

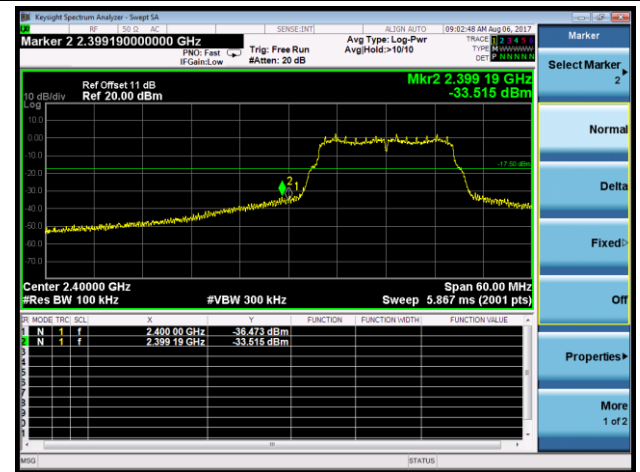
802.11g Out-of-Band Emissions

Channel 01 (2412MHz)

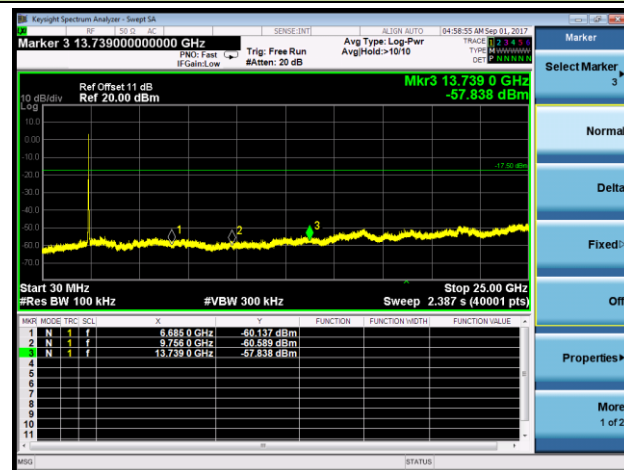
100kHz PSD reference Level



Low Band Edge



Spurious Emission

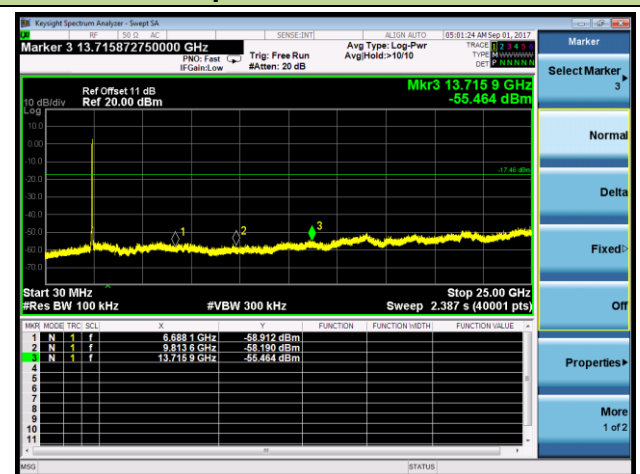


Channel 06 (2437MHz)

100kHz PSD reference Level

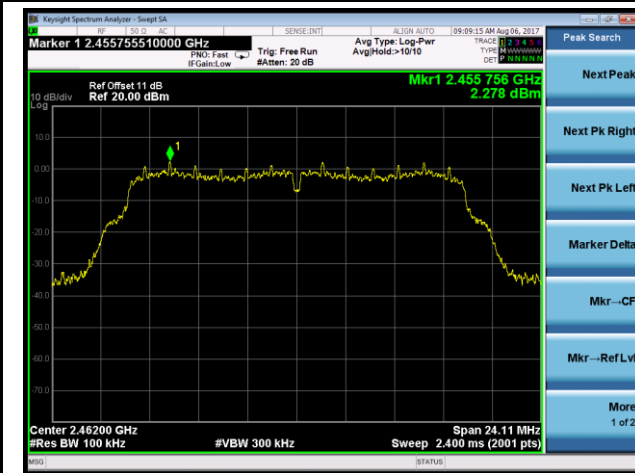


Spurious Emission

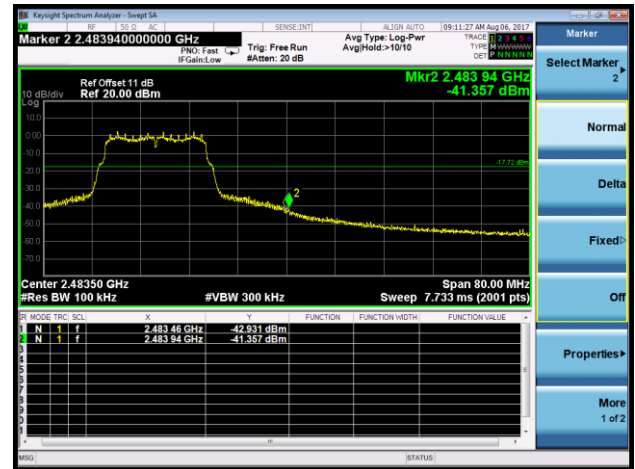


Channel 11 (2462MHz)

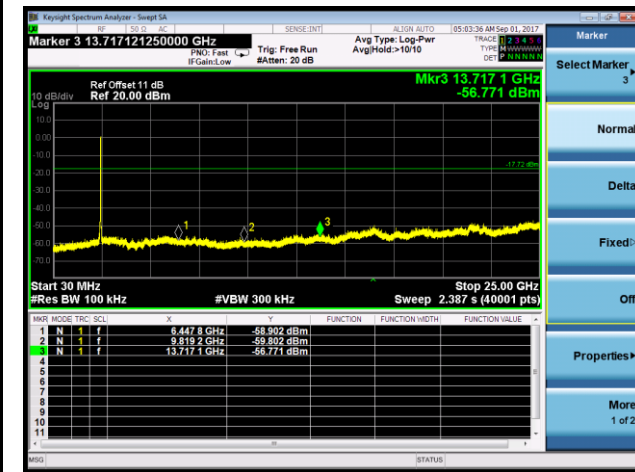
100kHz PSD reference Level



High Band Edge



Spurious Emission



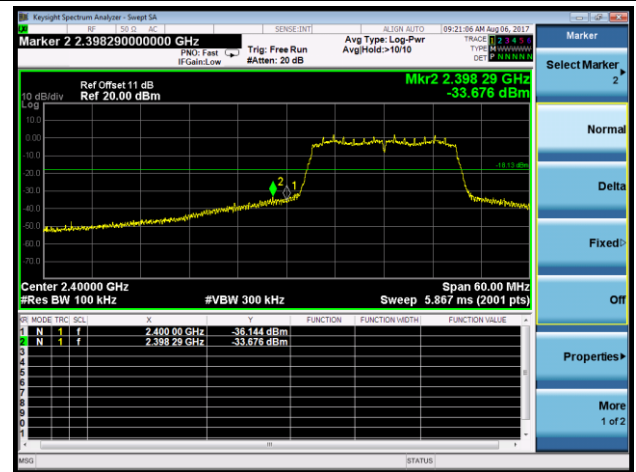
802.11n-HT20 Out-of-Band Emissions

Channel 01 (2412MHz)

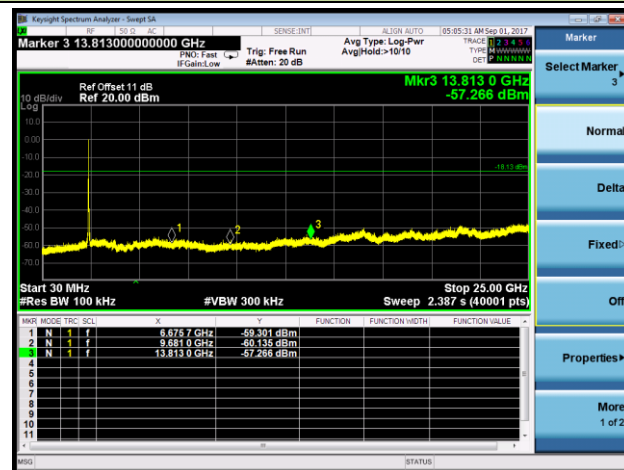
100kHz PSD reference Level



Low Band Edge

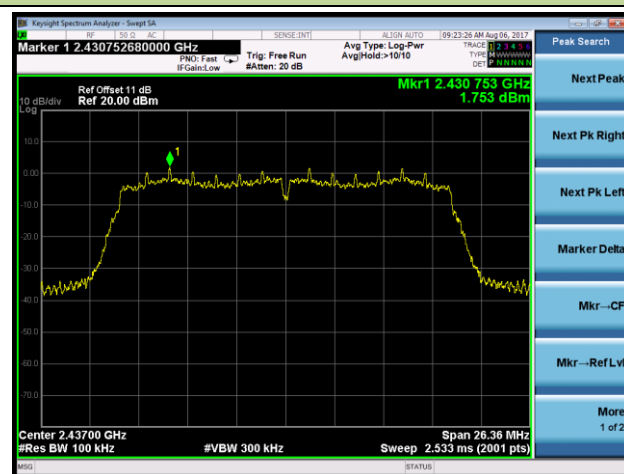


Spurious Emission

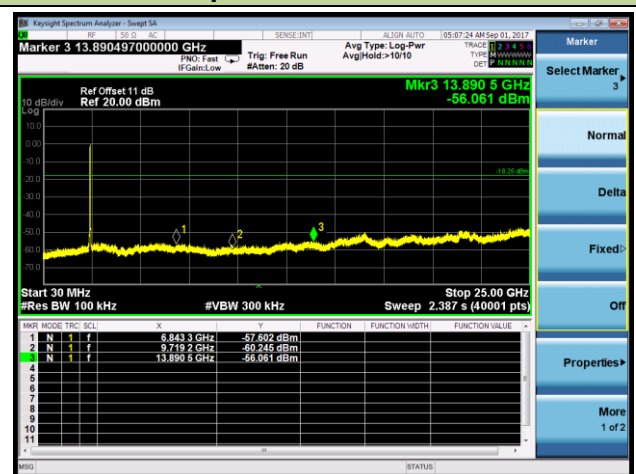


Channel 06 (2437MHz)

100kHz PSD reference Level

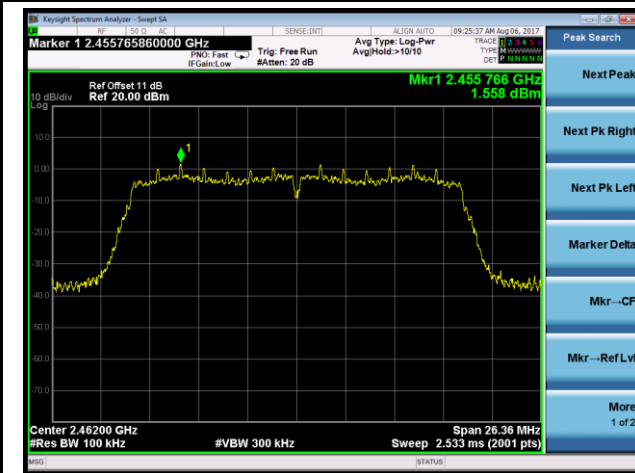


Spurious Emission

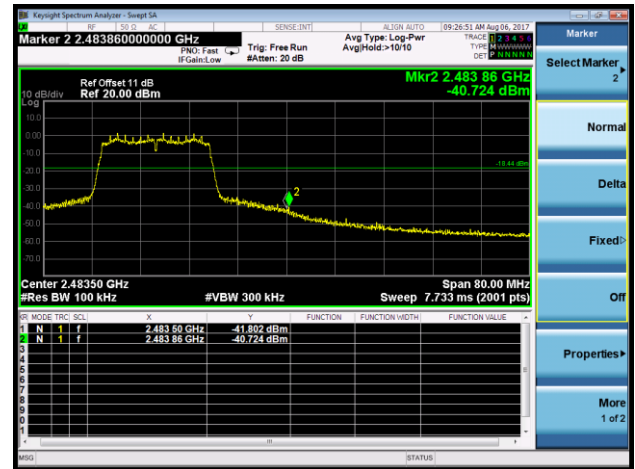


Channel 11 (2462MHz)

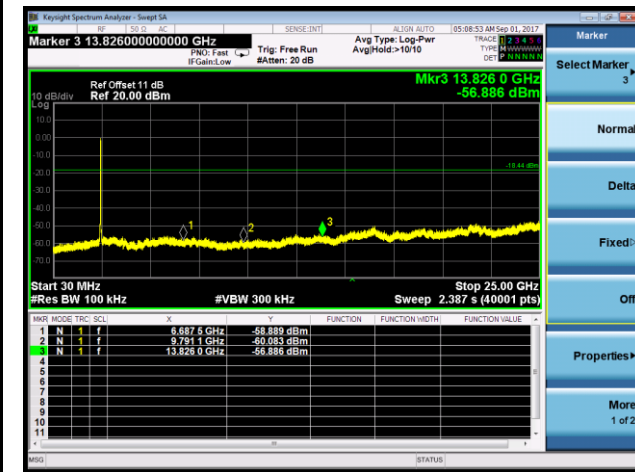
100kHz PSD reference Level



High Band Edge



Spurious Emission



7.6. Radiated Spurious Emission Measurement

7.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.6.2. Test Procedure Used

KDB 558074 D01v04 - Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v04 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v04 - Section 12.2.5 (average power measurements)

7.6.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple

6. Trace mode = max hold
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

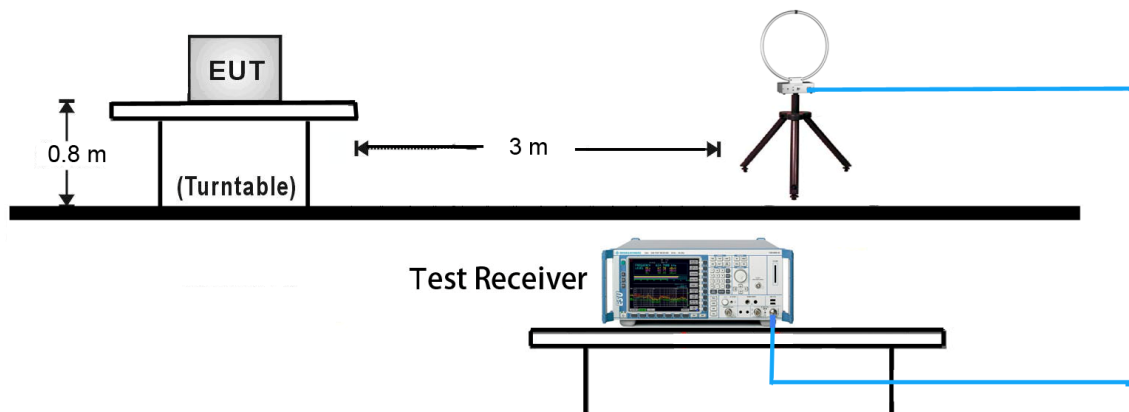
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

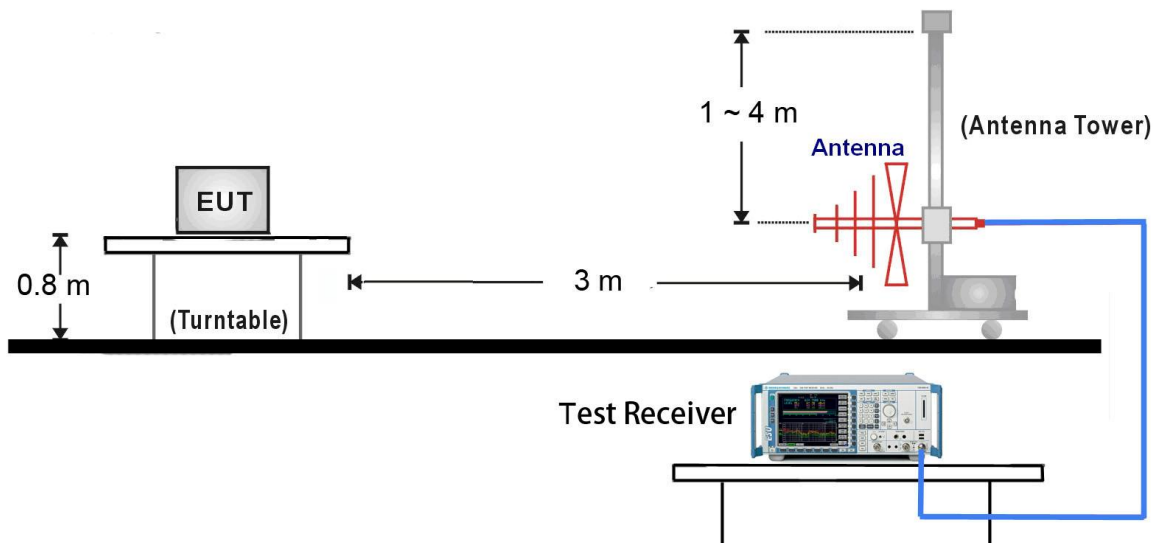
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.6.4.Test Setup

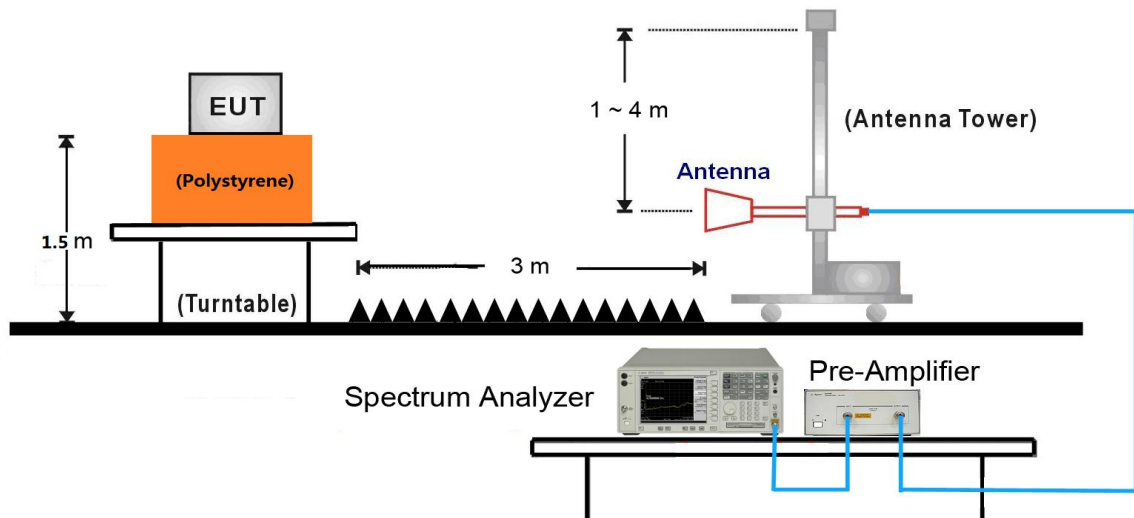
9kHz ~ 30MHz Test Setup:



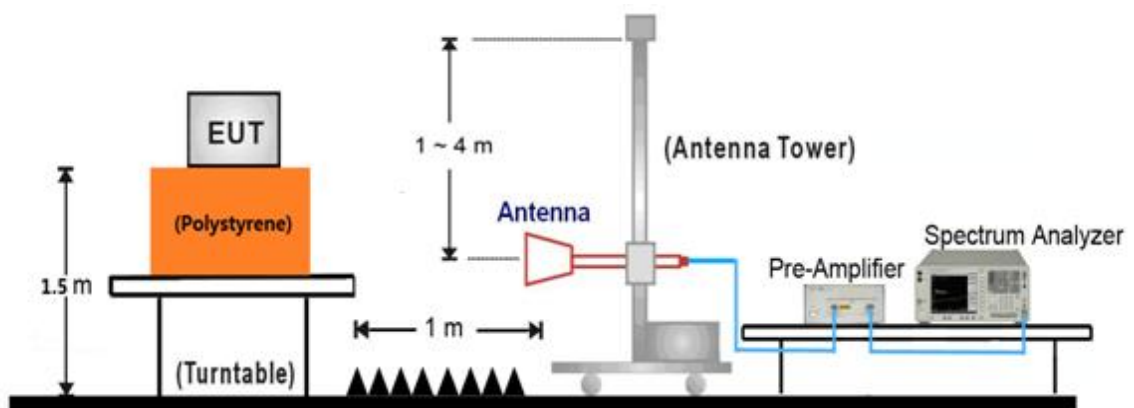
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11b	Test Site:	AC2
Test Channel:	01	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4306.5	36.2	1.0	37.2	74.0	-36.8	Peak	Horizontal
*	5598.5	36.2	3.7	39.9	80.5	-40.6	Peak	Horizontal
	7613.0	33.1	10.8	43.9	74.0	-30.1	Peak	Horizontal
*	10120.5	33.4	13.5	46.9	80.5	-33.6	Peak	Horizontal
	3754.0	37.5	-0.6	36.9	74.0	-37.1	Peak	Vertical
*	5530.5	35.7	3.4	39.1	80.5	-41.4	Peak	Vertical
	8055.0	33.6	10.8	44.4	74.0	-29.6	Peak	Vertical
*	10562.5	31.9	15.2	47.1	80.5	-33.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (100.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11b	Test Site:	AC2
Test Channel:	06	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4561.5	36.7	1.9	38.6	74.0	-35.4	Peak	Horizontal
*	5998.0	35.7	5.3	41.0	81.7	-40.7	Peak	Horizontal
	7732.0	33.7	10.5	44.2	74.0	-29.8	Peak	Horizontal
*	9661.5	32.3	12.5	44.8	81.7	-36.9	Peak	Horizontal
	4663.5	35.1	2.5	37.6	74.0	-36.4	Peak	Vertical
*	5998.0	35.6	5.3	40.9	81.7	-40.8	Peak	Vertical
	7621.5	33.7	10.6	44.3	74.0	-29.7	Peak	Vertical
*	10171.5	32.6	14.0	46.6	81.7	-35.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (101.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11b	Test Site:	AC2
Test Channel:	11	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4893.0	36.2	2.7	38.9	74.0	-35.1	Peak	Horizontal
*	5598.5	36.0	3.7	39.7	82.2	-42.5	Peak	Horizontal
	7655.5	32.9	10.6	43.5	74.0	-30.5	Peak	Horizontal
*	10129.0	32.3	13.6	45.9	82.2	-36.3	Peak	Horizontal
	4119.5	35.7	0.2	35.9	74.0	-38.1	Peak	Vertical
*	5998.0	36.0	5.3	41.3	82.2	-40.9	Peak	Vertical
	9602.0	33.7	12.6	46.3	74.0	-27.7	Peak	Vertical
*	12934.0	32.4	17.1	49.5	82.2	-32.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (102.2dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g	Test Site:	AC2
Test Channel:	01	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4128.0	36.0	0.2	36.2	74.0	-37.8	Peak	Horizontal
*	5998.0	35.3	5.3	40.6	84.0	-43.4	Peak	Horizontal
	9313.0	31.9	12.7	44.6	74.0	-29.4	Peak	Horizontal
*	12866.0	31.6	16.7	48.3	84.0	-35.7	Peak	Horizontal
	4799.5	36.0	2.8	38.8	74.0	-35.2	Peak	Vertical
*	5998.0	35.7	5.3	41.0	84.0	-43.0	Peak	Vertical
	7570.5	33.7	10.8	44.5	74.0	-29.5	Peak	Vertical
*	10494.5	32.6	14.8	47.4	84.0	-36.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.0dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g	Test Site:	AC2
Test Channel:	06	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3975.0	36.1	-0.5	35.6	74.0	-38.4	Peak	Horizontal
*	5598.5	35.8	3.7	39.5	84.5	-45.0	Peak	Horizontal
	7647.0	33.5	10.6	44.1	74.0	-29.9	Peak	Horizontal
*	9916.5	32.2	13.4	45.6	84.5	-38.9	Peak	Horizontal
	4349.0	35.8	1.1	36.9	74.0	-37.1	Peak	Vertical
*	5998.0	35.9	5.3	41.2	84.5	-43.3	Peak	Vertical
	7519.5	32.6	10.9	43.5	74.0	-30.5	Peak	Vertical
*	9840.0	32.5	13.5	46.0	84.5	-38.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g	Test Site:	AC2
Test Channel:	11	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4527.5	35.9	1.9	37.8	74.0	-36.2	Peak	Horizontal
*	5598.5	36.4	3.7	40.1	84.7	-44.6	Peak	Horizontal
	7264.5	32.4	10.7	43.1	74.0	-30.9	Peak	Horizontal
*	10384.0	32.3	14.9	47.2	84.7	-37.5	Peak	Horizontal
	3694.5	37.5	-0.9	36.6	74.0	-37.4	Peak	Vertical
*	5471.0	34.9	3.5	38.4	84.7	-46.3	Peak	Vertical
	7519.5	32.3	10.9	43.2	74.0	-30.8	Peak	Vertical
*	10154.5	33.3	13.8	47.1	84.7	-37.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (104.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20	Test Site:	AC2
Test Channel:	01	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3796.5	36.8	-0.6	36.2	74.0	-37.8	Peak	Horizontal
*	5598.5	35.9	3.7	39.6	82.5	-42.9	Peak	Horizontal
	7485.5	32.5	10.9	43.4	74.0	-30.6	Peak	Horizontal
*	9636.0	32.5	12.9	45.4	82.5	-37.1	Peak	Horizontal
	3720.0	36.8	-0.8	36.0	74.0	-38.0	Peak	Vertical
*	5165.0	35.7	3.0	38.7	82.5	-43.8	Peak	Vertical
	7349.5	33.7	10.7	44.4	74.0	-29.6	Peak	Vertical
*	9636.0	32.5	12.9	45.4	82.5	-37.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (102.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20	Test Site:	AC2
Test Channel:	06	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3652.0	37.5	-1.0	36.5	74.0	-37.5	Peak	Horizontal
*	5156.5	35.0	3.0	38.0	82.1	-44.1	Peak	Horizontal
	7468.5	32.8	11.0	43.8	74.0	-30.2	Peak	Horizontal
*	9670.0	33.1	12.6	45.7	82.1	-36.4	Peak	Horizontal
	3652.0	37.2	-1.0	36.2	74.0	-37.8	Peak	Vertical
*	5513.5	35.2	3.3	38.5	82.1	-43.6	Peak	Vertical
	7528.0	33.0	11.0	44.0	74.0	-30.0	Peak	Vertical
*	10520.0	32.5	15.4	47.9	82.1	-34.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (102.1dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20	Test Site:	AC2
Test Channel:	11	Test Engineer:	Snake Ni
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3694.5	37.6	-0.9	36.7	74.0	-37.3	Peak	Horizontal
*	5556.0	35.5	3.6	39.1	80.5	-41.4	Peak	Horizontal
	7570.5	33.1	10.8	43.9	74.0	-30.1	Peak	Horizontal
*	9857.0	33.0	13.0	46.0	80.5	-34.5	Peak	Horizontal
	3694.5	37.9	-0.9	37.0	74.0	-37.0	Peak	Vertical
*	5598.5	36.9	3.7	40.6	80.5	-39.9	Peak	Vertical
	7451.5	33.3	10.9	44.2	74.0	-29.8	Peak	Vertical
*	10265.0	32.3	14.2	46.5	80.5	-34.0	Peak	Vertical

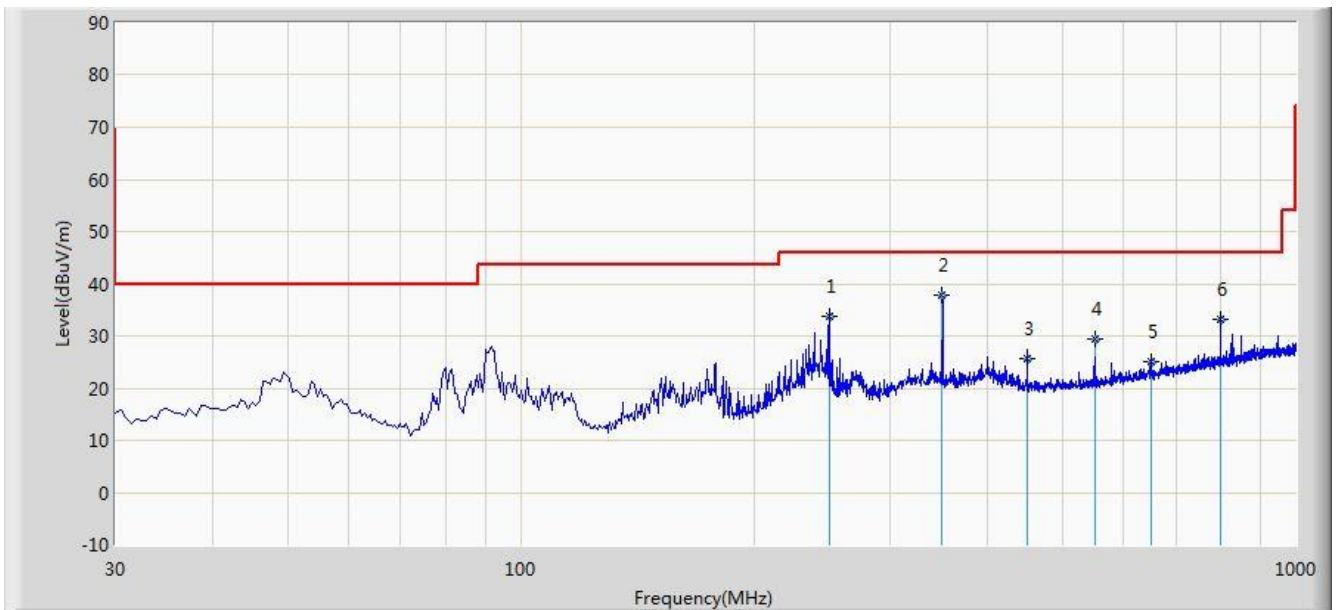
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (100.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2017/08/07 - 16:08
Limit: FCC_Part15.209_RE(3m)	Engineer: Flag Yang
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	



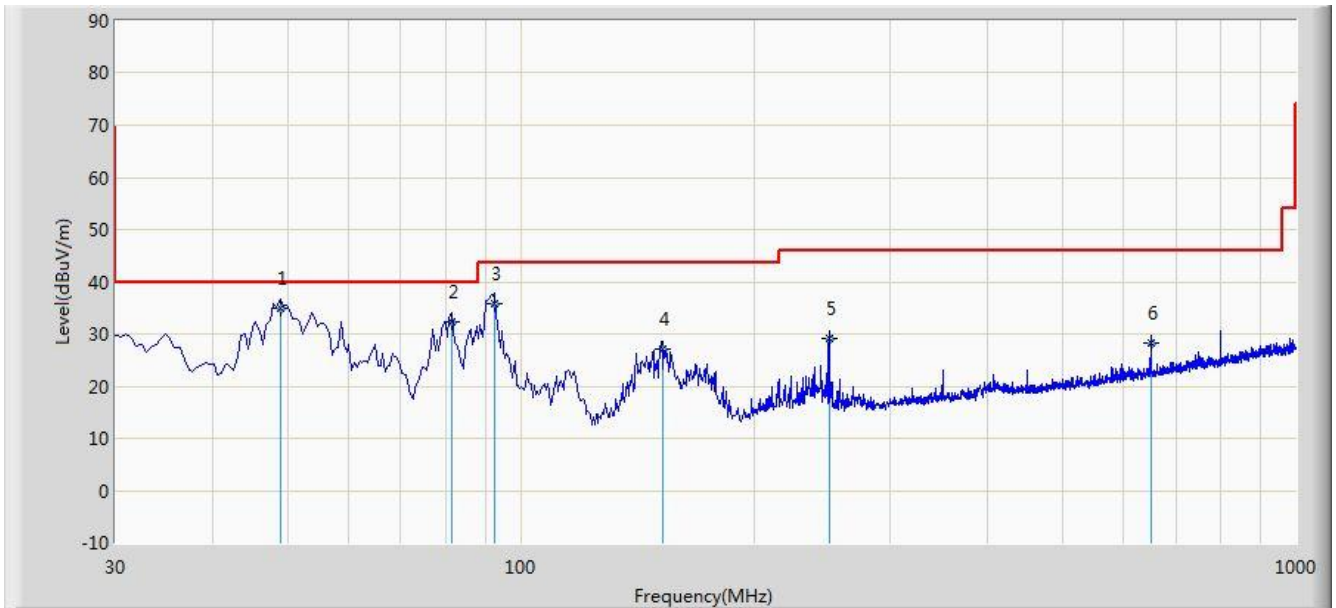
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			250.000	33.831	20.140	-12.169	46.000	13.691	QP
2		*	350.000	37.788	21.930	-8.212	46.000	15.858	QP
3			450.000	25.685	8.256	-20.315	46.000	17.429	QP
4			550.000	29.352	10.200	-16.648	46.000	19.152	QP
5			650.000	25.003	4.280	-20.997	46.000	20.723	QP
6			800.000	33.211	10.350	-12.789	46.000	22.860	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

Site: AC2	Time: 2017/08/07 - 16:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Flag Yang
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	49.000	34.915	19.950	-5.085	40.000	14.964	QP
2			81.530	32.202	22.600	-7.798	40.000	9.602	QP
3			92.415	35.921	24.080	-7.579	43.500	11.840	QP
4			152.400	27.055	17.480	-16.445	43.500	9.574	QP
5			250.230	29.037	15.340	-16.963	46.000	13.697	QP
6			650.000	28.153	7.430	-17.847	46.000	20.723	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

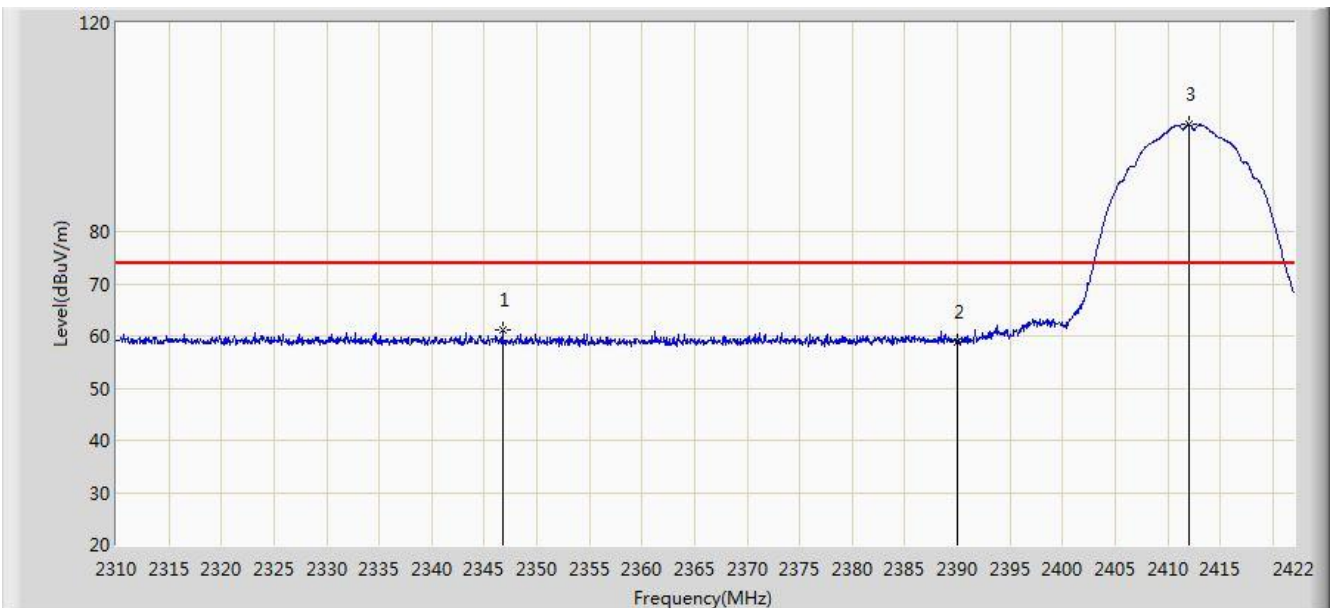
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Result

Site: AC2	Time: 2017/08/08 - 01:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

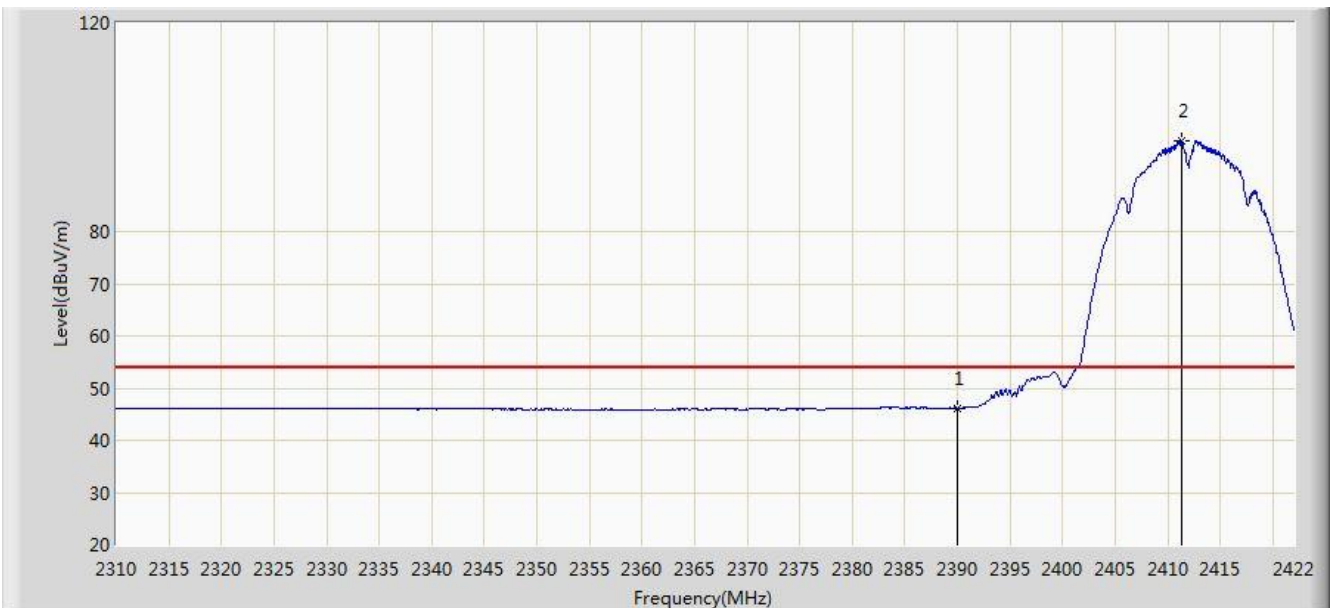


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2346.736	61.303	29.013	-12.697	74.000	32.290	PK
2			2390.000	58.881	26.603	-15.119	74.000	32.278	PK
3		*	2412.032	100.532	68.292	N/A	N/A	32.240	PK

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 01:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

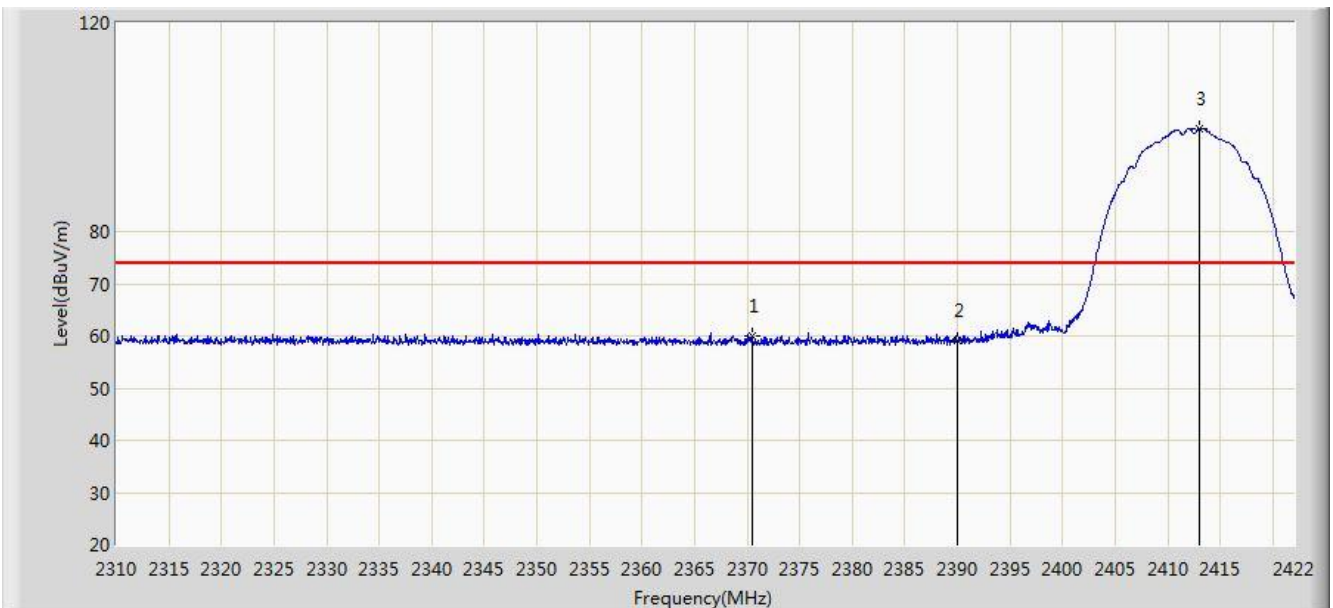


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.209	13.931	-7.791	54.000	32.278	AV
2		*	2411.304	97.526	65.283	N/A	N/A	32.243	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 01:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

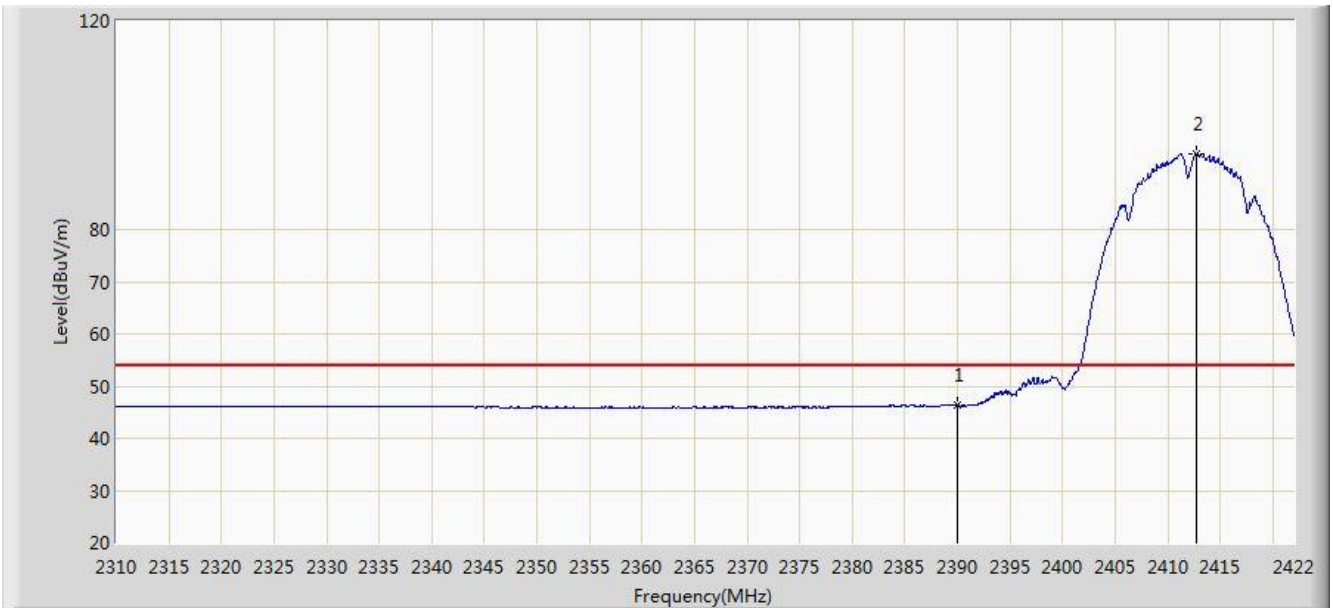


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2370.480	60.035	27.812	-13.965	74.000	32.223	PK
2			2390.000	59.152	26.874	-14.848	74.000	32.278	PK
3		*	2413.040	99.774	67.539	N/A	N/A	32.235	PK

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 01:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

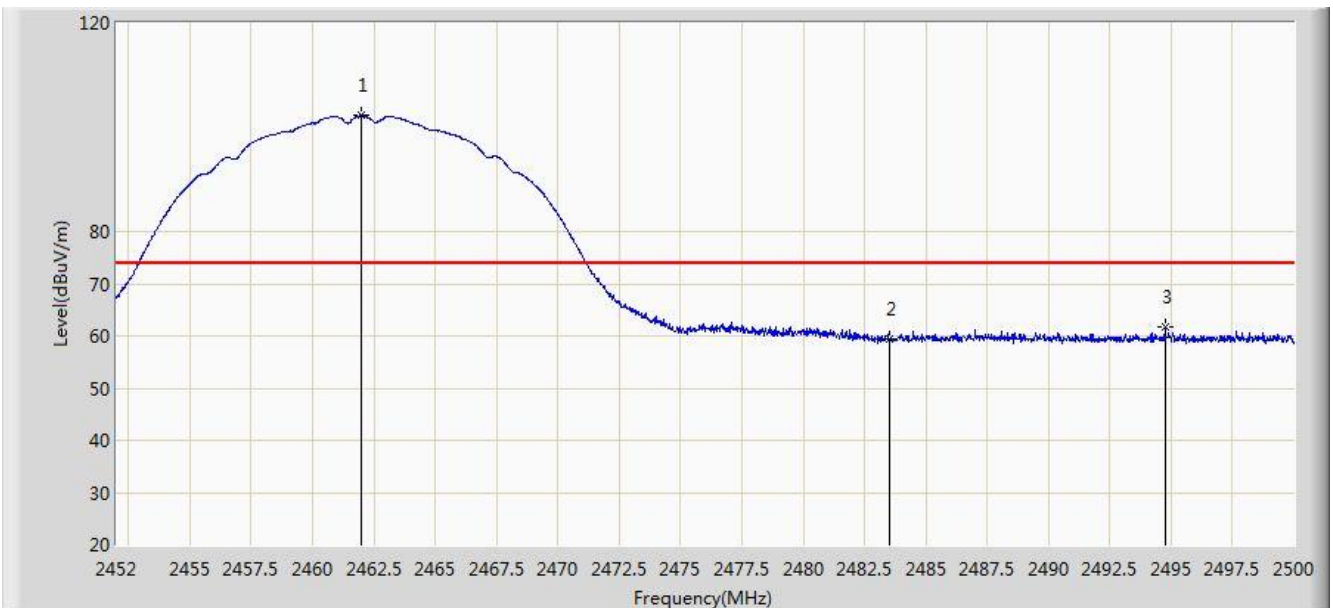


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.240	13.962	-7.760	54.000	32.278	AV
2		*	2412.760	94.575	62.338	N/A	N/A	32.236	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 01:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.984	102.239	70.001	N/A	N/A	32.238	PK
2			2483.500	59.378	27.097	-14.622	74.000	32.282	PK
3			2494.744	61.755	29.435	-12.245	74.000	32.320	PK

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz	

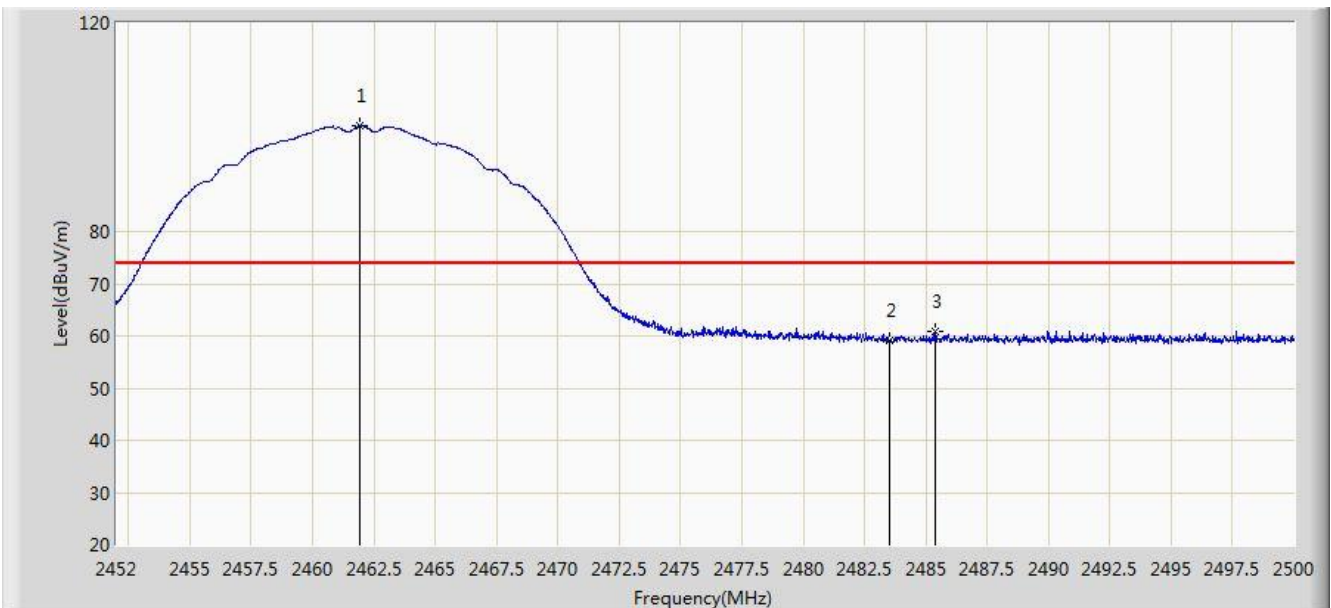


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.776	98.114	65.875	N/A	N/A	32.239	AV
2			2483.500	46.534	14.253	-7.466	54.000	32.282	AV
3			2487.520	47.262	14.967	-6.738	54.000	32.295	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Engineer: Jone Zhang	
Site: AC2	Time: 2017/08/08 - 02:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.912	100.173	67.935	N/A	N/A	32.238	PK
2			2483.500	59.165	26.884	-14.835	74.000	32.282	PK
3			2485.408	60.776	28.488	-13.224	74.000	32.288	PK

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz	

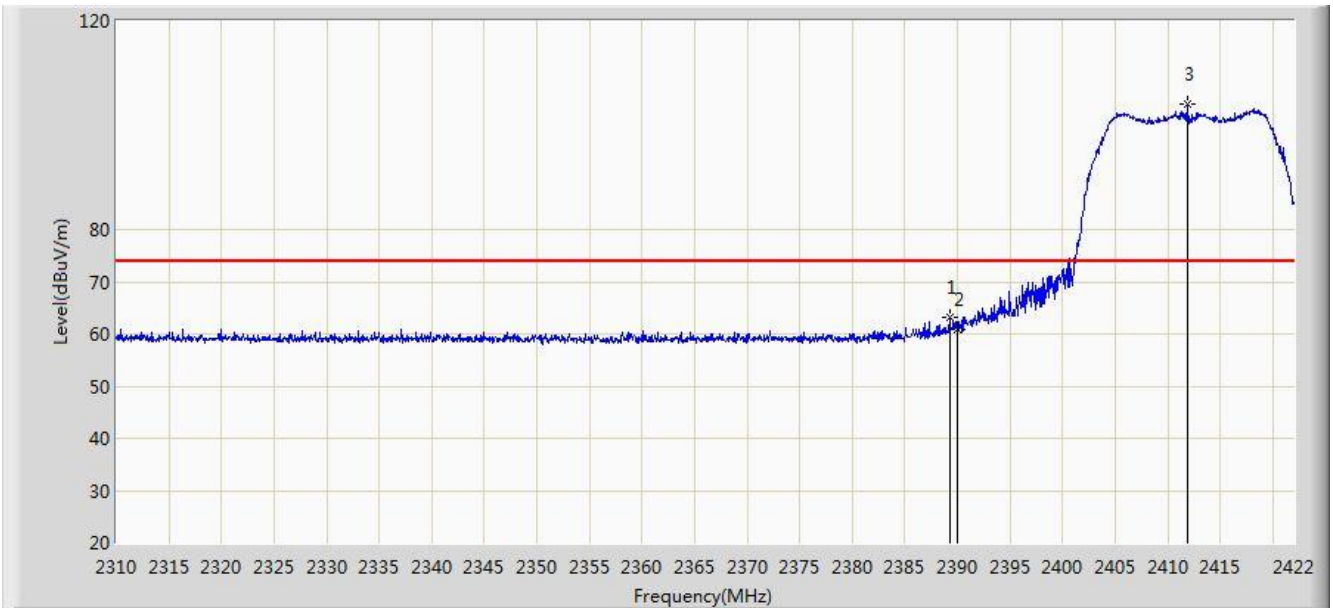


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.240	96.301	64.066	N/A	N/A	32.235	AV
2			2483.500	46.337	14.056	-7.663	54.000	32.282	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz	

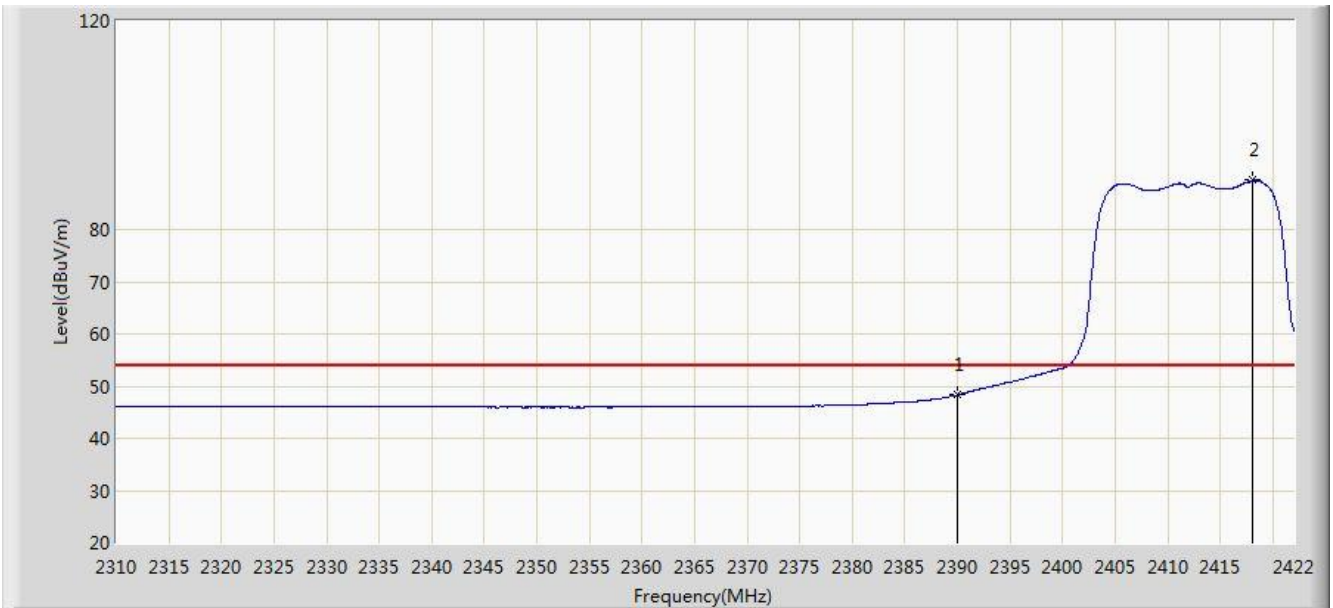


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.240	63.149	30.875	-10.851	74.000	32.274	PK
2			2390.000	60.873	28.595	-13.127	74.000	32.278	PK
3		*	2411.864	104.018	71.778	N/A	N/A	32.240	PK

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:25
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz	

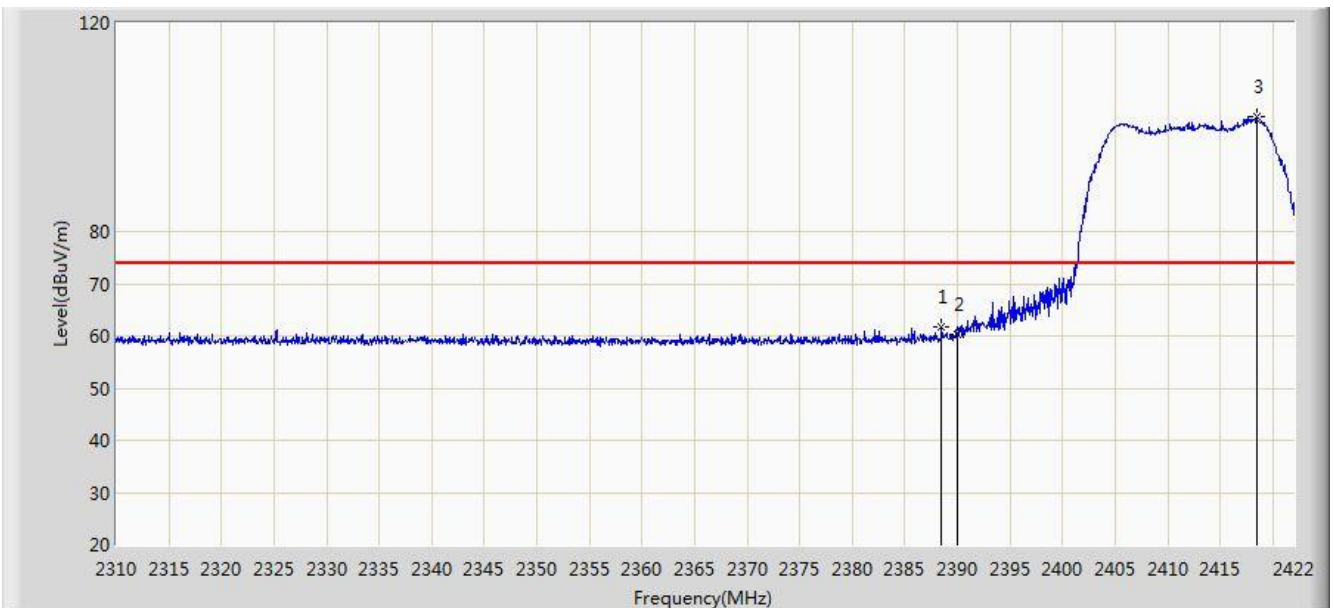


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.290	16.012	-5.710	54.000	32.278	AV
2		*	2418.080	89.437	57.223	N/A	N/A	32.214	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz	

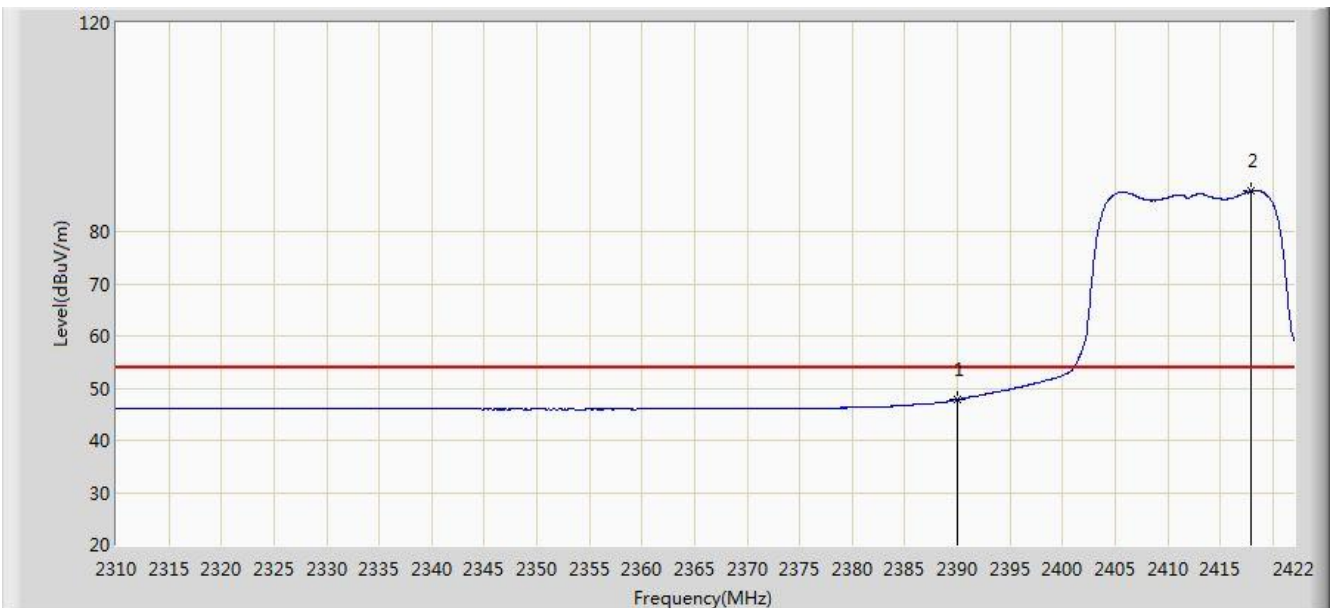


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.512	61.635	29.365	-12.365	74.000	32.270	PK
2			2390.000	60.189	27.911	-13.811	74.000	32.278	PK
3		*	2418.472	102.023	69.810	N/A	N/A	32.213	PK

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz	

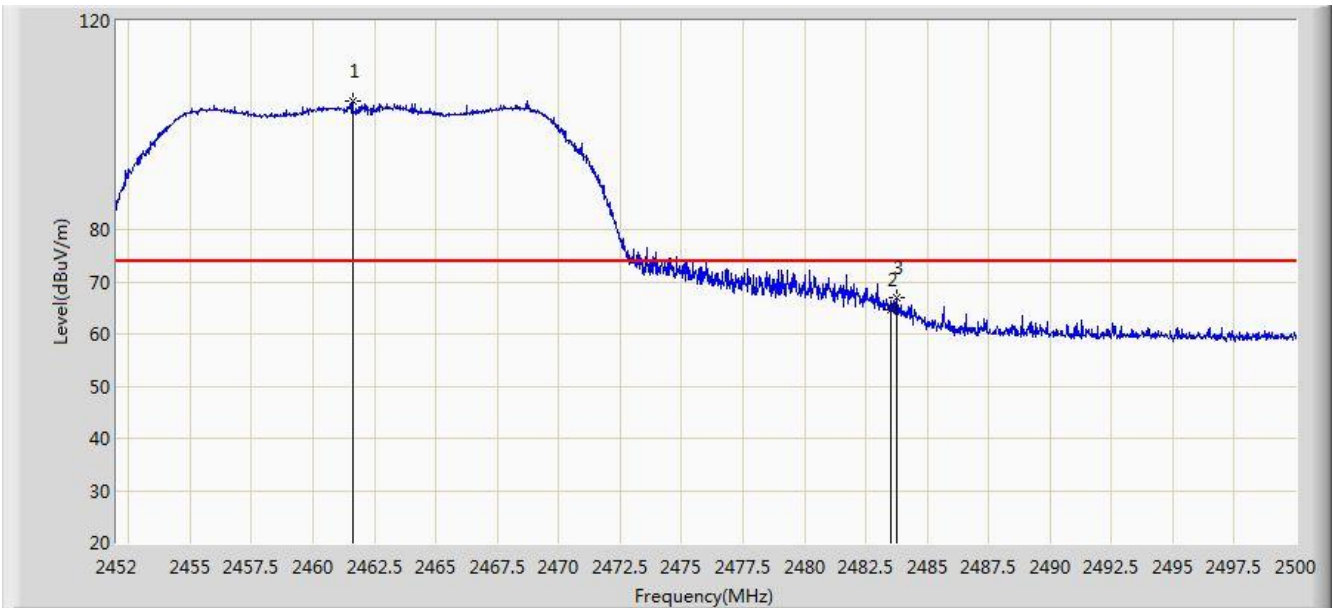


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	47.722	15.444	-6.278	54.000	32.278	AV
2		*	2417.912	87.871	55.656	N/A	N/A	32.215	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz	

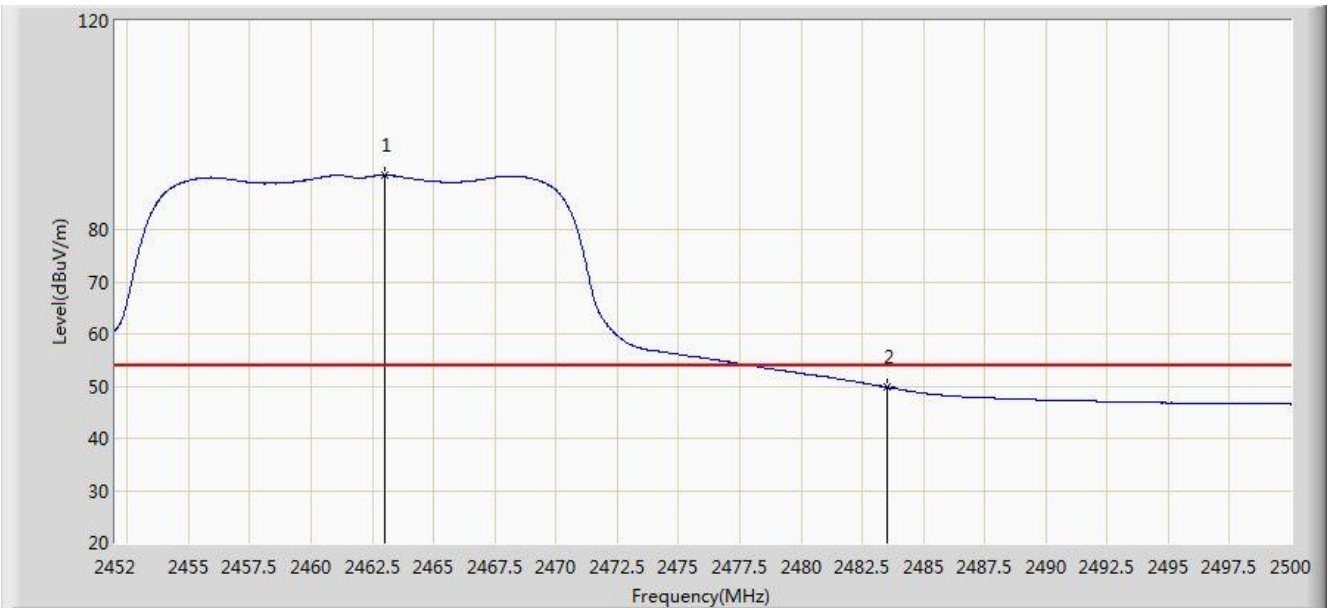


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.600	104.741	72.505	N/A	N/A	32.236	PK
2			2483.500	64.529	32.248	-9.471	74.000	32.282	PK
3			2483.776	66.917	34.635	-7.083	74.000	32.282	PK

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz	

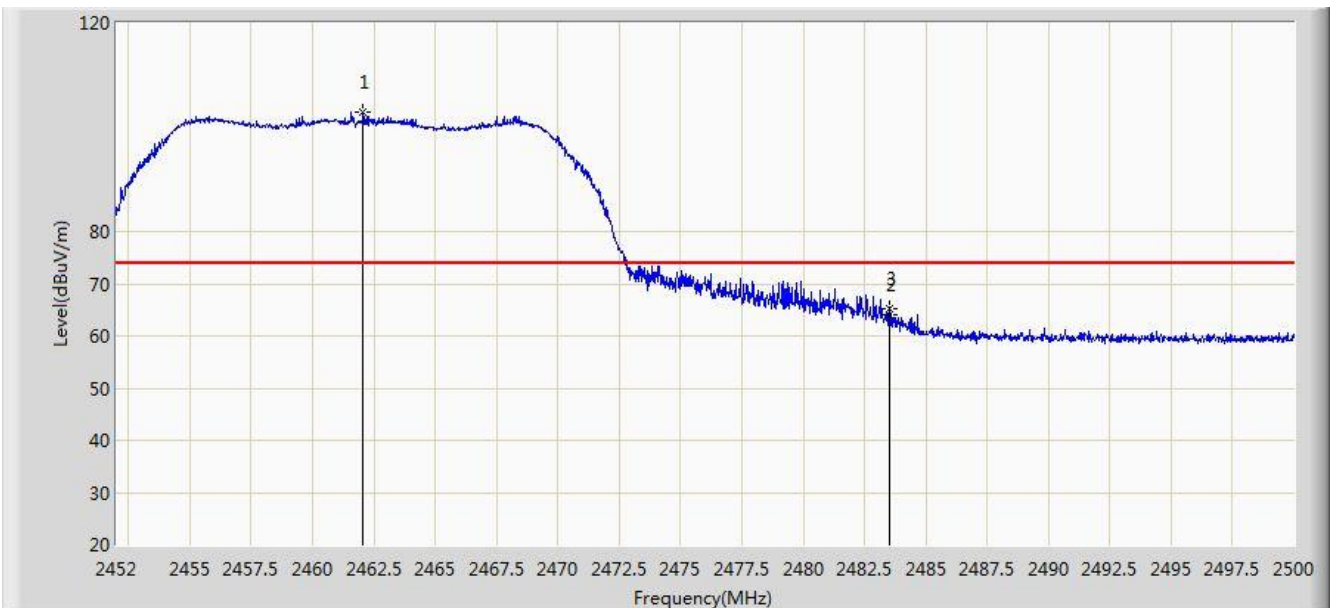


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.016	90.448	58.209	N/A	N/A	32.239	AV
2			2483.500	49.820	17.539	-4.180	54.000	32.282	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz	

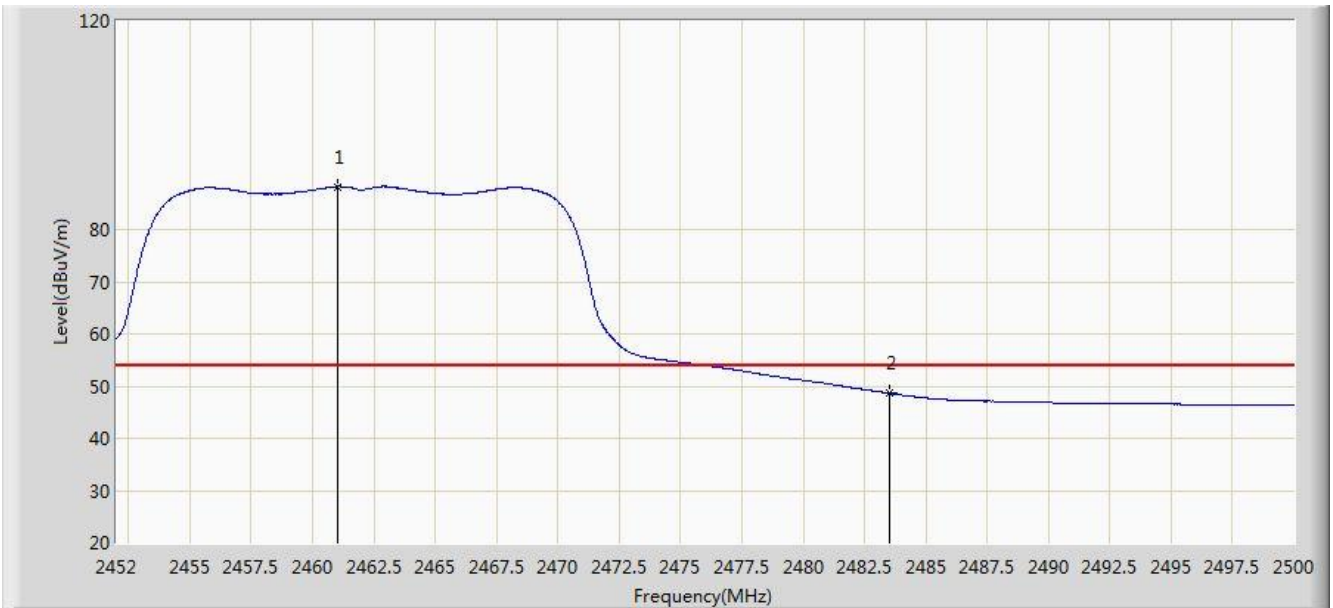


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.056	102.858	70.620	N/A	N/A	32.238	PK
2			2483.500	64.141	31.860	-9.859	74.000	32.282	PK
3			2483.512	65.160	32.879	-8.840	74.000	32.282	PK

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz	

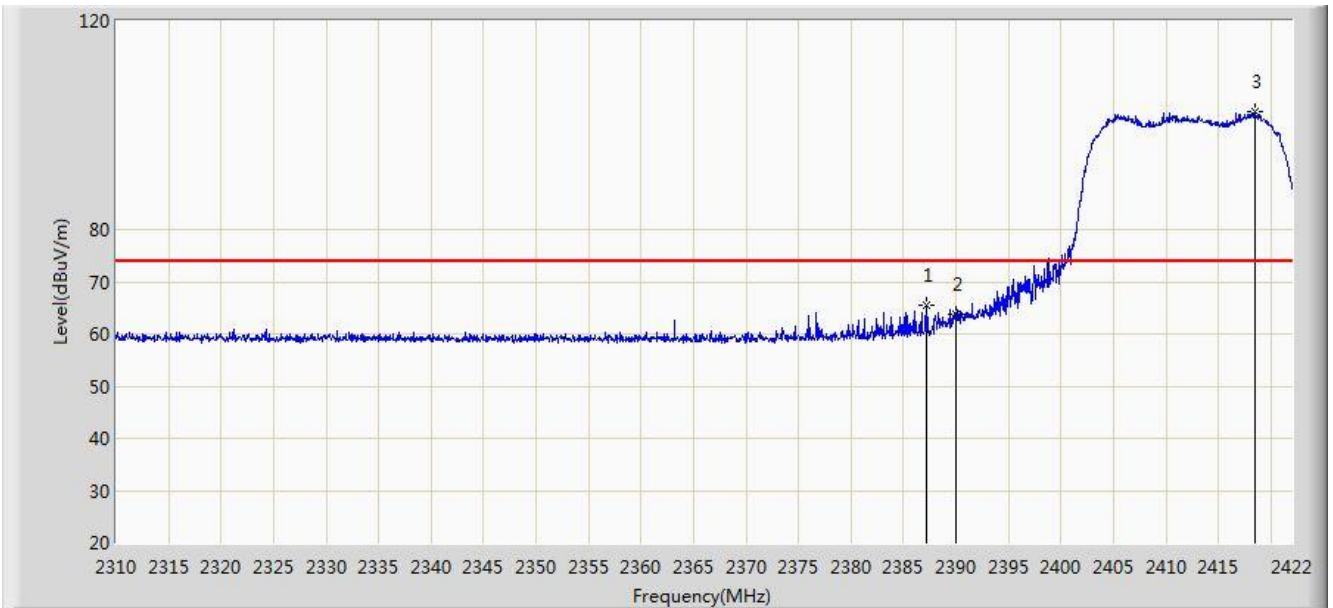


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.000	88.257	56.023	N/A	N/A	32.233	AV
2			2483.500	48.658	16.377	-5.342	54.000	32.282	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

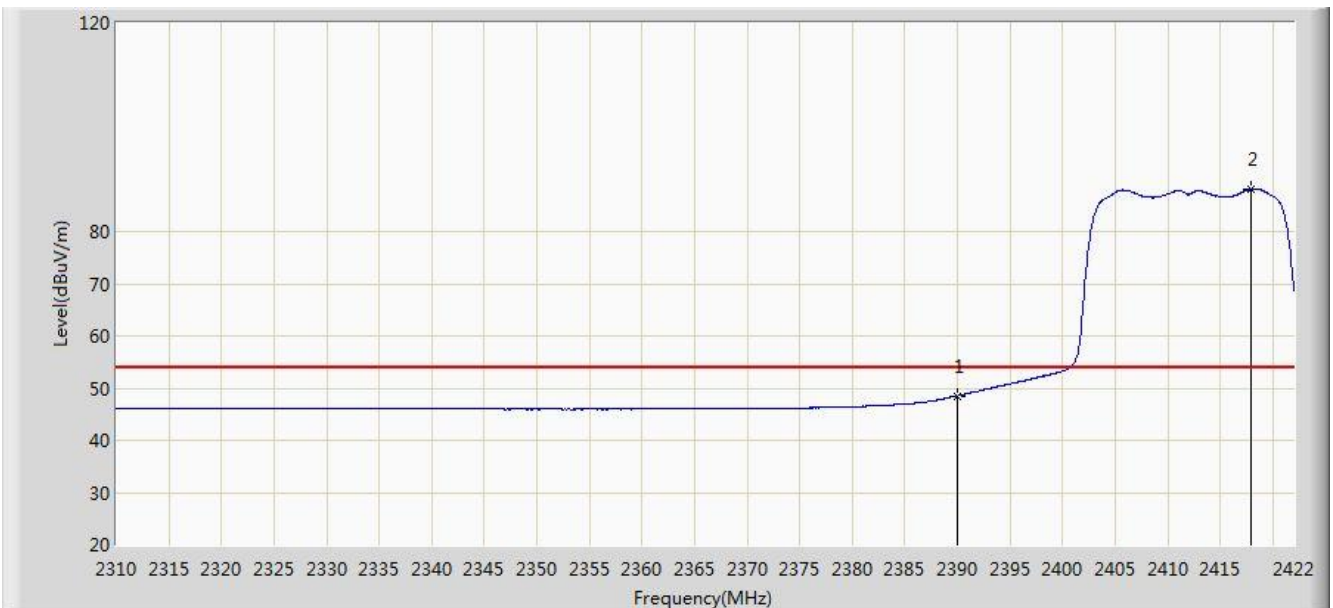


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.168	65.503	33.241	-8.497	74.000	32.262	PK
2			2390.000	63.640	31.362	-10.360	74.000	32.278	PK
3		*	2418.472	102.494	70.281	N/A	N/A	32.213	PK

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

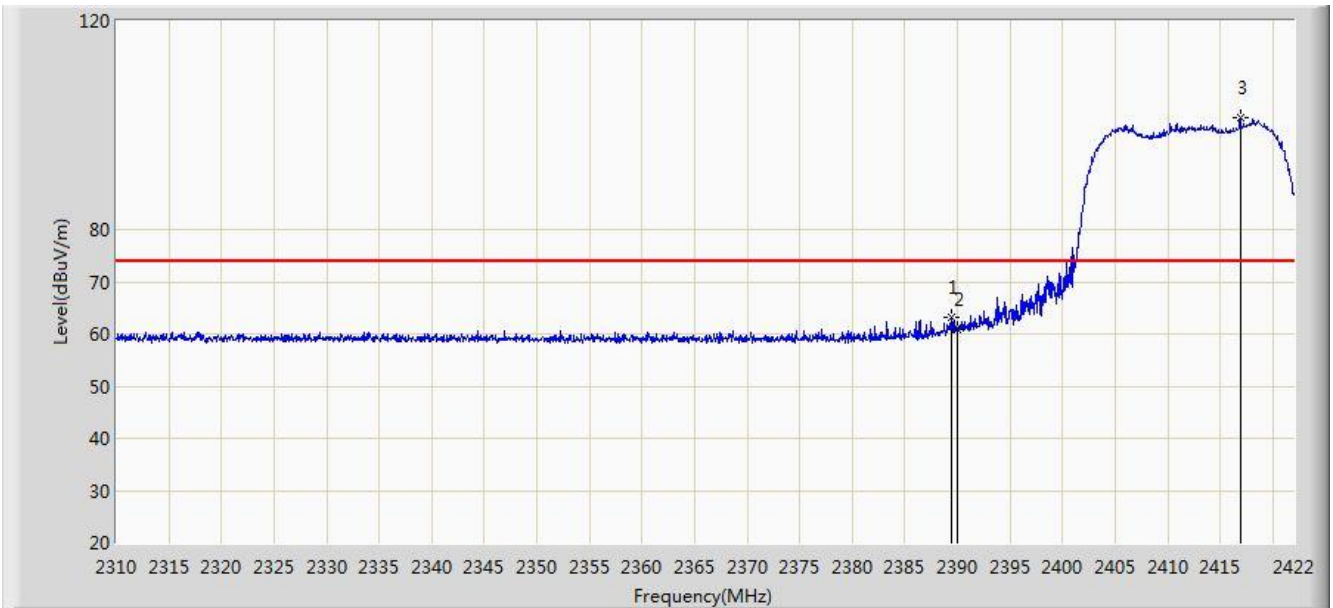


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.514	16.236	-5.486	54.000	32.278	AV
2		*	2417.968	88.198	55.983	N/A	N/A	32.215	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

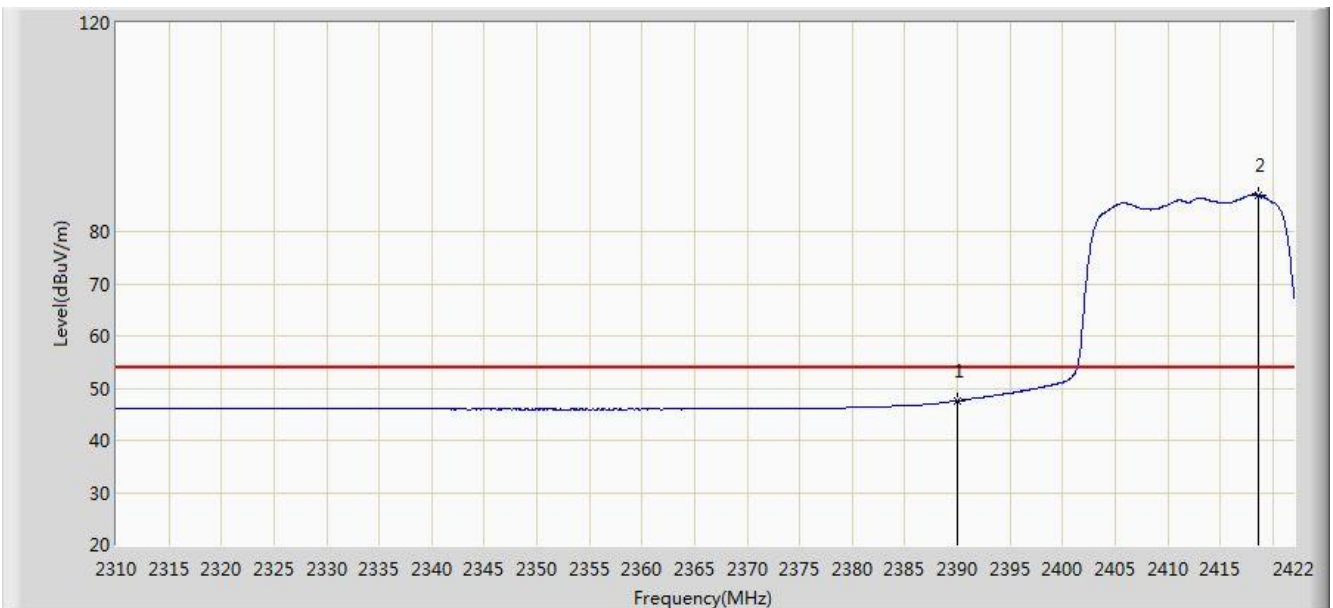


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.464	63.068	30.793	-10.932	74.000	32.275	PK
2			2390.000	60.873	28.595	-13.127	74.000	32.278	PK
3		*	2416.904	101.507	69.288	N/A	N/A	32.219	PK

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

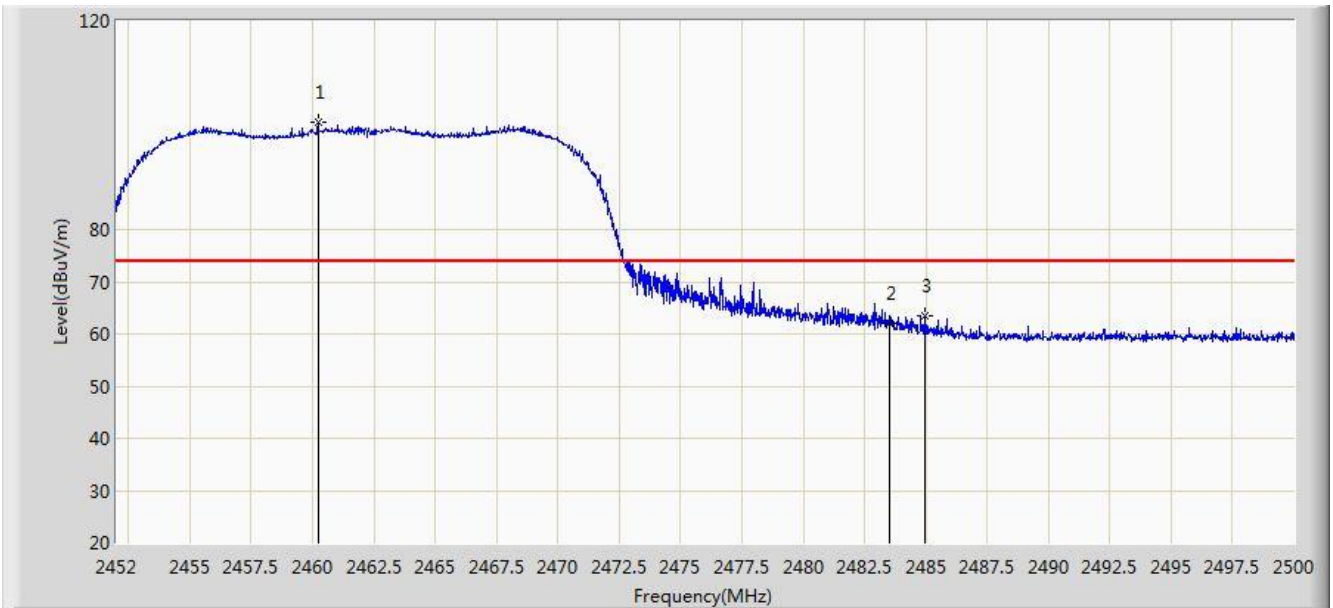


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	47.542	15.264	-6.458	54.000	32.278	AV
2		*	2418.640	86.999	54.787	N/A	N/A	32.212	AV

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz	

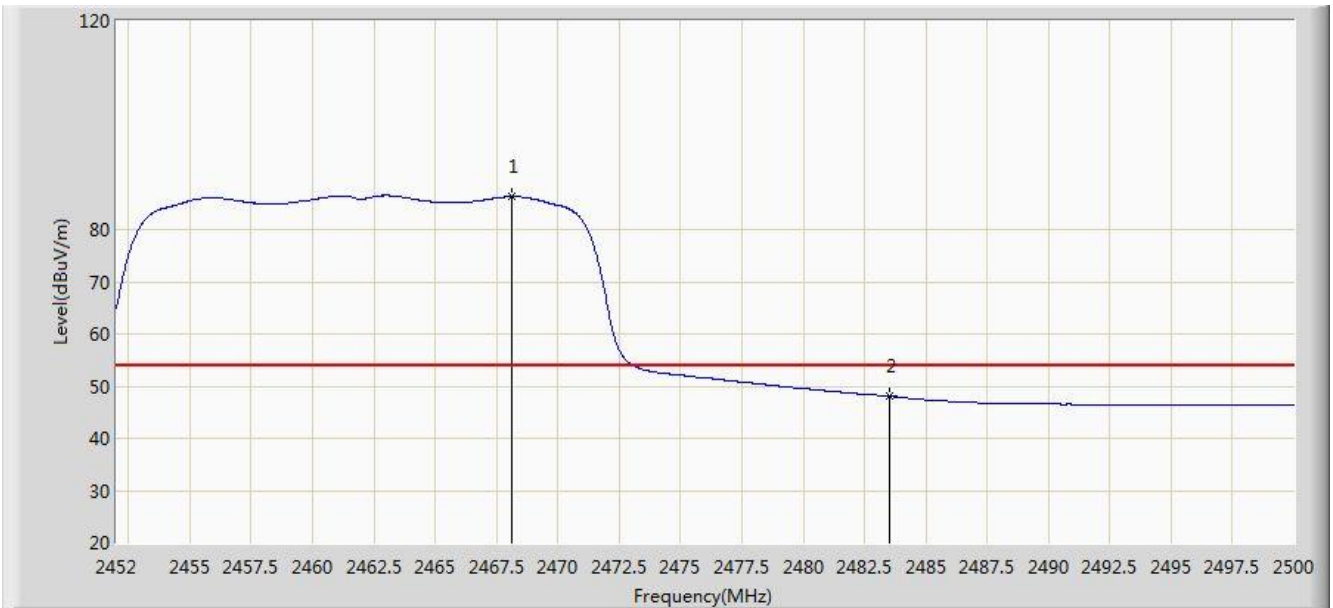


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.232	100.459	68.228	N/A	N/A	32.231	PK
2			2483.500	62.165	29.884	-11.835	74.000	32.282	PK
3			2484.952	63.485	31.199	-10.515	74.000	32.286	PK

Test Mode: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz	

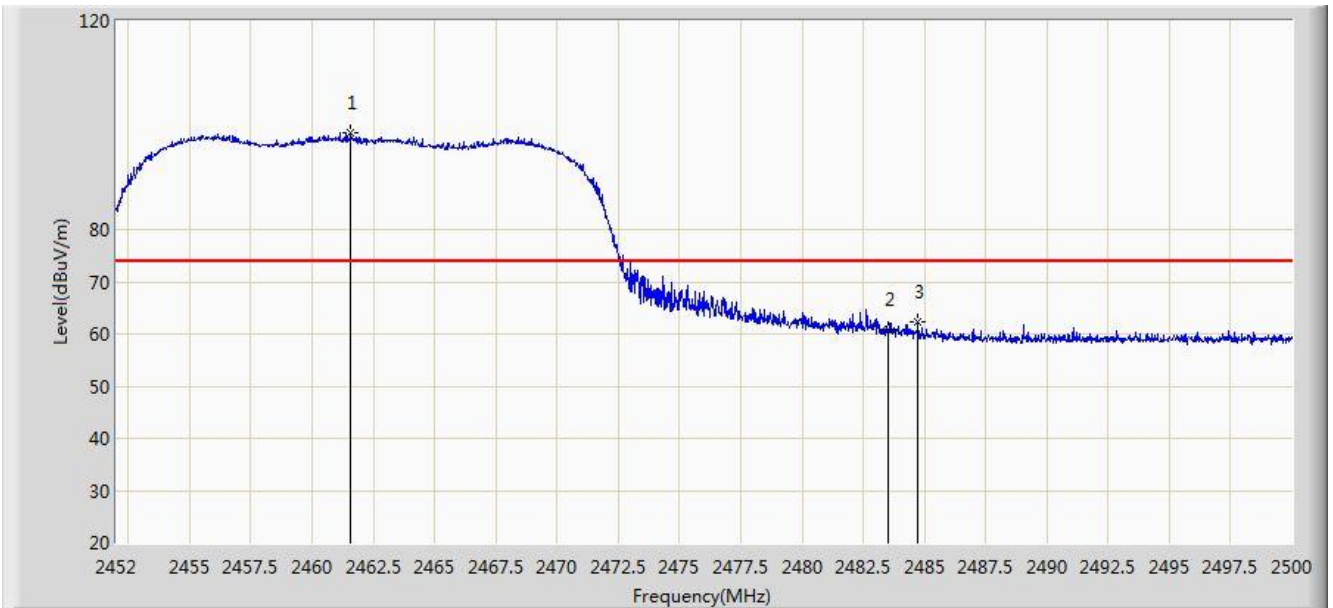


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2468.104	86.333	54.086	N/A	N/A	32.247	AV
2			2483.500	48.037	15.756	-5.963	54.000	32.282	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz	

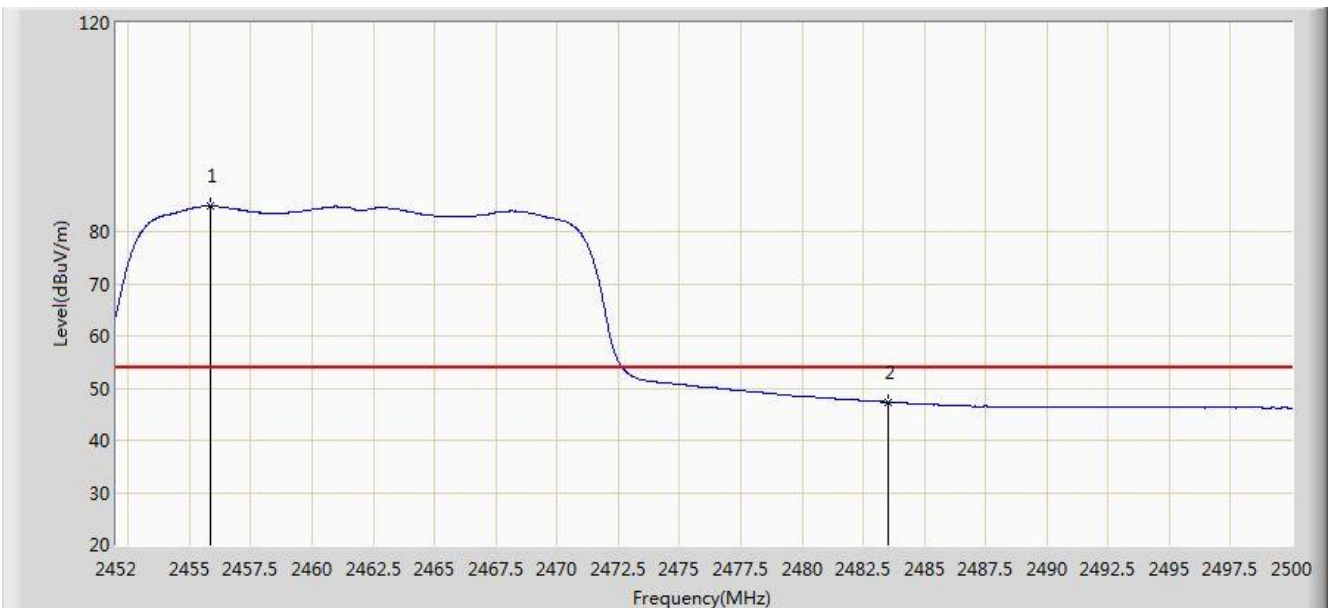


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.576	98.462	66.226	N/A	N/A	32.236	PK
2			2483.500	60.761	28.480	-13.239	74.000	32.282	PK
3			2484.736	62.276	29.991	-11.724	74.000	32.286	PK

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/08 - 02:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.864	84.912	52.700	N/A	N/A	32.212	AV
2			2483.500	47.340	15.059	-6.660	54.000	32.282	AV

Test Mode: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

7.8. AC Conducted Emissions Measurement

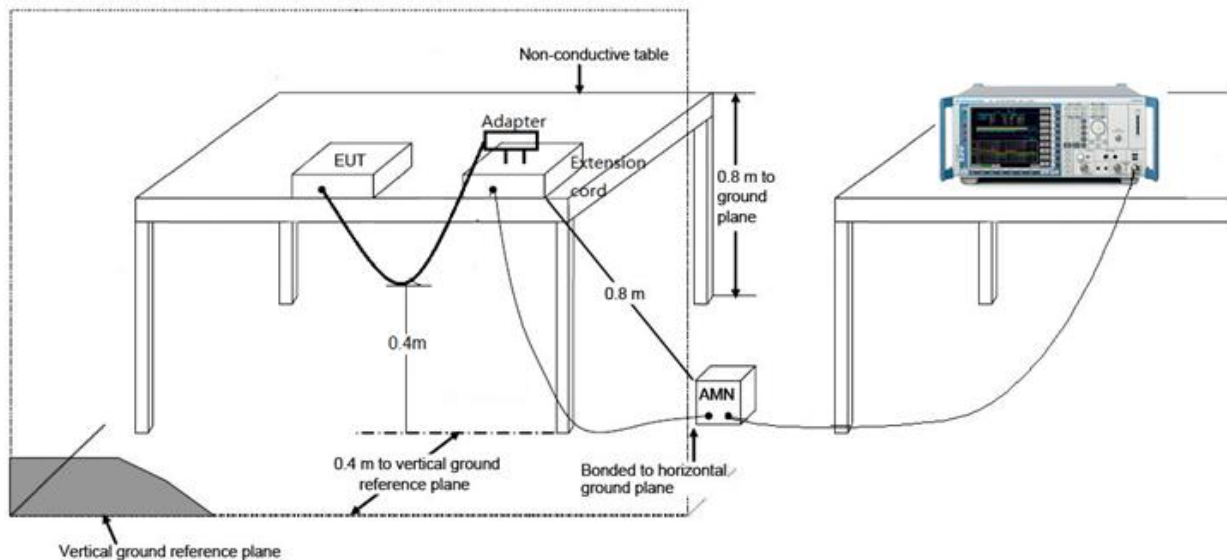
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

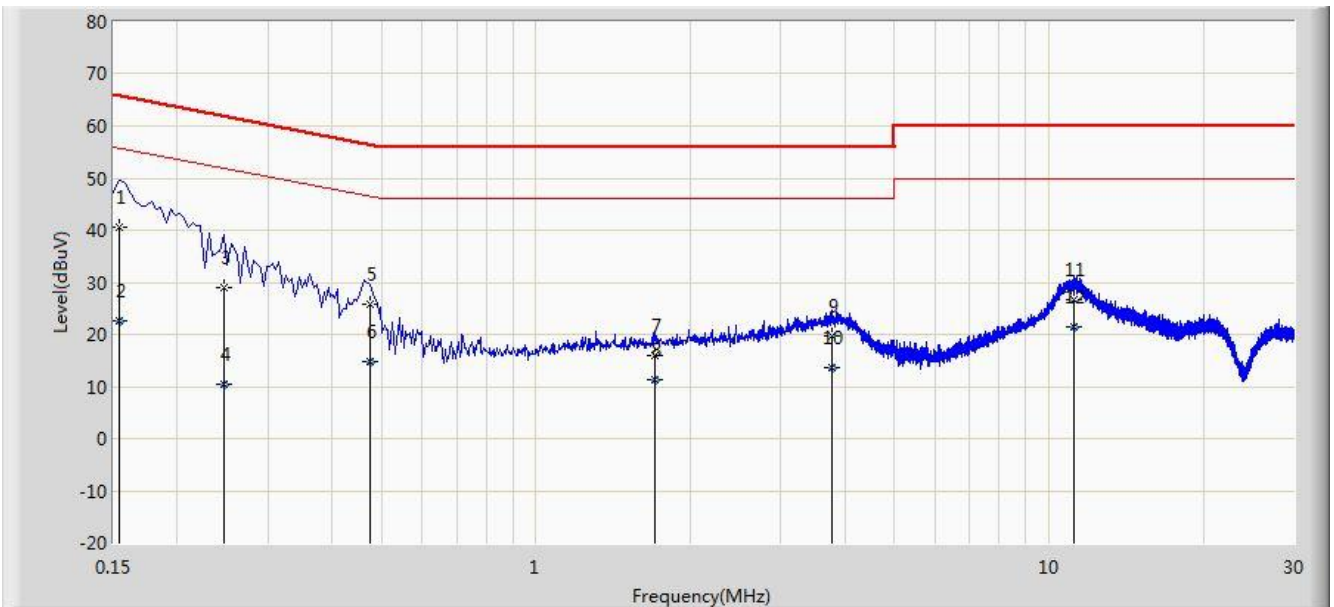
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3.Test Result

Site: SR2	Time: 2017/08/11 - 14:05
Limit: FCC_Part15.207_CE_AC Power	Engineer: Cat Hu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Mode 1	

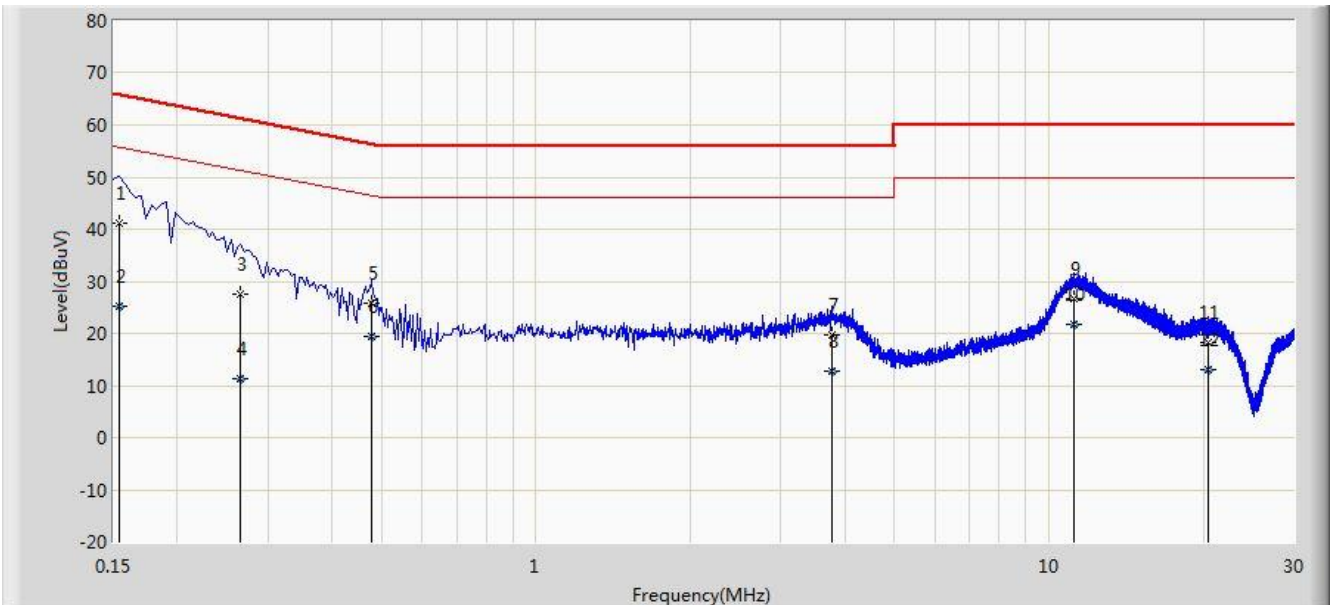


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.154	40.588	29.849	-25.193	65.781	10.740	QP
2			0.154	22.611	11.872	-33.170	55.781	10.740	AV
3			0.246	29.071	19.110	-32.820	61.891	9.961	QP
4			0.246	10.379	0.419	-41.512	51.891	9.961	AV
5			0.474	25.837	15.691	-30.607	56.444	10.145	QP
6			0.474	14.685	4.539	-31.759	46.444	10.145	AV
7			1.702	16.082	6.200	-39.918	56.000	9.881	QP
8			1.702	11.428	1.547	-34.572	46.000	9.881	AV
9			3.766	19.844	9.885	-36.156	56.000	9.959	QP
10			3.766	13.490	3.531	-32.510	46.000	9.959	AV
11			11.210	26.671	16.570	-33.329	60.000	10.101	QP
12			11.210	21.532	11.431	-28.468	50.000	10.101	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SR2	Time: 2017/08/11 - 14:11
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bruce Wang
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: HD IP Conference Phone	Power: AC 120V/60Hz
Test Mode: Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.154	41.142	30.426	-24.639	65.781	10.716	QP
2			0.154	25.219	14.504	-30.562	55.781	10.716	AV
3			0.266	27.567	17.555	-33.674	61.242	10.013	QP
4			0.266	11.340	1.327	-39.902	51.242	10.013	AV
5			0.478	25.675	15.505	-30.699	56.374	10.170	QP
6			0.478	19.364	9.194	-27.010	46.374	10.170	AV
7			3.774	19.784	9.818	-36.216	56.000	9.966	QP
8			3.774	12.723	2.758	-33.277	46.000	9.966	AV
9			11.214	26.786	16.659	-33.214	60.000	10.127	QP
10			11.214	21.680	11.552	-28.320	50.000	10.127	AV
11			20.406	18.137	7.953	-41.863	60.000	10.184	QP
12			20.406	13.139	2.955	-36.861	50.000	10.184	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **HD IP Conference Phone FCC ID: T2C-CP920** is in compliance with Part 15C of the FCC Rules and IC Rules.

The End