

7.6. Frequency Stability Measurement

7.6.1. 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.

7.6.2. Test Procedure Used

Frequency Stability Under Temperature Variations:

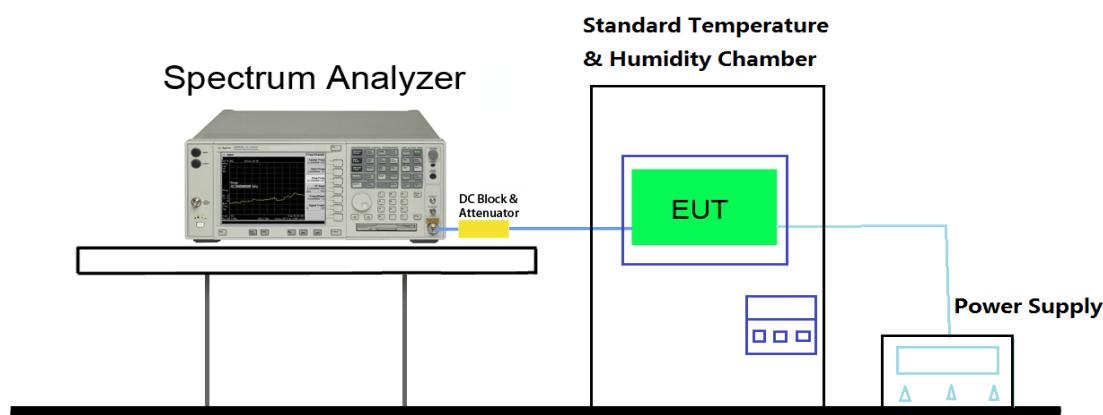
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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.

7.6.3. Test Setup



7.6.4. Test Result

Test Engineer	Milo Li	Temperature	-20 ~ 50°C
Test Time	06-20-2015	Relative Humidity	52%RH
Test Mode	802.11a	Test Channel	5320MHz

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 20	4.09	4.12	4.20	4.19
		- 10	4.13	4.11	4.15	4.20
		0	4.11	4.07	4.05	4.10
		+ 10	4.21	4.11	4.15	4.13
		+ 20 (Ref)	4.31	4.31	4.35	4.30
		+ 30	4.32	4.35	4.29	4.31
		+ 40	4.33	4.31	4.34	4.25
		+ 50	4.28	4.31	4.35	4.29
115%	138	+ 20	4.30	4.31	4.33	4.30
85%	102	+ 20	4.35	4.37	4.23	4.31

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

7.7. Radiated Spurious Emission Measurement

7.7.1. 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

7.7.2. Test Procedure Used

KDB 789033 D02v01 – Section G

7.7.3. Test Setting

Peak Measurements above 1GHz

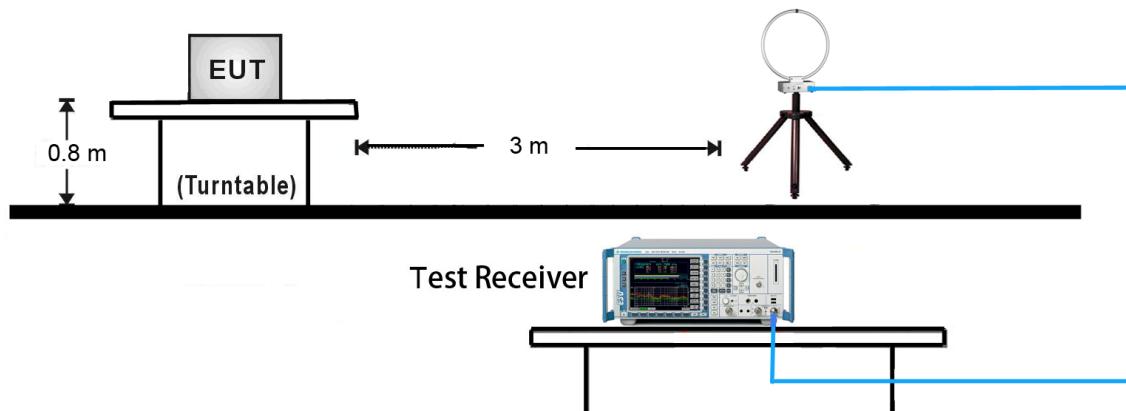
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

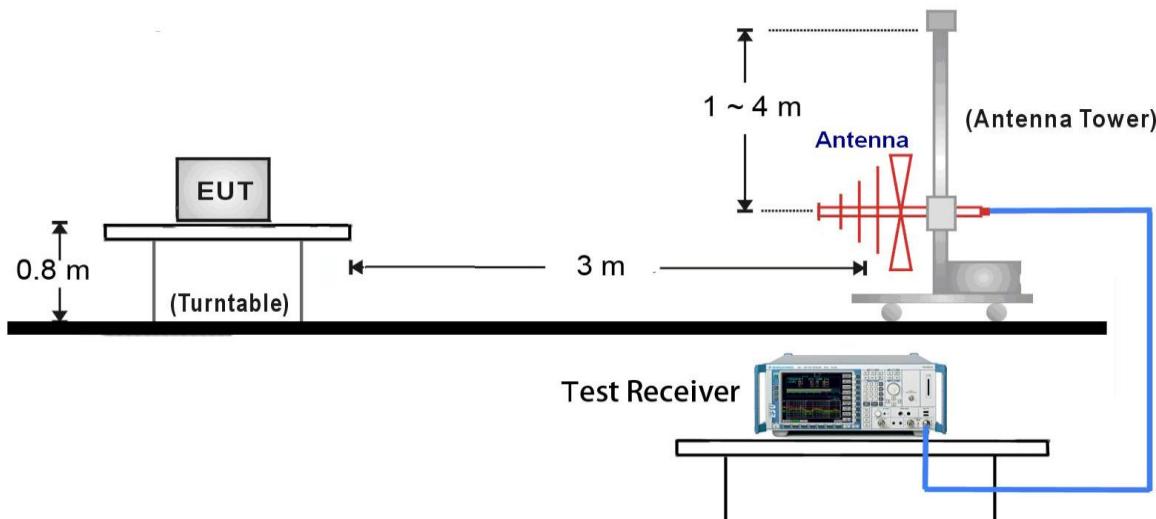
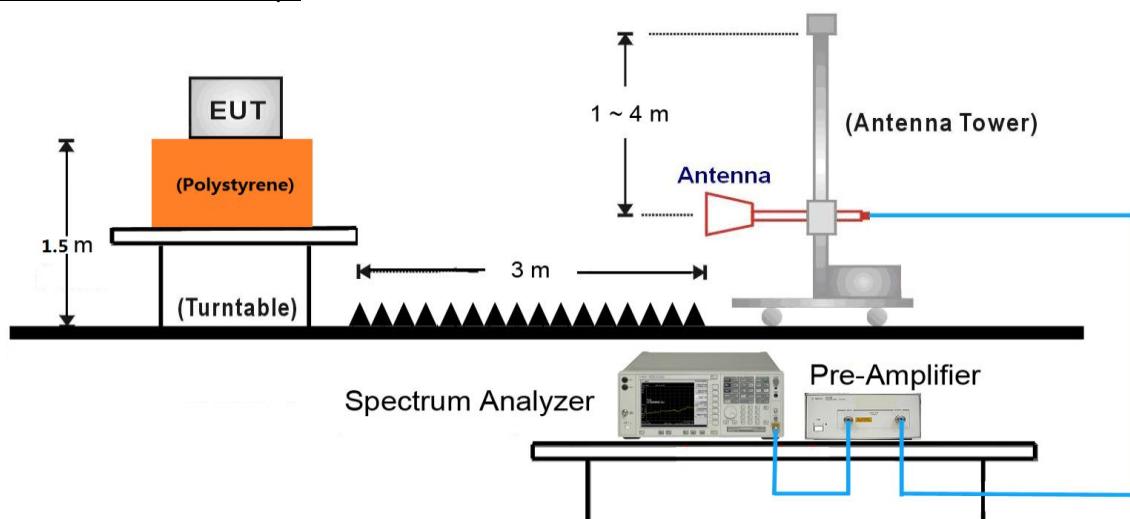
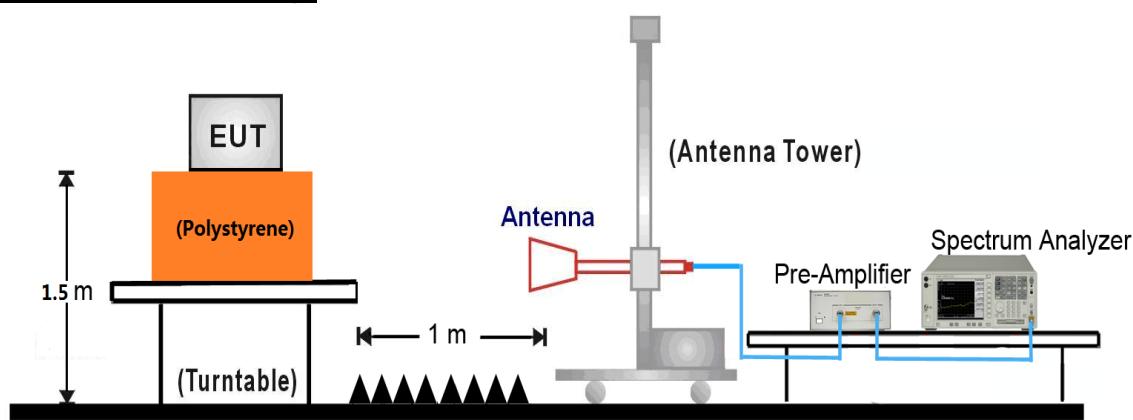
Quasi-Peak Measurements below 1GHz

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 x span/RBW)
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

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

30MHz ~ 1GHz Test Setup:

1GHz ~18GHz Test Setup:

18GHz ~40GHz Test Setup:


7.7.5. Test Result

Test Mode:	802.11a	Test Site:	AC1
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
*	8718.0	36.4	9.0	45.4	68.2	-22.8	PK	Horizontal
	9330.0	35.9	10.4	46.3	74.0	-27.7	PK	Horizontal
*	10358.5	41.2	12.2	53.4	68.2	-14.8	PK	Horizontal
	11548.5	35.8	12.7	48.5	74.0	-25.5	PK	Horizontal
*	8845.5	36.4	9.1	45.5	68.2	-22.7	PK	Vertical
	9347.0	35.9	10.5	46.4	74.0	-27.6	PK	Vertical
*	10358.5	44.0	12.2	56.2	68.2	-12.0	PK	Vertical
	10360.3	31.2	12.2	43.4	54.0	-10.6	AV	Vertical
	11633.5	35.9	12.4	48.3	74.0	-25.7	PK	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:	AC1
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
*	7963.5	36.9	8.6	45.5	68.2	-22.7	PK	Horizontal
	9452.4	35.2	10.5	45.7	74.0	-28.3	PK	Horizontal
*	10443.5	40.1	12.0	52.1	68.2	-16.1	PK	Horizontal
	11426.0	34.9	12.6	47.5	74.0	-26.5	PK	Horizontal
*	7982.4	36.7	8.7	45.4	68.2	-22.8	PK	Vertical
	9185.4	33.8	10.0	43.8	74.0	-30.2	PK	Vertical
*	10443.5	40.1	12.0	52.1	68.2	-16.1	PK	Vertical
	11547.4	35.0	12.7	47.7	74.0	-26.3	PK	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:	AC1
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
*	7953.3	36.3	8.6	44.9	68.2	-23.3	PK	Horizontal
	9142.4	33.9	9.8	43.7	74.0	-30.3	PK	Horizontal
*	10486.0	41.6	12.3	53.9	68.2	-14.3	PK	Horizontal
	11482.3	35.4	12.7	48.1	74.0	-25.9	PK	Horizontal
*	7952.9	36.5	8.6	45.1	68.2	-23.1	PK	Vertical
	9142.4	34.8	9.8	44.6	74.0	-29.4	PK	Vertical
*	10486.0	41.6	12.3	53.9	68.2	-14.3	PK	Vertical
	11625.0	37.3	12.5	49.8	74.0	-24.2	PK	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:	AC1
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
*	7953.3	36.5	8.6	45.1	68.2	-23.1	PK	Horizontal
	9452.3	35.5	10.5	46.0	74.0	-28.0	PK	Horizontal
*	10520.0	44.9	12.4	57.3	68.2	-10.9	PK	Horizontal
	11506.0	36.5	12.8	49.3	74.0	-24.7	PK	Horizontal
*	7842.7	36.3	8.4	44.7	68.2	-23.5	PK	Vertical
	9143.0	34.7	9.8	44.5	74.0	-29.5	PK	Vertical
*	10520.0	44.3	12.4	56.7	68.2	-11.5	PK	Vertical
	11592.4	35.0	12.6	47.6	74.0	-26.4	PK	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:	AC1
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
*	7987.0	37.1	8.7	45.9	68.2	-22.3	PK	Horizontal
	9420.6	34.1	10.6	44.7	74.0	-29.3	PK	Horizontal
*	10605.0	43.2	12.4	55.6	68.2	-12.6	PK	Horizontal
	11483.0	35.0	12.7	47.7	74.0	-26.3	PK	Horizontal
*	7985.4	36.2	8.7	44.9	68.2	-23.3	PK	Vertical
	10605.0	46.2	12.4	58.6	74.0	-15.4	PK	Vertical
*	10605.2	33.3	12.4	45.7	54.0	-8.3	AV	Vertical
	12745.3	34.4	11.7	46.1	68.2	-22.1	PK	Vertical
	13326.4	34.5	13.4	47.9	74.0	-26.1	PK	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:	AC1
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
*	7953.3	37.8	8.6	46.4	68.2	-21.8	PK	Horizontal
	9142.3	34.8	9.8	44.6	74.0	-29.4	PK	Horizontal
*	9653.5	34.8	11.0	45.8	68.2	-22.4	PK	Horizontal
	10638.7	32.4	12.3	44.7	54.0	-9.3	AV	Horizontal
	10639.0	44.1	12.3	56.4	74.0	-17.6	PK	Horizontal
*	7853.3	36.0	8.4	44.4	68.2	-23.8	PK	Vertical
	9142.4	34.3	9.8	44.1	74.0	-29.9	PK	Vertical
*	9653.3	35.1	11.0	46.1	68.2	-22.1	PK	Vertical
	10638.8	31.9	12.3	44.2	54.0	-9.8	AV	Vertical
	10639.0	43.7	12.3	56.0	74.0	-18.0	PK	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:	AC1
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
*	7852.4	36.0	8.4	44.4	68.2	-23.8	PK	Horizontal
	9142.4	34.2	9.8	44.0	74.0	-30.0	PK	Horizontal
*	9635.5	34.6	11.0	45.6	68.2	-22.6	PK	Horizontal
	11642.0	38.0	12.4	50.4	74.0	-23.6	PK	Horizontal
*	7332.5	38.5	8.0	46.5	68.2	-21.7	PK	Vertical
	9142.7	33.9	9.8	43.7	74.0	-30.3	PK	Vertical
*	9653.3	34.8	11.0	45.8	68.2	-22.4	PK	Vertical
	10996.0	38.1	13.0	51.1	74.0	-22.9	PK	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:	AC1
Test Channel:	116	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
*	7963.5	35.6	8.6	44.2	68.2	-24.0	PK	Horizontal
	9142.4	35.1	9.8	44.9	74.0	-29.1	PK	Horizontal
*	10520.0	46.3	12.4	58.7	68.2	-9.5	PK	Horizontal
	11625.0	37.1	12.5	49.6	74.0	-24.4	PK	Horizontal
*	8735.0	36.2	8.9	45.1	68.2	-23.1	PK	Vertical
	9185.4	33.7	10.0	43.7	74.0	-30.3	PK	Vertical
*	10358.5	44.5	12.2	56.7	68.2	-11.5	PK	Vertical
	11426.8	34.8	12.6	47.4	74.0	-26.6	PK	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:	AC1
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
*	7853.7	35.8	8.4	44.2	68.2	-24.0	PK	Horizontal
	9142.6	33.8	9.8	43.6	74.0	-30.4	PK	Horizontal
*	9653.9	35.4	11.0	46.4	68.2	-21.8	PK	Horizontal
	11200.0	39.4	12.5	51.9	74.0	-22.1	PK	Horizontal
*	7853.4	35.4	8.4	43.8	68.2	-24.4	PK	Vertical
	9142.7	34.4	9.8	44.2	74.0	-29.8	PK	Vertical
*	9628.2	35.2	11.0	46.2	68.2	-22.0	PK	Vertical
	11200.0	41.3	12.5	53.8	74.0	-20.2	PK	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:	AC1
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
*	7953.3	37.6	8.6	46.2	68.2	-22.0	PK	Horizontal
	9142.4	34.7	9.8	44.5	74.0	-29.5	PK	Horizontal
*	9653.3	34.8	11.0	45.8	68.2	-22.4	PK	Horizontal
	11395.5	38.6	12.6	51.2	74.0	-22.8	PK	Horizontal
*	7142.2	35.6	7.7	43.3	68.2	-24.9	PK	Vertical
	7596.0	38.8	8.1	46.9	74.0	-27.1	PK	Vertical
*	9635.3	35.0	11.0	46.0	68.2	-22.2	PK	Vertical
	11404.0	39.1	12.6	51.7	74.0	-22.3	PK	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:	AC1
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
*	7978.5	37.8	8.7	46.5	68.2	-21.7	PK	Horizontal
	9142.4	34.5	9.8	44.3	74.0	-29.7	PK	Horizontal
*	9653.3	34.9	11.0	45.9	68.2	-22.3	PK	Horizontal
	11447.1	35.9	12.7	48.6	74.0	-25.4	PK	Horizontal
*	7953.3	36.8	8.6	45.4	68.2	-22.8	PK	Vertical
	9355.5	37.0	10.5	47.5	74.0	-26.5	PK	Vertical
*	12742.3	35.3	11.7	47.0	68.2	-21.2	PK	Vertical
	13325.2	35.7	13.4	49.1	74.0	-24.9	PK	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:	AC1
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
*	7142.3	36.9	7.7	44.6	68.2	-23.6	PK	Horizontal
	7715.0	39.4	8.0	47.4	74.0	-26.6	PK	Horizontal
*	9253.7	35.9	10.2	46.1	68.2	-22.1	PK	Horizontal
	11455.0	37.4	12.7	50.1	74.0	-23.9	PK	Horizontal
*	7142.3	36.5	7.7	44.2	68.2	-24.0	PK	Vertical
	7715.0	39.0	8.0	47.0	74.0	-27.0	PK	Vertical
*	9253.8	34.4	10.2	44.6	68.2	-23.6	PK	Vertical
	11463.5	36.5	12.7	49.2	74.0	-24.8	PK	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:	AC1
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
*	7766.0	40.9	8.2	49.1	68.2	-19.1	PK	Horizontal
	9142.4	35.3	9.8	45.1	74.0	-28.9	PK	Horizontal
*	9625.4	36.0	10.9	46.9	68.2	-21.3	PK	Horizontal
	11426.0	36.1	12.6	48.7	74.0	-25.3	PK	Horizontal
*	7766.0	39.2	8.2	47.4	68.2	-20.8	PK	Vertical
	9425.7	34.6	10.6	45.2	74.0	-28.8	PK	Vertical
*	9685.2	34.1	10.9	45.0	68.2	-23.2	PK	Vertical
	11477.3	35.3	12.7	48.0	74.0	-26.0	PK	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:	AC1
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
*	7843.0	36.1	8.4	44.5	68.2	-23.7	PK	Horizontal
	9425.3	35.2	10.6	45.8	74.0	-28.2	PK	Horizontal
*	10358.5	41.0	12.2	53.2	68.2	-15.0	PK	Horizontal
	11869.0	35.1	11.8	46.9	74.0	-27.1	PK	Horizontal
*	7845.3	36.6	8.4	45.0	68.2	-23.2	PK	Vertical
	9142.4	35.0	9.8	44.8	74.0	-29.2	PK	Vertical
*	10358.5	42.5	12.2	54.7	68.2	-13.5	PK	Vertical
	11842.3	34.2	11.9	46.1	74.0	-27.9	PK	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:	AC1
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
*	7852.7	35.2	8.4	43.6	68.2	-24.6	PK	Horizontal
	9142.3	34.6	9.8	44.4	74.0	-29.6	PK	Horizontal
*	10350.0	41.3	12.2	53.5	68.2	-14.7	PK	Horizontal
	11472.7	35.3	12.7	48.0	74.0	-26.0	PK	Horizontal
*	7953.3	37.3	8.6	45.9	68.2	-22.3	PK	Vertical
	9355.5	36.4	10.5	46.9	74.0	-27.1	PK	Vertical
*	10443.5	42.5	12.0	54.5	68.2	-13.7	PK	Vertical
	11999.0	36.5	11.9	48.4	74.0	-25.6	PK	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:	AC1
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
*	7953.3	36.7	8.6	45.3	68.2	-22.9	PK	Horizontal
	9147.8	34.5	9.8	44.3	74.0	-29.7	PK	Horizontal
*	10477.5	39.7	12.2	51.9	68.2	-16.3	PK	Horizontal
	11923.7	35.5	11.8	47.3	74.0	-26.7	PK	Horizontal
*	7952.9	37.5	8.6	46.1	68.2	-22.1	PK	Vertical
	9142.9	35.2	9.8	45.0	74.0	-29.0	PK	Vertical
*	10469.0	42.0	12.1	54.1	68.2	-14.1	PK	Vertical
	11577.9	36.2	12.6	48.8	74.0	-25.2	PK	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:	AC1
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
*	7985.3	36.0	8.7	44.7	68.2	-23.5	PK	Horizontal
	9364.0	36.5	10.5	47.0	74.0	-27.0	PK	Horizontal
*	10520.0	45.8	12.4	58.2	68.2	-10.0	PK	Horizontal
	11616.5	36.9	12.5	49.4	74.0	-24.6	PK	Horizontal
*	8004.0	37.4	8.7	46.1	68.2	-22.1	PK	Vertical
	9321.5	35.8	10.4	46.2	74.0	-27.8	PK	Vertical
*	10528.5	45.6	12.5	58.1	68.2	-10.1	PK	Vertical
	11463.5	36.9	12.7	49.6	74.0	-24.4	PK	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:	AC1
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
*	7953.3	36.8	8.6	45.4	68.2	-22.8	PK	Horizontal
	9452.3	34.3	10.5	44.8	74.0	-29.2	PK	Horizontal
*	10596.5	45.2	12.4	57.6	68.2	-10.6	PK	Horizontal
	11547.3	35.0	12.7	47.7	74.0	-26.3	PK	Horizontal
*	7953.3	36.6	8.6	45.2	68.2	-23.0	PK	Vertical
	9452.8	34.7	10.5	45.2	74.0	-28.8	PK	Vertical
*	10596.5	44.7	12.4	57.1	68.2	-11.1	PK	Vertical
	11542.8	35.6	12.7	48.3	74.0	-25.7	PK	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:	AC1
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
*	7952.4	36.7	8.6	45.3	68.2	-22.9	PK	Horizontal
	9452.8	34.2	10.5	44.7	74.0	-29.3	PK	Horizontal
*	10639.0	42.8	12.3	55.1	68.2	-13.1	PK	Horizontal
	11473.0	35.0	12.7	47.7	74.0	-26.3	PK	Horizontal
*	7953.3	36.5	8.6	45.1	68.2	-23.1	PK	Vertical
	9142.6	34.7	9.8	44.5	74.0	-29.5	PK	Vertical
*	9652.3	34.8	11.0	45.8	68.2	-22.4	PK	Vertical
	10639.0	41.8	12.3	54.1	74.0	-19.9	PK	Vertical
	10639.2	29.4	12.3	41.7	54.0	-12.3	AV	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:	AC1
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
*	7953.3	36.7	8.6	45.3	68.2	-22.9	PK	Horizontal
	9142.3	34.0	9.8	43.8	74.0	-30.2	PK	Horizontal
*	9632.3	34.7	11.0	45.7	68.2	-22.5	PK	Horizontal
	11472.2	35.7	12.7	48.4	74.0	-25.6	PK	Horizontal
*	8633.0	37.8	8.8	46.6	68.2	-21.6	PK	Vertical
	9425.4	34.3	10.6	44.9	74.0	-29.1	PK	Vertical
*	9635.7	34.6	11.0	45.6	68.2	-22.6	PK	Vertical
	11454.2	34.9	12.7	47.6	74.0	-26.4	PK	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:	AC1
Test Channel:	116	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
*	7952.2	36.9	8.6	45.5	68.2	-22.7	PK	Horizontal
	9142.3	34.6	9.8	44.4	74.0	-29.6	PK	Horizontal
*	9645.3	35.3	11.0	46.3	68.2	-21.9	PK	Horizontal
	11540.0	36.6	12.7	49.3	74.0	-24.7	PK	Horizontal
*	7948.5	35.7	8.6	44.3	68.2	-23.9	PK	Vertical
	9142.3	33.1	9.8	42.9	74.0	-31.1	PK	Vertical
*	9652.3	33.9	11.0	44.9	68.2	-23.3	PK	Vertical
	11565.5	36.1	12.7	48.8	74.0	-25.2	PK	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:	AC1
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
*	7925.2	35.8	8.5	44.3	68.2	-23.9	PK	Horizontal
	9142.3	33.9	9.8	43.7	74.0	-30.3	PK	Horizontal
*	9625.3	34.7	10.9	45.6	68.2	-22.6	PK	Horizontal
	11200.0	39.6	12.5	52.1	74.0	-21.9	PK	Horizontal
*	7985.3	36.0	8.7	44.7	68.2	-23.5	PK	Vertical
	9142.3	34.1	9.8	43.9	74.0	-30.1	PK	Vertical
*	9625.3	34.2	10.9	45.1	68.2	-23.1	PK	Vertical
	11200.0	40.6	12.5	53.1	74.0	-20.9	PK	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:	AC1
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
*	7952.4	36.6	8.6	45.2	68.2	-23.0	PK	Horizontal
	9142.9	33.8	9.8	43.6	74.0	-30.4	PK	Horizontal
*	9652.2	34.5	11.0	45.5	68.2	-22.7	PK	Horizontal
	11404.0	37.3	12.6	49.9	74.0	-24.1	PK	Horizontal
*	7125.7	36.3	7.6	43.9	68.2	-24.3	PK	Vertical
	9142.9	34.1	9.8	43.9	74.0	-30.1	PK	Vertical
*	9655.7	35.3	11.0	46.3	68.2	-21.9	PK	Vertical
	11395.5	37.0	12.6	49.6	74.0	-24.4	PK	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:	AC1
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
*	7862.3	35.6	8.4	44.0	68.2	-24.2	PK	Horizontal
	9142.8	33.5	9.8	43.3	74.0	-30.7	PK	Horizontal
*	9685.7	34.3	10.9	45.2	68.2	-23.0	PK	Horizontal
	11625.0	36.6	12.5	49.1	74.0	-24.9	PK	Horizontal
*	8735.0	36.9	8.9	45.8	68.2	-22.4	PK	Vertical
	9142.3	33.9	9.8	43.7	74.0	-30.3	PK	Vertical
*	9653.3	35.0	11.0	46.0	68.2	-22.2	PK	Vertical
	11426.3	34.2	12.6	46.8	74.0	-27.2	PK	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:	AC1
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
*	7985.8	36.2	8.7	44.9	68.2	-23.3	PK	Horizontal
	9147.3	34.1	9.8	43.9	74.0	-30.1	PK	Horizontal
*	9684.0	34.5	10.9	45.4	68.2	-22.8	PK	Horizontal
	11455.0	35.8	12.7	48.5	74.0	-25.5	PK	Horizontal
*	7892.6	35.7	8.3	44.0	68.2	-24.2	PK	Vertical
	9142.6	34.0	9.8	43.8	74.0	-30.2	PK	Vertical
*	9625.4	34.4	10.9	45.3	68.2	-22.9	PK	Vertical
	11480.5	36.3	12.7	49.0	74.0	-25.0	PK	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:	AC1
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
*	7982.3	36.3	8.7	45.0	68.2	-23.2	PK	Horizontal
	9142.3	34.1	9.8	43.9	74.0	-30.1	PK	Horizontal
*	9653.3	34.1	11.0	45.1	68.2	-23.1	PK	Horizontal
	11489.0	36.6	12.8	49.4	74.0	-24.6	PK	Horizontal
*	7912.0	36.7	8.4	45.1	68.2	-23.1	PK	Vertical
	9142.3	34.7	9.8	44.5	74.0	-29.5	PK	Vertical
*	9653.7	34.3	11.0	45.3	68.2	-22.9	PK	Vertical
	11047.0	36.0	12.9	48.9	74.0	-25.1	PK	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:	AC1
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
*	8652.3	36.5	8.8	45.3	68.2	-22.9	PK	Horizontal
	9125.3	35.0	9.6	44.6	74.0	-29.4	PK	Horizontal
*	10375.5	41.3	12.2	53.5	68.2	-14.7	PK	Horizontal
	11582.3	36.5	12.6	49.1	74.0	-24.9	PK	Horizontal
*	7985.3	36.6	8.7	45.3	68.2	-22.9	PK	Vertical
	9153.3	34.4	9.8	44.2	74.0	-29.8	PK	Vertical
*	10384.0	42.5	12.3	54.8	68.2	-13.4	PK	Vertical
	11472.7	35.6	12.7	48.3	74.0	-25.7	PK	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:	AC1
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
*	7852.4	35.8	8.4	44.2	68.2	-24.0	PK	Horizontal
	9142.3	35.7	9.8	45.5	74.0	-28.5	PK	Horizontal
*	10452.0	40.0	12.0	52.0	68.2	-16.2	PK	Horizontal
	11542.0	35.4	12.7	48.1	74.0	-25.9	PK	Horizontal
*	7982.4	36.5	8.7	45.2	68.2	-23.0	PK	Vertical
	9381.0	36.2	10.5	46.7	74.0	-27.3	PK	Vertical
*	10460.5	42.1	12.1	54.2	68.2	-14.0	PK	Vertical
	11667.5	37.5	12.2	49.7	74.0	-24.3	PK	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:	AC1
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
*	7952.2	36.5	8.6	45.1	68.2	-23.1	PK	Horizontal
	9152.3	34.1	9.8	43.9	74.0	-30.1	PK	Horizontal
*	10545.5	40.4	12.5	52.9	68.2	-15.3	PK	Horizontal
	11421.3	35.0	12.6	47.6	74.0	-26.4	PK	Horizontal
*	7985.3	36.9	8.7	45.6	68.2	-22.6	PK	Vertical
	9452.6	35.4	10.5	45.9	74.0	-28.1	PK	Vertical
*	10520.0	41.2	12.4	53.6	68.2	-14.6	PK	Vertical
	11426.8	35.2	12.6	47.8	74.0	-26.2	PK	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:	AC1
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
*	8005.0	36.6	8.7	45.3	68.2	-22.9	PK	Horizontal
	9457.0	35.3	10.5	45.8	74.0	-28.2	PK	Horizontal
*	9653.3	35.4	11.0	46.4	68.2	-21.8	PK	Horizontal
	11842.5	34.3	11.9	46.2	74.0	-27.8	PK	Horizontal
*	7142.3	36.7	7.7	44.4	68.2	-23.8	PK	Vertical
	8356.3	35.3	8.0	43.3	74.0	-30.7	PK	Vertical
*	9653.3	35.3	11.0	46.3	68.2	-21.9	PK	Vertical
	10605.0	38.1	12.4	50.5	74.0	-23.5	PK	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:	AC1
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
*	7985.3	36.4	8.7	45.1	68.2	-23.1	PK	Horizontal
	9140.3	34.0	9.7	43.7	74.0	-30.3	PK	Horizontal
*	9653.3	34.4	11.0	45.4	68.2	-22.8	PK	Horizontal
	11472.0	36.7	12.7	49.4	74.0	-24.6	PK	Horizontal
*	7970.0	38.5	8.6	47.1	68.2	-21.1	PK	Vertical
	9425.3	35.0	10.6	45.6	74.0	-28.4	PK	Vertical
*	9658.3	35.2	11.0	46.2	68.2	-22.0	PK	Vertical
	11472.4	36.2	12.7	48.9	74.0	-25.1	PK	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:	AC1
Test Channel:	110	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
*	7984.3	36.1	8.7	44.8	68.2	-23.4	PK	Horizontal
	9143.7	34.5	9.8	44.3	74.0	-29.7	PK	Horizontal
*	9865.3	34.7	11.6	46.3	68.2	-21.9	PK	Horizontal
	11514.5	36.9	12.8	49.7	74.0	-24.3	PK	Horizontal
*	7983.5	36.6	8.7	45.3	68.2	-22.9	PK	Vertical
	9152.3	34.4	9.8	44.2	74.0	-29.8	PK	Vertical
*	9882.3	33.5	11.6	45.1	68.2	-23.1	PK	Vertical
	11455.0	36.7	12.7	49.4	74.0	-24.6	PK	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:	AC1
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
*	7984.3	36.1	8.7	44.8	68.2	-23.4	PK	Horizontal
	9143.7	34.5	9.8	44.3	74.0	-29.7	PK	Horizontal
*	9865.3	34.7	11.6	46.3	68.2	-21.9	PK	Horizontal
	11514.5	36.9	12.8	49.7	74.0	-24.3	PK	Horizontal
*	7983.5	36.6	8.7	45.3	68.2	-22.9	PK	Vertical
	9152.3	34.4	9.8	44.2	74.0	-29.8	PK	Vertical
*	9882.3	33.5	11.6	45.1	68.2	-23.1	PK	Vertical
	11455.0	36.7	12.7	49.4	74.0	-24.6	PK	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:	AC1
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
*	7985.3	37.0	8.7	45.7	68.2	-22.5	PK	Horizontal
	9174.9	34.8	9.9	44.7	74.0	-29.3	PK	Horizontal
*	9852.4	34.2	11.6	45.8	68.2	-22.4	PK	Horizontal
	11659.0	37.0	12.3	49.3	74.0	-24.7	PK	Horizontal
*	7952.2	37.4	8.6	46.0	68.2	-22.2	PK	Vertical
	9142.2	34.7	9.8	44.5	74.0	-29.5	PK	Vertical
*	9823.5	34.6	11.6	46.2	68.2	-22.0	PK	Vertical
	11540.0	36.5	12.7	49.2	74.0	-24.8	PK	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:	AC1
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
*	7985.4	36.4	8.7	45.1	68.2	-23.1	PK	Horizontal
	9147.7	34.5	9.8	44.3	74.0	-29.7	PK	Horizontal
*	9985.2	34.7	11.4	46.1	68.2	-22.1	PK	Horizontal
	11506.0	37.0	12.8	49.8	74.0	-24.2	PK	Horizontal
*	7985.2	36.6	8.7	45.3	68.2	-22.9	PK	Vertical
	9173.3	34.1	9.9	44.0	74.0	-30.0	PK	Vertical
*	9852.2	34.2	11.6	45.8	68.2	-22.4	PK	Vertical
	11548.5	36.6	12.7	49.3	74.0	-24.7	PK	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:	AC1
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
*	7853.3	35.7	8.4	44.1	68.2	-24.1	PK	Horizontal
	9142.3	34.4	9.8	44.2	74.0	-29.8	PK	Horizontal
*	9763.3	34.1	11.4	45.5	68.2	-22.7	PK	Horizontal
	10860.0	36.2	12.8	49.0	74.0	-25.0	PK	Horizontal
*	7952.2	36.5	8.6	45.1	68.2	-23.1	PK	Vertical
	9153.3	34.1	9.8	43.9	74.0	-30.1	PK	Vertical
*	9685.3	35.2	10.9	46.1	68.2	-22.1	PK	Vertical
	11514.5	36.6	12.8	49.4	74.0	-24.6	PK	Vertical

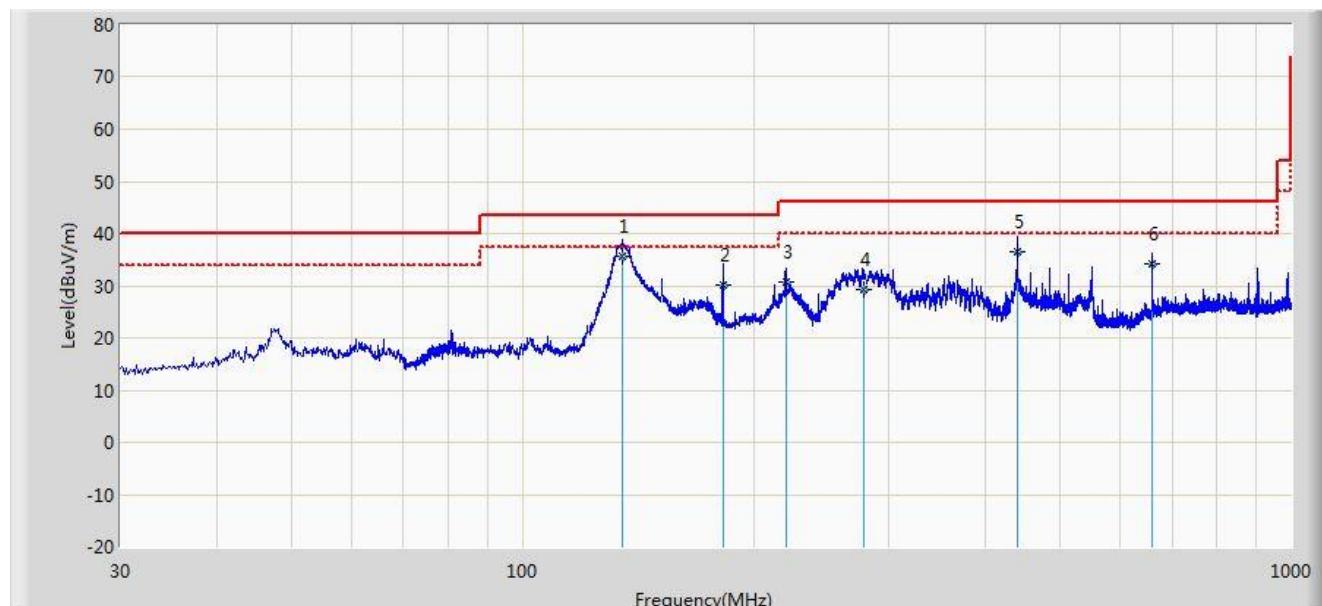
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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: AC 1	Time: 2015/07/03 - 10:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Worst Mode: Transmit at channel 5180MHz	

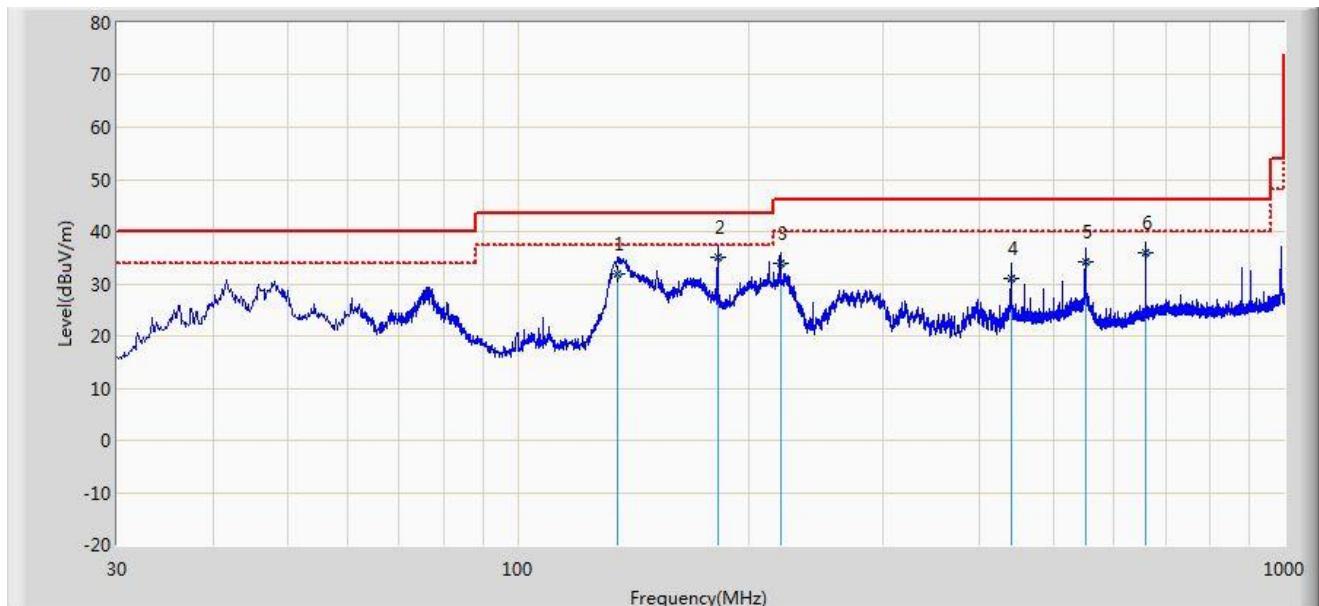


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*		134.994	35.680	26.000	-7.820	43.500	9.679	QP
2			182.231	30.271	19.200	-13.229	43.500	11.071	QP
3			220.012	30.706	18.100	-15.294	46.000	12.606	QP
4			278.241	29.414	15.300	-16.586	46.000	14.115	QP
5			440.210	36.392	19.200	-9.608	46.000	17.192	QP
6			660.210	34.163	13.400	-11.837	46.000	20.763	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: AC 1	Time: 2015/07/03 - 10:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
Worst Mode: Transmit at channel 5180MHz	

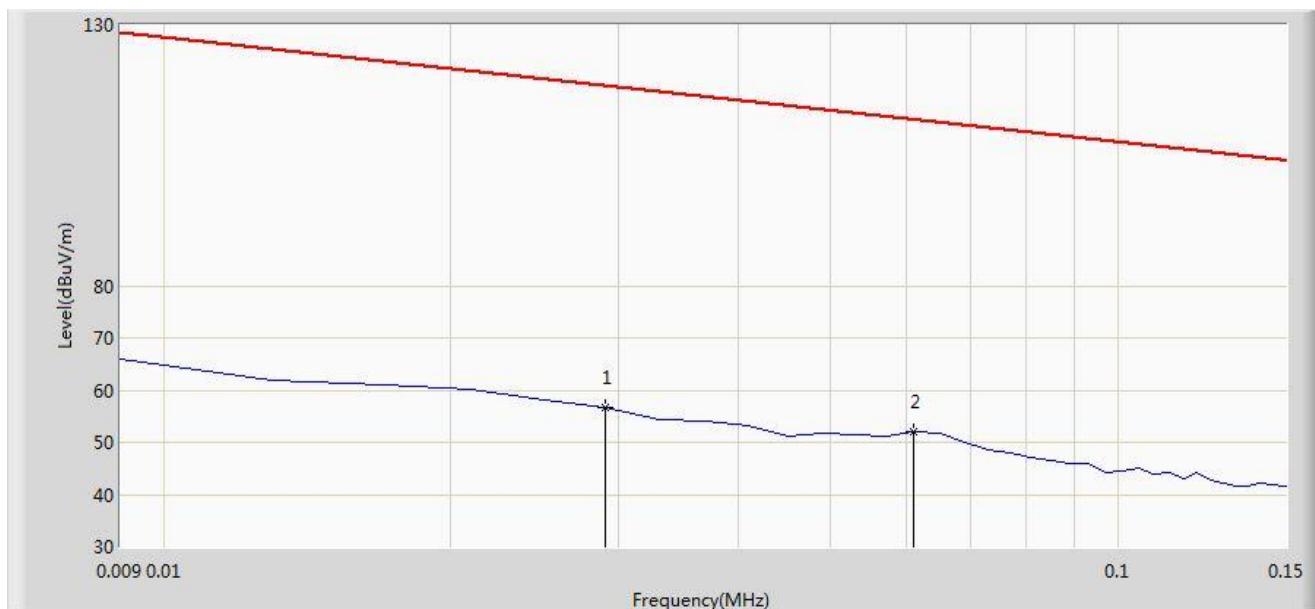


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			135.012	31.779	22.100	-11.721	43.500	9.678	QP
2	*		182.201	35.168	24.100	-8.332	43.500	11.069	QP
3			220.014	33.906	21.300	-12.094	46.000	12.606	QP
4			440.012	30.989	13.800	-15.011	46.000	17.189	QP
5			550.084	34.242	15.200	-11.758	46.000	19.043	QP
6			660.041	36.060	15.300	-9.940	46.000	20.760	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: AC1	Time: 2015/06/20 - 18:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: sengled snap	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

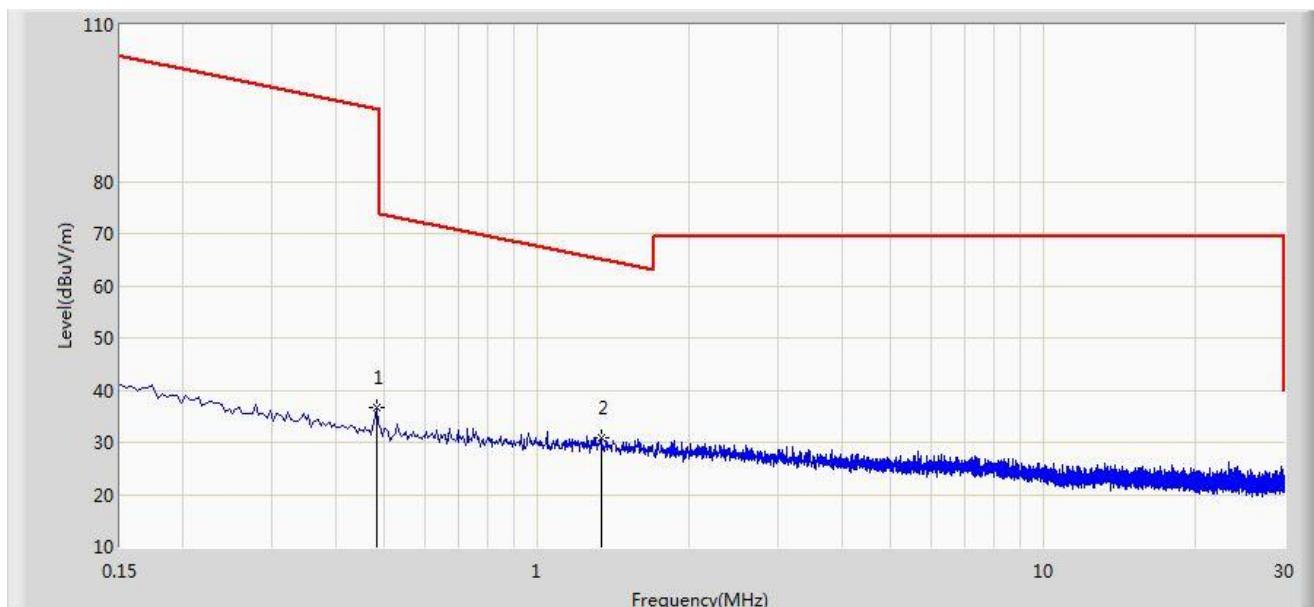


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.029	56.610	35.660	-61.732	118.342	21.049	QP
2		*	0.061	51.899	31.588	-59.988	111.887	20.311	QP

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

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

Site: AC1	Time: 2015/06/20 - 18:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: sengled snap	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

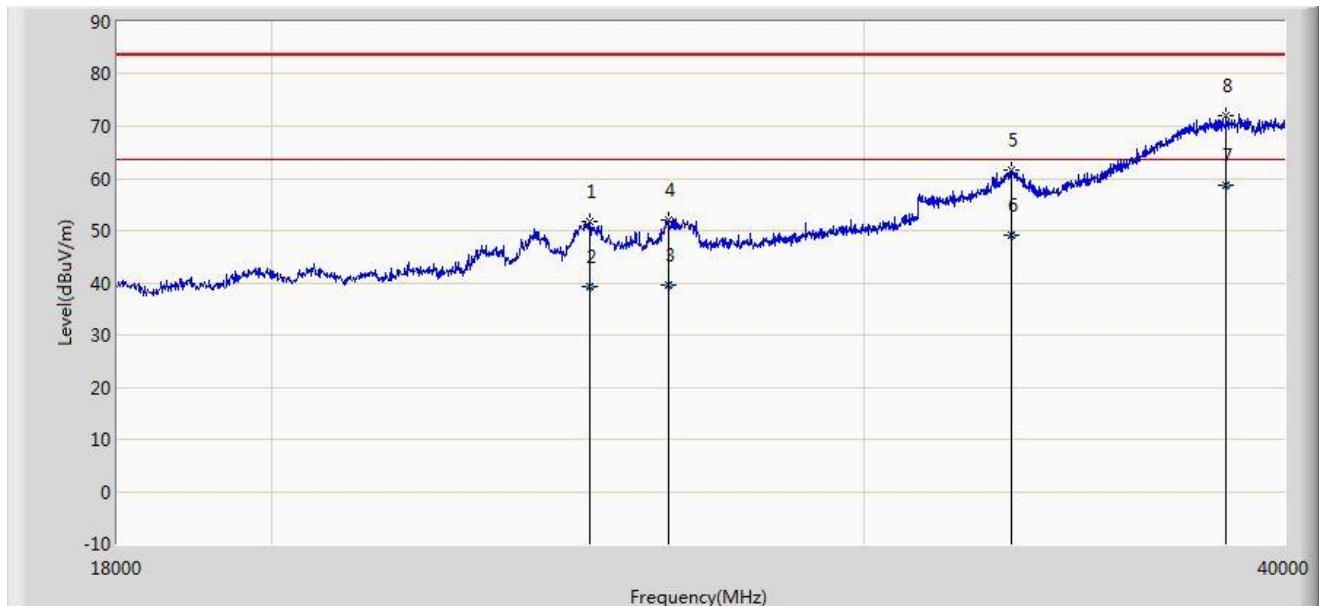


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.482	36.584	16.183	-57.359	93.943	20.401	QP
2	*		1.338	31.001	10.512	-34.098	65.099	20.489	QP

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

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

Site: AC1	Time: 2015/06/20 - 20:25
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~40GHz.	

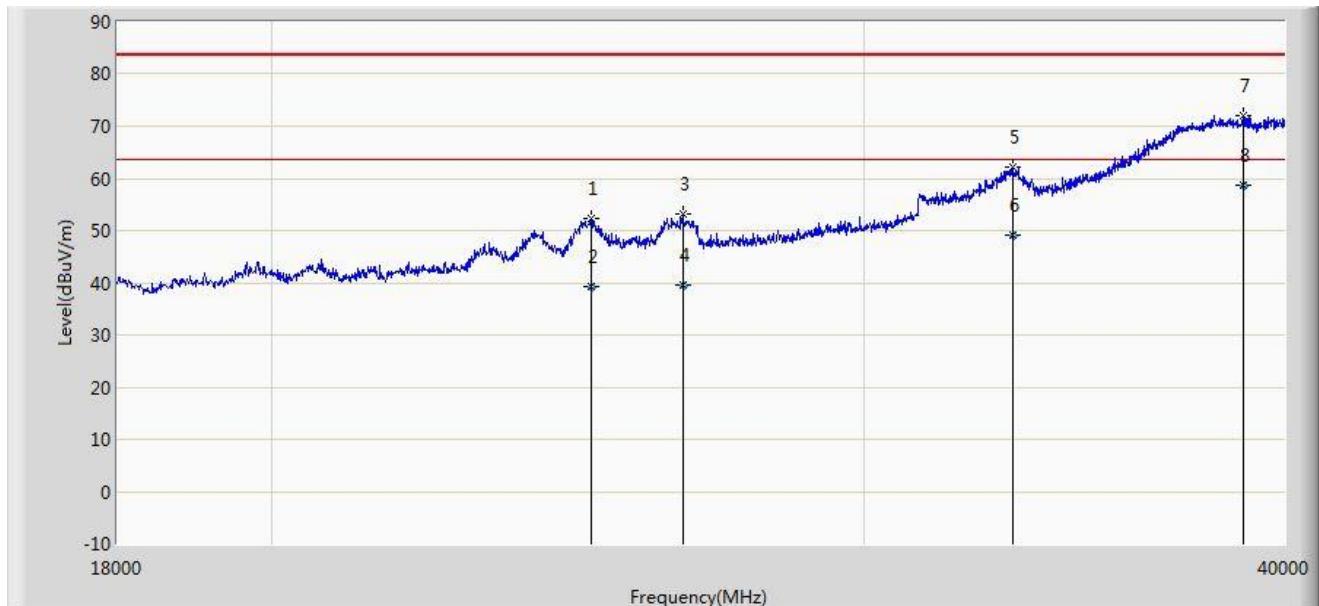


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			24864.000	51.836	37.061	-31.664	83.500	14.775	PK
2			24864.088	39.225	24.450	-24.275	63.500	14.775	AV
3			26260.988	39.469	24.050	-24.031	63.500	15.419	AV
4			26261.000	51.956	36.537	-31.544	83.500	15.419	PK
5			33180.000	61.461	39.940	-22.039	83.500	21.521	PK
6			33180.361	49.061	27.540	-14.439	63.500	21.521	AV
7	*		38437.980	58.523	31.190	-4.977	63.500	27.333	AV
8			38438.000	72.021	44.688	-11.479	83.500	27.333	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: AC1	Time: 2015/06/20 - 20:28
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
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			24886.000	52.313	37.528	-31.187	83.500	14.785	PK
2			24886.970	39.234	24.449	-24.266	63.500	14.785	AV
3			26503.000	53.227	37.207	-30.273	83.500	16.020	PK
4			26503.872	39.572	23.550	-23.928	63.500	16.022	AV
5			33213.000	62.110	40.572	-21.390	83.500	21.538	PK
6			33213.984	49.098	27.560	-14.402	63.500	21.538	AV
7			38900.000	72.096	44.211	-11.404	83.500	27.885	PK
8	*		38900.755	58.705	30.820	-4.795	63.500	27.885	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)

7.8. Radiated Restricted Band Edge Measurement

7.8.1. 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).

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
1.0495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 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	(³)

For RSS-Gen Section 8.10 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

MHz
0.090-0.110
2.1735-2.1905
3.020-3.026
4.125-4.128
4.17725-4.17775
4.20725-4.20775
5.677-5.683
6.215-6.218
6.26775-6.26825
6.31175-6.31225
8.291-8.294
8.362-8.366
8.37625-8.38675
8.41425-8.41475
12.29-12.293
12.51975-12.52025
12.57675-12.57725
13.36-13.41
16.42-16.423
16.69475-16.69525
16.80425-16.80475
25.5-25.67
37.5-38.25
73-74.6
74.8-75.2
108-138
156.52475-156.52525

MHz
240-285
322-335.4
399.9-410
608-614
960-1427
1435-1626.5
1645.5-1646.5
1660-1710
1718.8-1722.2
2200-2300
2310-2390
2655-2900
3260-3267
3332-3339
3345.8-3358
3500-4400
4500-5150
5350-5460
7250-7750
8025-8500

GHz
9.0-9.2
9.3-9.5
10.6-12.7
13.25-13.4
14.47-14.5
15.35-16.2
17.7-21.4
22.01-23.12
23.6-24.0
31.2-31.8
36.43-36.5
Above 38.6

* Certain frequency bands listed in Table 6 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to the devices are set out in the 200- and 300-series of RSSs, such as RSS-210 and RSS-310, which contain the requirements that apply to licence-exempt radio apparatus.

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 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

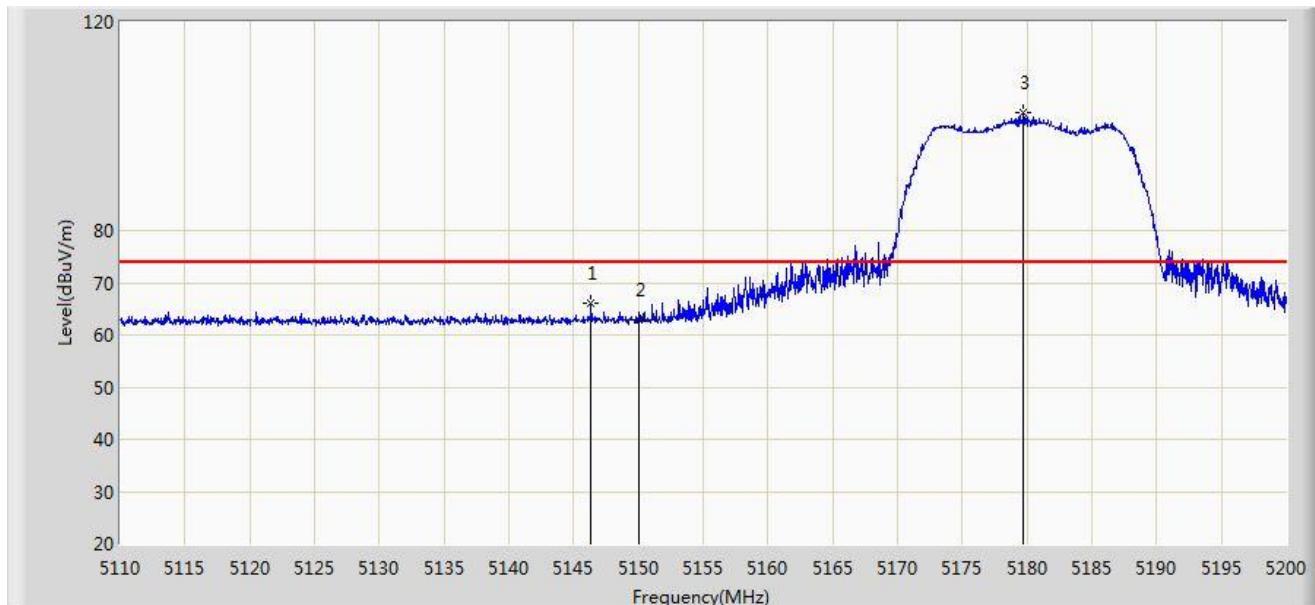
Note: Refer to KDB 789033 D02v01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the 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

7.8.2. Test Result of Radiated Restricted Band Edge

Site: AC 1	Time: 2015/06/23 - 15:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5180MHz	

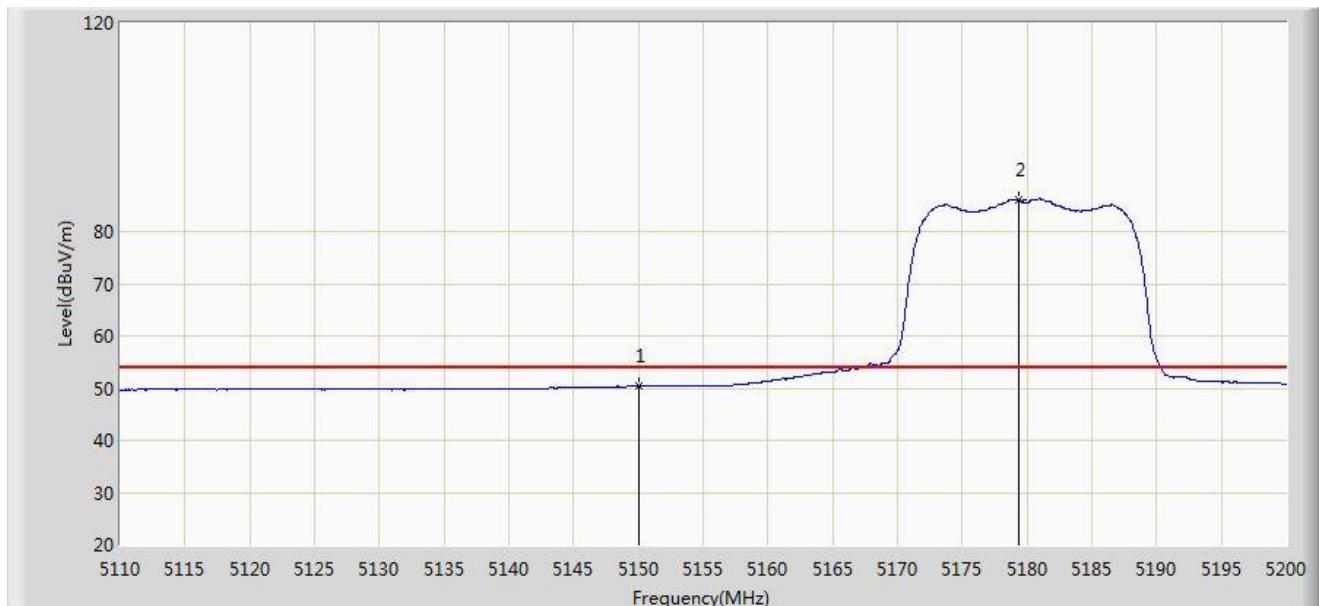


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5146.360	66.228	28.771	-7.772	74.000	37.457	PK
2			5150.000	62.813	25.361	-11.187	74.000	37.452	PK
3	*		5179.705	102.673	65.299	N/A	N/A	37.374	PK

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

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

Site: AC 1	Time: 2015/06/23 - 15:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5180MHz	

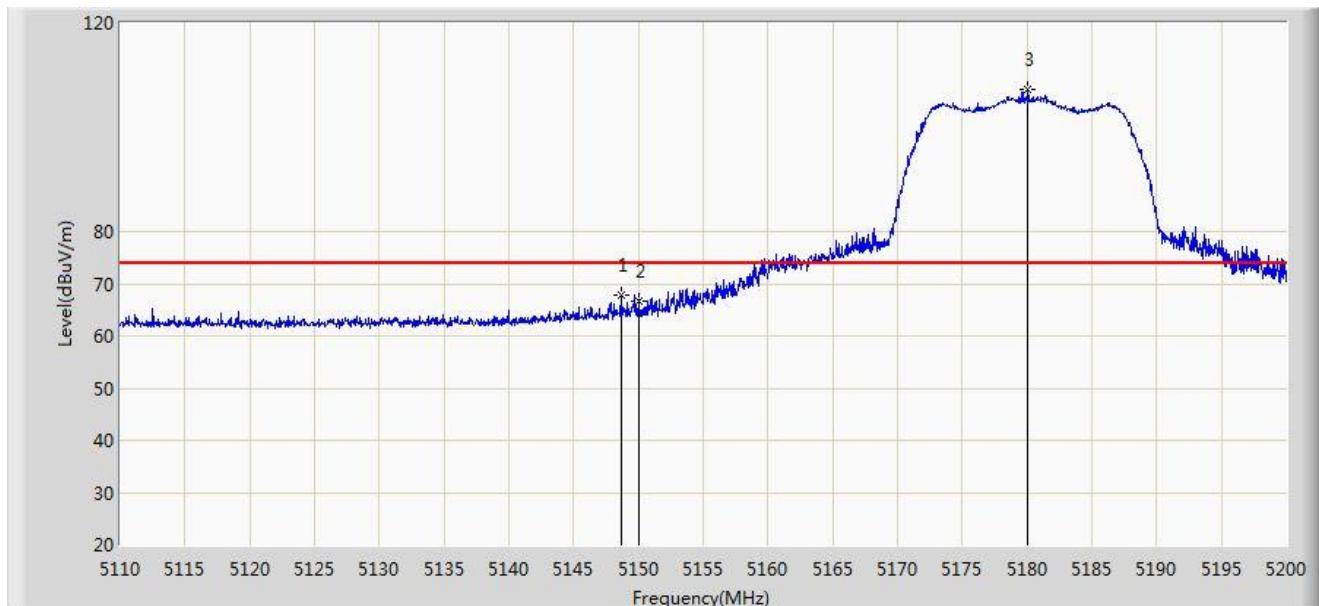


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5150.000	50.377	12.925	-3.623	54.000	37.452	AV
2		*	5179.390	86.154	48.779	N/A	N/A	37.375	AV

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

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

Site: AC 1	Time: 2015/06/23 - 15:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5180MHz	

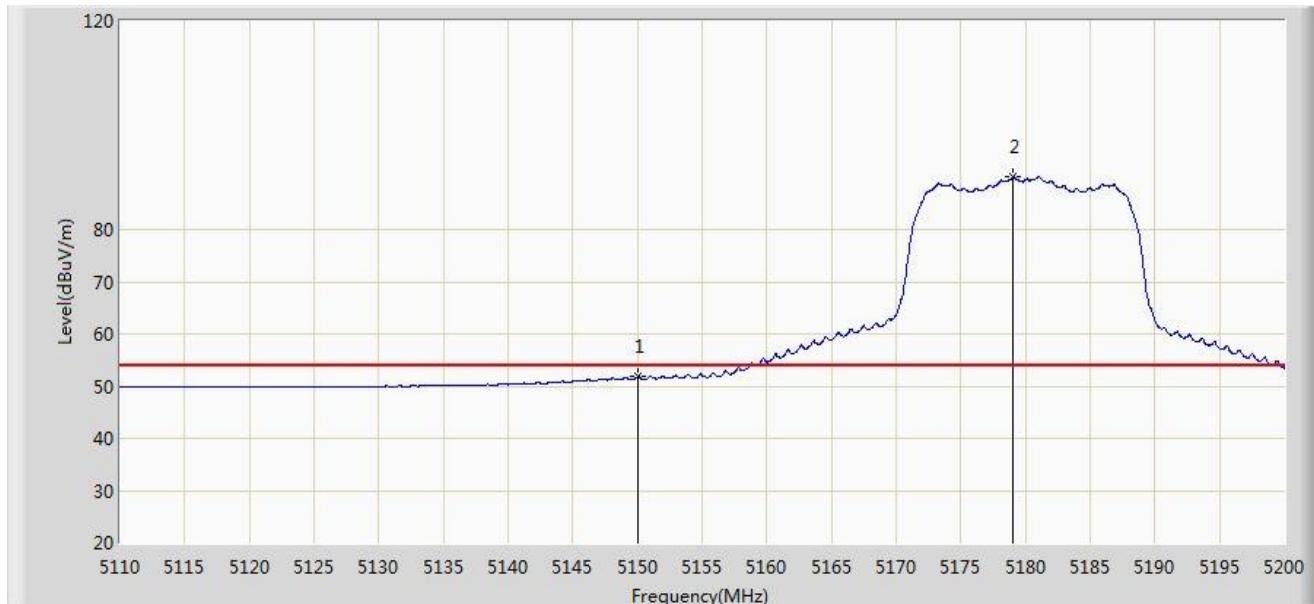


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.655	67.869	30.415	-6.131	74.000	37.454	PK
2			5150.000	66.535	29.083	-7.465	74.000	37.452	PK
3	*	*	5180.065	107.283	69.909	N/A	N/A	37.374	PK

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

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

Site: AC 1	Time: 2015/06/23 - 15:08
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5180MHz	

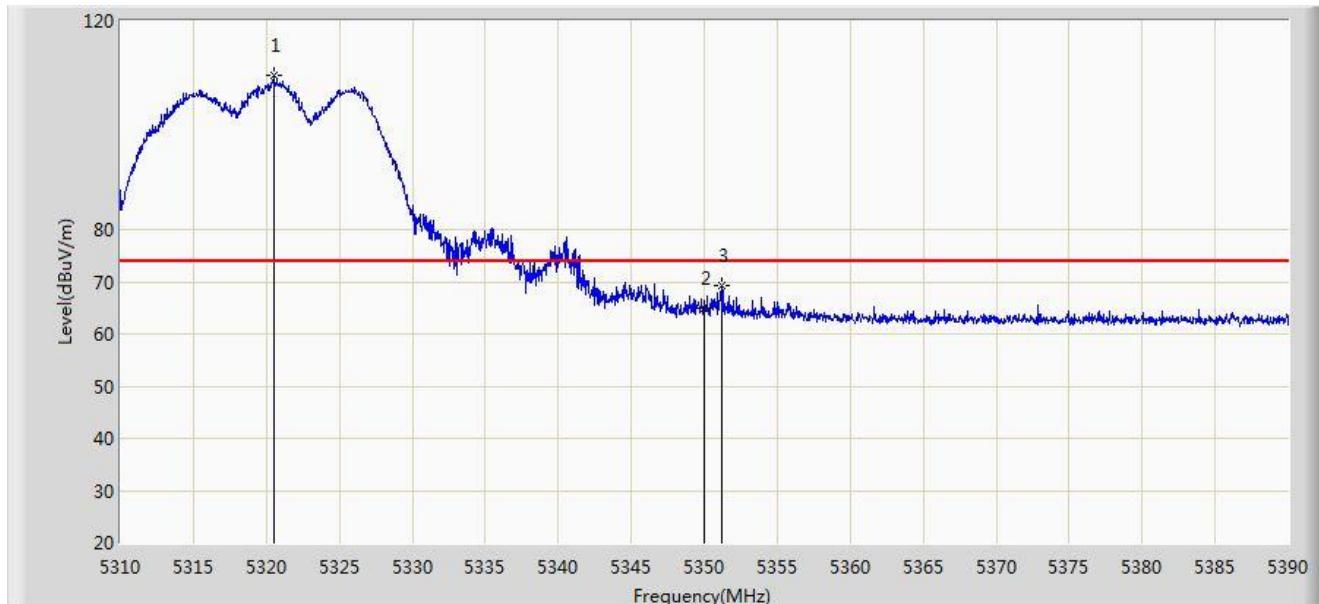


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5150.000	51.775	14.323	-2.225	54.000	37.452	AV
2		*	5179.030	90.104	52.728	N/A	N/A	37.376	AV

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

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

Site: AC 1	Time: 2015/06/23 - 15:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5320MHz	

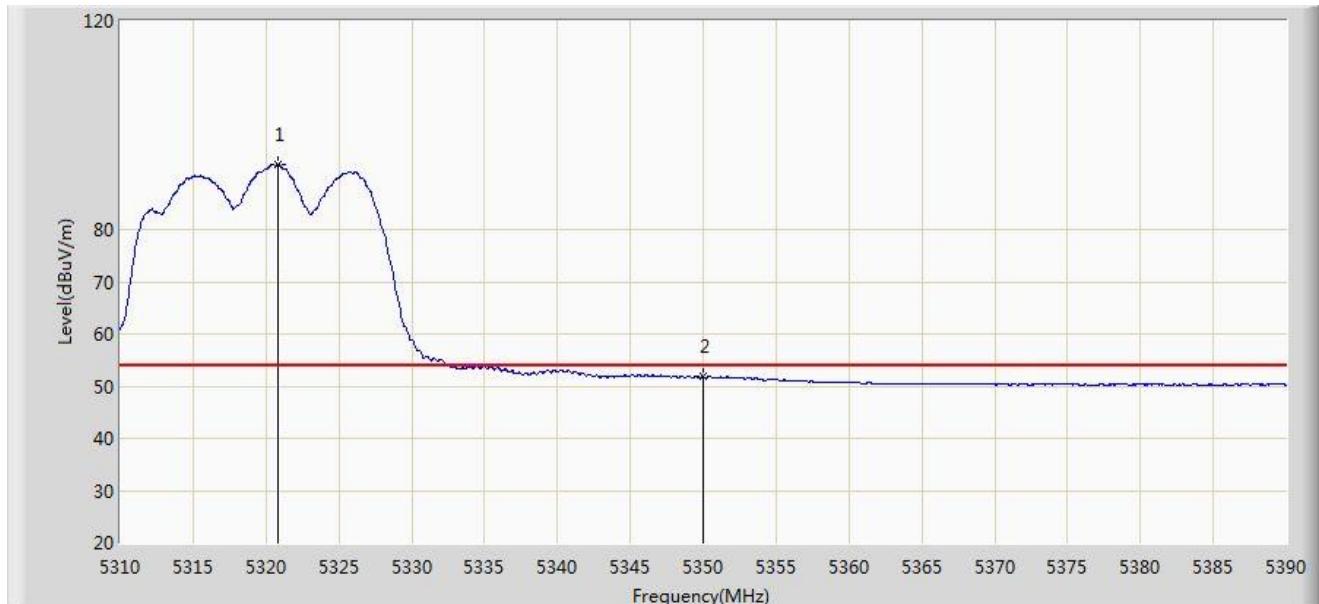


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*		5320.480	109.485	72.271	N/A	N/A	37.215	PK
2			5350.000	64.973	27.687	-9.027	74.000	37.286	PK
3			5351.240	69.284	31.994	-4.716	74.000	37.290	PK

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

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

Site: AC 1	Time: 2015/06/23 - 15:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5320MHz	

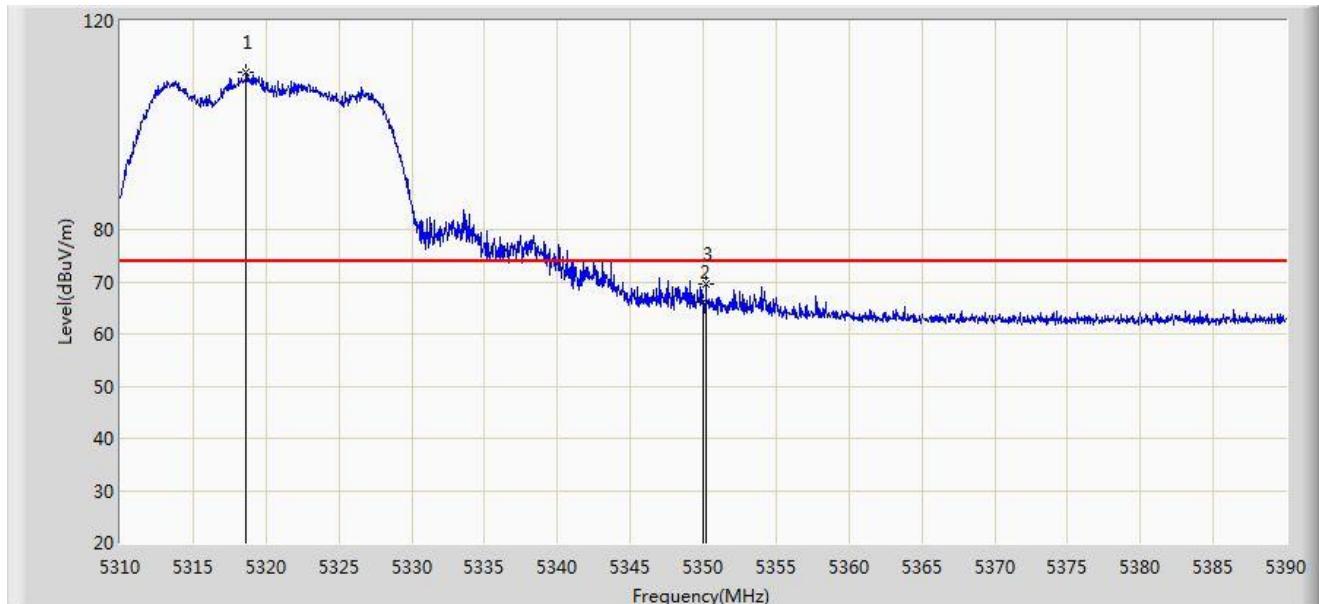


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	5320.800	92.508	55.293	N/A	N/A	37.215	AV
2			5350.000	51.848	14.562	-2.152	54.000	37.286	AV

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

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

Site: AC 1	Time: 2015/06/23 - 15:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5320MHz	

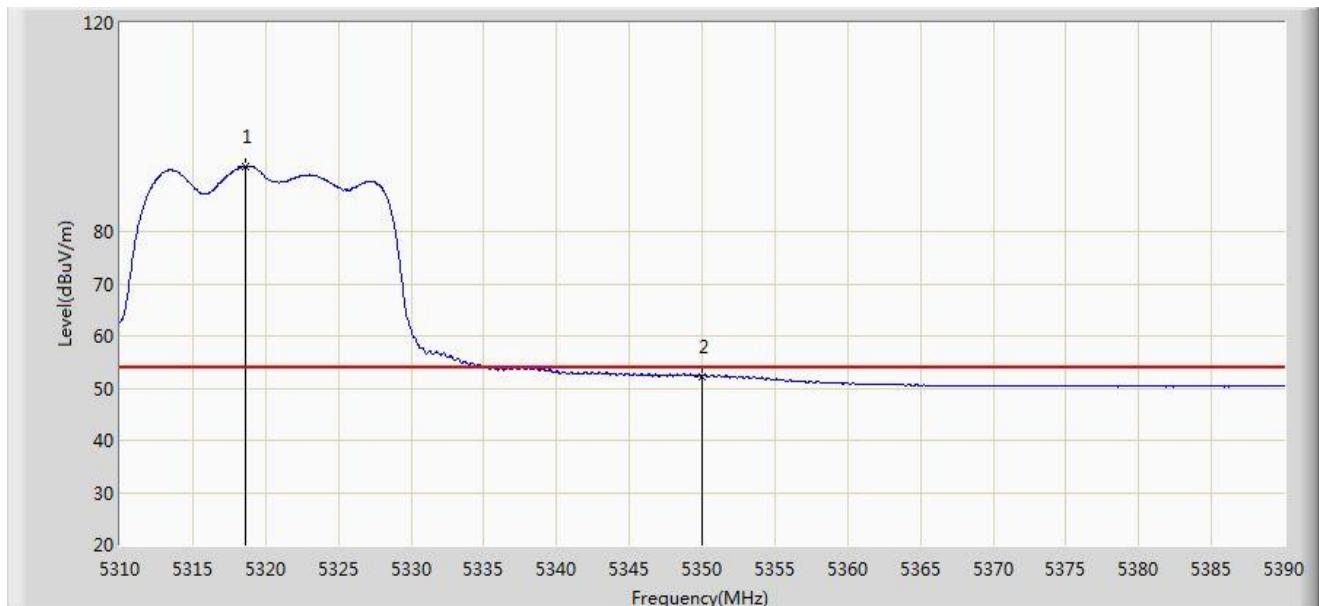


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	*		5318.640	110.138	72.927	N/A	N/A	37.211	PK
2			5350.000	66.014	28.728	-7.986	74.000	37.286	PK
3			5350.200	69.466	32.179	-4.534	74.000	37.287	PK

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

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

Site: AC 1	Time: 2015/06/23 - 15:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5320MHz	

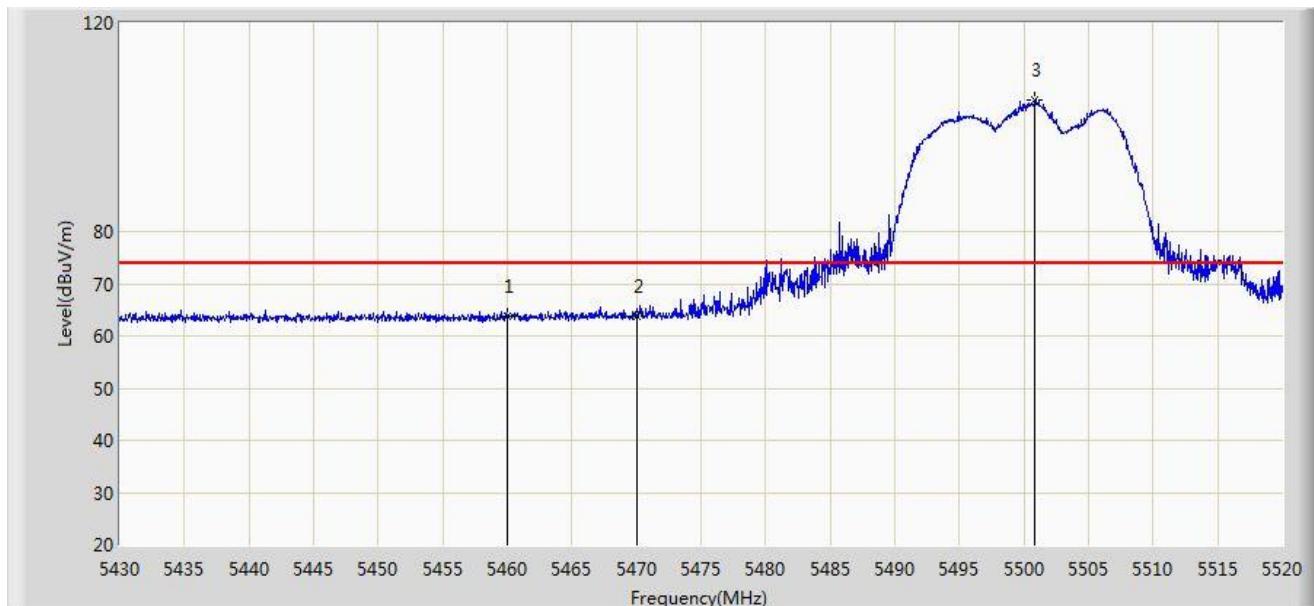


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	5318.600	92.546	55.335	N/A	N/A	37.211	AV
2			5350.000	52.237	14.951	-1.763	54.000	37.286	AV

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

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

Site: AC 1	Time: 2015/06/23 - 16:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5500MHz	

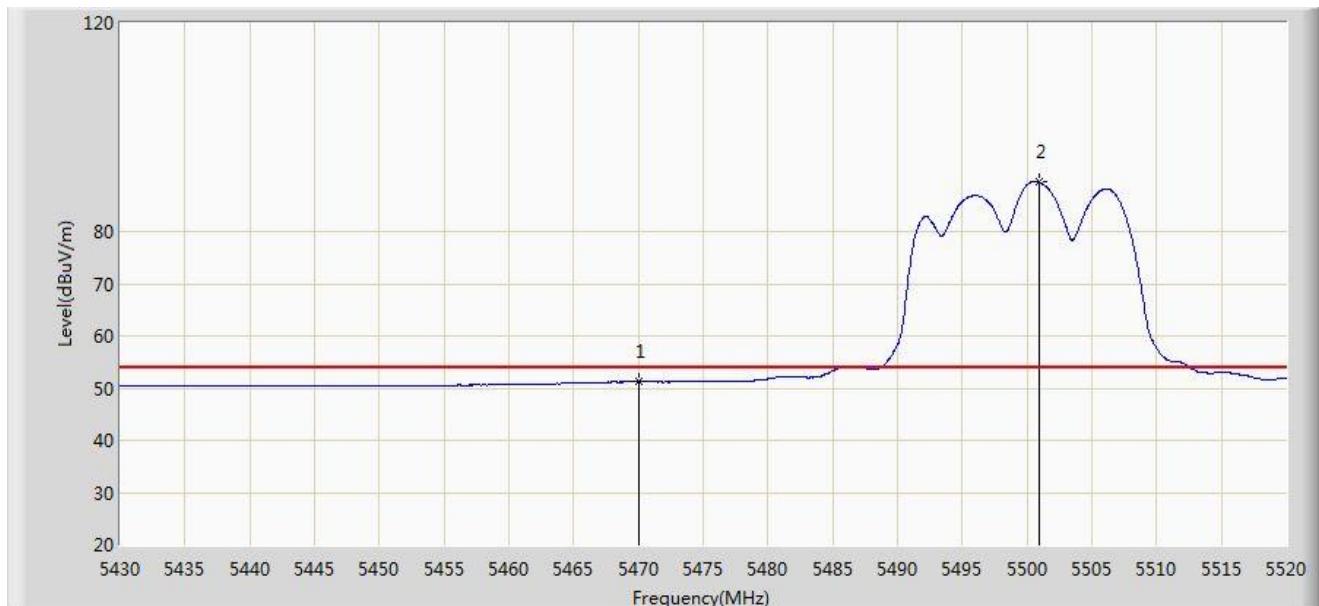


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5460.000	63.641	26.078	-10.359	74.000	37.563	PK
2			5470.000	63.765	26.176	-4.435	68.200	37.588	PK
3	*		5500.830	105.303	67.678	N/A	N/A	37.626	PK

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

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

Site: AC 1	Time: 2015/06/23 - 16:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5500MHz	

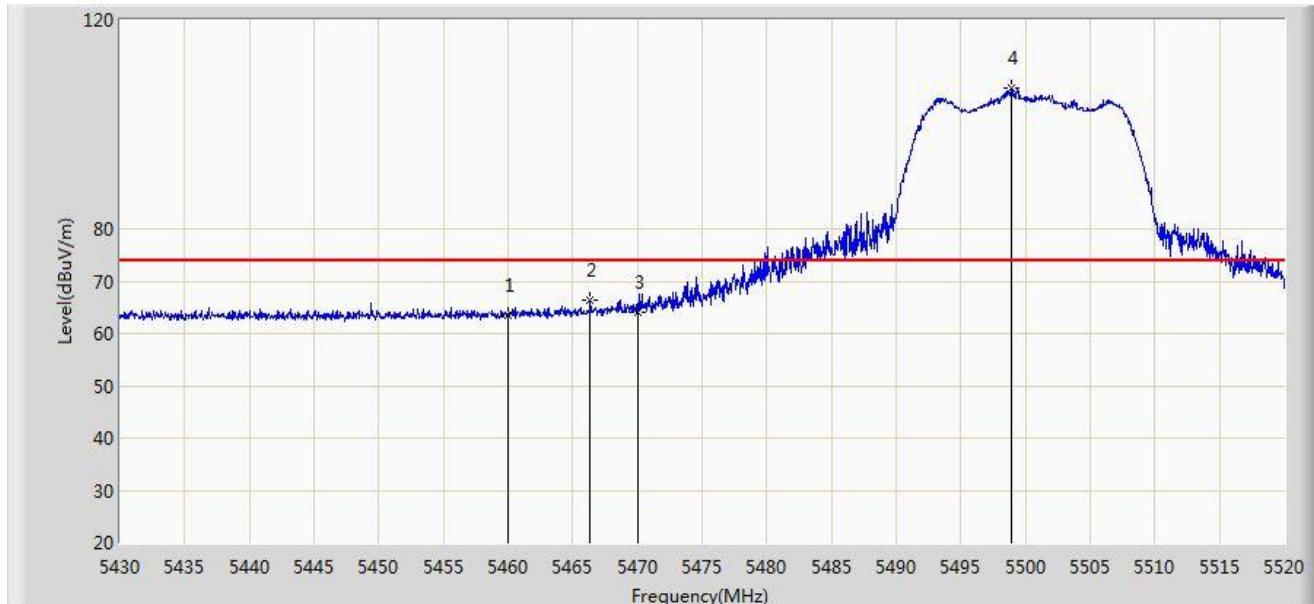


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1			5470.000	51.171	13.582	-2.829	54.000	37.588	AV
2		*	5500.920	89.430	51.805	N/A	N/A	37.626	AV

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

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

Site: AC 1	Time: 2015/06/23 - 16:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5500MHz	

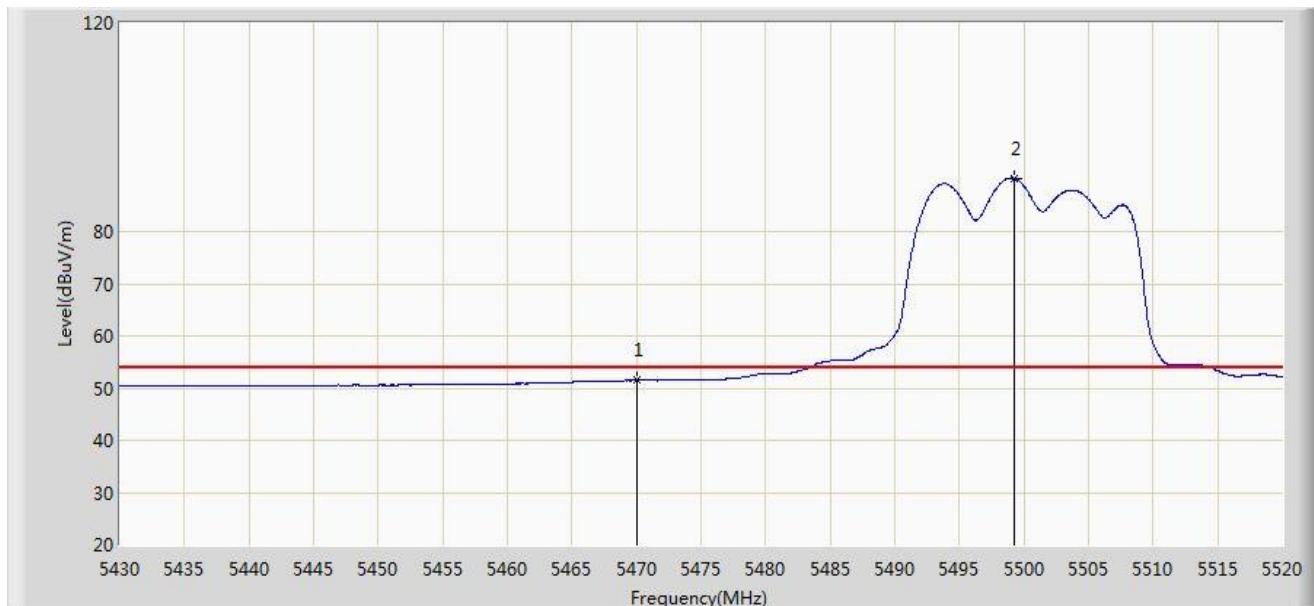


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	63.342	25.779	-10.658	74.000	37.563	PK
2			5466.360	66.279	28.700	-1.921	68.200	37.579	PK
3	*		5470.000	64.181	26.592	-4.019	68.200	37.588	PK
4	*		5498.940	106.873	69.250	N/A	N/A	37.624	PK

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

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

Site: AC 1	Time: 2015/06/23 - 16:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5500MHz	

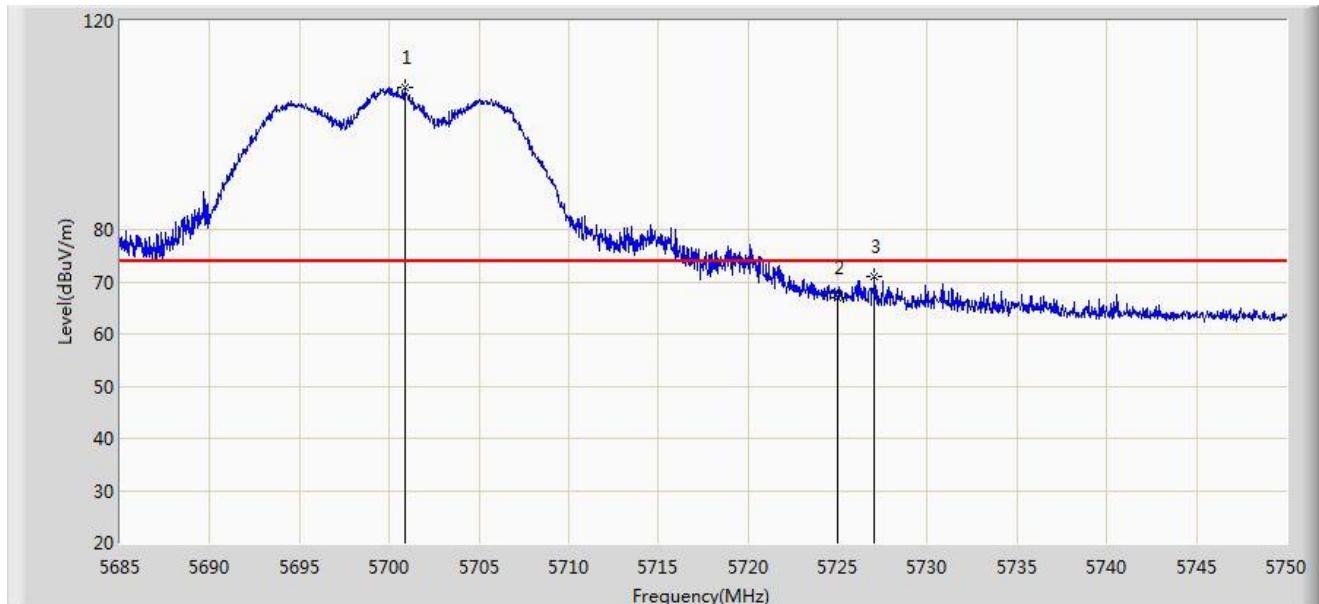


No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1		*	5470.000	51.481	13.892	-2.519	54.000	37.588	AV
2		*	5499.255	90.225	52.601	N/A	N/A	37.624	AV

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

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

Site: AC 1	Time: 2015/06/23 - 16:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled snap	Power: AC 120V/60Hz
Note: Test Mode: Transmit by 802.11a at channel 5700MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5700.860	107.211	69.317	N/A	N/A	37.894	PK
2			5725.000	67.011	29.021	-6.989	74.000	37.990	PK
3			5727.055	71.049	33.051	-2.951	74.000	37.998	PK

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

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