

7.6.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Result
Ant 1										
11a	6	36	5180	-2.78	96.5	-2.63	≤ 11.00	1.37	≤ 10.00	Pass
11a	6	44	5220	0.88	96.5	1.03	≤ 11.00	5.03	≤ 10.00	Pass
11a	6	48	5240	1.01	96.5	1.16	≤ 11.00	5.16	≤ 10.00	Pass
11n-HT20	6.5	36	5180	-2.07	96.3	-1.91	≤ 11.00	2.09	≤ 10.00	Pass
11n-HT20	6.5	44	5220	-1.80	96.3	-1.64	≤ 11.00	2.36	≤ 10.00	Pass
11n-HT20	6.5	48	5240	-1.67	96.3	-1.51	≤ 11.00	2.49	≤ 10.00	Pass
11n-HT40	13.5	38	5190	-5.98	96.3	-5.82	≤ 11.00	-1.82	≤ 10.00	Pass
11n-HT40	13.5	46	5230	0.11	96.3	0.27	≤ 11.00	4.27	≤ 10.00	Pass
Ant 2										
11a	6	36	5180	-1.21	96.5	-1.06	≤ 11.00	2.28	≤ 10.00	Pass
11a	6	44	5220	1.70	96.5	1.85	≤ 11.00	5.19	≤ 10.00	Pass
11a	6	48	5240	2.12	96.5	2.27	≤ 11.00	5.61	≤ 10.00	Pass
11n-HT20	6.5	36	5180	-0.69	96.3	-0.53	≤ 11.00	2.81	≤ 10.00	Pass
11n-HT20	6.5	44	5220	-0.65	96.3	-0.49	≤ 11.00	2.85	≤ 10.00	Pass
11n-HT20	6.5	48	5240	-0.66	96.3	-0.50	≤ 11.00	2.84	≤ 10.00	Pass
11n-HT40	13.5	38	5190	-4.93	96.3	-4.77	≤ 11.00	-1.43	≤ 10.00	Pass
11n-HT40	13.5	46	5230	-4.93	96.3	-4.77	≤ 11.00	-1.43	≤ 10.00	Pass

Note 1: When EUT duty cycle < 98%, the Total PSD = PSD + 10*log(1/duty cycle).

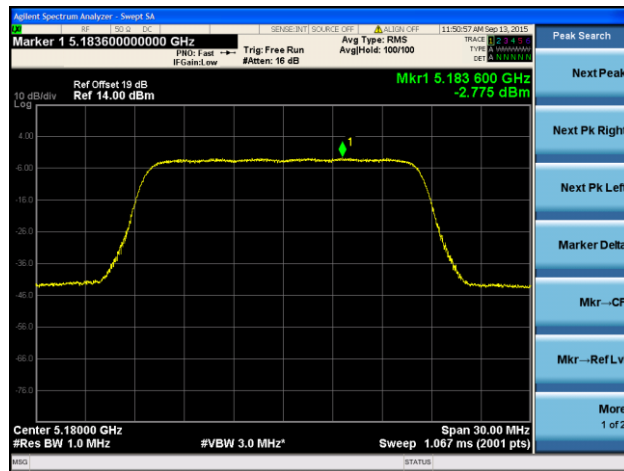
Note 2: EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + Antenna Gain (dBi).

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	PSD (dBm/ 100kHz)	Duty Cycle (%)	Constant Factor	Total PSD (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Result
Ant 1									
11a	6	149	5745	-12.30	96.5	7.00	-5.15	≤ 30.00	Pass
11a	6	157	5785	-12.79	96.5	7.00	-5.64	≤ 30.00	Pass
11a	6	165	5825	-12.12	96.5	7.00	-4.97	≤ 30.00	Pass
11n-HT20	6.5	149	5745	-13.06	96.3	7.00	-5.90	≤ 30.00	Pass
11n-HT20	6.5	157	5785	-13.60	96.3	7.00	-6.44	≤ 30.00	Pass
11n-HT20	6.5	165	5825	-13.01	96.3	7.00	-5.85	≤ 30.00	Pass
11n-HT40	13.5	151	5755	-8.37	96.3	7.00	-1.21	≤ 30.00	Pass
11n-HT40	13.5	159	5795	-8.93	96.3	7.00	-1.77	≤ 30.00	Pass
Ant 2									
11a	6	149	5745	-10.56	96.5	7.00	-3.41	≤ 30.00	Pass
11a	6	157	5785	-11.66	96.5	7.00	-4.51	≤ 30.00	Pass
11a	6	165	5825	-11.30	96.5	7.00	-4.15	≤ 30.00	Pass
11n-HT20	6.5	149	5745	-11.83	96.3	7.00	-4.67	≤ 30.00	Pass
11n-HT20	6.5	157	5785	-12.55	96.3	7.00	-5.39	≤ 30.00	Pass
11n-HT20	6.5	165	5825	-12.74	96.3	7.00	-5.58	≤ 30.00	Pass
11n-HT40	13.5	151	5755	-15.21	96.3	7.00	-8.05	≤ 30.00	Pass
11n-HT40	13.5	159	5795	-15.98	96.3	7.00	-8.82	≤ 30.00	Pass

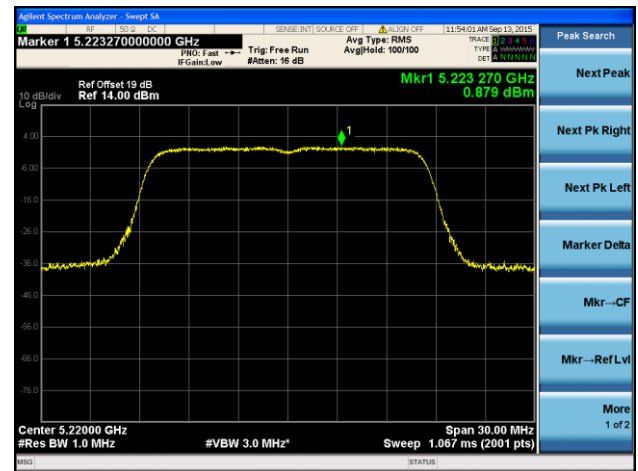
Note: When EUT duty cycle < 98%, Total PSD (dBm/500kHz) = PSD (dBm/100kHz) + 10*log(1/duty cycle) + Constant Factor.

802.11a Power Spectral Density - Ant 1

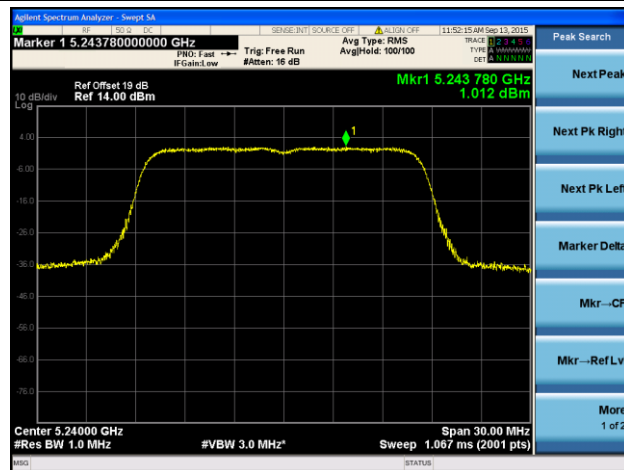
Channel 36 (5180MHz)



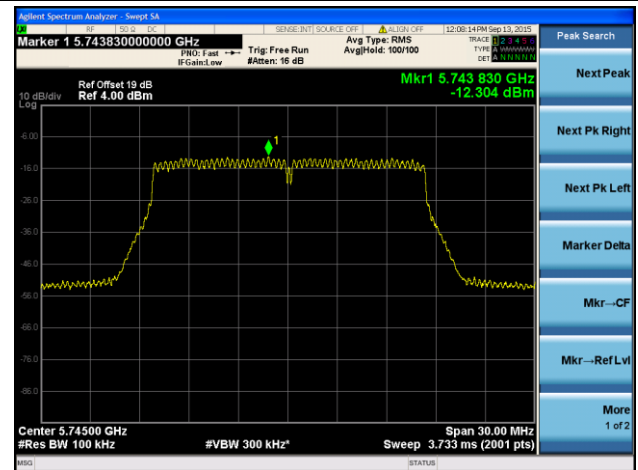
Channel 44 (5220MHz)



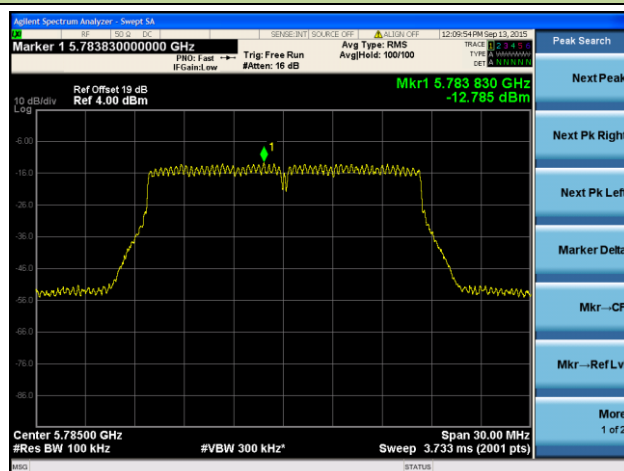
Channel 48 (5240MHz)



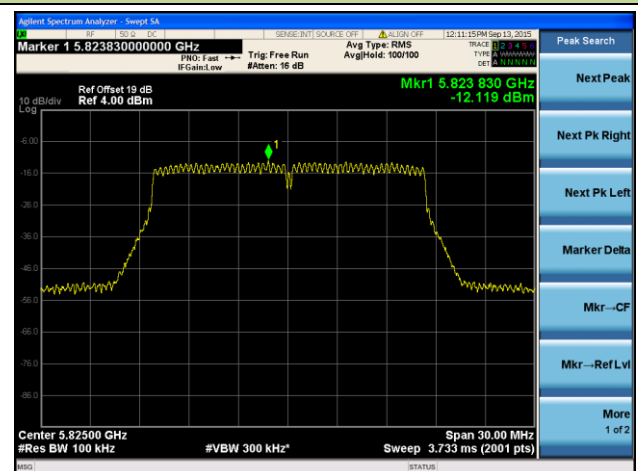
Channel 149 (5745MHz)



Channel 157 (5785MHz)

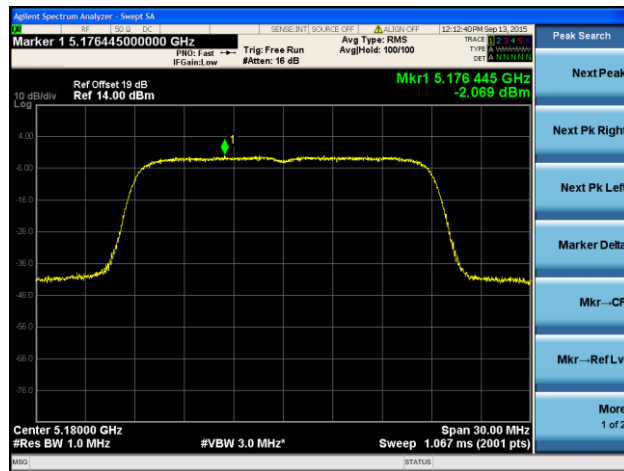


Channel 165 (5825MHz)

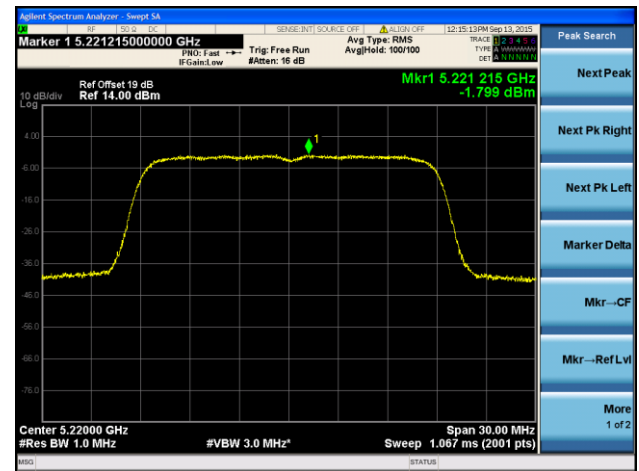


802.11n-HT20 Power Spectral Density - Ant 1

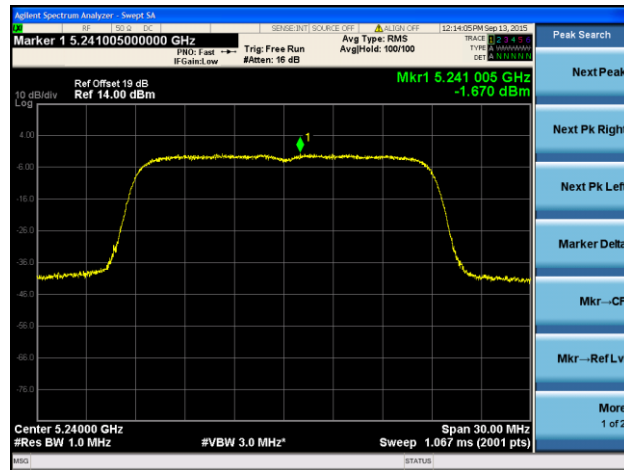
Channel 36 (5180MHz)



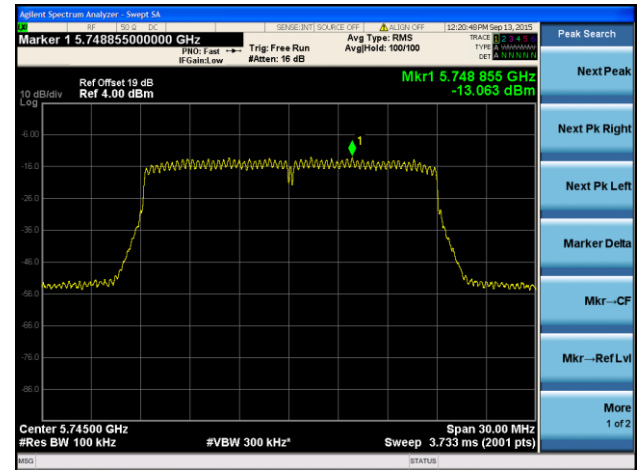
Channel 44 (5220MHz)



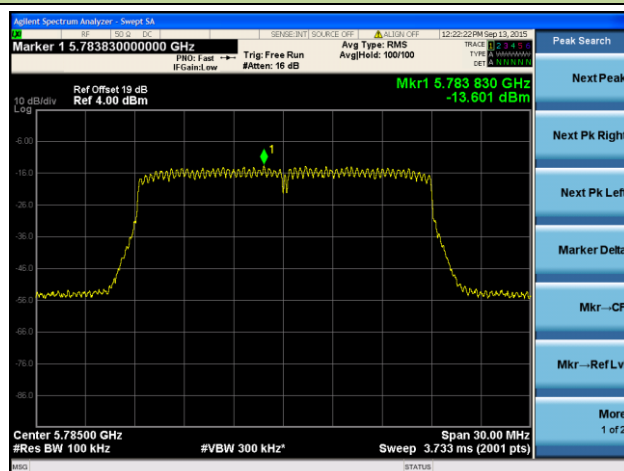
Channel 48 (5240MHz)



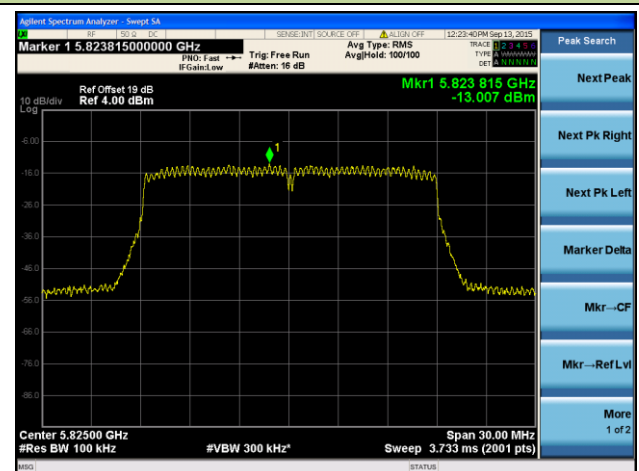
Channel 149 (5745MHz)



Channel 157 (5785MHz)

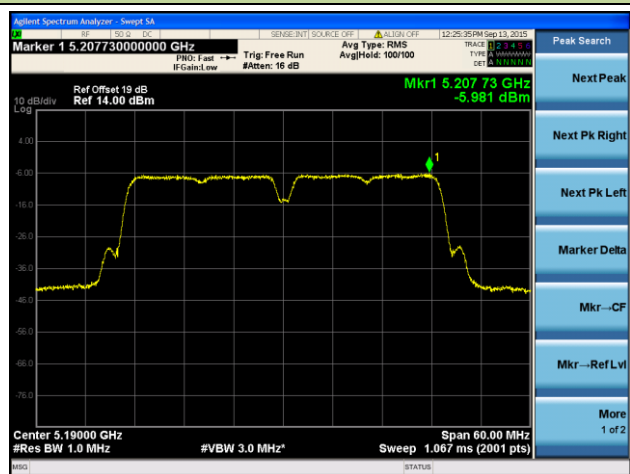


Channel 165 (5825MHz)

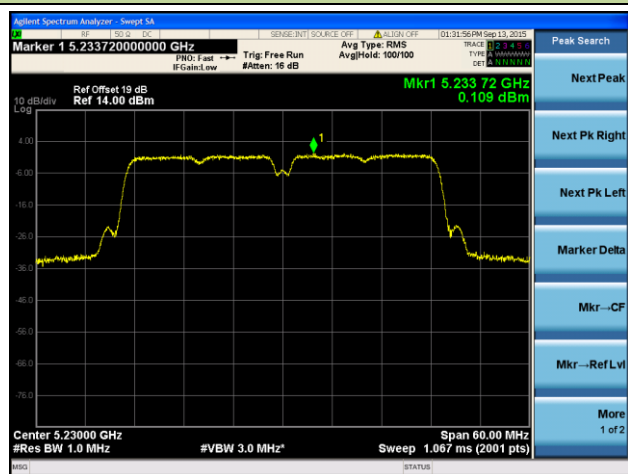


802.11n-HT40 Power Spectral Density - Ant 1

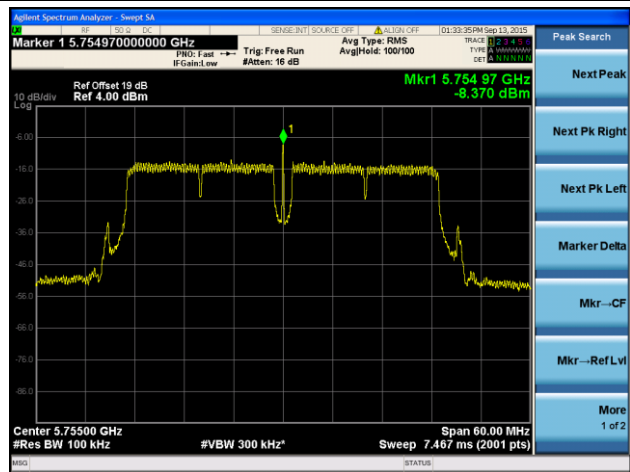
Channel 38 (5190MHz)



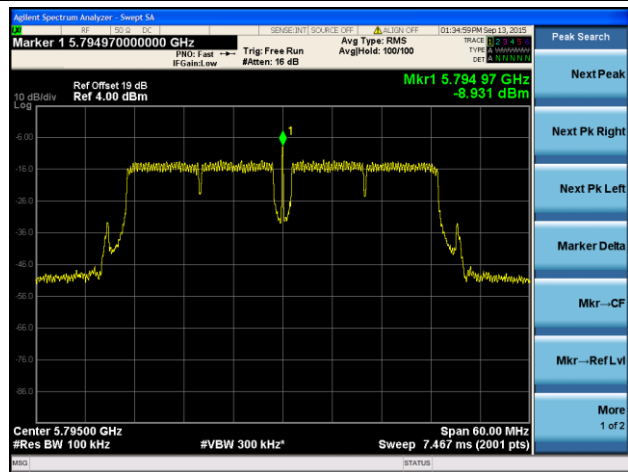
Channel 46 (5230MHz)



Channel 151 (5755MHz)

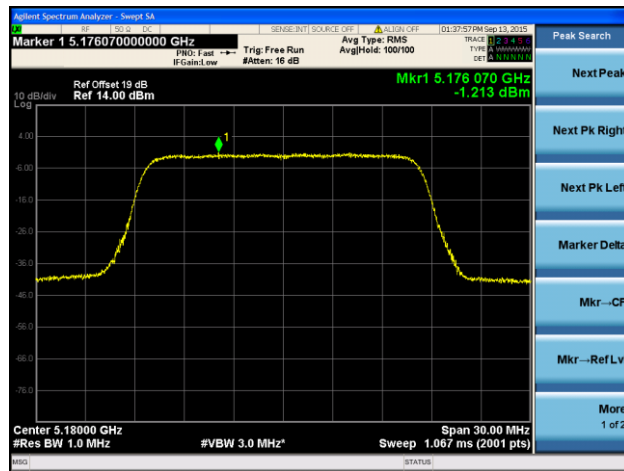


Channel 159 (5795MHz)

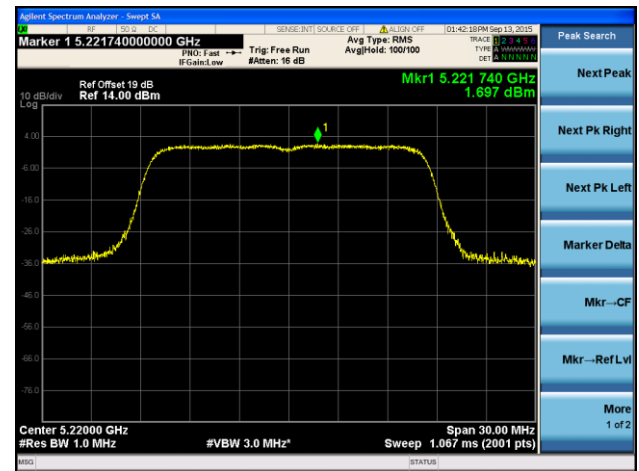


802.11a Power Spectral Density - Ant 2

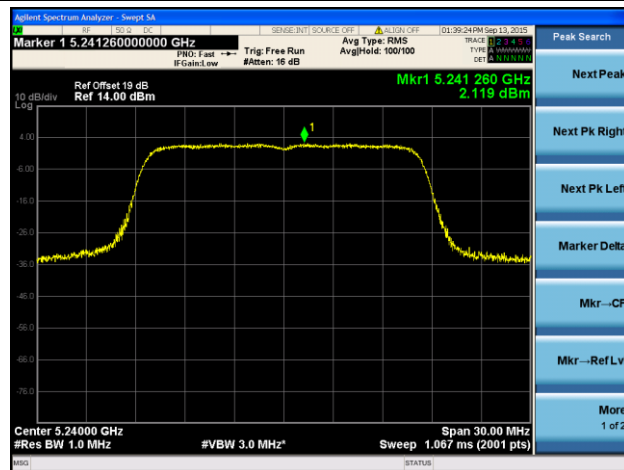
Channel 36 (5180MHz)



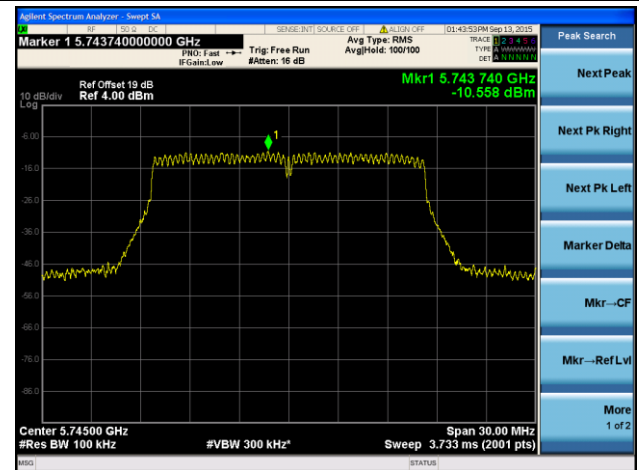
Channel 44 (5220MHz)



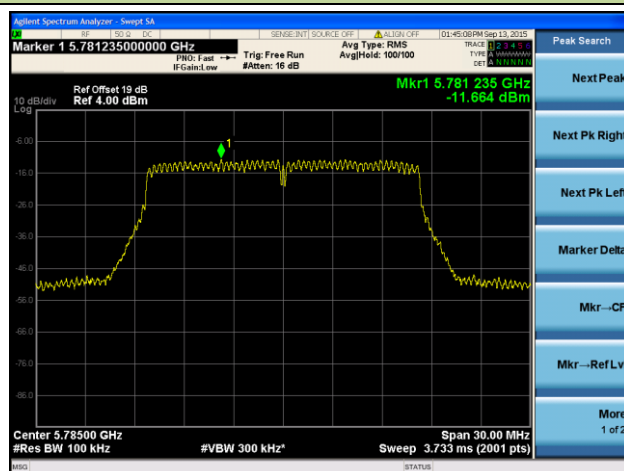
Channel 48 (5240MHz)



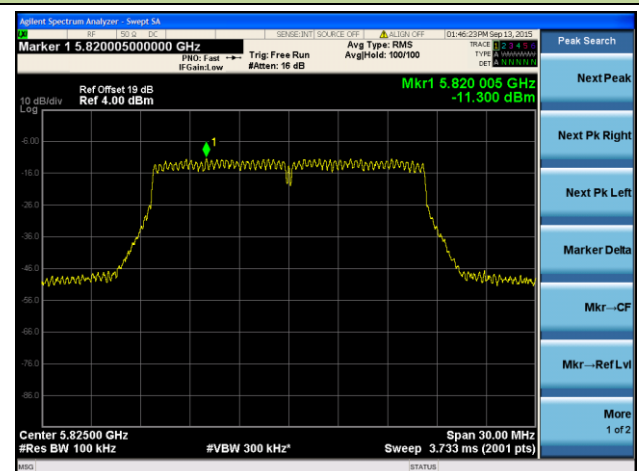
Channel 149 (5745MHz)



Channel 157 (5785MHz)

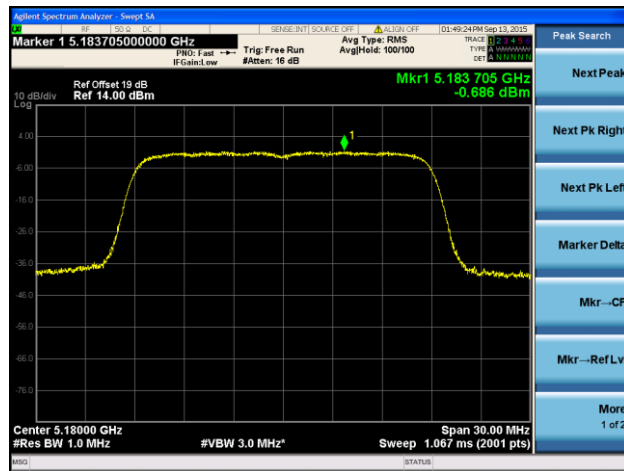


Channel 165 (5825MHz)

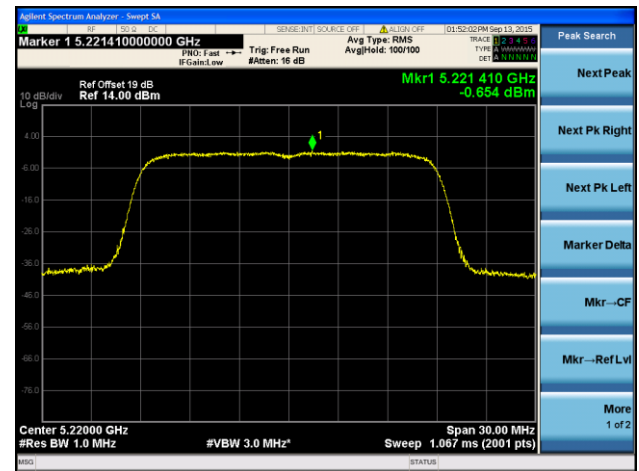


802.11n-HT20 Power Spectral Density - Ant 2

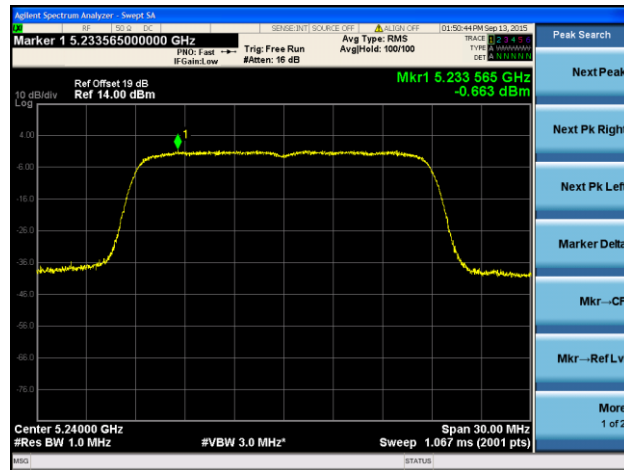
Channel 36 (5180MHz)



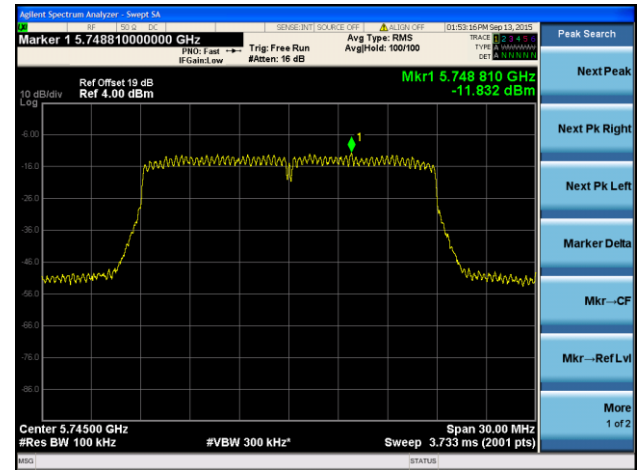
Channel 44 (5220MHz)



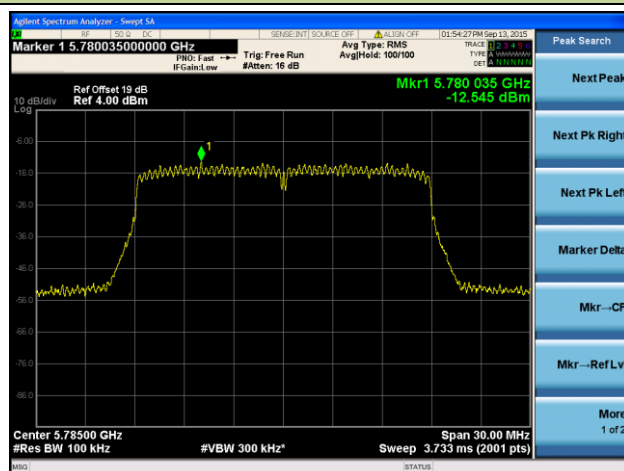
Channel 48 (5240MHz)



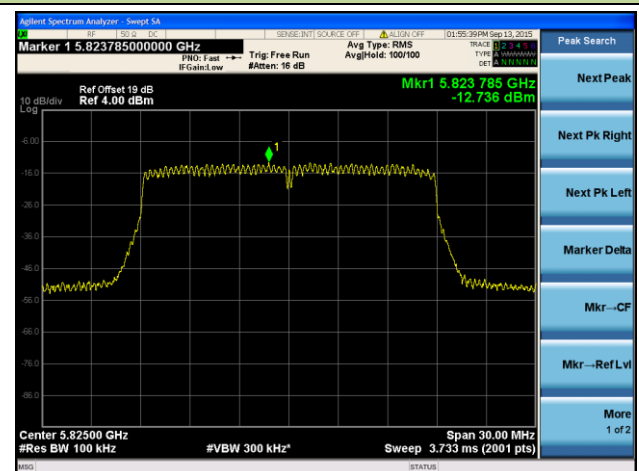
Channel 149 (5745MHz)



Channel 157 (5785MHz)

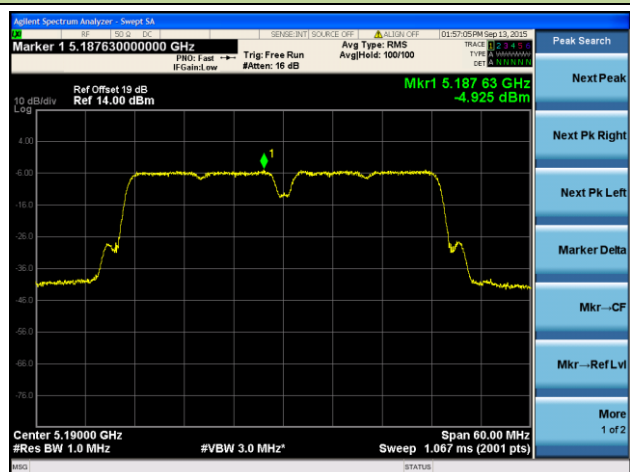


Channel 165 (5825MHz)

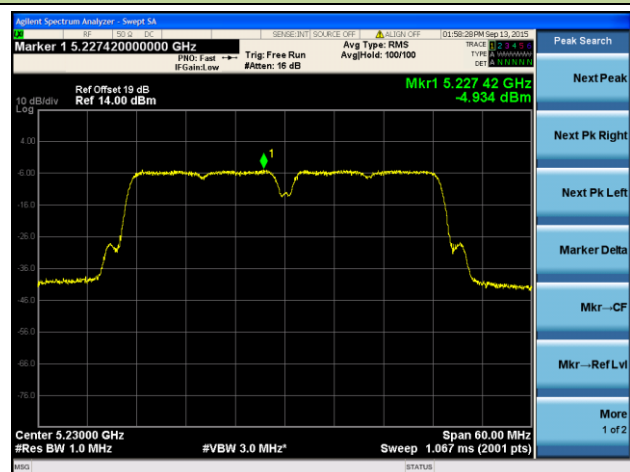


802.11n-HT40 Power Spectral Density - Ant 2

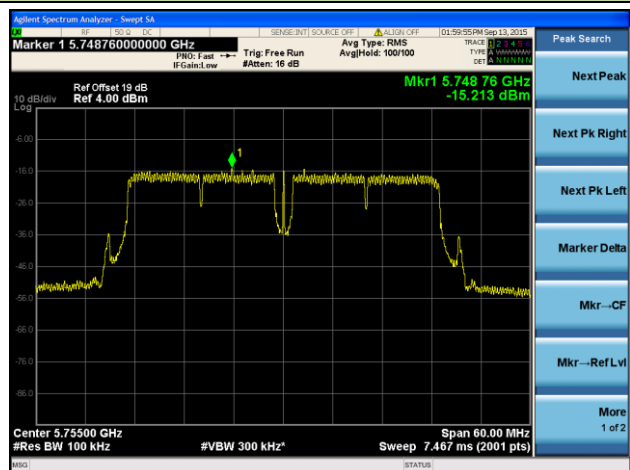
Channel 38 (5190MHz)



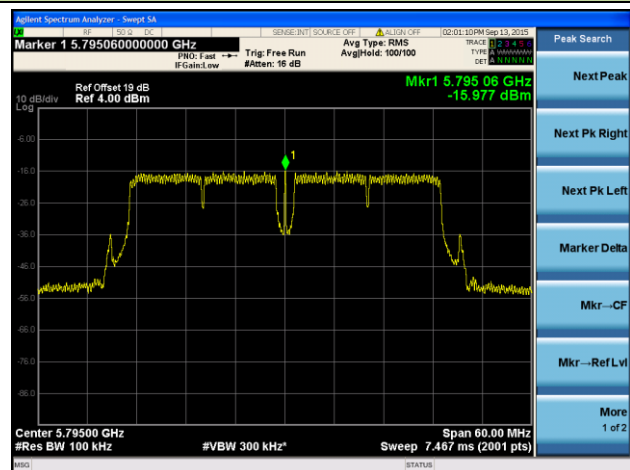
Channel 46 (5230MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)



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:

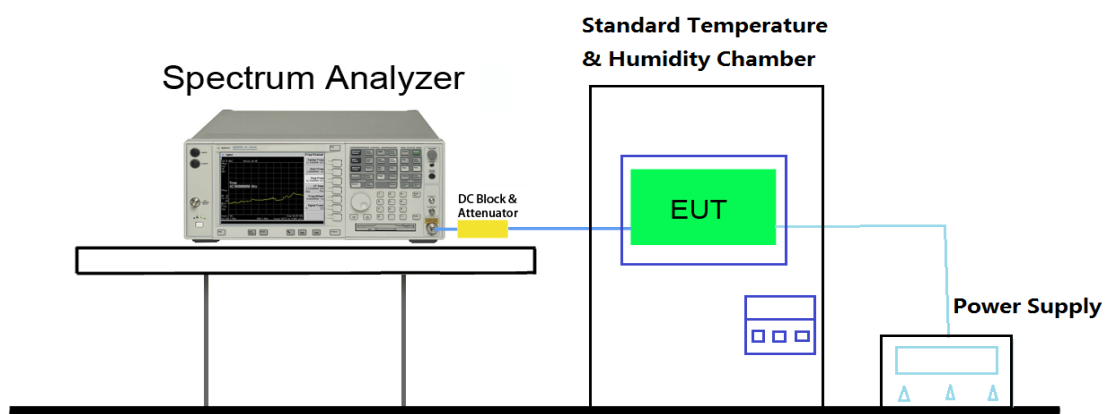
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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	0 ~ 35°C
Test Time	10-05-2015	Relative Humidity	52%RH

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 20	4.01	3.82	3.91	3.80
		- 10	3.93	3.76	3.78	3.77
		0	3.81	3.81	3.96	3.95
		+ 10	4.06	4.09	4.13	4.10
		+ 20 (Ref)	3.90	4.30	4.22	4.11
		+ 30	3.99	4.25	4.11	4.25
		+ 40	4.06	4.28	3.87	4.01
		+ 50	3.99	3.93	3.95	3.88
115%	138	+ 20	4.30	3.89	4.29	3.90
85%	102	+ 20	4.35	4.01	4.04	3.87

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 D02v01 – 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

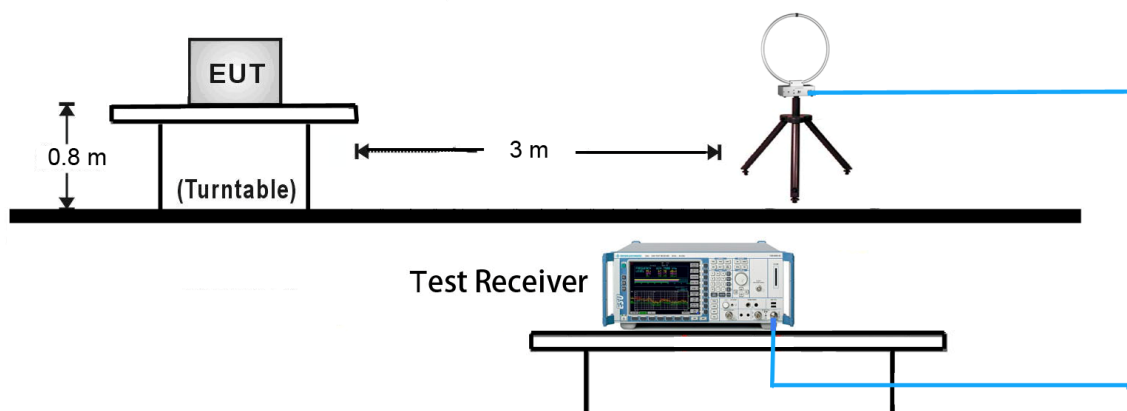
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Average Measurements above 1GHz (Method AD)

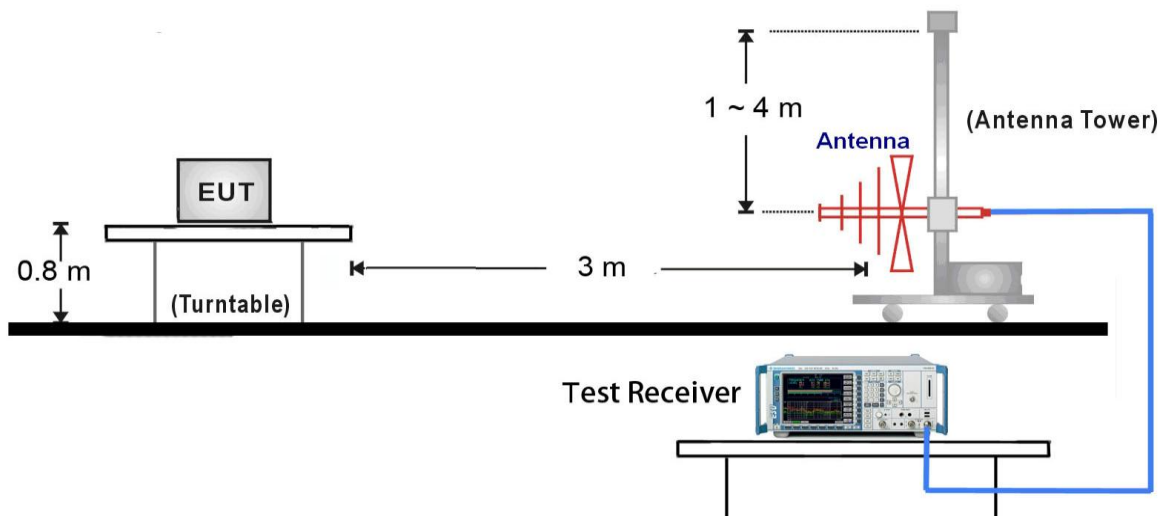
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $> 2 \times \text{span}/\text{RBW}$)
6. Sweep time = auto
7. Trace was averaged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

7.8.4. Test Setup

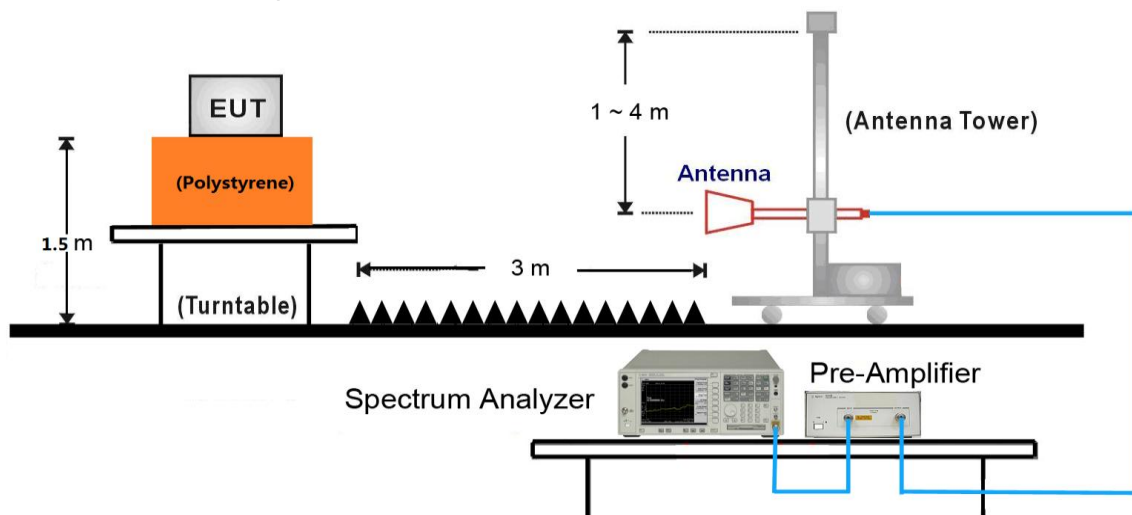
9kHz ~ 30MHz Test Setup:



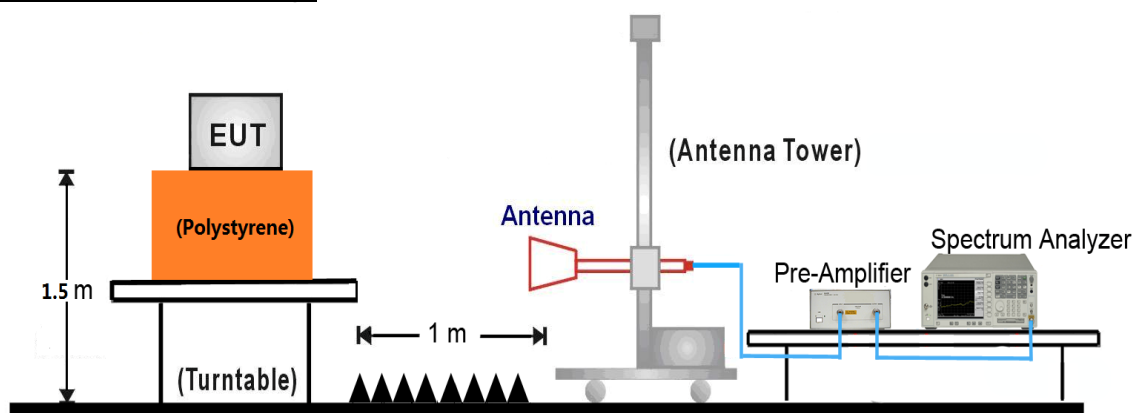
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~ 40GHz Test Setup:



7.8.5. Test Result

Test Mode:	802.11a - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9738.0	34.1	11.2	45.3	68.2	-22.9	Peak	Horizontal
*	10494.5	35.4	12.4	47.8	68.2	-20.4	Peak	Horizontal
	11111.0	33.0	12.7	45.7	74.0	-28.3	Peak	Horizontal
	13302.0	32.7	13.1	45.8	74.0	-28.2	Peak	Horizontal
*	9255.0	32.7	10.2	42.9	68.2	-25.3	Peak	Vertical
*	9738.0	33.1	11.2	44.3	68.2	-23.9	Peak	Vertical
	10843.0	34.5	12.7	47.2	74.0	-26.8	Peak	Vertical
	12052.0	33.3	12.0	45.3	74.0	-28.7	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9246.0	32.7	10.2	42.9	68.2	-25.3	Peak	Horizontal
*	9535.0	32.7	10.8	43.5	68.2	-24.7	Peak	Horizontal
	10782.0	33.0	12.6	45.6	74.0	-28.4	Peak	Horizontal
	11608.0	35.3	12.5	47.8	74.0	-26.2	Peak	Horizontal
*	9536.0	33.0	10.8	43.8	68.2	-24.4	Peak	Vertical
*	10341.5	34.4	12.2	46.6	68.2	-21.6	Peak	Vertical
	11505.0	32.5	12.8	45.3	74.0	-28.7	Peak	Vertical
	13302.0	32.6	13.1	45.7	74.0	-28.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9569.0	32.7	10.9	43.6	68.2	-24.6	Peak	Horizontal
*	10299.0	34.3	12.0	46.3	68.2	-21.9	Peak	Horizontal
	11215.0	33.1	12.4	45.5	74.0	-28.5	Peak	Horizontal
	13308.0	31.9	13.2	45.1	74.0	-28.9	Peak	Horizontal
*	9247.0	32.9	10.2	43.1	68.2	-25.1	Peak	Vertical
*	9602.0	32.7	10.9	43.6	68.2	-24.6	Peak	Vertical
	11693.0	35.3	12.0	47.3	74.0	-26.7	Peak	Vertical
	12505.0	32.7	11.4	44.1	74.0	-29.9	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9255.0	32.3	10.2	42.5	68.2	-25.7	Peak	Horizontal
*	9677.0	32.6	10.9	43.5	68.2	-24.7	Peak	Horizontal
	11106.5	34.5	12.8	47.3	74.0	-26.7	Peak	Horizontal
	12052.0	32.8	12.0	44.8	74.0	-29.2	Peak	Horizontal
*	9236.0	32.4	10.1	42.5	68.2	-25.7	Peak	Vertical
*	9629.0	32.7	11.0	43.7	68.2	-24.5	Peak	Vertical
	11395.5	34.5	12.6	47.1	74.0	-26.9	Peak	Vertical
	12415.0	32.6	11.5	44.1	74.0	-29.9	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9236.0	32.3	10.1	42.4	68.2	-25.8	Peak	Horizontal
*	9522.0	32.6	10.7	43.3	68.2	-24.9	Peak	Horizontal
	10741.0	34.7	12.5	47.2	74.0	-26.8	Peak	Horizontal
	13315.0	32.4	13.3	45.7	74.0	-28.3	Peak	Horizontal
*	9266.0	32.4	10.3	42.7	68.2	-25.5	Peak	Vertical
*	9818.0	32.9	11.6	44.5	68.2	-23.7	Peak	Vertical
	10928.0	34.1	13.0	47.1	74.0	-26.9	Peak	Vertical
	11282.0	33.3	12.4	45.7	74.0	-28.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9277.0	32.4	10.3	42.7	68.2	-25.5	Peak	Horizontal
*	9516.0	31.7	10.6	42.3	68.2	-25.9	Peak	Horizontal
	10945.0	33.7	13.1	46.8	74.0	-27.2	Peak	Horizontal
	11529.0	32.7	12.7	45.4	74.0	-28.6	Peak	Horizontal
*	9255.0	33.2	10.2	43.4	68.2	-24.8	Peak	Vertical
*	9569.0	32.8	10.9	43.7	68.2	-24.5	Peak	Vertical
	10843.0	34.2	12.7	46.9	74.0	-27.1	Peak	Vertical
	11245.0	32.3	12.4	44.7	74.0	-29.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9244.0	33.2	10.2	43.4	68.2	-24.8	Peak	Horizontal
*	9848.0	32.5	11.6	44.1	68.2	-24.1	Peak	Horizontal
	11191.5	34.2	12.5	46.7	74.0	-27.3	Peak	Horizontal
	13329.0	32.7	13.4	46.1	74.0	-27.9	Peak	Horizontal
*	9236.0	32.4	10.1	42.5	68.2	-25.7	Peak	Vertical
*	9526.0	34.5	10.7	45.2	68.2	-23.0	Peak	Vertical
	10945.0	33.9	13.1	47.0	74.0	-27.0	Peak	Vertical
	11252.0	32.3	12.4	44.7	74.0	-29.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9263.0	33.4	10.3	43.7	68.2	-24.5	Peak	Horizontal
*	9515.0	32.4	10.6	43.0	68.2	-25.2	Peak	Horizontal
	10851.5	34.7	12.8	47.5	74.0	-26.5	Peak	Horizontal
	11262.0	32.7	12.4	45.1	74.0	-28.9	Peak	Horizontal
*	9268.0	32.9	10.3	43.2	68.2	-25.0	Peak	Vertical
*	9549.0	31.9	10.8	42.7	68.2	-25.5	Peak	Vertical
	11302.0	34.3	12.5	46.8	74.0	-27.2	Peak	Vertical
	12525.0	33.7	11.4	45.1	74.0	-28.9	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9269.0	32.1	10.3	42.4	68.2	-25.8	Peak	Horizontal
*	9574.0	33.1	10.9	44.0	68.2	-24.2	Peak	Horizontal
	10919.5	33.8	13.0	46.8	74.0	-27.2	Peak	Horizontal
	11282.0	32.4	12.4	44.8	74.0	-29.2	Peak	Horizontal
*	9258.0	32.5	10.3	42.8	68.2	-25.4	Peak	Vertical
*	9516.0	32.6	10.6	43.2	68.2	-25.0	Peak	Vertical
	10715.5	34.3	12.4	46.7	74.0	-27.3	Peak	Vertical
	11250.0	32.3	12.4	44.7	74.0	-29.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9246.0	33.1	10.2	43.3	68.2	-24.9	Peak	Horizontal
*	9529.0	32.7	10.7	43.4	68.2	-24.8	Peak	Horizontal
	10911.0	33.8	13.0	46.8	74.0	-27.2	Peak	Horizontal
	11629.0	33.0	12.4	45.4	74.0	-28.6	Peak	Horizontal
*	9249.0	32.5	10.2	42.7	68.2	-25.5	Peak	Vertical
*	9567.0	33.5	10.9	44.4	68.2	-23.8	Peak	Vertical
	11412.5	34.0	12.6	46.6	74.0	-27.4	Peak	Vertical
	13308.0	31.7	13.2	44.9	74.0	-29.1	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9238.0	32.5	10.2	42.7	68.2	-25.5	Peak	Horizontal
*	9518.0	32.9	10.6	43.5	68.2	-24.7	Peak	Horizontal
	11378.5	33.8	12.6	46.4	74.0	-27.6	Peak	Horizontal
	13304.0	32.8	13.1	45.9	74.0	-28.1	Peak	Horizontal
*	9271.0	33.2	10.3	43.5	68.2	-24.7	Peak	Vertical
*	9528.0	32.4	10.7	43.1	68.2	-25.1	Peak	Vertical
	11310.5	34.1	12.5	46.6	74.0	-27.4	Peak	Vertical
	13308.0	32.2	13.2	45.4	74.0	-28.6	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9248.0	32.6	10.2	42.8	68.2	-25.4	Peak	Horizontal
*	9518.0	33.2	10.6	43.8	68.2	-24.4	Peak	Horizontal
	11370.0	34.4	12.6	47.0	74.0	-27.0	Peak	Horizontal
	13304.0	32.6	13.1	45.7	74.0	-28.3	Peak	Horizontal
*	9271.0	32.5	10.3	42.8	68.2	-25.4	Peak	Vertical
*	9538.0	32.9	10.8	43.7	68.2	-24.5	Peak	Vertical
	10953.5	34.3	13.1	47.4	74.0	-26.6	Peak	Vertical
	12005.0	32.9	11.9	44.8	74.0	-29.2	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9248.0	33.4	10.2	43.6	68.2	-24.6	Peak	Horizontal
*	9536.0	33.2	10.8	44.0	68.2	-24.2	Peak	Horizontal
	11030.0	34.1	13.0	47.1	74.0	-26.9	Peak	Horizontal
	12020.0	32.9	11.9	44.8	74.0	-29.2	Peak	Horizontal
*	9236.0	32.7	10.1	42.8	68.2	-25.4	Peak	Vertical
*	9518.0	32.9	10.6	43.5	68.2	-24.7	Peak	Vertical
	11395.5	33.5	12.6	46.1	74.0	-27.9	Peak	Vertical
	12051.0	32.6	12.0	44.6	74.0	-29.4	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9248.0	33.1	10.2	43.3	68.2	-24.9	Peak	Horizontal
*	9518.0	32.1	10.6	42.7	68.2	-25.5	Peak	Horizontal
	10851.5	34.2	12.8	47.0	74.0	-27.0	Peak	Horizontal
	13325.0	32.6	13.4	46.0	74.0	-28.0	Peak	Horizontal
*	9218.0	32.8	10.1	42.9	68.2	-25.3	Peak	Vertical
*	9517.0	32.6	10.6	43.2	68.2	-25.0	Peak	Vertical
	10877.0	33.5	12.9	46.4	74.0	-27.6	Peak	Vertical
	11252.0	32.3	12.4	44.7	74.0	-29.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9248.0	33.1	10.2	43.3	68.2	-24.9	Peak	Horizontal
*	9568.0	32.7	10.9	43.6	68.2	-24.6	Peak	Horizontal
	10996.0	35.0	13.0	48.0	74.0	-26.0	Peak	Horizontal
	11250.0	33.4	12.4	45.8	74.0	-28.2	Peak	Horizontal
*	9248.0	32.9	10.2	43.1	68.2	-25.1	Peak	Vertical
*	9547.0	33.2	10.8	44.0	68.2	-24.2	Peak	Vertical
	10919.5	34.1	13.0	47.1	74.0	-26.9	Peak	Vertical
	12250.0	33.3	11.7	45.0	74.0	-29.0	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 1	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9236.0	32.8	10.1	42.9	68.2	-25.3	Peak	Horizontal
*	9526.0	33.8	10.7	44.5	68.2	-23.7	Peak	Horizontal
	10894.0	33.8	12.9	46.7	74.0	-27.3	Peak	Horizontal
	11252.0	32.1	12.4	44.5	74.0	-29.5	Peak	Horizontal
*	9248.0	32.8	10.2	43.0	68.2	-25.2	Peak	Vertical
*	9538.0	32.4	10.8	43.2	68.2	-25.0	Peak	Vertical
	10928.0	34.6	13.0	47.6	74.0	-26.4	Peak	Vertical
	11250.0	32.3	12.4	44.7	74.0	-29.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9235.0	34.0	10.1	44.1	68.2	-24.1	Peak	Horizontal
*	9518.0	32.8	10.6	43.4	68.2	-24.8	Peak	Horizontal
	10877.0	34.0	12.9	46.9	74.0	-27.1	Peak	Horizontal
	11252.0	33.9	12.4	46.3	74.0	-27.7	Peak	Horizontal
*	9241.0	33.1	10.2	43.3	68.2	-24.9	Peak	Vertical
*	9518.0	32.7	10.6	43.3	68.2	-24.9	Peak	Vertical
	10860.0	35.4	12.8	48.2	74.0	-25.8	Peak	Vertical
	11252.0	32.6	12.4	45.0	74.0	-29.0	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9232.0	33.2	10.1	43.3	68.2	-24.9	Peak	Horizontal
*	9516.0	32.7	10.6	43.3	68.2	-24.9	Peak	Horizontal
	10868.5	34.3	12.8	47.1	74.0	-26.9	Peak	Horizontal
	11252.0	32.5	12.4	44.9	74.0	-29.1	Peak	Horizontal
*	9236.0	31.9	10.1	42.0	68.2	-26.2	Peak	Vertical
*	9518.0	31.5	10.6	42.1	68.2	-26.1	Peak	Vertical
	11081.0	33.9	12.9	46.8	74.0	-27.2	Peak	Vertical
	11258.0	32.5	12.4	44.9	74.0	-29.1	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9238.0	32.8	10.2	43.0	68.2	-25.2	Peak	Horizontal
*	9528.0	31.9	10.7	42.6	68.2	-25.6	Peak	Horizontal
	10732.5	33.1	12.5	45.6	74.0	-28.4	Peak	Horizontal
	11285.0	32.8	12.4	45.2	74.0	-28.8	Peak	Horizontal
*	9268.0	32.6	10.3	42.9	68.2	-25.3	Peak	Vertical
*	9569.0	32.6	10.9	43.5	68.2	-24.7	Peak	Vertical
	10877.0	33.6	12.9	46.5	74.0	-27.5	Peak	Vertical
	11286.0	33.3	12.4	45.7	74.0	-28.3	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9269.0	32.6	10.3	42.9	68.2	-25.3	Peak	Horizontal
*	9518.0	33.1	10.6	43.7	68.2	-24.5	Peak	Horizontal
	10860.0	34.0	12.8	46.8	74.0	-27.2	Peak	Horizontal
	11252.0	33.1	12.4	45.5	74.0	-28.5	Peak	Horizontal
*	9236.0	32.7	10.1	42.8	68.2	-25.4	Peak	Vertical
*	9548.0	32.4	10.8	43.2	68.2	-25.0	Peak	Vertical
	10945.0	33.6	13.1	46.7	74.0	-27.3	Peak	Vertical
	12150.0	33.3	11.8	45.1	74.0	-28.9	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9251.0	33.3	10.2	43.5	68.2	-24.7	Peak	Horizontal
*	9569.0	33.3	10.9	44.2	68.2	-24.0	Peak	Horizontal
	10758.0	34.9	12.5	47.4	74.0	-26.6	Peak	Horizontal
	11258.0	33.0	12.4	45.4	74.0	-28.6	Peak	Horizontal
*	9258.0	33.5	10.3	43.8	68.2	-24.4	Peak	Vertical
*	9549.0	32.3	10.8	43.1	68.2	-25.1	Peak	Vertical
	10758.0	34.9	12.5	47.4	74.0	-26.6	Peak	Vertical
	11252.0	32.8	12.4	45.2	74.0	-28.8	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11a - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9268.0	32.6	10.3	42.9	68.2	-25.3	Peak	Horizontal
*	9548.0	32.5	10.8	43.3	68.2	-24.9	Peak	Horizontal
	11250.0	32.7	12.4	45.1	74.0	-28.9	Peak	Horizontal
	11506.0	34.4	12.8	47.2	74.0	-26.8	Peak	Horizontal
*	9235.0	32.4	10.1	42.5	68.2	-25.7	Peak	Vertical
*	9524.0	32.3	10.7	43.0	68.2	-25.2	Peak	Vertical
	11412.5	34.5	12.6	47.1	74.0	-26.9	Peak	Vertical
	12052.0	32.3	12.0	44.3	74.0	-29.7	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9218.0	34.5	10.1	44.6	68.2	-23.6	Peak	Horizontal
*	9535.0	33.2	10.8	44.0	68.2	-24.2	Peak	Horizontal
	11591.0	35.7	12.6	48.3	74.0	-25.7	Peak	Horizontal
	12065.0	33.7	12.0	45.7	74.0	-28.3	Peak	Horizontal
*	9261.0	32.3	10.3	42.6	68.2	-25.6	Peak	Vertical
*	9516.0	32.0	10.6	42.6	68.2	-25.6	Peak	Vertical
	11591.0	33.5	12.6	46.1	74.0	-27.9	Peak	Vertical
	12082.0	34.2	12.0	46.2	74.0	-27.8	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9264.0	32.5	10.3	42.8	68.2	-25.4	Peak	Horizontal
*	9518.0	32.9	10.6	43.5	68.2	-24.7	Peak	Horizontal
	11565.5	34.8	12.7	47.5	74.0	-26.5	Peak	Horizontal
	15424.5	33.8	12.6	46.4	74.0	-27.6	Peak	Horizontal
*	9218.0	33.0	10.1	43.1	68.2	-25.1	Peak	Vertical
*	9523.0	32.8	10.7	43.5	68.2	-24.7	Peak	Vertical
	11081.0	34.6	12.9	47.5	74.0	-26.5	Peak	Vertical
	12053.0	33.8	12.0	45.8	74.0	-28.2	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9215.0	33.1	10.1	43.2	68.2	-25.0	Peak	Horizontal
*	9526.0	32.2	10.7	42.9	68.2	-25.3	Peak	Horizontal
	11021.5	33.9	13.0	46.9	74.0	-27.1	Peak	Horizontal
	11786.5	33.7	11.9	45.6	74.0	-28.4	Peak	Horizontal
*	9236.0	33.0	10.1	43.1	68.2	-25.1	Peak	Vertical
*	9517.0	31.7	10.6	42.3	68.2	-25.9	Peak	Vertical
	10996.0	33.9	13.0	46.9	74.0	-27.1	Peak	Vertical
	11251.0	32.7	12.4	45.1	74.0	-28.9	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9236.0	32.6	10.1	42.7	68.2	-25.5	Peak	Horizontal
*	9562.0	32.0	10.9	42.9	68.2	-25.3	Peak	Horizontal
	11548.5	34.8	12.7	47.5	74.0	-26.5	Peak	Horizontal
	12020.0	32.6	11.9	44.5	74.0	-29.5	Peak	Horizontal
*	9236.0	32.5	10.1	42.6	68.2	-25.6	Peak	Vertical
*	9518.0	32.0	10.6	42.6	68.2	-25.6	Peak	Vertical
	10979.0	33.8	13.0	46.8	74.0	-27.2	Peak	Vertical
	11252.0	31.5	12.4	43.9	74.0	-30.1	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9236.0	32.6	10.1	42.7	68.2	-25.5	Peak	Horizontal
*	9517.0	32.2	10.6	42.8	68.2	-25.4	Peak	Horizontal
	10825.0	33.0	12.7	45.7	74.0	-28.3	Peak	Horizontal
	10979.0	33.8	13.0	46.8	74.0	-27.2	Peak	Horizontal
*	9236.0	32.7	10.1	42.8	68.2	-25.4	Peak	Vertical
*	9518.0	32.6	10.6	43.2	68.2	-25.0	Peak	Vertical
	10681.5	34.6	12.4	47.0	74.0	-27.0	Peak	Vertical
	11252.0	32.5	12.4	44.9	74.0	-29.1	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT20 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9236.0	32.4	10.1	42.5	68.2	-25.7	Peak	Horizontal
*	9518.0	32.5	10.6	43.1	68.2	-25.1	Peak	Horizontal
	11574.0	34.8	12.6	47.4	74.0	-26.6	Peak	Horizontal
	12053.0	33.0	12.0	45.0	74.0	-29.0	Peak	Horizontal
*	9236.0	32.9	10.1	43.0	68.2	-25.2	Peak	Vertical
*	9547.0	32.8	10.8	43.6	68.2	-24.6	Peak	Vertical
	10877.0	36.3	12.9	49.2	74.0	-24.8	Peak	Vertical
	12325.0	32.6	11.6	44.2	74.0	-29.8	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9236.0	33.1	10.1	43.2	68.2	-25.0	Peak	Horizontal
*	9517.0	32.1	10.6	42.7	68.2	-25.5	Peak	Horizontal
	10936.5	33.6	13.0	46.6	74.0	-27.4	Peak	Horizontal
	12052.0	33.6	12.0	45.6	74.0	-28.4	Peak	Horizontal
*	9236.0	33.3	10.1	43.4	68.2	-24.8	Peak	Vertical
*	9517.0	32.6	10.6	43.2	68.2	-25.0	Peak	Vertical
	10651.0	33.0	11.9	44.9	74.0	-29.1	Peak	Vertical
	10936.5	33.6	13.0	46.6	74.0	-27.4	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9215.0	32.2	10.1	42.3	68.2	-25.9	Peak	Horizontal
*	9517.0	31.9	10.6	42.5	68.2	-25.7	Peak	Horizontal
	11344.5	33.2	12.5	45.7	74.0	-28.3	Peak	Horizontal
	12305.0	32.2	11.6	43.8	74.0	-30.2	Peak	Horizontal
*	9235.0	32.9	10.1	43.0	68.2	-25.2	Peak	Vertical
*	9518.0	32.6	10.6	43.2	68.2	-25.0	Peak	Vertical
	11599.5	34.9	12.6	47.5	74.0	-26.5	Peak	Vertical
	12050.0	32.9	12.0	44.9	74.0	-29.1	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9249.0	33.2	10.2	43.4	68.2	-24.8	Peak	Horizontal
*	9526.0	33.1	10.7	43.8	68.2	-24.4	Peak	Horizontal
	11404.0	33.9	12.6	46.5	74.0	-27.5	Peak	Horizontal
	15577.5	35.5	12.1	47.6	74.0	-26.4	Peak	Horizontal
*	9236.0	33.0	10.1	43.1	68.2	-25.1	Peak	Vertical
*	9548.0	32.5	10.8	43.3	68.2	-24.9	Peak	Vertical
	10800.5	33.5	12.6	46.1	74.0	-27.9	Peak	Vertical
	11268.0	35.0	12.4	47.4	74.0	-26.6	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 dBμV/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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Mode:	802.11n-HT40 - Ant 2	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9248.0	32.7	10.2	42.9	68.2	-25.3	Peak	Horizontal
*	9531.0	32.6	10.7	43.3	68.2	-24.9	Peak	Horizontal
	10928.0	34.1	13.0	47.1	74.0	-26.9	Peak	Horizontal
	12052.0	32.6	12.0	44.6	74.0	-29.4	Peak	Horizontal
*	9235.0	33.1	10.1	43.2	68.2	-25.0	Peak	Vertical
*	9518.0	32.8	10.6	43.4	68.2	-24.8	Peak	Vertical
	10945.0	34.1	13.1	47.2	74.0	-26.8	Peak	Vertical
	11353.0	35.1	12.5	47.6	74.0	-26.4	Peak	Vertical

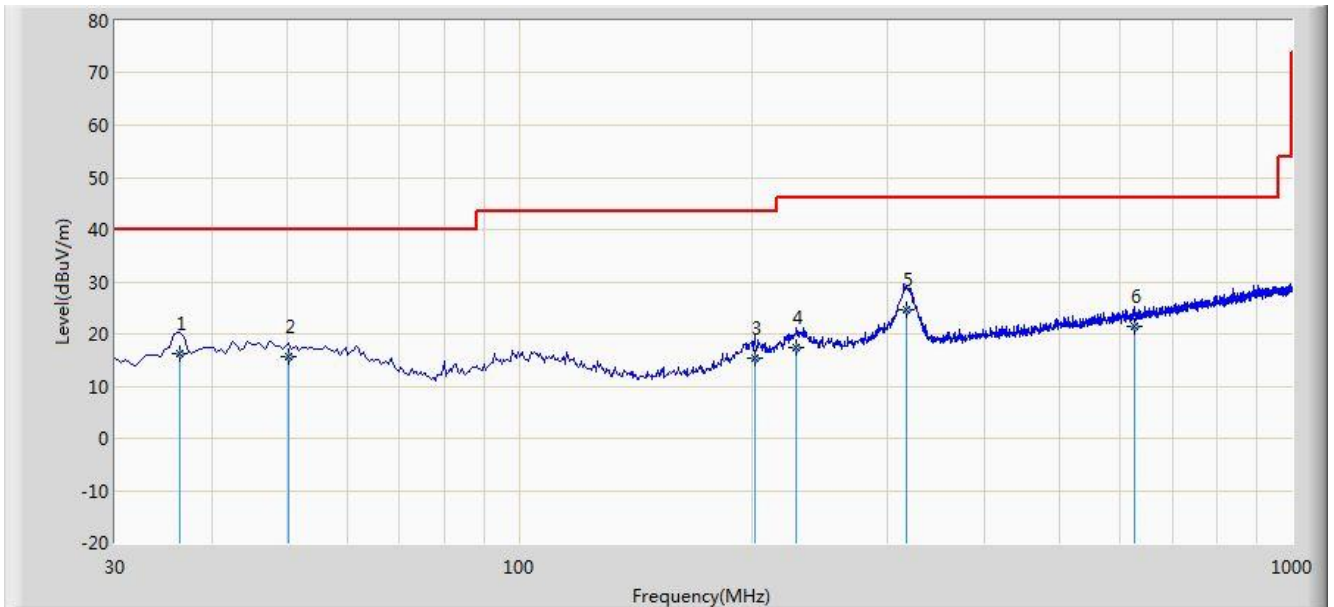
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2015/10/08 - 18:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Worst Mode: Transmit at channel 5180MHz	

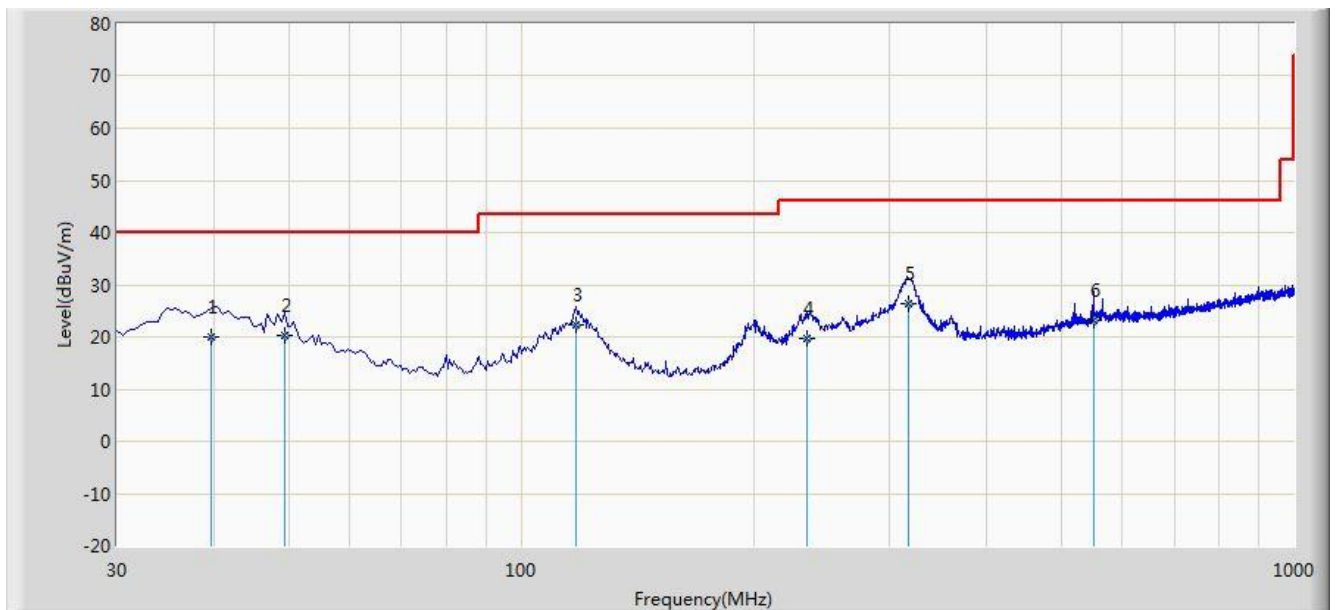


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			36.305	16.307	3.154	-23.693	40.000	13.153	QP
2			50.370	15.510	0.610	-24.490	40.000	14.900	QP
3			201.690	15.496	3.240	-28.004	43.500	12.256	QP
4			228.365	17.279	4.325	-28.721	46.000	12.955	QP
5		*	317.120	24.527	9.587	-21.473	46.000	14.940	QP
6			626.065	21.314	1.042	-24.686	46.000	20.272	QP

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

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

Site: AC1	Time: 2015/10/08 - 18:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: sengled pulse flex	Power: AC 120V/60Hz
Worst Mode: Transmit at channel 5180MHz	

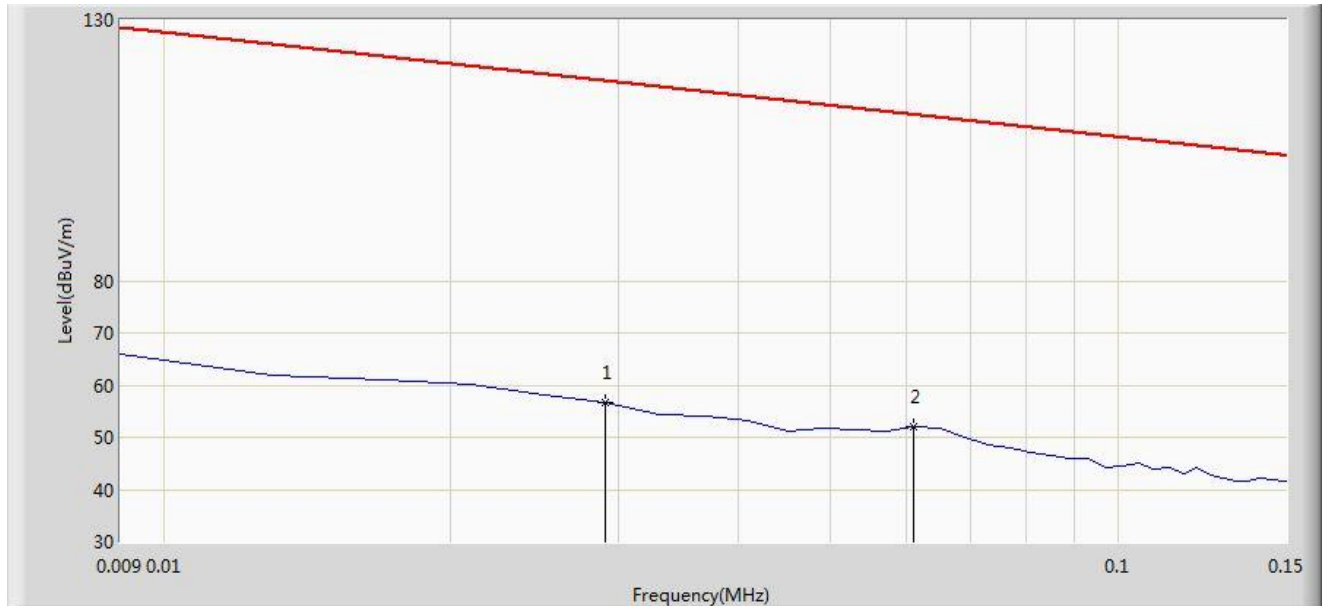


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			39.701	20.103	6.315	-19.897	40.000	13.788	QP
2			49.402	20.290	5.374	-19.710	40.000	14.916	QP
3			117.785	22.228	10.646	-21.272	43.500	11.582	QP
4			234.185	19.593	6.424	-26.407	46.000	13.169	QP
5		*	317.605	26.379	11.425	-19.621	46.000	14.954	QP
6			549.920	23.292	4.254	-22.708	46.000	19.038	QP

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

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

Site: AC1	Time: 2015/10/06 - 19:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: sengled pulse flex	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

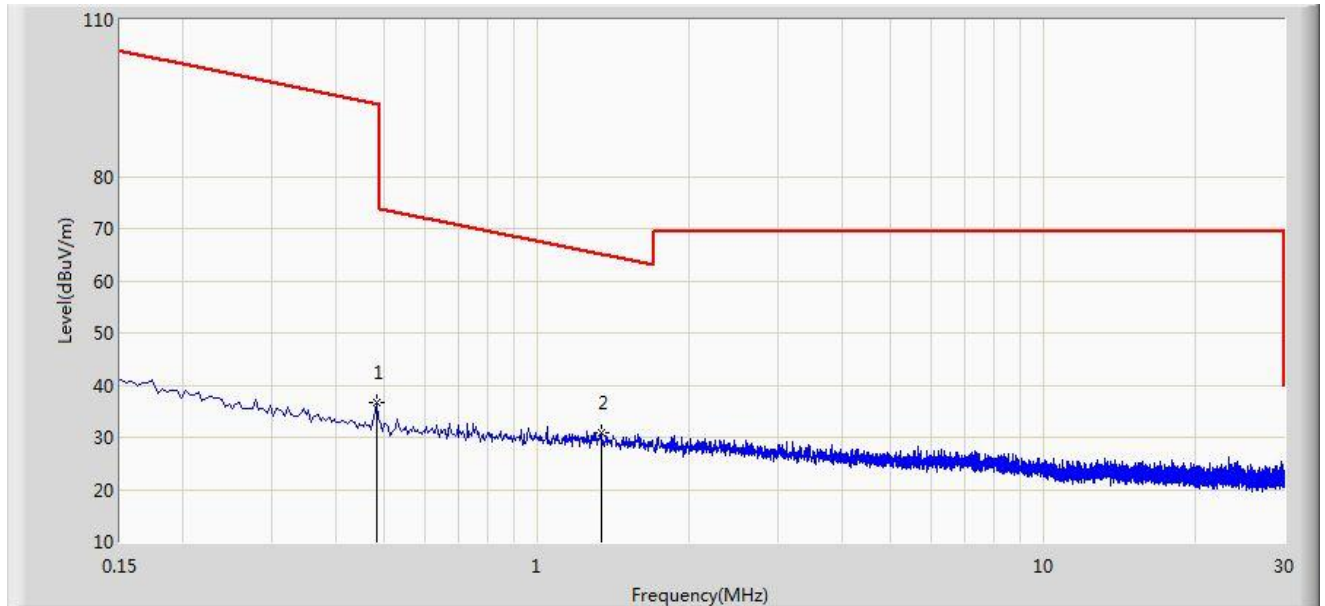


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.029	56.610	35.660	-61.732	118.342	21.049	QP
2		*	0.061	51.899	31.588	-59.988	111.887	20.311	QP

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

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

Site: AC1	Time: 2015/10/06 - 19:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: sengled pulse flex	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 (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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

Site: AC1	Time: 2015/10/06 - 21:25
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~40GHz.	



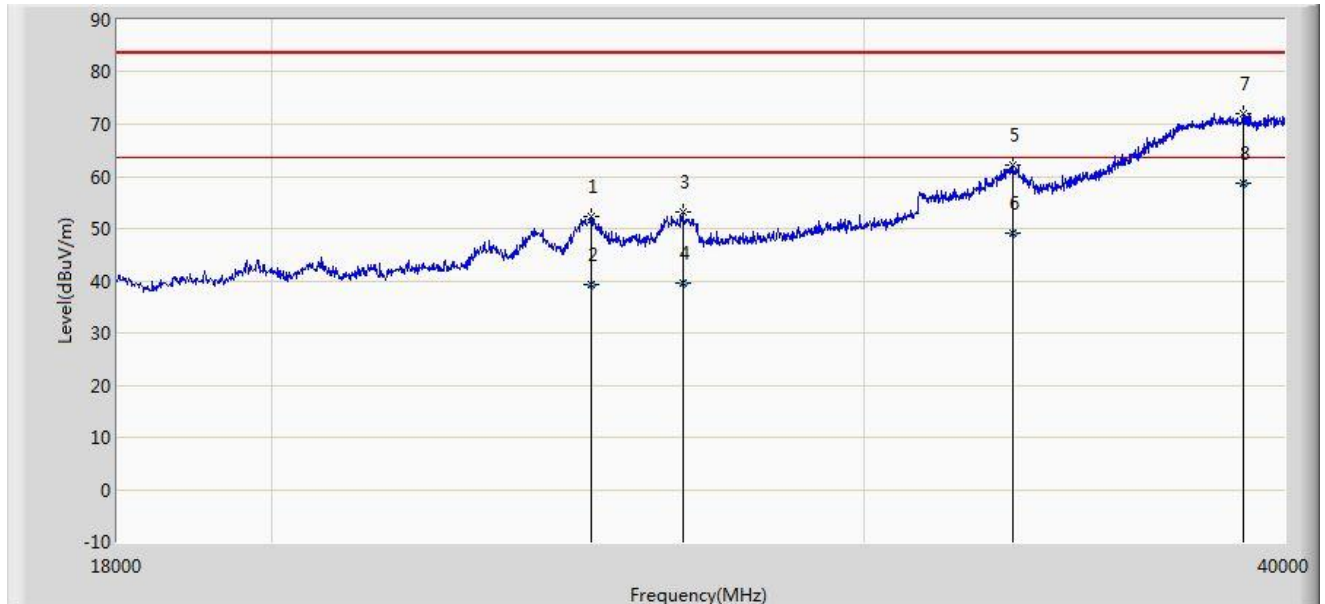
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			24864.000	51.836	37.061	-31.664	83.500	14.775	PK
2			24864.088	39.225	24.450	-24.275	63.500	14.775	AV
3			26260.988	39.469	24.050	-24.031	63.500	15.419	AV
4			26261.000	51.956	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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Limit@1m = 20*Log(500uV/m) + 20*Log(3m/1m) = 63.5dBμV/m (Average detector), and 83.5dBμV/m (Peak detector).

Site: AC1	Time: 2015/10/06 - 21:28
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: sengled pulse flex	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 (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Limit@1m = 20*Log(500uV/m) + 20*Log(3m/1m) = 63.5dBμV/m (Average detector), and 83.5dBμV/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)
0.009 - 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	8.025 - 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 - 156.525225	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	35.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

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.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 - 0.110	240 - 285	9.0 - 9.2
2.1735 - 2.1905	322 - 335.4	9.3 - 9.5
3.020 - 3.026	399.9 - 410	10.6 - 12.7
4.125 - 4.128	608 - 614	13.25 - 13.4
4.17725 - 4.17775	960 - 1427	14.47 - 14.5
4.20725 - 4.20775	1435 - 1626.5	15.35 - 16.2
5.677 - 5.683	1645.5 - 1646.5	17.7 - 21.4
6.215 - 6.218	1660 - 1710	22.01 - 23.12

6.26775 - 6.26825	1718.8 -1722.2	23.6 - 24.0
6.31175 - 6.31225	2200 - 2300	31.2 - 31.8
8.291 - 8.294	2310 -2390	36.43 - 36.5
8.362 - 8.366	2655 - 2900	Above 38.6
8.37625 - 8.38675	3260 - 3267	--
8.41425 - 8.41475	3332 -3339	
12.29 - 12.293	334.5 - 3358	
12.51975 - 12.52025	3500 - 4400	
12.57675 - 12.57725	4500 - 5150	
13.36 -13.41	5350 - 5460	
16.42 - 16.423	7250 - 7750	
16.69475 - 16.69525	8025 - 8500	
16.80425 - 16.80475	--	
25.5 - 25.67		
37.5 - 38.25		
73 - 74.6		
74.8 - 75.2		
108 - 138		
156.52475 - 156.525225		
156.7 - 156.9		

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.

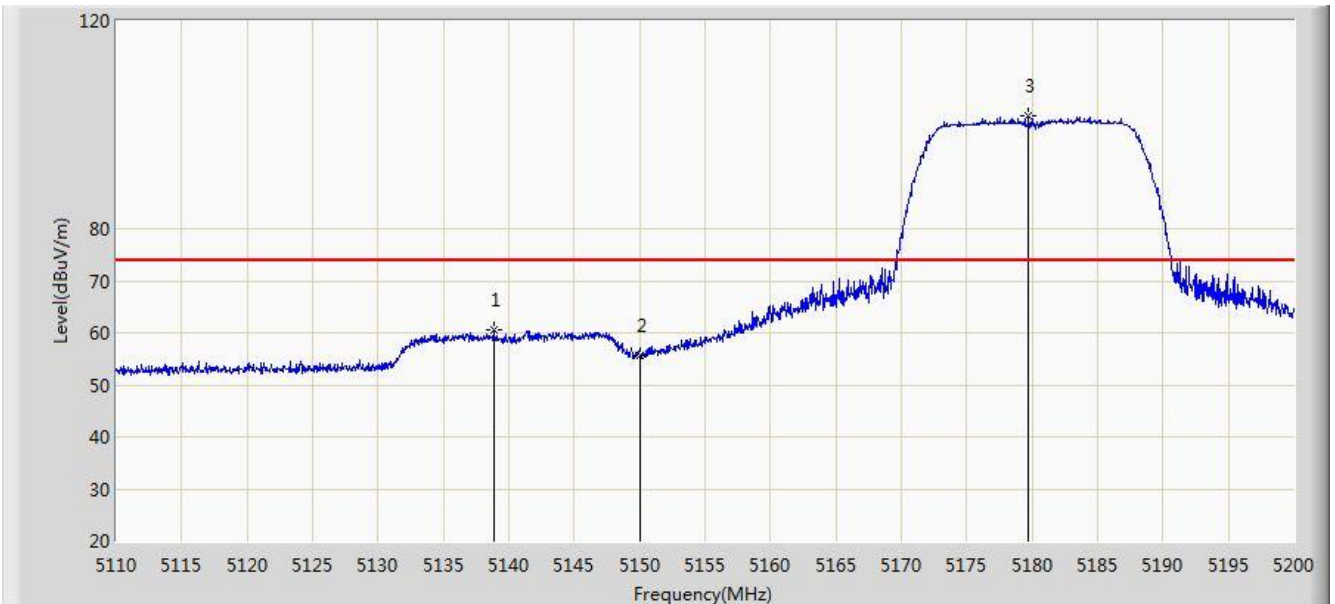
Note: Refer to KDB 789033 D02v01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the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

7.9.2. Test Result of Radiated Restricted Band Edge

Site: AC 1	Time: 2015/09/26 - 15:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz Ant 1	

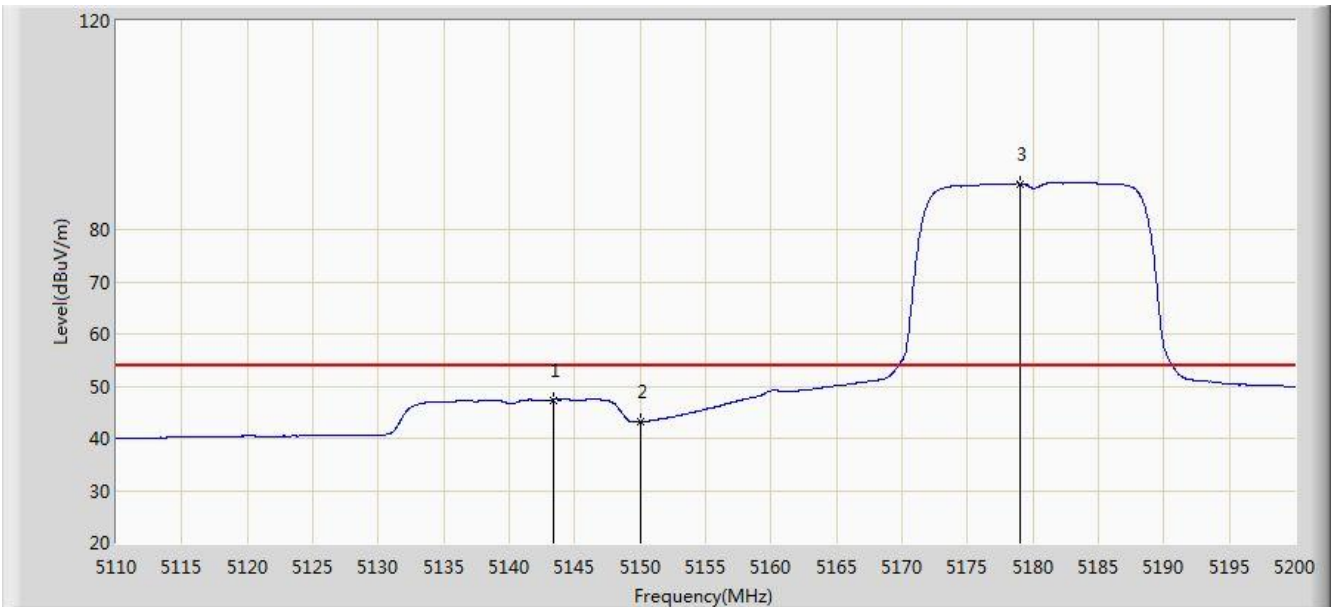


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5138.845	60.582	57.272	-13.418	74.000	3.311	PK
2			5150.000	55.603	52.294	-18.397	74.000	3.309	PK
3		*	5179.750	101.605	98.332	N/A	N/A	3.273	PK

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

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

Site: AC 1	Time: 2015/09/26 - 15:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz Ant 1	

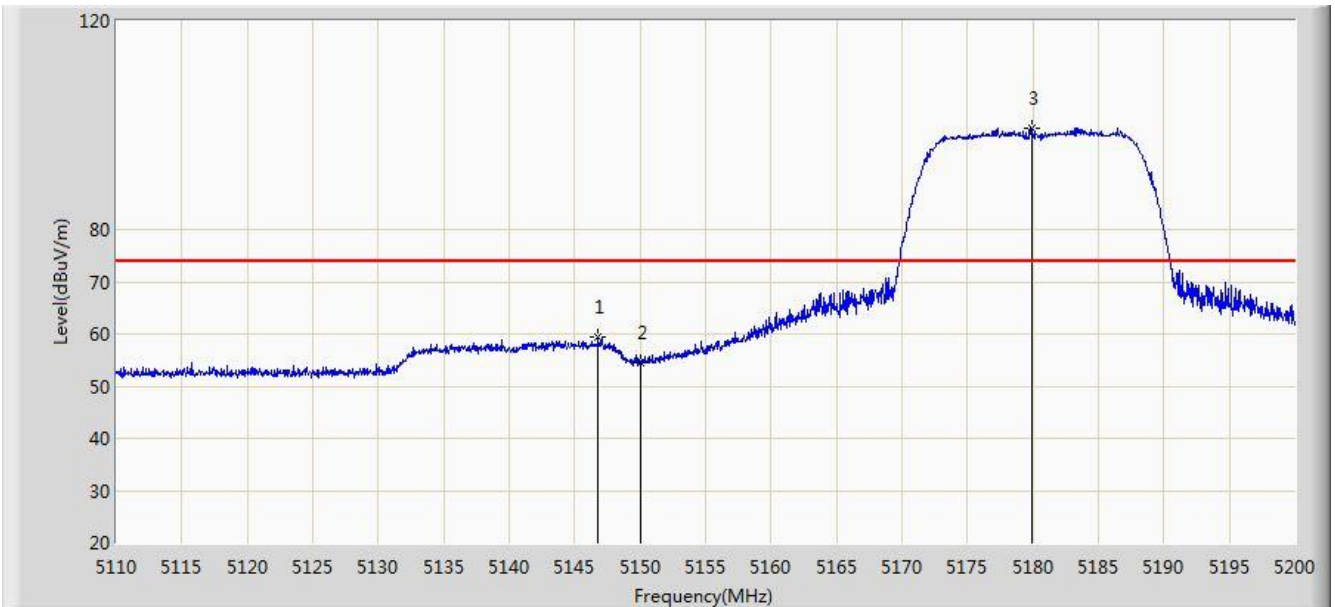


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5143.390	47.381	44.072	-6.619	54.000	3.309	AV
2			5150.000	43.123	39.814	-10.877	54.000	3.309	AV
3		*	5179.075	88.798	85.524	N/A	N/A	3.274	AV

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

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

Site: AC 1	Time: 2015/09/26 - 15:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz Ant 1	

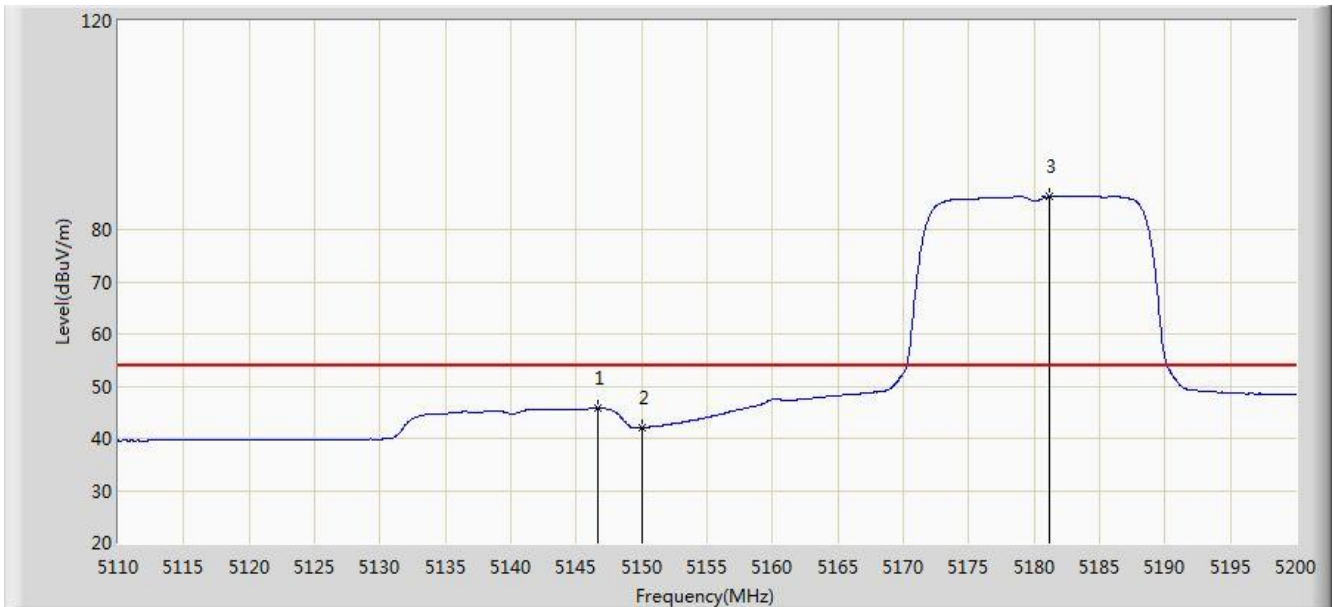


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5146.810	59.397	56.088	-14.603	74.000	3.308	PK
2			5150.000	54.566	51.257	-19.434	74.000	3.309	PK
3		*	5179.930	99.493	96.220	N/A	N/A	3.273	PK

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

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

Site: AC 1	Time: 2015/09/26 - 15:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz Ant 1	

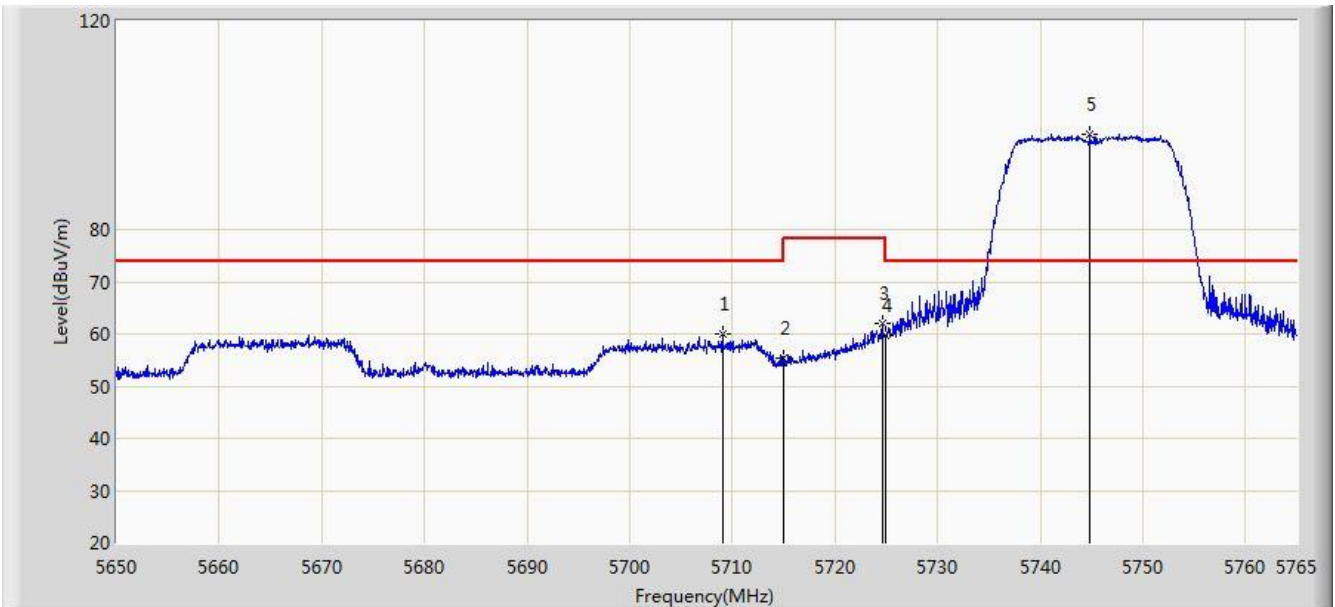


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5146.630	45.781	42.472	-8.219	54.000	3.309	AV
2			5150.000	41.968	38.659	-12.032	54.000	3.309	AV
3		*	5181.145	86.326	83.054	N/A	N/A	3.272	AV

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

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

Site: AC 1	Time: 2015/09/26 - 15:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5745MHz Ant 1	

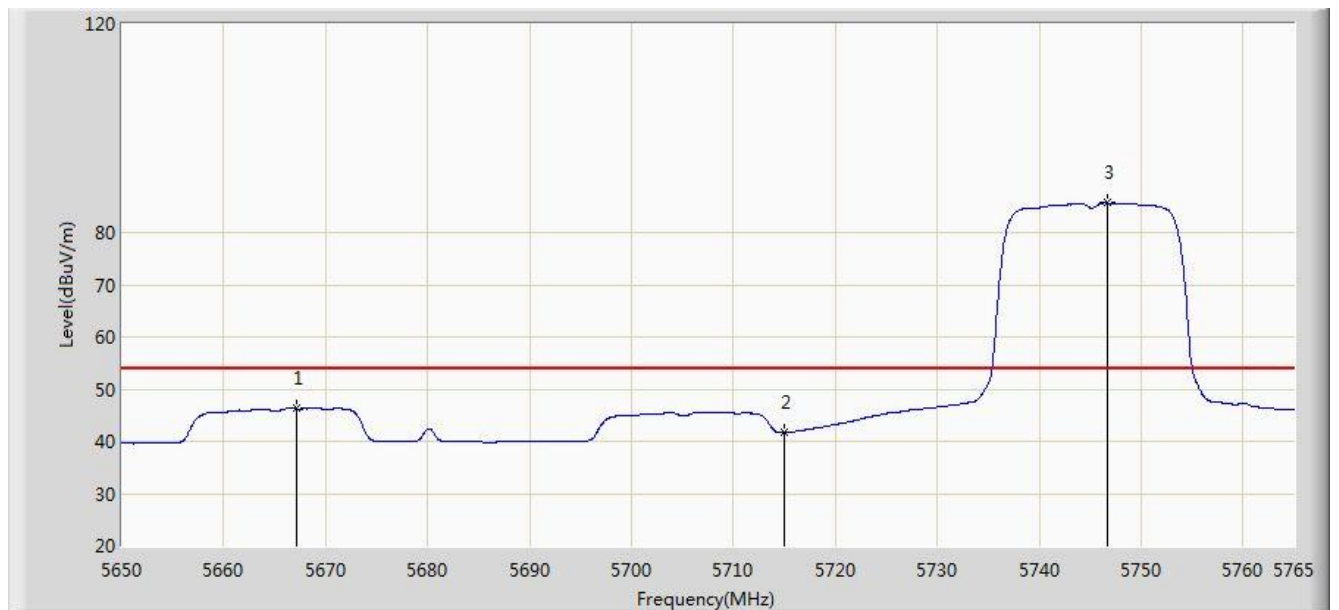


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5709.053	59.948	56.205	-14.052	74.000	3.743	PK
2			5715.000	55.459	51.698	-18.541	74.000	3.761	PK
3			5724.635	62.018	58.228	-16.182	78.200	3.790	PK
4			5725.000	59.666	55.875	-18.534	78.200	3.791	PK
5		*	5744.875	98.131	94.279	N/A	N/A	3.853	PK

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

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

Site: AC 1	Time: 2015/09/26 - 15:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: sengled pulse flex	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5745MHz Ant 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5667.135	46.267	42.610	-7.733	54.000	3.656	AV
2			5715.000	41.638	37.877	-12.362	54.000	3.761	AV
3		*	5746.715	85.694	81.835	N/A	N/A	3.859	AV

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

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