Test Report

FCC Part15 Subpart C & Industry Canada RSS-247 Issue 1

Product Name	:	Access Point
Model No.	:	APEX0365, APEX0367
FCC ID	:	Q9DAPEX0365367
IC		4675A-APEX0365367

Applicant	:	Hewlett Packard Enterprise Company
Address	:	3000 Hanover St. Palo Alto,CA 94304,USA

Date of Receipt	:	Nov. 29, 2016
Test Date	:	Nov. 29, 2016~ Dec. 12, 2016
Issued Date	:	Jan. 18, 2017
Report No.	:	16B2199R-RF- US-P06V02
Report Version	:	V1.1

The test results relate only to the samples tested.

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

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Test Report Certification

Issued Date : Jan. 18, 2017
Report No. : 16B2199R-RF-US-P06V02

Product Name	:	Access Point
Applicant	:	Hewlett Packard Enterprise Company
Address	:	3000 Hanover St. Palo Alto,CA 94304,USA
Manufacturer	:	Hewlett Packard Enterprise Company
Address	:	3000 Hanover St. Palo Alto,CA 94304,USA
Model No.	:	APEX0365, APEX0367
FCC ID	:	Q9DAPEX0365367
IC	:	4675A-APEX0365367
EUT Voltage	:	PoE 57V
Test Voltage		PoE 57V
Brand Name	:	aruba
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C ANSI C63.4:2014; ANSI C63.10:2013; KDB 558074 D01v03r05 KDB 662911 D01 Multiple Transmitter Output v02r01 KDB 662911 D02 MIMO with Cross-Polarized Antennas v01
Test Result	:	Complied
Performed Location	:	DEKRA Testing and Certification (Suzhou) Co., Ltd. Corporation - Suzhou EMC Laboratory No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392; IC Lab Code: 4075B

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
16B2199R-RF-US-P06V02	V1.0	Initial Issued Report	Jan. 11, 2017
16B2199R-RF-US-P06V02	V1.1	(1) Add new channel data with band-edge and power of 802.11n(40MHz). (2) Update the data rate.	Jan. 18, 2017

1. General Information

1.1. EUT Description

Product Name	Access Point
Brand Name	aruba
Model No.	APEX0365, APEX0367
SN	APEX0365:CNCFJSW047 APEX0367:CNCJJSX009
SW	6.5.2.0 build 57798
EUT Voltage	PoE 57V
Test Voltage	PoE 57V
Frequency Range	For 2.4GHz Band 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz
Channel Number	For 2.4GHz Band 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7
Type of Modulation	802.11b: DSSS
	802.11g: OFDM
Data Rate	802.11g: 6/9/12/18/24/36/48/54 Mbps
	802.11b: 1/2/5.5/11 Mbps
	802.11n: up to 300 Mbps
Channel Control	Auto
Extreme Temperature	-40℃-50℃

1.2. Channel List:

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

1.3. Test Channel:

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

1.4. Antenna information

APEX0365:

Antenna manufacturer	N/A			
Antenna Delivery	☐	1*TX+1*RX	☒ 2*TX+2*RX	☐ 3*TX+3*RX
Antenna technology	☐	SISO		
	☒	MIMO	☐	Basic
			☐	Sectorized antenna systems
			☒	Cross-polarized antennas
			☐	Unequal antenna gains, with equal transmit powers
			☐	Spatial Multiplexing
			☐	CDD
			☐	Beam-forming
Antenna Type	☐	External	☐	Dipole
	☒	Internal	☐	PIFA
			☐	PCB
			☐	Ceramic Chip Antenna
			☐	Metal plate type F antenna
			☒	Cross-polarize Antenna
Antenna Gain #0	2.7dBi			
Antenna Gain #1	2.7dBi			

APEX0367:

Antenna manufacturer	N/A					
Antenna Delivery	☐	1*TX+1*RX	☒	2*TX+2*RX	☐	3*TX+3*RX
Antenna technology	☐	SISO				
	☒	MIMO	☐	Basic		
			☐	Sectorized antenna systems		
			☒	Cross-polarized antennas		
			☐	Unequal antenna gains, with equal transmit powers		
			☐	Spatial Multiplexing		
			☐	CDD		
			☐	Beam-forming		
Antenna Type	☐	External	☐	Dipole		
	☒	Internal	☐	PIFA		
			☐	PCB		
			☐	Ceramic Chip Antenna		
			☐	Metal plate type F antenna		
			☒	Cross-polarize Antenna		
Antenna Gain #0	6.3dBi					
Antenna Gain #1	6.3dBi					

1.5. Mode of Operation

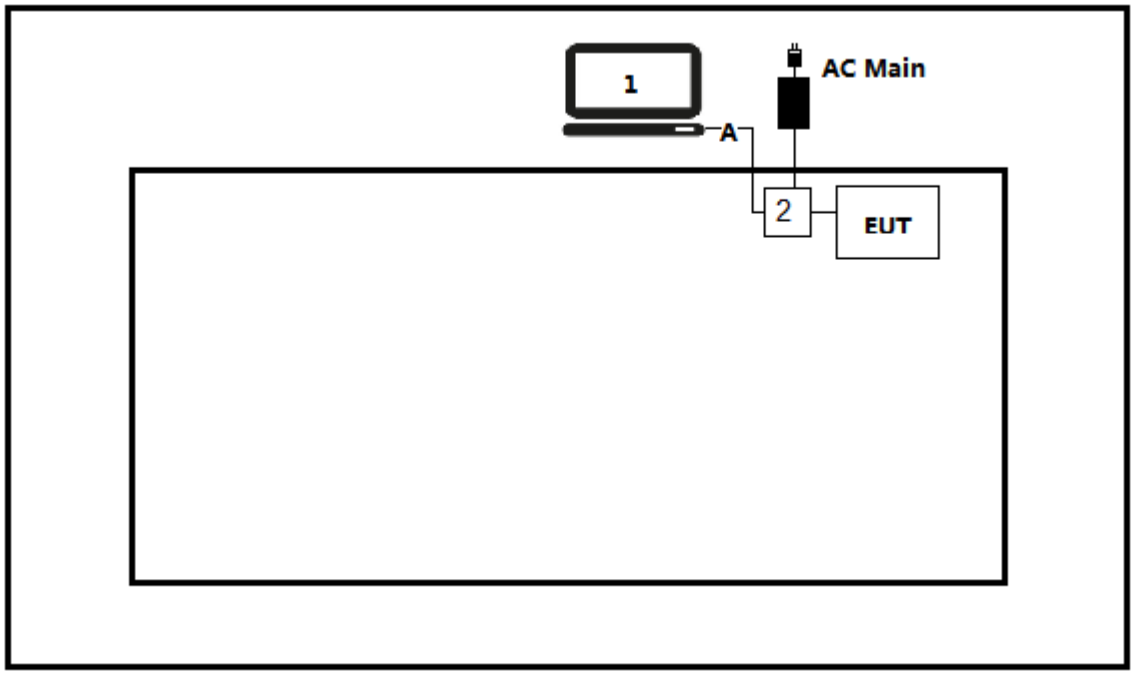
Test Modes List
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g
Mode 3: Transmit by 802.11n(20MHz)
Mode 4: Transmit by 802.11n(40MHz)

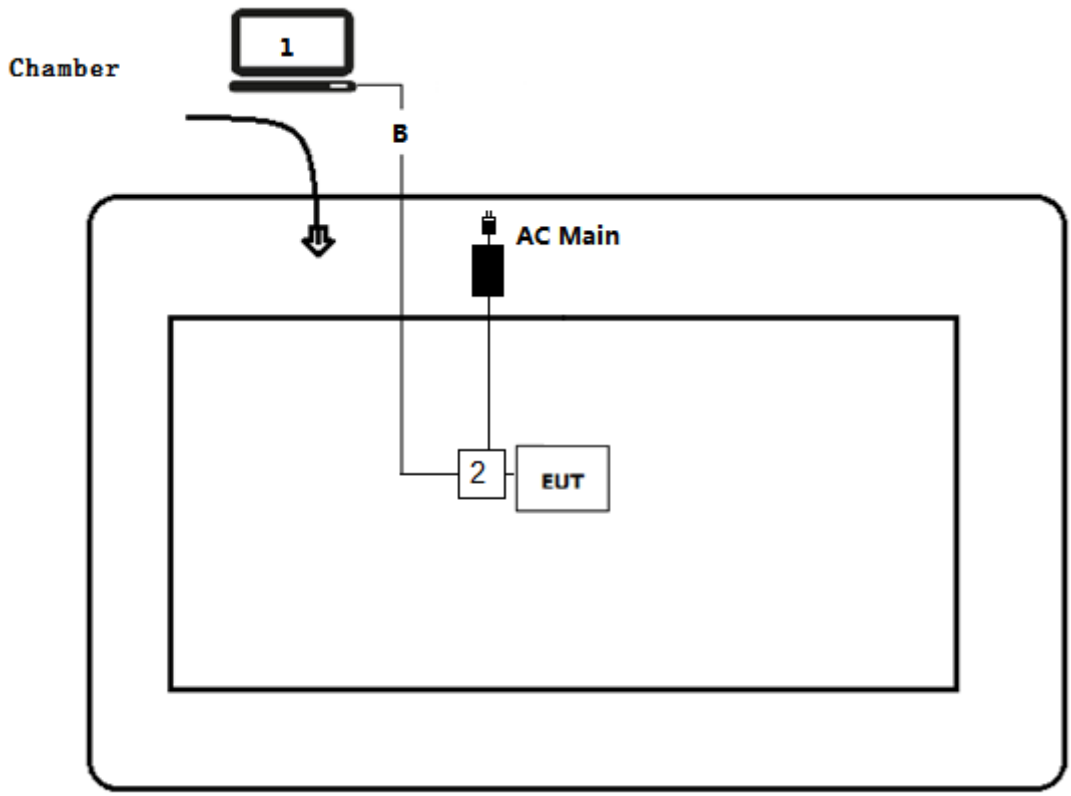
1.6. Tested System Details

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

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

1.7. Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test

Test setup Diagram- Radiated Emission



A	LAN Cable	Non-shielded, 1.5m
B	LAN Cable	Non-shielded, 15m

2. Technical Test

2.1. Summary of Test Result

For FCC Rule:

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

For IC Rule:

Performed Test Item	Normative References	Worst case mode	Limit	Result
AC Power Line Conducted Emission	RSS-Gen Issue 4 Section 8.8	Mode 1	RSS-Gen	PASS
Emissions in restricted frequency bands	RSS-Gen Issue 4 Section 8.9	Mode 1	RSS-Gen	Pass
Emissions in non-restricted frequency bands	RSS-247 Issue 1 Section A5.5	Mode 1	⩾30dBc	Pass
Radiated Emission Band Edge	RSS-247 Issue 1 Section A5.5	Mode 1	RSS-247	Pass
Occupied Bandwidth	RSS-Gen Issue 4 Section 6.6 RSS-247 Issue 1 Section A5.2(1)	Mode 1	⩾500kHz	Pass
Fundamental emission output power	RSS-247 Issue 1 Section A5.4(4)	Mode 1	⩽30dBm	Pass
Power Spectral Density	RSS-247 Issue 1 Section A5.2(2)	Mode 1	⩽8dBm/3kHz	Pass
Antenna Requirement	RSS-Gen Issue 4 Section 8.3	N/A	RSS-Gen Issue 4	Pass

2.2. Power setting parameter

APEX0365:

Test Software	QSPR V5.500.5975.23013	
Modulation Mode	Test Frequency	Ant 0+1
802.11b	2412	17.5
	2437	17.5
	2462	17.5
802.11g	2412	18
	2437	18
	2462	18
802.11n(20MHz)	2412	18
	2437	18
	2462	18
802.11n(40MHz)	2422	15
	2427	15
	2437	18
	2447	18
	2452	17

APEX0367:

Test Software	QSPR V5.500.5975.23013	
Modulation Mode	Test Frequency	Ant 0+1
802.11b	2412	18
	2437	18
	2462	18
802.11g	2412	16.5
	2437	18
	2462	17
802.11n(20MHz)	2412	15.5
	2437	18
	2462	17
802.11n(40MHz)	2422	13.5
	2427	14
	2437	18
	2447	17
	2452	16

2.3. Power vs Data Rate

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)						
		802.11b	802.11g		20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
0	1	1	6	---	6.5	7.2	13.5	15.0
1	1	2	9	---	13.0	14.4	27.0	30.0
2	1	5.5	12	---	19.5	21.7	40.5	45.0
3	1	11	18	---	26.0	28.9	54.0	60.0
4	1	---	24	---	39.0	43.3	81.0	90.0
5	1	---	36	---	52.0	57.8	108.0	120.0
6	1	---	48	---	58.5	65.0	121.5	135.0
7	1	---	54	---	65.0	72.2	135.0	150.0

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

2.4. Test Environment

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

2.5. Measurement Uncertainty

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

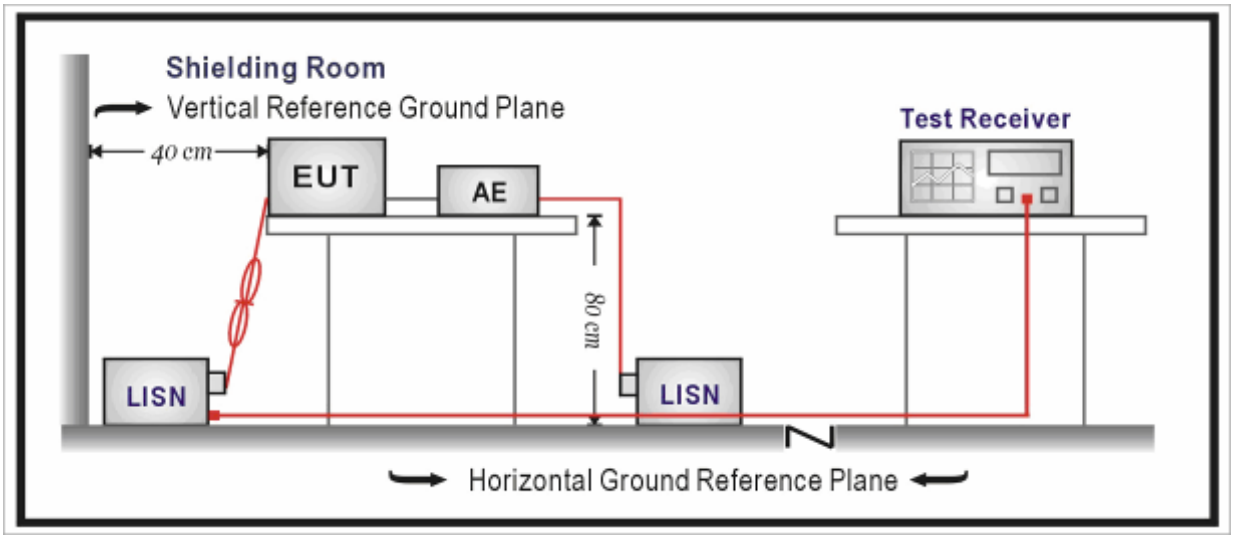
3. AC Power Line Conducted Emission

3.1. Test Equipment

AC Power Line Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100906	2016.03.05	2017.03.04
Two-Line V-Network	R&S	ENV 216	101189	2016.07.16	2017.07.15
Two-Line V-Network	R&S	ENV 216	101044	2016.09.16	2017.09.15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
50ohm Termination	SHX	TF2	07081402	2016.09.16	2017.09.15
Temperature/Humidity Meter	Zhichen	ZC1-2	TR1-TH	2017.01.04	2018.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

3.2. Test Setup

AC Power Line Conducted Emission test setup



3.3. Limit

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

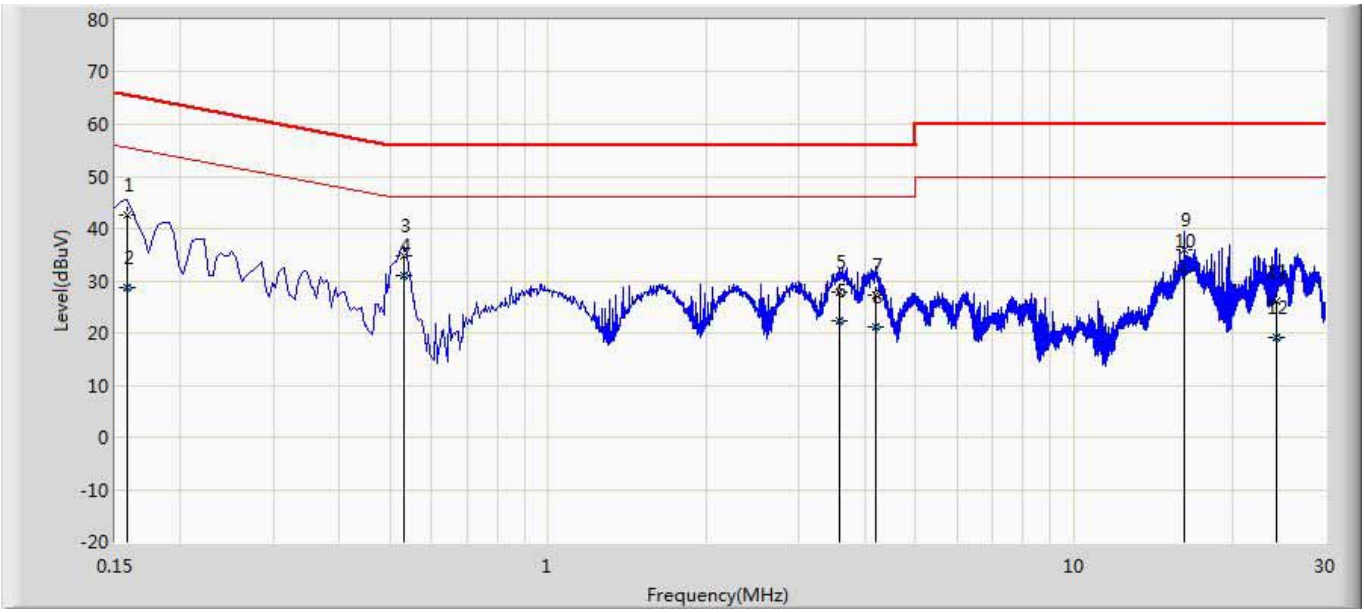
3.4. Test Procedure

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

3.5. Test Result

APEX0365:

Site: TR1	Time: 2017/01/18 - 14:37
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: Access Point	Power: PoE 57V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.158	42.586	32.955	-22.982	65.568	9.608	0.022	0.000	QP
2		0.158	28.689	19.059	-26.879	55.568	9.608	0.022	0.000	AV
3		0.530	34.921	25.273	-21.079	56.000	9.600	0.048	0.000	QP
4	*	0.530	30.992	21.343	-15.008	46.000	9.600	0.048	0.000	AV
5		3.578	27.897	18.136	-28.103	56.000	9.636	0.126	0.000	QP
6		3.578	22.306	12.544	-23.694	46.000	9.636	0.126	0.000	AV
7		4.210	27.337	17.558	-28.663	56.000	9.647	0.132	0.000	QP
8		4.210	21.303	11.524	-24.697	46.000	9.647	0.132	0.000	AV
9		16.230	35.943	25.718	-24.057	60.000	9.959	0.266	0.000	QP
10		16.230	31.771	21.546	-18.229	50.000	9.959	0.266	0.000	AV
11		24.294	26.223	15.469	-33.777	60.000	10.423	0.331	0.000	QP
12		24.294	19.163	8.408	-30.837	50.000	10.423	0.331	0.000	AV

Note:

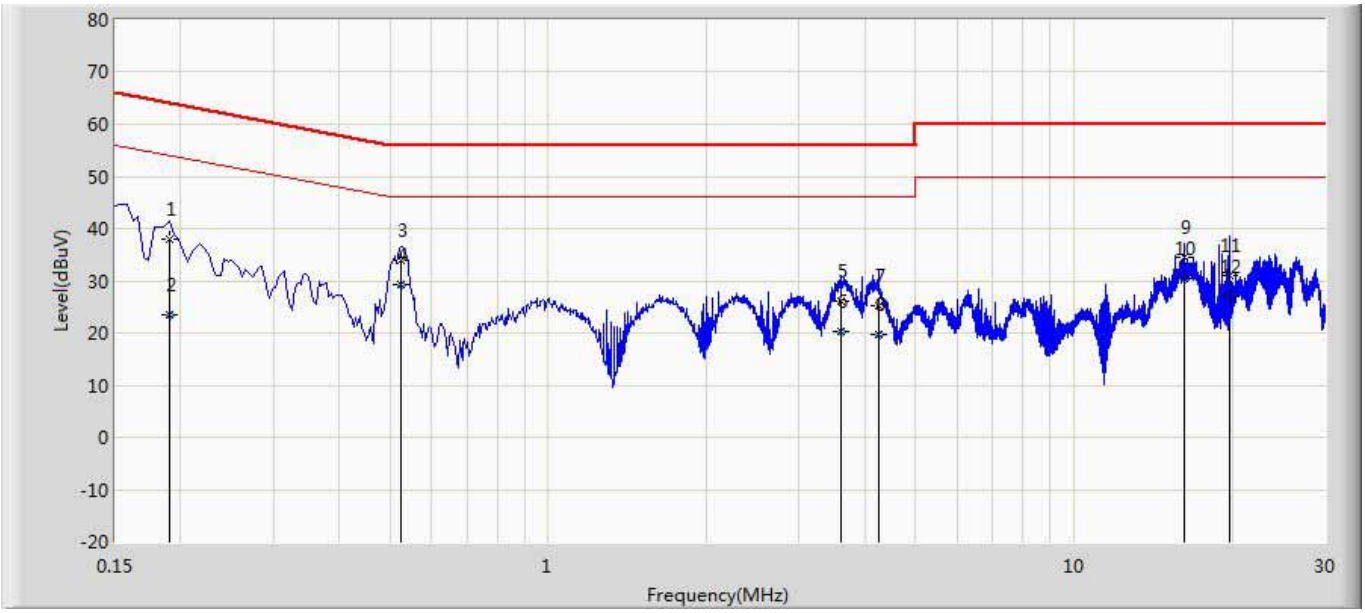
1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

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

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

Site: TR1	Time: 2017/01/18 - 14:37
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: Access Point	Power: PoE 57V
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		0.190	37.842	28.217	-26.195	64.037	9.598	0.028	0.000	QP
2		0.190	23.602	13.977	-30.435	54.037	9.598	0.028	0.000	AV
3		0.526	33.905	24.267	-22.095	56.000	9.590	0.048	0.000	QP
4	*	0.526	29.251	19.614	-16.749	46.000	9.590	0.048	0.000	AV
5		3.606	26.162	16.406	-29.838	56.000	9.631	0.125	0.000	QP
6		3.606	20.296	10.540	-25.704	46.000	9.631	0.125	0.000	AV
7		4.258	25.317	15.542	-30.683	56.000	9.640	0.135	0.000	QP
8		4.258	19.691	9.915	-26.309	46.000	9.640	0.135	0.000	AV
9		16.226	34.508	24.229	-25.492	60.000	10.014	0.266	0.000	QP
10		16.226	30.368	20.088	-19.632	50.000	10.014	0.266	0.000	AV
11		19.710	31.063	20.603	-28.937	60.000	10.167	0.294	0.000	QP
12		19.710	26.979	16.518	-23.021	50.000	10.167	0.294	0.000	AV

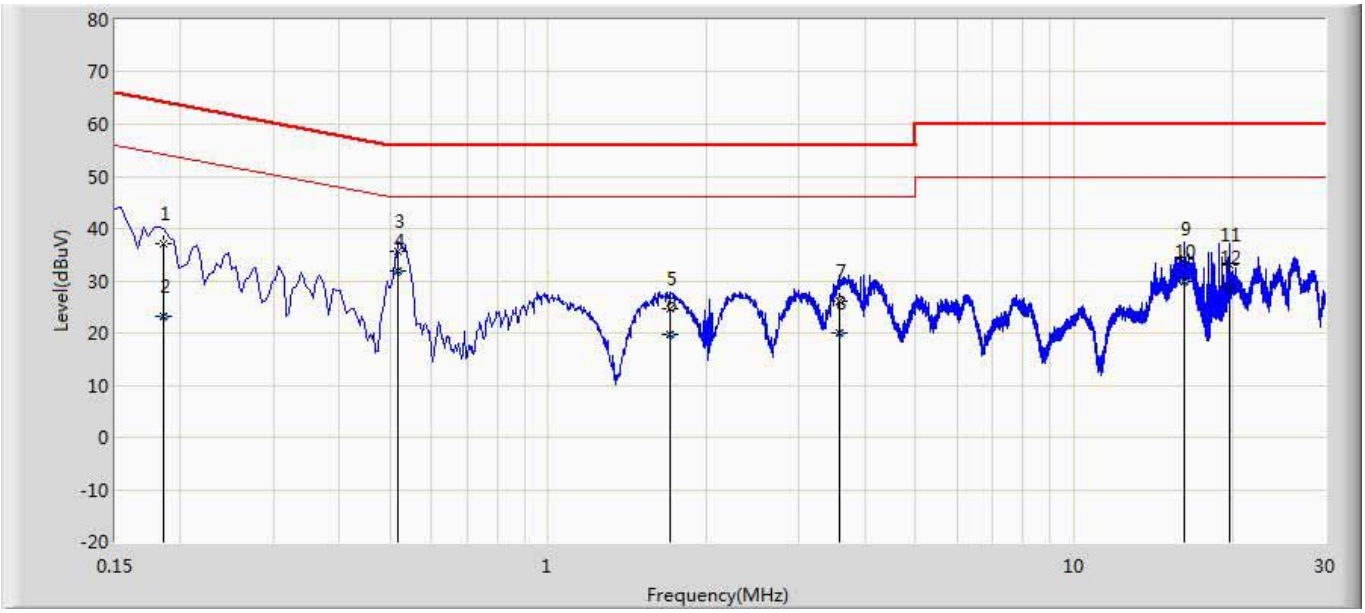
Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

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

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

APEX0367:

Site: TR1	Time: 2017/01/18 - 14:29
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: Access Point	Power: PoE 57V
Note: Mode 1	



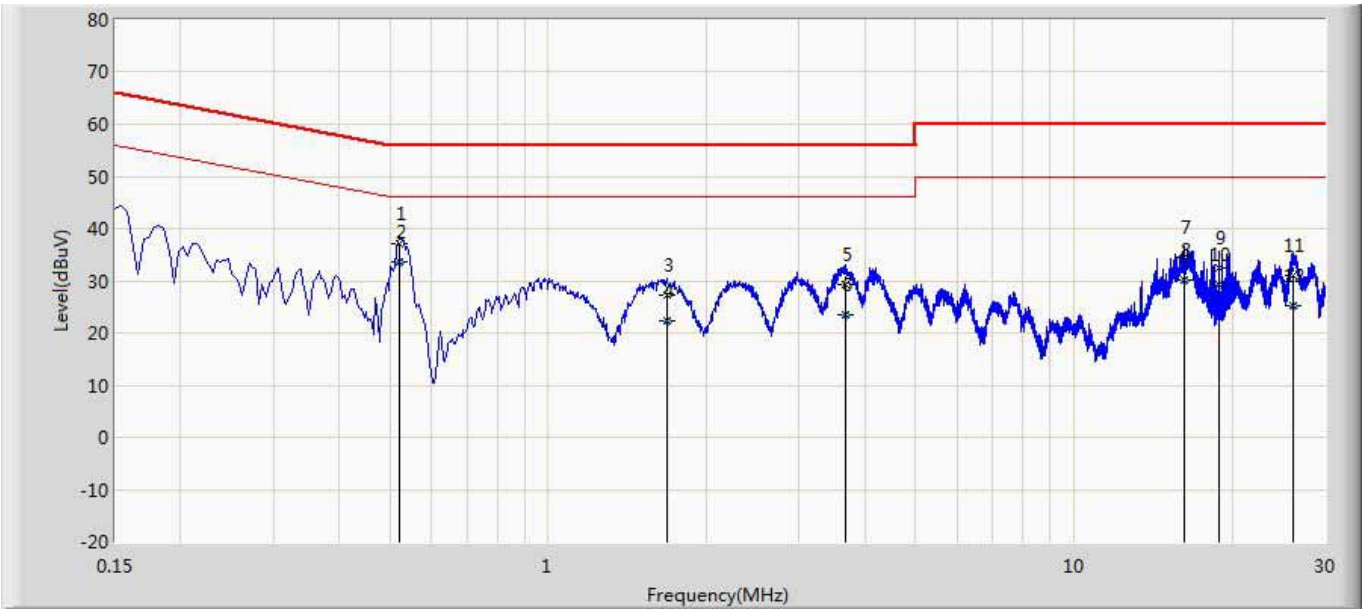
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.186	37.063	27.439	-27.150	64.213	9.597	0.027	0.000	QP
2		0.186	23.268	13.644	-30.945	54.213	9.597	0.027	0.000	AV
3		0.518	35.510	25.874	-20.490	56.000	9.590	0.046	0.000	QP
4	*	0.518	31.879	22.243	-14.121	46.000	9.590	0.046	0.000	AV
5		1.706	24.652	14.966	-31.348	56.000	9.604	0.082	0.000	QP
6		1.706	19.847	10.161	-26.153	46.000	9.604	0.082	0.000	AV
7		3.578	26.111	16.354	-29.889	56.000	9.631	0.126	0.000	QP
8		3.578	19.944	10.187	-26.056	46.000	9.631	0.126	0.000	AV
9		16.166	34.134	23.860	-25.866	60.000	10.011	0.262	0.000	QP
10		16.166	29.775	19.501	-20.225	50.000	10.011	0.262	0.000	AV
11		19.710	32.988	22.527	-27.012	60.000	10.167	0.294	0.000	QP
12		19.710	28.682	18.221	-21.318	50.000	10.167	0.294	0.000	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.

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

Site: TR1	Time: 2017/01/18 - 14:34
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: Access Point	Power: PoE 57V
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		0.522	36.988	27.342	-19.012	56.000	9.600	0.047	0.000	QP
2	*	0.522	33.493	23.846	-12.507	46.000	9.600	0.047	0.000	AV
3		1.678	27.148	17.460	-28.852	56.000	9.610	0.078	0.000	QP
4		1.678	22.449	12.761	-23.551	46.000	9.610	0.078	0.000	AV
5		3.674	29.163	19.399	-26.837	56.000	9.638	0.126	0.000	QP
6		3.674	23.532	13.768	-22.468	46.000	9.638	0.126	0.000	AV
7		16.166	34.456	24.238	-25.544	60.000	9.956	0.262	0.000	QP
8		16.166	30.091	19.873	-19.909	50.000	9.956	0.262	0.000	AV
9		18.918	32.417	22.041	-27.583	60.000	10.088	0.288	0.000	QP
10		18.918	29.323	18.947	-20.677	50.000	10.088	0.288	0.000	AV
11		26.058	31.123	20.330	-28.877	60.000	10.451	0.342	0.000	QP
12		26.058	25.282	14.490	-24.718	50.000	10.451	0.342	0.000	AV

Note:1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

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

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

4. Emissions in restricted frequency bands

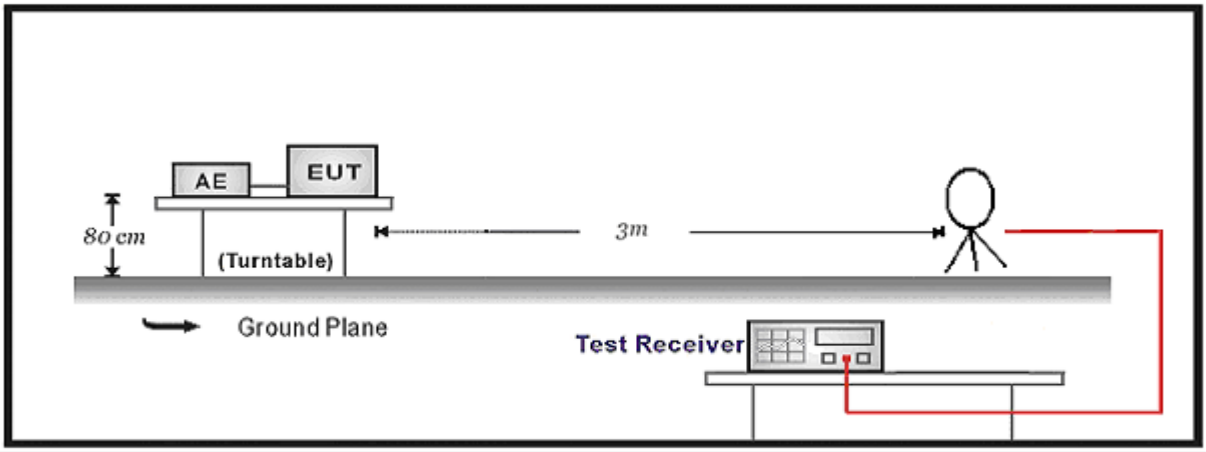
4.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.29	2017.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2016.11.16	2017.11.15
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2016.10.16	2017.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.02	2017.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2017.01.04	2018.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

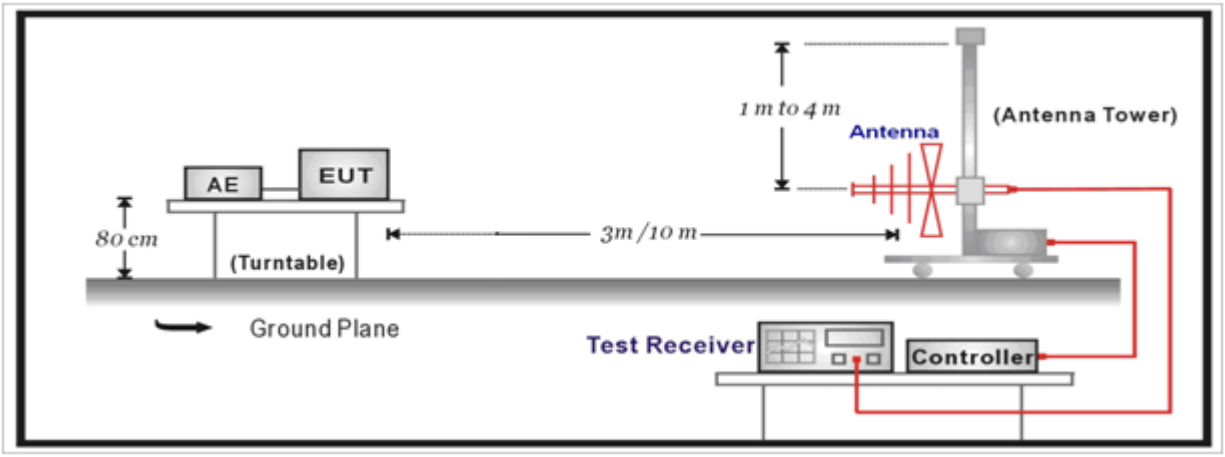
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.03	2018.01.02
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.06	2017.05.05
Preamplifier	DEKRA Testing and Certification (Suzhou) Co., Ltd.	AP-040G	CHM-0906001	2016.05.06	2017.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.22	2017.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.11.25	2017.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.02	2017.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.10	2017.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2017.01.04	2018.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

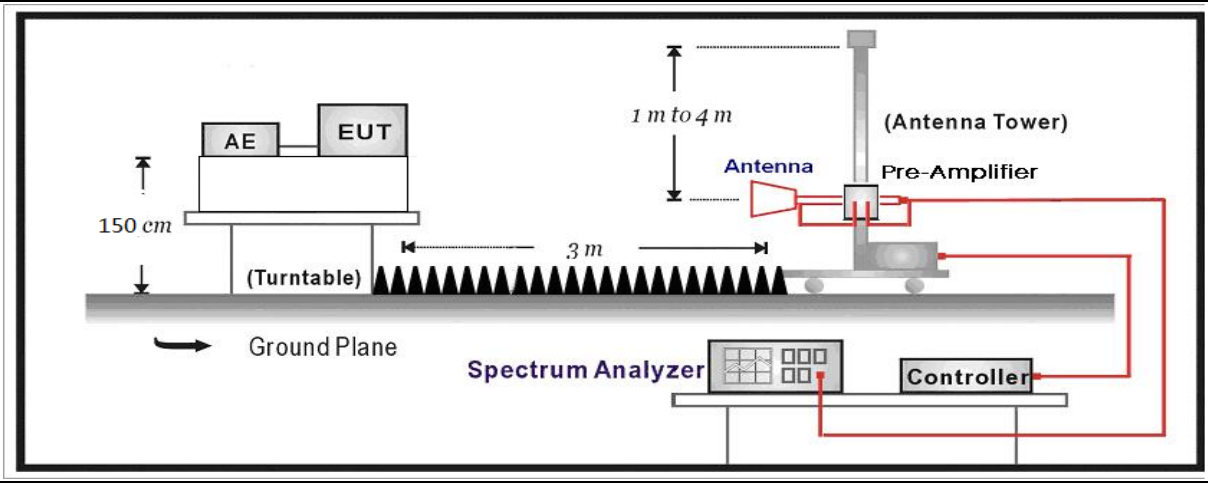
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

For FCC:

Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 –16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975–12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675–12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

For IC:

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

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

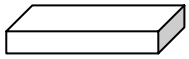
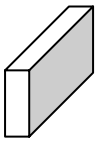
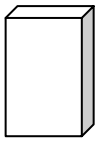
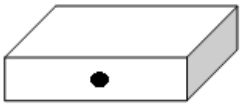
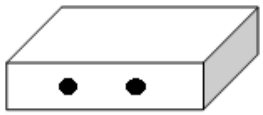
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed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

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

4.4. Test Procedure

Test Method						
	References Rule				Chapter	Description
☐	ANSI C63.10				11.11	Emissions in non-restricted frequency bands
	☐	ANSI C63.10			11.11.2	Reference level measurement
	☐	ANSI C63.10			11.11.3	Emission level measurement
☒	ANSI C63.10				11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10			11.12.1	Radiated emission measurements
	☒	ANSI C63.10			11.12.2.7	Radiated spurious emission test
		☒	ANSI C63.10		6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
		☒	ANSI C63.10		6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
		☒	ANSI C63.10		6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
		☐	ANSI C63.10		11.12.2.3	Quasi-peak measurement procedure
		☒	ANSI C63.10		11.12.2.4	Peak power measurement procedure
		☒	ANSI C63.10		11.12.2.5	Average power measurement procedures
			☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
			☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
			☒	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

4.5. EUT test Axis definition

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

4.6. Test Result

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 1	Test Site	:	AC-5
Mode No.	:	APEX0365	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	1	H	4825.000	64.301	-8.345	55.956	74	-18.044	PK
		H	4825.000	61.685	-8.345	53.340	54	-0.660	AV
		H	7239.000	54.315	-4.981	49.334	54(note3)	-4.666	PK
		H	9648.000	45.816	-0.787	45.029	54(note3)	-8.971	PK
		V	4825.000	58.952	-8.345	50.607	54(note3)	-3.393	PK
		V	7239.000	52.746	-4.981	47.765	54(note3)	-6.235	PK
		V	9648.000	47.456	-0.787	46.669	54(note3)	-7.331	PK
	6	H	4876.000	66.674	-8.352	58.322	74	-15.678	PK
		H	4876.000	61.850	-8.352	53.498	54	-0.502	AV
		H	7307.000	61.240	-4.794	56.446	74	-17.554	PK
		H	7307.000	56.397	-4.794	51.603	54	-2.397	AV
		H	9748.000	46.038	-1.066	44.972	54(note3)	-9.028	PK
		V	4876.000	58.730	-8.352	50.378	54(note3)	-3.622	PK
		V	7307.000	56.894	-4.794	52.100	54(note3)	-1.900	PK
		V	9748.000	46.974	-1.066	45.908	54(note3)	-8.092	PK
	11	H	4927.000	63.213	-8.349	54.864	74	-19.136	PK
		H	4927.000	61.357	-8.349	53.008	54	-0.992	AV
		H	7383.500	57.529	-4.398	53.131	54(note3)	-0.869	PK
		H	9848.000	45.680	-1.039	44.641	54(note3)	-9.359	PK
		V	4927.000	59.544	-8.349	51.195	54(note3)	-2.805	PK
		V	7383.500	56.649	-4.398	52.251	54(note3)	-1.749	PK
		V	9848.000	45.953	-1.039	44.914	54(note3)	-9.086	PK

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

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

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

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

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 2	Test Site	:	AC-5
Mode No.	:	APEX0365	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	1	H	4816.500	58.576	-8.279	50.297	54(note3)	-3.703	PK
		H	7239.000	53.610	-4.981	48.629	54(note3)	-5.371	PK
		H	9648.000	45.287	-0.787	44.500	54(note3)	-9.500	PK
		V	4825.000	60.400	-8.345	52.055	54(note3)	-1.945	PK
		V	7239.000	51.569	-4.981	46.588	54(note3)	-7.412	PK
		V	9648.000	45.783	-0.787	44.996	54(note3)	-9.004	PK
	6	H	4867.500	55.932	-8.376	47.555	54(note3)	-6.445	PK
		H	7307.000	52.778	-4.794	47.984	54(note3)	-6.016	PK
		H	9748.000	44.992	-1.066	43.926	54(note3)	-10.074	PK
		V	4867.500	56.256	-8.376	47.879	54(note3)	-6.121	PK
		V	7311.000	49.802	-4.840	44.962	54(note3)	-9.038	PK
		V	9748.000	45.062	-1.066	43.996	54(note3)	-10.004	PK
	11	H	4927.000	57.119	-8.349	48.770	54(note3)	-5.230	PK
		H	7386.000	49.703	-4.456	45.247	54(note3)	-8.753	PK
		H	9848.000	45.023	-1.039	43.984	54(note3)	-10.016	PK
		V	4918.500	52.899	-8.293	44.606	54(note3)	-9.394	PK
		V	7386.000	49.603	-4.456	45.147	54(note3)	-8.853	PK
		V	9848.000	45.307	-1.039	44.268	54(note3)	-9.732	PK

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

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

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

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

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 3	Test Site	:	AC-5
Mode No.	:	APEX0365	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	1	H	4825.000	58.241	-8.345	49.896	54(note3)	-4.104	PK
		H	7247.500	52.655	-4.903	47.753	54(note3)	-6.247	PK
		H	9648.000	45.501	-0.787	44.714	54(note3)	-9.286	PK
		V	4833.500	58.994	-8.302	50.692	54(note3)	-3.308	PK
		V	7247.500	51.348	-4.903	46.446	54(note3)	-7.554	PK
		V	9648.000	45.093	-0.787	44.306	54(note3)	-9.694	PK
	6	H	4876.000	56.080	-8.352	47.728	54(note3)	-6.272	PK
		H	7311.000	48.904	-4.840	44.064	54(note3)	-9.936	PK
		H	9748.000	45.282	-1.066	44.216	54(note3)	-9.784	PK
		V	4867.500	55.151	-8.376	46.774	54(note3)	-7.226	PK
		V	7311.000	48.421	-4.840	43.581	54(note3)	-10.419	PK
		V	9748.000	45.257	-1.066	44.191	54(note3)	-9.809	PK
	11	H	4927.000	54.944	-8.349	46.595	54(note3)	-7.405	PK
		H	7386.000	47.711	-4.456	43.255	54(note3)	-10.745	PK
		H	9848.000	44.357	-1.039	43.318	54(note3)	-10.682	PK
		V	4924.000	51.350	-8.330	43.021	54(note3)	-10.979	PK
		V	7386.000	49.573	-4.456	45.117	54(note3)	-8.883	PK
		V	9848.000	44.761	-1.039	43.722	54(note3)	-10.278	PK

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

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

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

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

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 4	Test Site	:	AC-5
Mode No.	:	APEX0365	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	3	H	4842.000	54.434	-8.267	46.167	54(note3)	-7.833	PK
		H	7266.000	47.240	-4.702	42.537	54(note3)	-11.463	PK
		H	9688.000	44.775	-0.941	43.835	54(note3)	-10.165	PK
		V	4833.500	55.014	-8.302	46.712	54(note3)	-7.288	PK
		V	7266.000	47.288	-4.702	42.585	54(note3)	-11.415	PK
		V	9688.000	45.327	-0.941	44.387	54(note3)	-9.613	PK
	6	H	4867.500	53.671	-8.376	45.294	54(note3)	-8.706	PK
		H	7311.000	48.323	-4.840	43.483	54(note3)	-10.517	PK
		H	9748.000	45.387	-1.066	44.321	54(note3)	-9.679	PK
		V	4859.000	56.424	-8.380	48.044	54(note3)	-5.956	PK
		V	7311.000	47.096	-4.840	42.256	54(note3)	-11.744	PK
		V	9748.000	46.097	-1.066	45.031	54(note3)	-8.969	PK
	9	H	4893.000	54.322	-8.253	46.069	54(note3)	-7.931	PK
		H	7356.000	48.042	-4.698	43.344	54(note3)	-10.656	PK
		H	9808.000	45.036	-0.858	44.179	54(note3)	-9.821	PK
		V	4904.000	50.719	-8.270	42.448	54(note3)	-11.552	PK
		V	7356.000	47.249	-4.698	42.551	54(note3)	-11.449	PK
		V	9808.000	45.693	-0.858	44.836	54(note3)	-9.164	PK

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

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

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

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

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 1	Test Site	:	AC-5
Mode No.	:	APEX0367	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	1	H	4825.000	60.237	-8.345	51.892	54(note3)	-2.108	PK
		H	7236.000	48.246	-4.998	43.248	54(note3)	-10.752	PK
		H	7236.000	48.246	-4.998	43.248	54(note3)	-10.752	PK
		V	4825.000	60.915	-8.345	52.570	54(note3)	-1.430	PK
		V	7236.000	48.094	-4.998	43.096	54(note3)	-10.904	PK
		V	9648.000	45.158	-0.787	44.371	54(note3)	-9.629	PK
	6	H	4876.000	57.892	-8.352	49.540	54(note3)	-4.460	PK
		H	7311.000	47.667	-4.840	42.827	54(note3)	-11.173	PK
		H	9748.000	45.430	-1.066	44.364	54(note3)	-9.636	PK
		V	4876.000	59.362	-8.352	51.010	54(note3)	-2.990	PK
		V	7311.000	47.131	-4.840	42.291	54(note3)	-11.709	PK
		V	9748.000	45.793	-1.066	44.727	54(note3)	-9.273	PK
	11	H	4924.000	49.857	-8.330	41.528	54(note3)	-12.472	PK
		H	7386.000	48.196	-4.456	43.740	54(note3)	-10.260	PK
		H	9848.000	45.112	-1.039	44.073	54(note3)	-9.927	PK
		V	4924.000	50.376	-8.330	42.047	54(note3)	-11.953	PK
		V	7386.000	46.991	-4.456	42.535	54(note3)	-11.465	PK
		V	9848.000	44.917	-1.039	43.878	54(note3)	-10.122	PK

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

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

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

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

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 2	Test Site	:	AC-5
Mode No.	:	APEX0367	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	1	H	4824.000	52.803	-8.338	44.466	54(note3)	-9.534	PK
		H	7236.000	47.829	-4.998	42.831	54(note3)	-11.169	PK
		H	9648.000	45.682	-0.787	44.895	54(note3)	-9.105	PK
		V	4824.000	53.203	-8.338	44.866	54(note3)	-9.134	PK
		V	7236.000	48.083	-4.998	43.085	54(note3)	-10.915	PK
		V	9648.000	45.058	-0.787	44.271	54(note3)	-9.729	PK
	6	H	4874.000	49.727	-8.358	41.369	54(note3)	-12.631	PK
		H	7311.000	47.634	-4.840	42.794	54(note3)	-11.206	PK
		H	9748.000	44.731	-1.066	43.665	54(note3)	-10.335	PK
		V	4874.000	50.459	-8.358	42.101	54(note3)	-11.899	PK
		V	7311.000	47.230	-4.840	42.390	54(note3)	-11.610	PK
		V	9748.000	45.306	-1.066	44.240	54(note3)	-9.760	PK
	11	H	4924.000	49.630	-8.330	41.301	54(note3)	-12.699	PK
		H	7386.000	48.278	-4.456	43.822	54(note3)	-10.178	PK
		H	9848.000	44.816	-1.039	43.777	54(note3)	-10.223	PK
		V	4924.000	49.326	-8.330	40.997	54(note3)	-13.003	PK
		V	7386.000	47.794	-4.456	43.338	54(note3)	-10.662	PK
		V	9848.000	44.966	-1.039	43.927	54(note3)	-10.073	PK

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

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

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

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

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 3	Test Site	:	AC-5
Mode No.	:	APEX0367	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	1	H	4824.000	51.984	-8.338	43.647	54(note3)	-10.353	PK
		H	7236.000	48.259	-4.998	43.261	54(note3)	-10.739	PK
		H	9648.000	44.917	-0.787	44.130	54(note3)	-9.870	PK
		V	4824.000	53.201	-8.338	44.864	54(note3)	-9.136	PK
		V	7236.000	48.062	-4.998	43.064	54(note3)	-10.936	PK
		V	9648.000	45.403	-0.787	44.616	54(note3)	-9.384	PK
	6	H	4874.000	49.609	-8.358	41.251	54(note3)	-12.749	PK
		H	7311.000	47.015	-4.840	42.175	54(note3)	-11.825	PK
		H	9748.000	45.526	-1.066	44.460	54(note3)	-9.540	PK
		V	4874.000	49.686	-8.358	41.328	54(note3)	-12.672	PK
		V	7311.000	47.553	-4.840	42.713	54(note3)	-11.287	PK
		V	9748.000	45.025	-1.066	43.959	54(note3)	-10.041	PK
	11	H	4924.000	50.236	-8.330	41.907	54(note3)	-12.093	PK
		H	7386.000	47.753	-4.456	43.297	54(note3)	-10.703	PK
		H	9848.000	45.239	-1.039	44.200	54(note3)	-9.800	PK
		V	4924.000	50.342	-8.330	42.013	54(note3)	-11.987	PK
		V	7386.000	47.255	-4.456	42.799	54(note3)	-11.201	PK
		V	9848.000	43.945	-1.039	42.906	54(note3)	-11.094	PK

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

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

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

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

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode 4	Test Site	:	AC-5
Mode No.	:	APEX0367	Test Date	:	2016.11.31

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μV)	Factor (dB)	Measured Level (dB μV/m)	Limit (dB μV/m)	Over Limt (dB)	Detector
Ant 0+1	3	H	4844.000	49.896	-8.283	41.614	54(note3)	-12.386	PK
		H	7266.000	46.840	-4.702	42.137	54(note3)	-11.863	PK
		H	9688.000	44.528	-0.941	43.588	54(note3)	-10.412	PK
		V	4844.000	50.904	-8.283	42.622	54(note3)	-11.378	PK
		V	7266.000	47.810	-4.702	43.107	54(note3)	-10.893	PK
		V	9688.000	45.778	-0.941	44.838	54(note3)	-9.162	PK
	6	H	4874.000	49.720	-8.358	41.362	54(note3)	-12.638	PK
		H	7311.000	47.560	-4.840	42.720	54(note3)	-11.280	PK
		H	9748.000	45.199	-1.066	44.133	54(note3)	-9.867	PK
		V	4874.000	49.932	-8.358	41.574	54(note3)	-12.426	PK
		V	7311.000	47.445	-4.840	42.605	54(note3)	-11.395	PK
		V	9748.000	45.213	-1.066	44.147	54(note3)	-9.853	PK
	9	H	4904.000	49.643	-8.270	41.372	54(note3)	-12.628	PK
		H	7356.000	47.022	-4.698	42.324	54(note3)	-11.676	PK
		H	9808.000	45.343	-0.858	44.486	54(note3)	-9.514	PK
		V	4904.000	49.112	-8.270	40.841	54(note3)	-13.159	PK
		V	7356.000	46.840	-4.698	42.142	54(note3)	-11.858	PK
		V	9808.000	45.001	-0.858	44.144	54(note3)	-9.856	PK

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

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

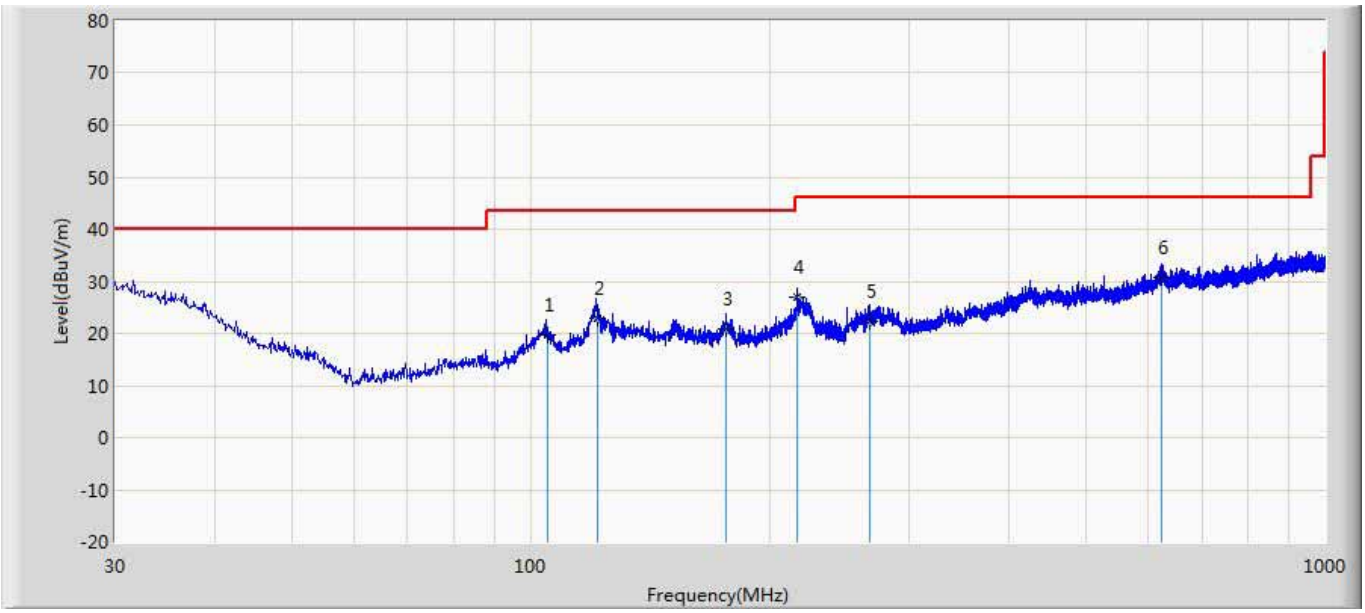
Note: 3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

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

The worst case of Radiated Emission below 1GHz:

APEX0365:

Site: AC2	Time: 2016/12/20
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC2_3m (30-1000MHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power: AC 120V/60Hz
Note: Mode 1	

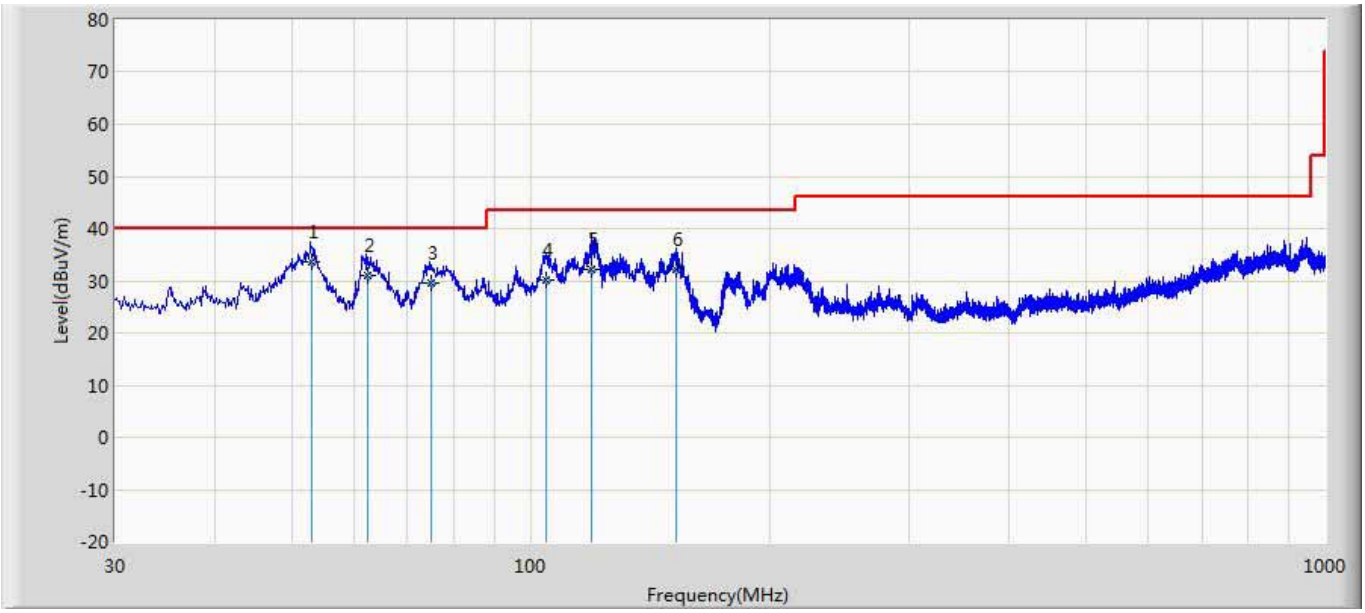


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		104.873	19.711	30.172	-23.789	43.500	11.587	1.110	23.158	200	140	QP
2		121.363	23.038	32.530	-20.462	43.500	12.418	1.190	23.100	100	221	QP
3		176.543	20.899	33.146	-22.601	43.500	9.404	1.440	23.091	100	281	QP
4		216.982	27.053	39.423	-18.947	46.000	9.270	1.590	23.230	100	337	QP
5		267.873	22.193	30.555	-23.807	46.000	13.076	1.760	23.198	100	340	QP
6	*	622.873	30.790	31.608	-15.210	46.000	19.000	2.740	22.558	200	310	QP

Note1: " * ", means this data is the worst emission level.

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

Site: AC2	Time: 2016/12/20
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC2_3m (30-1000MHz)	Polarity: Vertical
EUT: Wireless Access Point	Power:PoE 57V
Note: Mode 1	



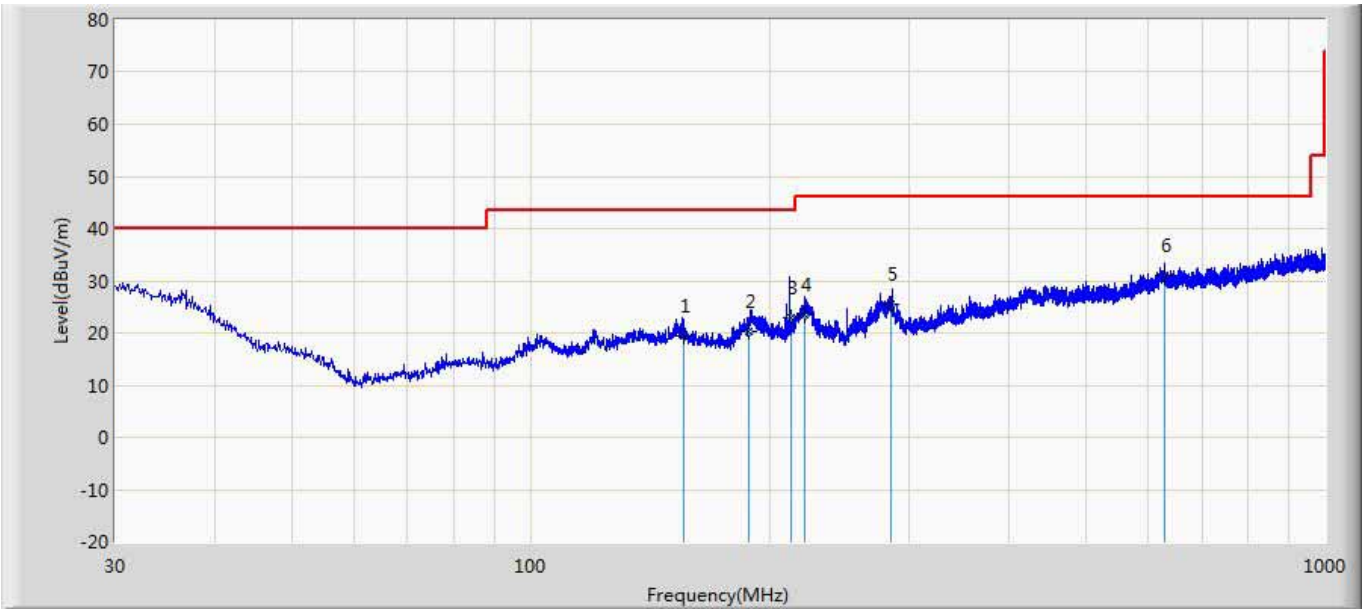
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	53.117	33.524	48.083	-6.476	40.000	7.670	0.790	23.018	100	135	QP
2		62.500	31.005	46.750	-8.995	40.000	6.450	0.850	23.045	100	140	QP
3		74.853	29.523	45.044	-10.477	40.000	6.639	0.930	23.090	100	260	QP
4		104.783	30.269	40.740	-13.231	43.500	11.578	1.110	23.159	100	227	QP
5		119.086	32.111	41.579	-11.389	43.500	12.464	1.178	23.110	100	0	QP
6		152.543	32.125	43.441	-11.375	43.500	10.348	1.340	23.003	200	360	QP

Note1: " * ", means this data is the worst emission level.

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

APEX0367:

Site: AC2	Time: 2016/12/20
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC2_3m (30-1000MHz)	Polarity: Horizontal
EUT: Wireless Access Point	Power:PoE 57V
Note: Mode 1	

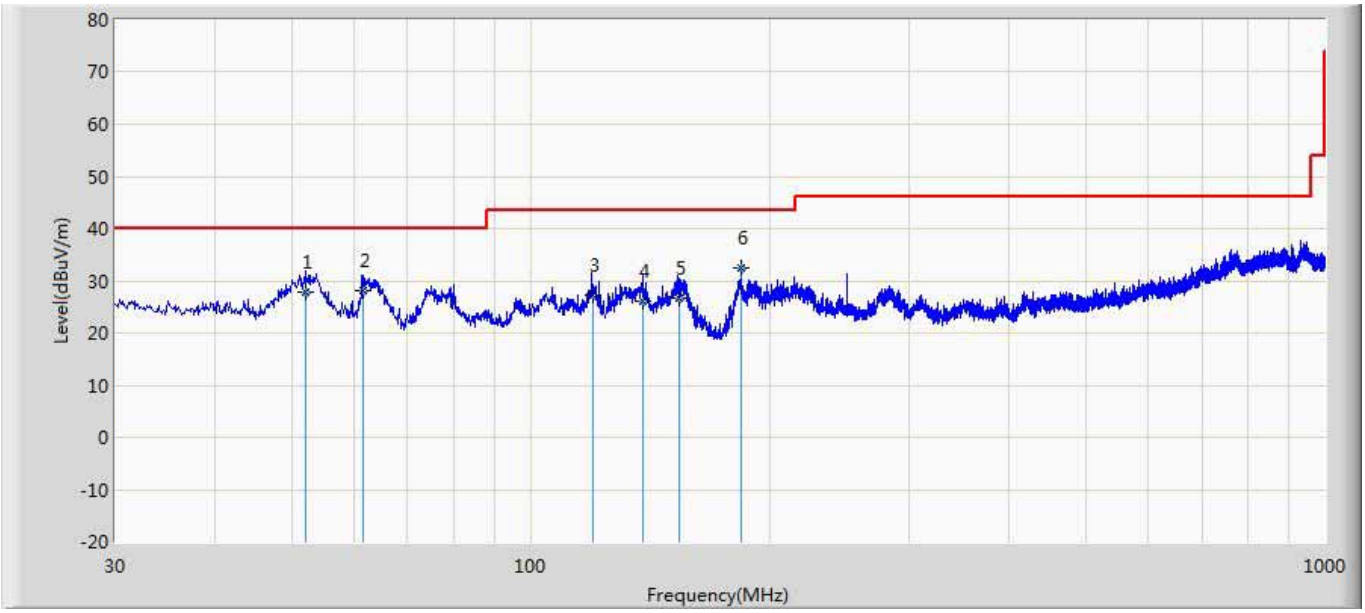


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		155.653	19.376	30.881	-24.124	43.500	10.161	1.350	23.015	100	331	QP
2		188.653	20.343	32.775	-23.157	43.500	9.213	1.490	23.136	100	154	QP
3		212.543	22.999	35.413	-20.501	43.500	9.226	1.580	23.220	200	360	QP
4		221.495	23.370	35.550	-22.630	46.000	9.450	1.610	23.240	200	52	QP
5		284.627	25.645	33.912	-20.355	46.000	12.993	1.810	23.070	100	260	QP
6	*	627.653	30.937	31.696	-15.063	46.000	19.000	2.750	22.509	100	202	QP

Note1: " * ", means this data is the worst emission level.

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

Site: AC2	Time: 2016/12/20
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC2_3m (30-1000MHz)	Polarity: Vertical
EUT: Wireless Access Point	Power:PoE 57V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		52.087	27.897	42.277	-12.103	40.000	7.845	0.788	23.012	100	53	QP
2		61.492	28.121	43.846	-11.879	40.000	6.470	0.845	23.040	200	137	QP
3		120.044	27.344	36.782	-16.156	43.500	12.484	1.180	23.102	100	21	QP
4		138.681	26.156	36.720	-17.344	43.500	11.206	1.270	23.040	100	1	QP
5		153.591	26.679	38.060	-16.821	43.500	10.285	1.344	23.010	100	110	QP
6	*	184.328	32.516	44.908	-10.984	43.500	9.257	1.471	23.120	100	261	QP

Note1: " * ", means this data is the worst emission level.

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

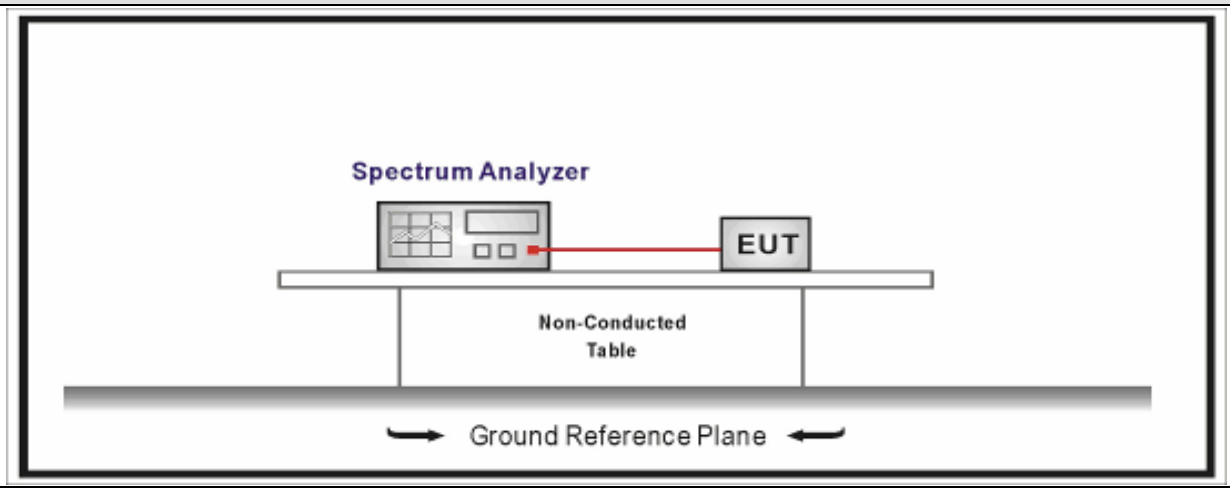
5. Emissions in non-restricted frequency bands

5.1. Test Equipment

Occupied Bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.02.04	2017.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2016.04.09	2017.04.08
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2016.04.09	2017.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

5.2. Test Setup

Occupied Bandwidth test setup:



5.3. Limit

Un-Restricted Band Emissions Limit	
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30c(Note1)
RF Output power(PK detector)	20c(Note2)

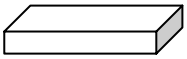
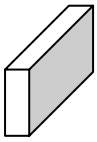
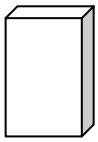
Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

5.4. Test Procedure

Test Method						
	References Rule				Chapter	Description
☒	ANSI C63.10				11.11	Emissions in non-restricted frequency bands
	☒	ANSI C63.10			11.11.2	Reference level measurement
	☒	ANSI C63.10			11.11.3	Emission level measurement
☐	ANSI C63.10				11.12	Emissions in restricted frequency bands
	☐	ANSI C63.10			11.12.1	Radiated emission measurements
	☐	ANSI C63.10			11.12.2.7	Radiated spurious emission test
☐	ANSI C63.10				6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10				6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☒	ANSI C63.10				6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	☒	ANSI C63.10			11.12.2	Antenna-port conducted measurements
		☐	ANSI C63.10		11.12.2.3	Quasi-peak measurement procedure
		☒	ANSI C63.10		11.12.2.4	Peak power measurement procedure
		☐	ANSI C63.10		11.12.2.5	Average power measurement procedures
			☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
			☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
			☐	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

5.5. EUT test Axis definition

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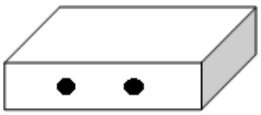
	☒	Conducted		
	☐	Chain 0		
	☒	Chain 0	Chain 1	
				
	☐	Chain 0	Chain 1	Chain 2

5.6. Test Result

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode1~4	Test Site	:	TR8
Mode No.	:	APEX0365	Test Date	:	2016.12.01

Antenna #0

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	17.920	2394.50	-31.709	49.629	>30	Pass
1	11	2462	17.920	2483.5	-39.152	57.072	>30	Pass
2	01	2412	10.179	2400	-30.147	40.326	>30	Pass
2	11	2462	10.179	2483.5	-35.428	45.607	>30	Pass
3	01	2412	7.719	2400	-33.919	41.638	>30	Pass
3	11	2462	7.719	2483.5	-37.437	45.156	>30	Pass
4	03	2422	3.913	2400	-41.942	45.855	>30	Pass
4	09	2452	3.913	2483.5	-39.970	43.883	>30	Pass

Note 1: The worst case of Emissions in non-restricted frequency bands as below:
2: As the radiated emission was performed, so conducted emission was only tested for the nearest emission of fundamental frequency.
3: In-Band PSD[a] data is tested by Mid channel.

Mode 2 CH01(2412MHz)

Antenna #1

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	16.838	2396.1	-32.217	49.055	>30	Pass
1	11	2462	16.838	2483.5	-41.840	58.678	>30	Pass
2	01	2412	9.640	2399.8	-31.584	41.224	>30	Pass
2	11	2462	9.640	2438.3	-38.835	48.475	>30	Pass
3	01	2412	9.662	2400	-34.10	43.762	>30	Pass
3	11	2462	9.662	2483.5	-36.616	46.278	>30	Pass
4	03	2422	5.772	2394.5	-32.578	38.350	>30	Pass
4	09	2452	5.772	2483.5	-41.506	47.278	>30	Pass

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

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

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

Mode 4 CH03(2422MHz)

Product Name	:	Access Point	Power	:	PoE 57V
Test Mode	:	Mode1~4	Test Site	:	TR8
Mode No.	:	APEX0367	Test Date	:	2016.12.01

Antenna #0

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	15.914	2399.496	-31.399	47.313	>30	Pass
1	11	2462	15.070	2483.5	-44.300	59.370	>30	Pass
2	01	2412	5.143	2400	-40.224	45.367	>30	Pass
2	11	2462	6.932	2483.5	-46.422	53.354	>30	Pass
3	01	2412	4.721	2400	-38.704	43.425	>30	Pass
3	11	2462	6.935	2483.5	-45.213	52.148	>30	Pass
4	03	2422	0.986	2400	-42.685	43.671	>30	Pass
4	09	2452	3.151	2483.5	-46.419	49.570	>30	Pass

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

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

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

Mode 3 CH01(2412MHz)

Antenna #1

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	14.567	2395.994	-31.522	46.089	>30	Pass
1	11	2462	15.317	2483.5	-44.693	60.010	>30	Pass
2	01	2412	4.702	2400	-38.201	42.903	>30	Pass
2	11	2462	6.108	2483.5	-46.105	52.213	>30	Pass
3	01	2412	4.657	2400	-37.906	42.563	>30	Pass
3	11	2462	6.370	2483.5	-47.175	53.545	>30	Pass
4	03	2422	2.976	2400	-38.907	41.883	>30	Pass
4	09	2452	2.390	2483.5	-47.941	50.331	>30	Pass

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

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

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

Mode 4 CH03(2422MHz)

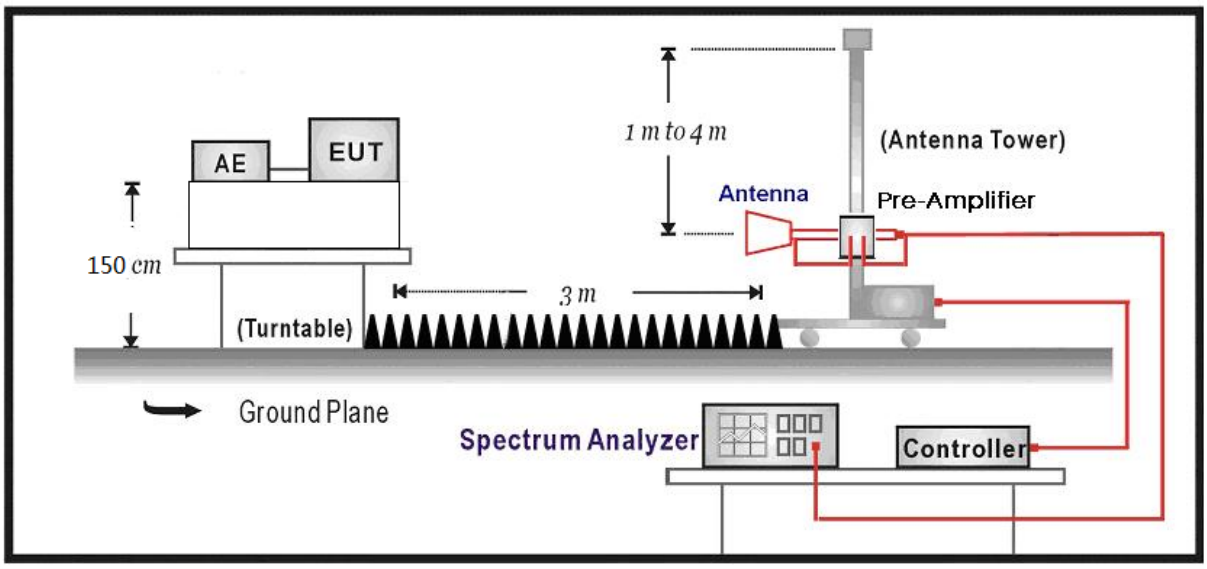
6. Radiated Emission Band Edge

6.1. Test Equipment

Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Receiver	Agilent	N9038A	MY51210196	2016.07.16	2017.07.15
Pre-Amplifier	Miteq	NSP1800-25	1364185	2016.05.03	2017.05.02
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2016.07.12	2017.07.11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.09.18	2017.09.17
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.02.28	2017.02.27
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.02.28	2017.02.27
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.05	2017.01.04
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

6.2. Test Setup

Above 1GHz Test Setup:



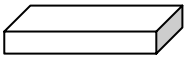
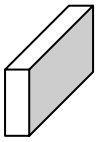
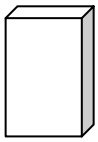
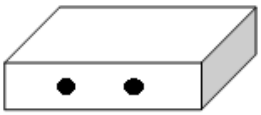
6.3. Limit

Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390 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
☐	ANSI C63.10				6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☒	ANSI C63.10				6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
		☐	ANSI C63.10		11.12.2.3	Quasi-peak measurement procedure
		☒	ANSI C63.10		11.12.2.4	Peak power measurement procedure
		☒	ANSI C63.10		11.12.2.5	Average power measurement procedures
			☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
			☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
			☒	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

6.5. EUT test definition

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

6.6. Duty Cycle

APEX0365:

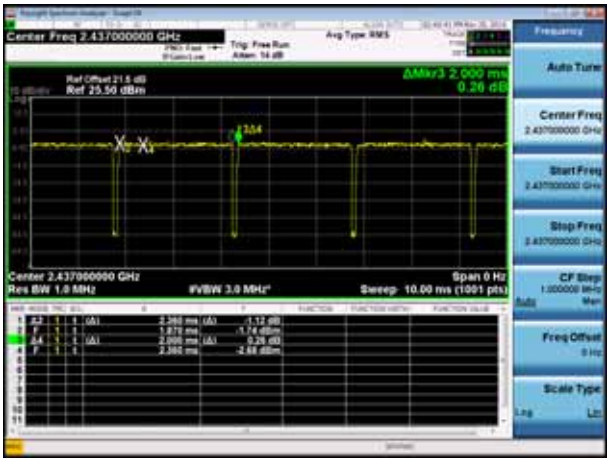
Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11b	N/A	N/A	10Hz	N/A	100%
802.11g	2.01	0.12	510Hz	2.13	94.37%
802.11n(20MHz)	4.92	0.12	220Hz	5.04	97.62%
802.11n(40MHz)	2.00	0.36	510Hz	2.36	84.75%

802.11b

802.11g

802.11n(20MHz)

802.11n(40MHz)



APEX0367:

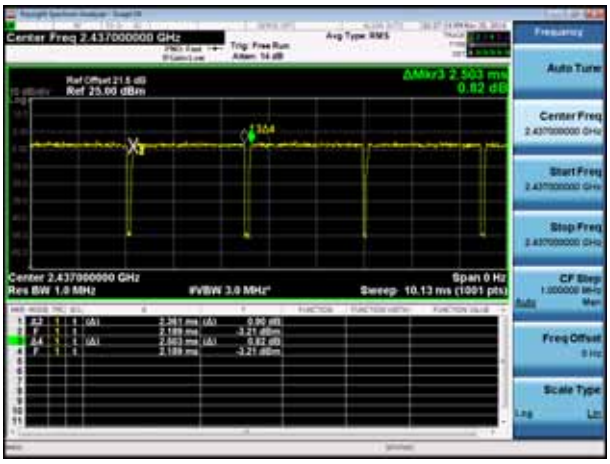
Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11b	N/A	N/A	10Hz	N/A	100%
802.11g	2.02	0.1	510 Hz	2.12	95.28%
802.11n(20MHz)	4.94	0.14	210 Hz	5.08	97.24%
802.11n(40MHz)	2.361	0.142	450 Hz	2.503	94.33%

802.11b

802.11g

802.11n(20MHz)

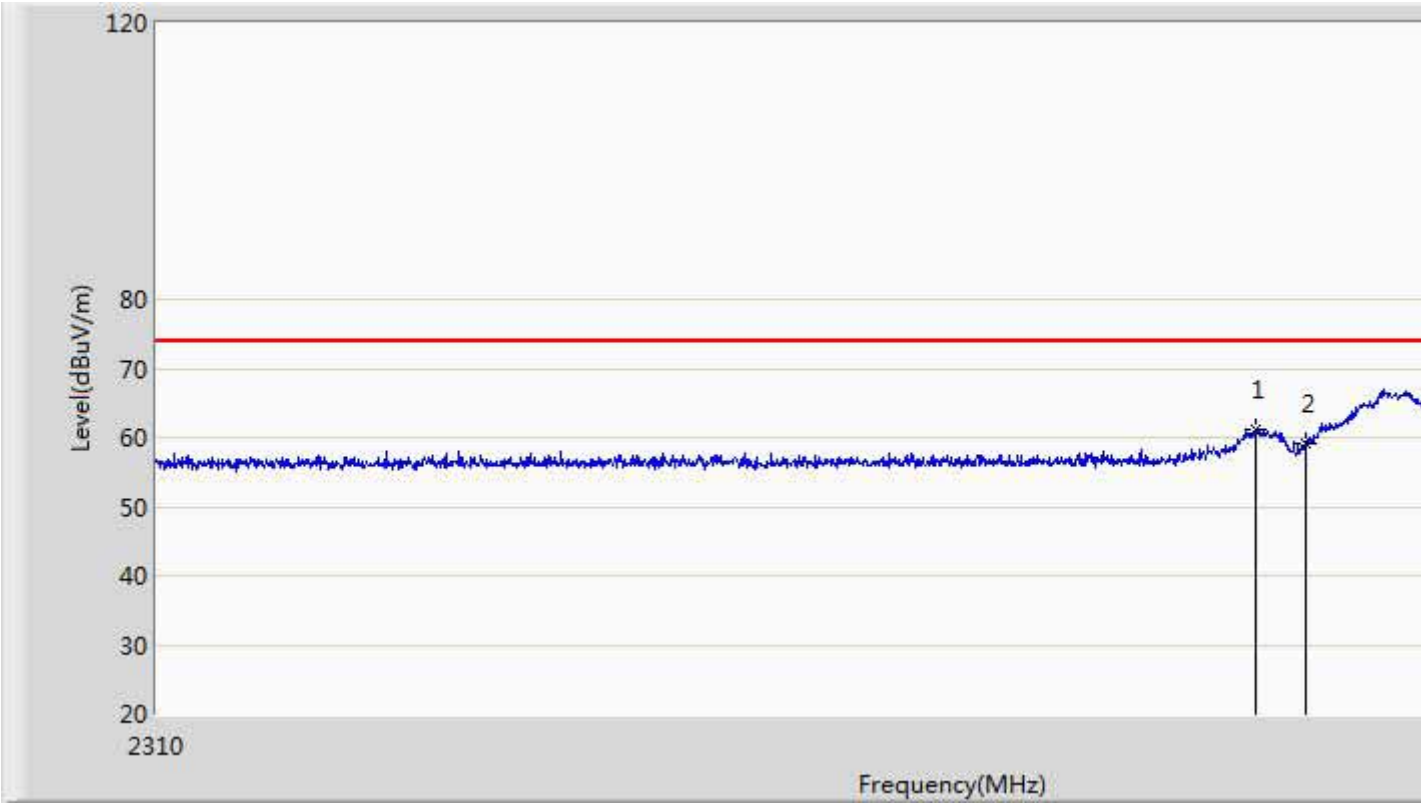
802.11n(40MHz)



6.7. Test Result

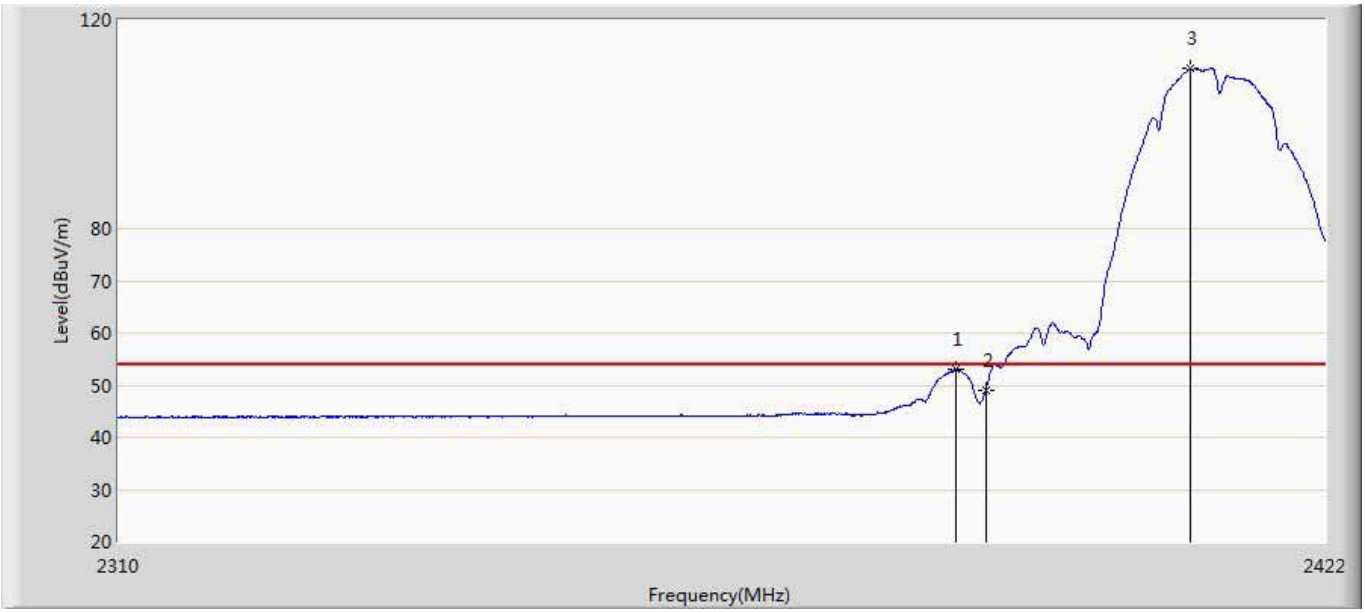
APEX0365:

Site: AC5	Time: 2016/11/19 - 14:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2412MHz by 802.11b	



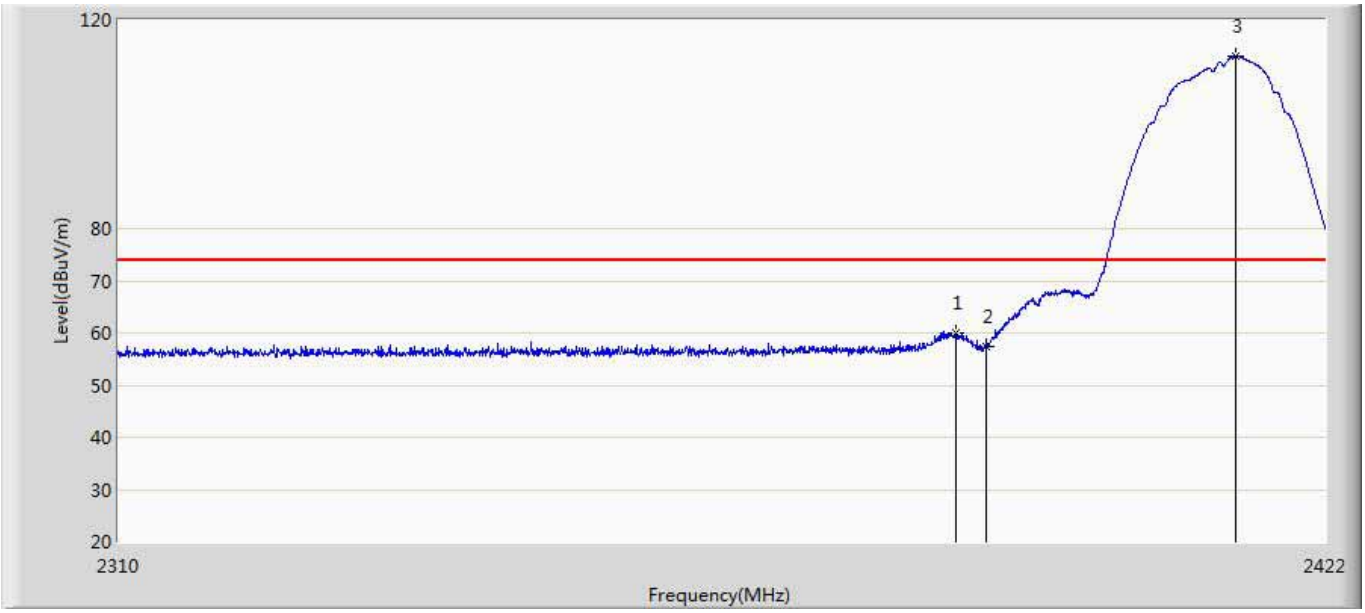
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.552	61.244	25.570	-12.756	74.000	35.674	PK
2		2390.000	59.182	23.500	-14.818	74.000	35.682	PK
3	*	2410.464	113.977	78.241	39.977	74.000	35.735	PK

Site: AC5	Time: 2016/11/19 - 14:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2412MHz by 802.11b	



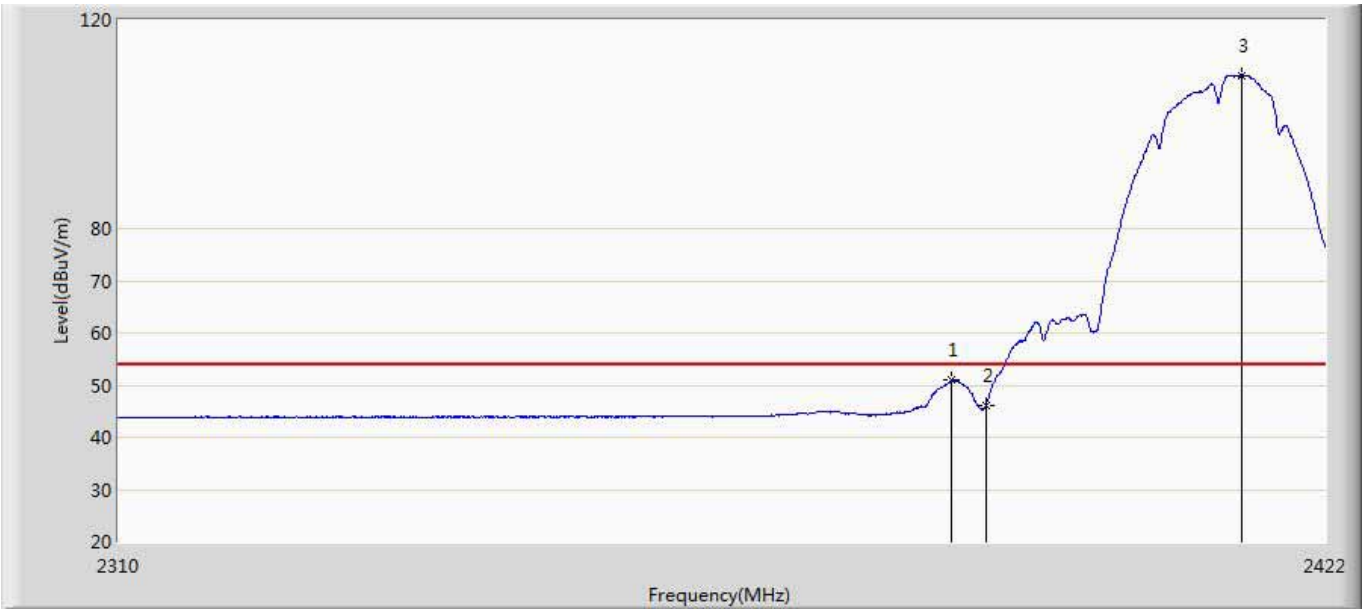
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.224	53.184	17.508	-0.816	54.000	35.676	AV
2		2390.000	49.095	13.413	-4.905	54.000	35.682	AV
3	*	2409.232	110.590	74.858	56.590	54.000	35.732	AV

Site: AC5	Time: 2016/11/19 - 14:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2412MHz by 802.11b	



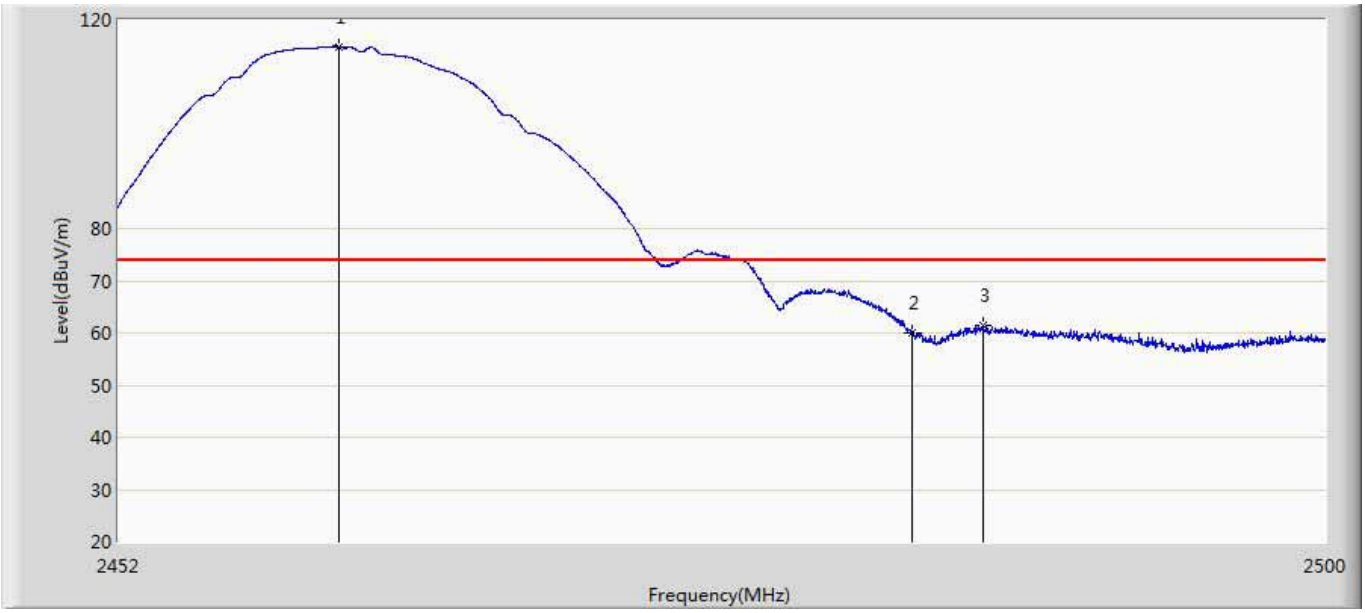
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.224	60.029	24.353	-13.971	74.000	35.676	PK
2		2390.000	57.367	21.685	-16.633	74.000	35.682	PK
3	*	2413.488	113.015	77.267	39.015	74.000	35.748	PK

Site: AC5	Time: 2016/11/19 - 15:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2412MHz by 802.11b	



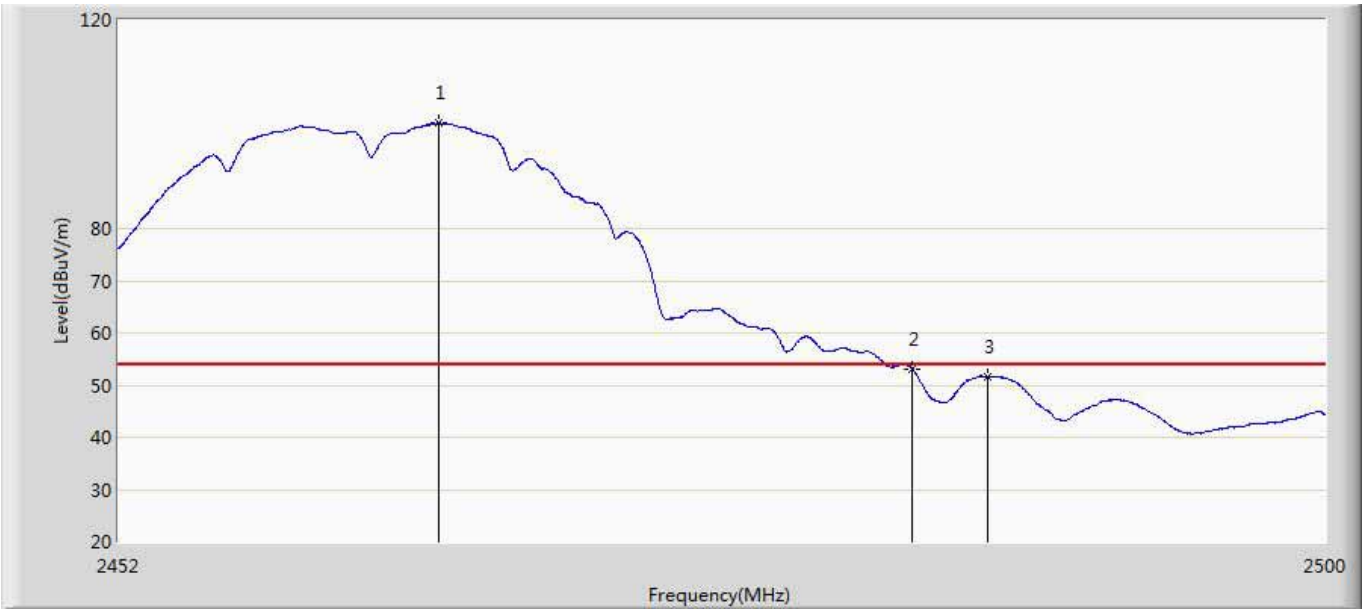
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.832	50.940	15.265	-3.060	54.000	35.675	AV
2		2390.000	46.152	10.470	-7.848	54.000	35.682	AV
3	*	2414.048	109.350	73.600	55.350	54.000	35.750	AV

Site: AC5	Time: 2016/11/19 - 15:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2462MHz by 802.11b	



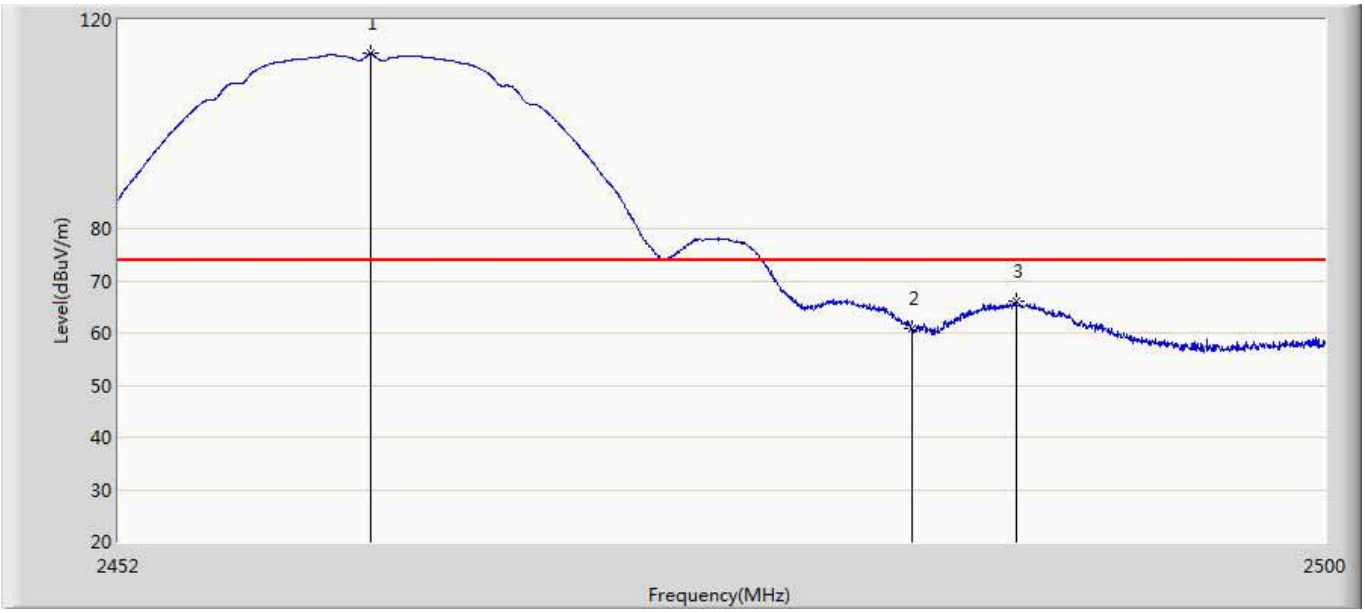
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.688	114.880	79.007	40.880	74.000	35.872	PK
2		2483.500	59.947	24.055	-14.053	74.000	35.891	PK
3		2486.320	61.568	25.656	-12.432	74.000	35.912	PK

Site: AC5	Time: 2016/11/19 - 15:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2462MHz by 802.11b	



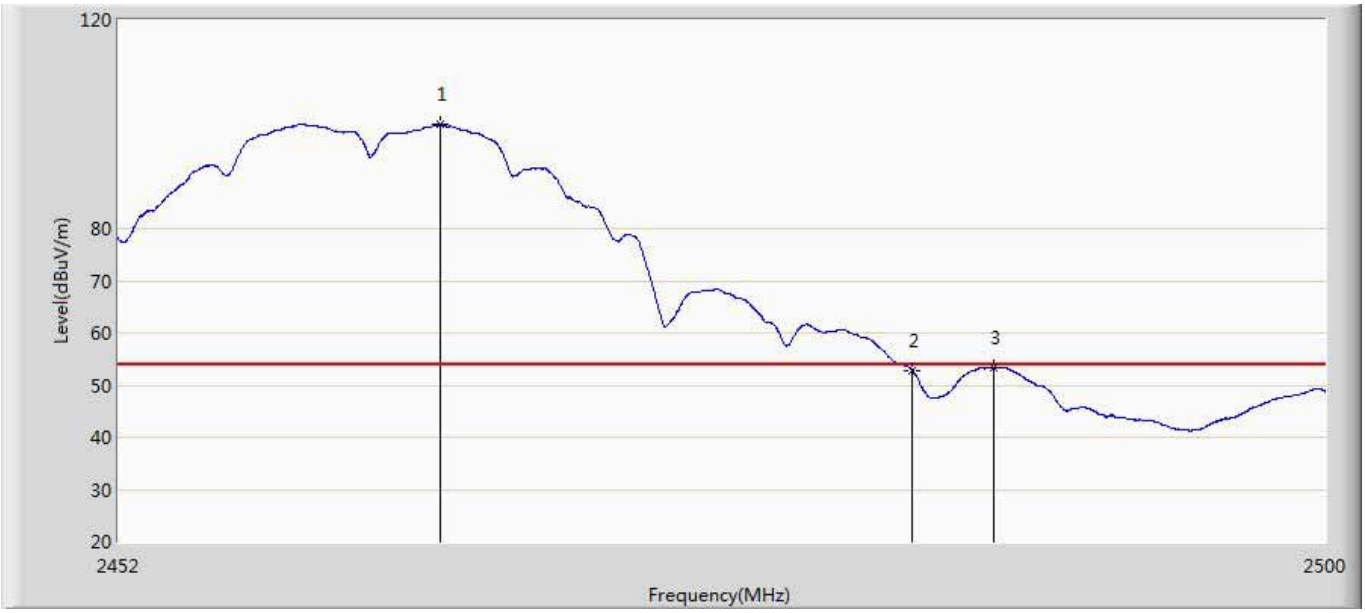
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.648	100.173	64.298	46.173	54.000	35.875	AV
2		2483.500	53.079	17.187	-0.921	54.000	35.891	AV
3		2486.512	51.639	15.726	-2.361	54.000	35.914	AV

Site: AC5	Time: 2016/11/19 - 15:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2462MHz by 802.11b	



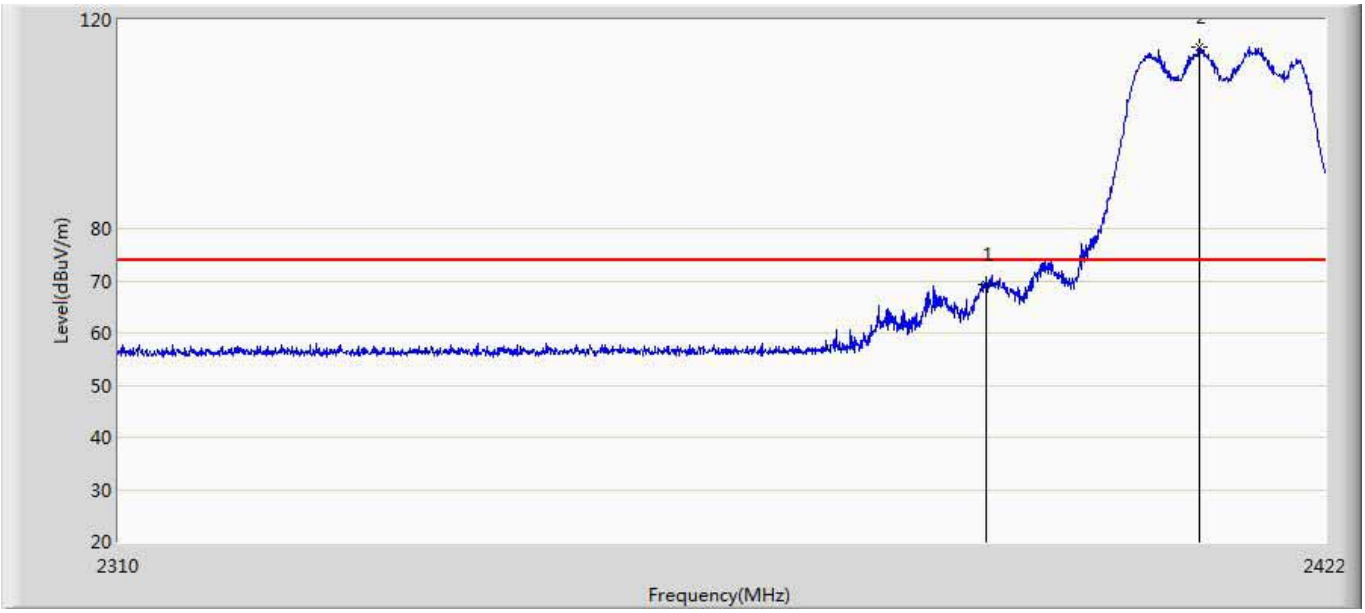
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.960	113.575	77.697	39.575	74.000	35.878	PK
2		2483.500	60.746	24.854	-13.254	74.000	35.891	PK
3		2487.616	65.989	30.068	-8.011	74.000	35.921	PK

Site: AC5	Time: 2016/11/19 - 15:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 1:Transmit at channel 2462MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.720	99.906	64.031	45.906	54.000	35.875	AV
2		2483.500	52.747	16.855	-1.253	54.000	35.891	AV
3		2486.728	53.433	17.518	-0.567	54.000	35.915	AV

Site: AC5	Time: 2016/11/19 - 15:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2412MHz by 802.11g	

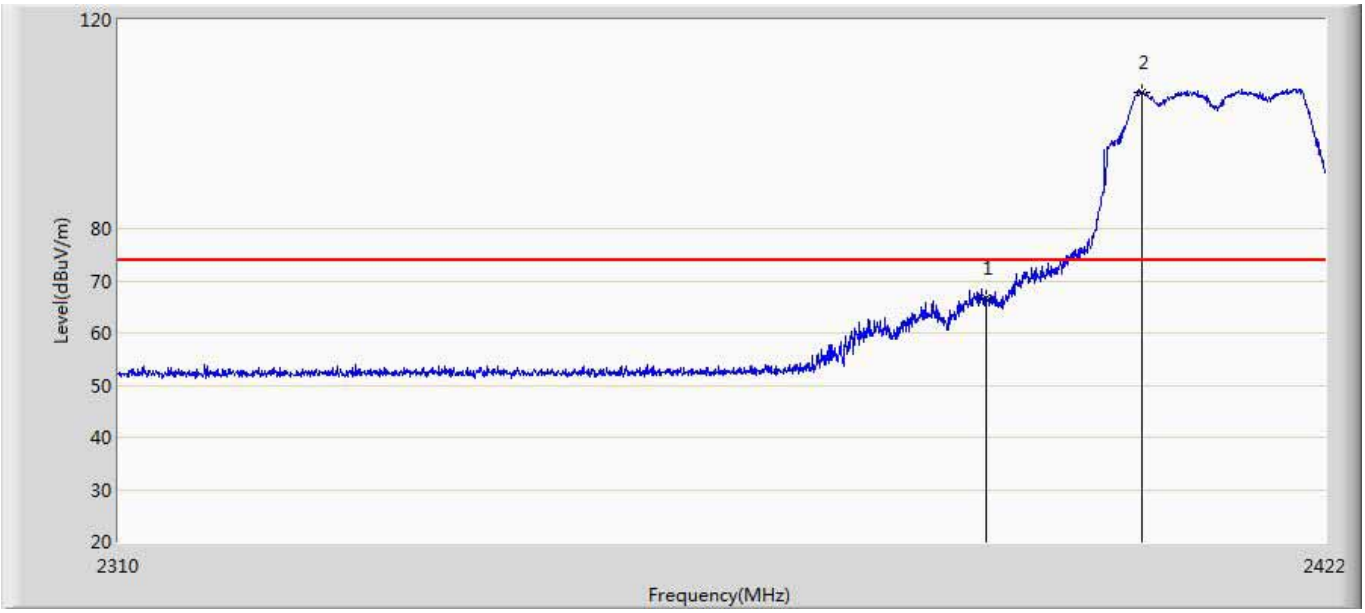


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	69.284	33.602	-4.716	74.000	35.682	PK
2	*	2410.072	114.780	79.045	40.780	74.000	35.735	PK

Site: AC5	Time: 2016/11/19 - 15:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2412MHz by 802.11g	

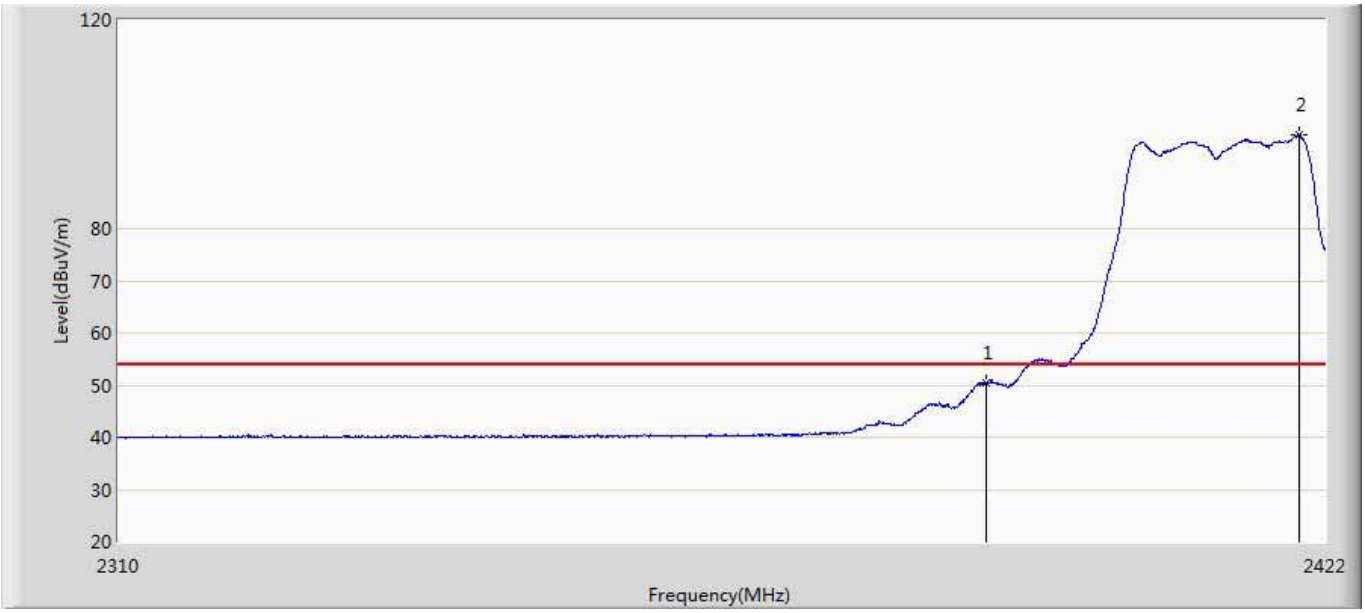
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.062	17.380	-0.938	54.000	35.682	AV
2	*	2404.976	97.519	61.798	43.519	54.000	35.721	AV

Site: AC5	Time: 2016/11/19 - 15:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2412MHz by 802.11g	



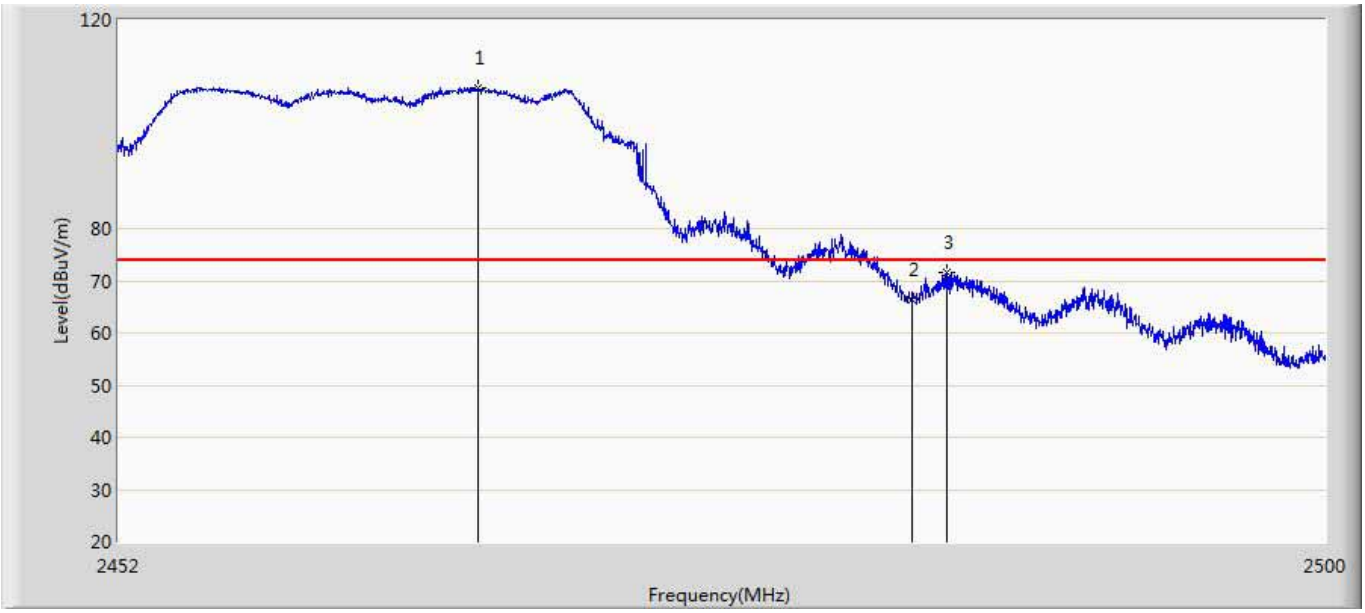
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	66.743	31.061	-7.257	74.000	35.682	PK
2	*	2404.640	106.227	70.507	32.227	74.000	35.720	PK

Site: AC5	Time: 2016/11/19 - 15:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2412MHz by 802.11g	



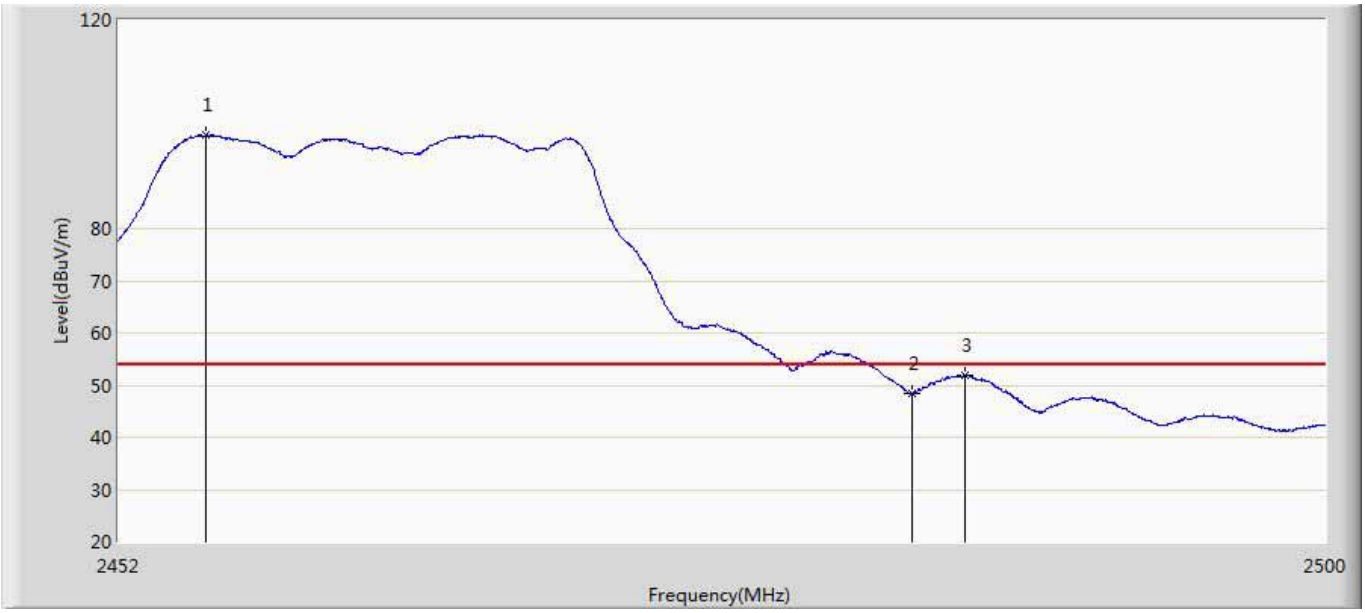
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.356	14.674	-3.644	54.000	35.682	AV
2	*	2419.592	97.905	62.132	43.905	54.000	35.774	AV

Site: AC5	Time: 2016/11/19 - 15:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2462MHz by 802.11g	



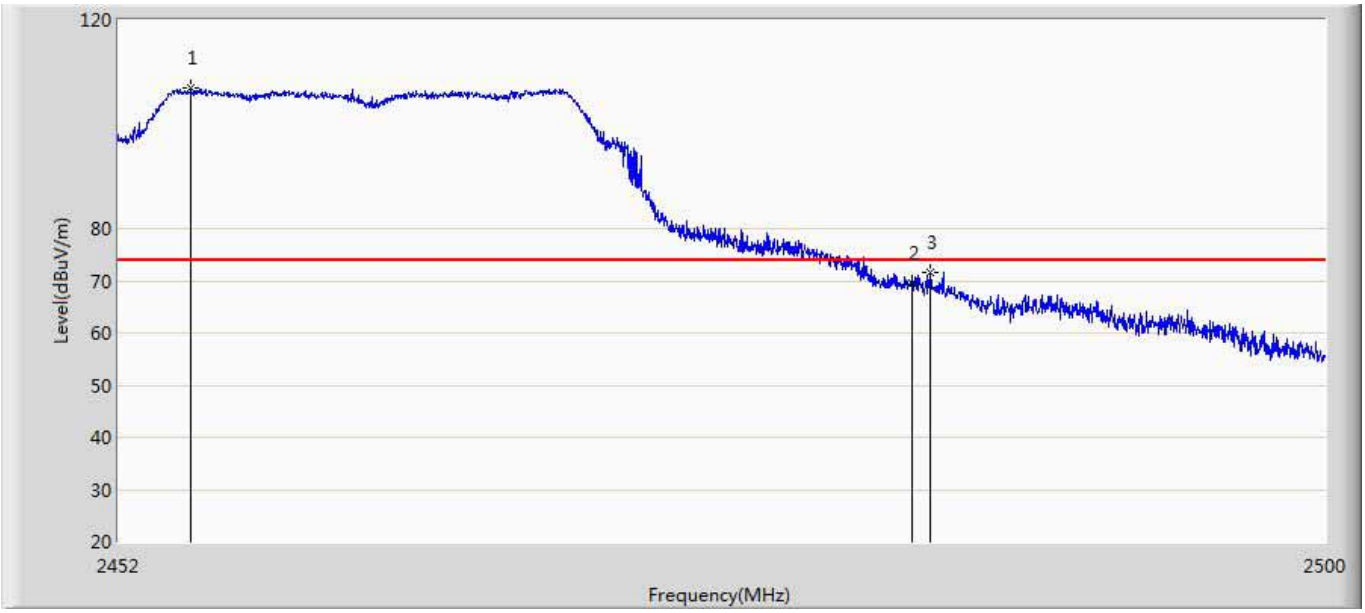
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2466.232	106.878	71.004	32.878	74.000	35.873	PK
2		2483.500	66.362	30.470	-7.638	74.000	35.891	PK
3		2484.880	71.478	35.576	-2.522	74.000	35.902	PK

Site: AC5	Time: 2016/11/19 - 15:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2462MHz by 802.11g	



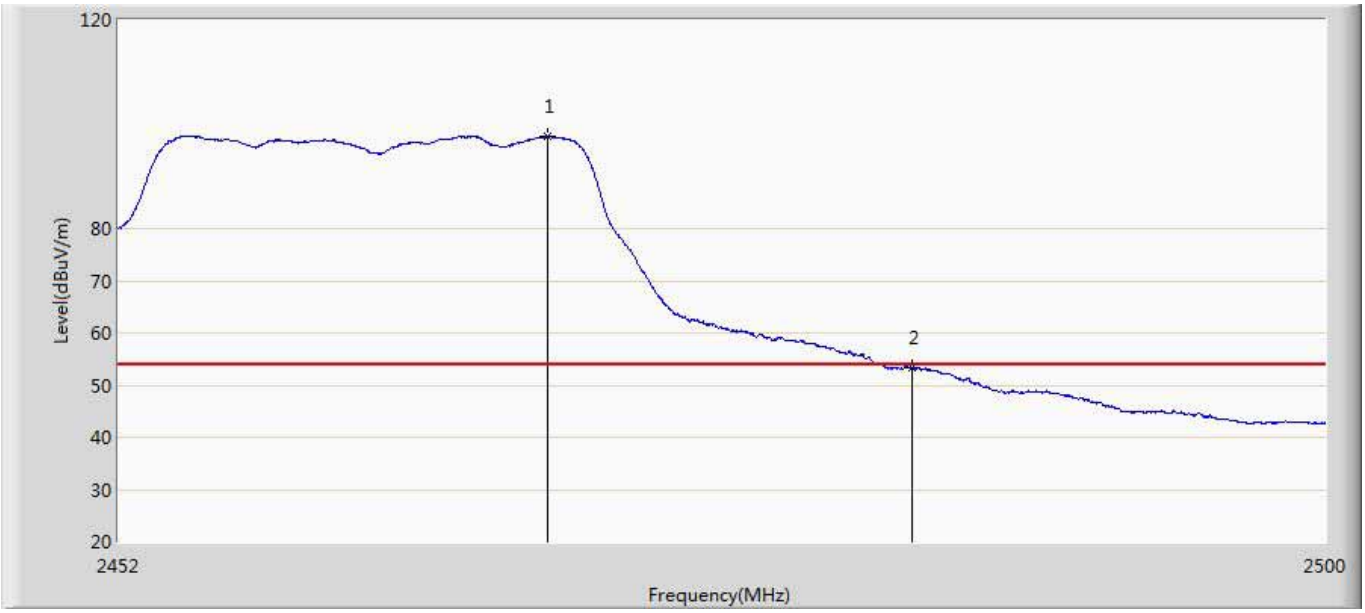
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2455.480	98.023	62.173	44.023	54.000	35.849	AV
2		2483.500	48.289	12.397	-5.711	54.000	35.891	AV
3		2485.576	51.836	15.929	-2.164	54.000	35.907	AV

Site: AC5	Time: 2016/11/19 - 16:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2462MHz by 802.11g	



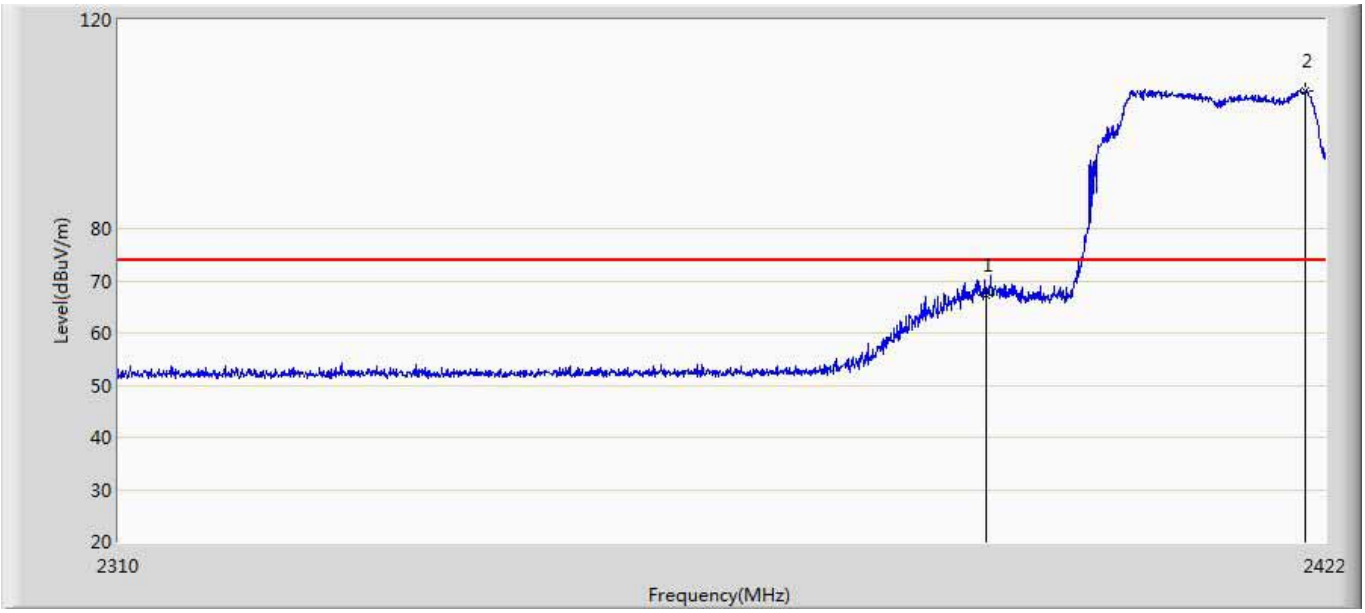
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.880	106.919	71.072	32.919	74.000	35.848	PK
2		2483.500	69.611	33.719	-4.389	74.000	35.891	PK
3		2484.208	71.510	35.613	-2.490	74.000	35.897	PK

Site: AC5	Time: 2016/11/19 - 16:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 2:Transmit at channel 2462MHz by 802.11g	



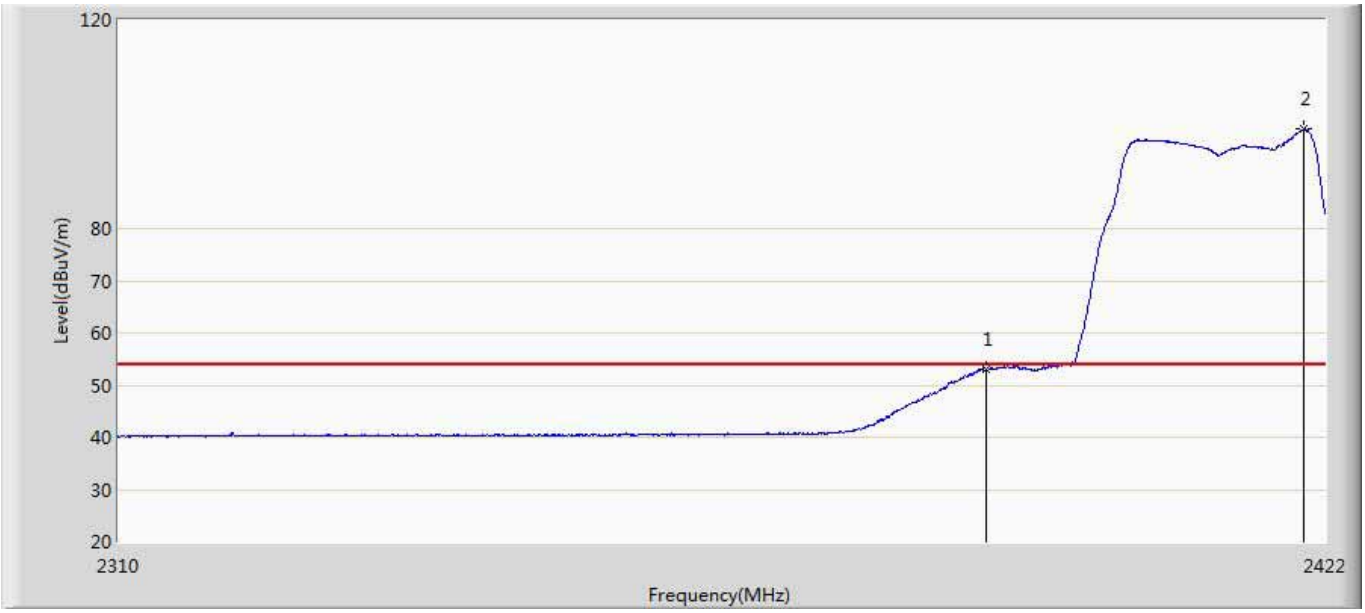
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.992	97.632	61.762	43.632	54.000	35.871	AV
2		2483.500	53.304	17.412	-0.696	54.000	35.891	AV

Site: AC5	Time: 2016/11/19 - 16:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2412MHz by 802.11n20	



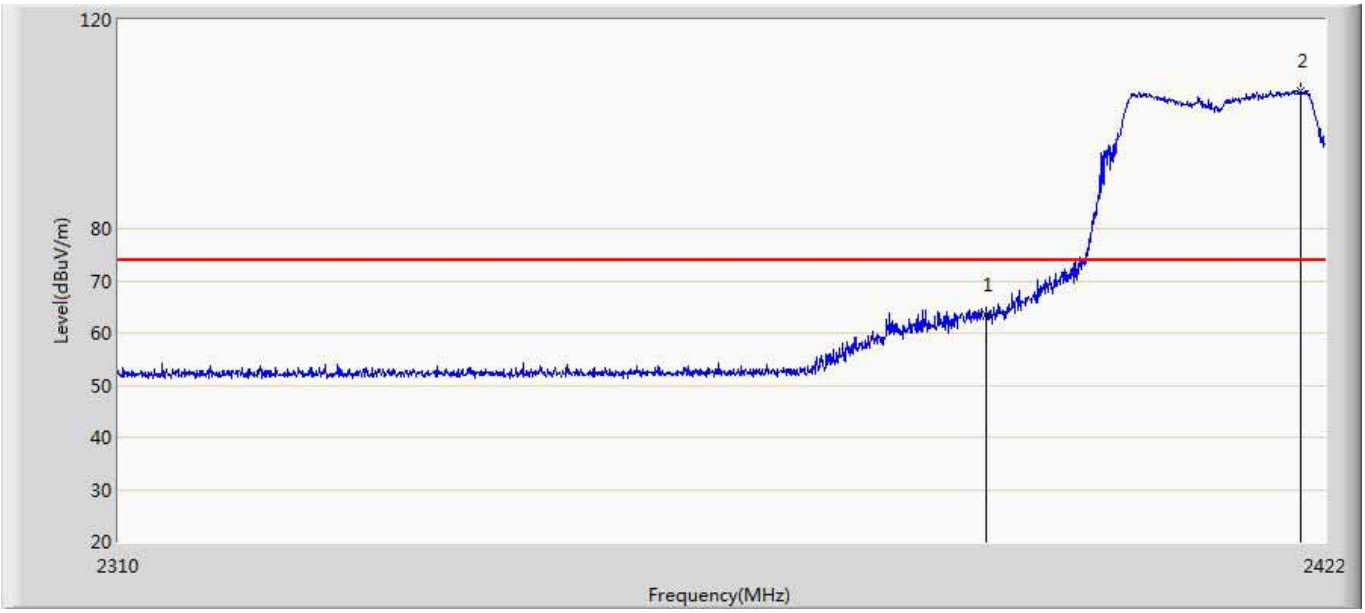
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	67.347	31.665	-6.653	74.000	35.682	PK
2	*	2420.152	106.511	70.735	32.511	74.000	35.775	PK

Site: AC5	Time: 2016/11/19 - 16:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2412MHz by 802.11n20	



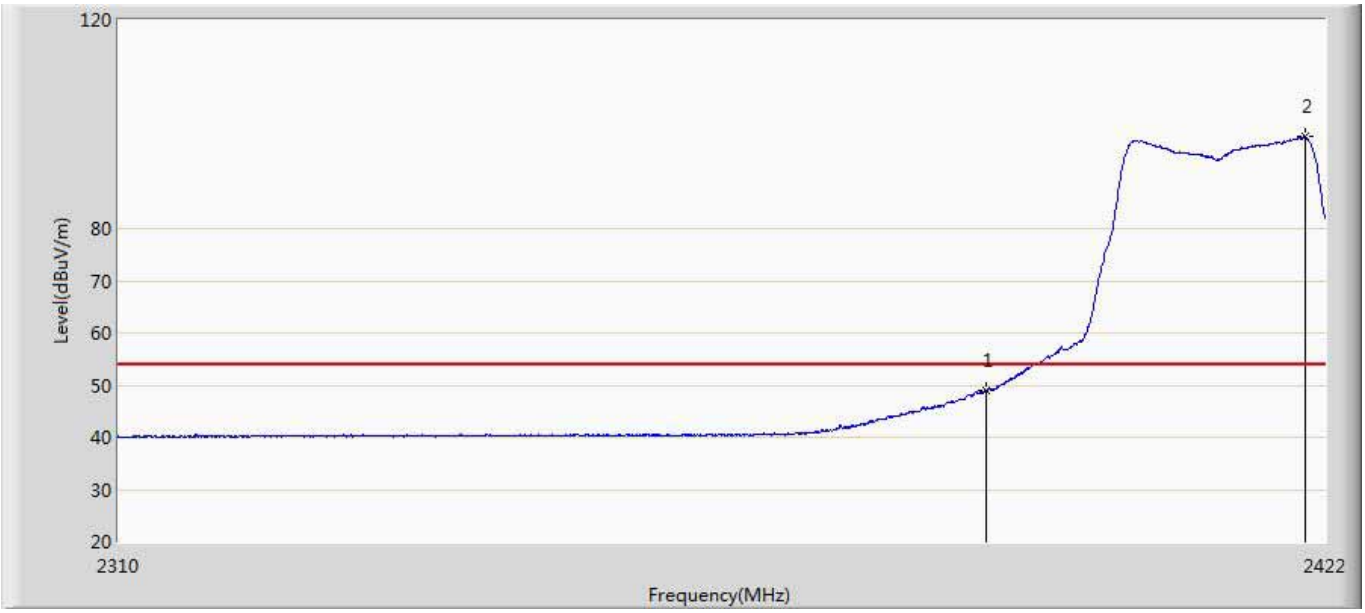
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.044	17.362	-0.956	54.000	35.682	AV
2	*	2419.984	99.046	63.271	45.046	54.000	35.775	AV

Site: AC5	Time: 2016/11/19 - 16:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2412MHz by 802.11n20	



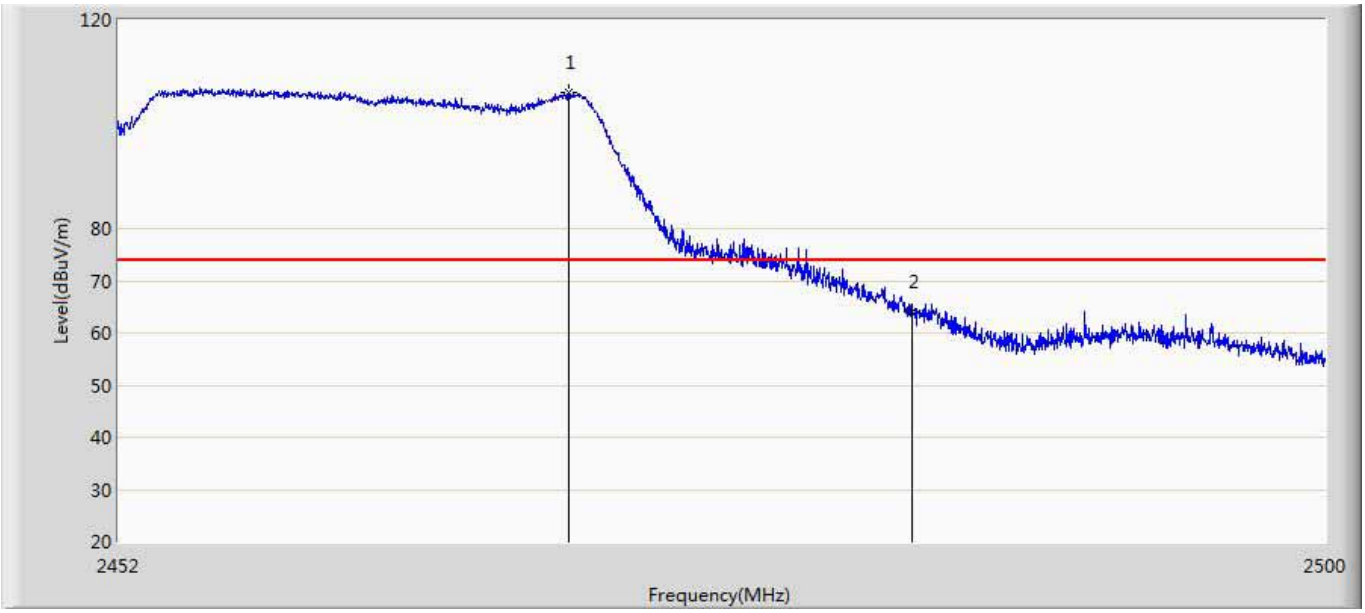
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.589	27.907	-10.411	74.000	35.682	PK
2	*	2419.648	106.424	70.651	32.424	74.000	35.774	PK

Site: AC5	Time: 2016/11/19 - 16:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2412MHz by 802.11n20	



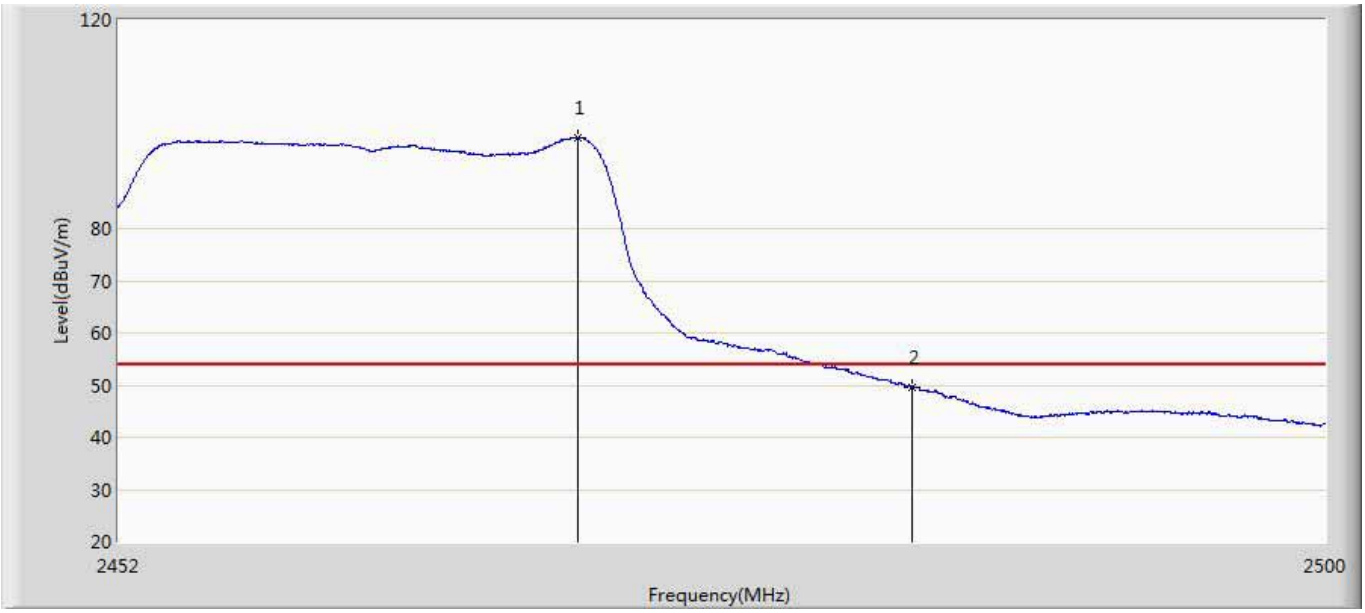
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.984	13.302	-5.016	54.000	35.682	AV
2	*	2420.152	97.552	61.776	43.552	54.000	35.775	AV

Site: AC5	Time: 2016/11/19 - 16:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2462MHz by 802.11n20	



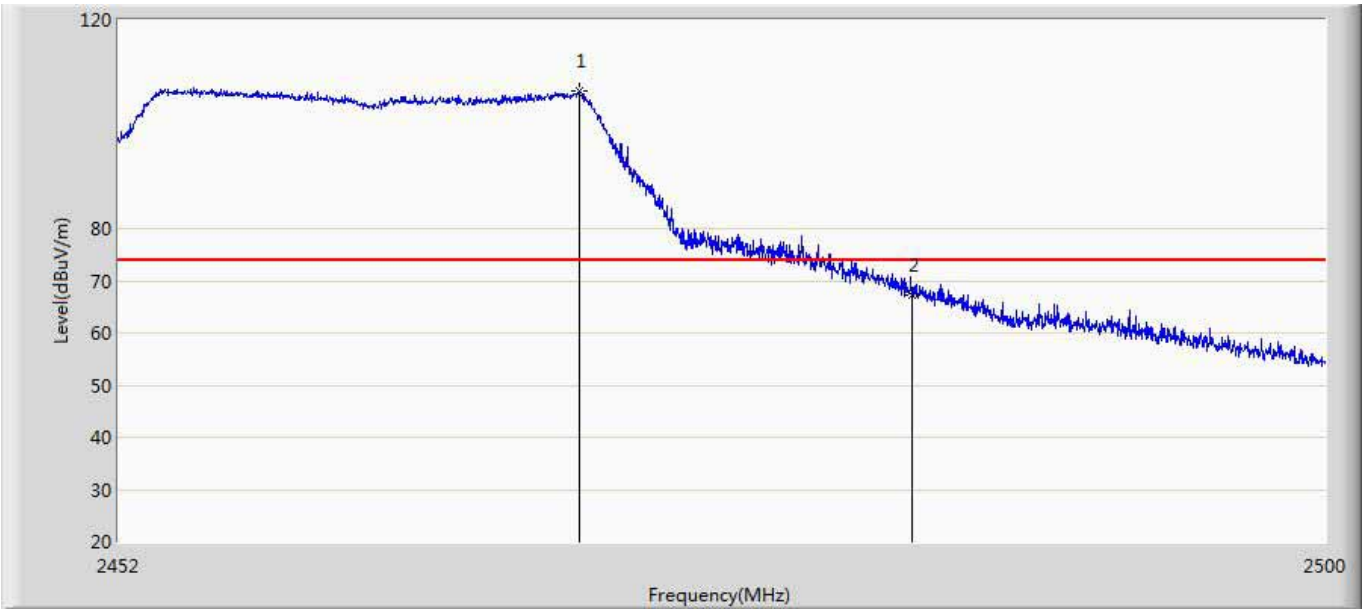
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.808	106.229	70.360	32.229	74.000	35.870	PK
2		2483.500	64.093	28.201	-9.907	74.000	35.891	PK

Site: AC5	Time: 2016/11/19 - 16:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2462MHz by 802.11n20	



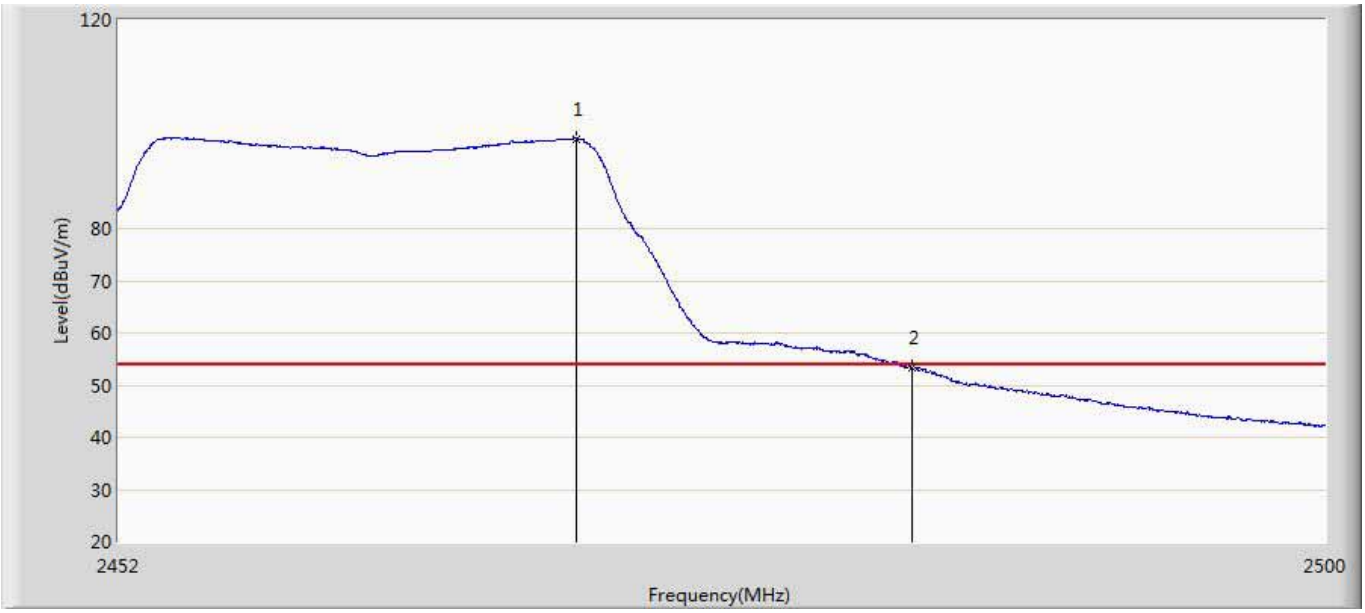
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2470.192	97.430	61.561	43.430	54.000	35.869	AV
2		2483.500	49.638	13.746	-4.362	54.000	35.891	AV

Site: AC5	Time: 2016/11/19 - 16:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2462MHz by 802.11n20	



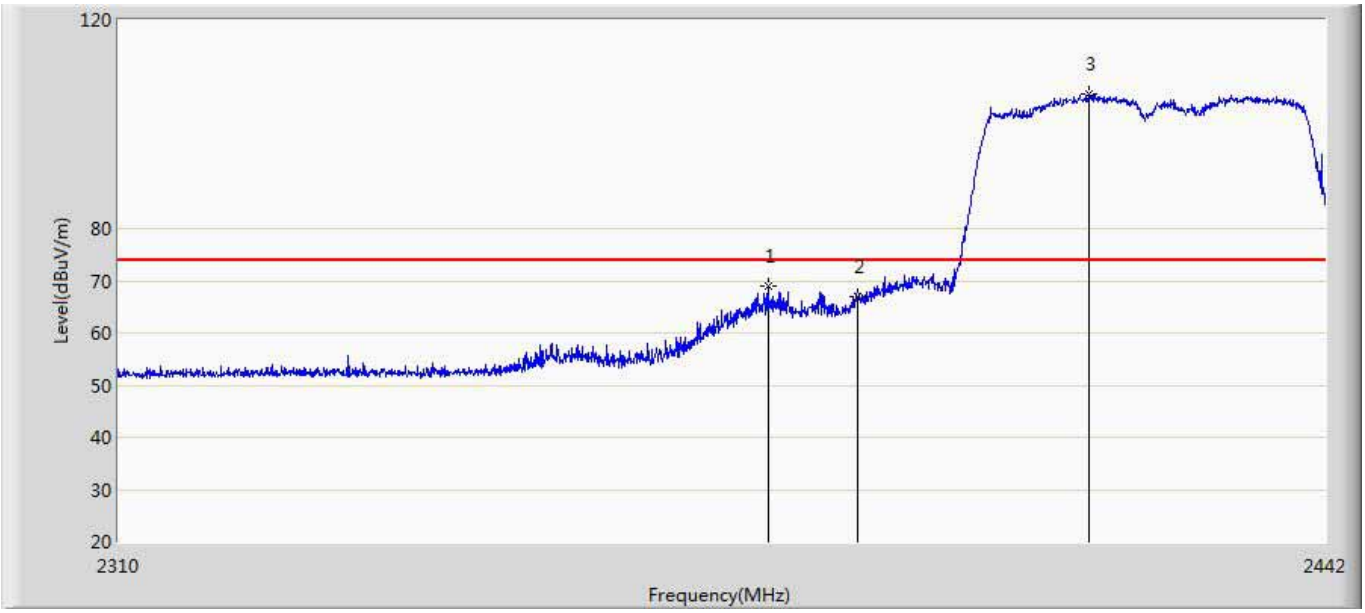
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2470.216	106.380	70.511	32.380	74.000	35.869	PK
2		2483.500	67.354	31.462	-6.646	74.000	35.891	PK

Site: AC5	Time: 2016/11/19 - 16:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 3:Transmit at channel 2462MHz by 802.11n20	



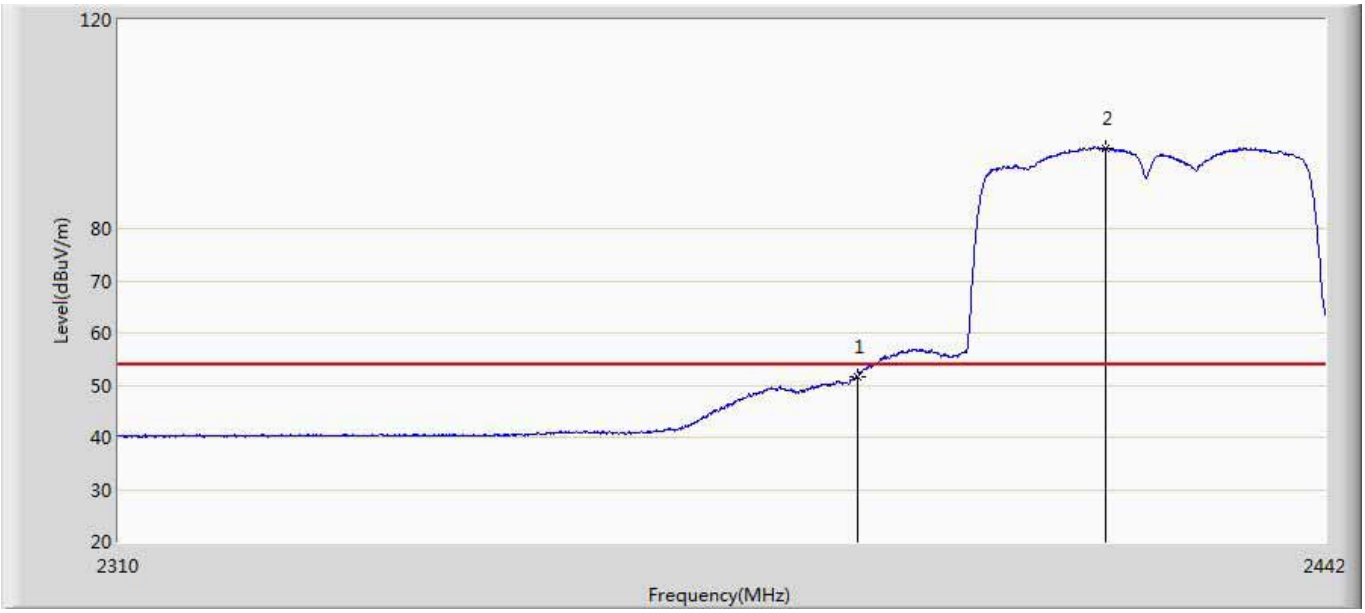
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2470.120	97.237	61.368	43.237	54.000	35.869	AV
2		2483.500	53.368	17.476	-0.632	54.000	35.891	AV

Site: AC5	Time: 2016/11/19 - 16:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2422MHz by 802.11n40	



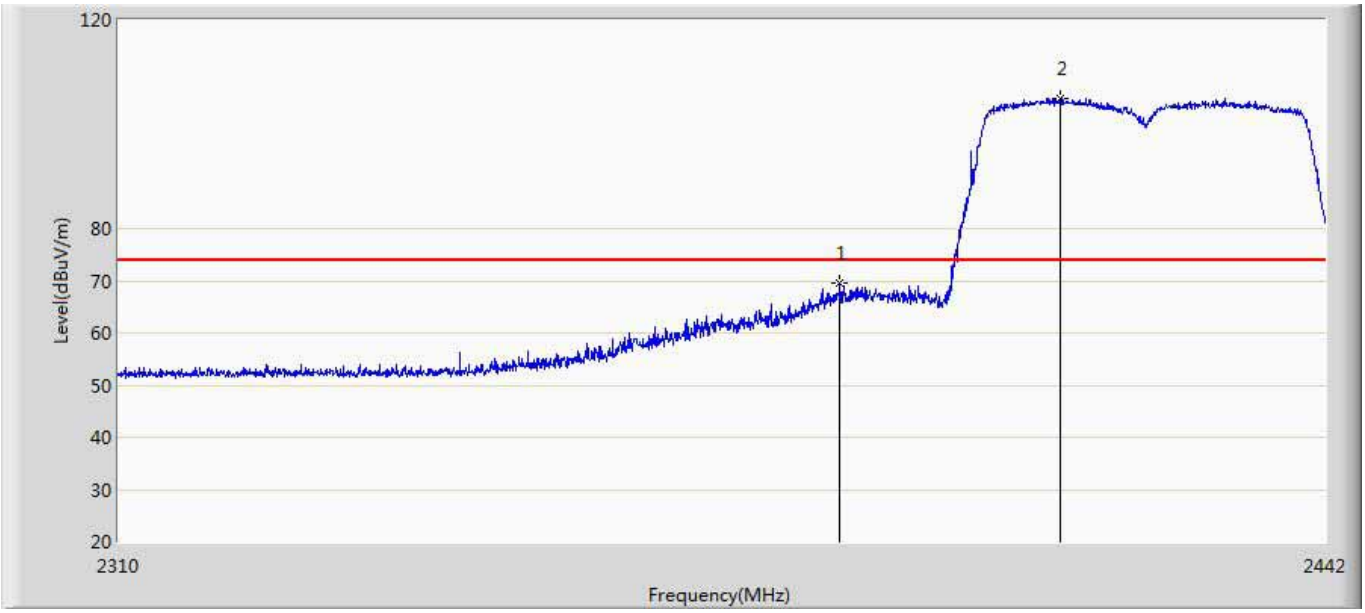
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2380.224	68.956	33.296	-5.044	74.000	35.660	PK
2		2390.000	66.830	31.148	-7.170	74.000	35.682	PK
3	*	2415.534	105.745	69.989	31.745	74.000	35.757	PK

Site: AC5	Time: 2016/11/19 - 17:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2422MHz by 802.11n40	



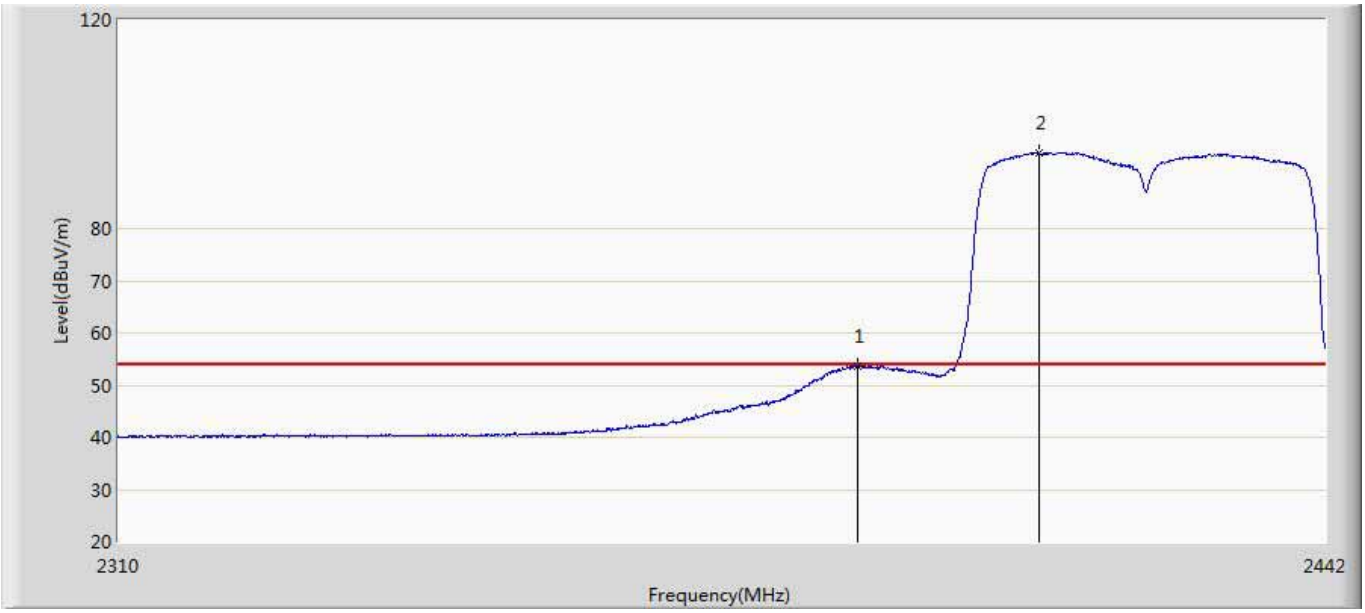
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.640	15.958	-2.360	54.000	35.682	AV
2	*	2417.448	95.413	59.649	41.413	54.000	35.764	AV

Site: AC5	Time: 2016/11/19 - 17:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2422MHz by 802.11n40	



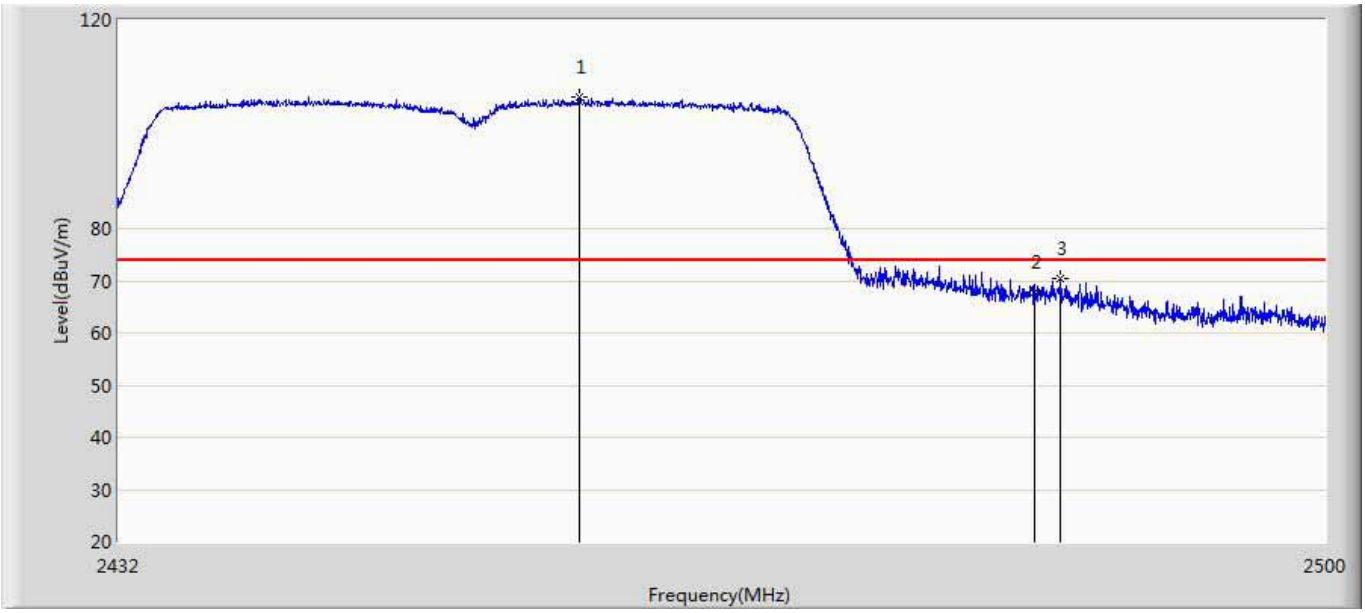
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2388.078	69.500	33.822	-4.500	74.000	35.678	PK
2	*	2412.498	104.974	69.230	30.974	74.000	35.744	PK

Site: AC5	Time: 2016/11/19 - 17:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2422MHz by 802.11n40	



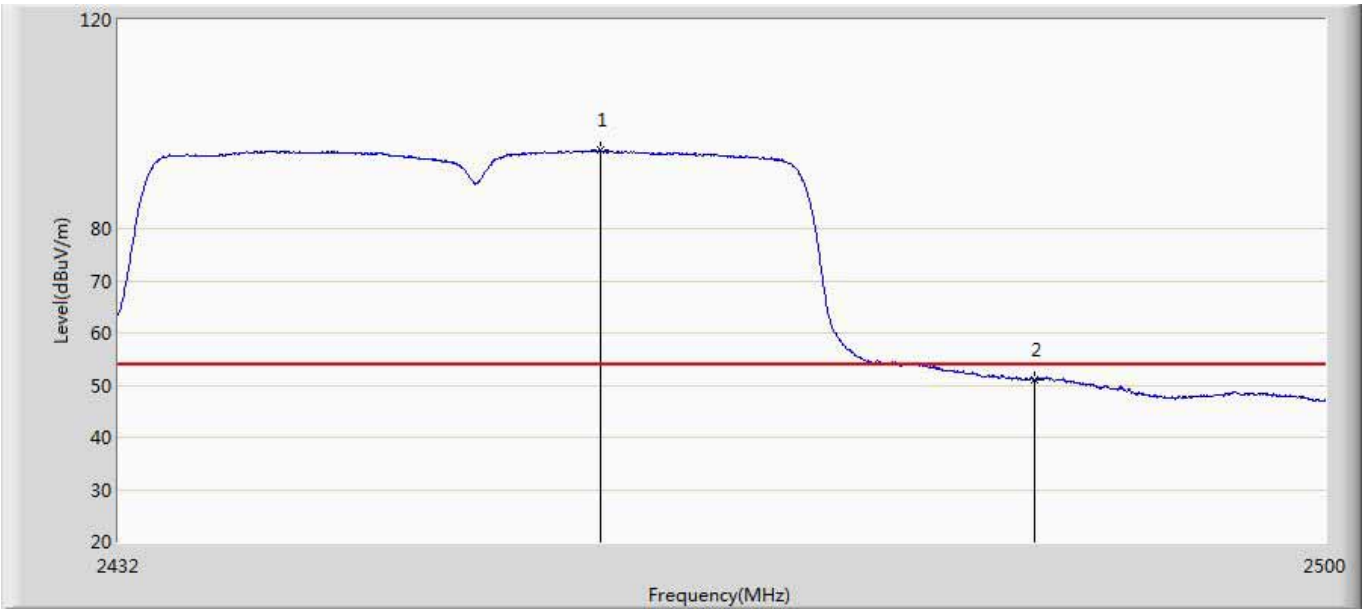
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.499	17.817	-0.501	54.000	35.682	AV
2	*	2410.056	94.536	58.801	40.536	54.000	35.735	AV

Site: AC5	Time: 2016/11/19 - 17:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2452MHz by 802.11n40	



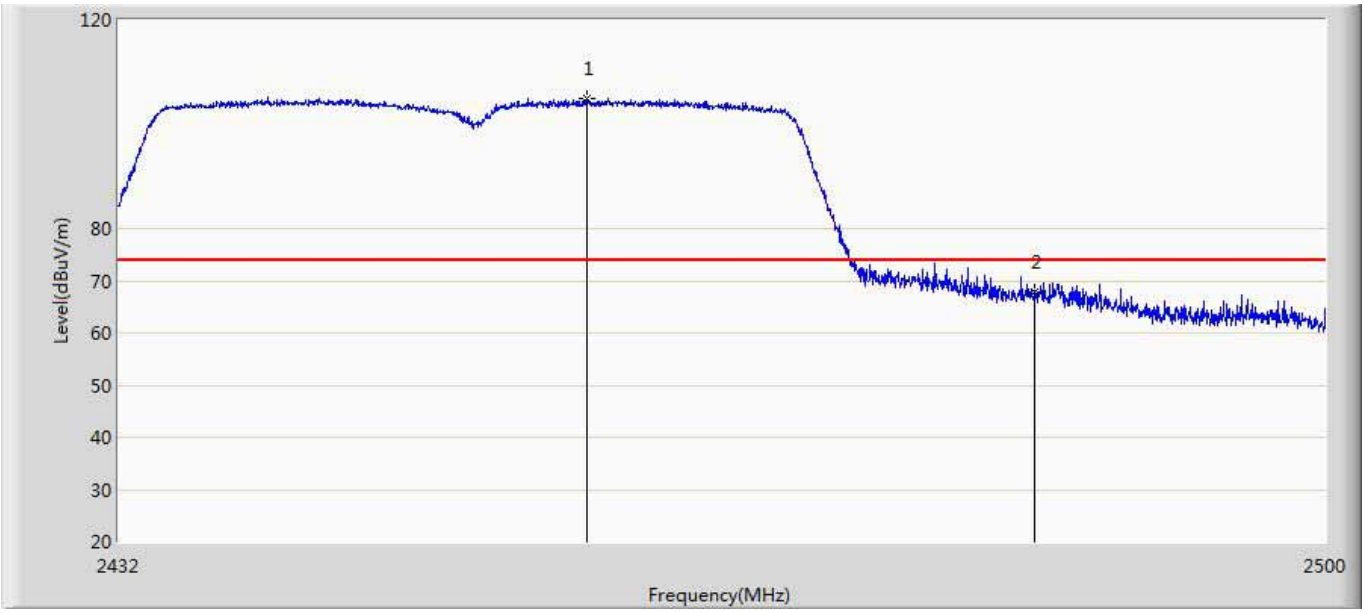
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.738	105.157	69.297	31.157	74.000	35.860	PK
2		2483.500	67.748	31.856	-6.252	74.000	35.891	PK
3		2484.938	70.549	34.647	-3.451	74.000	35.902	PK

Site: AC5	Time: 2016/11/19 - 17:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2452MHz by 802.11n40	



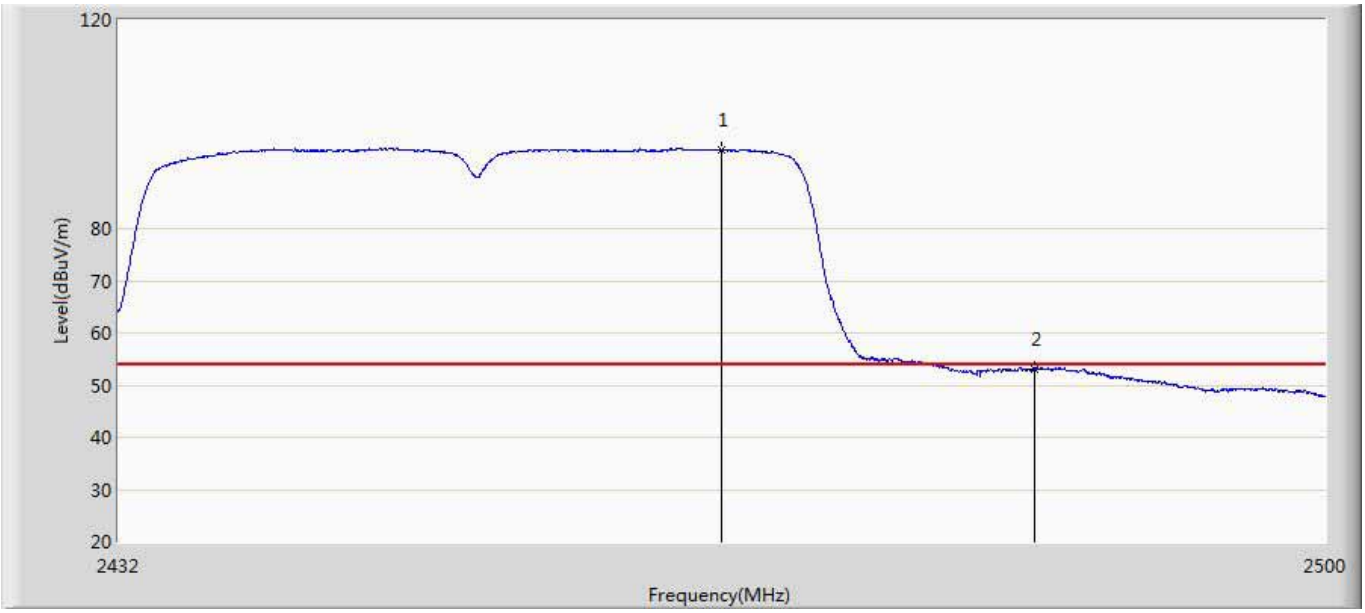
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.928	95.045	59.180	41.045	54.000	35.864	AV
2		2483.500	51.027	15.135	-2.973	54.000	35.891	AV

Site: AC5	Time: 2016/11/19 - 17:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2452MHz by 802.11n40	



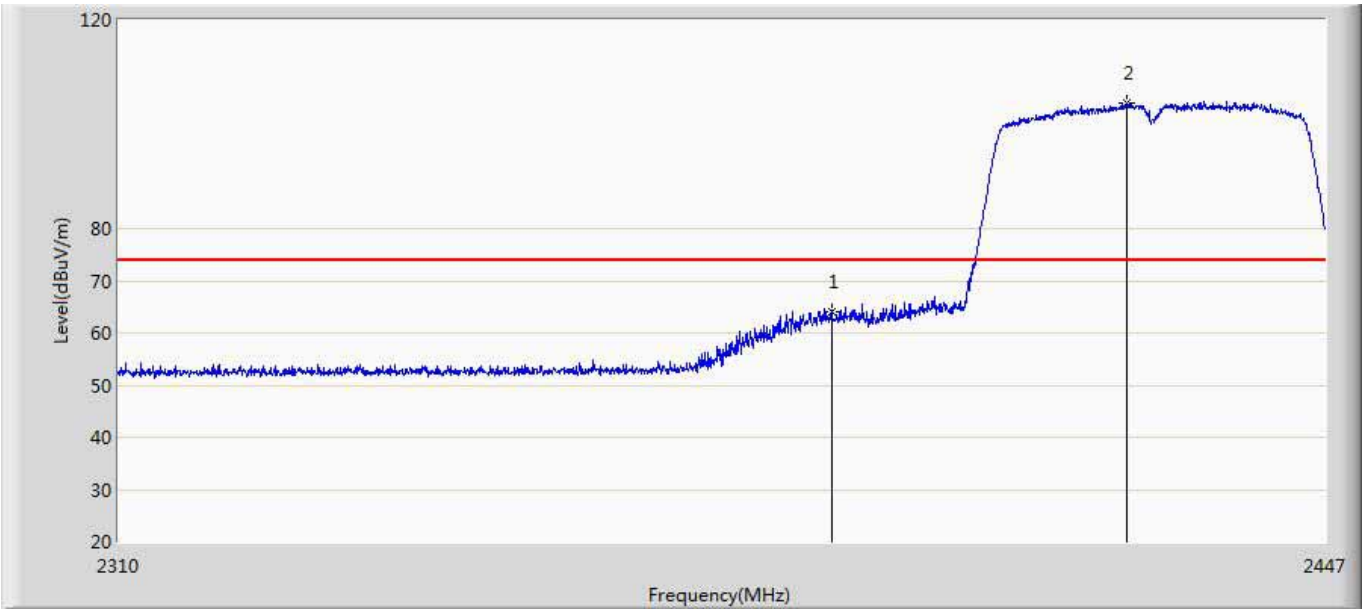
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.180	104.928	69.066	30.928	74.000	35.862	PK
2		2483.500	67.922	32.030	-6.078	74.000	35.891	PK

Site: AC5	Time: 2016/11/19 - 17:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Access Point	Power:PoE 57V
Note: Mode 4:Transmit at channel 2452MHz by 802.11n40	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2465.796	95.090	59.216	41.090	54.000	35.874	AV
2		2483.500	53.095	17.203	-0.905	54.000	35.891	AV

Site: AC5	Time: 2017/01/17 - 09:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wireless Access Point	Power: PoE 57V
Note: Mode 4:Transmit at channel 2427MHz by 802.11n40	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	64.148	28.466	-9.852	74.000	35.682	PK
2	*	2423.916	104.040	68.249	30.040	74.000	35.791	PK