

7.7. Frequency Stability Measurement

7.7.1. Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

7.7.2. Test Procedure Used

Frequency Stability Under Temperature Variations:

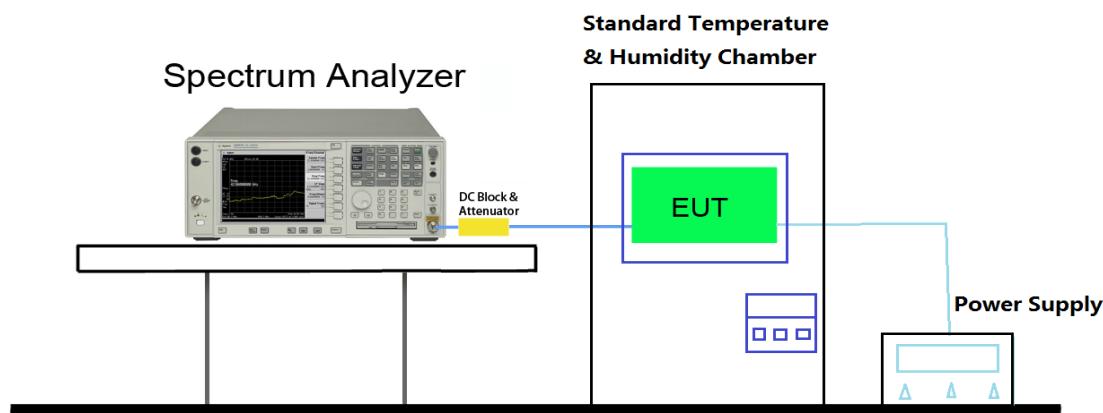
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

7.7.3. Test Setup



7.7.4. Test Result

Test Engineer	Milo Li	Temperature	-20 ~ 50°C
Test Time	04-06-2015	Relative Humidity	52%RH

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 20	-1.51	-1.83	-1.74	-1.71
		- 10	-1.51	-1.83	-1.74	-1.71
		0	-1.18	-1.00	-1.02	-0.35
		+ 10	-0.34	-0.54	-0.35	0.38
		+ 20 (Ref)	0.17	-0.69	-0.48	0.05
		+ 30	-1.53	-1.54	-1.52	-1.62
		+ 40	-1.51	-1.83	-1.74	-1.71
		+ 50	-1.24	-1.73	-1.96	-1.71
115%	138	+ 20	-1.51	-1.78	-1.83	-1.64
85%	102	+ 20	-1.56	-1.27	-0.96	-0.63

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) – Declared Frequency (Hz)] / Declared Frequency (Hz)} *10⁶.

7.8. Radiated Spurious Emission Measurement

7.8.1. 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

7.8.2. Test Procedure Used

KDB 789033 D02v01r02 – Section G

7.8.3. Test Setting

Peak Measurements above 1GHz

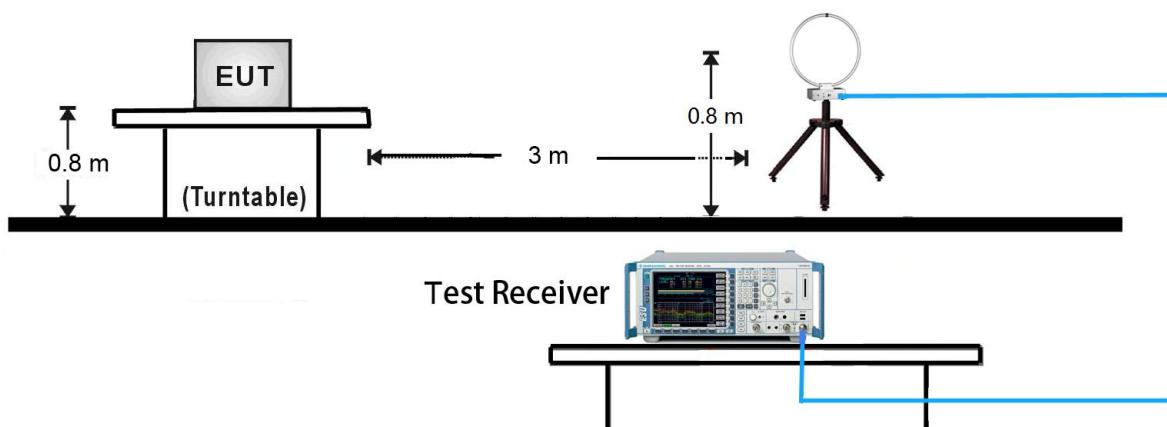
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

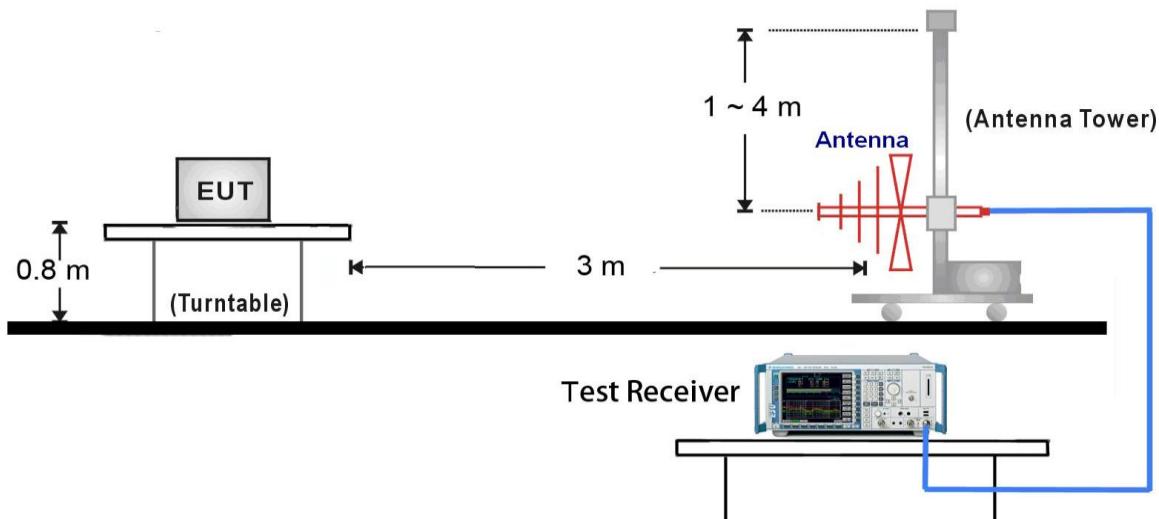
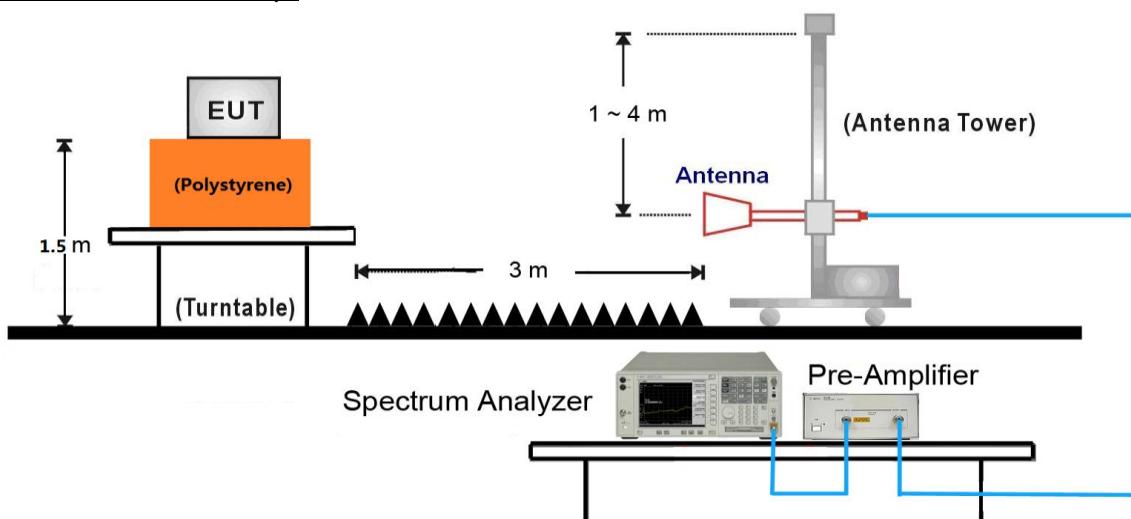
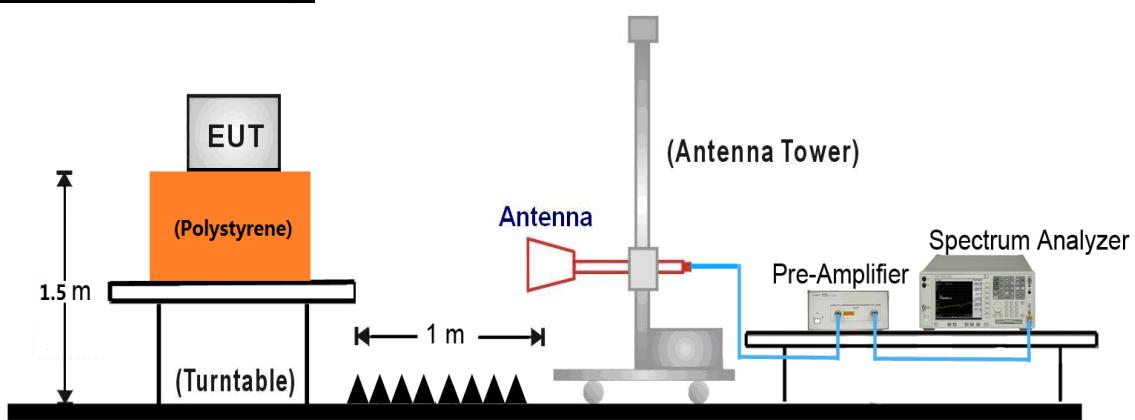
Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Average Measurements above 1GHz (Method AD)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $> 2 \times \text{span}/\text{RBW}$)
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

7.8.4. Test Setup**9kHz ~ 30MHz Test Setup:**

30MHz ~ 1GHz Test Setup:

1GHz ~18GHz Test Setup:

18GHz ~40GHz Test Setup:


7.8.5. Test Result

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	36	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11514.5	33.1	17.4	50.5	74.0	-23.5	Peak	Horizontal
	15535.0	34.9	17.4	52.3	74.0	-21.7	Peak	Horizontal
*	16623.0	32.6	19.6	52.2	68.2	-16.0	Peak	Horizontal
*	17464.5	33.2	22.9	56.1	68.2	-12.1	Peak	Horizontal
	11922.5	32.6	16.6	49.2	74.0	-24.8	Peak	Vertical
	15552.0	38.7	17.5	56.2	74.0	-17.8	Peak	Vertical
	15552.0	24.3	17.5	41.8	54.0	-12.2	Average	Vertical
*	16563.5	32.5	18.9	51.4	68.2	-16.8	Peak	Vertical
*	17379.5	32.0	23.2	55.2	68.2	-13.0	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	44	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11047.0	34.4	16.6	51.0	74.0	-23.0	Peak	Horizontal
	15662.5	39.3	17.0	56.3	74.0	-17.7	Peak	Horizontal
	15662.5	27.2	17.0	44.2	54.0	-9.8	Average	Horizontal
*	17116.0	31.8	21.5	53.3	68.2	-14.9	Peak	Horizontal
*	17481.5	32.3	23.5	55.8	68.2	-12.4	Peak	Horizontal
	11038.5	33.2	16.6	49.8	74.0	-24.2	Peak	Vertical
	15671.0	41.8	16.8	58.6	74.0	-15.4	Peak	Vertical
	15671.0	28.7	16.8	45.5	54.0	-8.5	Average	Vertical
*	17124.5	31.8	22.1	53.9	68.2	-14.3	Peak	Vertical
*	17447.5	32.6	23.1	55.7	68.2	-12.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	48	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11081.0	33.7	16.8	50.5	74.0	-23.5	Peak	Horizontal
	15722.0	38.0	16.5	54.5	74.0	-19.5	Peak	Horizontal
	15722.0	25.4	16.5	41.9	54.0	-12.1	Average	Horizontal
*	16767.5	31.5	20.2	51.7	74.0	-22.3	Peak	Horizontal
*	17184.0	32.4	22.3	54.7	74.0	-19.3	Peak	Horizontal
	11514.5	33.8	17.4	51.2	74.0	-22.8	Peak	Vertical
	15705.0	41.9	17.1	59.0	74.0	-15.0	Peak	Vertical
	15705.0	28.6	17.1	45.7	54.0	-8.3	Average	Vertical
*	16580.5	33.1	19.2	52.3	74.0	-21.7	Peak	Vertical
*	17235.0	32.8	22.4	55.2	74.0	-18.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	52	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11140.5	33.0	16.9	49.9	74.0	-24.1	Peak	Horizontal
	15781.5	38.8	16.5	55.3	74.0	-18.7	Peak	Horizontal
	15781.5	26.4	16.5	42.9	54.0	-11.1	Average	Horizontal
*	17005.5	33.0	21.0	54.0	68.2	-14.2	Peak	Horizontal
*	17286.0	31.5	22.6	54.1	68.2	-14.1	Peak	Horizontal
	11157.5	33.5	16.8	50.3	74.0	-23.7	Peak	Vertical
	15781.5	42.5	16.5	59.0	74.0	-15.0	Peak	Vertical
	15781.5	29.7	16.5	46.2	54.0	-7.8	Average	Vertical
*	16988.5	32.1	20.9	53.0	68.2	-15.2	Peak	Vertical
*	17439.0	32.4	23.4	55.8	68.2	-12.4	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	60	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11098.0	33.2	16.9	50.1	74.0	-23.9	Peak	Horizontal
	15900.5	38.7	17.5	56.2	74.0	-17.8	Peak	Horizontal
	15900.5	26.4	17.5	43.9	54.0	-10.1	Average	Horizontal
*	17073.5	31.7	21.7	53.4	68.2	-14.8	Peak	Horizontal
*	17362.5	32.3	22.9	55.2	68.2	-13.0	Peak	Horizontal
	11421.0	32.6	17.1	49.7	74.0	-24.3	Peak	Vertical
	15909.0	43.2	17.1	60.3	74.0	-13.7	Peak	Vertical
	15909.0	29.5	17.1	46.6	54.0	-7.4	Average	Vertical
*	17073.5	30.9	21.7	52.6	68.2	-15.6	Peak	Vertical
*	17354.0	32.1	22.7	54.8	68.2	-13.4	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	64	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	10800.5	34.5	15.9	50.4	74.0	-23.6	Peak	Horizontal
	15960.0	34.6	17.1	51.7	74.0	-22.3	Peak	Horizontal
*	16971.5	31.1	21.2	52.3	68.2	-15.9	Peak	Horizontal
*	17294.5	32.5	22.6	55.1	68.2	-13.1	Peak	Horizontal
	11395.5	33.1	17.1	50.2	74.0	-23.8	Peak	Vertical
	15977.0	40.5	17.0	57.5	74.0	-16.5	Peak	Vertical
	15977.0	28.0	17.0	45.0	54.0	-9.0	Average	Vertical
*	17014.0	31.8	21.1	52.9	68.2	-15.3	Peak	Vertical
*	17379.5	32.5	23.2	55.7	68.2	-12.5	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	100	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9321.5	34.2	12.9	47.1	74.0	-26.9	Peak	Horizontal
	10962.0	33.5	16.5	50.0	74.0	-24.0	Peak	Horizontal
*	13716.0	32.9	19.7	52.6	68.2	-15.6	Peak	Horizontal
*	16504.0	36.7	18.6	55.3	68.2	-12.9	Peak	Horizontal
	9313.0	33.2	12.7	45.9	74.0	-28.1	Peak	Vertical
	11004.5	35.1	16.5	51.6	74.0	-22.4	Peak	Vertical
*	13818.0	32.2	20.5	52.7	68.2	-15.5	Peak	Vertical
*	16495.5	37.4	18.4	55.8	68.2	-12.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	120	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9381.0	34.2	12.5	46.7	74.0	-27.3	Peak	Horizontal
	11421.0	33.1	17.1	50.2	74.0	-23.8	Peak	Horizontal
*	13818.0	32.1	20.5	52.6	68.2	-15.6	Peak	Horizontal
*	16793.0	41.3	19.9	61.2	68.2	-7.0	Peak	Horizontal
	9432.0	34.1	12.4	46.5	74.0	-27.5	Peak	Vertical
	11191.5	35.9	16.7	52.6	74.0	-21.4	Peak	Vertical
*	13444.0	32.4	19.5	51.9	68.2	-16.3	Peak	Vertical
*	16801.5	40.9	20.0	60.9	68.2	-7.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	140	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9432.0	34.0	12.4	46.4	74.0	-27.6	Peak	Horizontal
	11412.5	34.5	17.2	51.7	74.0	-22.3	Peak	Horizontal
*	13792.5	33.0	19.9	52.9	68.2	-15.3	Peak	Horizontal
*	17107.5	36.4	20.9	57.3	68.2	-10.9	Peak	Horizontal
	9381.0	34.5	12.5	47.0	74.0	-27.0	Peak	Vertical
	11404.0	37.0	17.2	54.2	74.0	-19.8	Peak	Vertical
	11404.0	24.5	17.2	41.7	54.0	-12.3	Average	Vertical
*	13869.0	32.6	20.6	53.2	68.2	-15.0	Peak	Vertical
*	17107.5	34.0	20.9	54.9	68.2	-13.3	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	149	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9457.5	34.9	12.4	47.3	74.0	-26.7	Peak	Horizontal
	10953.5	34.7	16.4	51.1	74.0	-22.9	Peak	Horizontal
*	14030.5	34.4	20.1	54.5	68.2	-13.7	Peak	Horizontal
*	17243.5	40.6	22.2	62.8	68.2	-5.4	Peak	Horizontal
	9321.5	33.8	12.9	46.7	74.0	-27.3	Peak	Vertical
	11497.5	36.8	17.3	54.1	74.0	-19.9	Peak	Vertical
	11497.5	24.2	17.3	41.5	54.0	-12.5	Average	Vertical
*	13818.0	32.2	20.5	52.7	68.2	-15.5	Peak	Vertical
*	17235.0	36.7	22.4	59.1	68.2	-9.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	157	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9381.0	33.6	12.5	46.1	74.0	-27.9	Peak	Horizontal
	11081.0	33.4	16.8	50.2	74.0	-23.8	Peak	Horizontal
*	14013.5	34.1	19.8	53.9	68.2	-14.3	Peak	Horizontal
*	17354.0	36.1	22.7	58.8	68.2	-9.4	Peak	Horizontal
	9347.0	34.4	12.4	46.8	74.0	-27.2	Peak	Vertical
	11565.5	34.2	17.6	51.8	74.0	-22.2	Peak	Vertical
*	13597.0	34.1	18.9	53.0	68.2	-15.2	Peak	Vertical
*	17345.5	33.2	22.8	56.0	68.2	-12.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11a	Test Site:	AC2
Test Channel:	165	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9338.5	33.7	12.6	46.3	74.0	-27.7	Peak	Horizontal
	11004.5	33.4	16.5	49.9	74.0	-24.1	Peak	Horizontal
*	13639.5	34.2	18.7	52.9	68.2	-15.3	Peak	Horizontal
*	17481.5	35.9	23.5	59.4	68.2	-8.8	Peak	Horizontal
	9313.0	34.3	12.7	47.0	74.0	-27.0	Peak	Vertical
	11642.0	35.4	17.4	52.8	74.0	-21.2	Peak	Vertical
*	13707.5	33.5	19.5	53.0	68.2	-15.2	Peak	Vertical
*	17473.0	33.1	23.1	56.2	68.2	-12.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	36	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9483.0	34.9	12.1	47.0	74.0	-27.0	Peak	Horizontal
	11565.5	33.1	17.6	50.7	74.0	-23.3	Peak	Horizontal
*	13869.0	32.4	20.6	53.0	68.2	-15.2	Peak	Horizontal
*	17439.0	32.7	23.4	56.1	68.2	-12.1	Peak	Horizontal
	9355.5	34.4	12.7	47.1	74.0	-26.9	Peak	Vertical
	11455.0	33.2	17.3	50.5	74.0	-23.5	Peak	Vertical
*	13427.0	32.6	19.4	52.0	68.2	-16.2	Peak	Vertical
*	17014.0	32.3	21.1	53.4	68.2	-14.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	44	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11387.0	32.7	17.1	49.8	74.0	-24.2	Peak	Horizontal
	15662.5	38.1	17.0	55.1	74.0	-18.9	Peak	Horizontal
	15662.5	26.3	17.0	43.3	54.0	-10.7	Average	Horizontal
*	16376.5	33.5	18.3	51.8	68.2	-16.4	Peak	Horizontal
*	17481.5	32.3	23.5	55.8	68.2	-12.4	Peak	Horizontal
	11055.5	34.2	16.6	50.8	74.0	-23.2	Peak	Vertical
	15654.0	39.4	17.3	56.7	74.0	-17.3	Peak	Vertical
	15654.0	26.5	17.3	43.8	54.0	-10.2	Average	Vertical
*	17116.0	31.5	21.5	53.0	68.2	-15.2	Peak	Vertical
*	17413.5	31.6	23.1	54.7	68.2	-13.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	48	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11098.0	33.7	16.9	50.6	74.0	-23.4	Peak	Horizontal
	15713.5	37.5	16.8	54.3	74.0	-19.7	Peak	Horizontal
	15713.5	24.9	16.8	41.7	54.0	-12.3	Average	Horizontal
*	16963.0	31.7	21.3	53.0	68.2	-15.2	Peak	Horizontal
*	17481.5	32.2	23.5	55.7	68.2	-12.5	Peak	Horizontal
	11395.5	33.0	17.1	50.1	74.0	-23.9	Peak	Vertical
	15713.5	42.2	16.8	59.0	74.0	-15.0	Peak	Vertical
	15713.5	29.7	16.8	46.5	54.0	-7.5	Average	Vertical
*	16529.5	31.3	18.9	50.2	68.2	-18.0	Peak	Vertical
*	17022.5	32.2	21.3	53.5	68.2	-14.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	52	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11030.0	34.1	16.7	50.8	74.0	-23.2	Peak	Horizontal
	15781.5	38.7	16.5	55.2	74.0	-18.8	Peak	Horizontal
	15781.5	25.9	16.5	42.4	54.0	-11.6	Average	Horizontal
*	16623.0	31.9	19.6	51.5	68.2	-16.7	Peak	Horizontal
*	17133.0	32.4	21.7	54.1	68.2	-14.1	Peak	Horizontal
	11072.5	34.4	16.5	50.9	74.0	-23.1	Peak	Vertical
	15781.5	40.0	16.5	56.5	74.0	-17.5	Peak	Vertical
	15781.5	27.5	16.5	44.0	54.0	-10.0	Average	Vertical
*	16725.0	32.1	20.1	52.2	68.2	-16.0	Peak	Vertical
*	17269.0	32.9	21.8	54.7	68.2	-13.5	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	60	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	11387.0	33.7	17.1	50.8	74.0	-23.2	Peak	Horizontal
	15900.5	37.3	17.5	54.8	74.0	-19.2	Peak	Horizontal
	15900.5	24.5	17.5	42.0	54.0	-12.0	Average	Horizontal
*	16504.0	33.2	18.6	51.8	68.2	-16.4	Peak	Horizontal
*	17065.0	31.5	21.4	52.9	68.2	-15.3	Peak	Horizontal
	11038.5	34.2	16.6	50.8	74.0	-23.2	Peak	Vertical
	15900.5	41.5	17.5	59.0	74.0	-15.0	Peak	Vertical
	15900.5	28.5	17.5	46.0	54.0	-8.0	Average	Vertical
*	16946.0	31.5	20.7	52.2	68.2	-16.0	Peak	Vertical
*	17439.0	32.4	23.4	55.8	68.2	-12.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	64	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9381.0	34.5	12.5	47.0	74.0	-27.0	Peak	Horizontal
	10953.5	34.0	16.4	50.4	74.0	-23.6	Peak	Horizontal
*	13605.5	33.6	19.0	52.6	68.2	-15.6	Peak	Horizontal
*	17294.5	33.3	22.6	55.9	68.2	-12.3	Peak	Horizontal
	11633.5	32.9	17.4	50.3	74.0	-23.7	Peak	Vertical
	15968.5	38.1	17.1	55.2	74.0	-18.8	Peak	Vertical
	15968.5	25.5	17.1	42.6	54.0	-11.4	Average	Vertical
*	16971.5	32.4	21.2	53.6	68.2	-14.6	Peak	Vertical
*	17490.0	31.5	23.9	55.4	68.2	-12.8	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	100	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9109.0	34.2	12.3	46.5	74.0	-27.5	Peak	Horizontal
	11038.5	34.3	16.6	50.9	74.0	-23.1	Peak	Horizontal
*	13792.5	33.8	19.9	53.7	68.2	-14.5	Peak	Horizontal
*	16495.5	35.9	18.4	54.3	68.2	-13.9	Peak	Horizontal
	9126.0	34.5	12.5	47.0	74.0	-27.0	Peak	Vertical
	10996.0	37.0	16.5	53.5	74.0	-20.5	Peak	Vertical
*	14132.5	32.6	21.0	53.6	68.2	-14.6	Peak	Vertical
*	16504.0	38.5	18.6	57.1	68.2	-11.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	120	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9355.5	33.9	12.7	46.6	74.0	-27.4	Peak	Horizontal
	10945.0	33.3	16.3	49.6	74.0	-24.4	Peak	Horizontal
*	13792.5	33.6	19.9	53.5	68.2	-14.7	Peak	Horizontal
*	16801.5	43.4	20.0	63.4	68.2	-4.8	Peak	Horizontal
	9364.0	33.4	12.8	46.2	74.0	-27.8	Peak	Vertical
	11072.5	33.6	16.5	50.1	74.0	-23.9	Peak	Vertical
*	13860.5	32.8	20.3	53.1	68.2	-15.1	Peak	Vertical
*	16801.5	39.7	20.0	59.7	68.2	-8.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	140	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9440.5	34.4	12.4	46.8	74.0	-27.2	Peak	Horizontal
	11404.0	33.4	17.2	50.6	74.0	-23.4	Peak	Horizontal
*	13707.5	33.4	19.5	52.9	68.2	-15.3	Peak	Horizontal
*	17099.0	34.5	20.9	55.4	68.2	-12.8	Peak	Horizontal
	9160.0	34.2	12.8	47.0	74.0	-27.0	Peak	Vertical
	11404.0	34.9	17.2	52.1	74.0	-21.9	Peak	Vertical
*	13792.5	32.8	19.9	52.7	68.2	-15.5	Peak	Vertical
*	16665.5	33.0	19.6	52.6	68.2	-15.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	149	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9041.0	34.3	11.8	46.1	74.0	-27.9	Peak	Horizontal
	11463.5	33.4	17.2	50.6	74.0	-23.4	Peak	Horizontal
*	13809.5	32.4	20.3	52.7	68.2	-15.5	Peak	Horizontal
*	17235.0	38.1	22.4	60.5	68.2	-7.7	Peak	Horizontal
	9338.5	33.6	12.6	46.2	74.0	-27.8	Peak	Vertical
	11497.5	36.3	17.3	53.6	74.0	-20.4	Peak	Vertical
*	13869.0	32.3	20.6	52.9	68.2	-15.3	Peak	Vertical
*	17235.0	33.5	22.4	55.9	68.2	-12.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	157	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9440.5	33.9	12.4	46.3	74.0	-27.7	Peak	Horizontal
	11565.5	32.8	17.6	50.4	74.0	-23.6	Peak	Horizontal
*	13665.0	33.6	19.2	52.8	68.2	-15.4	Peak	Horizontal
*	17362.5	36.7	22.9	59.6	68.2	-8.6	Peak	Horizontal
	9398.0	34.6	12.3	46.9	74.0	-27.1	Peak	Vertical
	11557.0	34.2	17.7	51.9	74.0	-22.1	Peak	Vertical
*	13758.5	33.2	20.0	53.2	68.2	-15.0	Peak	Vertical
*	17345.5	34.5	22.8	57.3	68.2	-10.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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:	165	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9364.0	34.4	12.8	47.2	74.0	-26.8	Peak	Horizontal
	11642.0	32.8	17.4	50.2	74.0	-23.8	Peak	Horizontal
*	13886.0	32.6	20.0	52.6	68.2	-15.6	Peak	Horizontal
*	17464.5	34.0	22.9	56.9	68.2	-11.3	Peak	Horizontal
	9066.5	34.7	12.0	46.7	74.0	-27.3	Peak	Vertical
	11650.5	34.5	17.4	51.9	74.0	-22.1	Peak	Vertical
*	13716.0	32.5	19.7	52.2	68.2	-16.0	Peak	Vertical
*	17124.5	31.7	22.1	53.8	68.2	-14.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	38	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9160.0	34.7	12.8	47.5	74.0	-26.5	Peak	Horizontal
	11098.0	32.9	16.9	49.8	74.0	-24.2	Peak	Horizontal
*	13784.0	32.9	19.8	52.7	68.2	-15.5	Peak	Horizontal
*	17141.5	32.5	21.3	53.8	68.2	-14.4	Peak	Horizontal
	9330.0	34.0	12.9	46.9	74.0	-27.1	Peak	Vertical
	11021.5	33.2	16.5	49.7	74.0	-24.3	Peak	Vertical
*	13818.0	32.9	20.5	53.4	68.2	-14.8	Peak	Vertical
*	16631.5	32.6	19.5	52.1	68.2	-16.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	46	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9168.5	34.0	12.6	46.6	74.0	-27.4	Peak	Horizontal
	11608.0	33.2	17.4	50.6	74.0	-23.4	Peak	Horizontal
*	13597.0	33.1	18.9	52.0	68.2	-16.2	Peak	Horizontal
*	17345.5	32.5	22.8	55.3	68.2	-12.9	Peak	Horizontal
	11132.0	33.3	16.8	50.1	74.0	-23.9	Peak	Vertical
	15679.5	37.2	16.8	54.0	74.0	-20.0	Peak	Vertical
*	16623.0	33.8	19.6	53.4	68.2	-14.8	Peak	Vertical
*	17396.5	31.9	23.3	55.2	68.2	-13.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	54	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	10868.5	33.9	16.2	50.1	74.0	-23.9	Peak	Horizontal
	15824.0	35.9	16.6	52.5	74.0	-21.5	Peak	Horizontal
*	16971.5	31.1	21.2	52.3	68.2	-15.9	Peak	Horizontal
*	17311.5	31.8	22.4	54.2	68.2	-14.0	Peak	Horizontal
	11429.5	33.0	17.0	50.0	74.0	-24.0	Peak	Vertical
	15807.0	38.4	16.6	55.0	74.0	-19.0	Peak	Vertical
	15807.0	25.5	16.6	42.1	54.0	-11.9	Average	Vertical
*	16954.5	31.5	20.9	52.4	68.2	-15.8	Peak	Vertical
*	17490.0	30.9	23.9	54.8	68.2	-13.4	Peak	Vertical

Note 1: “**” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	62	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9440.5	34.9	12.4	47.3	74.0	-26.7	Peak	Horizontal
	11038.5	33.2	16.6	49.8	74.0	-24.2	Peak	Horizontal
*	13461.0	31.7	19.7	51.4	68.2	-16.8	Peak	Horizontal
*	16971.5	31.8	21.2	53.0	68.2	-15.2	Peak	Horizontal
	9364.0	34.4	12.8	47.2	74.0	-26.8	Peak	Vertical
	11123.5	34.0	16.6	50.6	74.0	-23.4	Peak	Vertical
*	13784.0	32.7	19.8	52.5	68.2	-15.7	Peak	Vertical
*	17124.5	32.6	22.1	54.7	68.2	-13.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	102	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9483.0	35.0	12.1	47.1	74.0	-26.9	Peak	Horizontal
	11531.5	32.8	17.2	50.0	74.0	-24.0	Peak	Horizontal
*	13826.5	32.7	20.3	53.0	68.2	-15.2	Peak	Horizontal
*	16742.0	32.6	19.9	52.5	68.2	-15.7	Peak	Horizontal
	9381.0	33.2	12.5	45.7	74.0	-28.3	Peak	Vertical
	11038.5	33.3	16.6	49.9	74.0	-24.1	Peak	Vertical
*	13656.5	34.2	19.1	53.3	68.2	-14.9	Peak	Vertical
*	17481.5	31.7	23.5	55.2	68.2	-13.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	118	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9355.5	34.7	12.7	47.4	74.0	-26.6	Peak	Horizontal
	11667.5	32.9	17.6	50.5	74.0	-23.5	Peak	Horizontal
*	13988.0	33.0	20.3	53.3	68.2	-14.9	Peak	Horizontal
*	16767.5	40.2	20.2	60.4	68.2	-7.8	Peak	Horizontal
	9117.5	35.0	12.4	47.4	74.0	-26.6	Peak	Vertical
	11166.0	34.3	16.9	51.2	74.0	-22.8	Peak	Vertical
*	13775.5	32.4	19.9	52.3	68.2	-15.9	Peak	Vertical
*	16767.5	37.4	20.2	57.6	68.2	-10.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	134	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9381.0	34.1	12.5	46.6	74.0	-27.4	Peak	Horizontal
	11115.0	33.3	16.5	49.8	74.0	-24.2	Peak	Horizontal
*	13639.5	33.8	18.7	52.5	68.2	-15.7	Peak	Horizontal
*	16997.0	34.9	21.1	56.0	68.2	-12.2	Peak	Horizontal
	9449.0	34.2	12.4	46.6	74.0	-27.4	Peak	Vertical
	11344.5	33.5	17.1	50.6	74.0	-23.4	Peak	Vertical
*	13818.0	32.4	20.5	52.9	68.2	-15.3	Peak	Vertical
*	16997.0	33.0	21.1	54.1	68.2	-14.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	151	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9398.0	34.5	12.3	46.8	74.0	-27.2	Peak	Horizontal
	11497.5	33.5	17.3	50.8	74.0	-23.2	Peak	Horizontal
*	13818.0	32.7	20.5	53.2	68.2	-15.0	Peak	Horizontal
*	17252.0	36.0	22.0	58.0	68.2	-10.2	Peak	Horizontal
	9134.5	35.0	12.5	47.5	74.0	-26.5	Peak	Vertical
	11514.5	34.1	17.4	51.5	74.0	-22.5	Peak	Vertical
*	13818.0	32.8	20.5	53.3	68.2	-14.9	Peak	Vertical
*	17260.5	34.1	21.7	55.8	68.2	-12.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

Test Mode:	802.11n-HT40	Test Site:	AC2
Test Channel:	159	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 (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	9372.5	35.2	12.7	47.9	74.0	-26.1	Peak	Horizontal
	11557.0	32.9	17.7	50.6	74.0	-23.4	Peak	Horizontal
*	13920.0	32.3	20.3	52.6	68.2	-15.6	Peak	Horizontal
*	17379.5	34.0	23.2	57.2	68.2	-11.0	Peak	Horizontal
	9168.5	35.0	12.6	47.6	74.0	-26.4	Peak	Vertical
	11574.0	34.0	17.4	51.4	74.0	-22.6	Peak	Vertical
*	13571.5	34.2	19.1	53.3	68.2	-14.9	Peak	Vertical
*	17396.5	32.5	23.3	55.8	68.2	-12.4	Peak	Vertical

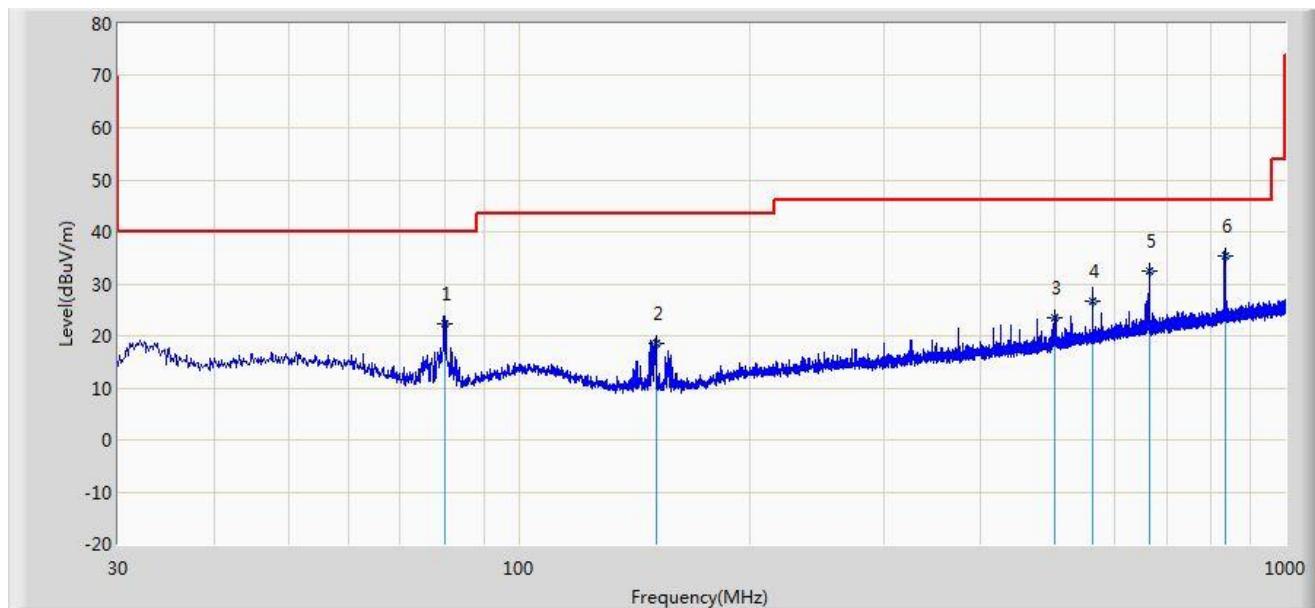
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + 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: 2015/04/10 - 13:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Worst Mode: Transmit by 802.11a at channel 5220MHz	

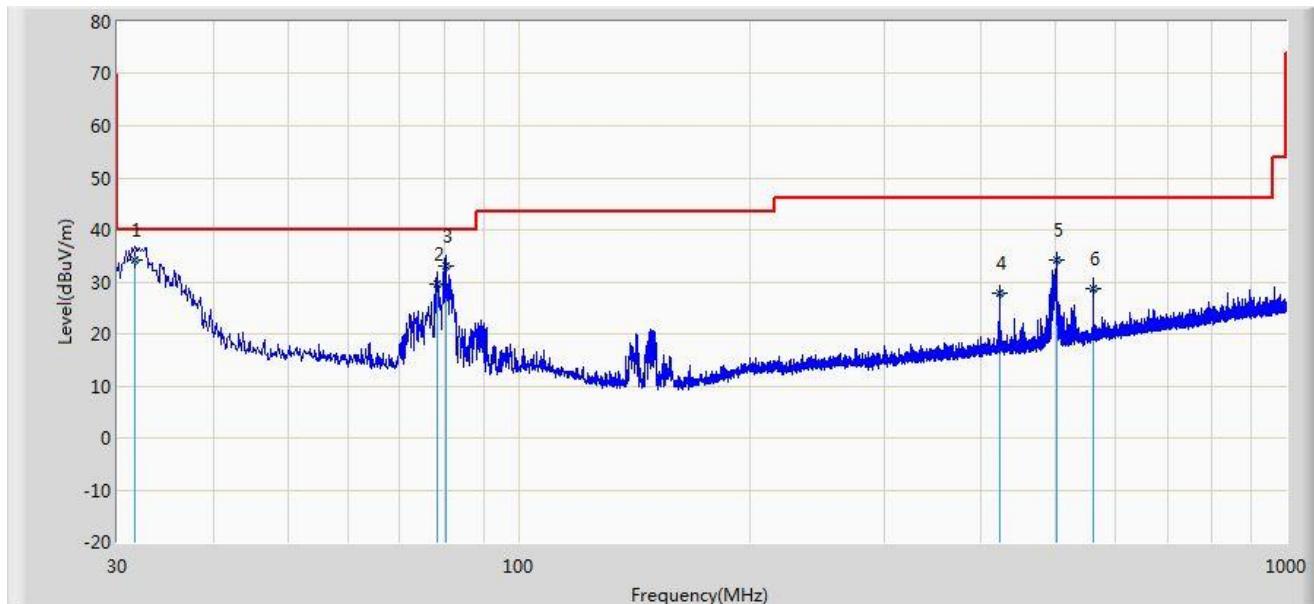


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			79.980	22.178	12.820	-17.822	40.000	9.358	QP
2			151.080	18.620	9.140	-24.880	43.500	9.480	QP
3			500.400	23.515	5.280	-22.485	46.000	18.235	QP
4			560.074	26.650	7.400	-19.350	46.000	19.249	QP
5			664.205	32.399	11.570	-13.601	46.000	20.829	QP
6	*		833.835	35.311	12.078	-10.689	46.000	23.233	QP

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

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

Site: AC2	Time: 2015/04/10 - 13:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Worst Mode: Transmit by 802.11a at channel 5220MHz	

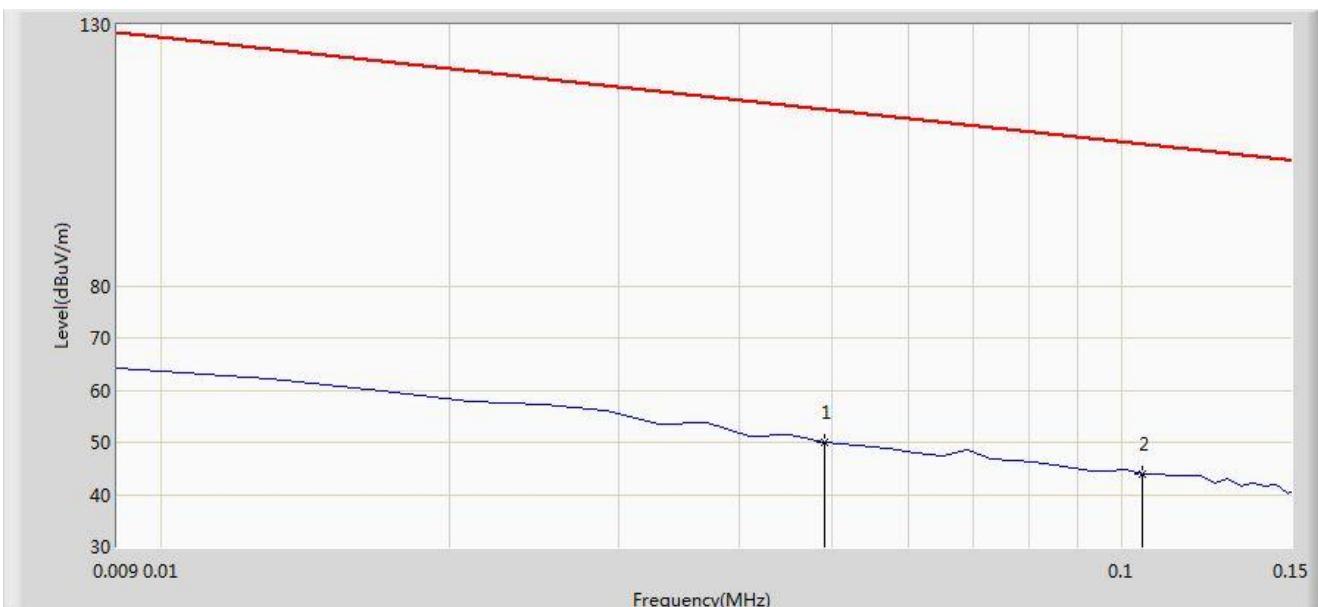


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	31.620	34.241	21.930	-5.759	40.000	12.311	QP
2			78.360	29.632	20.500	-10.368	40.000	9.132	QP
3			80.420	32.930	23.510	-7.070	40.000	9.420	QP
4			422.740	27.757	10.780	-18.243	46.000	16.977	QP
5			501.600	34.109	15.860	-11.891	46.000	18.249	QP
6			560.030	28.789	9.540	-17.211	46.000	19.248	QP

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

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

Site: AC2	Time: 2016/1/27 - 17:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: Radio Controller	Power: By Battery
Note: There is the ambient noise within frequency range 9kHz~30MHz.	



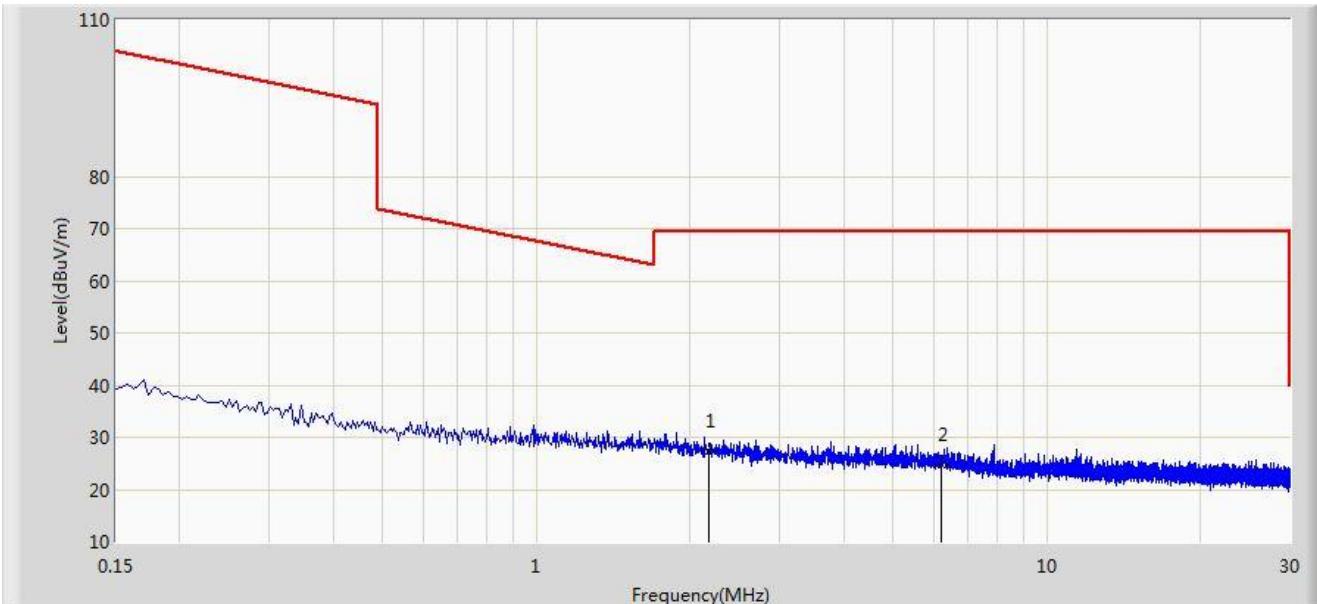
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.049	50.112	29.552	-63.688	113.800	20.560	AV
2		*	0.105	44.043	23.845	-63.137	107.180	20.198	QP

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

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

Limit@3m = 20*Log((2400/49) μ V/m) + 40*Log(300m/3m) = 113.800dB μ V/m (Average detector)

Site: AC2	Time: 2016/1/27 - 17:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: Radio Controller	Power: By Battery
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		*	2.175	27.371	6.960	-42.129	69.500	20.412	QP
2			6.216	24.786	4.701	-44.714	69.500	20.085	QP

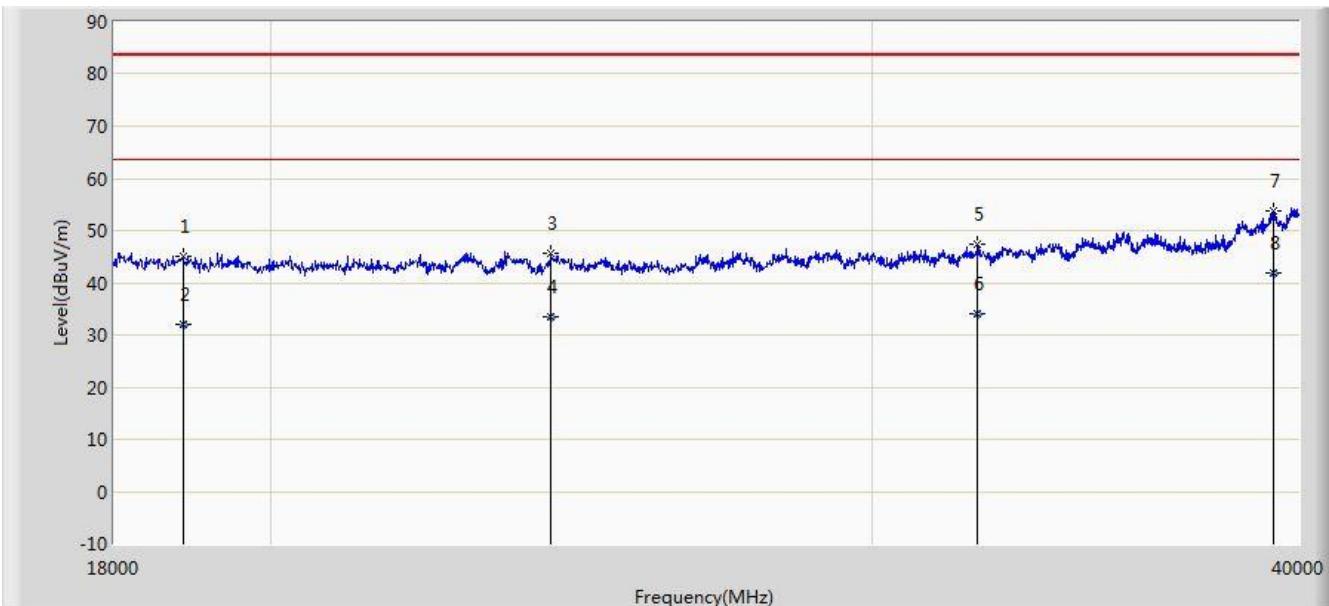
Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

Limit@3m = $20 \times \log(30\mu\text{V}/\text{m}) + 20 \times \log(30\text{m}/3\text{m}) = 49.5\text{dB}\mu\text{V}/\text{m}$ (Average detector), and $69.5\text{dB}\mu\text{V}/\text{m}$

(Quasi-Peak detector).

Site: AC2	Time: 2016/1/27 - 17:25
Limit: FCC_Part15.209_RE(1m)	Engineer: Lewis Huang
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: Radio Controller	Power: By Battery
Note: There is the ambient noise within frequency range 18GHz~40GHz.	



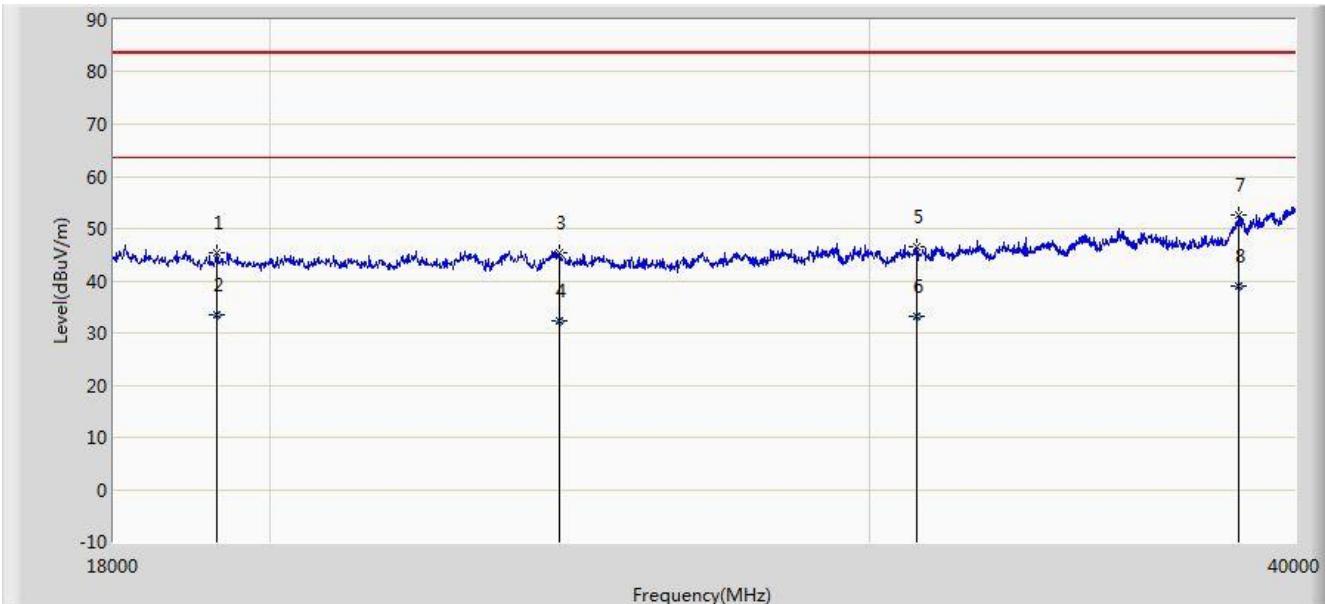
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			18858.000	45.191	36.541	-38.309	83.500	8.650	PK
2			18858.000	32.100	23.450	-31.400	63.500	8.650	AV
3			24171.000	45.675	35.208	-37.825	83.500	10.467	PK
4			24171.000	33.397	22.930	-30.103	63.500	10.467	AV
5			32223.000	47.527	35.659	-35.973	83.500	11.868	PK
6			32223.000	34.038	22.170	-29.462	63.500	11.868	AV
7			39318.000	53.825	36.172	-29.675	83.500	17.653	PK
8	*		39318.000	41.773	24.120	-21.727	63.500	17.653	AV

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

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

Limit@1m = $20 \cdot \log(500 \mu\text{V}/\text{m}) + 20 \cdot \log(3\text{m}/1\text{m}) = 63.5 \text{ dB}\mu\text{V}/\text{m}$ (Average detector), and $83.5 \text{ dB}\mu\text{V}/\text{m}$ (Peak detector).

Site: AC2	Time: 2016/1/27 - 17:28
Limit: FCC_Part15.209_RE(1m)	Engineer: Lewis Huang
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: Radio Controller	Power: By Battery
Note: There is the ambient noise within frequency range 18GHz~40GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			19309.000	45.507	37.286	-37.993	83.500	8.221	PK
2			19309.000	33.541	25.320	-29.959	63.500	8.221	AV
3			24336.000	45.444	34.796	-38.056	83.500	10.649	PK
4			24336.000	32.388	21.740	-31.112	63.500	10.649	AV
5			30991.000	46.616	33.637	-36.884	83.500	12.979	PK
6			30991.000	33.159	20.180	-30.341	63.500	12.979	AV
7			38504.000	52.623	36.736	-30.877	83.500	15.888	PK
8	*		38504.000	39.047	23.160	-24.453	63.500	15.888	AV

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

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

Limit@1m = $20 \cdot \log(500 \mu\text{V}/\text{m}) + 20 \cdot \log(3\text{m}/1\text{m}) = 63.5 \text{ dB}\mu\text{V}/\text{m}$ (Average detector), and $83.5 \text{ dB}\mu\text{V}/\text{m}$ (Peak detector).

7.9. Radiated Restricted Band Edge Measurement

7.9.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 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	8.25 - 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 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	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	(²)
13.36 - 13.41	--	--	--

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725

GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band, all out-of-band emissions be limited to a level of -27 dBm/MHz at 75 MHz beyond the band edge, increasing linearly to 10 dBm/MHz at 25 MHz beyond the band edge, and from 25 MHz beyond the band edge, increasing linearly to a level of 17 dBm/MHz at the band edge.

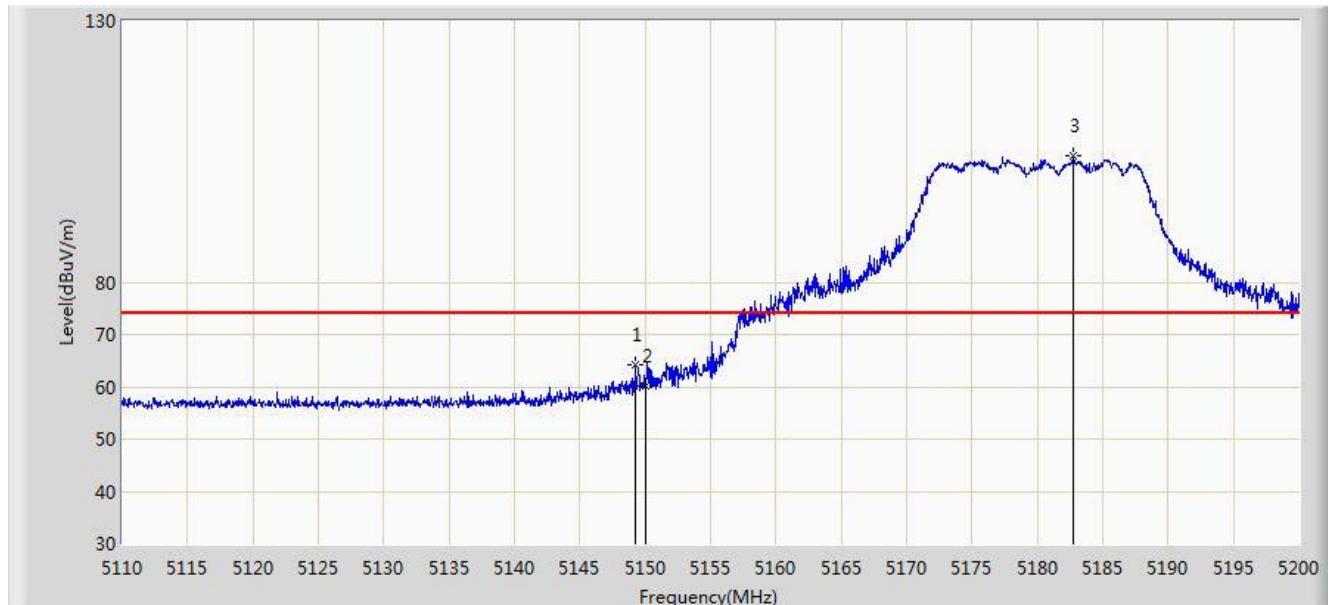
Note: Refer to KDB 789033 D02v01r02 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission 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

7.9.2. Test Result of Radiated Restricted Band Edge

Site: AC2	Time: 2016/05/25 - 20:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz	

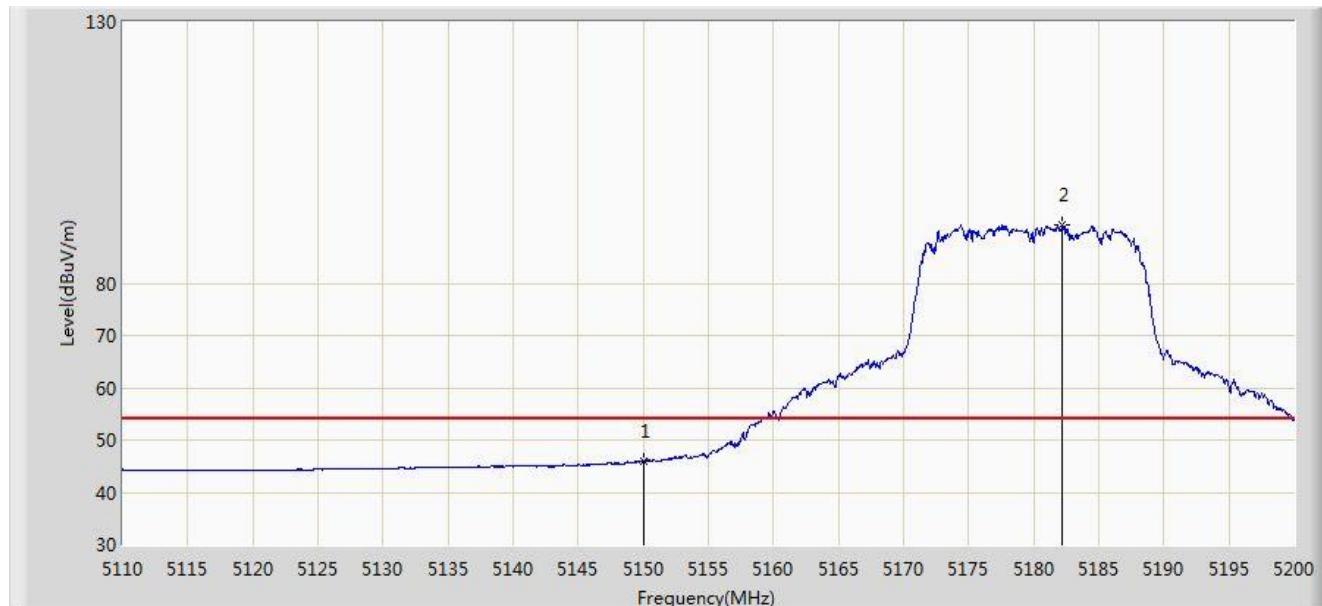


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.240	64.104	61.033	-9.896	74.000	3.072	PK
2			5150.000	60.256	57.186	-13.744	74.000	3.069	PK
3	*		5182.720	104.107	101.065	N/A	N/A	3.043	PK

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

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

Site: AC2	Time: 2016/05/25 - 20:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz	

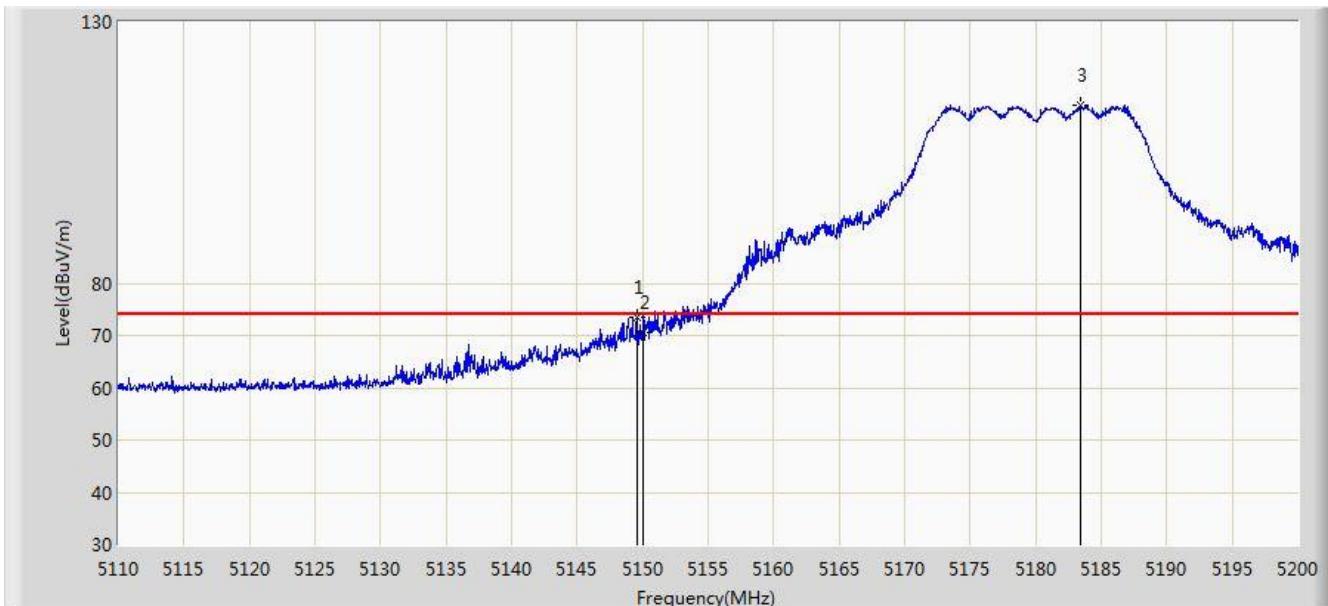


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5150.000	45.943	42.873	-8.057	54.000	3.069	AV
2		*	5182.225	91.043	87.995	N/A	N/A	3.047	AV

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

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

Site: AC2	Time: 2016/05/25 - 20:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz	

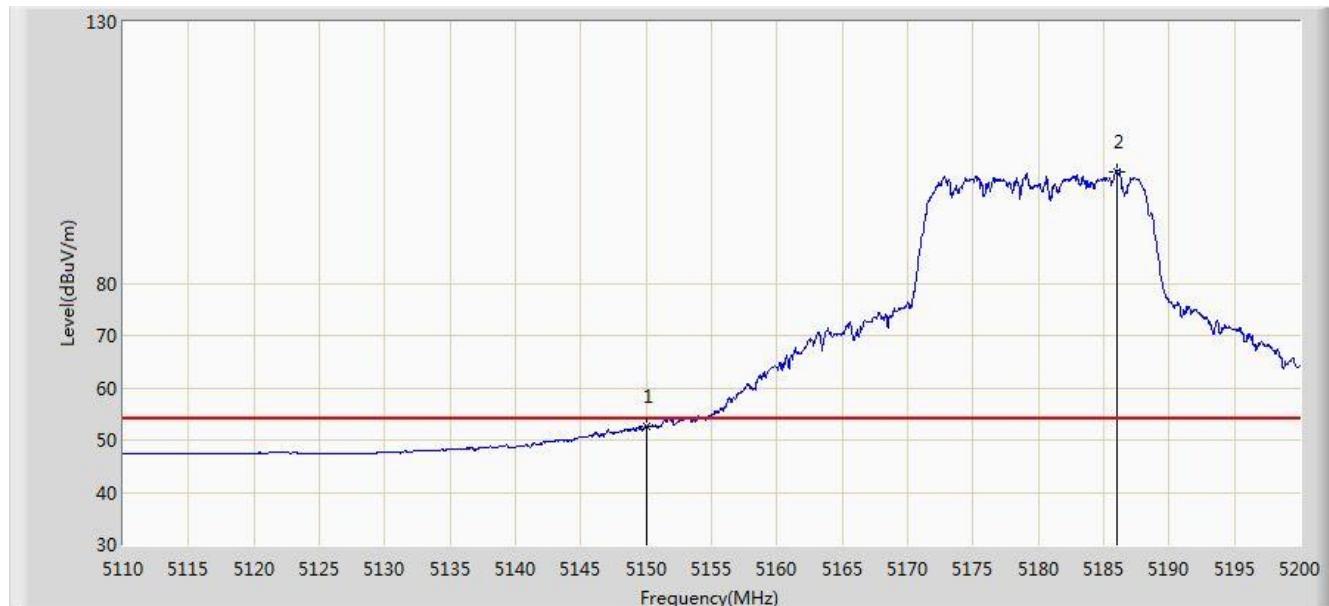


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5149.555	73.484	70.413	-0.516	74.000	3.071	PK
2			5150.000	70.721	67.651	-3.279	74.000	3.069	PK
3	*	*	5183.395	114.098	111.065	N/A	N/A	3.033	PK

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

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

Site: AC2	Time: 2016/05/25 - 20:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz	

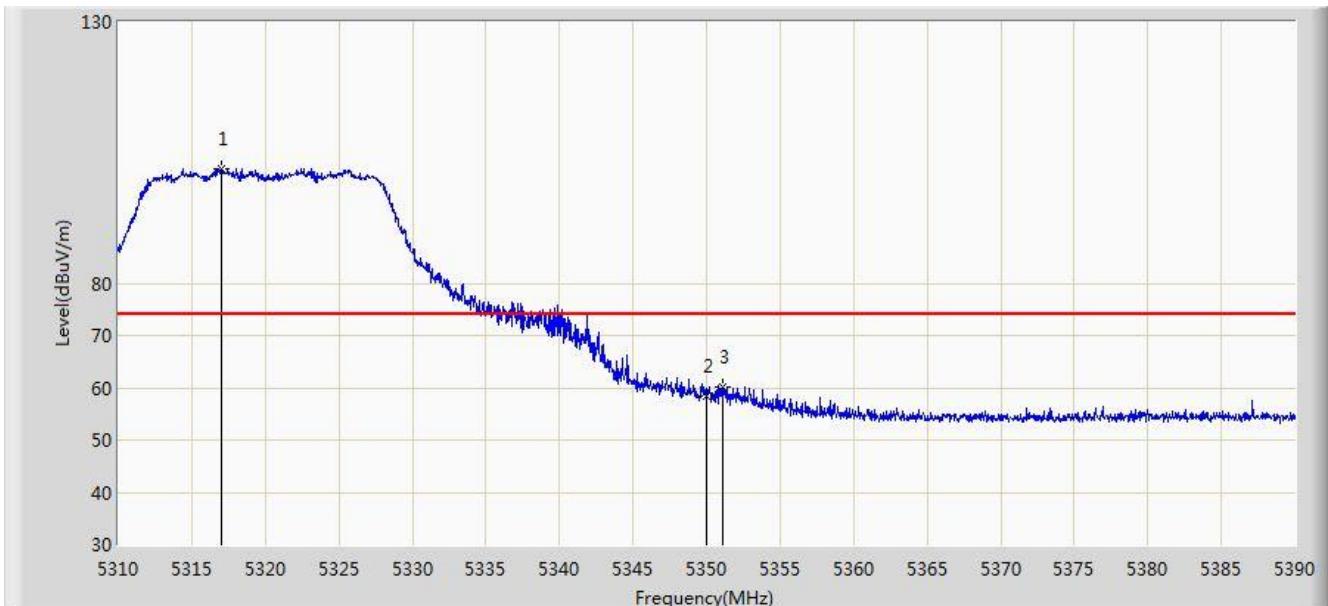


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.558	49.488	-1.442	54.000	3.069	AV
2		*	5185.960	101.431	98.429	N/A	N/A	3.002	AV

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

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

Site: AC2	Time: 2016/05/25 - 20:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

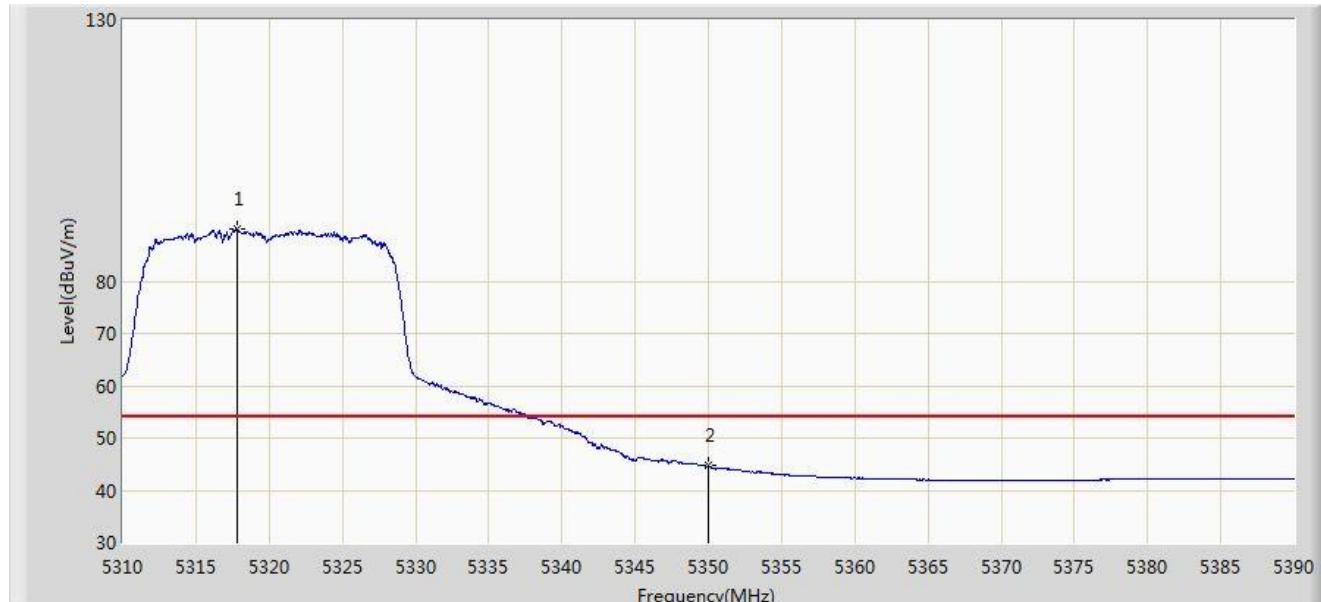


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*		5317.040	101.898	99.254	N/A	N/A	2.643	PK
2			5350.000	58.497	55.800	-15.503	74.000	2.697	PK
3			5351.120	60.284	57.583	-13.716	74.000	2.701	PK

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

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

Site: AC2	Time: 2016/05/25 - 20:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

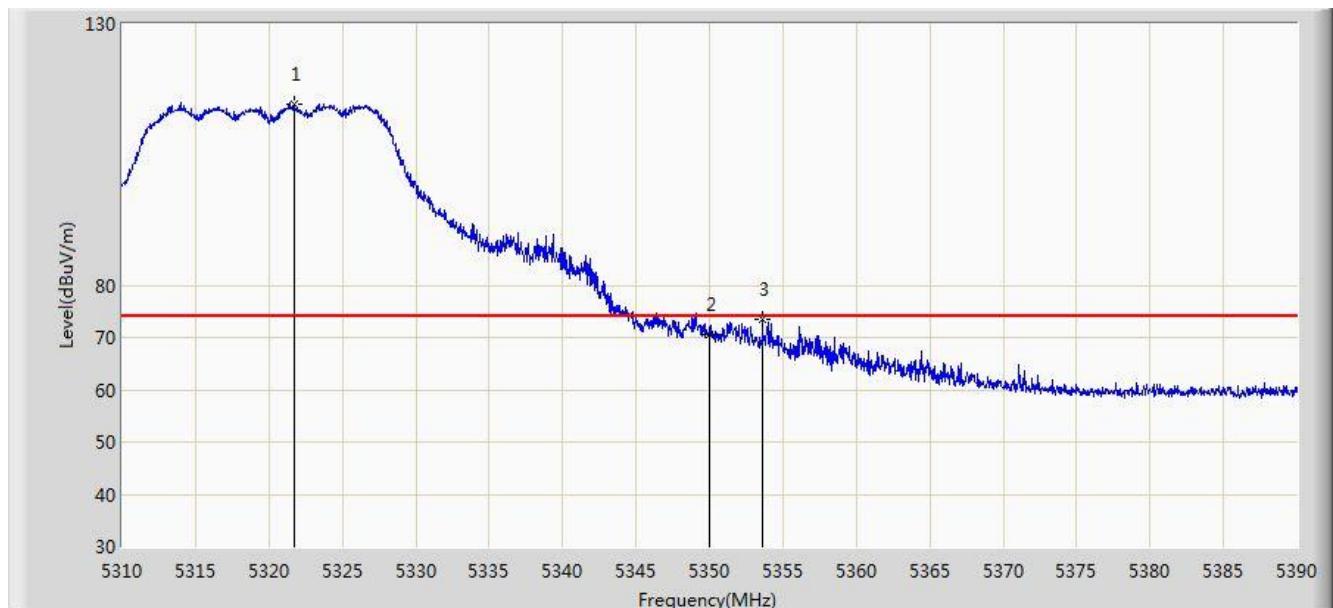


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	5317.800	89.881	87.230	N/A	N/A	2.651	AV
2			5350.000	44.645	41.948	-9.355	54.000	2.697	AV

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

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

Site: AC2	Time: 2016/05/25 - 20:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

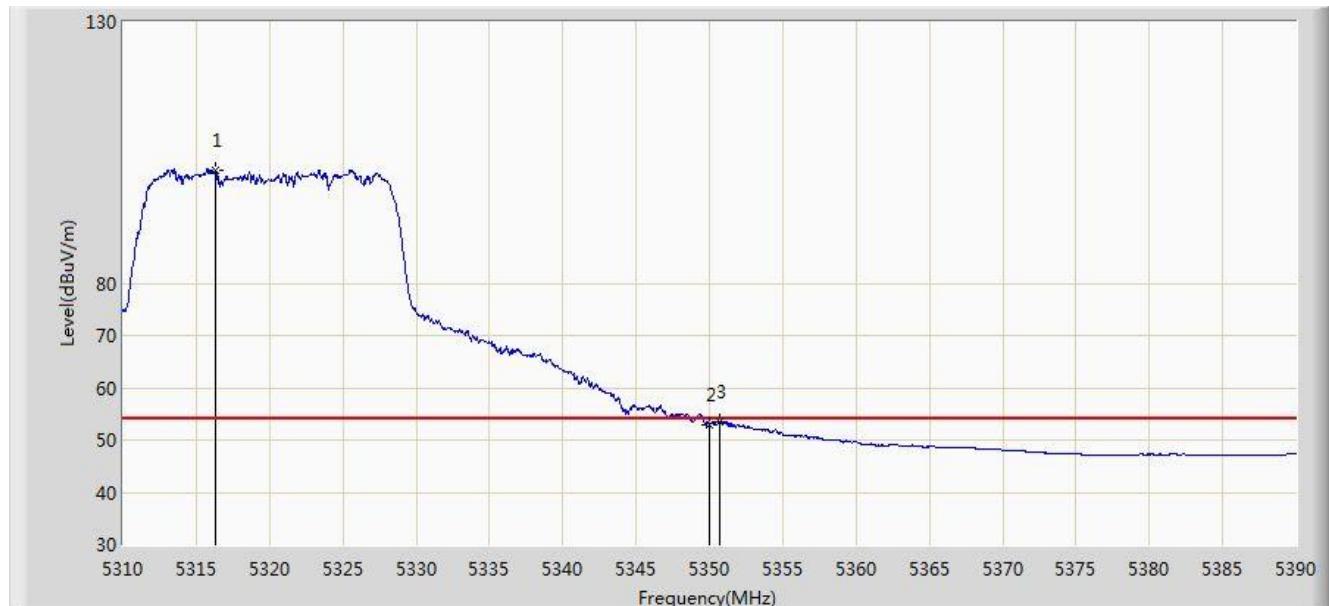


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	5321.680	114.765	112.096	N/A	N/A	2.669	PK
2			5350.000	70.468	67.771	-3.532	74.000	2.697	PK
3			5353.600	73.347	70.639	-0.653	74.000	2.708	PK

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

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

Site: AC2	Time: 2016/05/25 - 20:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

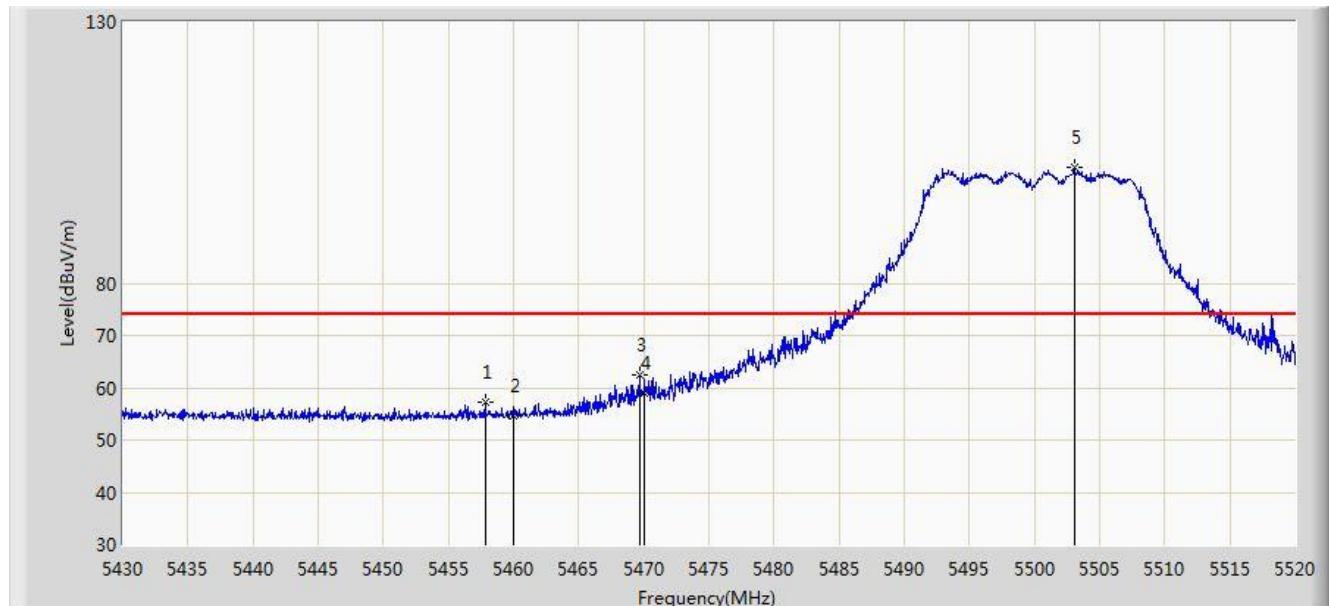


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5316.360	101.610	98.972	N/A	N/A	2.638	AV
2			5350.000	52.932	50.235	-1.068	54.000	2.697	AV
3			5350.720	53.518	50.818	-0.482	54.000	2.700	AV

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

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

Site: AC2	Time: 2016/05/25 - 20:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

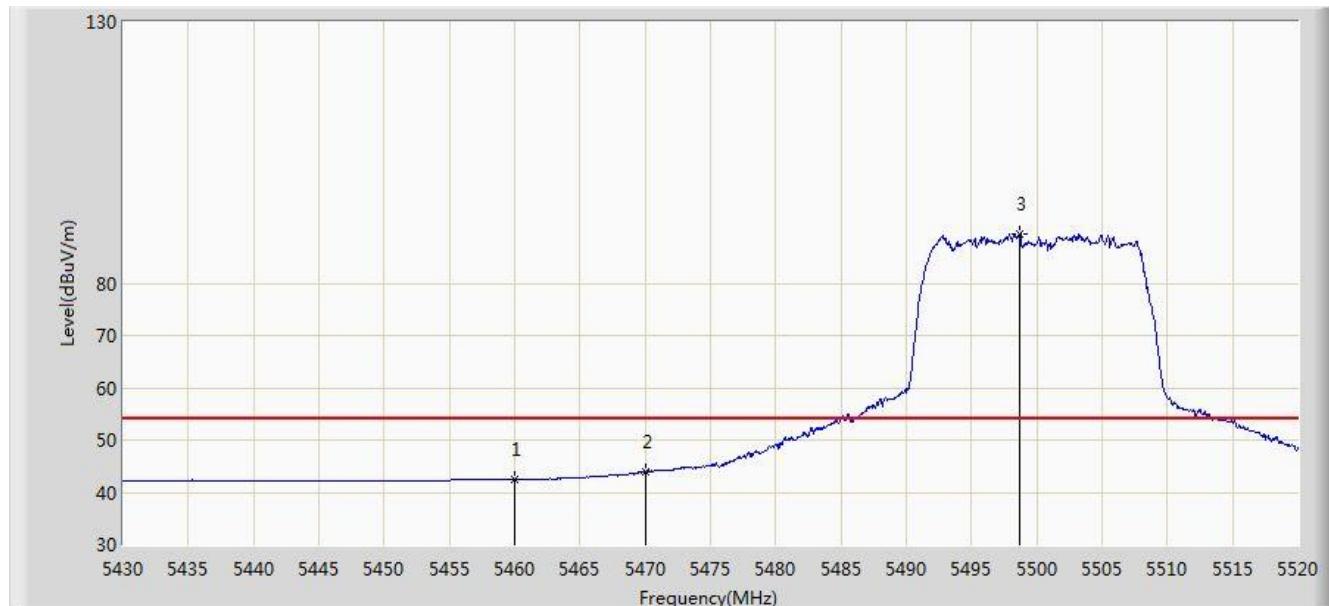


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5457.850	57.311	54.190	-16.689	74.000	3.121	PK
2			5460.000	54.567	51.374	-19.433	74.000	3.194	PK
3			5469.650	62.477	58.960	-11.523	74.000	3.518	PK
4			5470.000	59.093	55.564	-14.907	74.000	3.529	PK
5	*		5503.050	102.262	99.178	N/A	N/A	3.085	PK

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

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

Site: AC2	Time: 2016/05/25 - 20:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

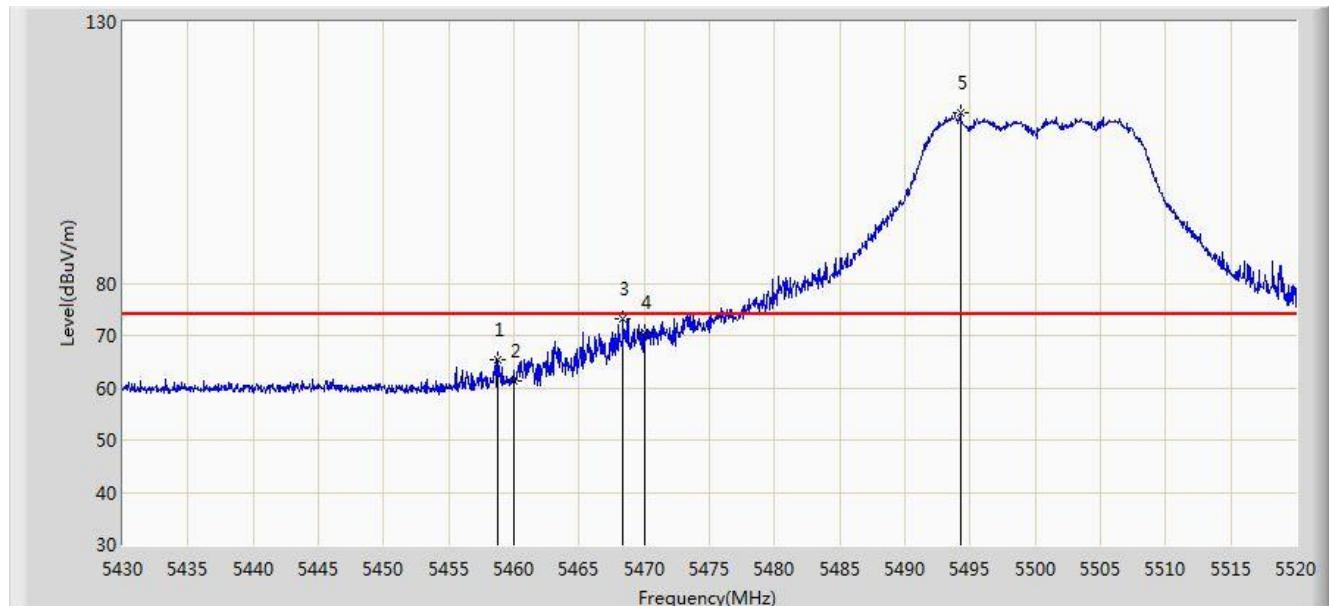


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5460.000	42.479	39.286	-11.521	54.000	3.194	AV
2			5470.000	43.786	40.257	-10.214	54.000	3.529	AV
3	*		5498.700	89.491	86.365	N/A	N/A	3.126	AV

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

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

Site: AC2	Time: 2016/05/25 - 20:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

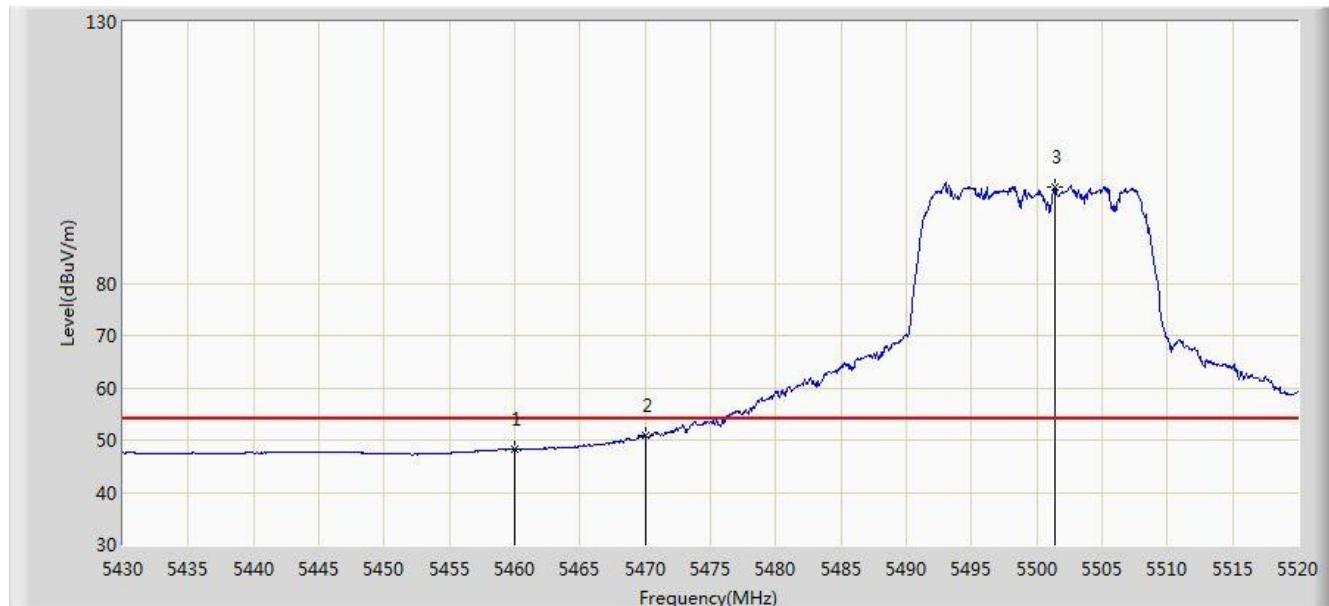


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5458.800	65.473	62.320	-8.527	74.000	3.153	PK
2			5460.000	61.350	58.157	-12.650	74.000	3.194	PK
3			5468.400	73.178	69.703	-0.822	74.000	3.476	PK
4			5470.000	70.709	67.180	-3.291	74.000	3.529	PK
5	*		5494.250	112.571	109.403	N/A	N/A	3.169	PK

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

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

Site: AC2	Time: 2016/05/25 - 20:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

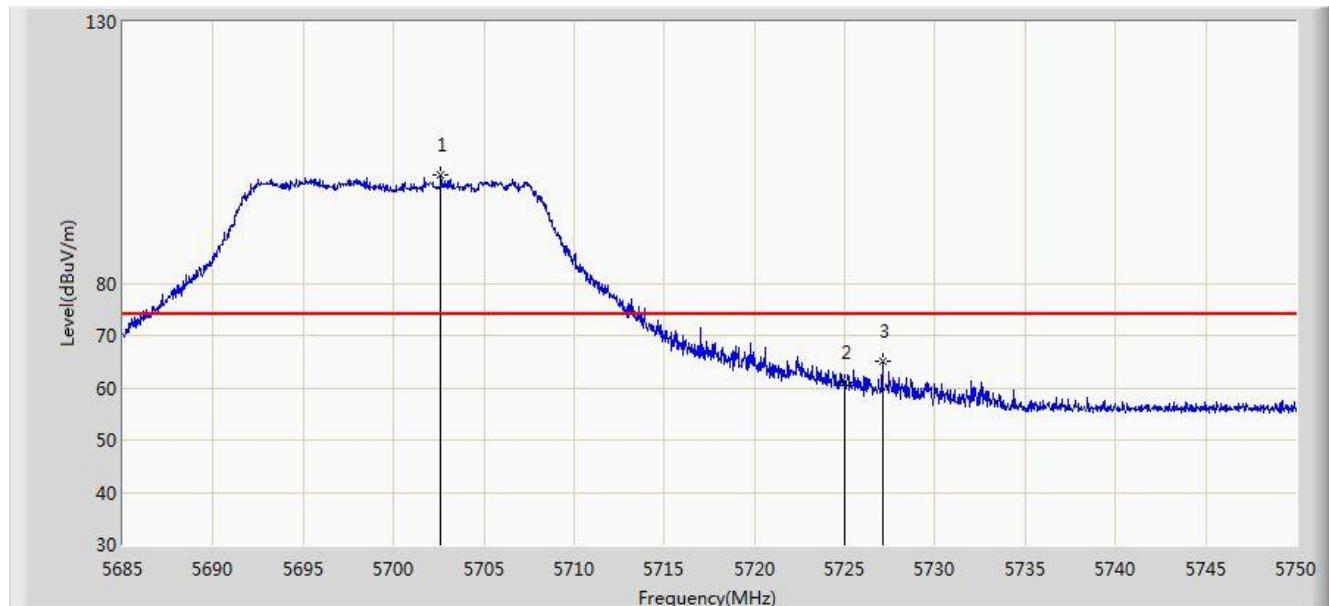


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5460.000	48.280	45.087	-5.720	54.000	3.194	AV
2			5470.000	50.754	47.225	-3.246	54.000	3.529	AV
3	*		5501.400	98.517	95.417	N/A	N/A	3.100	AV

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

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

Site: AC2	Time: 2016/05/25 - 20:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless-A/B/G/N Network Mini PCIe Adapter	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5700MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	5702.615	100.826	96.914	N/A	N/A	3.911	PK
2			5725.000	60.994	56.888	-13.006	74.000	4.105	PK
3			5727.087	65.059	60.901	-8.941	74.000	4.158	PK

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

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