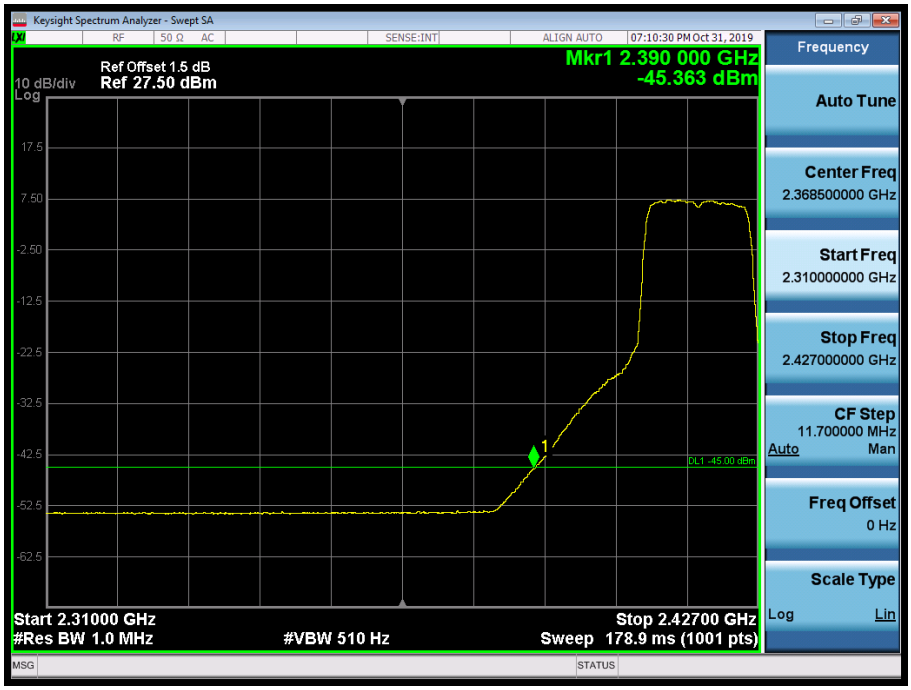
2462MHz by 802.11b:



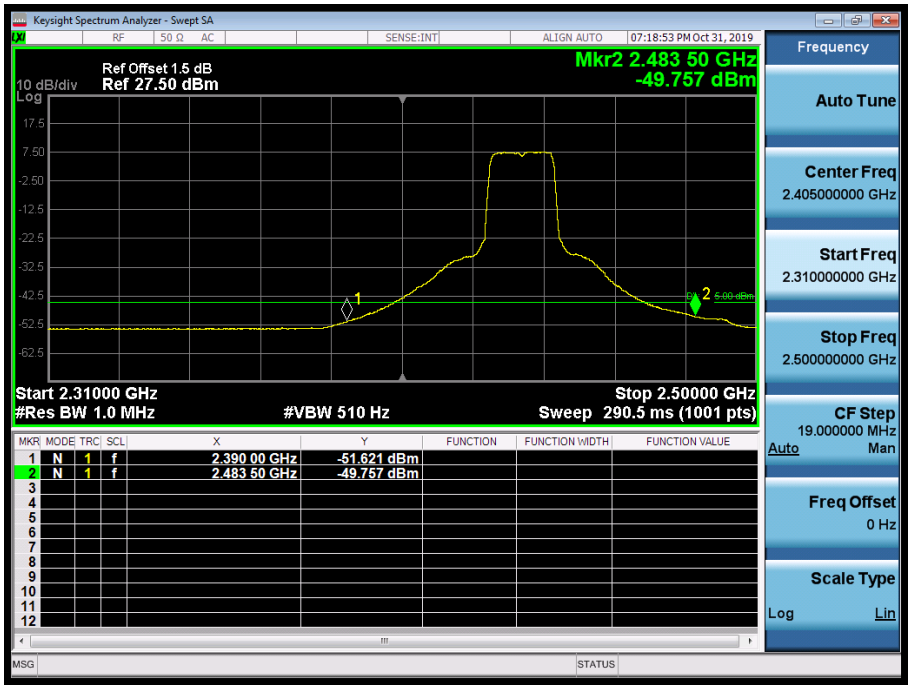
2412MHz by 802.11g:



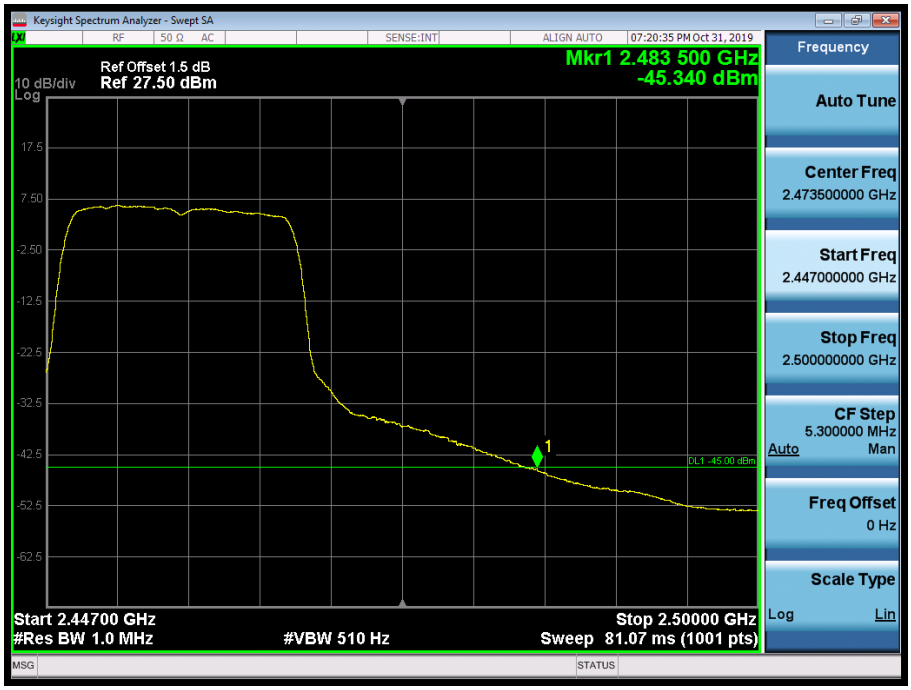
2417MHz by 802.11g:



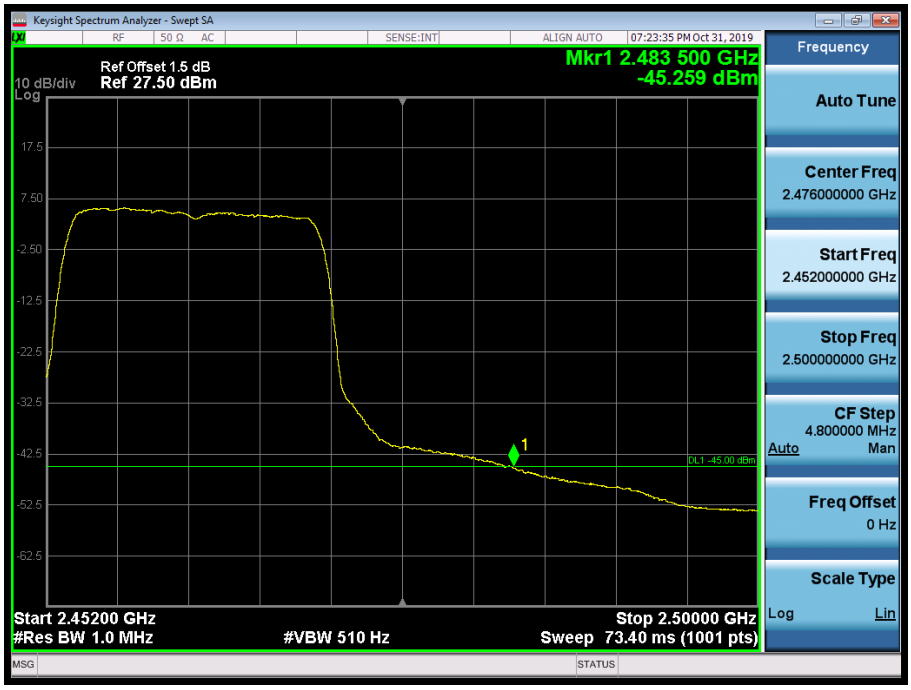
2437MHz by 802.11g:



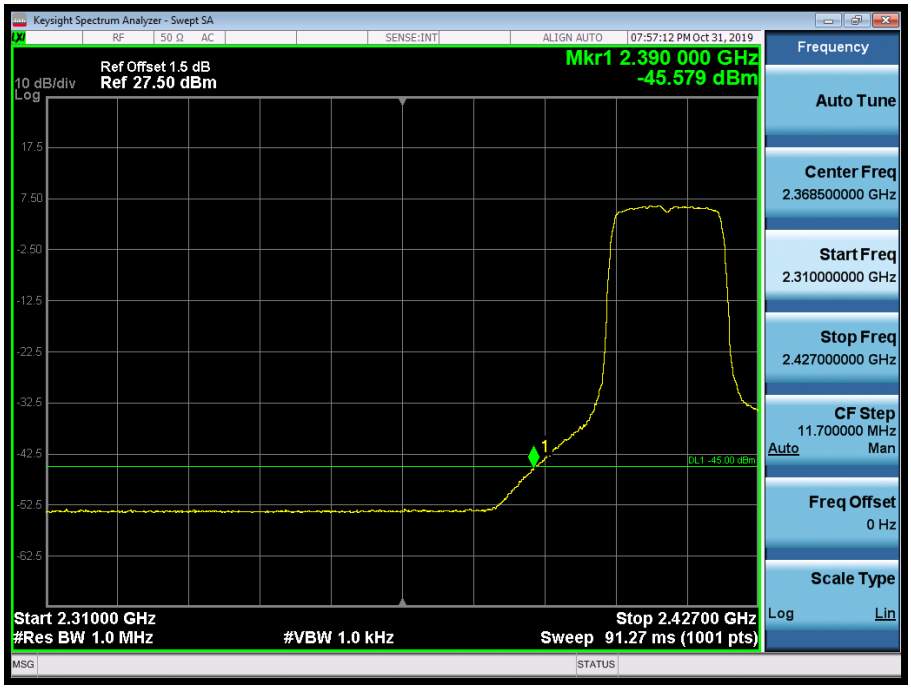
2457MHz by 802.11g:



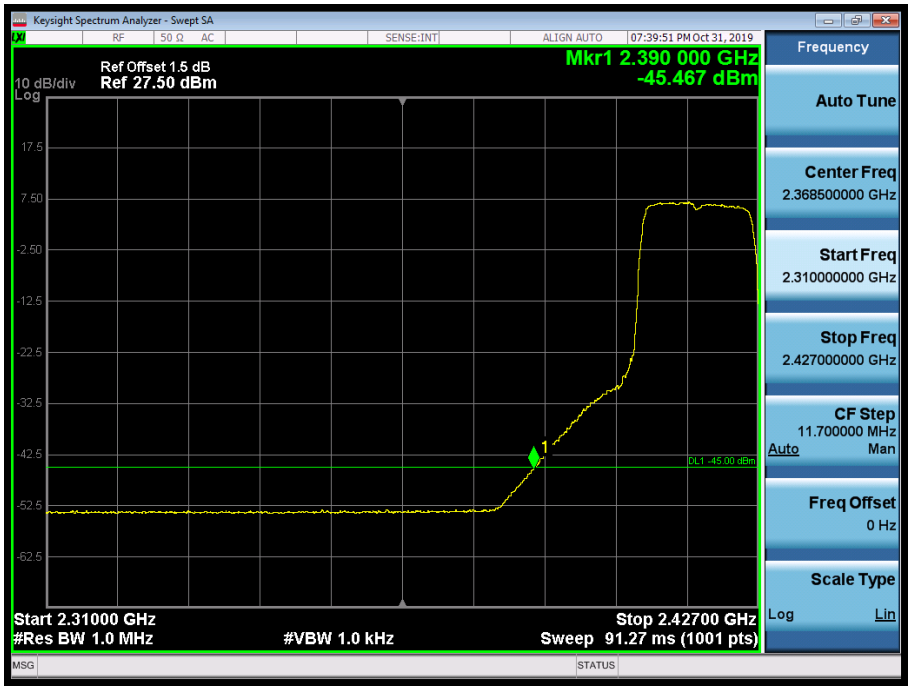
2462MHz by 802.11g:



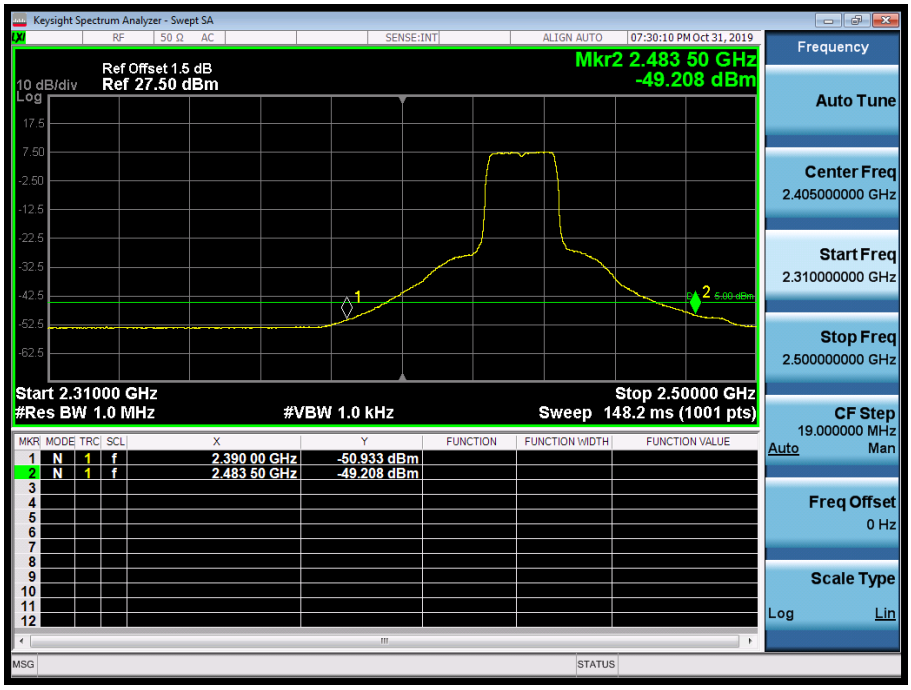
2412MHz by 802.11n(20MHz):



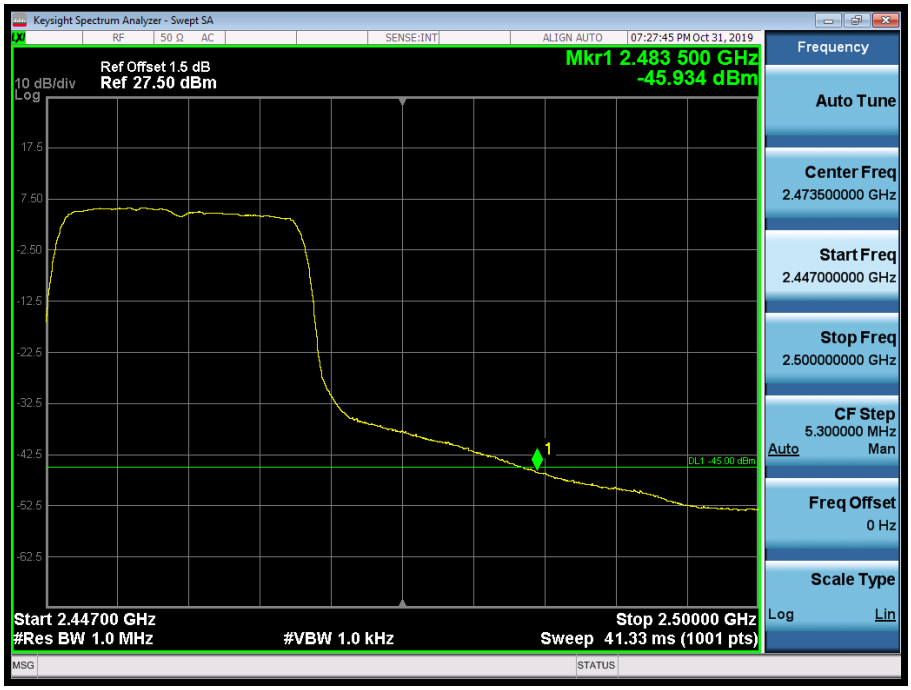
2417MHz by 802.11n(20MHz):



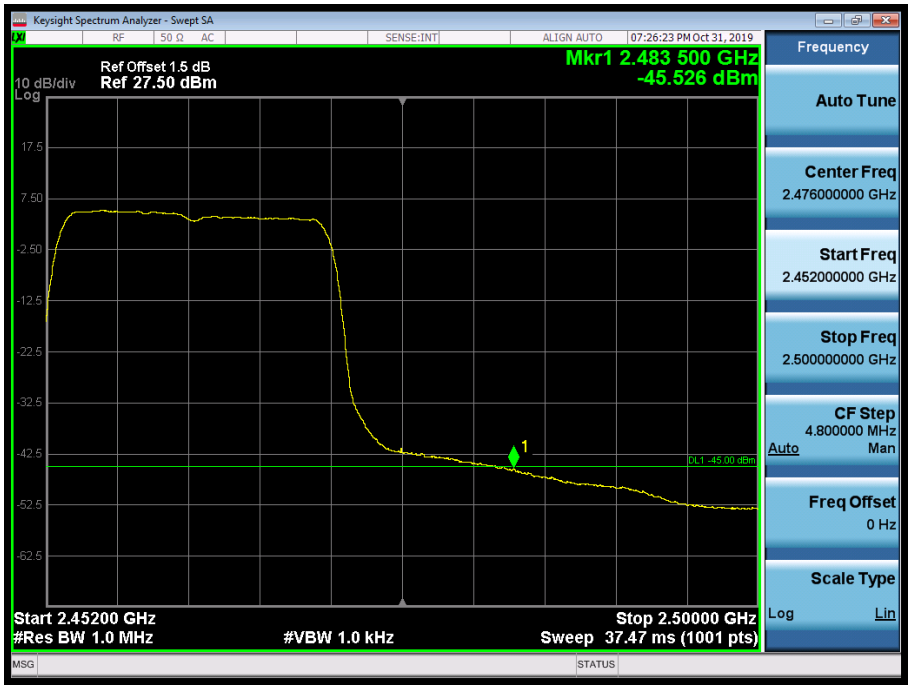
2437MHz by 802.11n(20MHz):



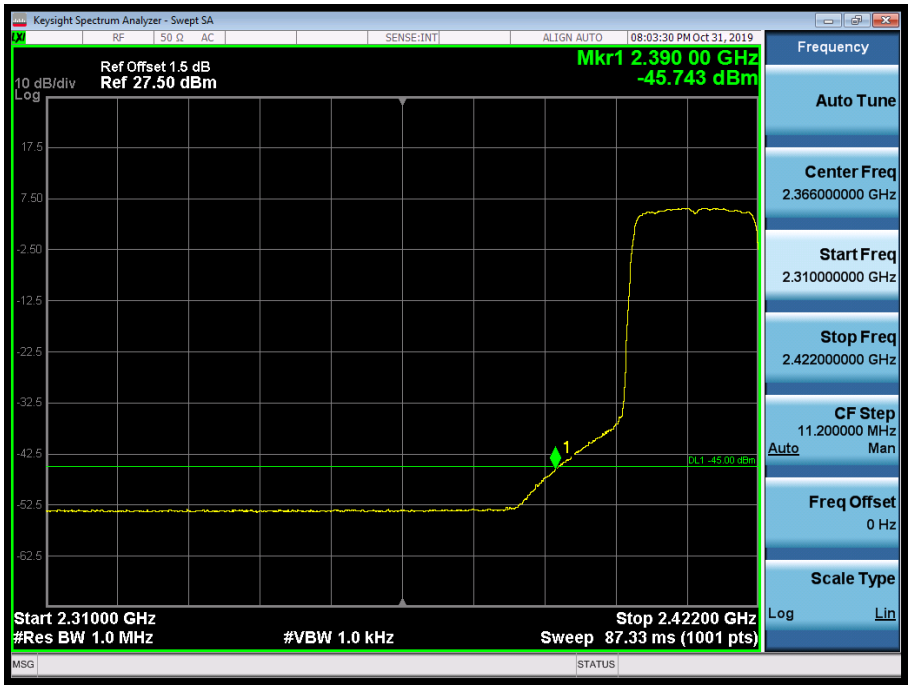
2457MHz by 802.11n(20MHz):



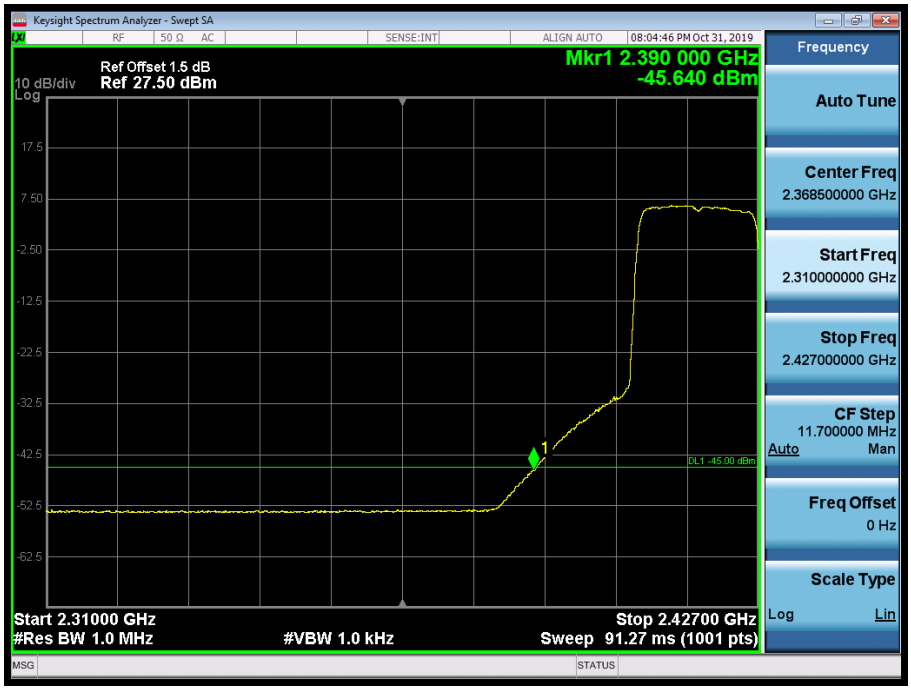
2462MHz by 802.11n(20MHz):



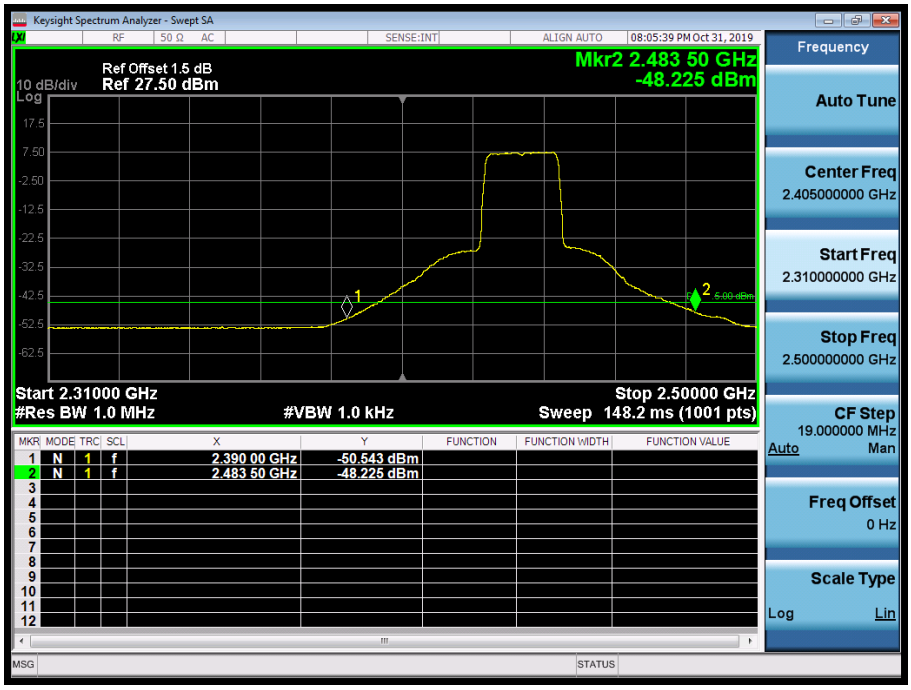
2412MHz by 802.11ax(20MHz):



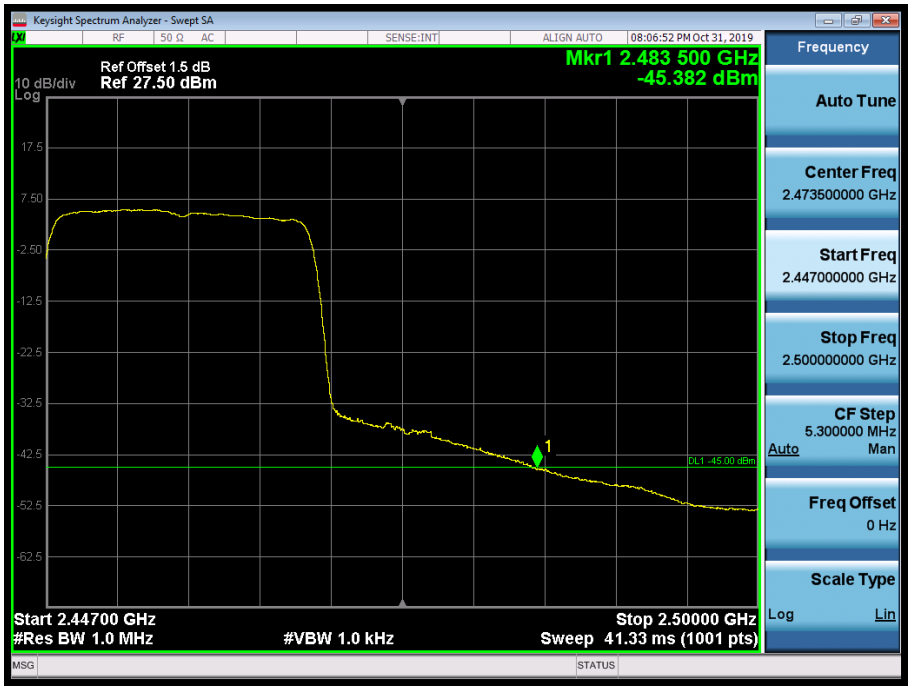
2417MHz by 802.11ax(20MHz):



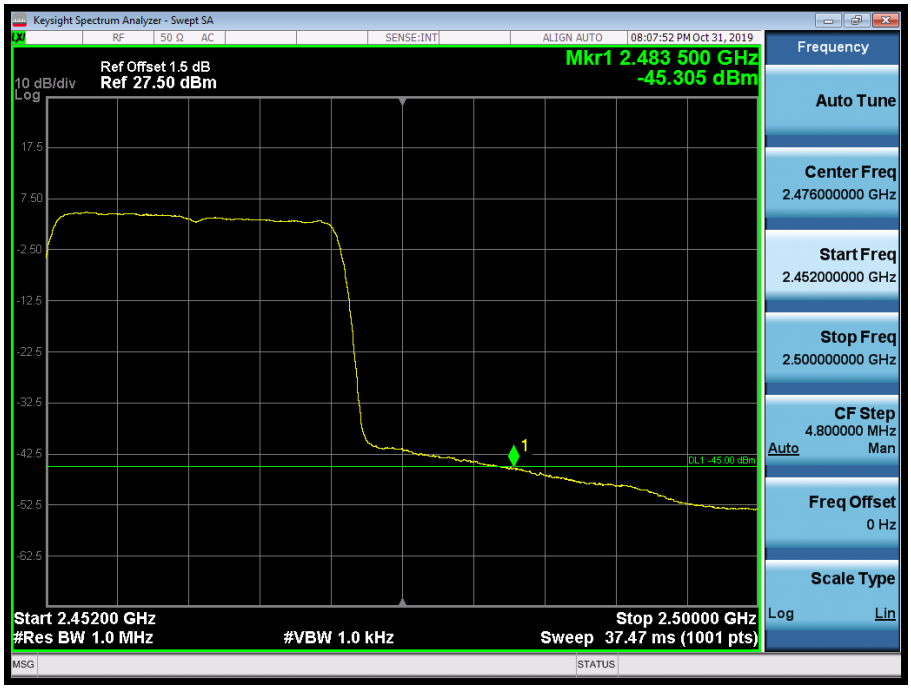
2437MHz by 802.11ax(20MHz):



2457MHz by 802.11ax(20MHz):

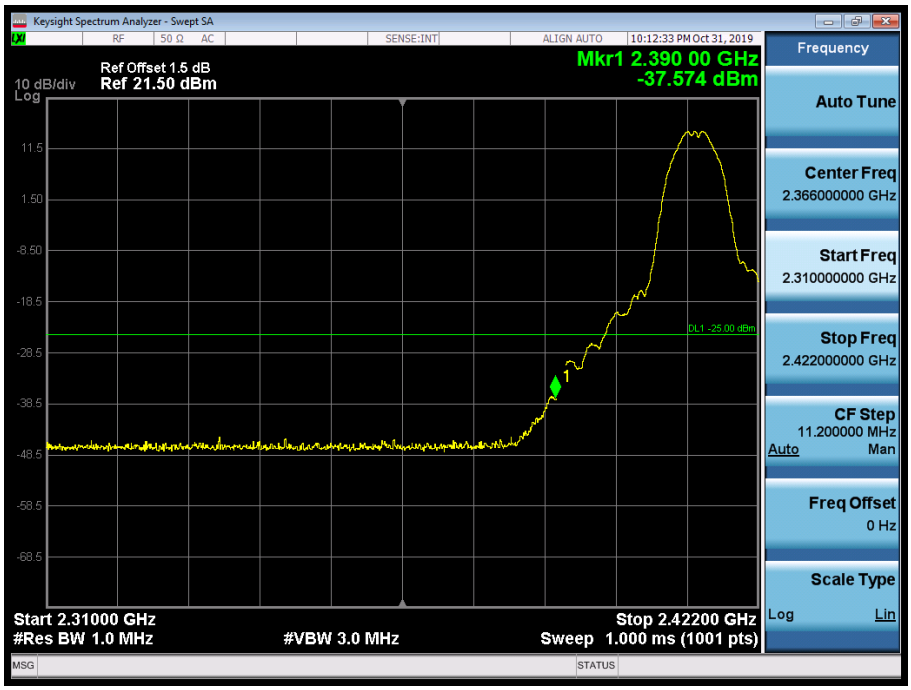


2462MHz by 802.11ax(20MHz):

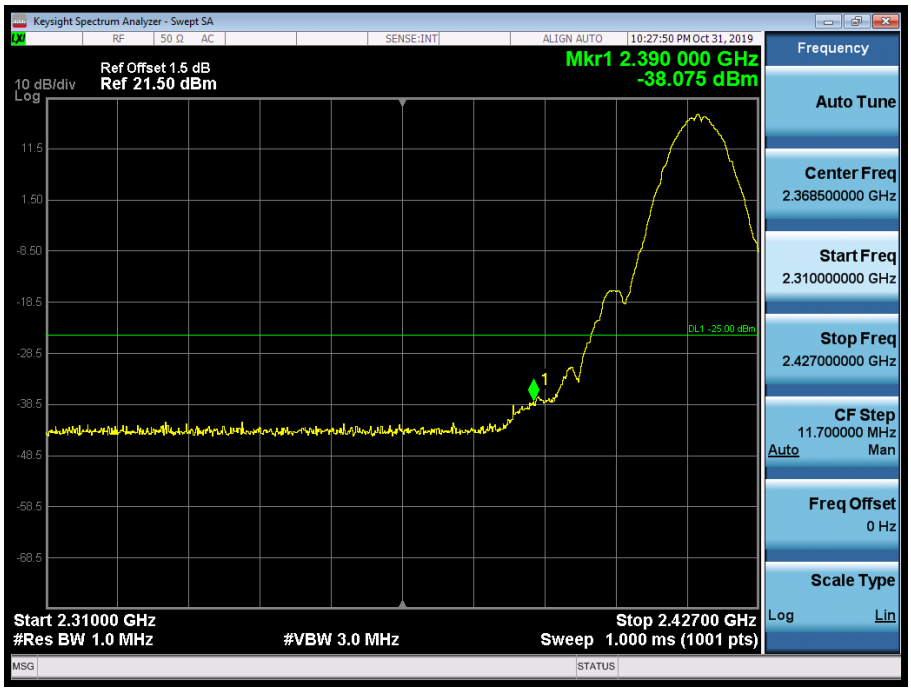


PK Limit-SISO:

2412MHz by 802.11b:

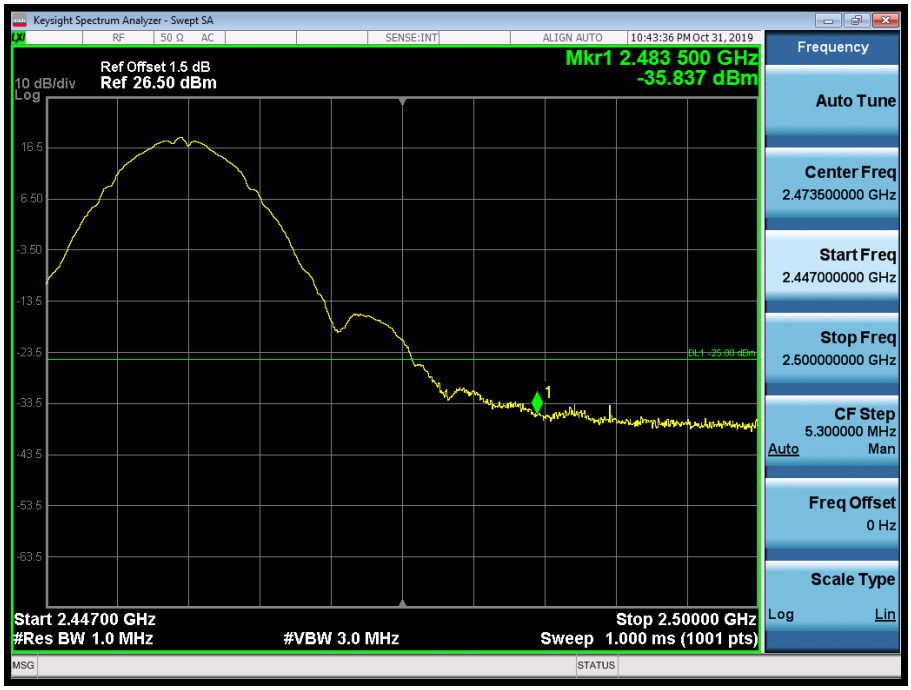


2417MHz by 802.11b:

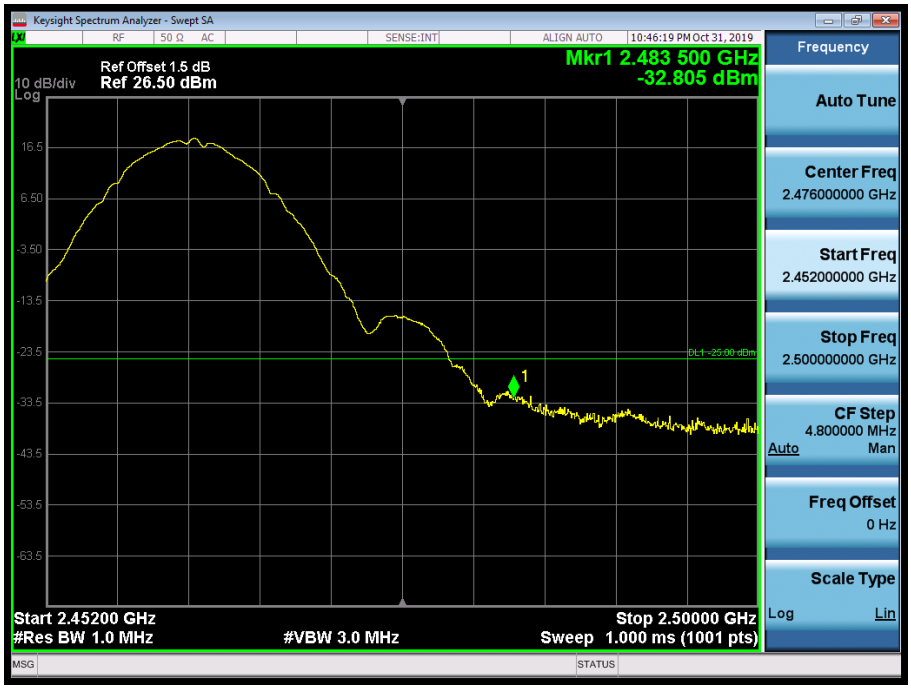


2437MHz by 802.11b:

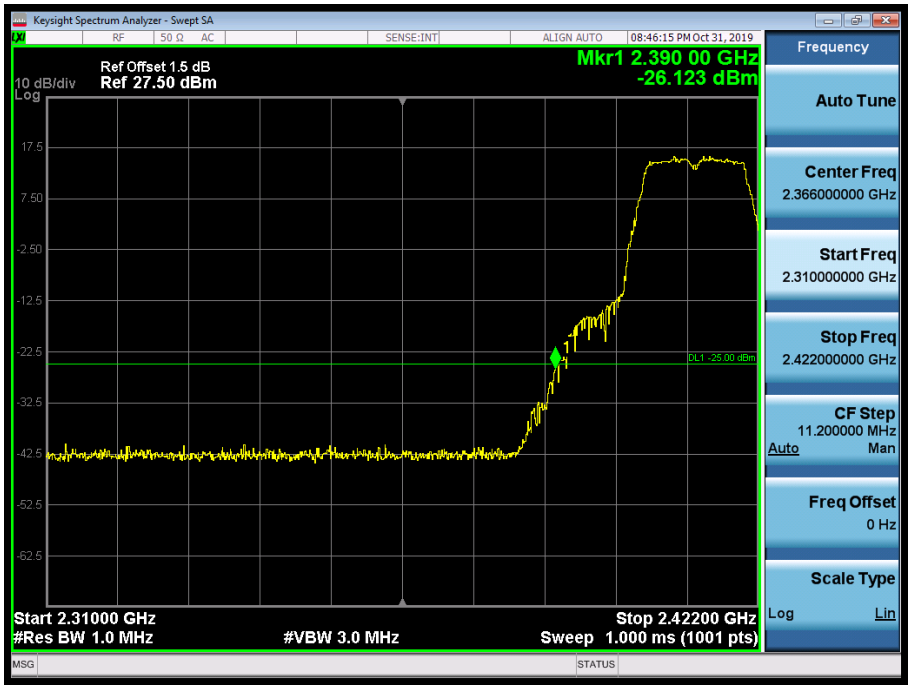
2457MHz by 802.11b:



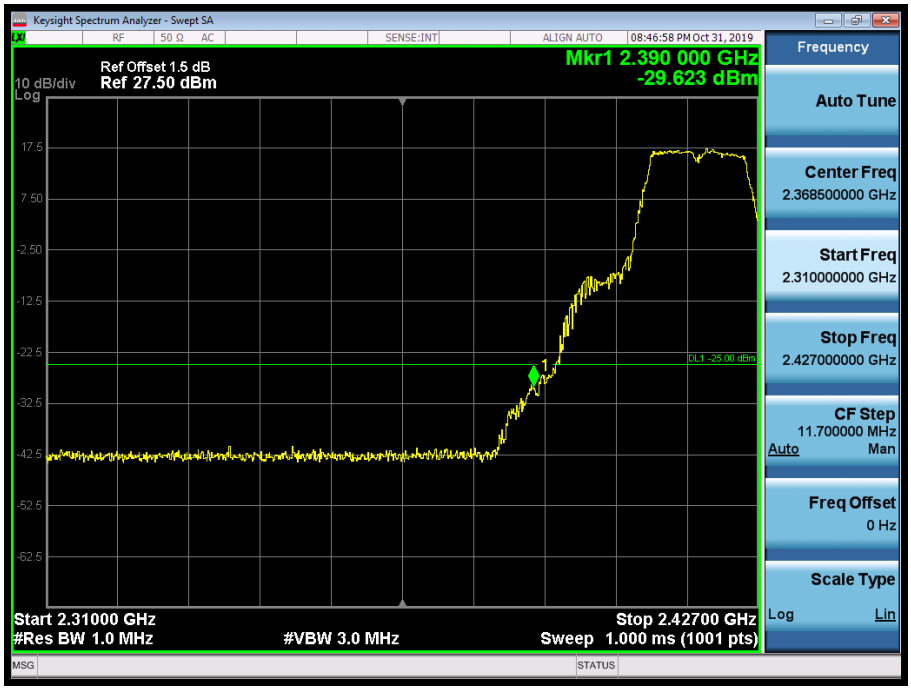
2462MHz by 802.11b:



2412MHz by 802.11g:



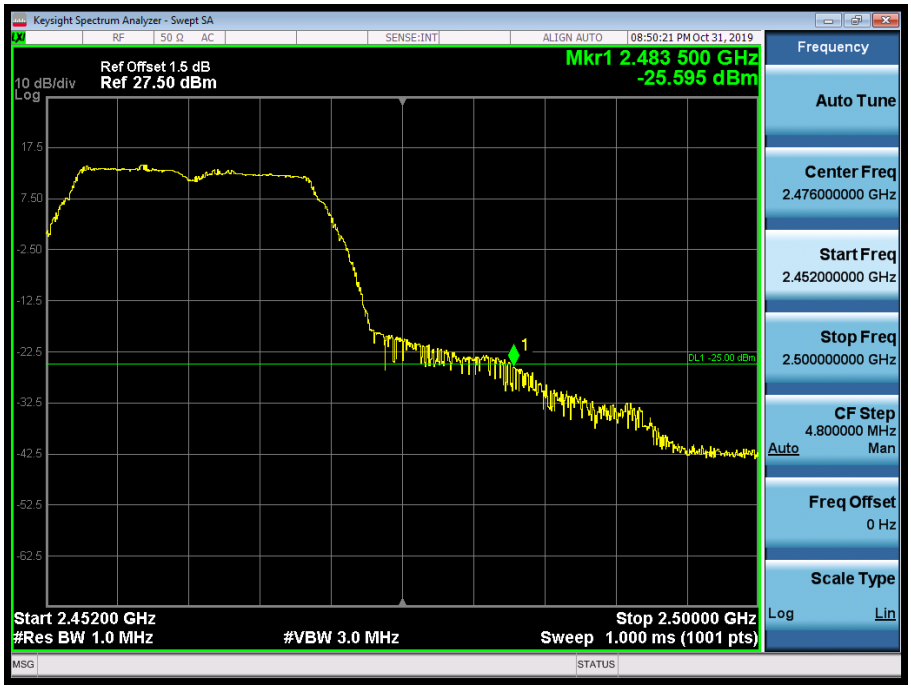
2417MHz by 802.11g:



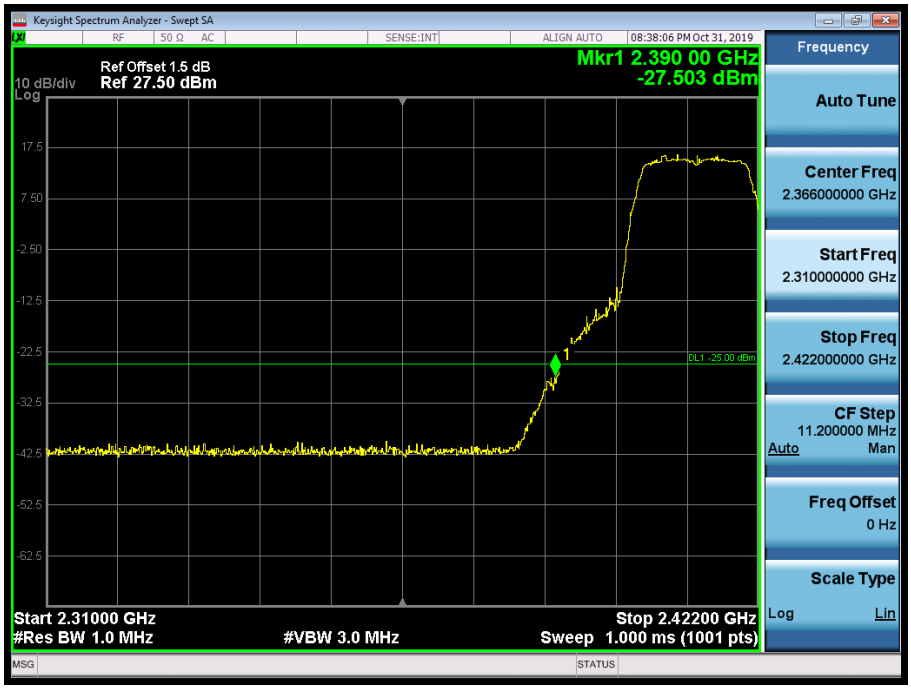
2437MHz by 802.11g:

2457MHz by 802.11g:

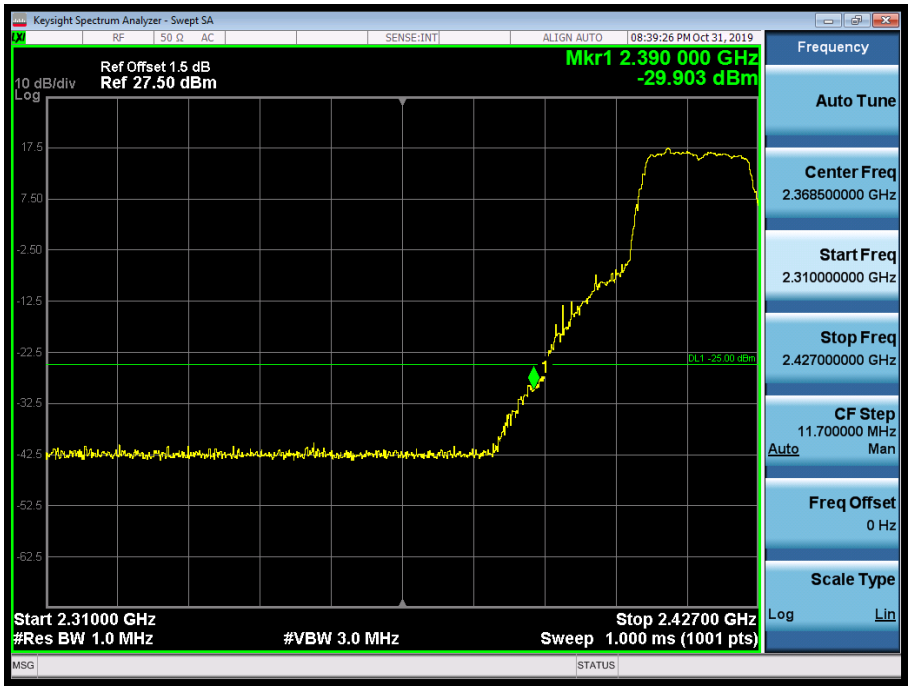
2462MHz by 802.11g:



2412MHz by 802.11n(20MHz):



2417MHz by 802.11n(20MHz):

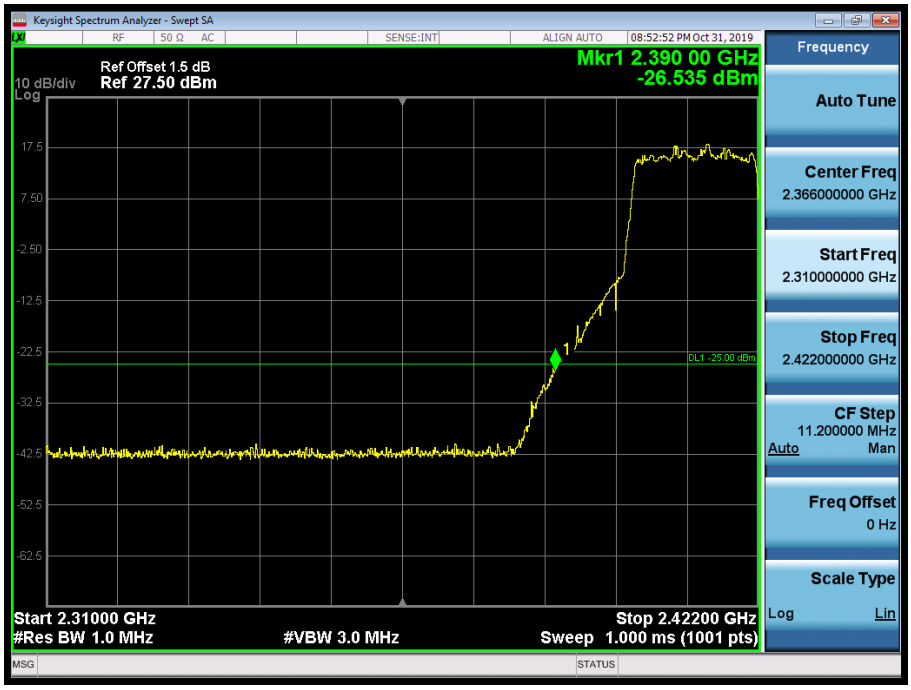


2437MHz by 802.11n(20MHz):

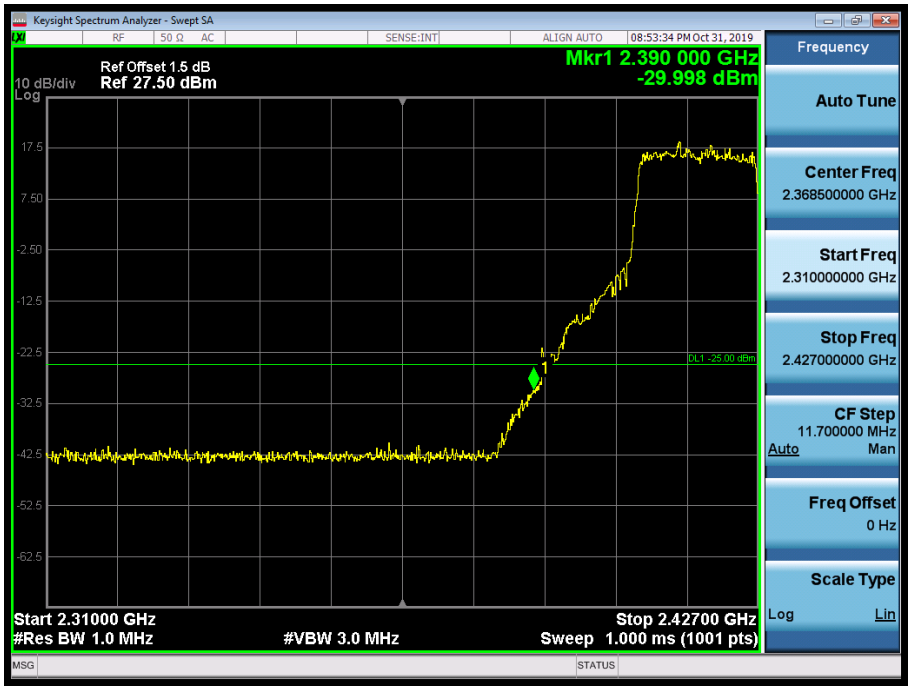
2457MHz by 802.11n(20MHz):

2462MHz by 802.11n(20MHz):

2412MHz by 802.11ax(20MHz):



2417MHz by 802.11ax(20MHz):



2437MHz by 802.11ax(20MHz):

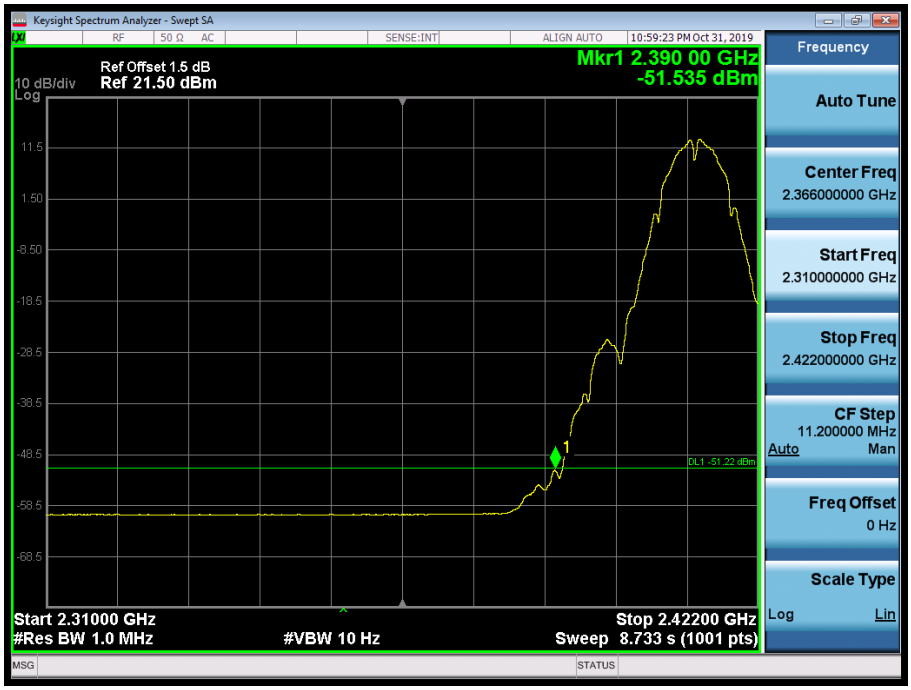
2457MHz by 802.11ax(20MHz):

2462MHz by 802.11ax(20MHz):

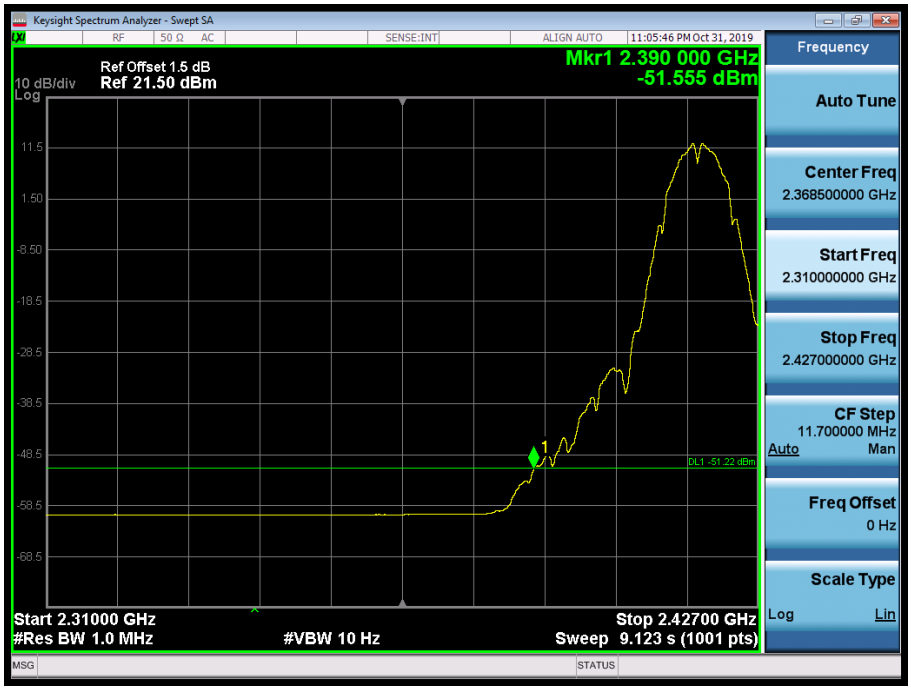
Radio 2

AV Limit-CDD:

2412MHz by 802.11b:

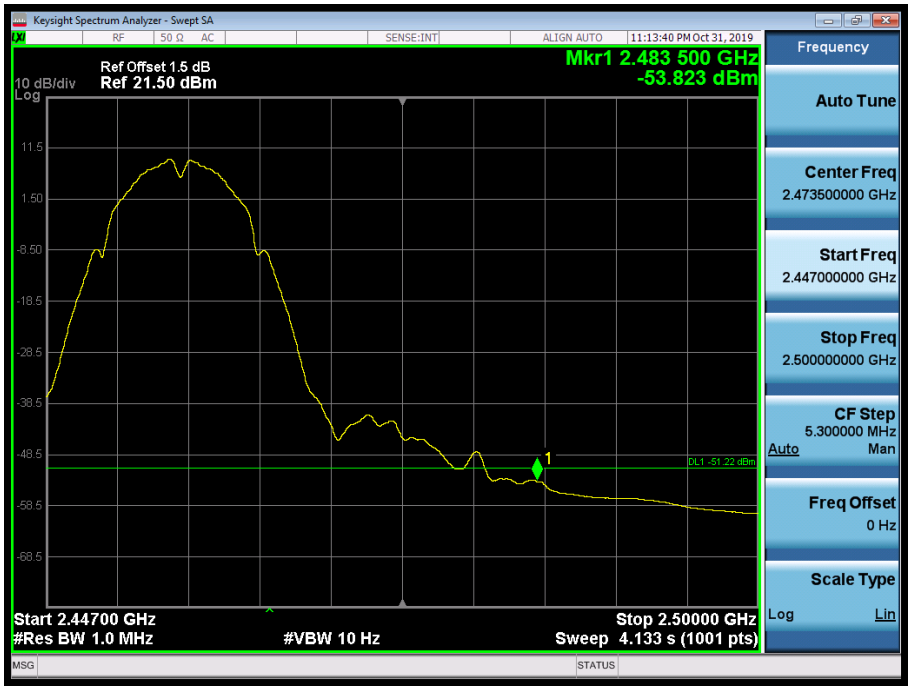


2417MHz by 802.11b:

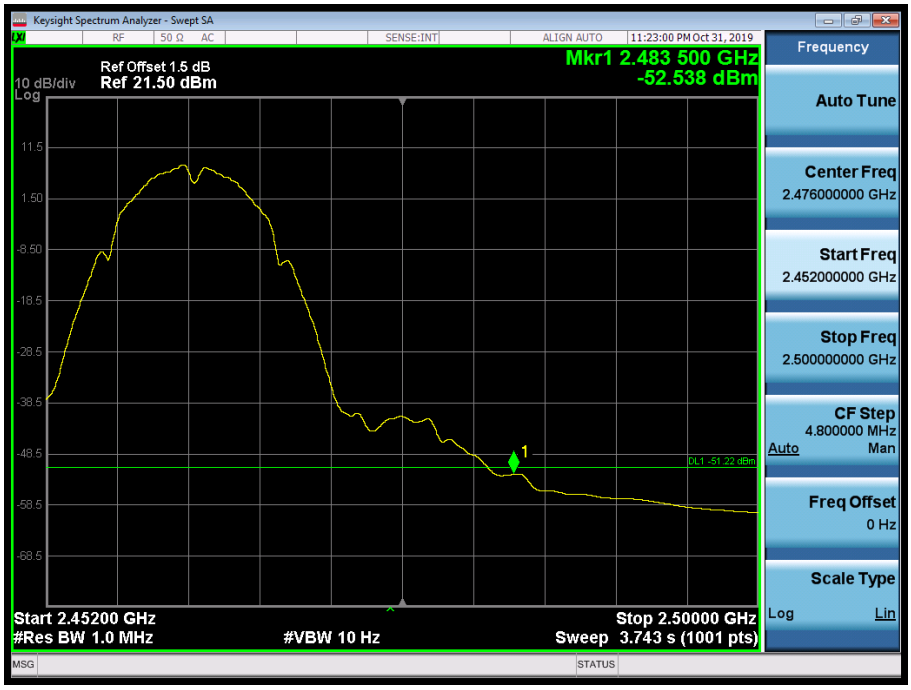


2437MHz by 802.11b:

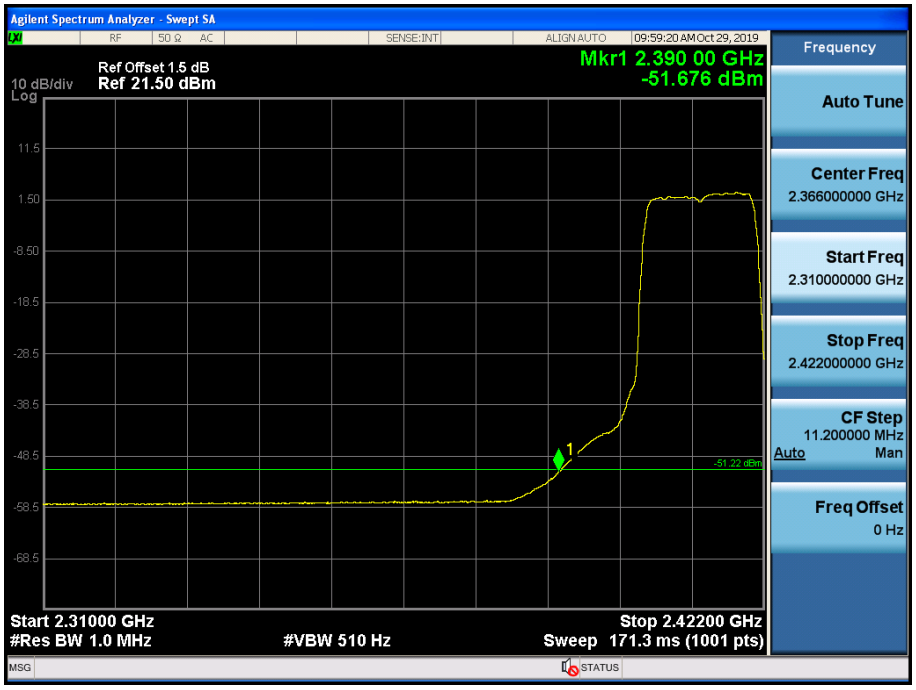
2457MHz by 802.11b:



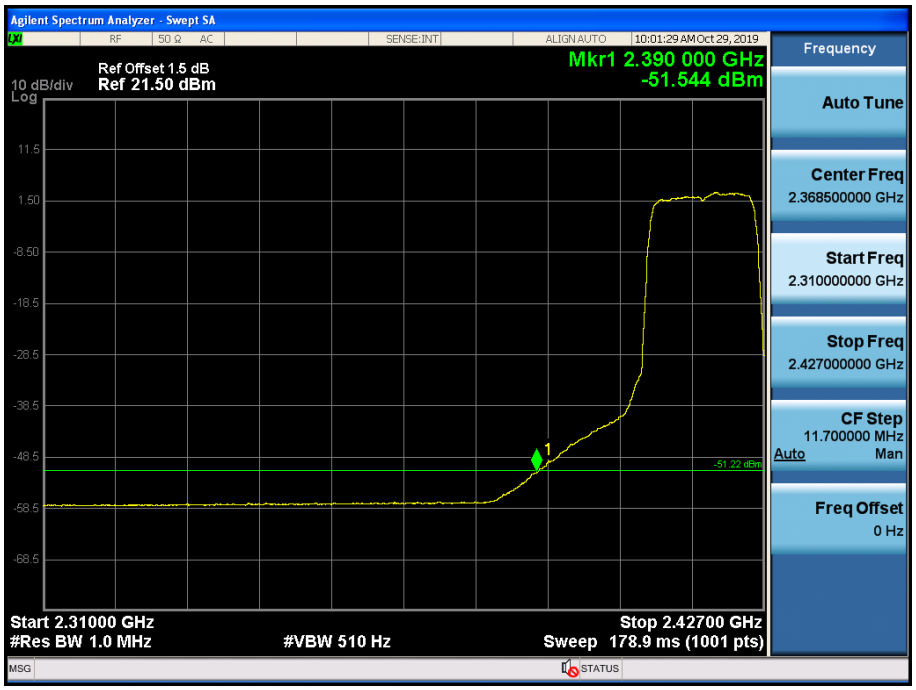
2462MHz by 802.11b:



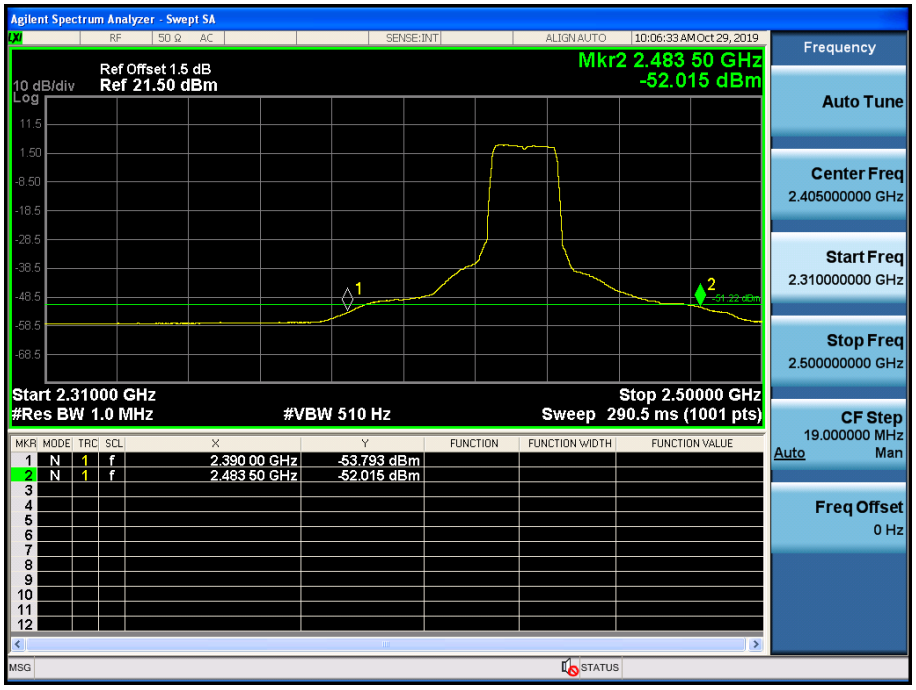
2412MHz by 802.11g:



2417MHz by 802.11g:



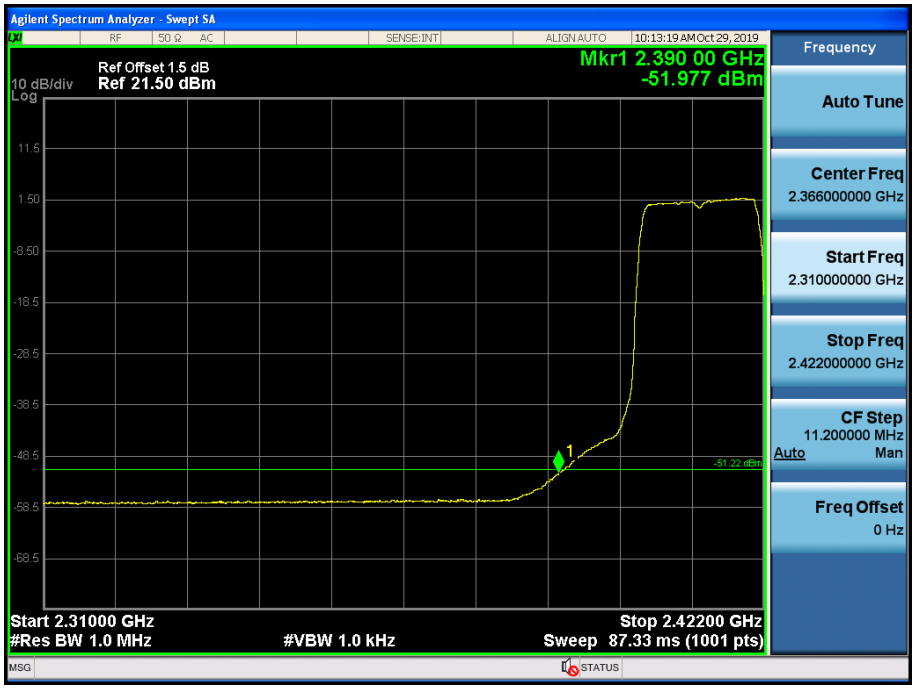
2437MHz by 802.11g:



2457MHz by 802.11g:

2462MHz by 802.11g:

2412MHz by 802.11n(20MHz):



2417MHz by 802.11n(20MHz):