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 D01v03r02 – Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r02 – Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r02 – Section 12.2.5 (average power measurements)

7.6.3. Test Setting

Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 D01v03r02

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

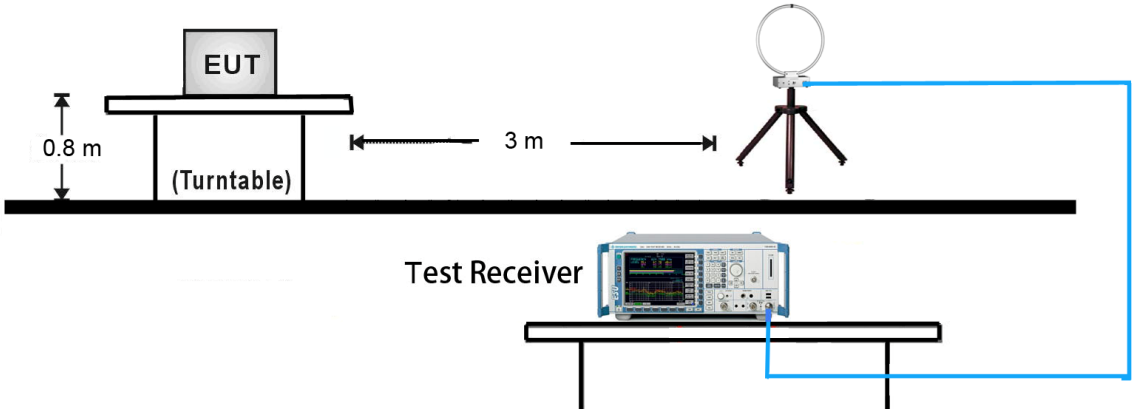
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements per Section 12.2.5.3 of KDB 558074 D01v03r02

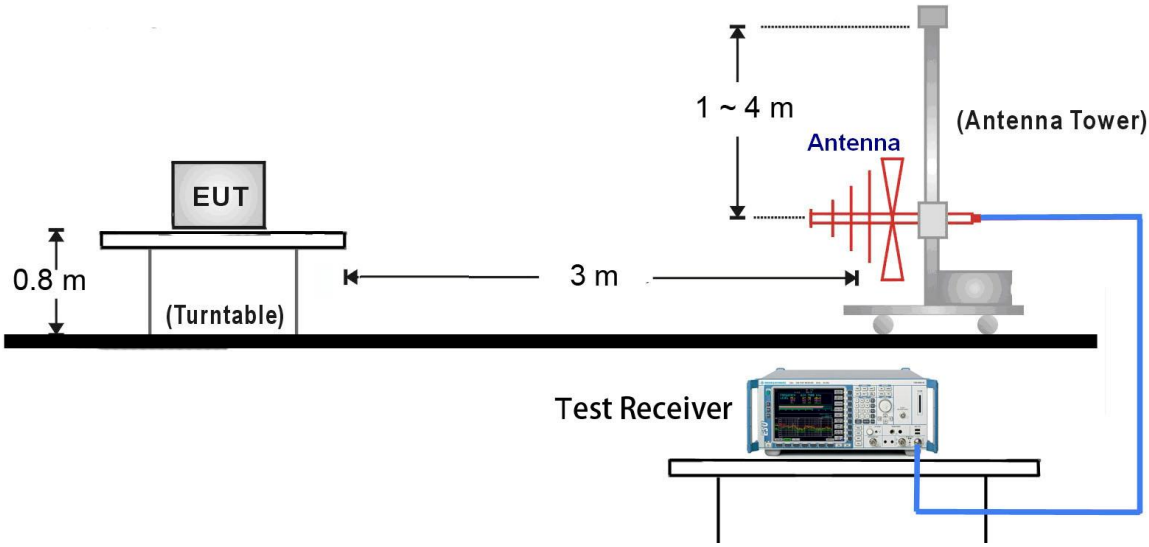
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). 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

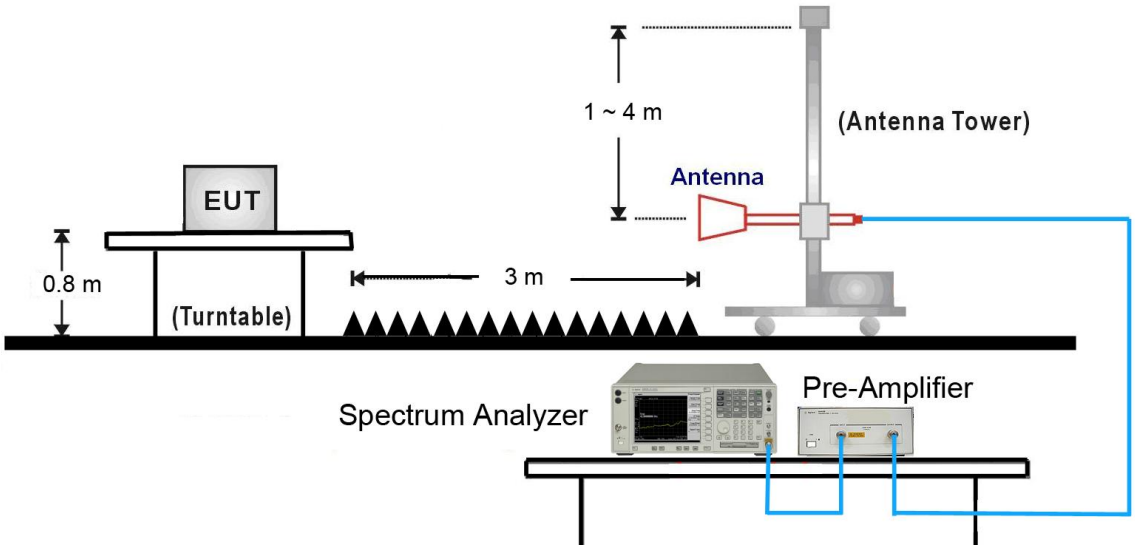
9kHz ~ 30MHz Test Setup:



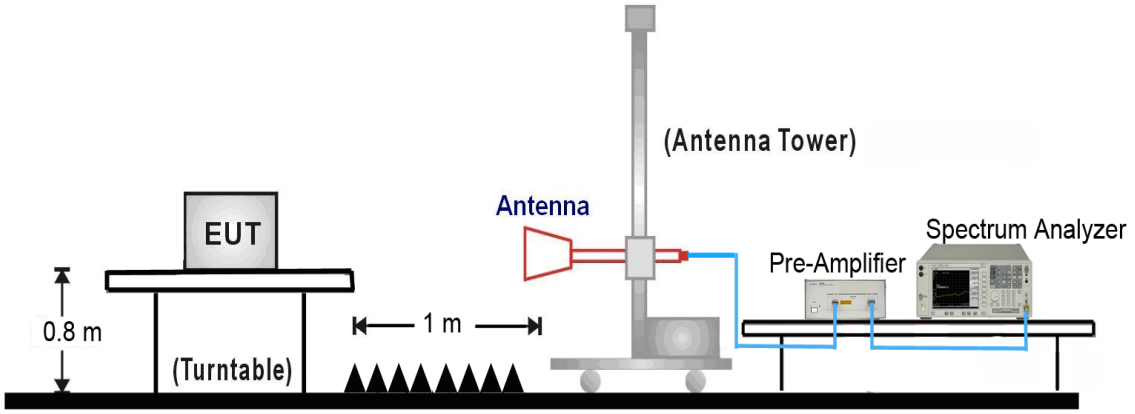
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~25GHz Test Setup:



7.6.5. Test Result

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3201.5	37.7	3.5	41.2	91.7	-50.5	Peak	Horizontal
*	3575.5	36.3	4.0	40.3	91.7	-51.4	Peak	Horizontal
	4825.0	45.6	6.4	52.0	74.0	-22.0	Peak	Horizontal
	4825.0	44.5	6.4	50.9	54.0	-3.1	Average	Horizontal
	7570.5	34.5	14.7	49.2	74.0	-24.8	Peak	Horizontal
*	6244.5	36.9	9.4	46.3	91.7	-45.4	Peak	Vertical
*	7247.5	37.1	13.8	50.9	91.7	-40.8	Peak	Vertical
	8148.5	33.9	14.9	48.8	74.0	-25.2	Peak	Vertical
	9032.5	34.1	14.5	48.6	74.0	-25.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (111.7dBμV/m).

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:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3320.5	37.3	3.1	40.4	91.2	-50.8	Peak	Horizontal
*	4468.0	38.2	5.6	43.8	91.2	-47.4	Peak	Horizontal
	4876.0	44.0	6.6	50.6	74.0	-23.4	Peak	Horizontal
	4874.0	42.6	6.6	49.2	54.0	-4.8	Average	Horizontal
	7502.5	34.4	14.5	48.9	74.0	-25.1	Peak	Horizontal
*	3320.5	37.3	3.1	40.4	91.2	-50.8	Peak	Vertical
*	3490.5	37.2	3.8	41.0	91.2	-50.2	Peak	Vertical
	4876.0	38.7	6.6	45.3	74.0	-28.7	Peak	Vertical
	7502.5	34.6	14.5	49.1	74.0	-24.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (111.2dBμV/m).

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:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3448.0	37.3	3.5	40.8	92.1	-51.3	Peak	Horizontal
*	4493.5	37.3	5.6	42.9	92.1	-49.2	Peak	Horizontal
	4927.0	45.8	6.7	52.5	74.0	-21.5	Peak	Horizontal
	4924.0	44.3	6.7	51.0	54.0	-3.0	Average	Horizontal
	7375.0	35.3	14.1	49.4	74.0	-24.6	Peak	Horizontal
*	3490.5	36.3	3.8	40.1	92.1	-52.0	Peak	Vertical
*	4425.5	37.1	5.5	42.6	92.1	-49.5	Peak	Vertical
	4927.0	39.1	6.7	45.8	74.0	-28.2	Peak	Vertical
	7536.5	33.8	14.6	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (112.1dBμV/m).

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:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	3439.5	36.9	3.5	40.4	91.9	-51.5	Peak	Horizontal
*	4485.0	37.1	5.6	42.7	91.9	-49.2	Peak	Horizontal
	4825.0	39.5	6.4	45.9	74.0	-28.1	Peak	Horizontal
	7613.0	34.2	14.6	48.8	74.0	-25.2	Peak	Horizontal
*	3456.5	37.4	3.6	41.0	91.9	-50.9	Peak	Vertical
*	4459.5	37.2	5.5	42.7	91.9	-49.2	Peak	Vertical
	4824.0	37.8	6.4	44.2	74.0	-29.8	Peak	Vertical
	5428.5	37.9	7.0	44.9	74.0	-29.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (111.9dBμV/m).

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:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	3516.0	36.3	3.9	40.2	91.3	-51.1	Peak	Horizontal
*	4442.5	36.7	5.5	42.2	91.3	-49.1	Peak	Horizontal
	4876.0	40.4	6.6	47.0	74.0	-27.0	Peak	Horizontal
	7400.5	34.4	14.1	48.5	74.0	-25.5	Peak	Horizontal
*	3490.5	37.0	3.8	40.8	91.3	-50.5	Peak	Vertical
*	4459.5	36.2	5.5	41.7	91.3	-49.6	Peak	Vertical
	4876.0	37.3	6.6	43.9	74.0	-30.1	Peak	Vertical
	7400.5	34.4	14.1	48.5	74.0	-25.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (111.3dBμV/m).

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:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	3567.0	36.5	4.1	40.6	90.7	-50.1	Peak	Horizontal
*	4408.5	36.7	5.5	42.2	90.7	-48.5	Peak	Horizontal
	4927.0	38.4	6.7	45.1	74.0	-28.9	Peak	Horizontal
	5386.0	36.9	6.9	43.8	74.0	-30.2	Peak	Horizontal
*	4408.5	37.7	5.5	43.2	90.7	-47.5	Peak	Vertical
*	5624.0	36.4	7.5	43.9	90.7	-46.8	Peak	Vertical
	7273.0	34.0	13.9	47.9	74.0	-26.1	Peak	Vertical
	8318.5	33.5	14.4	47.9	74.0	-26.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (110.7dBμV/m).

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:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
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
*	5216.0	36.6	6.8	43.4	90.9	-47.5	Peak	Horizontal
*	6091.5	37.0	8.4	45.4	90.9	-45.5	Peak	Horizontal
	7434.5	34.7	14.2	48.9	74.0	-25.1	Peak	Horizontal
	8165.5	33.1	14.8	47.9	74.0	-26.1	Peak	Horizontal
*	4459.5	35.9	5.5	41.4	90.9	-49.5	Peak	Vertical
*	5309.5	37.9	6.7	44.6	90.9	-46.3	Peak	Vertical
	7604.5	34.7	14.6	49.3	74.0	-24.7	Peak	Vertical
	8480.0	35.7	14.6	50.3	74.0	-23.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (110.9dBμV/m).

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:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	6134.0	37.1	8.7	45.8	89.6	-43.8	Peak	Horizontal
*	7026.5	35.4	12.9	48.3	89.6	-41.3	Peak	Horizontal
	8216.5	34.6	14.6	49.2	74.0	-24.8	Peak	Horizontal
	9049.5	34.8	14.5	49.3	74.0	-24.7	Peak	Horizontal
*	4442.5	37.5	5.5	43.0	89.6	-46.6	Peak	Vertical
*	5522.0	36.5	7.0	43.5	89.6	-46.1	Peak	Vertical
	7332.5	34.8	14.0	48.8	74.0	-25.2	Peak	Vertical
	8259.0	33.8	14.4	48.2	74.0	-25.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (109.6dBμV/m).

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:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
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
*	4485.0	36.3	5.6	41.9	89.4	-47.5	Peak	Horizontal
*	5649.5	37.9	7.6	45.5	89.4	-43.9	Peak	Horizontal
	7502.5	33.8	14.5	48.3	74.0	-25.7	Peak	Horizontal
	8386.5	34.2	14.4	48.6	74.0	-25.4	Peak	Horizontal
*	4442.5	36.8	5.5	42.3	89.4	-47.1	Peak	Vertical
*	5479.5	37.2	7.0	44.2	89.4	-45.2	Peak	Vertical
	7443.0	34.8	14.2	49.0	74.0	-25.0	Peak	Vertical
	8420.5	36.2	14.5	50.7	74.0	-23.3	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (109.4dBμV/m).

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-HT40	Test Site:	AC1
Test Channel:	03	Test Engineer:	Roy Cheng
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
*	4485.0	36.7	5.6	42.3	86.3	-44.0	Peak	Horizontal
*	6015.0	37.6	8.4	46.0	86.3	-40.3	Peak	Horizontal
	7400.5	34.8	14.1	48.9	74.0	-25.1	Peak	Horizontal
	8480.0	36.4	14.6	51.0	74.0	-23.0	Peak	Horizontal
*	4476.5	37.5	5.6	43.1	86.3	-43.2	Peak	Vertical
*	5751.5	37.6	7.8	45.4	86.3	-40.9	Peak	Vertical
	7281.5	34.6	13.9	48.5	74.0	-25.5	Peak	Vertical
	8199.5	33.9	14.6	48.5	74.0	-25.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (106.3dBμV/m).

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-HT40	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
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
*	4485.0	36.2	5.6	41.8	87.2	-45.4	Peak	Horizontal
*	6380.5	34.9	9.9	44.8	87.2	-42.4	Peak	Horizontal
	7502.5	34.1	14.5	48.6	74.0	-25.4	Peak	Horizontal
	8097.5	33.8	15.1	48.9	74.0	-25.1	Peak	Horizontal
*	4425.5	36.9	5.5	42.4	87.2	-44.8	Peak	Vertical
*	5879.0	37.1	8.3	45.4	87.2	-41.8	Peak	Vertical
	7434.5	34.5	14.2	48.7	74.0	-25.3	Peak	Vertical
	8233.5	33.3	14.5	47.8	74.0	-26.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (107.2dBμV/m).

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-HT40	Test Site:	AC1
Test Channel:	09	Test Engineer:	Roy Cheng
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
*	4476.5	37.9	5.6	43.5	85.0	-41.5	Peak	Horizontal
*	5207.5	36.5	6.9	43.4	85.0	-41.6	Peak	Horizontal
	7366.5	34.6	14.0	48.6	74.0	-25.4	Peak	Horizontal
	8097.5	33.8	15.1	48.9	74.0	-25.1	Peak	Horizontal
*	4459.5	36.6	5.5	42.1	85.0	-42.9	Peak	Vertical
*	5190.5	35.8	7.0	42.8	85.0	-42.2	Peak	Vertical
	7596.0	33.6	14.6	48.2	74.0	-25.8	Peak	Vertical
	8250.5	33.0	14.4	47.4	74.0	-26.6	Peak	Vertical

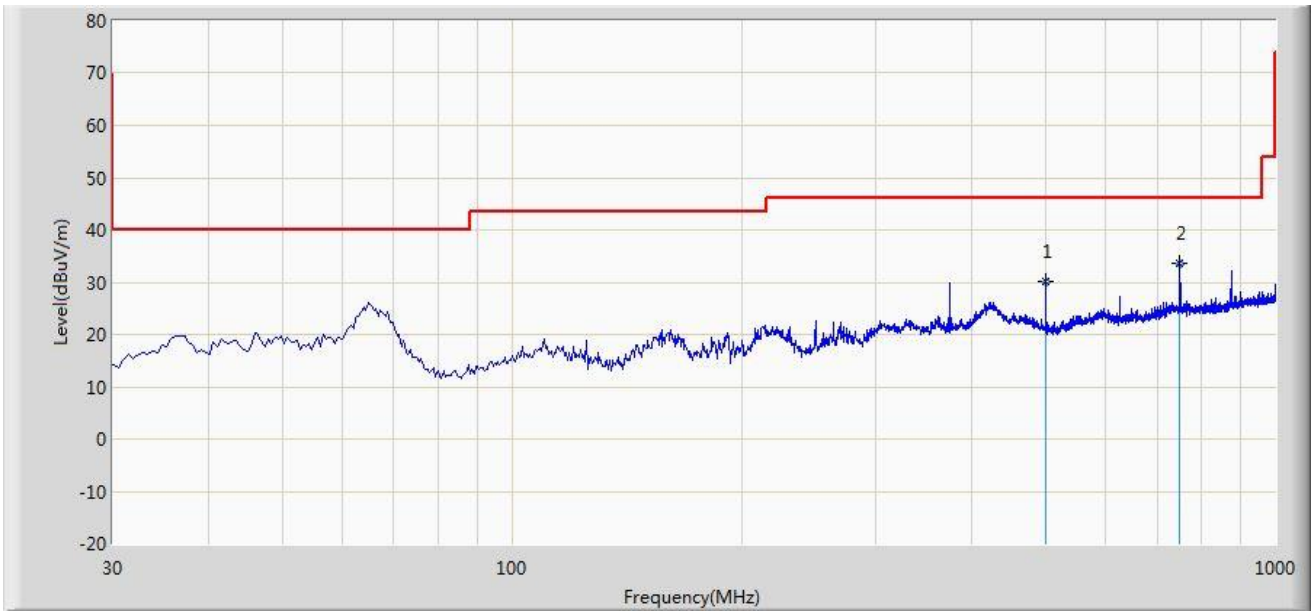
Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (105.0dBμV/m).

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:

Engineer: Milo Li	
Site: AC1	Time: 2014/09/22 - 14:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2437MHz	

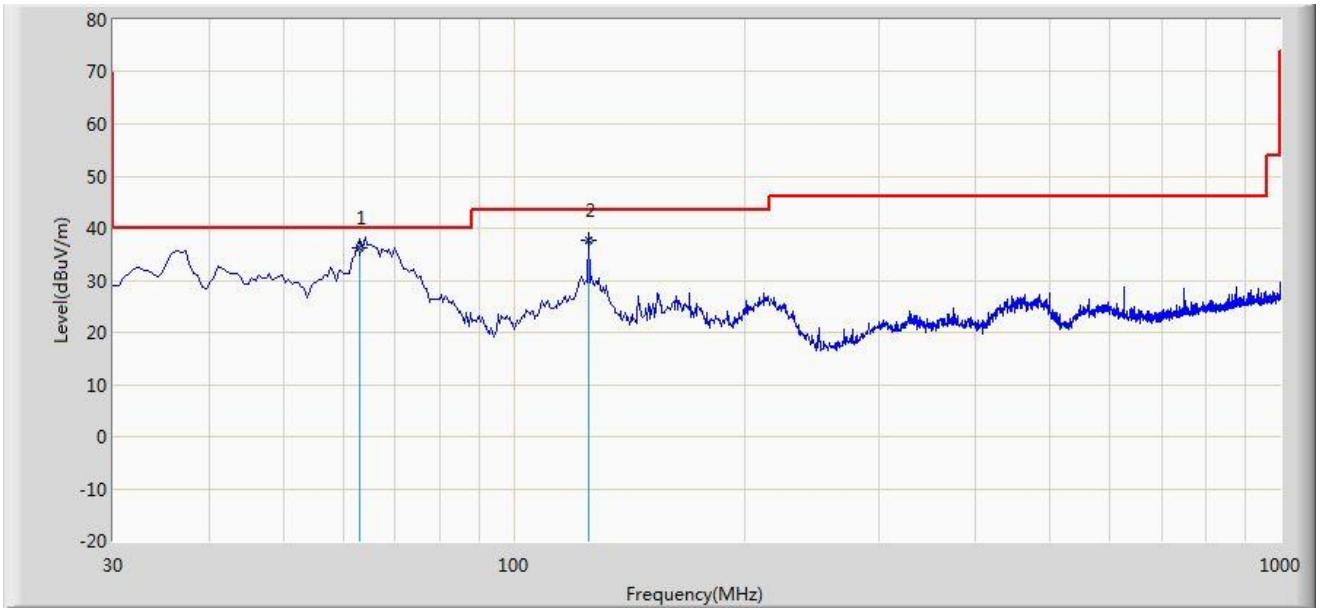


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			499.987	30.232	12.490	-15.768	46.000	17.741	QP
2		*	750.224	33.573	12.040	-12.427	46.000	21.532	QP

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/22 - 14:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2437MHz	

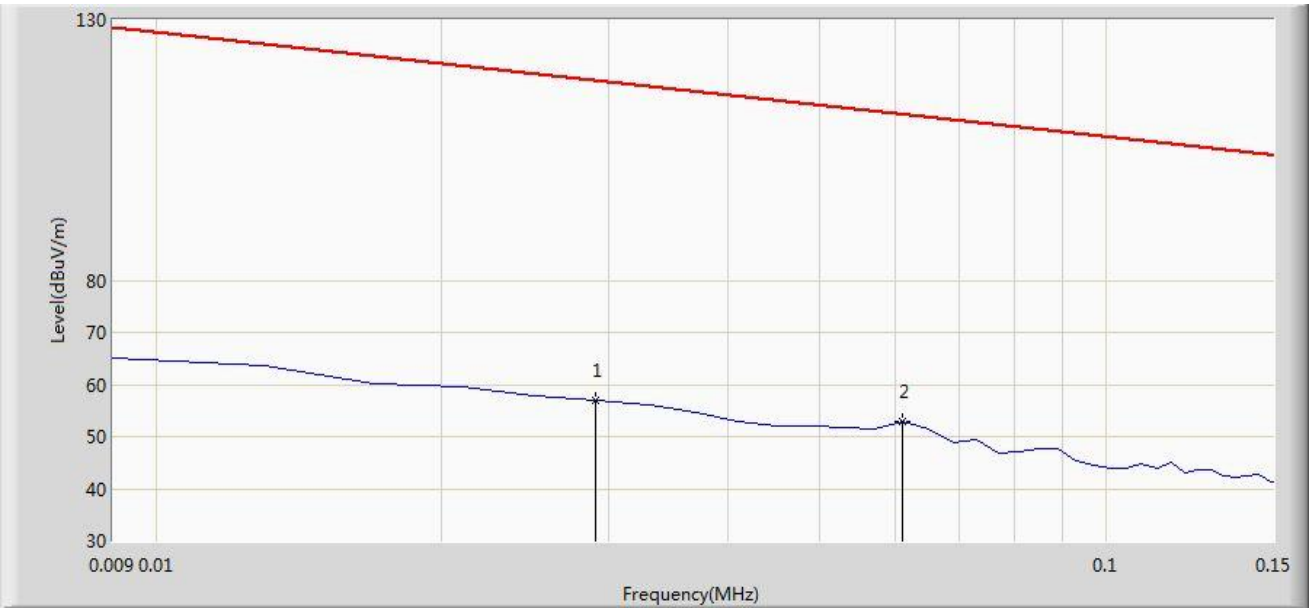


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	62.967	36.283	23.270	-3.717	40.000	13.013	QP
2			125.055	37.793	27.540	-5.707	43.500	10.253	QP

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

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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/20 - 18:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

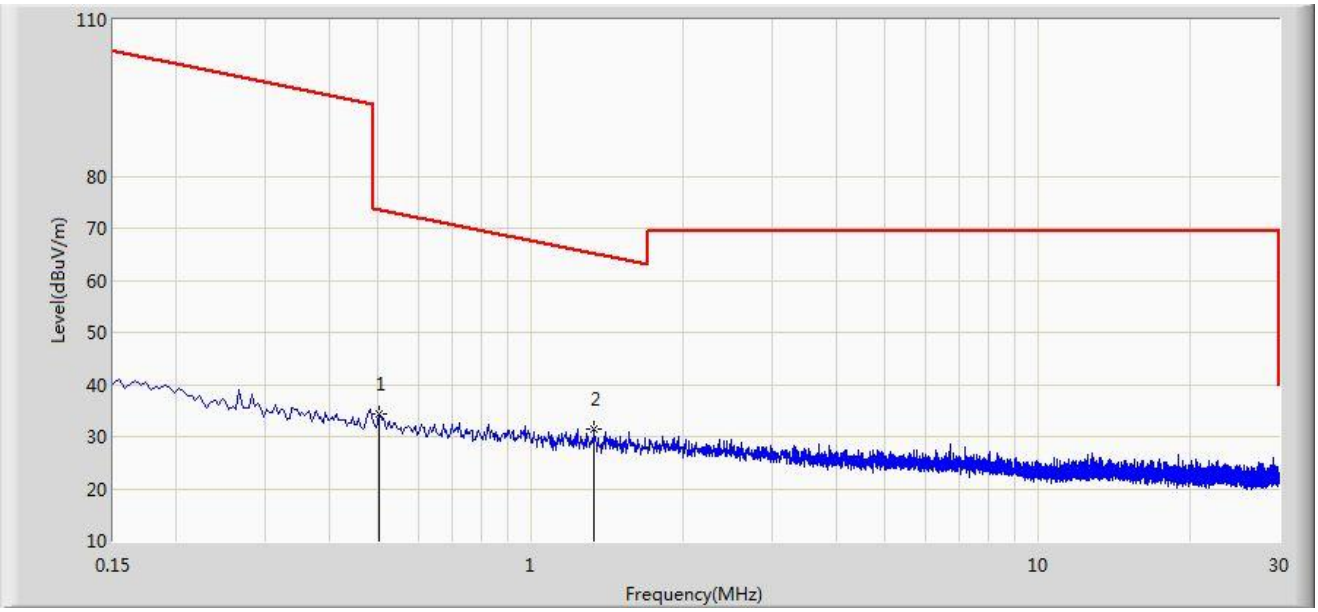


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.029	56.893	35.844	-61.449	118.342	21.049	QP
2		*	0.061	52.853	32.542	-59.034	111.887	20.311	QP

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

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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/20 - 18:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

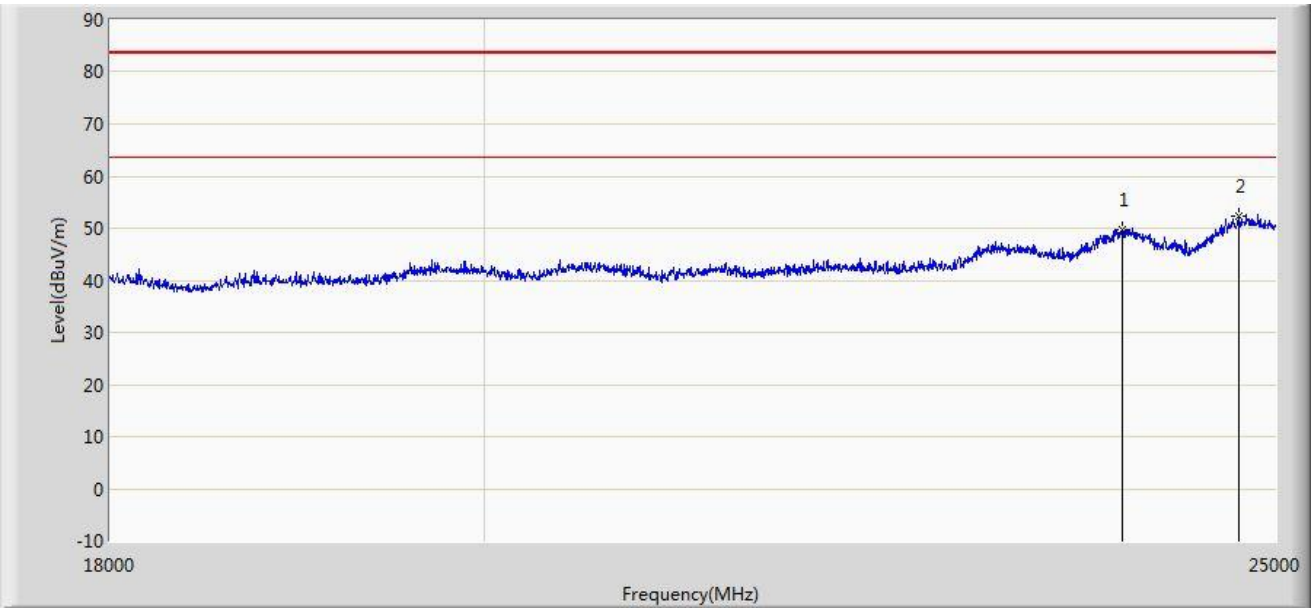


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.502	34.370	13.947	-39.220	73.590	20.423	QP
2		*	1.334	31.595	11.104	-33.530	65.125	20.491	QP

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

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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/20 - 21:20
Limit: FCC_Part15.209_RE(1m)	Margin: 0
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~25GHz.	

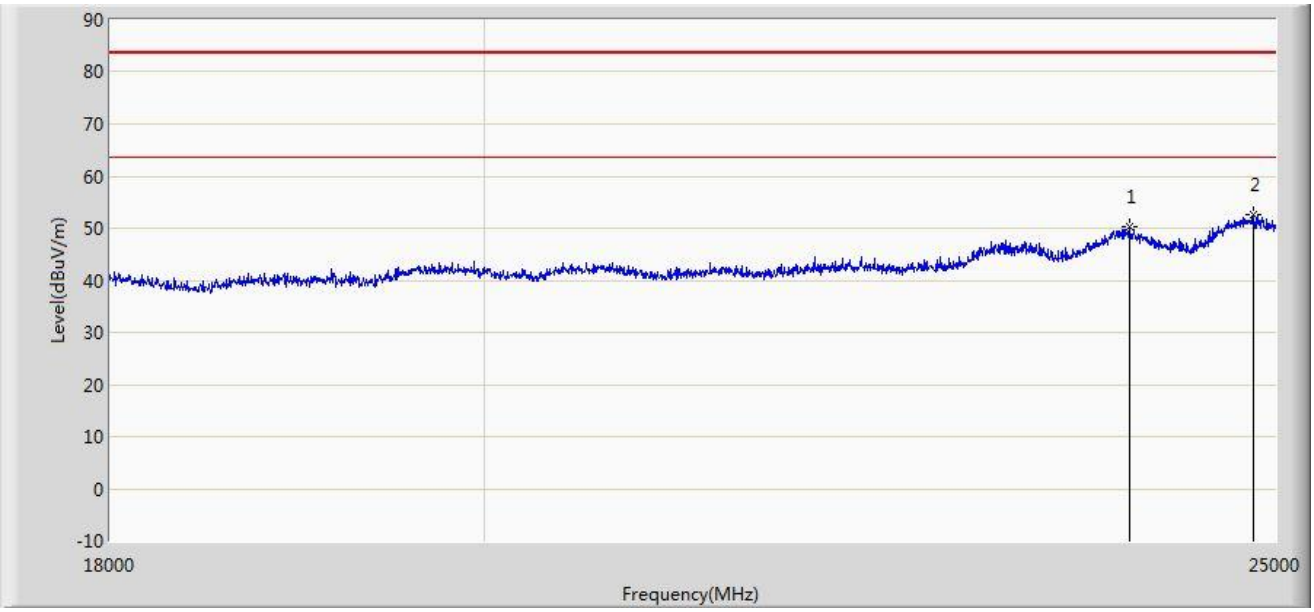


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			23943.000	49.776	35.866	-33.724	83.500	13.910	PK
2		*	24741.000	52.375	37.681	-31.125	83.500	14.694	PK

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

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

Engineer: Roy Cheng	
Site: AC1	Time: 2014/09/20 - 21:32
Limit: FCC_Part15.209_RE(1m)	Margin: 0
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~25GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			23999.000	50.379	36.435	-33.121	83.500	13.944	PK
2		*	24846.000	52.503	37.735	-30.997	83.500	14.768	PK

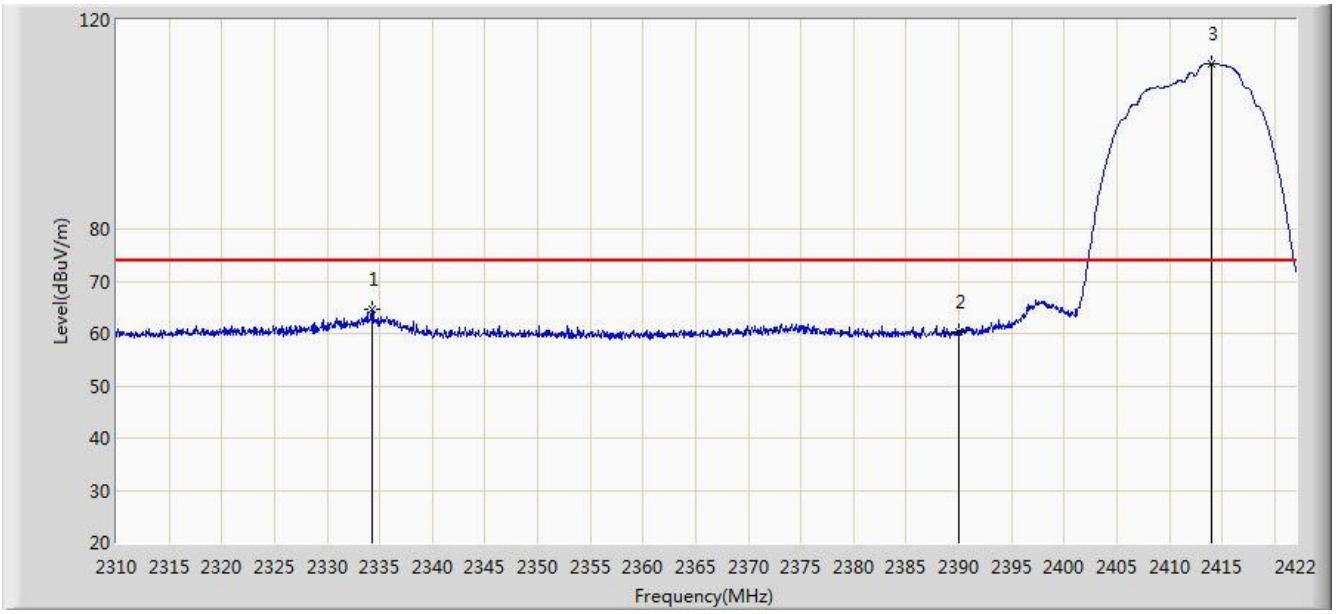
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Result

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 20:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2412MHz	

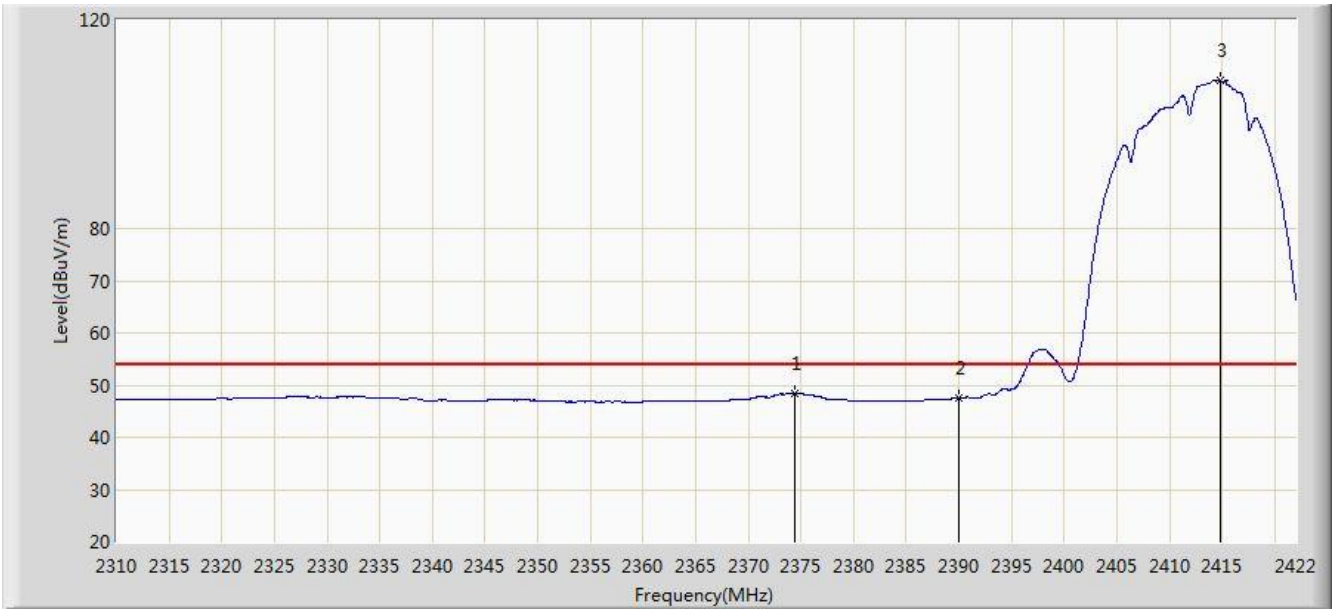


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2334.248	64.578	33.730	-9.422	74.000	30.847	PK
2			2390.000	60.399	29.715	-13.601	74.000	30.684	PK
3		*	2413.936	111.712	81.070	N/A	N/A	30.641	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 20:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2412MHz	

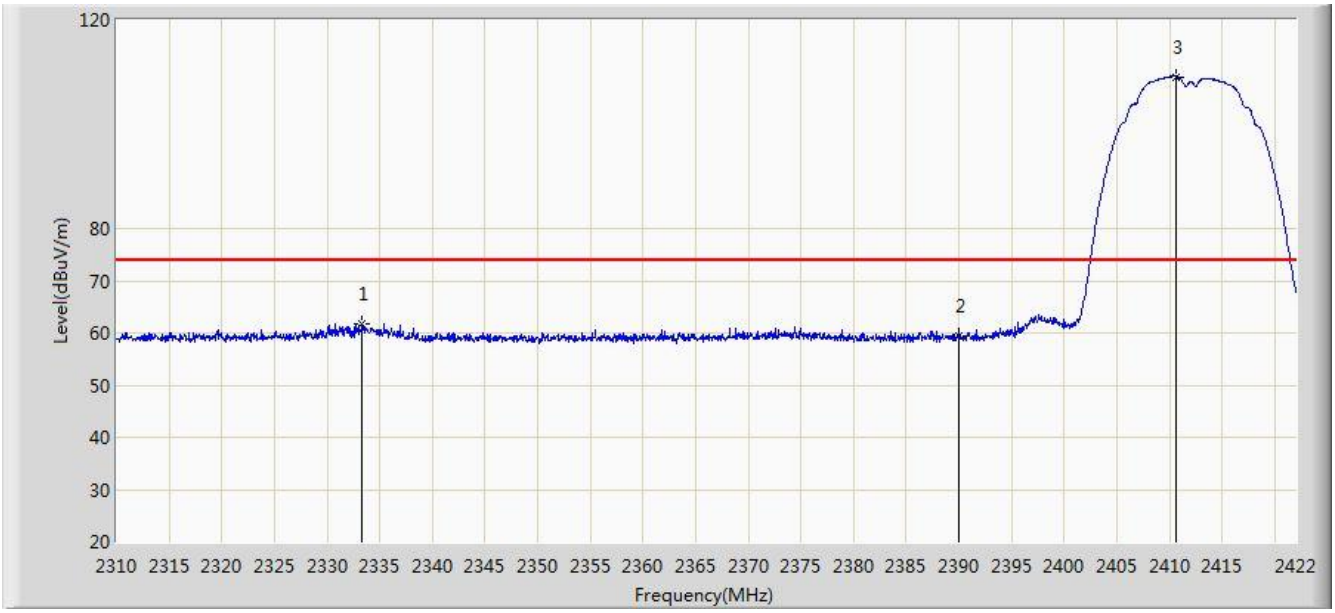


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2374.400	48.437	17.718	-5.563	54.000	30.719	AV
2			2390.000	47.544	16.860	-6.456	54.000	30.684	AV
3		*	2414.776	108.524	77.884	N/A	N/A	30.640	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2412MHz	

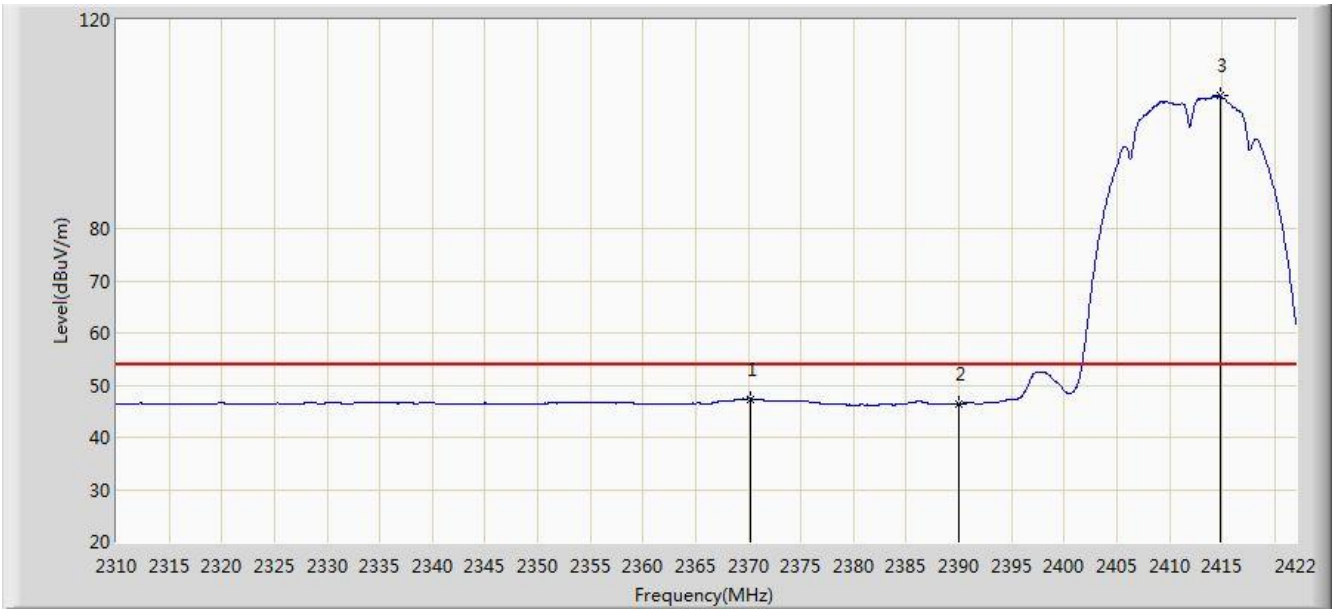


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2333.352	61.762	30.912	-12.238	74.000	30.852	PK
2			2390.000	59.378	28.694	-14.622	74.000	30.684	PK
3		*	2410.632	109.125	78.478	N/A	N/A	30.647	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2412MHz	

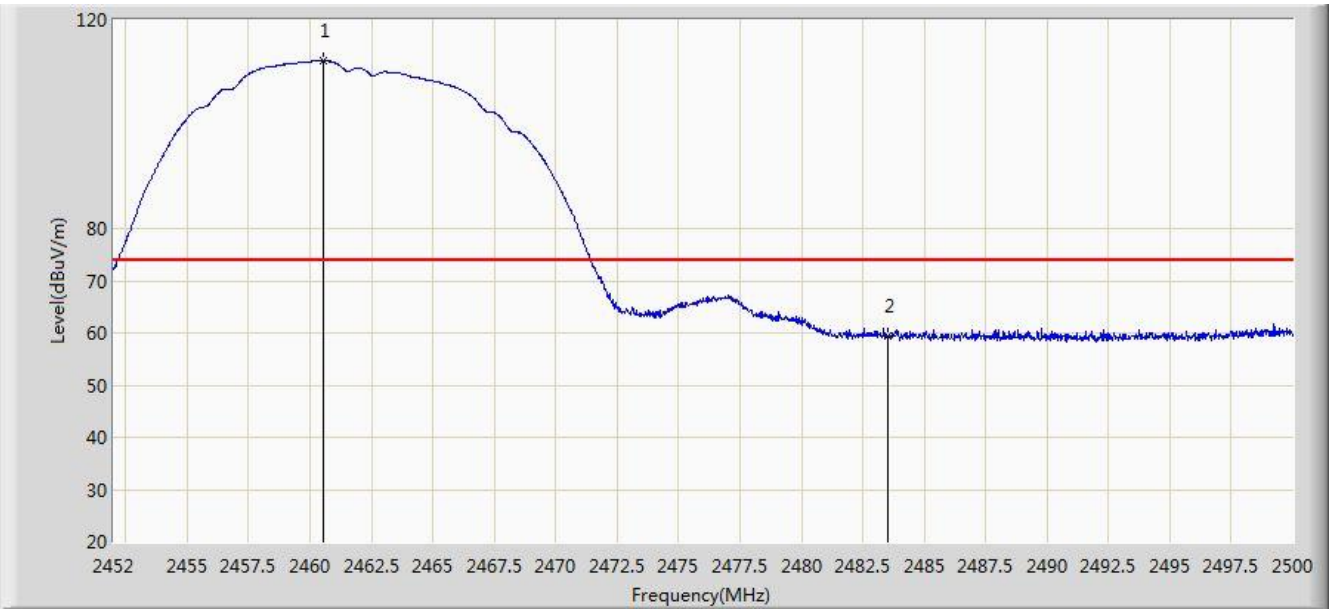


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2370.200	47.384	16.655	-6.616	54.000	30.729	AV
2			2390.000	46.402	15.718	-7.598	54.000	30.684	AV
3		*	2414.776	105.408	74.768	N/A	N/A	30.640	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2462MHz	

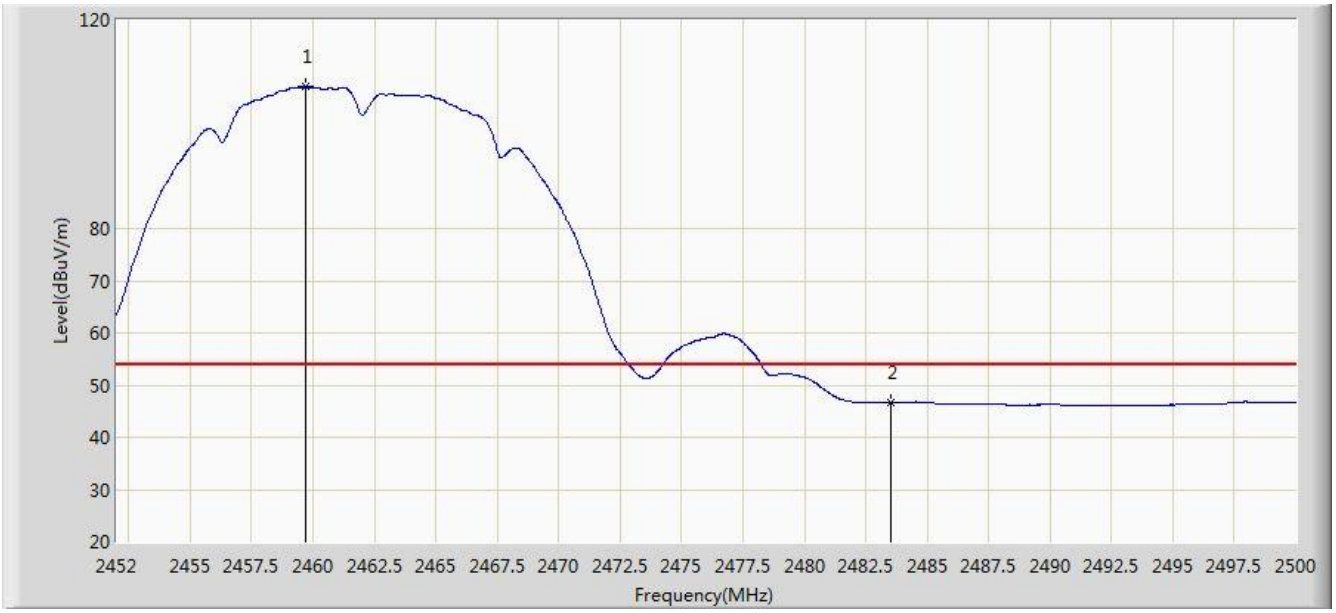


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.568	112.133	81.524	N/A	N/A	30.609	PK
2			2483.500	59.291	28.618	-14.709	74.000	30.673	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2462MHz	

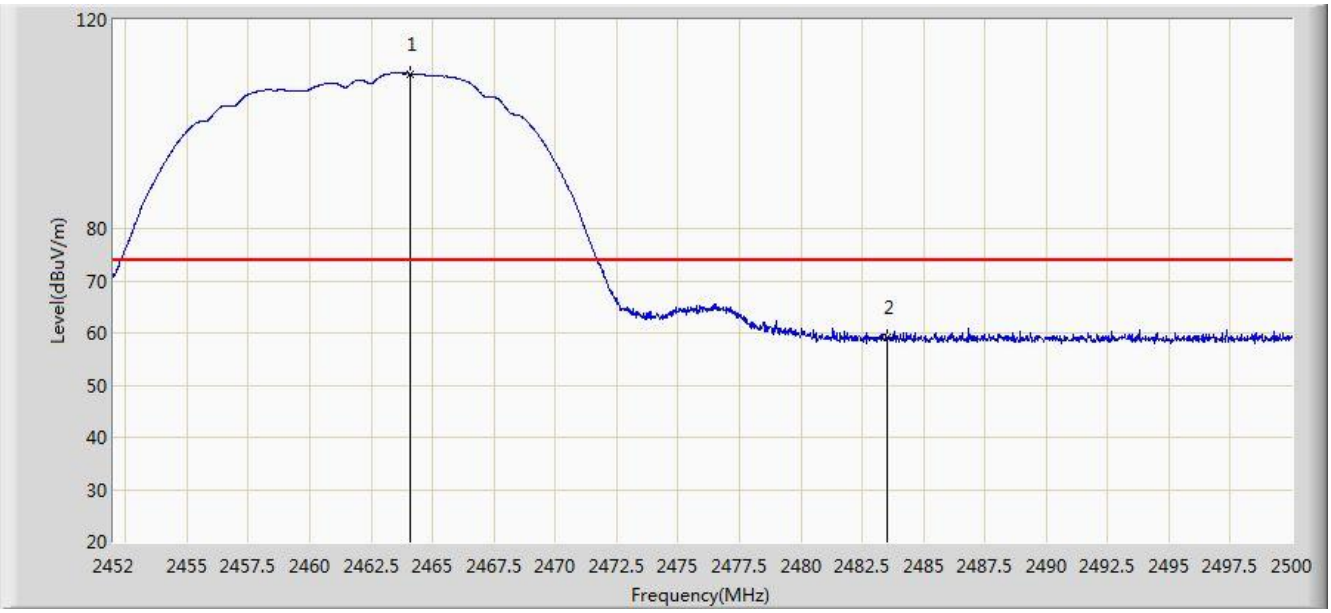


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.728	107.169	76.561	N/A	N/A	30.608	AV
2			2483.500	46.725	16.052	-7.275	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2462MHz	

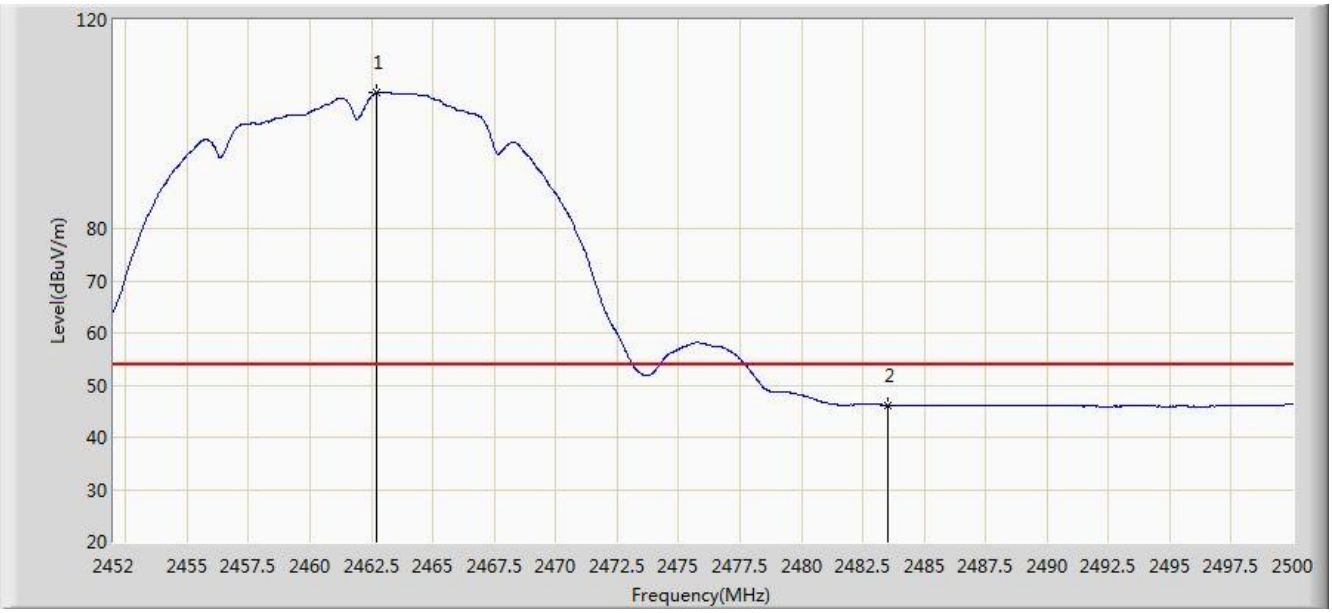


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.072	109.615	78.999	N/A	N/A	30.615	PK
2			2483.500	59.270	28.597	-14.730	74.000	30.673	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 1: Transmit by 802.11b at channel 2462MHz	

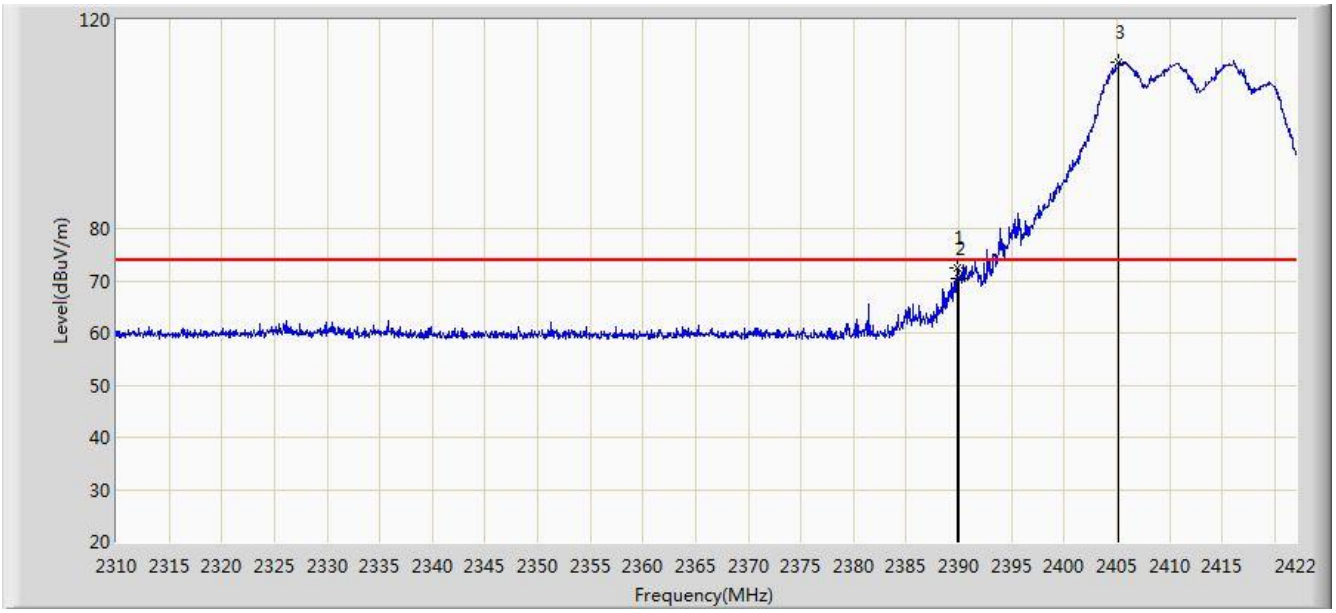


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.728	106.099	75.486	N/A	N/A	30.613	AV
2			2483.500	46.196	15.523	-7.804	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2412MHz	

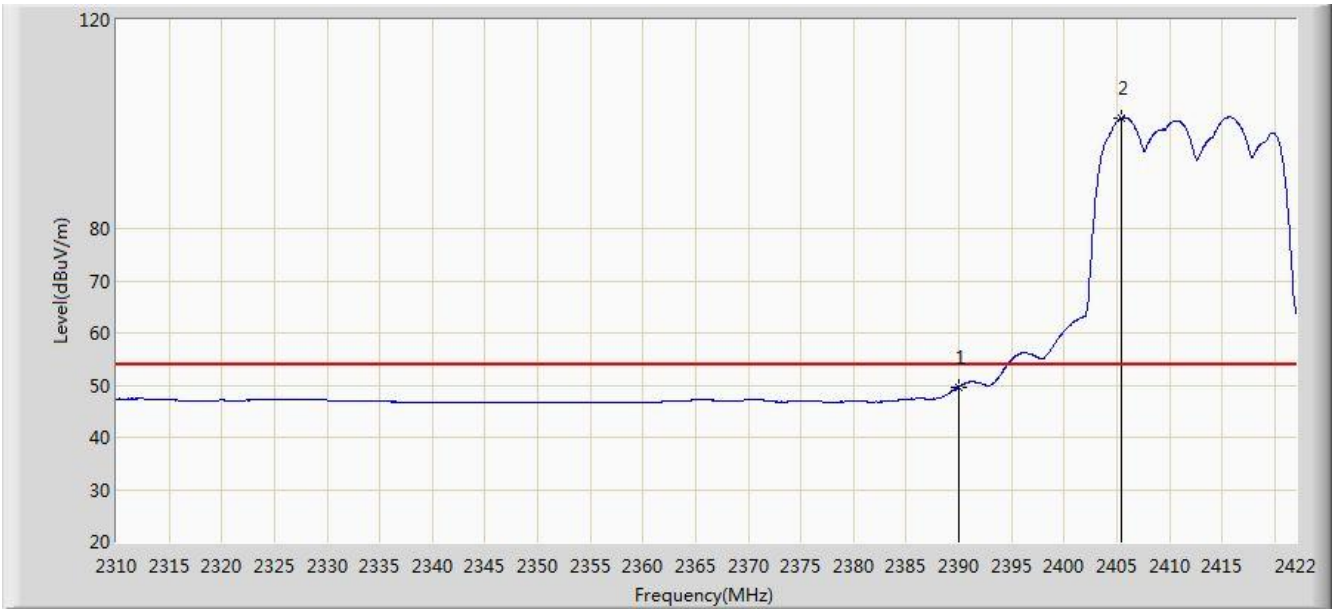


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.856	72.530	41.846	-1.470	74.000	30.684	PK
2			2390.000	70.527	39.843	-3.473	74.000	30.684	PK
3		*	2405.200	111.871	81.215	N/A	N/A	30.656	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2412MHz	

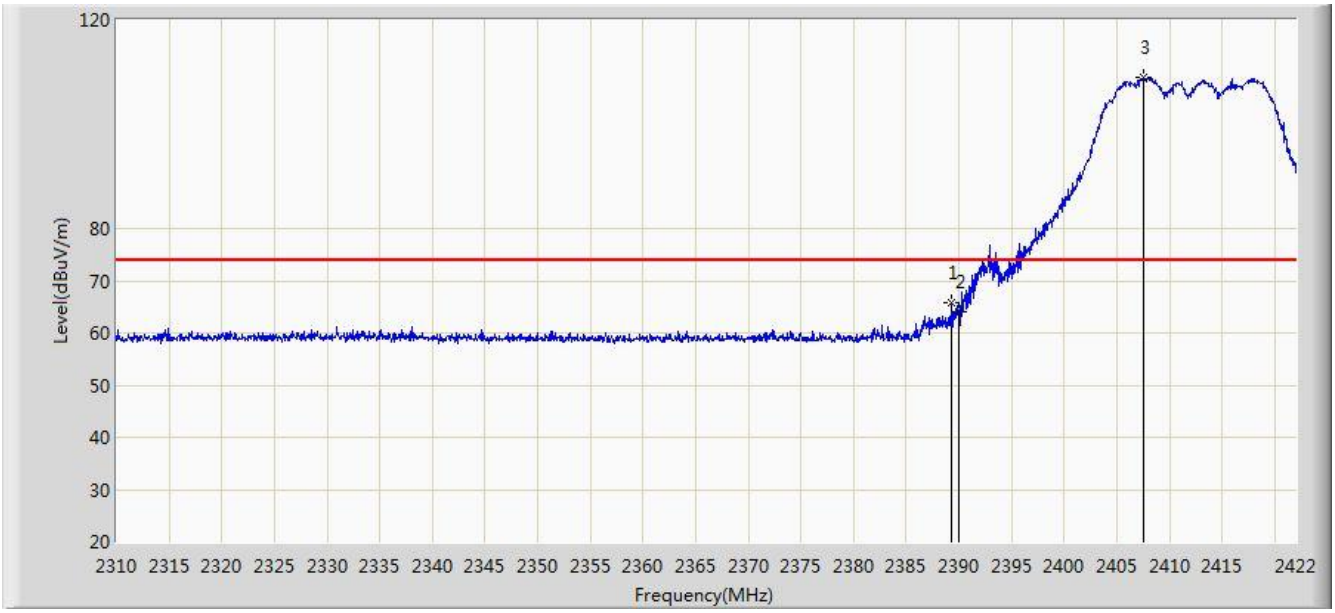


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.698	19.014	-4.302	54.000	30.684	AV
2		*	2405.480	101.226	70.571	N/A	N/A	30.655	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2412MHz	

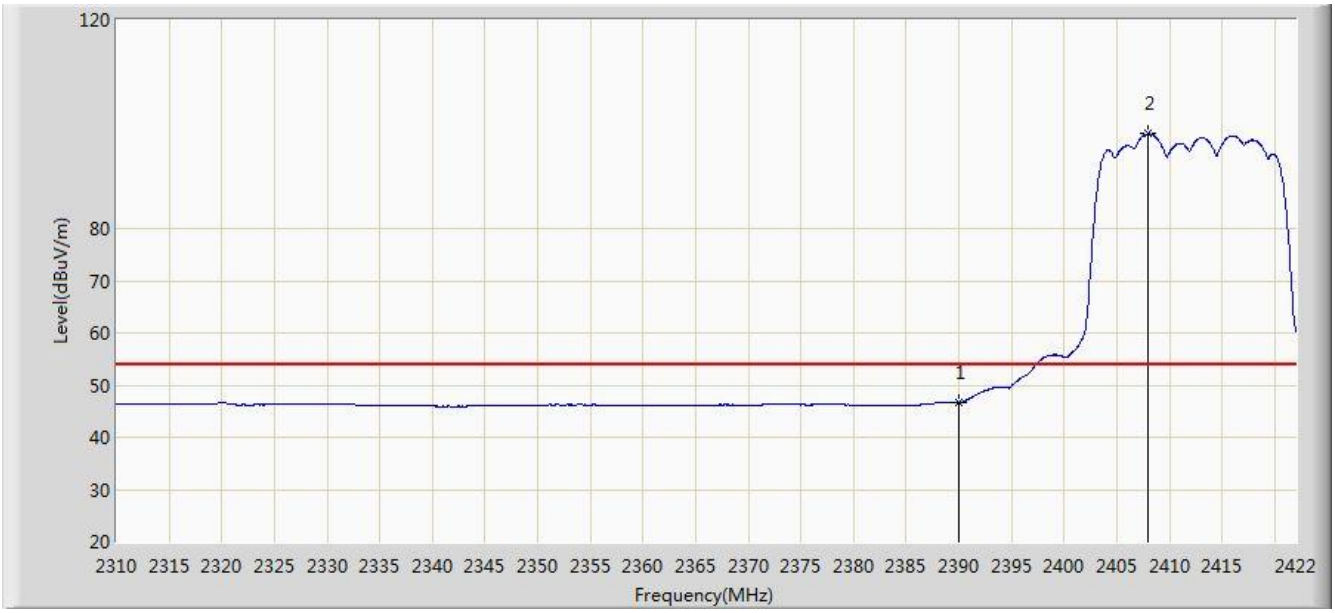


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.352	65.816	35.131	-8.184	74.000	30.685	PK
2			2390.000	64.054	33.370	-9.946	74.000	30.684	PK
3		*	2407.552	109.015	78.363	N/A	N/A	30.652	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2412MHz	

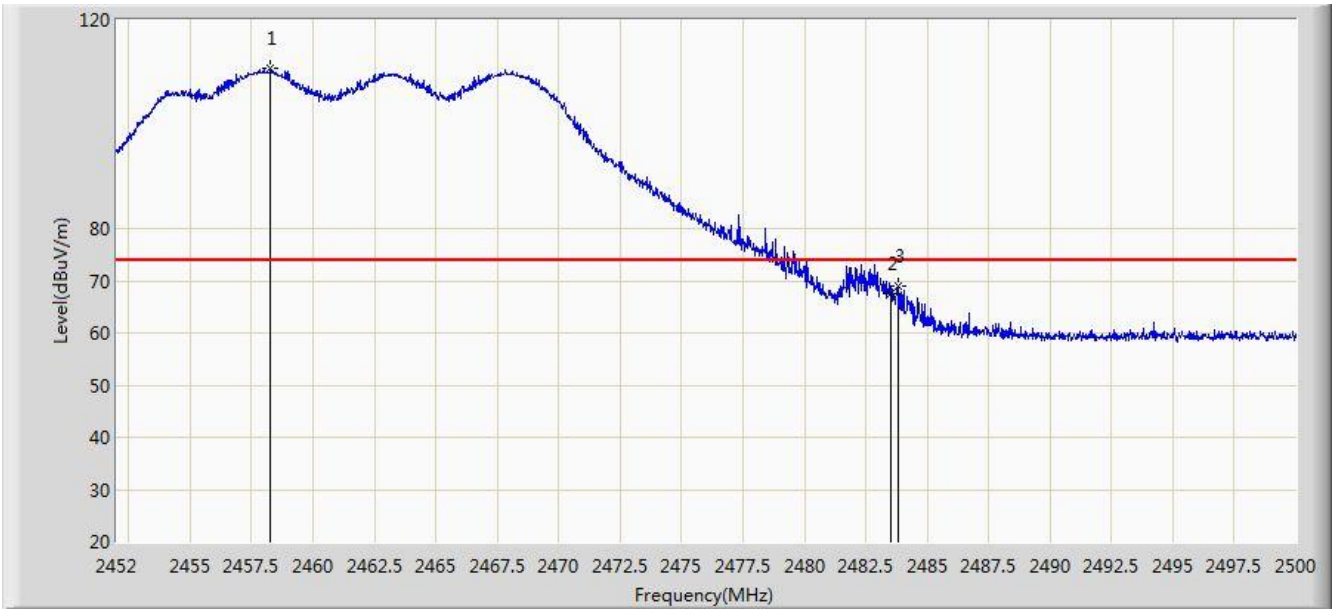


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.642	15.958	-7.358	54.000	30.684	AV
2		*	2408.000	98.128	67.477	N/A	N/A	30.652	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2462MHz	

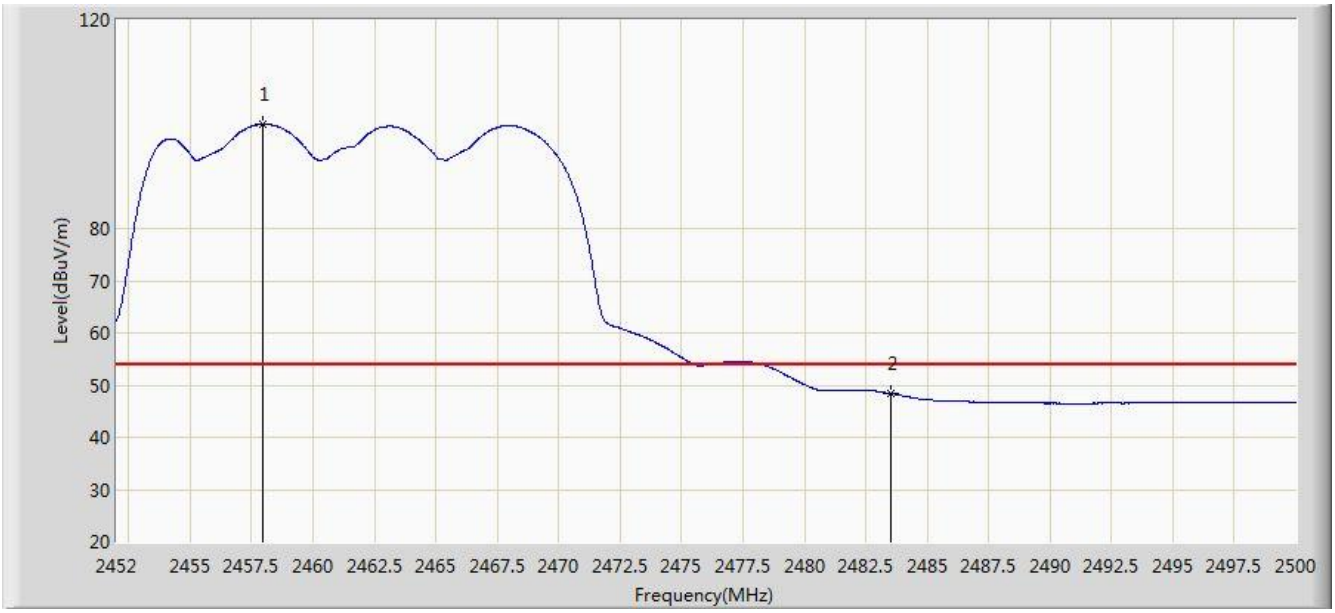


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.264	110.688	80.082	N/A	N/A	30.606	PK
2			2483.500	67.606	36.933	-6.394	74.000	30.673	PK
3			2483.824	68.923	38.249	-5.077	74.000	30.673	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2462MHz	

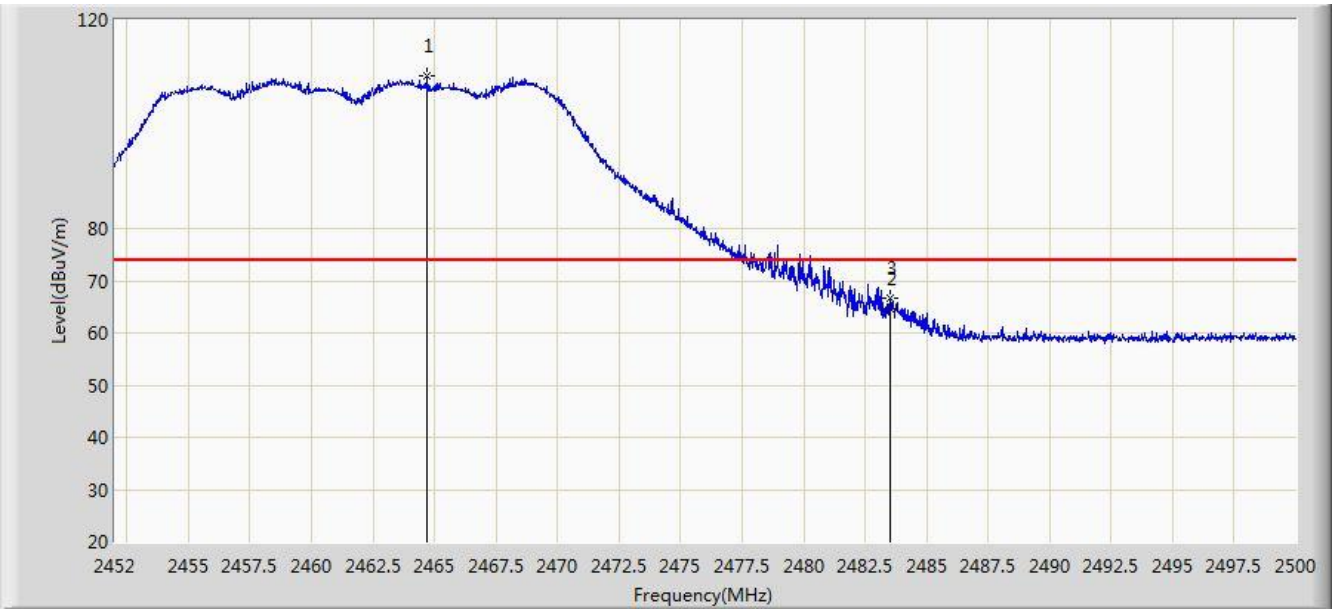


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2457.952	99.969	69.364	N/A	N/A	30.606	AV
2			2483.500	48.428	17.755	-5.572	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2462MHz	

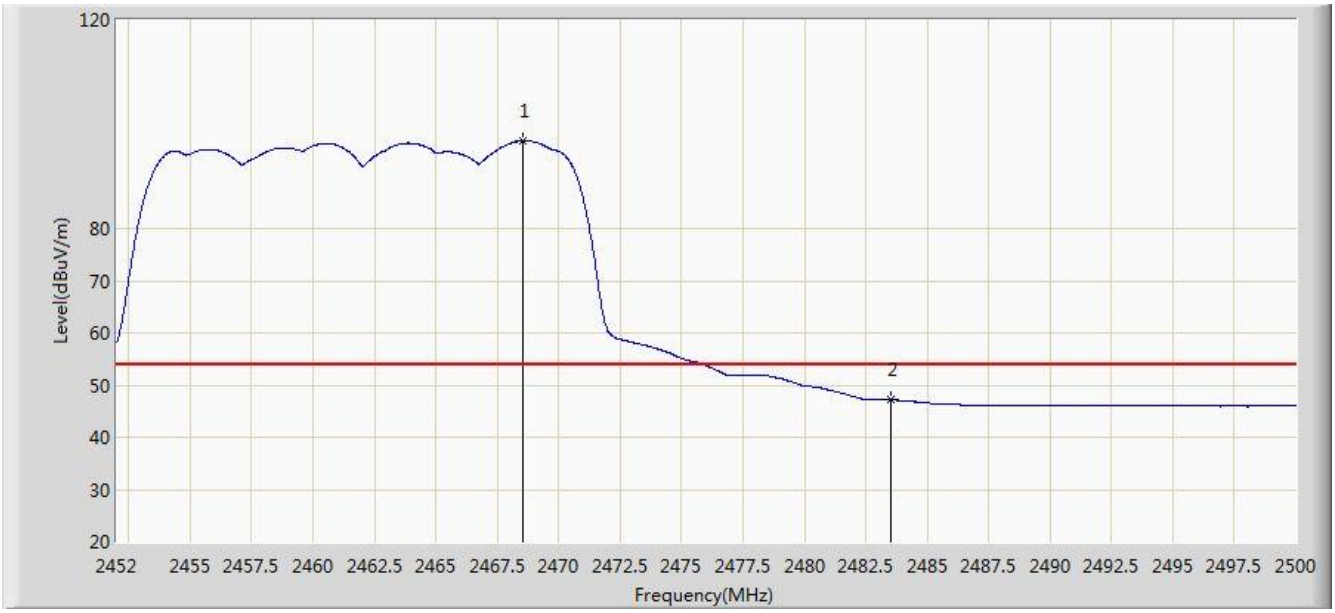


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.720	109.374	78.756	N/A	N/A	30.618	PK
2			2483.500	64.702	34.029	-9.298	74.000	30.673	PK
3			2483.536	66.690	36.017	-7.310	74.000	30.673	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 21:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 2: Transmit by 802.11g at channel 2462MHz	

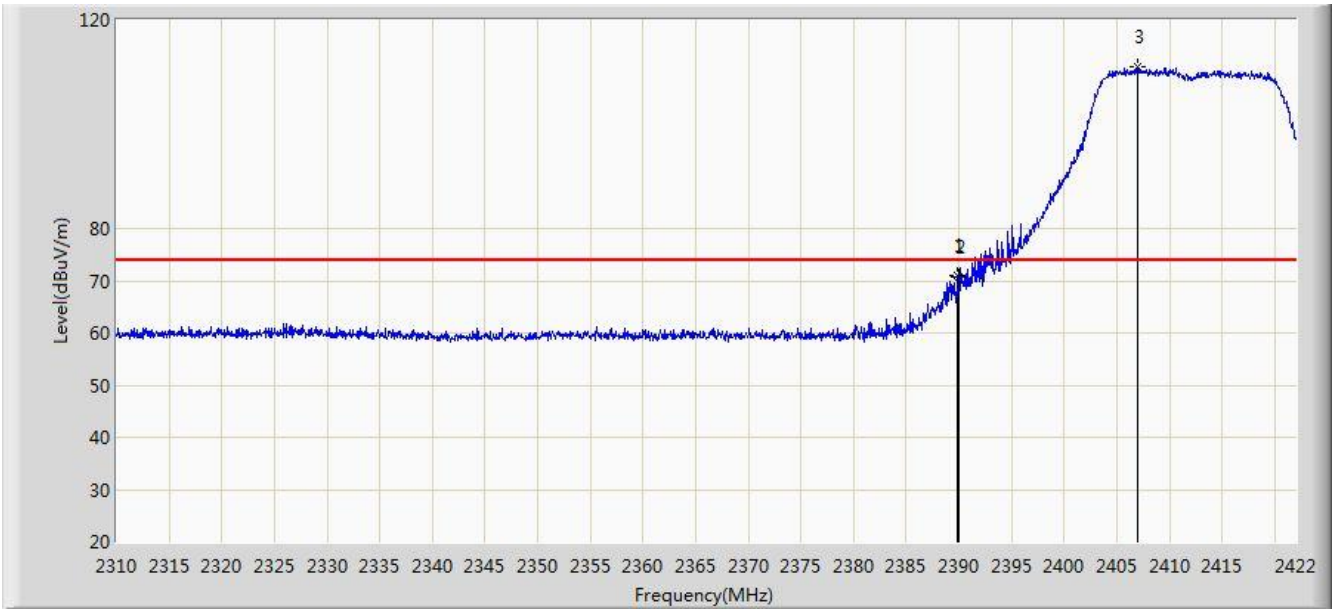


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2468.536	96.771	66.142	N/A	N/A	30.629	AV
2			2483.500	47.201	16.528	-6.799	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2412MHz	

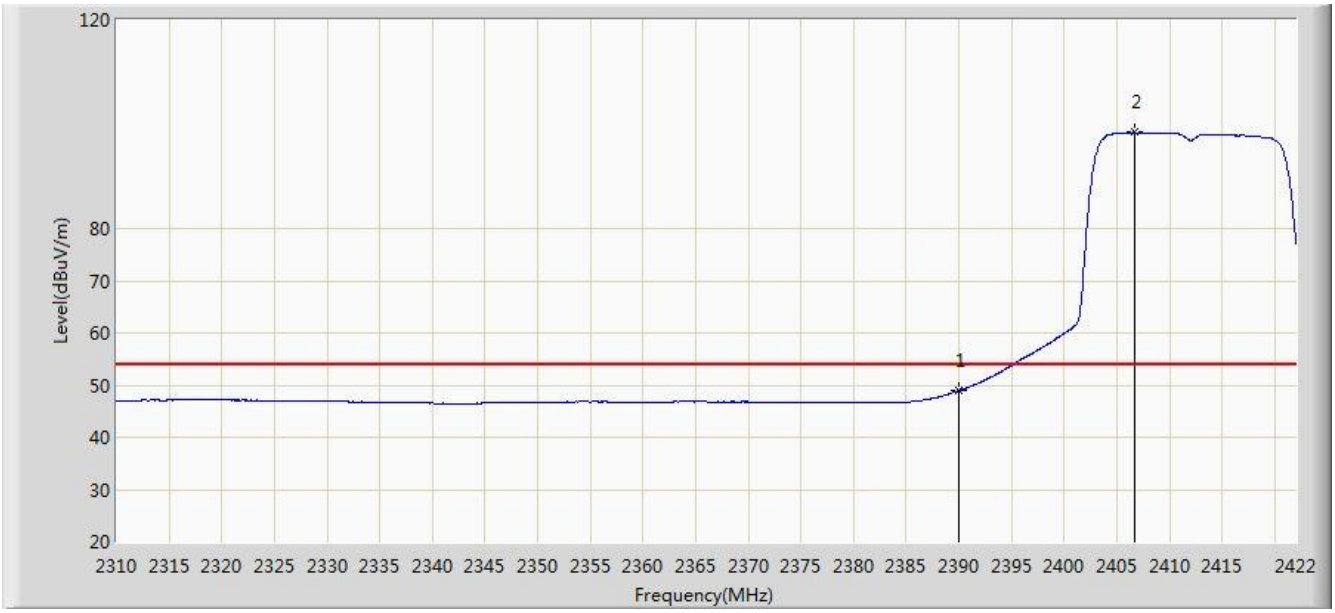


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.856	70.889	40.205	-3.111	74.000	30.684	PK
2			2390.000	70.866	40.182	-3.134	74.000	30.684	PK
3		*	2406.992	110.907	80.254	N/A	N/A	30.653	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2412MHz	

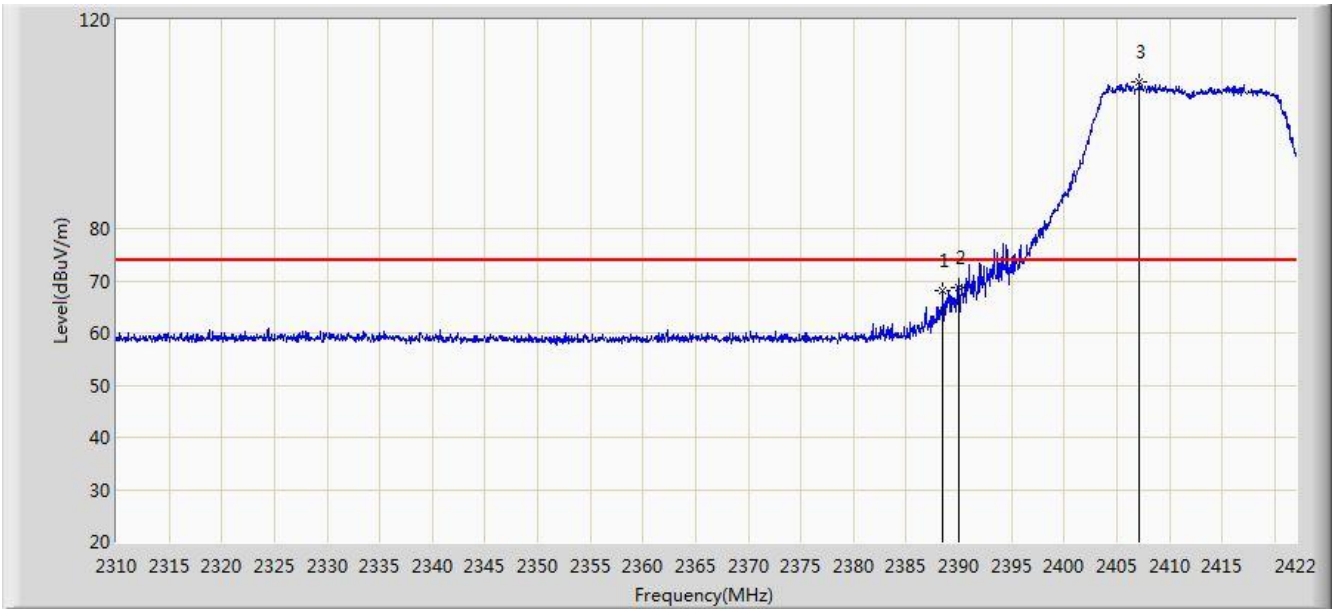


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.955	18.271	-5.045	54.000	30.684	AV
2		*	2406.712	98.419	67.766	N/A	N/A	30.653	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2412MHz	

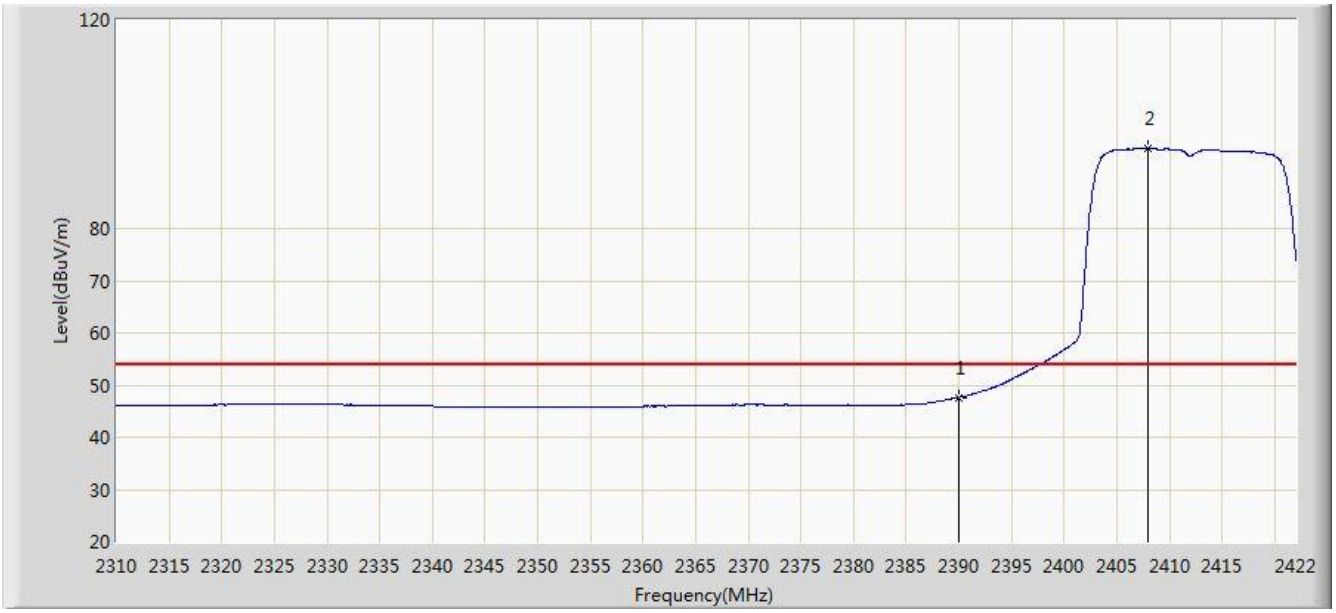


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.512	68.167	37.480	-5.833	74.000	30.687	PK
2			2390.000	68.636	37.952	-5.364	74.000	30.684	PK
3		*	2407.160	108.227	77.574	N/A	N/A	30.653	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2412MHz	

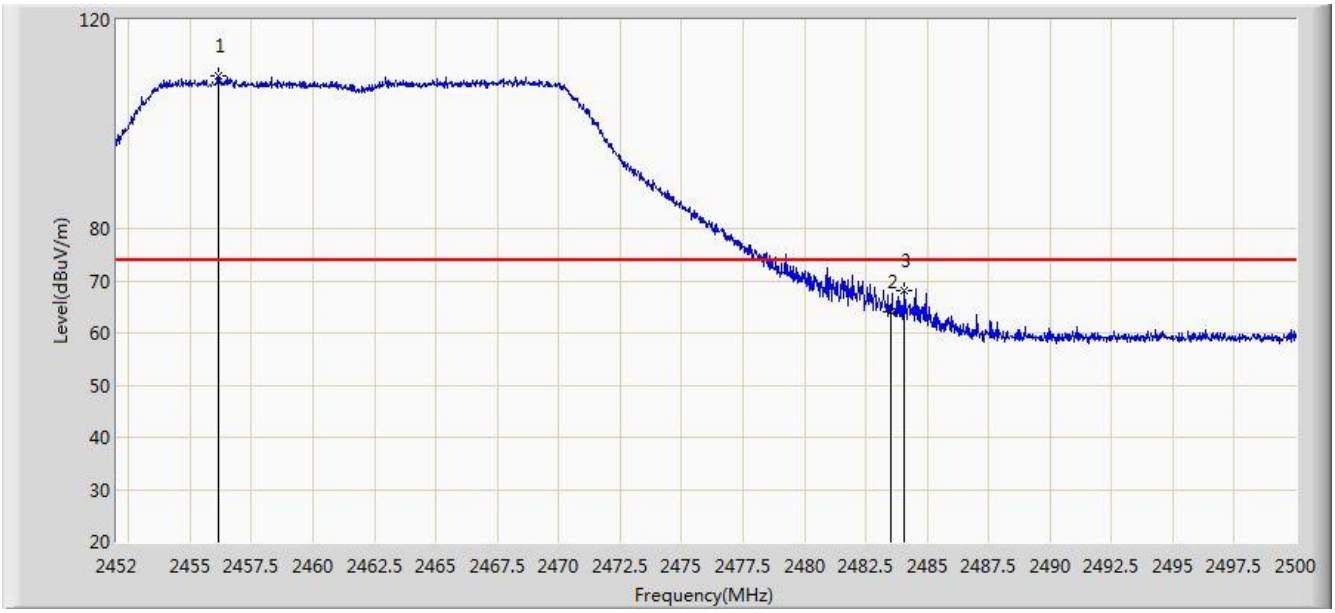


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	47.659	16.975	-6.341	54.000	30.684	AV
2		*	2408.000	95.228	64.577	N/A	N/A	30.652	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2462MHz	

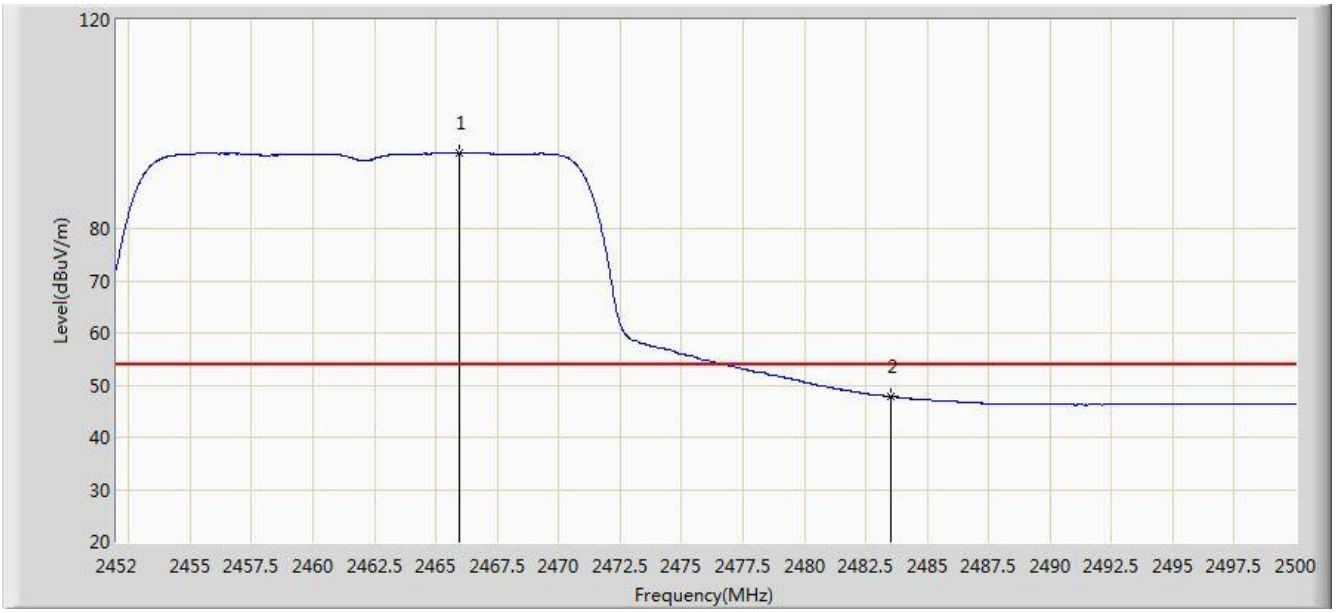


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2456.176	109.407	78.804	N/A	N/A	30.603	PK
2			2483.500	64.085	33.412	-9.915	74.000	30.673	PK
3			2484.040	68.021	37.347	-5.979	74.000	30.675	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2462MHz	

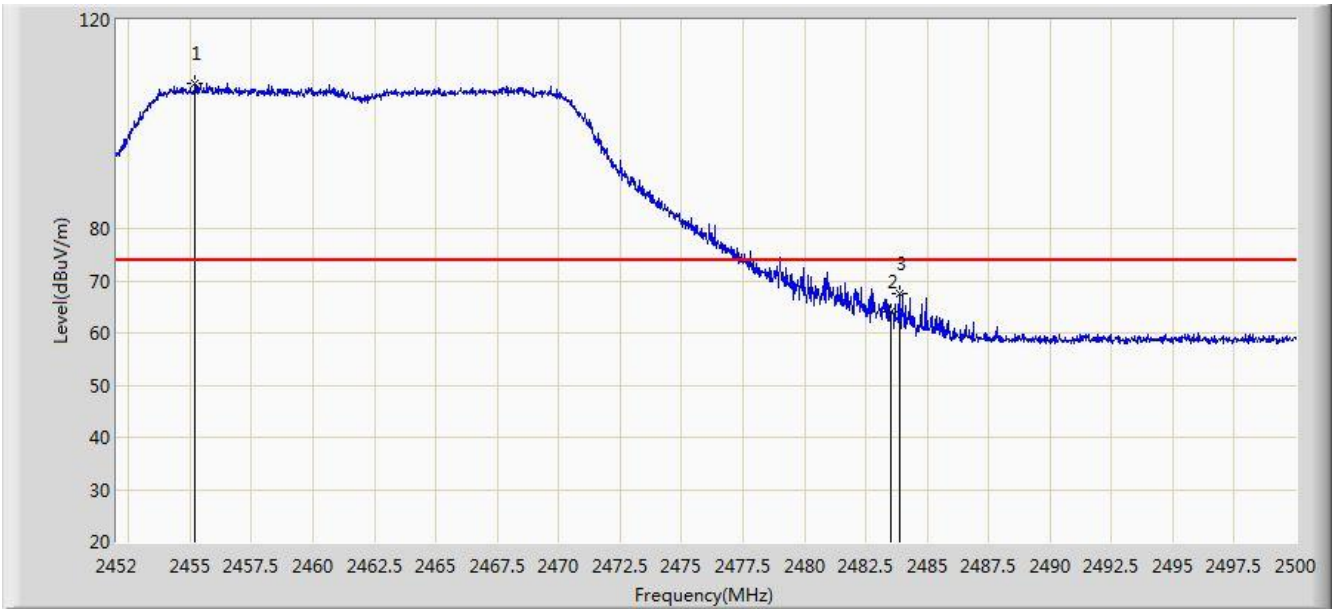


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.944	94.507	63.886	N/A	N/A	30.621	AV
2			2483.500	47.826	17.153	-6.174	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2462MHz	

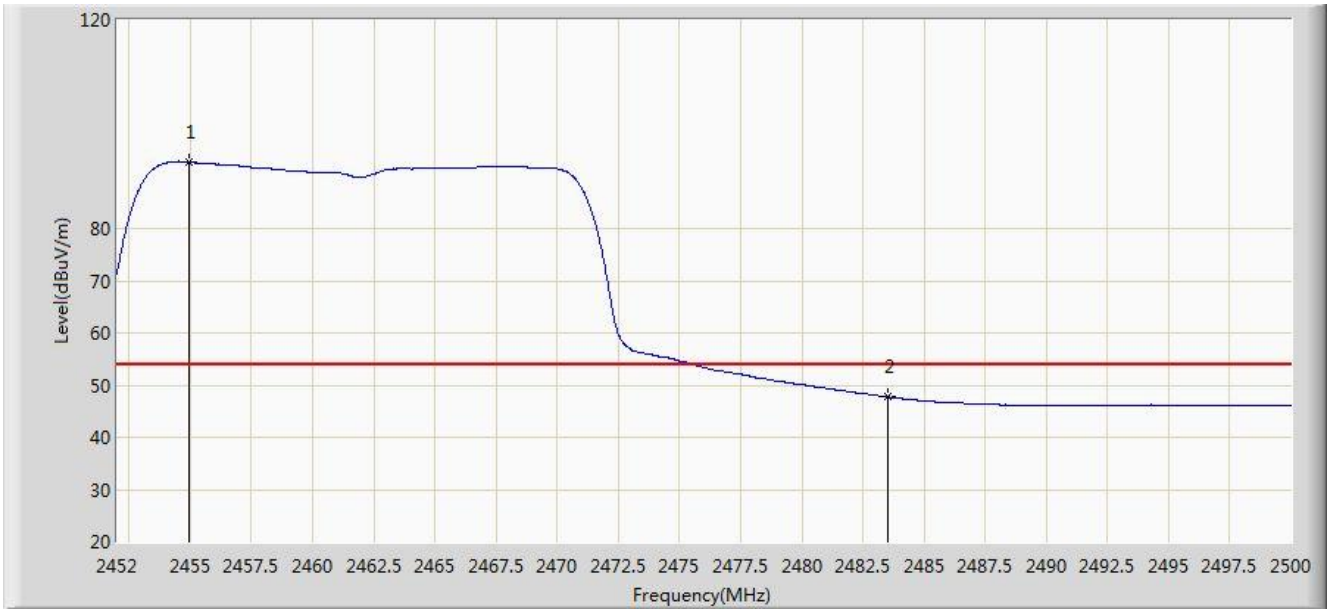


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.216	107.701	77.100	N/A	N/A	30.601	PK
2			2483.500	64.172	33.499	-9.828	74.000	30.673	PK
3			2483.872	67.493	36.819	-6.507	74.000	30.673	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 3: Transmit by 802.11n-HT20 at channel 2462MHz	

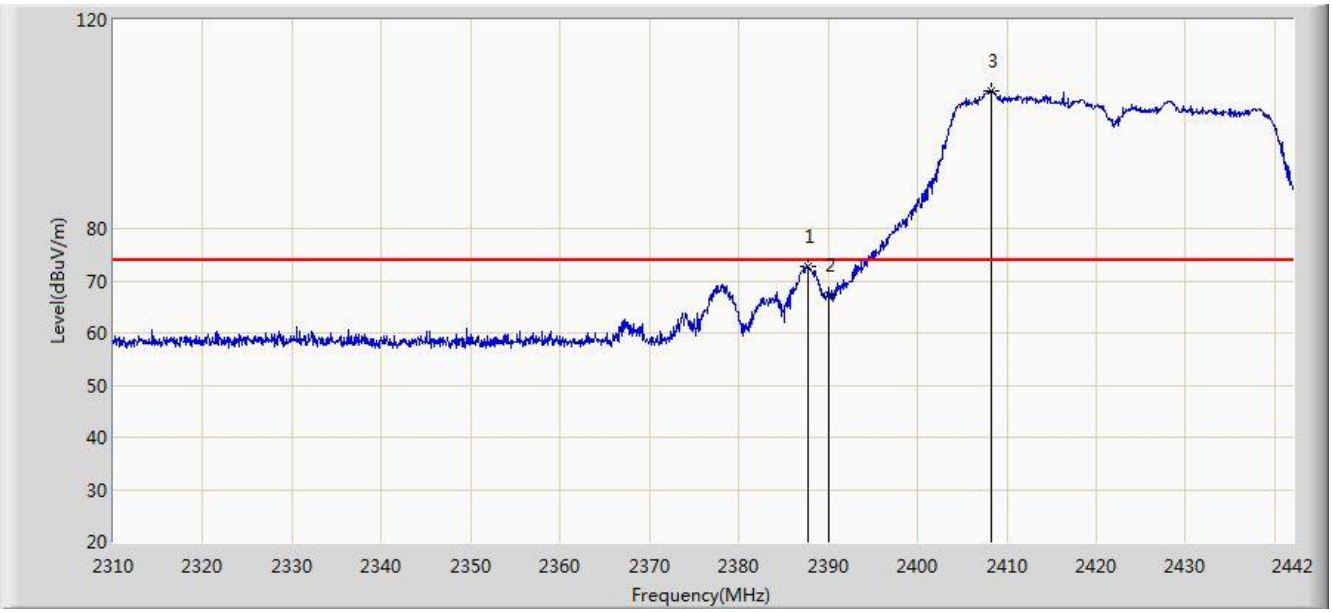


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.952	92.847	62.246	N/A	N/A	30.601	AV
2			2483.500	47.711	17.038	-6.289	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2422MHz	

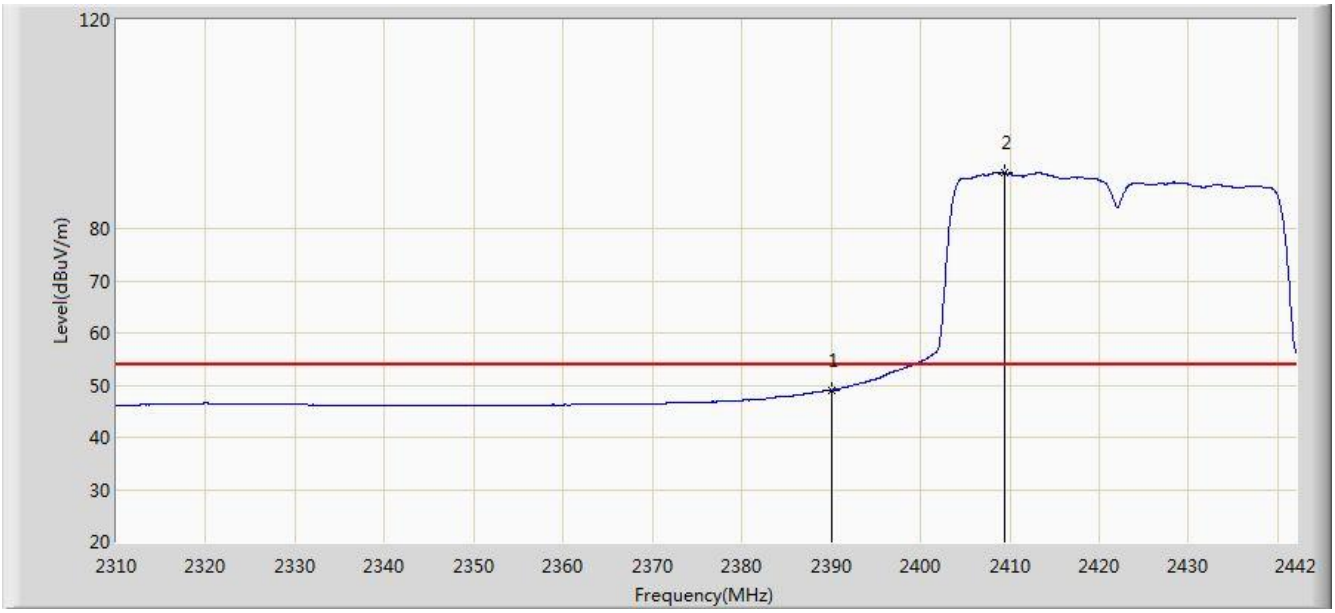


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.748	72.758	42.069	-1.242	74.000	30.689	PK
2			2390.000	67.339	36.655	-6.661	74.000	30.684	PK
3		*	2408.274	106.330	75.679	N/A	N/A	30.651	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2422MHz	

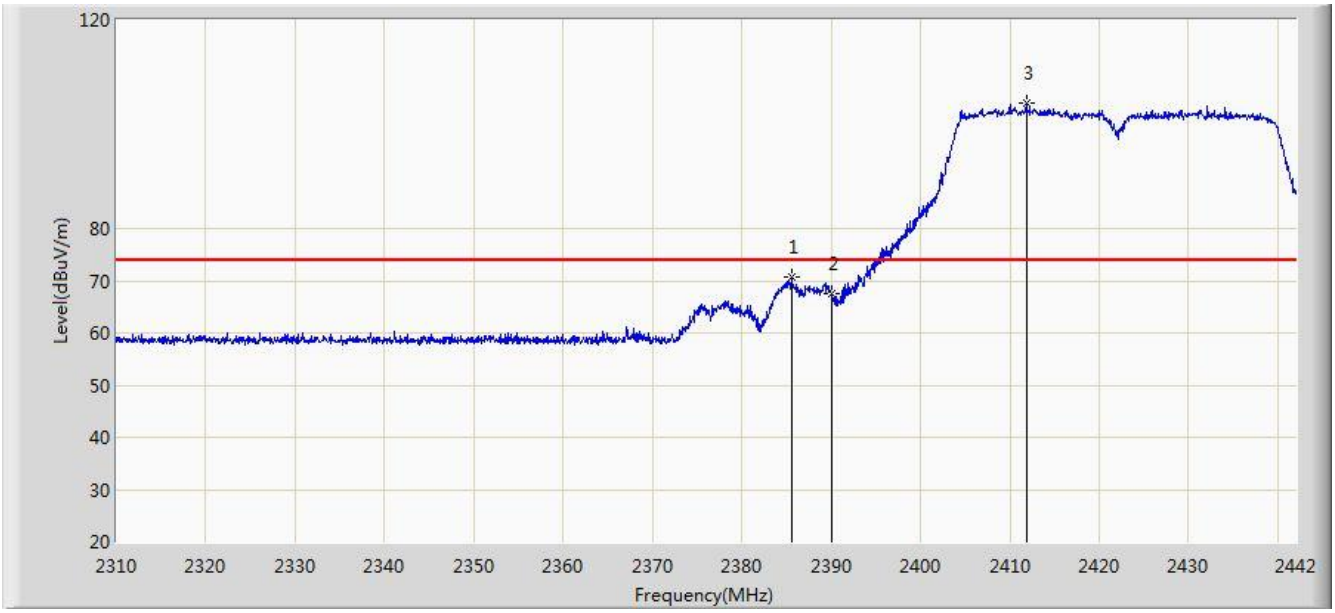


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.034	18.350	-4.966	54.000	30.684	AV
2		*	2409.462	90.695	60.046	N/A	N/A	30.649	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2422MHz	

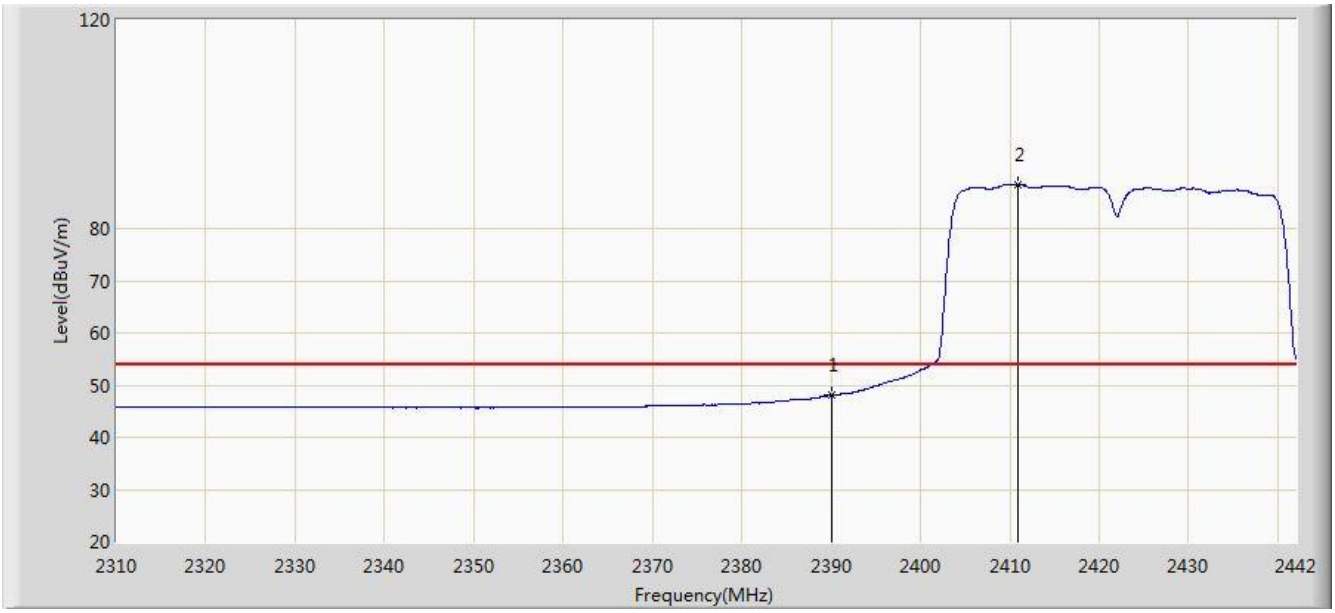


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2385.570	70.816	40.122	-3.184	74.000	30.694	PK
2			2390.000	67.652	36.968	-6.348	74.000	30.684	PK
3		*	2411.838	104.134	73.489	N/A	N/A	30.645	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2422MHz	

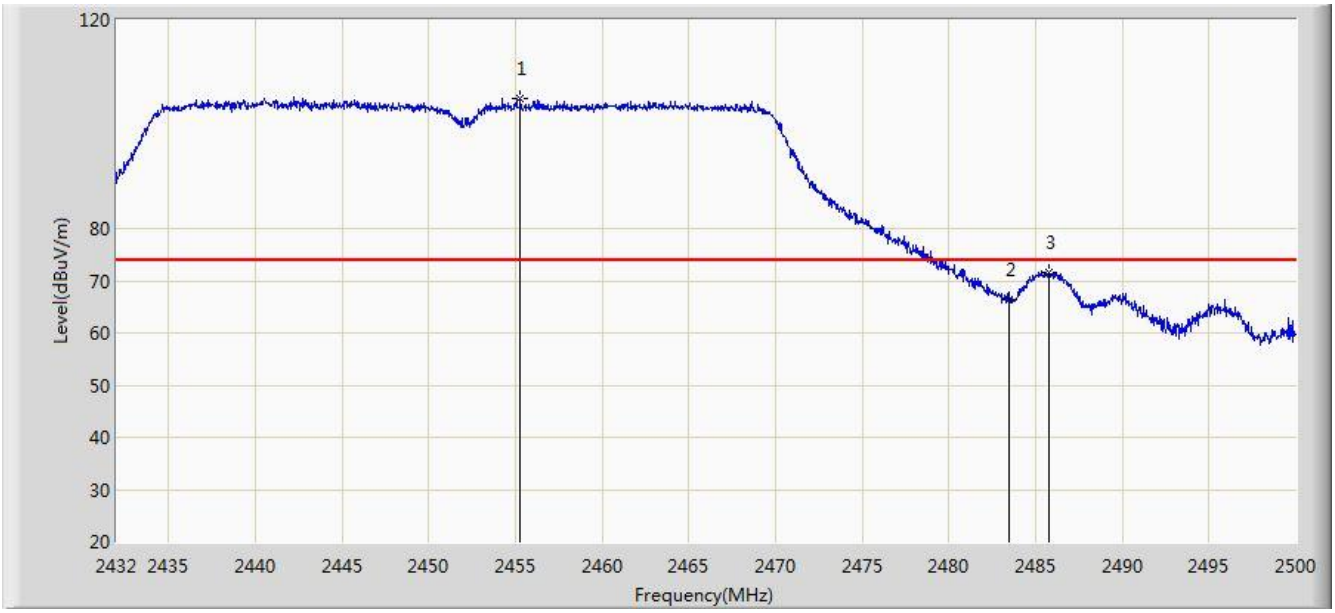


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.057	17.373	-5.943	54.000	30.684	AV
2		*	2410.914	88.515	57.869	N/A	N/A	30.646	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2452MHz	

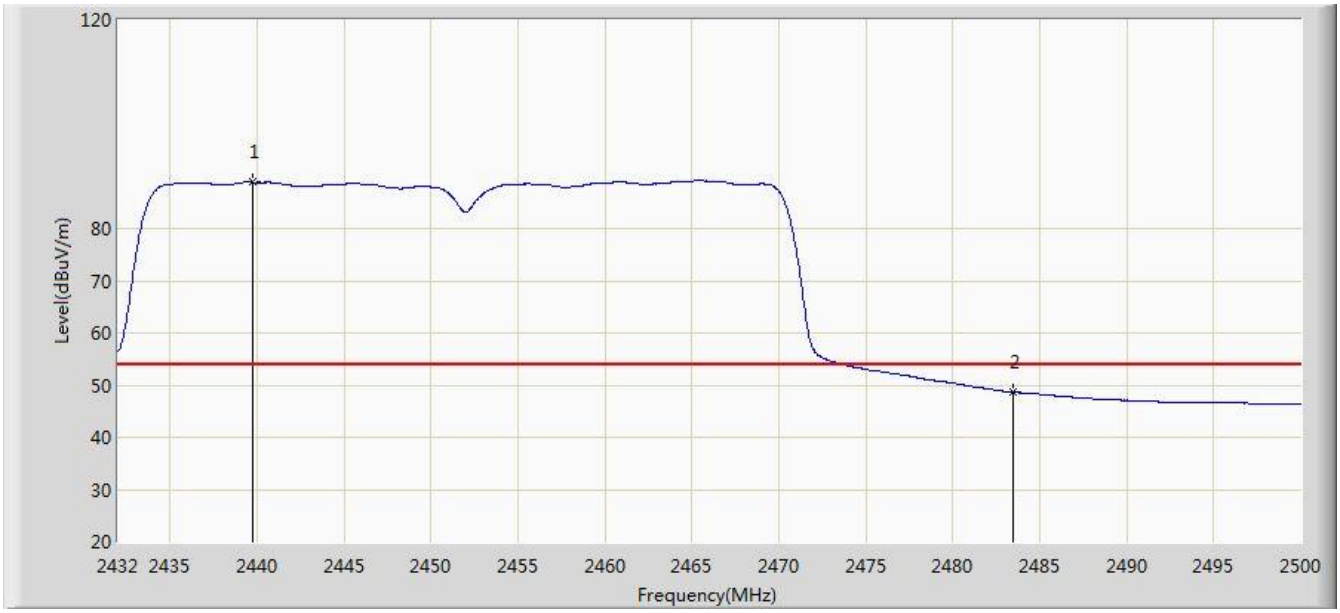


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.290	105.021	74.420	N/A	N/A	30.601	PK
2			2483.500	66.381	35.708	-7.619	74.000	30.673	PK
3			2485.788	71.737	41.058	-2.263	74.000	30.680	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2452MHz	

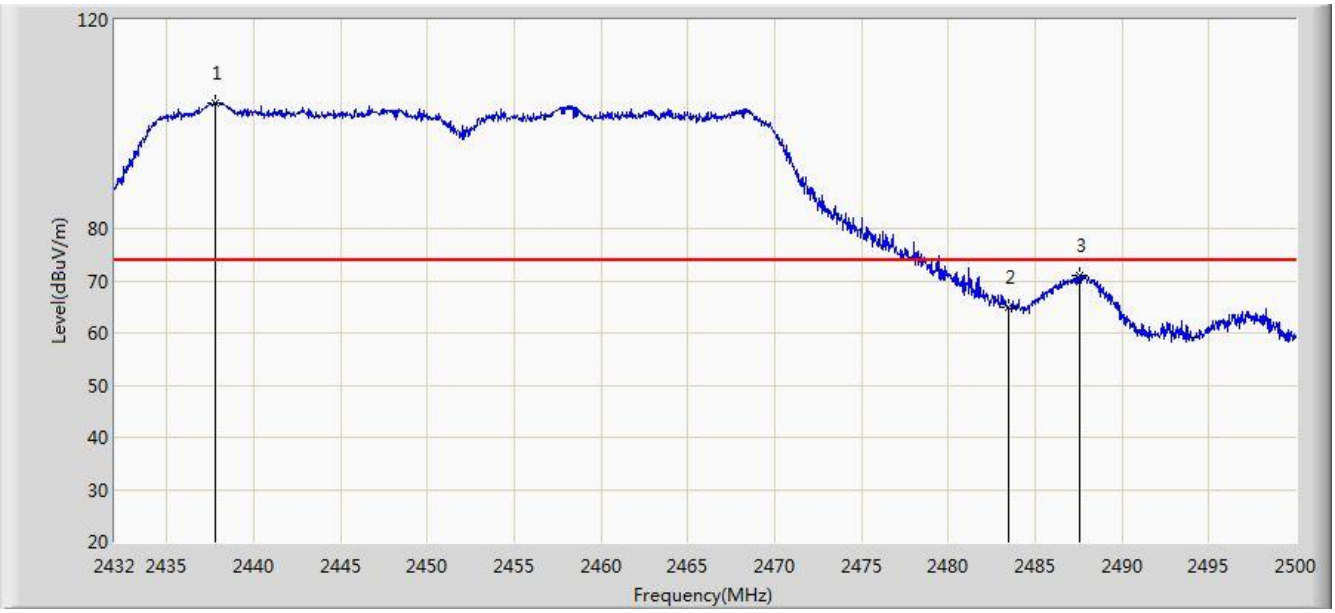


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2439.786	88.841	58.242	N/A	N/A	30.599	AV
2			2483.500	48.592	17.919	-5.408	54.000	30.673	AV

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2452MHz	

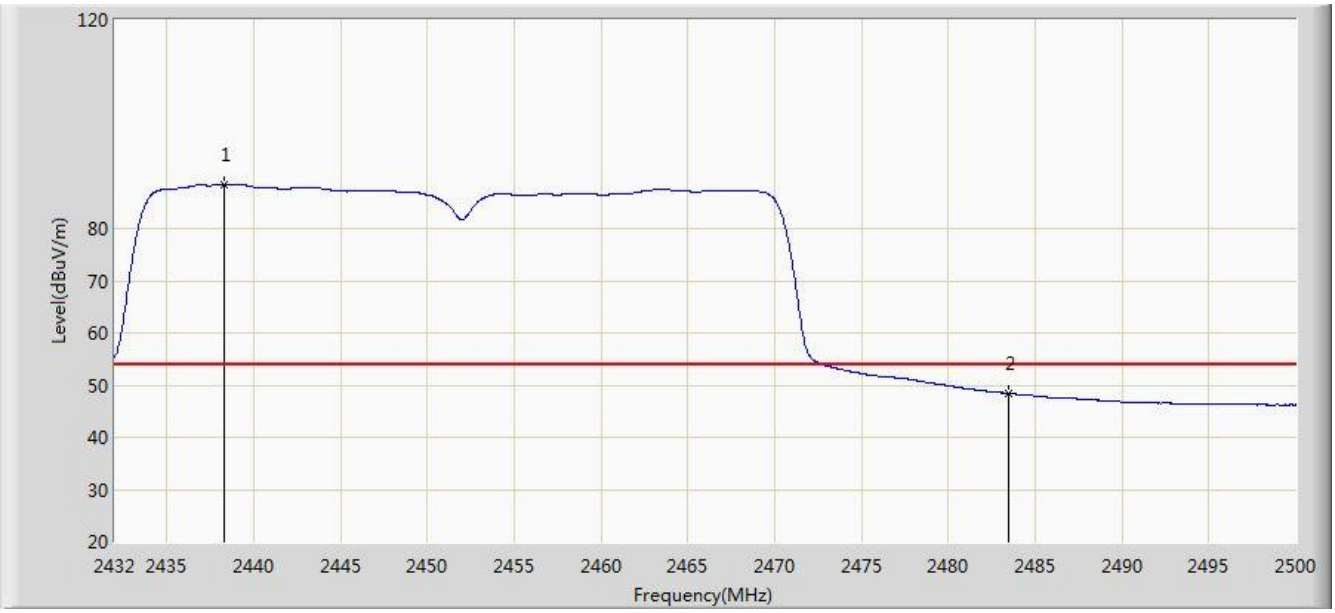


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2437.814	104.013	73.411	N/A	N/A	30.602	PK
2			2483.500	64.868	34.195	-9.132	74.000	30.673	PK
3			2487.556	70.903	40.218	-3.097	74.000	30.685	PK

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

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

Engineer: Milo Li	
Site: AC1	Time: 2014/09/17 - 22:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode 4: Transmit by 802.11n-HT40 at channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2438.324	88.512	57.910	N/A	N/A	30.602	AV
2			2483.500	48.402	17.729	-5.598	54.000	30.673	AV

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

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

7.8. AC Conducted Emissions Measurement

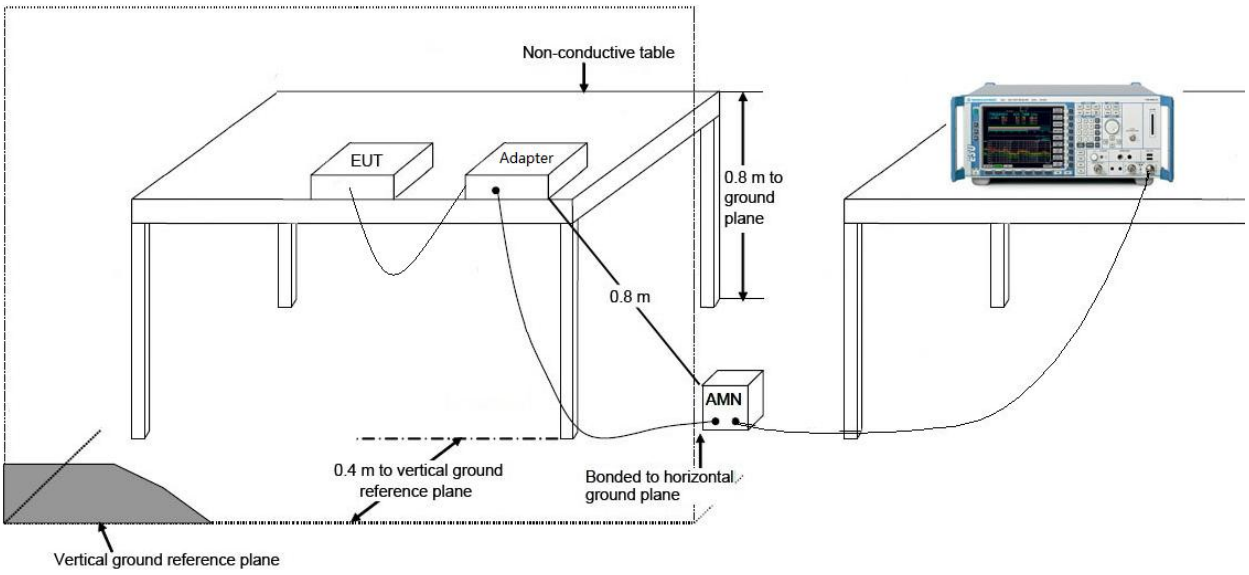
7.8.1. Test Limit

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.

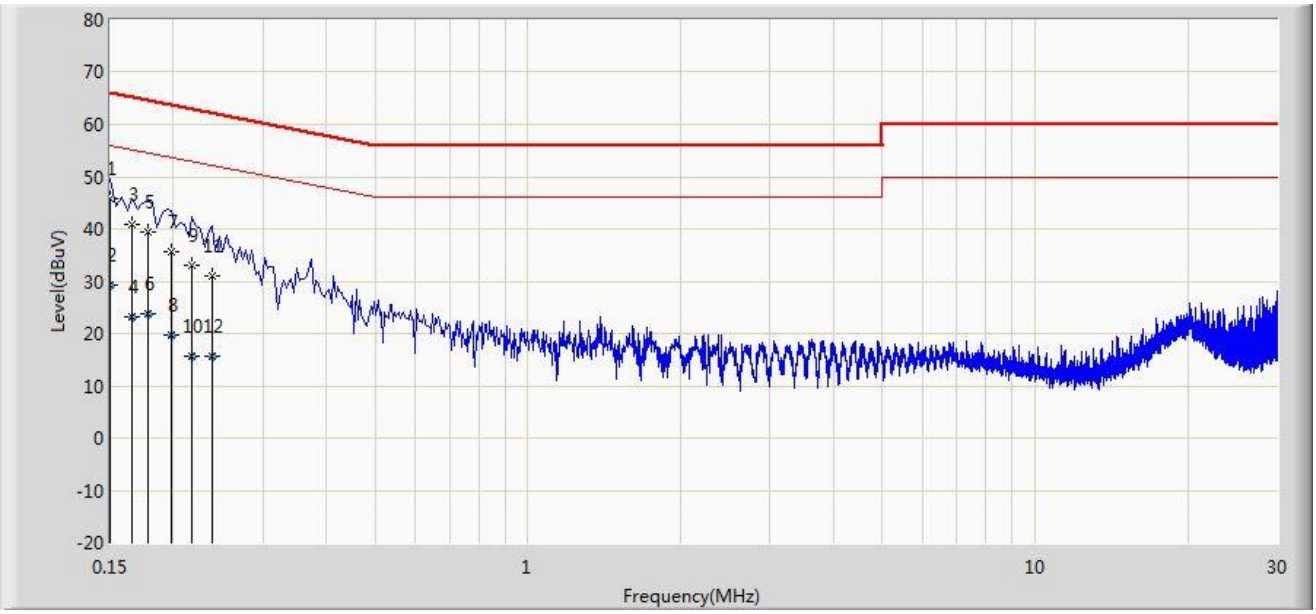
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

Engineer: Line Chen	
Site: SR2	Time: 2014/09/21 - 14:38
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode1	

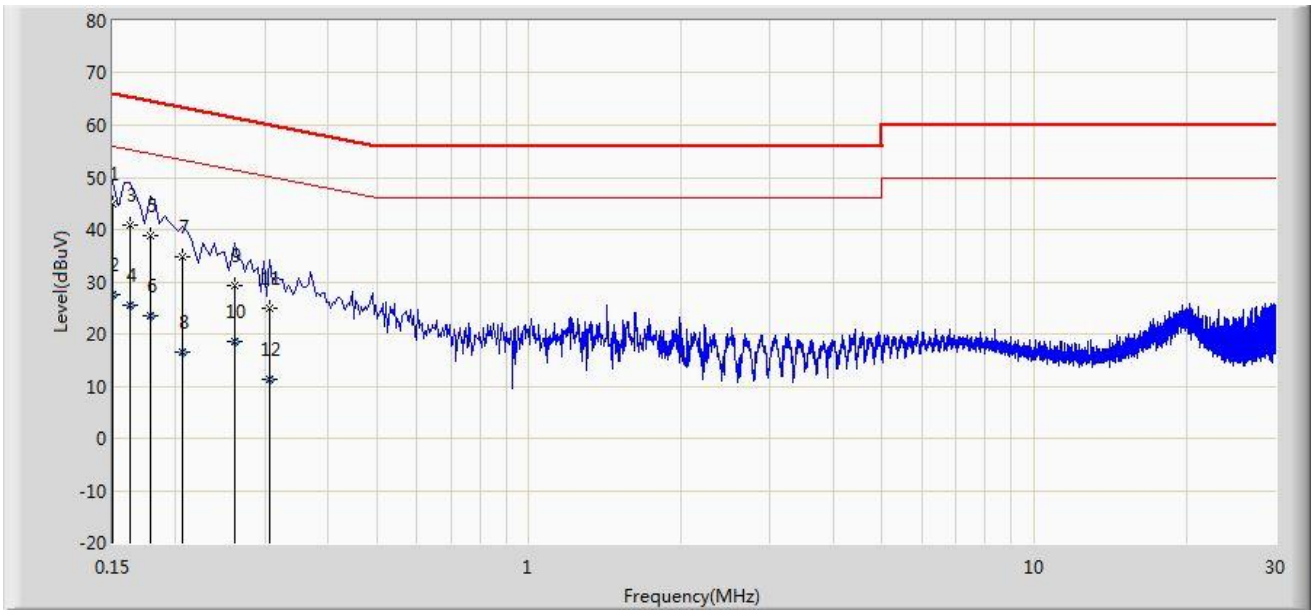


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.150	45.888	34.720	-20.112	66.000	11.168	QP
2			0.150	29.259	18.091	-26.741	56.000	11.168	AV
3			0.166	40.883	30.796	-24.275	65.158	10.087	QP
4			0.166	23.085	12.998	-32.073	55.158	10.087	AV
5			0.178	39.459	29.400	-25.120	64.578	10.058	QP
6			0.178	23.848	13.790	-30.730	54.578	10.058	AV
7			0.198	35.783	25.778	-27.911	63.694	10.005	QP
8			0.198	19.697	9.693	-33.997	53.694	10.005	AV
9			0.218	33.032	23.087	-29.863	62.895	9.945	QP
10			0.218	15.714	5.770	-37.180	52.895	9.945	AV
11			0.238	31.126	21.172	-31.039	62.166	9.954	QP
12			0.238	15.586	5.632	-36.579	52.166	9.954	AV

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

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

Engineer: Line Chen	
Site: SR2	Time: 2014/09/21 - 14:43
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Unified Wired-WLAN Walljack	Power: AC 120V/60Hz
Note: Mode1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.150	44.872	33.730	-21.128	66.000	11.142	QP
2			0.150	27.631	16.489	-28.369	56.000	11.142	AV
3			0.162	40.989	30.911	-24.372	65.361	10.078	QP
4			0.162	25.438	15.360	-29.922	55.361	10.078	AV
5			0.178	38.756	28.706	-25.823	64.578	10.049	QP
6			0.178	23.602	13.552	-30.977	54.578	10.049	AV
7			0.206	34.762	24.761	-28.603	63.365	10.001	QP
8			0.206	16.544	6.542	-36.821	53.365	10.001	AV
9			0.262	29.303	19.293	-32.065	61.368	10.010	QP
10			0.262	18.427	8.417	-32.941	51.368	10.010	AV
11			0.306	25.025	14.983	-35.054	60.078	10.042	QP
12			0.306	11.195	1.153	-38.884	50.078	10.042	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 **Unified Wired-WLAN Walljack**

FCC ID: O9C-BJNGAFB0005 is in compliance with Part 15C of the FCC Rules.

The End