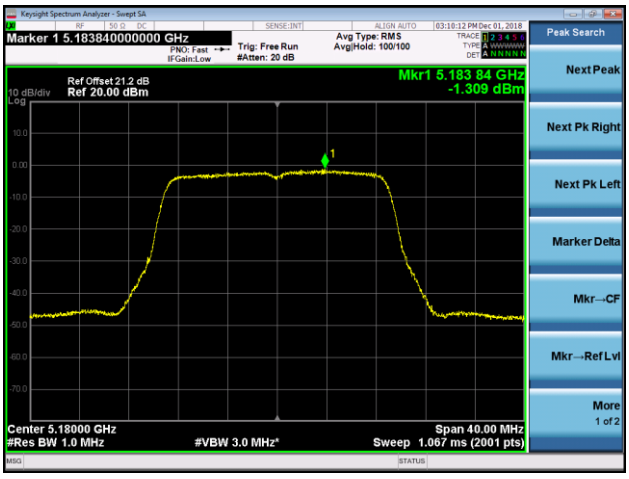
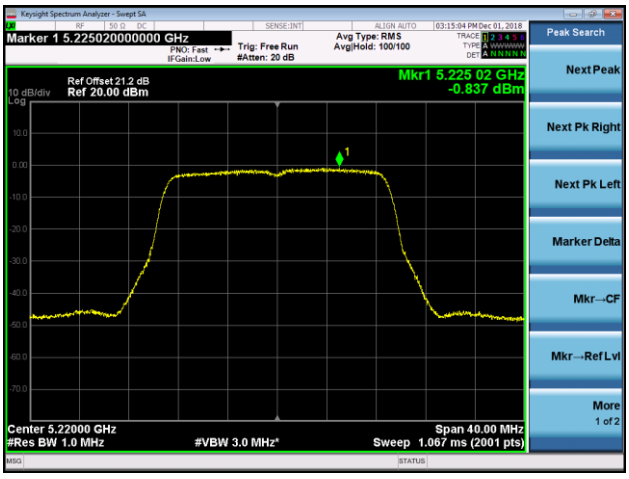
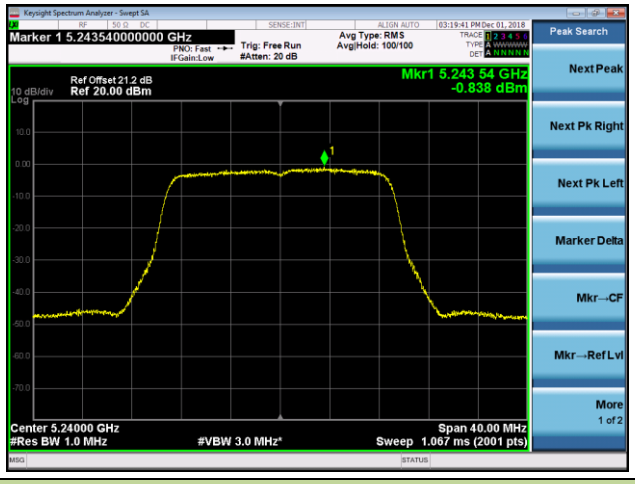
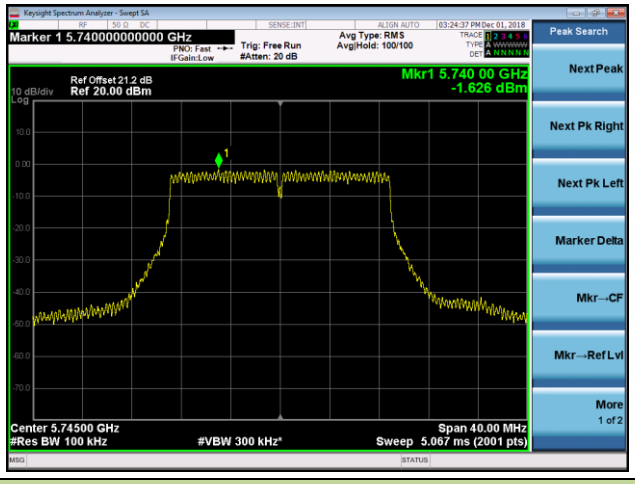
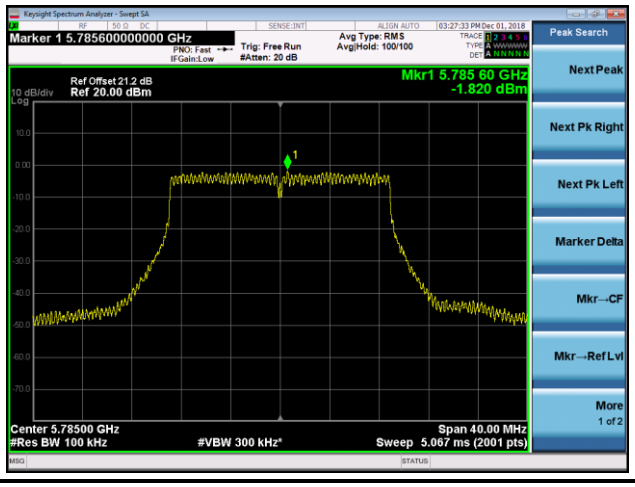
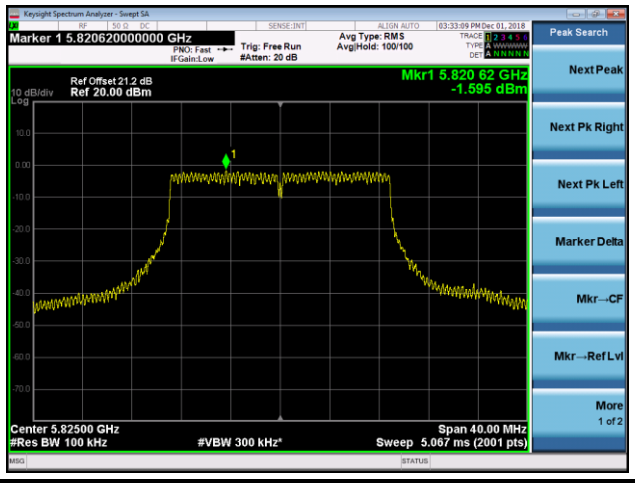
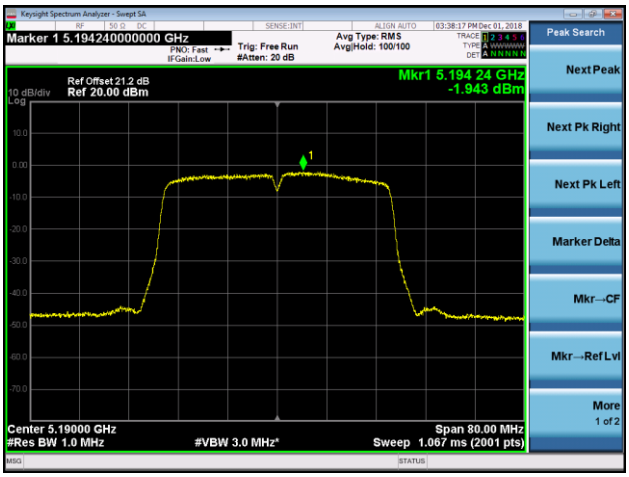
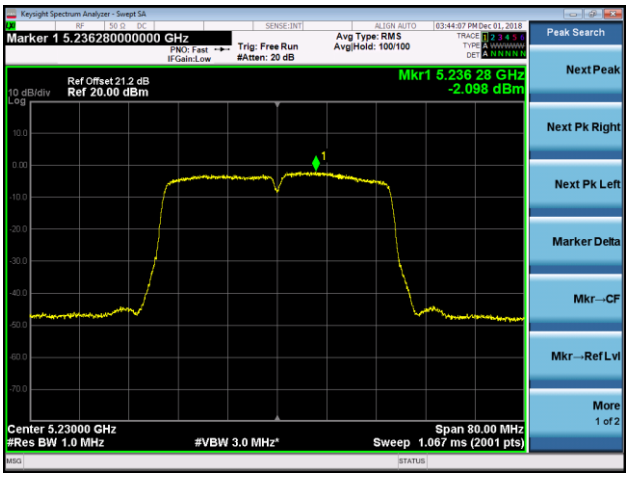
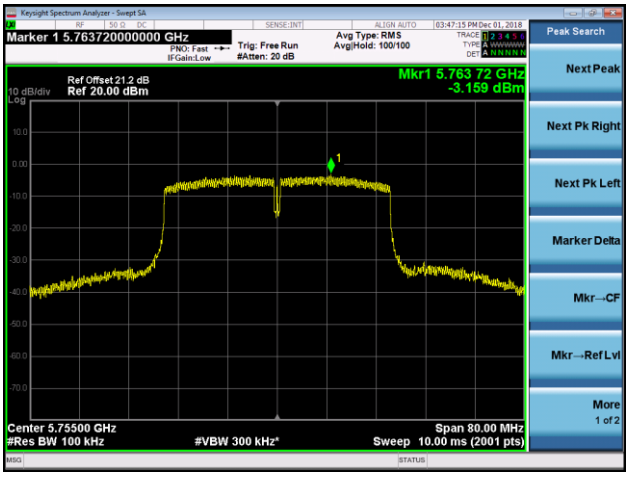
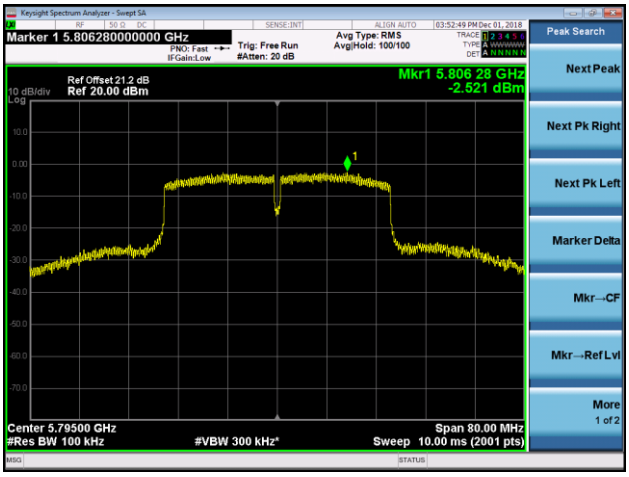
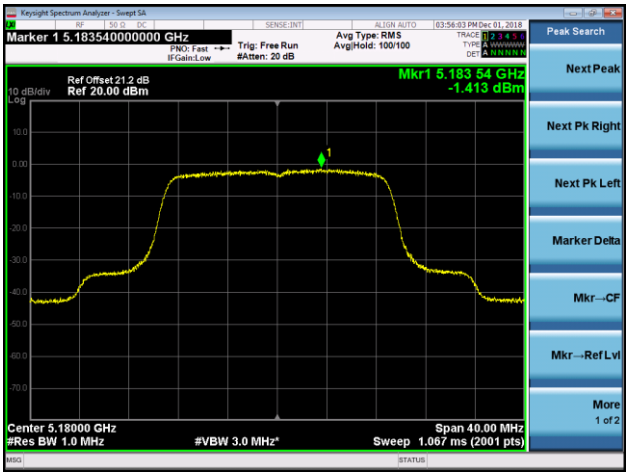
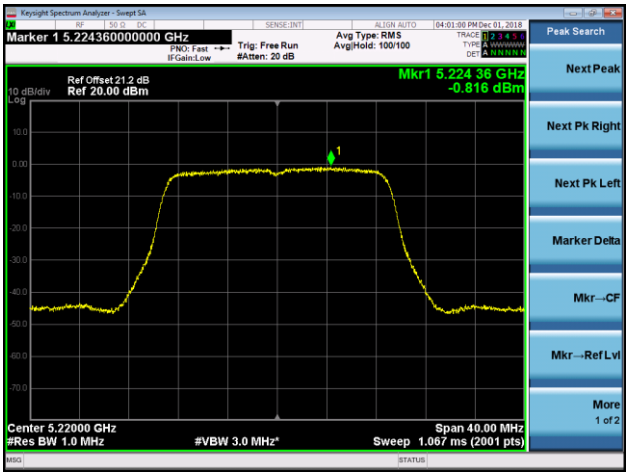
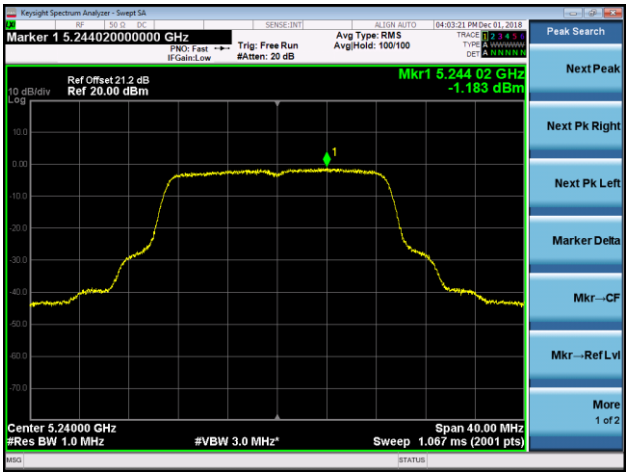
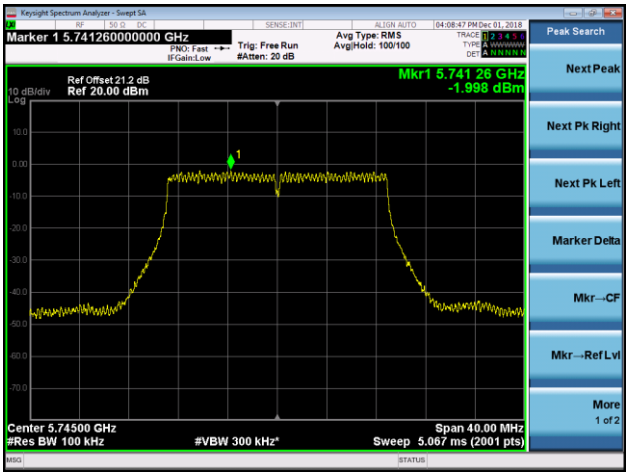
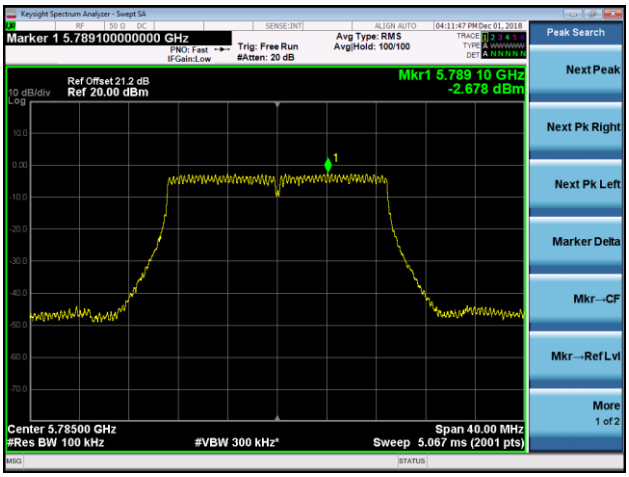
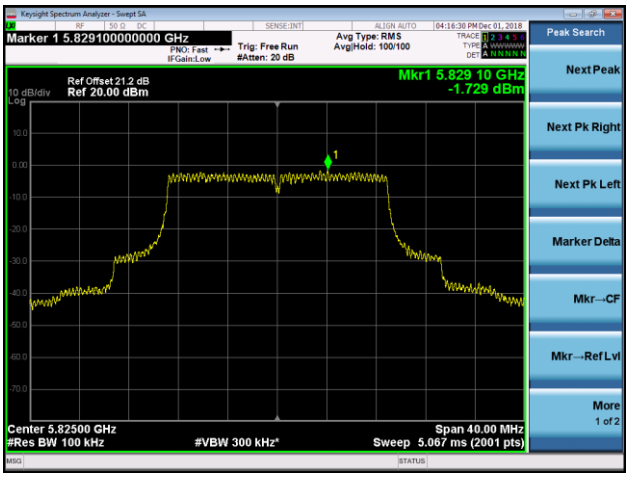
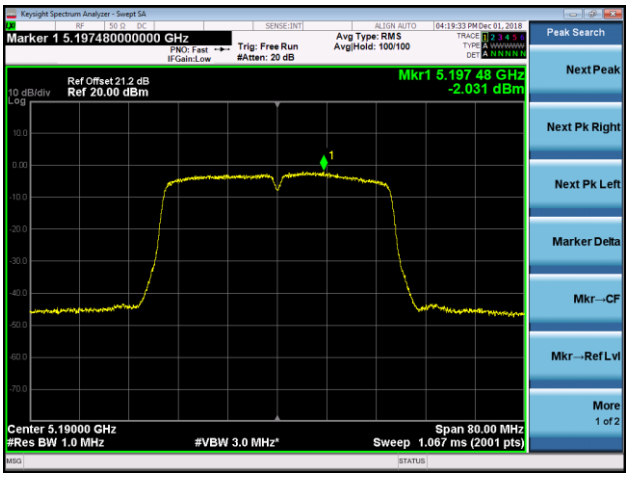
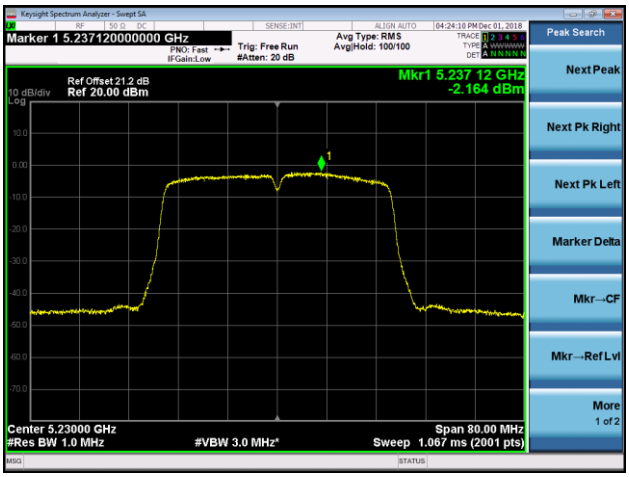
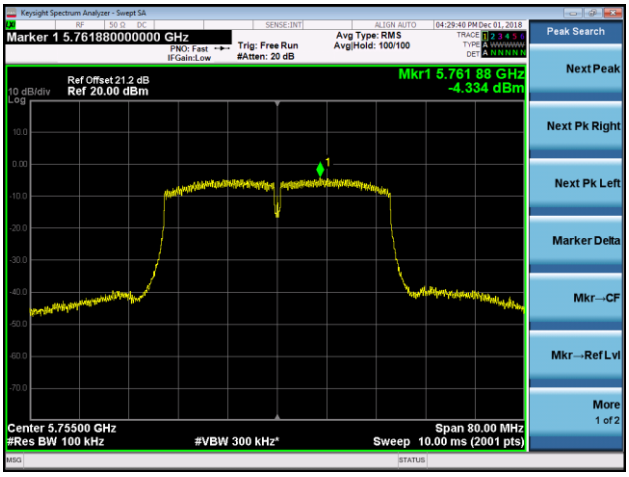
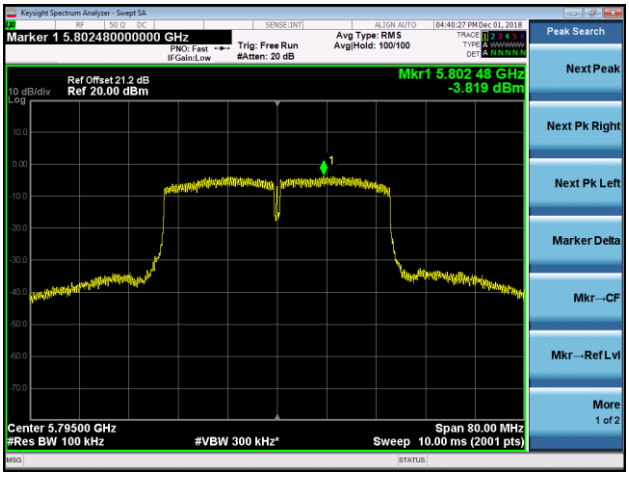
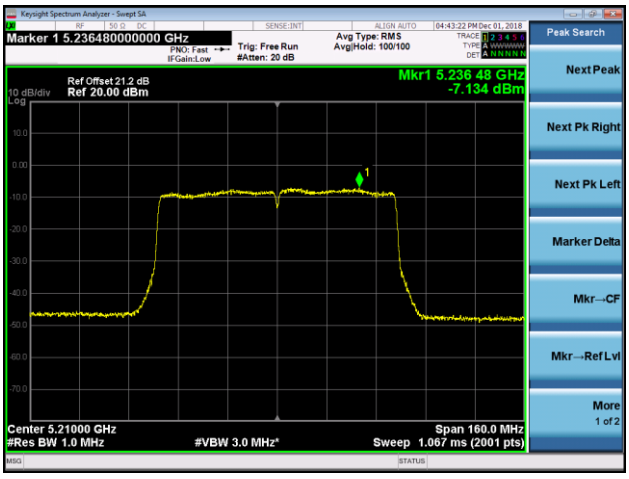
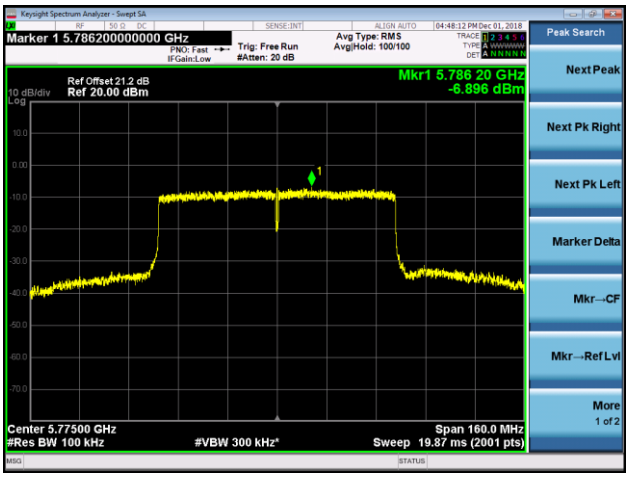
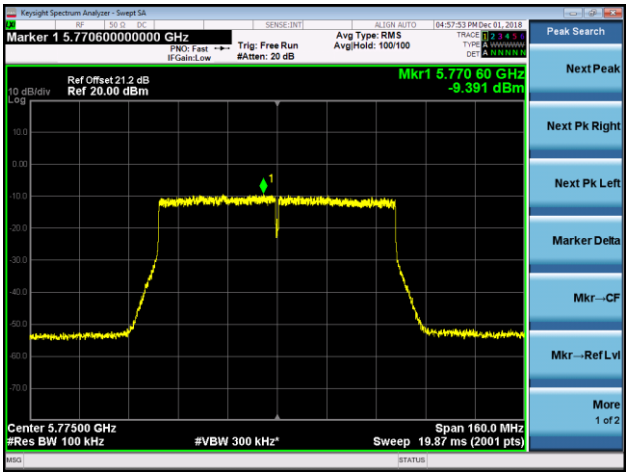
802.11n-HT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3	
Channel 36 (5180MHz)	Channel 44 (5220MHz)
	
Channel 48 (5240MHz)	Channel 149 (5745MHz)
	
Channel 157 (5785MHz)	Channel 165 (5825MHz)
	

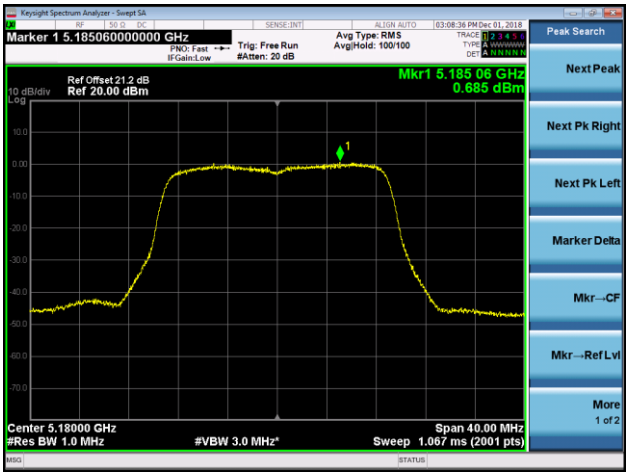
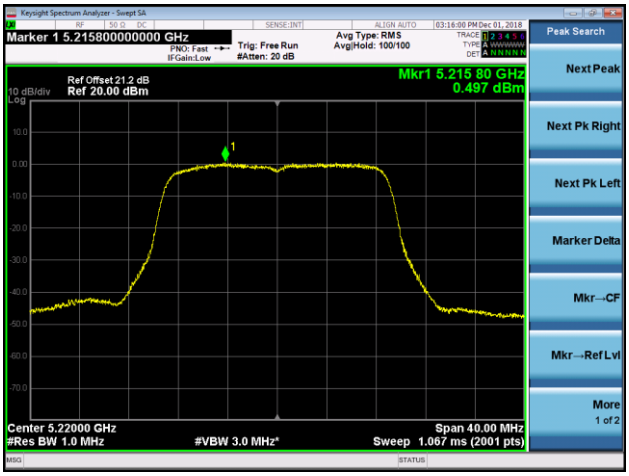
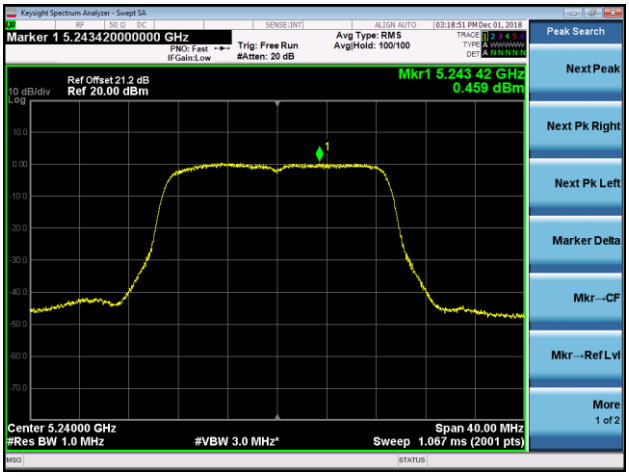
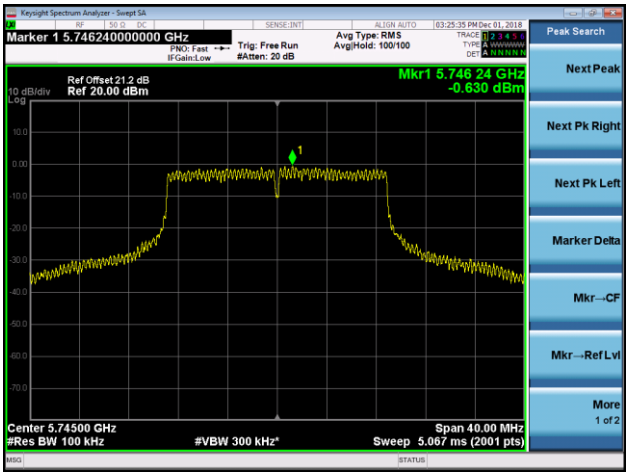
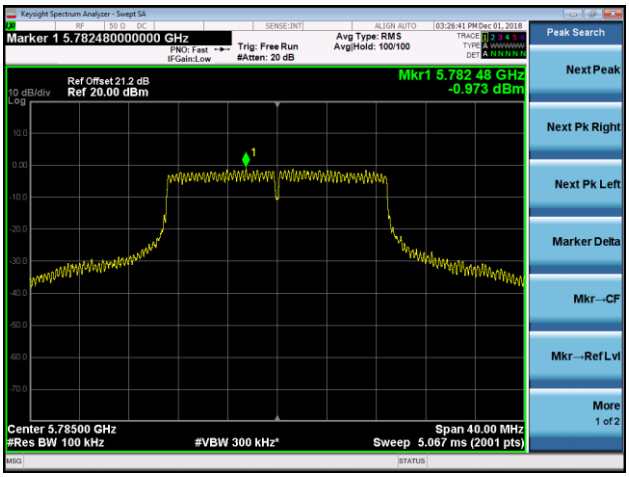
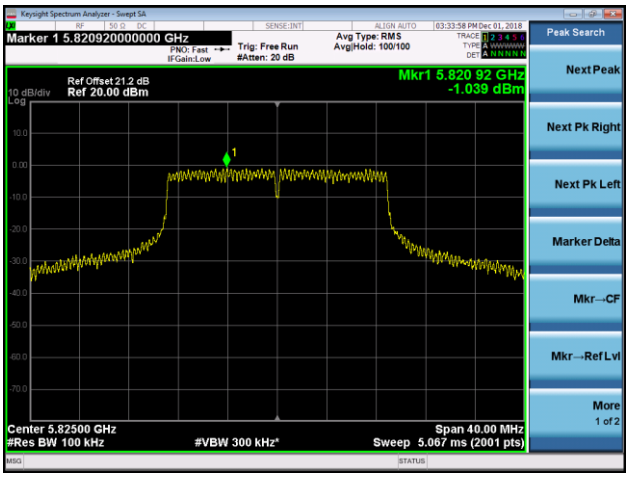
802.11n-HT40 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3	
Channel 38 (5190MHz)	Channel 46 (5230MHz)
	
Channel 151 (5755MHz)	Channel 159 (5795MHz)
	

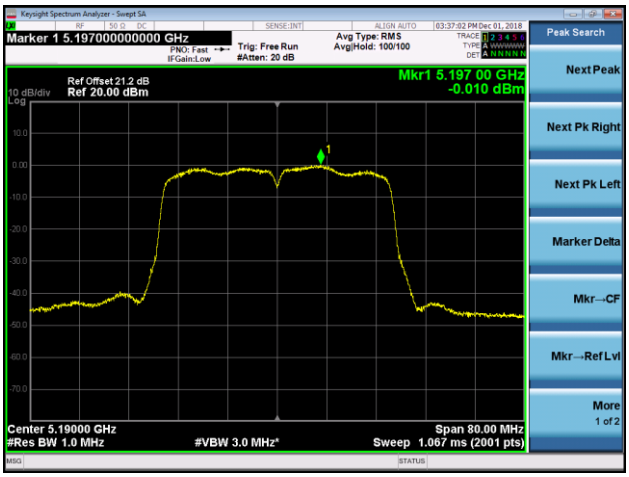
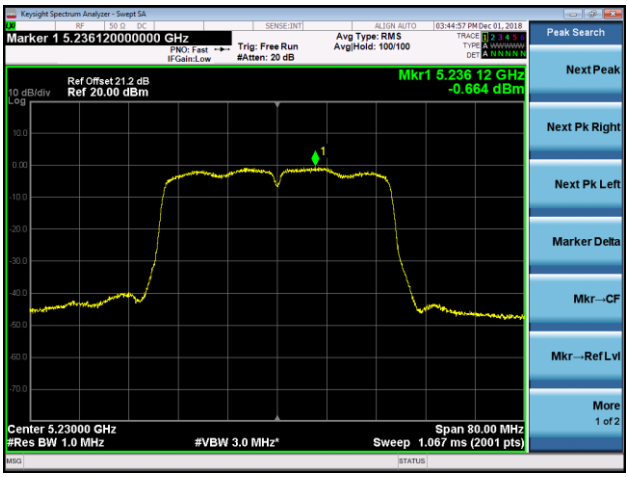
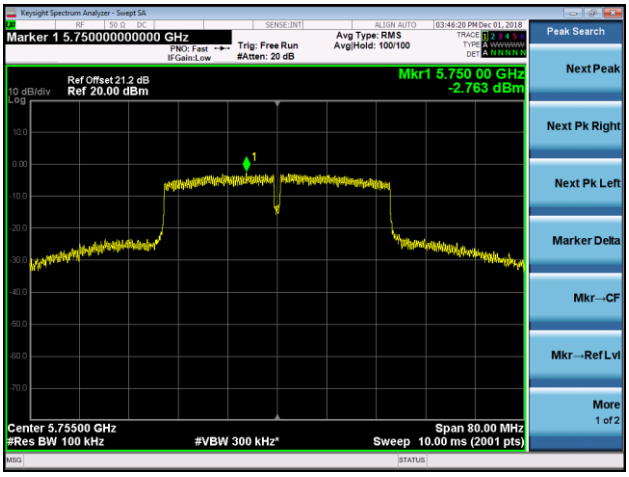
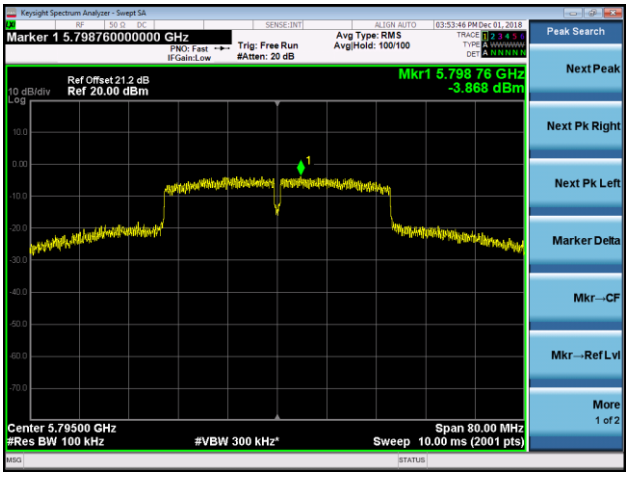
802.11ac-VHT20 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3	
Channel 36 (5180MHz)	Channel 44 (5220MHz)
	
Channel 48 (5240MHz)	Channel 149 (5745MHz)
	
Channel 157 (5785MHz)	Channel 165 (5825MHz)
	

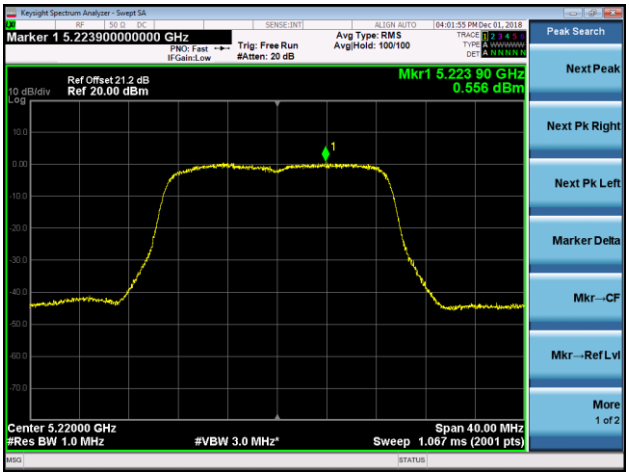
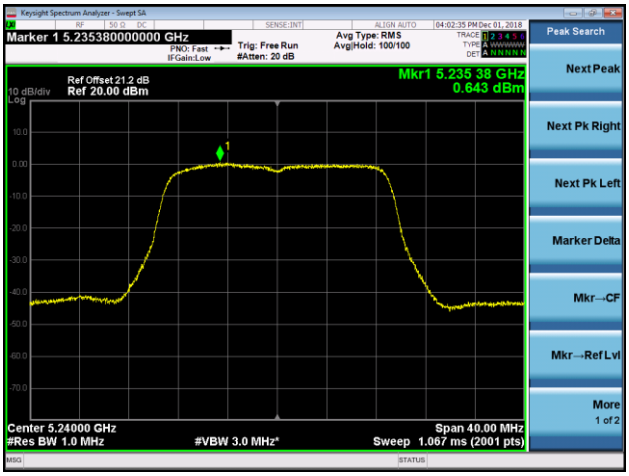
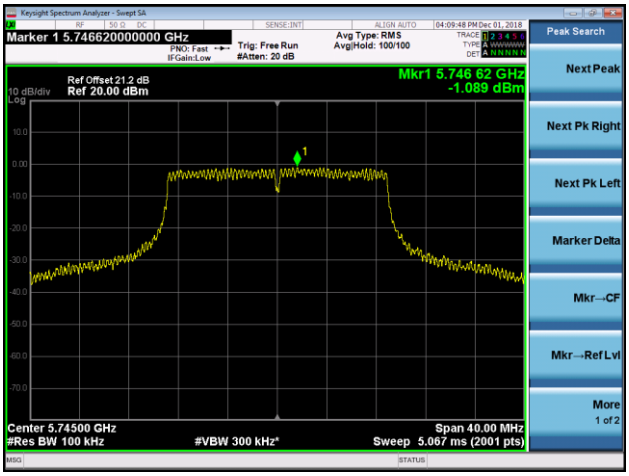
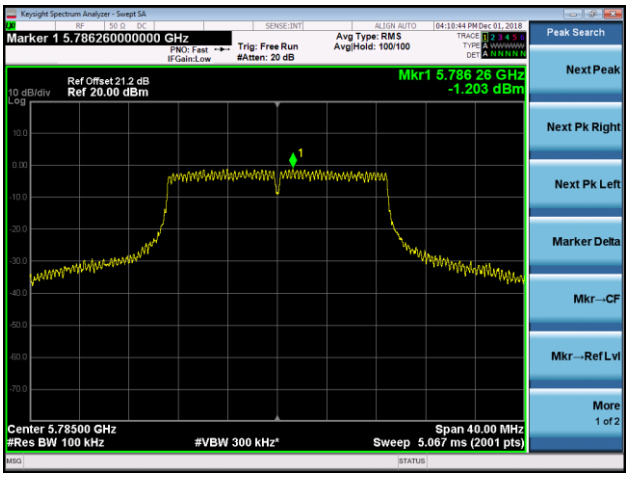
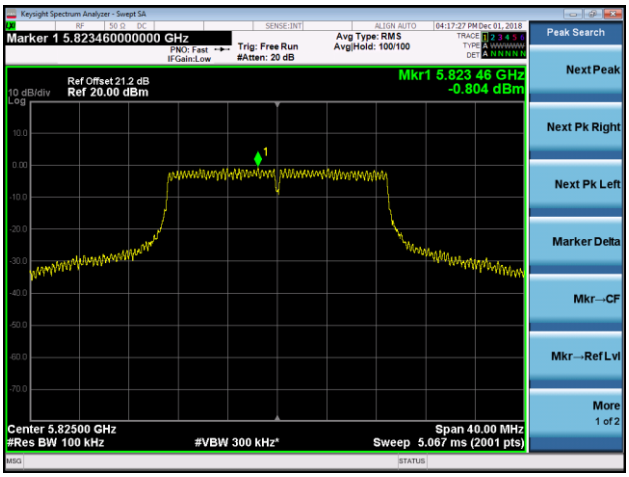
802.11ac-VHT40 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3	
Channel 38 (5190MHz)	Channel 46 (5230MHz)
	
Channel 151 (5755MHz)	Channel 159 (5795MHz)
	

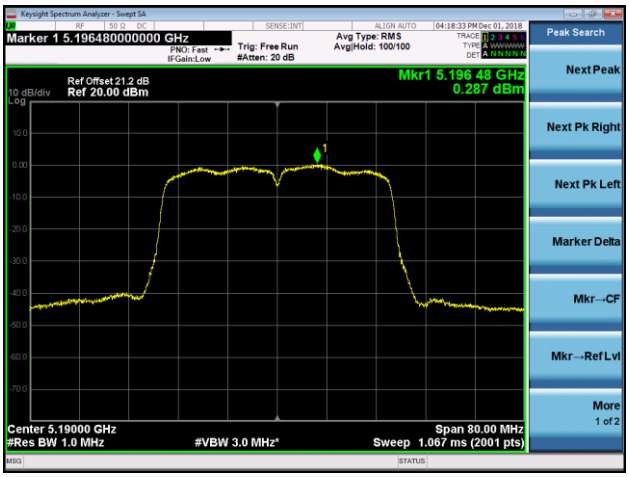
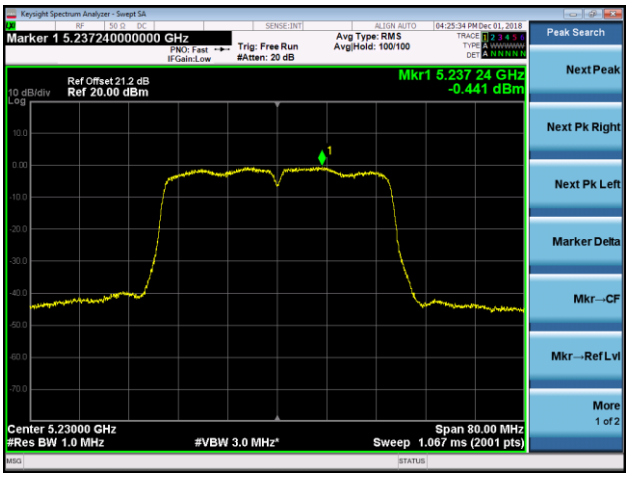
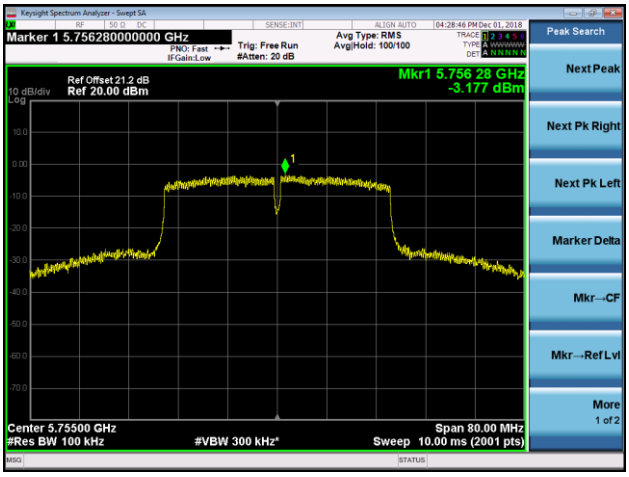
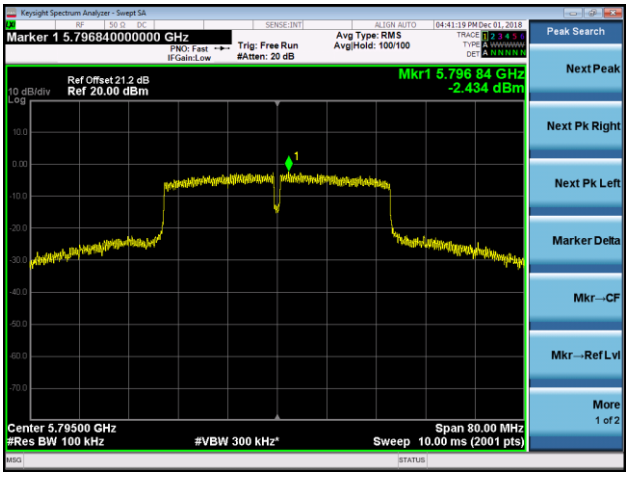
802.11ac-VHT80 Power Spectral Density - Ant 2 / Ant 0 + 1 + 2 + 3	
Channel 42 (5210MHz)	Channel 155 (5775MHz)
	

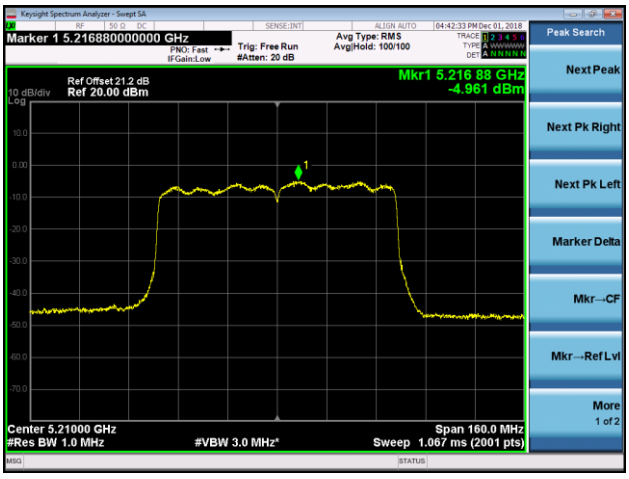
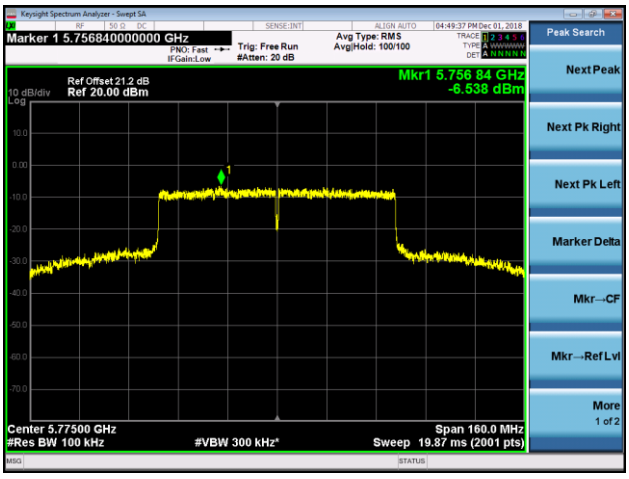
802.11ac-VHT80+80 Power Spectral Density - Ant 2 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3)	
Channel 155 (5775MHz)	
	

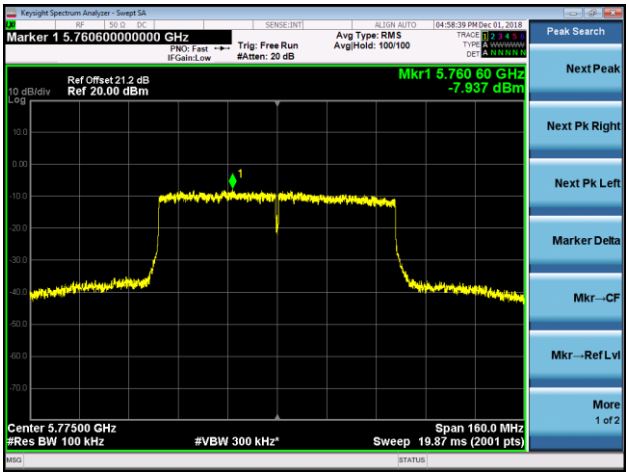
802.11n-HT20 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3	
Channel 36 (5180MHz)	Channel 44 (5220MHz)
	
Channel 48 (5240MHz)	Channel 149 (5745MHz)
	
Channel 157 (5785MHz)	Channel 165 (5825MHz)
	

802.11n-HT40 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3	
Channel 38 (5190MHz)	Channel 46 (5230MHz)
	
Channel 151 (5755MHz)	Channel 159 (5795MHz)
	

802.11ac-VHT20 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3	
Channel 36 (5180MHz)	Channel 44 (5220MHz)
	
Channel 48 (5240MHz)	Channel 149 (5745MHz)
	
Channel 157 (5785MHz)	Channel 165 (5825MHz)
	

802.11ac-VHT40 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3	
Channel 38 (5190MHz)	Channel 46 (5230MHz)
	
Channel 151 (5755MHz)	Channel 159 (5795MHz)
	

802.11ac-VHT80 Power Spectral Density - Ant 3 / Ant 0 + 1 + 2 + 3	
Channel 42 (5210MHz)	Channel 155 (5775MHz)
	

802.11ac-VHT80+80 Power Spectral Density - Ant 3 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3)	
Channel 155 (5775MHz)	
	

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.

The transmitter center frequency tolerance shall be ±20 ppm maximum for the 5GHz band (IEEE 802.11 specification).

7.6.2.Test Procedure Used

Frequency Stability Under Temperature Variations:

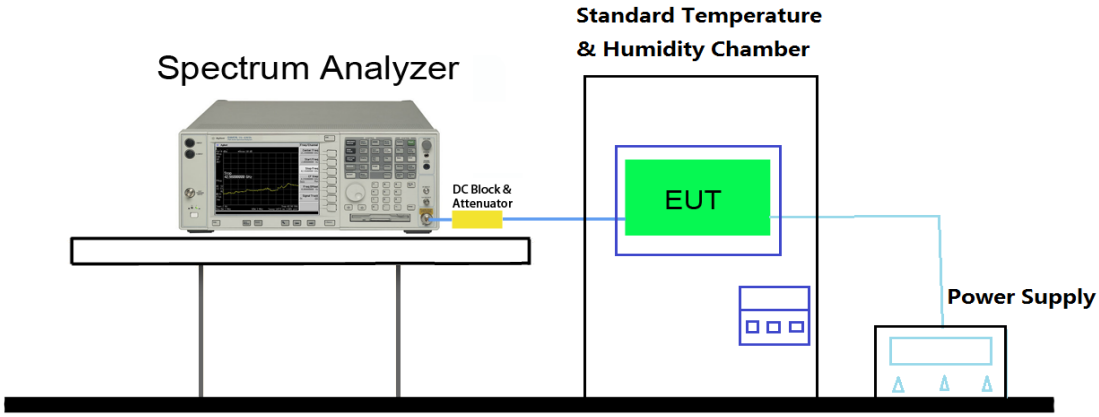
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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 (±15%) and endpoint, recordthe maximum frequency change.

7.6.3.Test Setup



7.6.4.Test Result

Test Engineer	Dandy Li	Temperature	-30 ~ 50°C
Test Time	2018/12/01	Relative Humidity	55%RH
Test Mode	5180MHz (Carrier Mode)	Test Site	TR3
Test Item	Frequency Stability Measurement		

Voltage (%)	Power (VAC)	Temp. (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 30	-8.87	-8.23	-8.96	-8.84
		- 20	-8.74	-8.43	-8.75	-8.51
		- 10	-8.25	-8.35	-8.74	-8.11
		0	-7.23	-7.18	-7.56	-7.93
		+ 10	-7.14	-7.04	-7.35	-7.43
		+ 20 (Ref)	-6.83	-6.44	-6.36	-6.69
		+ 30	-6.94	-6.62	-6.67	-6.97
		+ 40	-6.47	-6.65	-6.46	-6.88
		+ 50	-6.74	-6.76	-6.89	-6.91
115%	138	+ 20	-6.45	-6.73	-6.84	-6.74
85%	102	+ 20	-7.23	-7.41	-7.49	-7.62

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} $*10^6$.

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 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/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 D02v02r01 - Section G

7.7.3.Test Setting

Quasi-Peak& Average Measurements below30MHz

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 = 200Hz for 9kHz to 150kHz frequency; RBW = 9kHz for 0.15MHz to 30MHz frequency
4. Detector = CISPR quasi-peak or power average (Average)
5. Sweep time = auto couple
6. 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

Peak Measurements above 1GHz

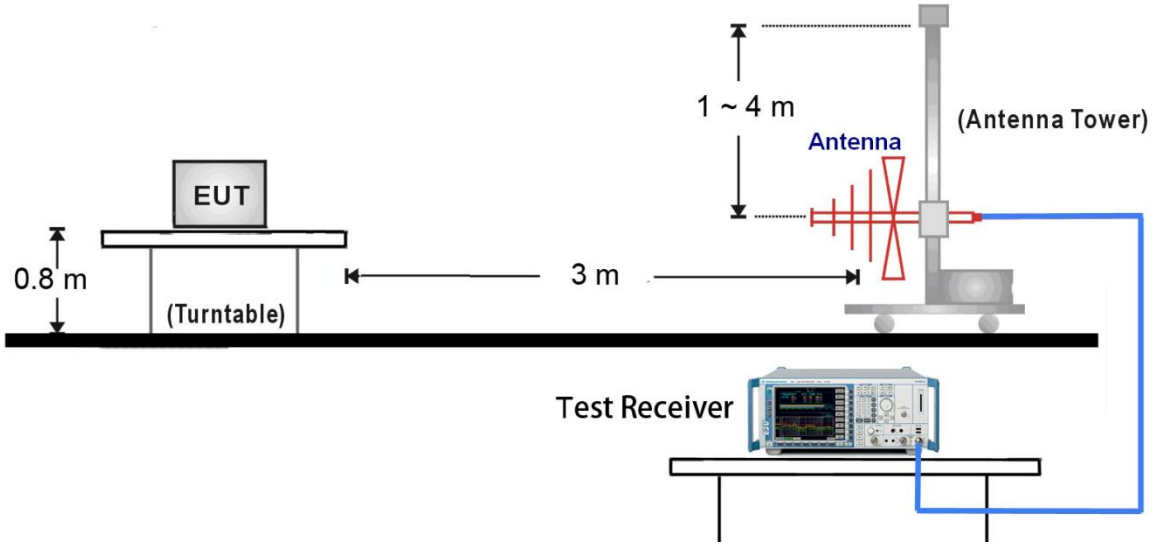
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

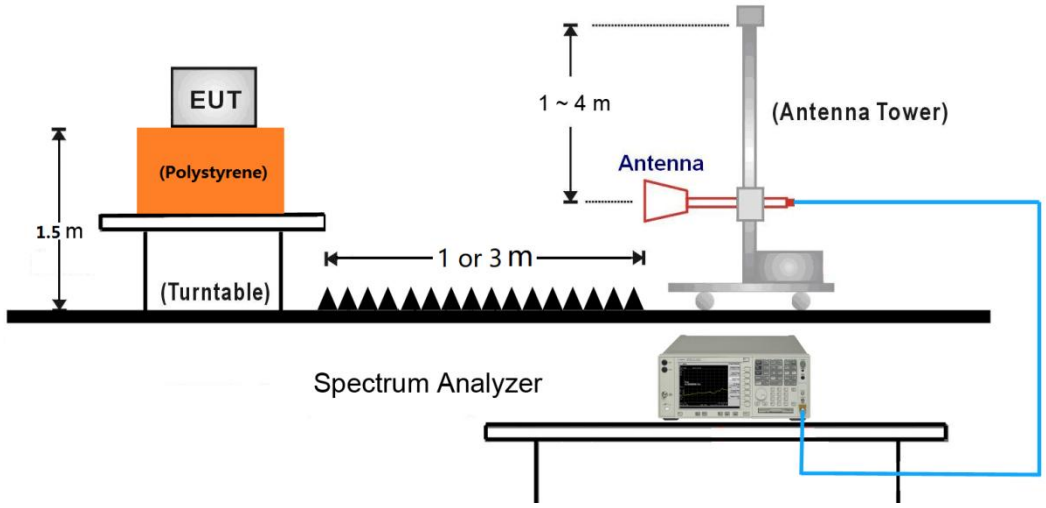
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW ≤ RBW/100 (i.e., 10 kHz) but not less than 10 Hz. If the EUT duty cycle is < 98%, set VBW ≥ 1/T.
4. Detector = Peak
5. Sweep time = auto
6. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.

7.7.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



7.7.5.Test Result

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 0	Test Channel:	36
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
*	8854.0	35.4	13.4	48.8	68.2	-19.4	Peak	Horizontal
*	10231.0	33.9	17.1	51.0	68.2	-17.2	Peak	Horizontal
	10775.0	35.7	17.9	53.6	74.0	-20.4	Peak	Horizontal
	10775.0	26.2	17.9	44.1	54.0	-9.9	Average	Horizontal
	11812.0	35.5	17.2	52.7	74.0	-21.3	Peak	Horizontal
*	8854.0	35.9	13.4	49.3	68.2	-18.9	Peak	Vertical
*	9984.5	34.8	16.7	51.5	68.2	-16.7	Peak	Vertical
	11404.0	34.9	17.7	52.6	74.0	-21.4	Peak	Vertical
	12152.0	34.4	17.5	51.9	74.0	-22.1	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 0	Test Channel:	44
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
*	8811.5	33.9	13.3	47.2	68.2	-21.0	Peak	Horizontal
*	9976.0	33.9	16.7	50.6	68.2	-17.6	Peak	Horizontal
	10749.5	36.1	17.8	53.9	74.0	-20.1	Peak	Horizontal
	10749.5	25.8	17.8	43.6	54.0	-10.4	Average	Horizontal
	11888.5	35.0	17.3	52.3	74.0	-21.7	Peak	Horizontal
*	8769.0	35.3	13.2	48.5	68.2	-19.7	Peak	Vertical
*	10299.0	35.1	17.3	52.4	68.2	-15.8	Peak	Vertical
	11072.5	34.2	17.9	52.1	74.0	-21.9	Peak	Vertical
	12092.5	34.9	17.5	52.4	74.0	-21.6	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 0	Test Channel:	48
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
*	7885.0	34.4	13.4	47.8	68.2	-20.4	Peak	Horizontal
*	8862.5	35.6	13.3	48.9	68.2	-19.3	Peak	Horizontal
	10630.5	36.2	17.7	53.9	74.0	-20.1	Peak	Horizontal
	10630.5	26.9	17.7	44.6	54.0	-9.4	Average	Horizontal
	11557.0	35.1	17.8	52.9	74.0	-21.1	Peak	Horizontal
*	8888.0	38.2	13.2	51.4	68.2	-16.8	Peak	Vertical
*	10401.0	34.5	17.3	51.8	68.2	-16.4	Peak	Vertical
	10860.0	34.7	18.1	52.8	74.0	-21.2	Peak	Vertical
	12475.0	35.8	17.3	53.1	74.0	-20.9	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 0	Test Channel:	149
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
*	8692.5	35.0	13.0	48.0	68.2	-20.2	Peak	Horizontal
*	10392.5	34.5	17.4	51.9	68.2	-16.3	Peak	Horizontal
	11421.0	35.2	17.8	53.0	74.0	-21.0	Peak	Horizontal
	12509.0	35.1	17.2	52.3	74.0	-21.7	Peak	Horizontal
*	8845.5	35.5	13.3	48.8	68.2	-19.4	Peak	Vertical
*	10197.0	34.3	17.2	51.5	68.2	-16.7	Peak	Vertical
	10894.0	34.7	18.1	52.8	74.0	-21.2	Peak	Vertical
	11506.0	34.8	17.8	52.6	74.0	-21.4	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 0	Test Channel:	157
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
*	8692.5	35.3	13.0	48.3	68.2	-19.9	Peak	Horizontal
*	10392.5	34.4	17.4	51.8	68.2	-16.4	Peak	Horizontal
	11310.5	35.3	17.5	52.8	74.0	-21.2	Peak	Horizontal
	11888.5	35.1	17.3	52.4	74.0	-21.6	Peak	Horizontal
*	8828.5	35.9	13.3	49.2	68.2	-19.0	Peak	Vertical
*	9959.0	35.4	16.7	52.1	68.2	-16.1	Peak	Vertical
	10911.0	34.5	18.2	52.7	74.0	-21.3	Peak	Vertical
	11642.0	35.5	17.6	53.1	74.0	-20.9	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 0	Test Channel:	165
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
*	8837.0	34.7	13.2	47.9	68.2	-20.3	Peak	Horizontal
*	10018.5	34.2	16.6	50.8	68.2	-17.4	Peak	Horizontal
	11438.0	34.6	17.8	52.4	74.0	-21.6	Peak	Horizontal
	12186.0	35.5	17.5	53.0	74.0	-21.0	Peak	Horizontal
*	8692.5	33.9	13.0	46.9	68.2	-21.3	Peak	Vertical
*	10324.5	34.6	17.3	51.9	68.2	-16.3	Peak	Vertical
	11412.5	35.1	17.7	52.8	74.0	-21.2	Peak	Vertical
	12033.0	34.6	17.4	52.0	74.0	-22.0	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 1	Test Channel:	36
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
*	8820.0	35.4	13.3	48.7	68.2	-19.5	Peak	Horizontal
*	10086.5	33.9	16.9	50.8	68.2	-17.4	Peak	Horizontal
	11404.0	35.5	17.7	53.2	74.0	-20.8	Peak	Horizontal
	11956.5	34.9	17.3	52.2	74.0	-21.8	Peak	Horizontal
*	8811.5	34.9	13.3	48.2	68.2	-20.0	Peak	Vertical
*	9908.0	34.1	16.6	50.7	68.2	-17.5	Peak	Vertical
	10928.0	34.2	18.2	52.4	74.0	-21.6	Peak	Vertical
	11752.5	35.2	17.3	52.5	74.0	-21.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in 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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 1	Test Channel:	44
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
*	8837.0	35.6	13.2	48.8	68.2	-19.4	Peak	Horizontal
*	10197.0	36.1	17.2	53.3	68.2	-14.9	Peak	Horizontal
	11370.0	34.8	17.6	52.4	74.0	-21.6	Peak	Horizontal
	11948.0	35.5	17.3	52.8	74.0	-21.2	Peak	Horizontal
*	8752.0	34.7	13.2	47.9	68.2	-20.3	Peak	Vertical
*	9823.0	34.1	16.5	50.6	68.2	-17.6	Peak	Vertical
	11106.5	35.3	17.8	53.1	74.0	-20.9	Peak	Vertical
	12186.0	34.6	17.5	52.1	74.0	-21.9	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 1	Test Channel:	48
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
*	8820.0	35.3	13.3	48.6	68.2	-19.6	Peak	Horizontal
*	10044.0	34.7	16.7	51.4	68.2	-16.8	Peak	Horizontal
	10911.0	34.4	18.2	52.6	74.0	-21.4	Peak	Horizontal
	11489.0	34.6	17.8	52.4	74.0	-21.6	Peak	Horizontal
*	8769.0	33.8	13.2	47.0	68.2	-21.2	Peak	Vertical
*	9865.5	34.6	16.7	51.3	68.2	-16.9	Peak	Vertical
	10792.0	34.2	18.0	52.2	74.0	-21.8	Peak	Vertical
	11497.5	34.9	17.8	52.7	74.0	-21.3	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 1	Test Channel:	149
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
*	8658.5	34.7	13.0	47.7	68.2	-20.5	Peak	Horizontal
*	10358.5	35.2	17.4	52.6	68.2	-15.6	Peak	Horizontal
	11395.5	34.9	17.7	52.6	74.0	-21.4	Peak	Horizontal
	12058.5	34.3	17.5	51.8	74.0	-22.2	Peak	Horizontal
*	8837.0	36.1	13.2	49.3	68.2	-18.9	Peak	Vertical
*	10409.5	34.9	17.3	52.2	68.2	-16.0	Peak	Vertical
	11489.0	35.4	17.8	53.2	74.0	-20.8	Peak	Vertical
	12517.5	35.2	17.3	52.5	74.0	-21.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in 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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 1	Test Channel:	157
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
*	8769.0	35.6	13.2	48.8	68.2	-19.4	Peak	Horizontal
*	9984.5	34.2	16.7	50.9	68.2	-17.3	Peak	Horizontal
	10885.5	35.0	18.1	53.1	74.0	-20.9	Peak	Horizontal
	11565.5	34.8	17.8	52.6	74.0	-21.4	Peak	Horizontal
*	8735.0	35.9	13.0	48.9	68.2	-19.3	Peak	Vertical
*	9857.0	33.3	16.7	50.0	68.2	-18.2	Peak	Vertical
	11404.0	35.1	17.7	52.8	74.0	-21.2	Peak	Vertical
	12067.0	34.5	17.5	52.0	74.0	-22.0	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 1	Test Channel:	165
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
*	8786.0	34.6	13.3	47.9	68.2	-20.3	Peak	Horizontal
*	10171.5	34.0	17.0	51.0	68.2	-17.2	Peak	Horizontal
	11472.0	35.8	17.8	53.6	74.0	-20.4	Peak	Horizontal
	11472.0	26.2	17.8	44.0	54.0	-10.0	Average	Horizontal
	12186.0	35.6	17.5	53.1	74.0	-20.9	Peak	Horizontal
*	8820.0	34.9	13.3	48.2	68.2	-20.0	Peak	Vertical
*	9763.5	34.4	16.2	50.6	68.2	-17.6	Peak	Vertical
	10936.5	34.9	18.3	53.2	74.0	-20.8	Peak	Vertical
	12177.5	34.5	17.5	52.0	74.0	-22.0	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 2	Test Channel:	36
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
*	8820.0	35.1	13.3	48.4	68.2	-19.8	Peak	Horizontal
*	9857.0	35.1	16.7	51.8	68.2	-16.4	Peak	Horizontal
	10749.5	36.3	17.8	54.1	74.0	-19.9	Peak	Horizontal
	10749.5	23.6	17.8	41.4	54.0	-12.6	Average	Horizontal
	11939.5	35.5	17.3	52.8	74.0	-21.2	Peak	Horizontal
*	8582.0	36.4	12.8	49.2	68.2	-19.0	Peak	Vertical
*	9942.0	34.6	16.8	51.4	68.2	-16.8	Peak	Vertical
	10834.5	34.2	18.0	52.2	74.0	-21.8	Peak	Vertical
	12152.0	34.5	17.5	52.0	74.0	-22.0	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 2	Test Channel:	44
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
*	8675.5	35.3	13.0	48.3	68.2	-19.9	Peak	Horizontal
*	9916.5	35.1	16.6	51.7	68.2	-16.5	Peak	Horizontal
	10877.0	34.3	18.1	52.4	74.0	-21.6	Peak	Horizontal
	12262.5	34.9	17.4	52.3	74.0	-21.7	Peak	Horizontal
*	8862.5	34.8	13.3	48.1	68.2	-20.1	Peak	Vertical
*	10282.0	34.2	17.1	51.3	68.2	-16.9	Peak	Vertical
	10817.5	35.0	18.0	53.0	74.0	-21.0	Peak	Vertical
	11463.5	35.0	17.8	52.8	74.0	-21.2	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 2	Test Channel:	48
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
*	7893.5	33.7	13.4	47.1	68.2	-21.1	Peak	Horizontal
*	10528.5	34.2	17.6	51.8	68.2	-16.4	Peak	Horizontal
	11574.0	34.6	17.7	52.3	74.0	-21.7	Peak	Horizontal
	12254.0	34.9	17.4	52.3	74.0	-21.7	Peak	Horizontal
*	8786.0	34.5	13.3	47.8	68.2	-20.4	Peak	Vertical
*	10171.5	33.4	17.0	50.4	68.2	-17.8	Peak	Vertical
	11166.0	35.2	17.7	52.9	74.0	-21.1	Peak	Vertical
	12585.5	34.8	17.5	52.3	74.0	-21.7	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 2	Test Channel:	149
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
*	8735.0	33.6	13.0	46.6	68.2	-21.6	Peak	Horizontal
*	9831.5	34.6	16.6	51.2	68.2	-17.0	Peak	Horizontal
	10894.0	34.6	18.1	52.7	74.0	-21.3	Peak	Horizontal
	11557.0	34.9	17.8	52.7	74.0	-21.3	Peak	Horizontal
*	8811.5	34.9	13.3	48.2	68.2	-20.0	Peak	Vertical
*	10214.0	33.8	17.1	50.9	68.2	-17.3	Peak	Vertical
	11106.5	35.8	17.8	53.6	74.0	-20.4	Peak	Vertical
	11786.5	35.8	17.3	53.1	74.0	-20.9	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 2	Test Channel:	157
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
*	8735.0	34.8	13.0	47.8	68.2	-20.4	Peak	Horizontal
*	9712.5	34.3	15.6	49.9	68.2	-18.3	Peak	Horizontal
	10877.0	34.6	18.1	52.7	74.0	-21.3	Peak	Horizontal
	11565.5	35.8	17.8	53.6	74.0	-20.4	Peak	Horizontal
	11565.5	26.6	17.8	44.4	54.0	-9.6	Average	Horizontal
*	8803.0	34.2	13.3	47.5	68.2	-20.7	Peak	Vertical
*	9899.5	34.2	16.6	50.8	68.2	-17.4	Peak	Vertical
	11574.0	35.2	17.7	52.9	74.0	-21.1	Peak	Vertical
	12475.0	34.9	17.3	52.2	74.0	-21.8	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 2	Test Channel:	165
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
*	8820.0	34.3	13.3	47.6	68.2	-20.6	Peak	Horizontal
*	9993.0	34.3	16.7	51.0	68.2	-17.2	Peak	Horizontal
	10945.0	34.2	18.3	52.5	74.0	-21.5	Peak	Horizontal
	11650.5	35.7	17.6	53.3	74.0	-20.7	Peak	Horizontal
*	8743.5	35.0	13.1	48.1	68.2	-20.1	Peak	Vertical
*	10307.5	33.9	17.3	51.2	68.2	-17.0	Peak	Vertical
	10877.0	34.2	18.1	52.3	74.0	-21.7	Peak	Vertical
	11642.0	35.3	17.6	52.9	74.0	-21.1	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 3	Test Channel:	36
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
*	10001.5	35.2	16.7	51.9	68.2	-16.3	Peak	Horizontal
*	14668.0	36.1	21.3	57.4	68.2	-10.8	Peak	Horizontal
	15424.5	32.2	18.9	51.1	74.0	-22.9	Peak	Horizontal
	15926.0	34.7	18.8	53.5	74.0	-20.5	Peak	Horizontal
*	8769.0	34.7	13.2	47.9	68.2	-20.3	Peak	Vertical
*	10333.0	33.9	17.3	51.2	68.2	-17.0	Peak	Vertical
	10877.0	34.6	18.1	52.7	74.0	-21.3	Peak	Vertical
	11846.0	35.6	17.2	52.8	74.0	-21.2	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 3	Test Channel:	44
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
*	8650.0	35.4	13.0	48.4	68.2	-19.8	Peak	Horizontal
*	9933.5	33.4	16.7	50.1	68.2	-18.1	Peak	Horizontal
	10979.0	34.4	18.2	52.6	74.0	-21.4	Peak	Horizontal
	12135.0	34.4	17.5	51.9	74.0	-22.1	Peak	Horizontal
*	8650.0	35.5	13.0	48.5	68.2	-19.7	Peak	Vertical
*	10316.0	34.3	17.4	51.7	68.2	-16.5	Peak	Vertical
	10953.5	34.7	18.2	52.9	74.0	-21.1	Peak	Vertical
	11931.0	34.4	17.3	51.7	74.0	-22.3	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 3	Test Channel:	48
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
*	8845.5	36.4	13.3	49.7	68.2	-18.5	Peak	Horizontal
*	9840.0	33.8	16.7	50.5	68.2	-17.7	Peak	Horizontal
	11132.0	34.9	17.7	52.6	74.0	-21.4	Peak	Horizontal
	11880.0	34.7	17.3	52.0	74.0	-22.0	Peak	Horizontal
*	8582.0	33.7	12.8	46.5	68.2	-21.7	Peak	Vertical
*	9865.5	33.4	16.7	50.1	68.2	-18.1	Peak	Vertical
	10928.0	33.6	18.2	51.8	74.0	-22.2	Peak	Vertical
	12339.0	34.5	17.3	51.8	74.0	-22.2	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 3	Test Channel:	149
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
*	8803.0	34.7	13.3	48.0	68.2	-20.2	Peak	Horizontal
*	9933.5	35.1	16.7	51.8	68.2	-16.4	Peak	Horizontal
	10911.0	34.6	18.2	52.8	74.0	-21.2	Peak	Horizontal
	11633.5	35.1	17.6	52.7	74.0	-21.3	Peak	Horizontal
*	8820.0	34.8	13.3	48.1	68.2	-20.1	Peak	Vertical
*	10103.5	34.8	16.9	51.7	68.2	-16.5	Peak	Vertical
	10885.5	34.3	18.1	52.4	74.0	-21.6	Peak	Vertical
	12305.0	35.1	17.3	52.4	74.0	-21.6	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 3	Test Channel:	157
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
*	8845.5	35.0	13.3	48.3	68.2	-19.9	Peak	Horizontal
*	9959.0	34.3	16.7	51.0	68.2	-17.2	Peak	Horizontal
	10860.0	34.5	18.1	52.6	74.0	-21.4	Peak	Horizontal
	12330.5	34.1	17.3	51.4	74.0	-22.6	Peak	Horizontal
*	8777.5	35.2	13.2	48.4	68.2	-19.8	Peak	Vertical
*	9865.5	34.2	16.7	50.9	68.2	-17.3	Peak	Vertical
	11302.0	35.7	17.5	53.2	74.0	-20.8	Peak	Vertical
	12594.0	35.4	17.6	53.0	74.0	-21.0	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11a - Ant 3	Test Channel:	165
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
*	8854.0	34.8	13.4	48.2	68.2	-20.0	Peak	Horizontal
*	10129.0	33.2	16.9	50.1	68.2	-18.1	Peak	Horizontal
	10970.5	33.9	18.2	52.1	74.0	-21.9	Peak	Horizontal
	11642.0	35.4	17.6	53.0	74.0	-21.0	Peak	Horizontal
*	8692.5	33.1	13.0	46.1	68.2	-22.1	Peak	Vertical
*	10350.0	32.6	17.3	49.9	68.2	-18.3	Peak	Vertical
	10953.5	34.0	18.2	52.2	74.0	-21.8	Peak	Vertical
	11659.0	35.4	17.6	53.0	74.0	-21.0	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	36
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
*	8658.5	35.9	13.0	48.9	68.2	-19.3	Peak	Horizontal
*	9823.0	34.5	16.5	51.0	68.2	-17.2	Peak	Horizontal
	10868.5	34.2	18.1	52.3	74.0	-21.7	Peak	Horizontal
	11939.5	35.1	17.3	52.4	74.0	-21.6	Peak	Horizontal
*	8624.5	35.7	12.9	48.6	68.2	-19.6	Peak	Vertical
*	10299.0	34.2	17.3	51.5	68.2	-16.7	Peak	Vertical
	11123.5	33.4	17.7	51.1	74.0	-22.9	Peak	Vertical
	12109.5	35.1	17.5	52.6	74.0	-21.4	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	44
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
*	8845.5	35.6	13.3	48.9	68.2	-19.3	Peak	Horizontal
*	9976.0	34.8	16.7	51.5	68.2	-16.7	Peak	Horizontal
	10936.5	34.5	18.3	52.8	74.0	-21.2	Peak	Horizontal
	11523.0	35.5	17.8	53.3	74.0	-20.7	Peak	Horizontal
*	8692.5	33.9	13.0	46.9	68.2	-21.3	Peak	Vertical
*	10171.5	33.5	17.0	50.5	68.2	-17.7	Peak	Vertical
	10877.0	33.9	18.1	52.0	74.0	-22.0	Peak	Vertical
	11659.0	35.1	17.6	52.7	74.0	-21.3	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	48
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
*	8862.5	35.4	13.3	48.7	68.2	-19.5	Peak	Horizontal
*	9950.5	34.1	16.7	50.8	68.2	-17.4	Peak	Horizontal
	11106.5	34.7	17.8	52.5	74.0	-21.5	Peak	Horizontal
	11897.0	34.4	17.3	51.7	74.0	-22.3	Peak	Horizontal
*	8811.5	33.9	13.3	47.2	68.2	-21.0	Peak	Vertical
*	10171.5	33.8	17.0	50.8	68.2	-17.4	Peak	Vertical
	11157.5	34.3	17.7	52.0	74.0	-22.0	Peak	Vertical
	11854.5	36.2	17.2	53.4	74.0	-20.6	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	149
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
*	8692.5	33.5	13.0	46.5	68.2	-21.7	Peak	Horizontal
*	9865.5	34.2	16.7	50.9	68.2	-17.3	Peak	Horizontal
	11055.5	34.5	17.9	52.4	74.0	-21.6	Peak	Horizontal
	11497.5	35.8	17.8	53.6	74.0	-20.4	Peak	Horizontal
*	8811.5	36.1	13.3	49.4	68.2	-18.8	Peak	Vertical
*	10044.0	33.7	16.7	50.4	68.2	-17.8	Peak	Vertical
	10868.5	34.9	18.1	53.0	74.0	-21.0	Peak	Vertical
	11480.5	37.4	17.8	55.2	74.0	-18.8	Peak	Vertical
	11480.5	28.3	17.8	46.1	54.0	-7.9	Average	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	157
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
*	8769.0	34.0	13.2	47.2	68.2	-21.0	Peak	Horizontal
*	10078.0	33.1	17.0	50.1	68.2	-18.1	Peak	Horizontal
	10902.5	35.0	18.1	53.1	74.0	-20.9	Peak	Horizontal
	11565.5	37.2	17.8	55.0	74.0	-19.0	Peak	Horizontal
	11565.5	27.2	17.8	45.0	54.0	-9.0	Average	Vertical
*	8879.5	35.7	13.2	48.9	68.2	-19.3	Peak	Vertical
*	9848.5	34.6	16.7	51.3	68.2	-16.9	Peak	Vertical
	10919.5	34.4	18.2	52.6	74.0	-21.4	Peak	Vertical
	11565.5	38.6	17.8	56.4	74.0	-17.6	Peak	Vertical
	11565.5	29.2	17.8	47.0	54.0	-7.0	Average	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT20 - Ant 0 + 1 + 2 + 3	Test Channel:	165
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
*	8803.0	35.7	13.3	49.0	68.2	-19.2	Peak	Horizontal
*	9950.5	34.7	16.7	51.4	68.2	-16.8	Peak	Horizontal
	10809.0	35.0	18.0	53.0	74.0	-21.0	Peak	Horizontal
	11642.0	38.2	17.6	55.8	74.0	-18.2	Peak	Horizontal
	11642.0	29.1	17.6	46.7	54.0	-7.3	Average	Vertical
*	8735.0	34.7	13.0	47.7	68.2	-20.5	Peak	Vertical
*	9797.5	34.6	16.2	50.8	68.2	-17.4	Peak	Vertical
	10860.0	35.3	18.1	53.4	74.0	-20.6	Peak	Vertical
	11642.0	38.5	17.6	56.1	74.0	-17.9	Peak	Vertical
	11642.0	29.9	17.6	47.5	54.0	-6.5	Average	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	38
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
*	8769.0	36.5	13.2	49.7	68.2	-18.5	Peak	Horizontal
*	10137.5	35.6	17.0	52.6	68.2	-15.6	Peak	Horizontal
	10868.5	35.6	18.1	53.7	74.0	-20.3	Peak	Horizontal
	11472.0	36.1	17.8	53.9	74.0	-20.1	Peak	Horizontal
	11472.0	27.3	17.8	45.1	54.0	-8.9	Average	Horizontal
*	8718.0	35.6	13.0	48.6	68.2	-19.6	Peak	Vertical
*	9865.5	35.3	16.7	52.0	68.2	-16.2	Peak	Vertical
	10860.0	34.7	18.1	52.8	74.0	-21.2	Peak	Vertical
	11599.5	35.4	17.6	53.0	74.0	-21.0	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	46
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
*	8811.5	34.8	13.3	48.1	68.2	-20.1	Peak	Horizontal
*	10180.0	34.5	17.1	51.6	68.2	-16.6	Peak	Horizontal
	10851.5	35.2	18.1	53.3	74.0	-20.7	Peak	Horizontal
	11659.0	35.6	17.6	53.2	74.0	-20.8	Peak	Horizontal
*	8845.5	35.6	13.3	48.9	68.2	-19.3	Peak	Vertical
*	9865.5	34.6	16.7	51.3	68.2	-16.9	Peak	Vertical
	10868.5	35.3	18.1	53.4	74.0	-20.6	Peak	Vertical
	12245.5	35.2	17.4	52.6	74.0	-21.4	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	151
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
*	8837.0	35.4	13.2	48.6	68.2	-19.6	Peak	Horizontal
*	10214.0	34.3	17.1	51.4	68.2	-16.8	Peak	Horizontal
	10834.5	35.4	18.0	53.4	74.0	-20.6	Peak	Horizontal
	11523.0	37.4	17.8	55.2	74.0	-18.8	Peak	Horizontal
	11523.0	27.3	17.8	45.1	54.0	-8.9	Average	Horizontal
*	8862.5	34.5	13.3	47.8	68.2	-20.4	Peak	Vertical
*	10579.5	34.9	17.6	52.5	68.2	-15.7	Peak	Vertical
	11523.0	37.3	17.8	55.1	74.0	-18.9	Peak	Vertical
	11523.0	28.3	17.8	46.1	54.0	-7.9	Average	Vertical
	12203.0	34.9	17.4	52.3	74.0	-21.7	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11n-HT40 - Ant 0 + 1 + 2 + 3	Test Channel:	159
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
*	8658.5	35.0	13.0	48.0	68.2	-20.2	Peak	Horizontal
*	9823.0	35.2	16.5	51.7	68.2	-16.5	Peak	Horizontal
	10877.0	34.7	18.1	52.8	74.0	-21.2	Peak	Horizontal
	11599.5	37.9	17.6	55.5	74.0	-18.5	Peak	Horizontal
	11599.5	28.3	17.6	45.9	54.0	-8.1	Average	Horizontal
*	8922.0	35.4	13.3	48.7	68.2	-19.5	Peak	Vertical
*	9865.5	33.8	16.7	50.5	68.2	-17.7	Peak	Vertical
	11582.5	37.8	17.7	55.5	74.0	-18.5	Peak	Vertical
	11582.5	28.3	17.7	46.0	54.0	-8.0	Average	Vertical
	12169.0	34.6	17.5	52.1	74.0	-21.9	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	36
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
*	8888.0	34.6	13.2	47.8	68.2	-20.4	Peak	Horizontal
*	10418.0	34.5	17.3	51.8	68.2	-16.4	Peak	Horizontal
	11676.0	37.0	17.6	54.6	74.0	-19.4	Peak	Horizontal
	11676.0	21.8	17.6	39.4	54.0	-14.6	Average	Horizontal
	12152.0	35.2	17.5	52.7	74.0	-21.3	Peak	Horizontal
*	8862.5	36.1	13.3	49.4	68.2	-18.8	Peak	Vertical
*	10307.5	34.8	17.3	52.1	68.2	-16.1	Peak	Vertical
	10860.0	35.3	18.1	53.4	74.0	-20.6	Peak	Vertical
	12033.0	35.1	17.4	52.5	74.0	-21.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in 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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	44
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
*	8837.0	35.4	13.2	48.6	68.2	-19.6	Peak	Horizontal
*	10163.0	35.1	17.0	52.1	68.2	-16.1	Peak	Horizontal
	10860.0	35.8	18.1	53.9	74.0	-20.1	Peak	Horizontal
	11557.0	35.9	17.8	53.7	74.0	-20.3	Peak	Horizontal
*	8811.5	36.4	13.3	49.7	68.2	-18.5	Peak	Vertical
*	9976.0	35.6	16.7	52.3	68.2	-15.9	Peak	Vertical
	10826.0	35.6	18.0	53.6	74.0	-20.4	Peak	Vertical
	10826.0	27.1	18.0	45.1	54.0	-8.9	Average	Vertical
	12211.5	35.2	17.4	52.6	74.0	-21.4	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	48
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
*	8658.5	35.9	13.0	48.9	68.2	-19.3	Peak	Horizontal
*	10010.0	34.9	16.6	51.5	68.2	-16.7	Peak	Horizontal
	10885.5	34.6	18.1	52.7	74.0	-21.3	Peak	Horizontal
	11684.5	35.5	17.5	53.0	74.0	-21.0	Peak	Horizontal
*	8820.0	36.0	13.3	49.3	68.2	-18.9	Peak	Vertical
*	9967.5	34.4	16.7	51.1	68.2	-17.1	Peak	Vertical
	10800.5	35.2	18.0	53.2	74.0	-20.8	Peak	Vertical
	11531.5	34.0	17.8	51.8	74.0	-22.2	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	149
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
*	8735.0	35.0	13.0	48.0	68.2	-20.2	Peak	Horizontal
*	10129.0	33.8	16.9	50.7	68.2	-17.5	Peak	Horizontal
	10834.5	34.6	18.0	52.6	74.0	-21.4	Peak	Horizontal
	11480.5	38.6	17.8	56.4	74.0	-17.6	Peak	Horizontal
	11480.5	27.3	17.8	45.1	54.0	-8.9	Average	Horizontal
*	8743.5	34.0	13.1	47.1	68.2	-21.1	Peak	Vertical
*	10120.5	35.3	16.9	52.2	68.2	-16.0	Peak	Vertical
	10800.5	34.7	18.0	52.7	74.0	-21.3	Peak	Vertical
	11480.5	38.6	17.8	56.4	74.0	-17.6	Peak	Vertical
	11480.5	29.6	17.8	47.4	54.0	-6.6	Average	Horizontal

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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	157
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
*	8658.5	35.3	13.0	48.3	68.2	-19.9	Peak	Horizontal
*	9959.0	35.1	16.7	51.8	68.2	-16.4	Peak	Horizontal
	10851.5	35.2	18.1	53.3	74.0	-20.7	Peak	Horizontal
	11582.5	38.0	17.7	55.7	74.0	-18.3	Peak	Horizontal
	11578.3	27.3	17.7	45.0	54.0	-9.0	Average	Horizontal
*	8624.5	36.9	12.9	49.8	68.2	-18.4	Peak	Vertical
*	10163.0	34.7	17.0	51.7	68.2	-16.5	Peak	Vertical
	10885.5	34.9	18.1	53.0	74.0	-21.0	Peak	Vertical
	11582.5	37.8	17.7	55.5	74.0	-18.5	Peak	Vertical
	11582.5	26.3	17.7	44.0	54.0	-10.0	Average	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3	Test Channel:	165
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
*	8701.0	35.7	13.0	48.7	68.2	-19.5	Peak	Horizontal
*	10239.5	34.6	17.2	51.8	68.2	-16.4	Peak	Horizontal
	11642.0	41.7	17.6	59.3	74.0	-14.7	Peak	Horizontal
	11642.0	30.6	17.6	48.2	54.0	-5.8	Average	Horizontal
	12169.0	35.1	17.5	52.6	74.0	-21.4	Peak	Horizontal
*	8658.5	34.4	13.0	47.4	68.2	-20.8	Peak	Vertical
*	10018.5	35.3	16.6	51.9	68.2	-16.3	Peak	Vertical
	11013.0	35.0	18.0	53.0	74.0	-21.0	Peak	Vertical
	11650.5	39.7	17.6	57.3	74.0	-16.7	Peak	Vertical
	11650.5	28.5	17.6	46.1	54.0	-7.9	Average	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	38
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
*	8684.0	35.0	13.1	48.1	68.2	-20.1	Peak	Horizontal
*	10120.5	34.9	16.9	51.8	68.2	-16.4	Peak	Horizontal
	10936.5	35.0	18.3	53.3	74.0	-20.7	Peak	Horizontal
	11693.0	35.5	17.5	53.0	74.0	-21.0	Peak	Horizontal
*	8624.5	35.8	12.9	48.7	68.2	-19.5	Peak	Vertical
*	10146.0	34.4	17.0	51.4	68.2	-16.8	Peak	Vertical
	10919.5	35.3	18.2	53.5	74.0	-20.5	Peak	Vertical
	11480.5	36.3	17.8	54.1	74.0	-19.9	Peak	Vertical
	11480.5	22.5	17.8	40.3	54.0	-13.7	Average	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	46
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
*	8692.5	34.9	13.0	47.9	68.2	-20.3	Peak	Horizontal
*	10214.0	32.8	17.1	49.9	68.2	-18.3	Peak	Horizontal
	11276.5	34.0	17.5	51.5	74.0	-22.5	Peak	Horizontal
	12288.0	34.8	17.3	52.1	74.0	-21.9	Peak	Horizontal
*	8624.5	35.7	12.9	48.6	68.2	-19.6	Peak	Vertical
*	10341.5	34.7	17.3	52.0	68.2	-16.2	Peak	Vertical
	11225.5	32.9	17.6	50.5	74.0	-23.5	Peak	Vertical
	11769.5	36.2	17.3	53.5	74.0	-20.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in 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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	151
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
*	8820.0	35.4	13.3	48.7	68.2	-19.5	Peak	Horizontal
*	9993.0	33.7	16.7	50.4	68.2	-17.8	Peak	Horizontal
	10885.5	35.3	18.1	53.4	74.0	-20.6	Peak	Horizontal
	11523.0	37.4	17.8	55.2	74.0	-18.8	Peak	Horizontal
	11523.0	26.5	17.8	44.3	54.0	-9.7	Average	Horizontal
*	8854.0	36.1	13.4	49.5	68.2	-18.7	Peak	Vertical
*	9933.5	35.2	16.7	51.9	68.2	-16.3	Peak	Vertical
	10758.0	35.2	17.8	53.0	74.0	-21.0	Peak	Vertical
	11518.6	25.3	17.8	43.1	54.0	-10.9	Average	Vertical
	11523.0	36.6	17.8	54.4	74.0	-19.6	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3	Test Channel:	159
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
*	8811.5	34.0	13.3	47.3	68.2	-20.9	Peak	Horizontal
*	9865.5	33.7	16.7	50.4	68.2	-17.8	Peak	Horizontal
	10953.5	34.8	18.2	53.0	74.0	-21.0	Peak	Horizontal
	11582.5	36.6	17.7	54.3	74.0	-19.7	Peak	Horizontal
	11587.6	25.3	17.7	43.0	54.0	-11.0	Average	Horizontal
*	8633.0	36.0	12.9	48.9	68.2	-19.3	Peak	Vertical
*	9840.0	34.2	16.7	50.9	68.2	-17.3	Peak	Vertical
	10749.5	36.0	17.8	53.8	74.0	-20.2	Peak	Vertical
	11582.5	37.7	17.7	55.4	74.0	-18.6	Peak	Vertical
	11582.5	28.9	17.7	46.6	54.0	-7.4	Average	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	42
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
*	8641.5	36.5	12.9	49.4	68.2	-18.8	Peak	Horizontal
*	10205.5	34.9	17.1	52.0	68.2	-16.2	Peak	Horizontal
	10928.0	35.1	18.2	53.3	74.0	-20.7	Peak	Horizontal
	11718.5	35.7	17.3	53.0	74.0	-21.0	Peak	Horizontal
*	8828.5	35.0	13.3	48.3	68.2	-19.9	Peak	Vertical
*	9874.0	34.3	16.8	51.1	68.2	-17.1	Peak	Vertical
	10877.0	34.1	18.1	52.2	74.0	-21.8	Peak	Vertical
	12169.0	35.3	17.5	52.8	74.0	-21.2	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3	Test Channel:	155
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
*	8633.0	36.6	12.9	49.5	68.2	-18.7	Peak	Horizontal
*	10375.5	34.5	17.4	51.9	68.2	-16.3	Peak	Horizontal
	11132.0	35.3	17.7	53.0	74.0	-21.0	Peak	Horizontal
	12101.0	34.9	17.5	52.4	74.0	-21.6	Peak	Horizontal
*	8820.0	34.7	13.3	48.0	68.2	-20.2	Peak	Vertical
*	10154.5	34.9	17.0	51.9	68.2	-16.3	Peak	Vertical
	10868.5	34.5	18.1	52.6	74.0	-21.4	Peak	Vertical
	11905.5	35.0	17.3	52.3	74.0	-21.7	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)

Product	7Signal Sapphire Eye	Temperature	26°C
Test Engineer	Max Wang	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/12/12
Test Mode:	802.11ac-VHT80+80	Test Channel:	42 + 155
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
*	8769.0	33.6	13.2	46.8	68.2	-21.4	Peak	Horizontal
*	10078.0	32.7	17.0	49.7	68.2	-18.5	Peak	Horizontal
	10928.0	35.5	18.2	53.7	74.0	-20.3	Peak	Horizontal
	10928.0	26.7	18.2	44.9	54.0	-9.1	Average	Horizontal
	12084.0	34.9	17.5	52.4	74.0	-21.6	Peak	Horizontal
*	8752.0	35.5	13.2	48.7	68.2	-19.5	Peak	Vertical
*	10035.5	34.4	16.7	51.1	68.2	-17.1	Peak	Vertical
	10843.0	35.2	18.1	53.3	74.0	-20.7	Peak	Vertical
	11871.5	35.2	17.2	52.4	74.0	-21.6	Peak	Vertical

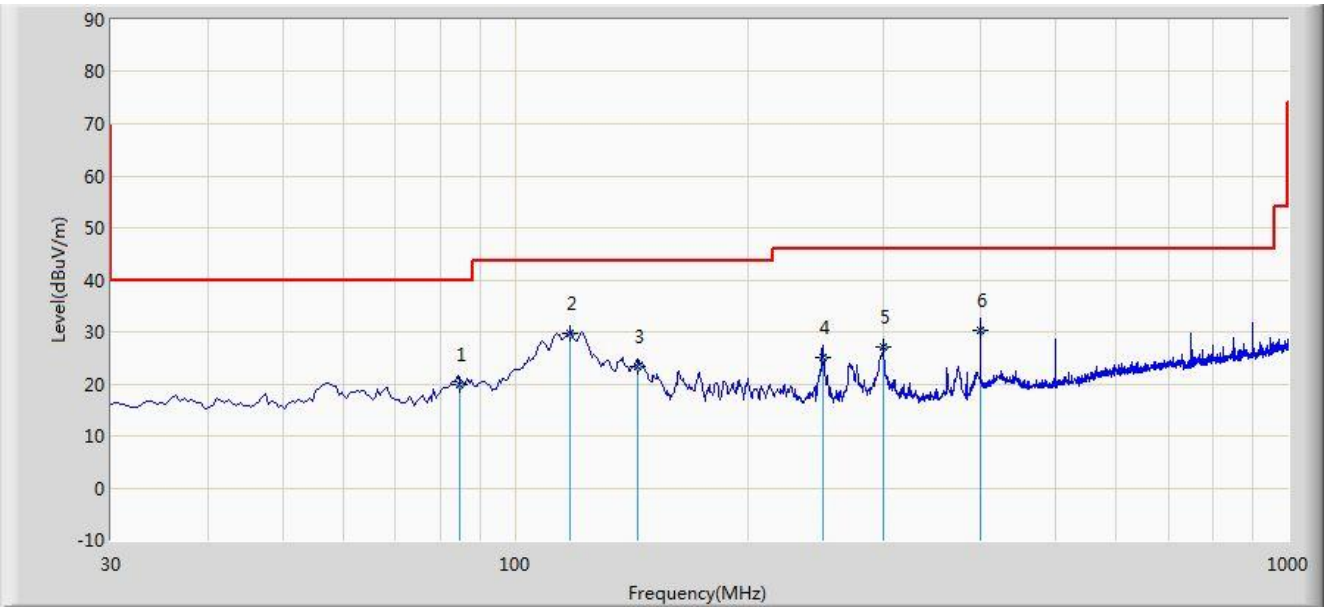
Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

The Worst Case of Radiated Emission below 1GHz:

Site: AC1	Time: 2018/12/29 - 02:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Cloud Guo
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Worst Case Mode: Transmit by 802.11n-HT20 at Channel 5785MHz	



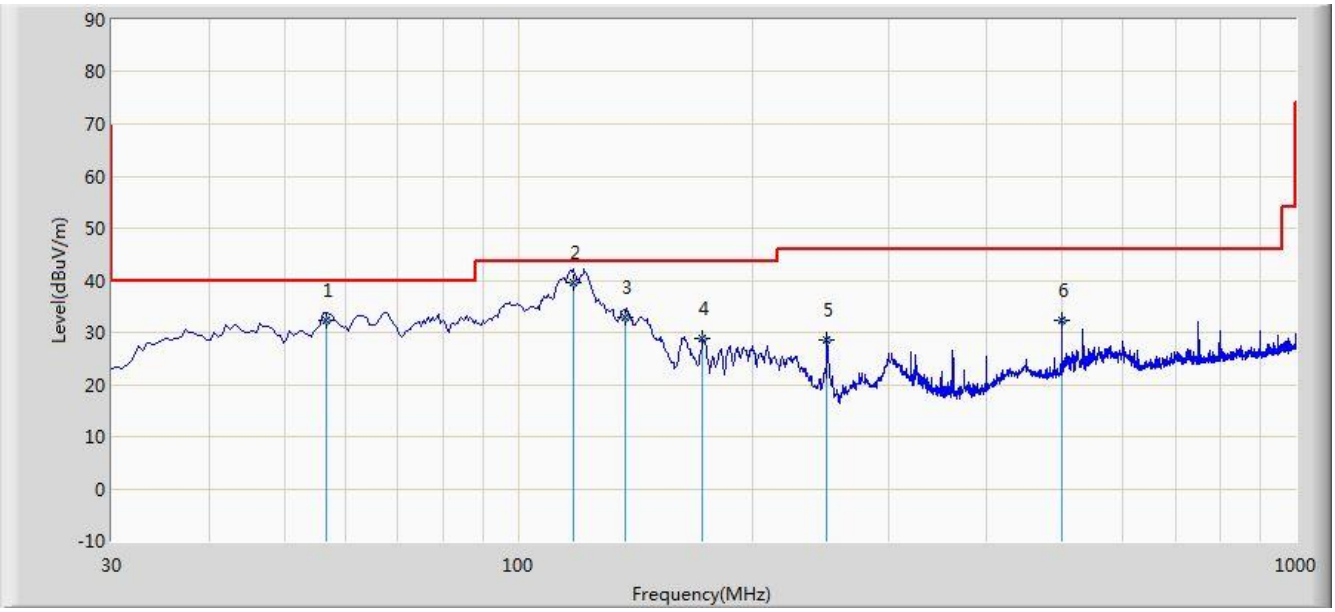
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor	Type
1			84.625	19.835	9.626	-20.165	40.000	10.209	QP
2		*	117.625	29.593	16.626	-13.907	43.500	12.967	QP
3			144.290	23.432	8.544	-20.068	43.500	14.888	QP
4			250.126	25.171	12.145	-20.829	46.000	13.026	QP
5			299.326	27.030	12.650	-18.970	46.000	14.379	QP
6			400.050	30.211	13.625	-15.789	46.000	16.586	QP

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

Site: AC1	Time: 2018/12/29 - 02:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Cloud Guo
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Worst Case Mode: Transmit by 802.11n-HT20 at Channel 5785MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor	Type
1			56.626	32.333	18.625	-7.667	40.000	13.708	QP
2		*	117.625	39.508	26.541	-3.992	43.500	12.967	QP
3			137.515	32.854	18.451	-10.646	43.500	14.403	QP
4			172.645	28.839	14.848	-14.661	43.500	13.991	QP
5			249.326	28.640	15.629	-17.360	46.000	13.011	QP
6			499.950	32.194	13.625	-13.806	46.000	18.569	QP

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

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).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1] 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 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 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41	--	--	--

For 15.407(b) Requirement:

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

For transmitters operating in the 5.725-5.85 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.

Refer to KDB 789033 D02v02r01 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 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/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

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

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

Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

2. RBW = 1MHz

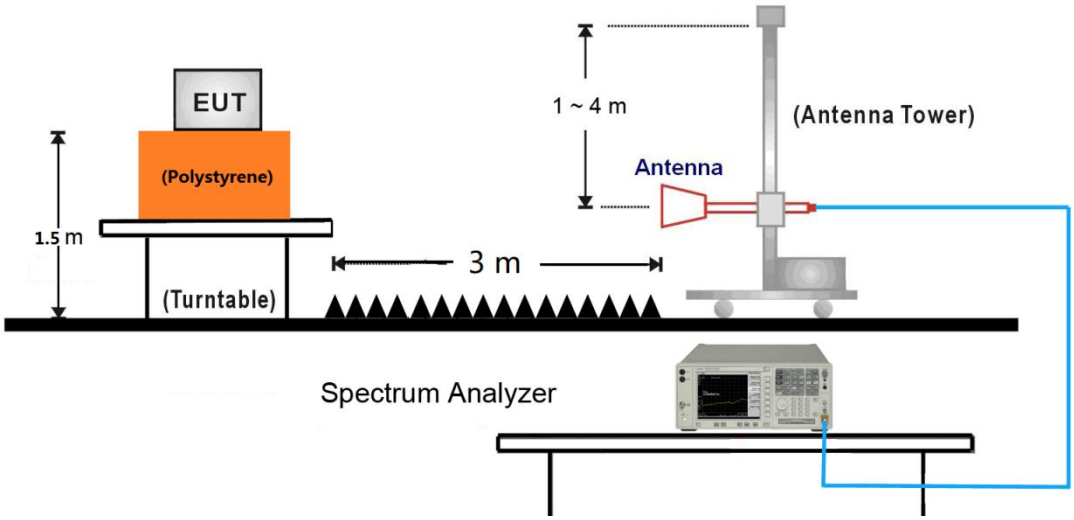
3. VBW If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW ≤ RBW/100 (i.e., 10 kHz) but not less than 10 Hz. If the EUT duty cycle is < 98%, set VBW ≥ 1/T

4. Detector = Peak

5. Sweep time = auto

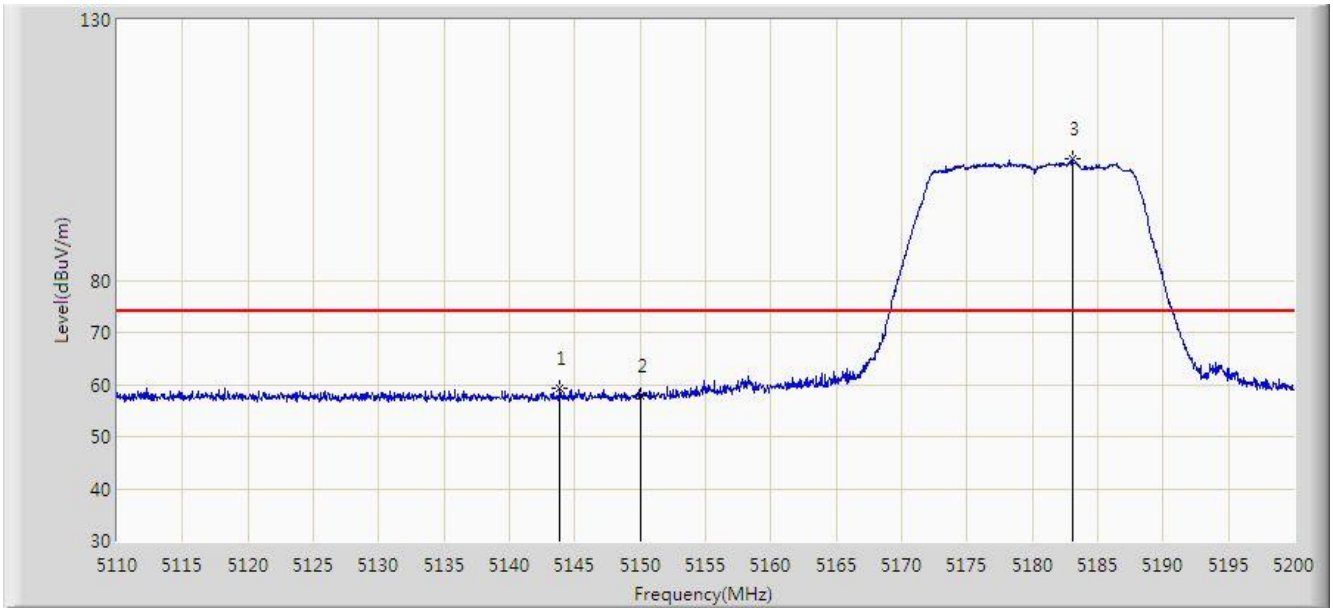
6. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.

7.8.4.Test Setup



7.8.5.Test Result

Site: AC1	Time: 2018/12/09 - 11:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

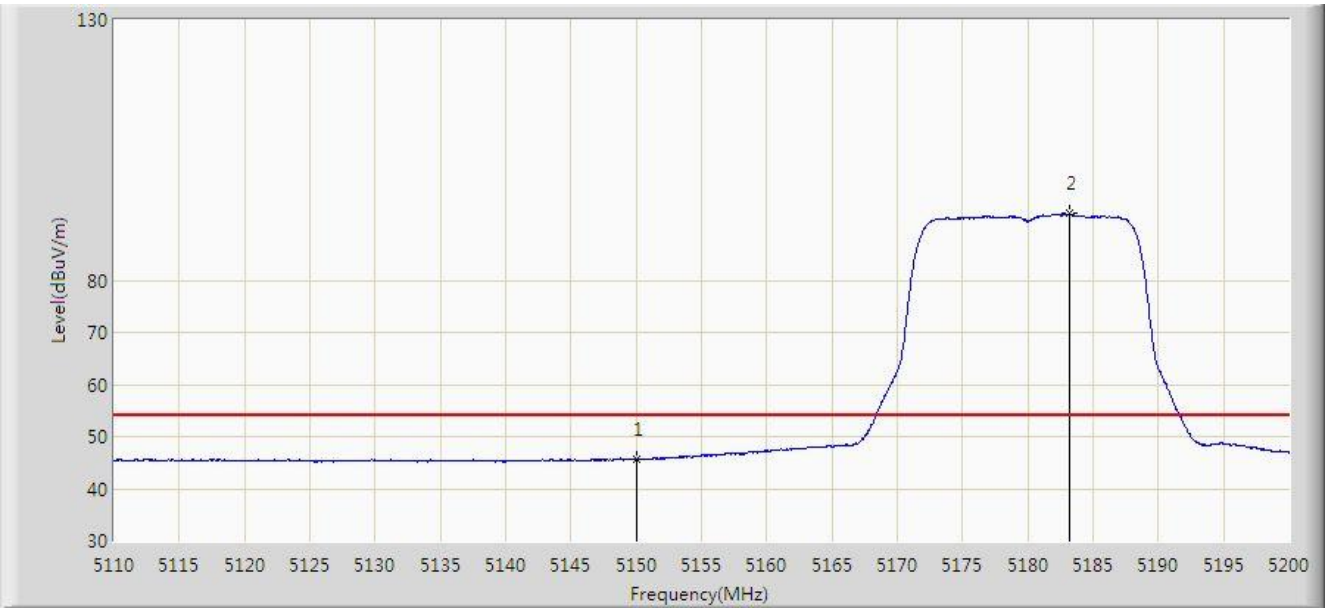


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5143.885	59.178	52.596	-14.822	74.000	6.583	PK
2			5150.000	57.884	51.322	-16.116	74.000	6.562	PK
3		*	5183.035	103.352	96.930	N/A	N/A	6.422	PK

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

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

Site: AC1	Time: 2018/12/09 - 11:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

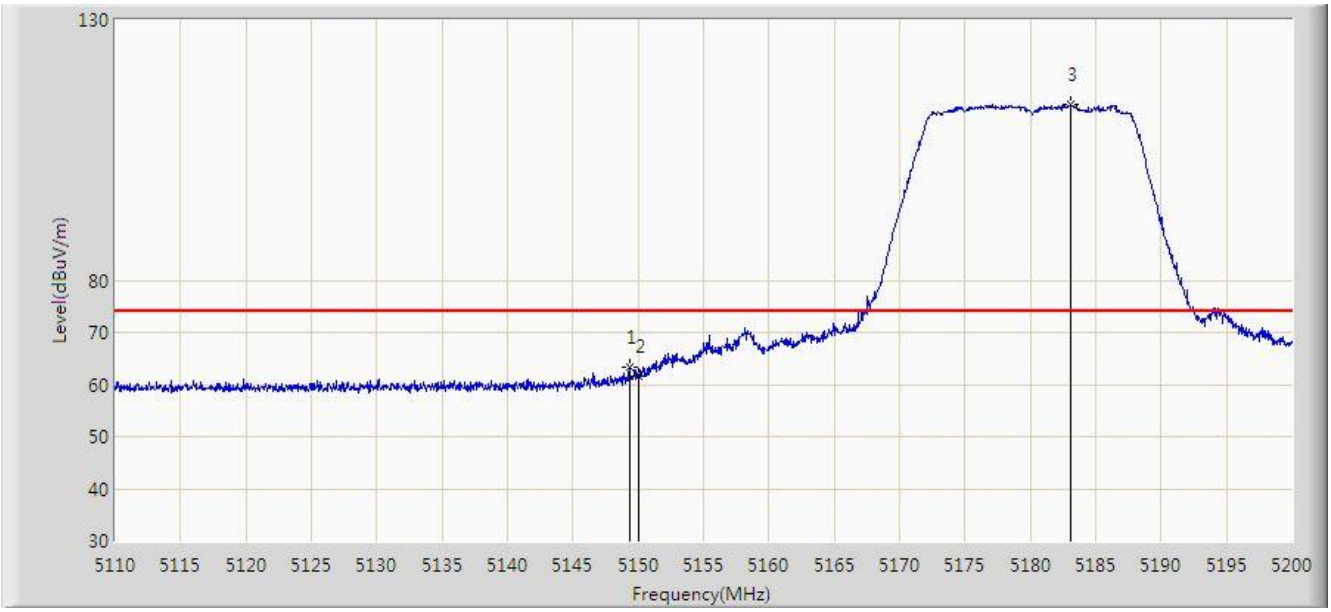


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	45.650	39.088	-8.350	54.000	6.562	AV
2		*	5183.170	92.773	86.352	N/A	N/A	6.421	AV

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

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

Site: AC1	Time: 2018/12/09 - 11:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

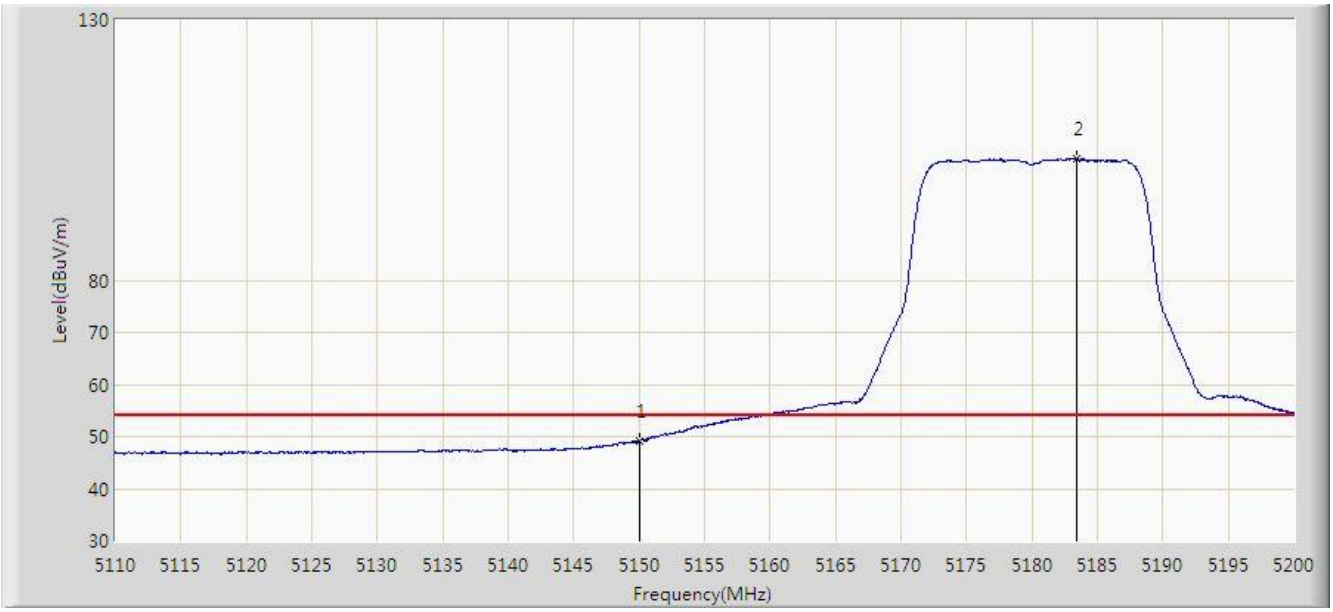


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.330	63.254	56.693	-10.746	74.000	6.560	PK
2			5150.000	61.577	55.015	-12.423	74.000	6.562	PK
3		*	5183.125	113.786	107.364	N/A	N/A	6.421	PK

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

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

Site: AC1	Time: 2018/12/09 - 11:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0	

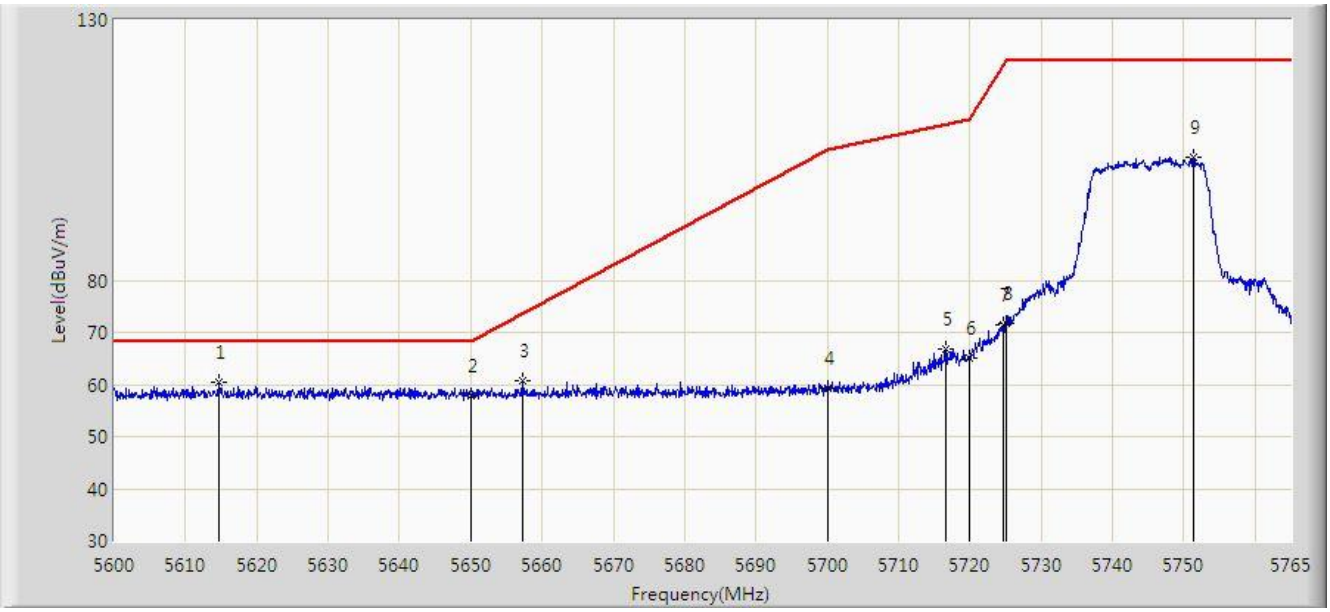


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	49.226	42.664	-4.774	54.000	6.562	AV
2		*	5183.440	103.245	96.825	N/A	N/A	6.420	AV

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

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

Site: AC1	Time: 2018/12/09 - 12:50
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 0	

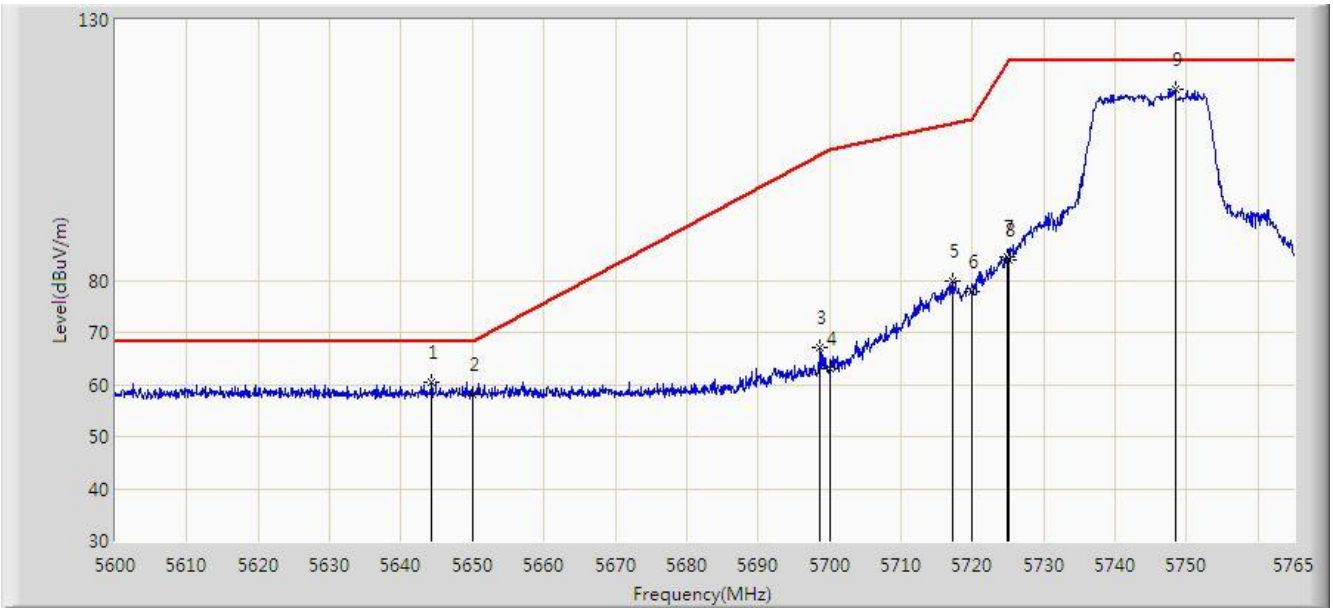


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5614.603	60.374	53.380	-7.826	68.200	6.993	PK
2			5650.000	57.826	50.821	-10.374	68.200	7.005	PK
3			5657.172	60.851	53.825	-12.677	73.527	7.026	PK
4			5700.000	59.264	52.099	-45.936	105.200	7.165	PK
5			5716.572	66.917	59.637	-42.925	109.842	7.280	PK
6			5720.000	65.145	57.846	-45.655	110.800	7.299	PK
7			5724.658	71.328	64.002	-50.092	121.421	7.327	PK
8			5725.000	71.645	64.317	-50.555	122.200	7.328	PK
9			5751.388	103.695	96.286	N/A	N/A	7.409	PK

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

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

Site: AC1	Time: 2018/12/09 - 12:49
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 0	

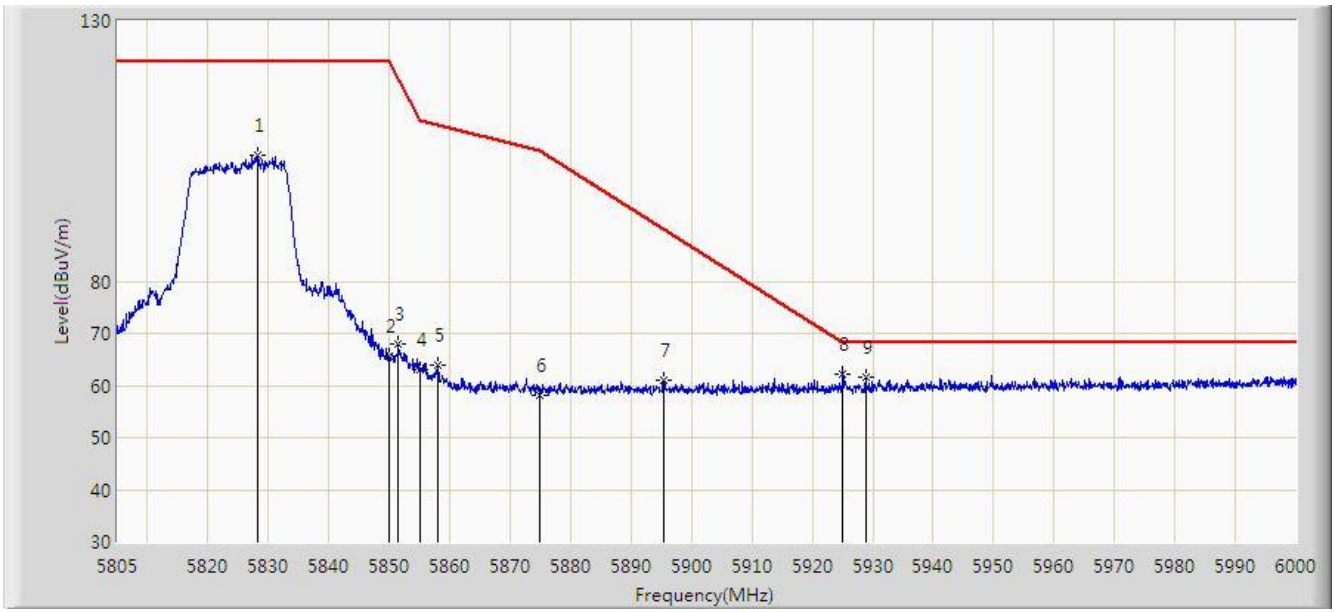


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5644.303	60.358	53.366	-7.842	68.200	6.992	PK
2			5650.000	58.218	51.213	-9.982	68.200	7.005	PK
3			5698.670	66.998	59.842	-37.222	104.220	7.157	PK
4			5700.000	63.061	55.896	-42.139	105.200	7.165	PK
5			5717.232	79.947	72.663	-30.079	110.026	7.284	PK
6			5720.000	77.796	70.497	-33.004	110.800	7.299	PK
7			5724.822	84.598	77.271	-37.196	121.794	7.326	PK
8			5725.000	83.826	76.498	-38.374	122.200	7.328	PK
9		*	5748.417	116.574	109.167	N/A	N/A	7.407	PK

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

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

Site: AC1	Time: 2018/12/09 - 12:54
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 0	

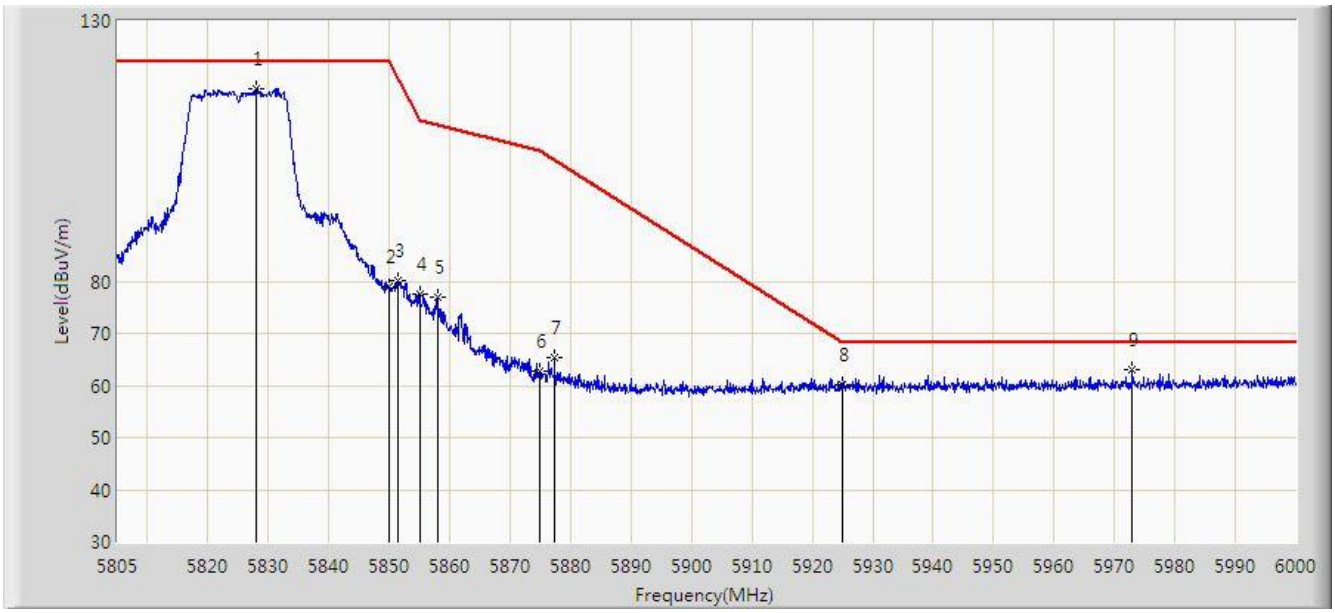


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5828.107	104.298	96.625	N/A	N/A	7.672	PK
2			5850.000	65.669	57.896	-56.531	122.200	7.774	PK
3			5851.507	67.951	60.177	-50.812	118.763	7.774	PK
4			5855.000	62.914	55.138	-47.886	110.800	7.775	PK
5			5858.138	63.890	56.112	-46.030	109.920	7.778	PK
6			5875.000	58.123	50.305	-47.077	105.200	7.818	PK
7			5895.382	61.029	53.195	-29.050	90.079	7.834	PK
8		*	5925.000	62.100	54.281	-6.100	68.200	7.819	PK
9			5928.825	61.612	53.790	-6.588	68.200	7.822	PK

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

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

Site: AC1	Time: 2018/12/09 - 12:52
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 0	

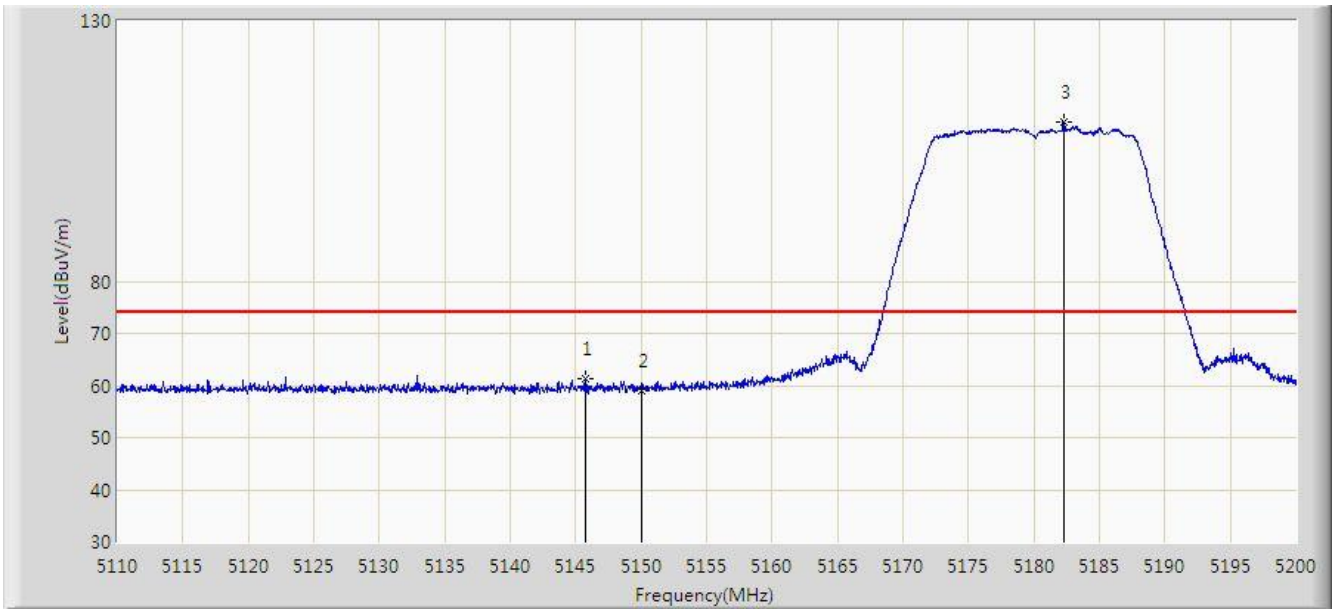


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5827.913	117.058	109.386	N/A	N/A	7.672	PK
2			5850.000	78.853	71.080	-43.347	122.200	7.774	PK
3			5851.507	80.178	72.404	-38.585	118.763	7.774	PK
4			5855.000	77.526	69.750	-33.274	110.800	7.775	PK
5			5857.942	76.871	69.093	-33.104	109.975	7.778	PK
6			5875.000	62.750	54.932	-42.450	105.200	7.818	PK
7			5877.345	65.246	57.421	-38.211	103.458	7.825	PK
8			5925.000	60.190	52.371	-8.010	68.200	7.819	PK
9		*	5972.895	63.140	55.264	-5.060	68.200	7.876	PK

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

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

Site: AC1	Time: 2018/12/09 - 12:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

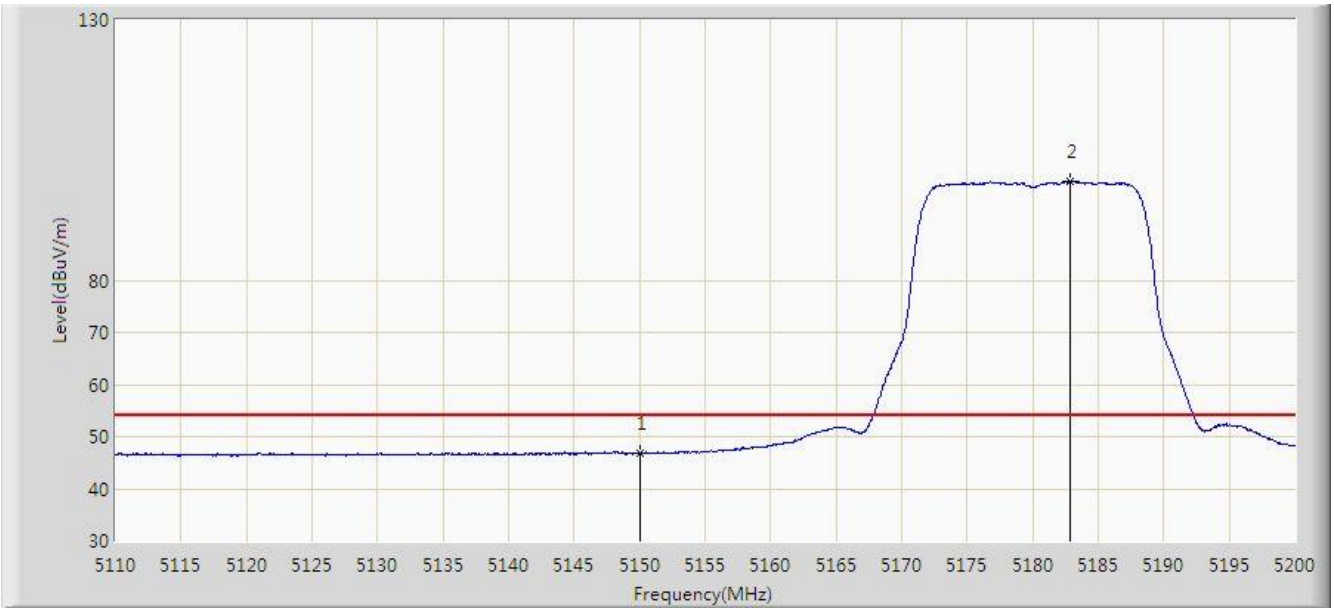


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5145.775	61.214	54.642	-12.786	74.000	6.572	PK
2			5150.000	59.044	52.482	-14.956	74.000	6.562	PK
3		*	5182.315	110.629	104.203	N/A	N/A	6.426	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

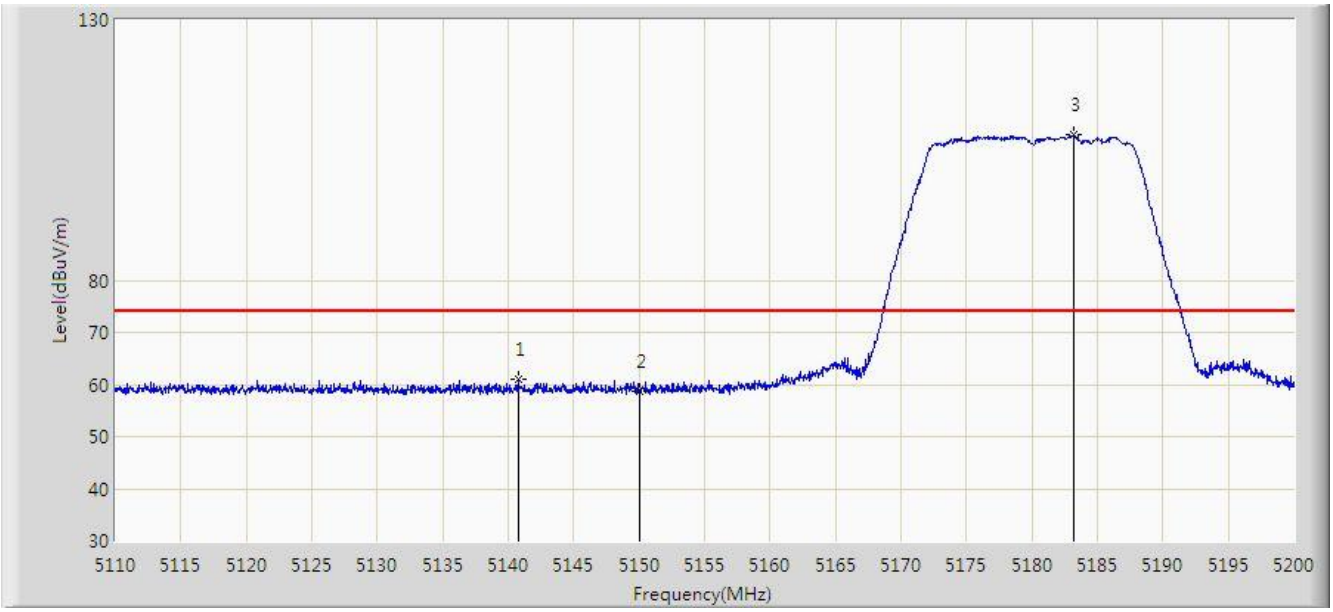


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	46.910	40.348	-7.090	54.000	6.562	AV
2		*	5182.855	98.997	92.574	N/A	N/A	6.423	AV

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

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

Site: AC1	Time: 2018/12/09 - 13:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

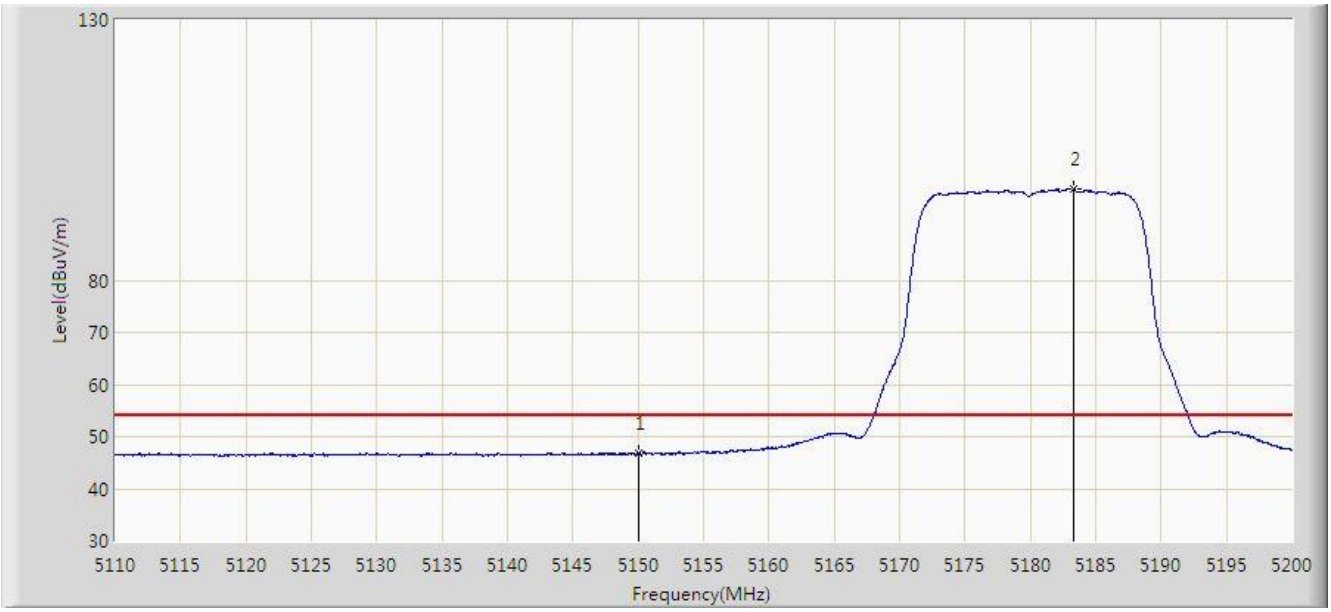


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5140.735	61.081	54.480	-12.919	74.000	6.601	PK
2			5150.000	58.580	52.018	-15.420	74.000	6.562	PK
3		*	5183.170	107.907	101.486	N/A	N/A	6.421	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 1	

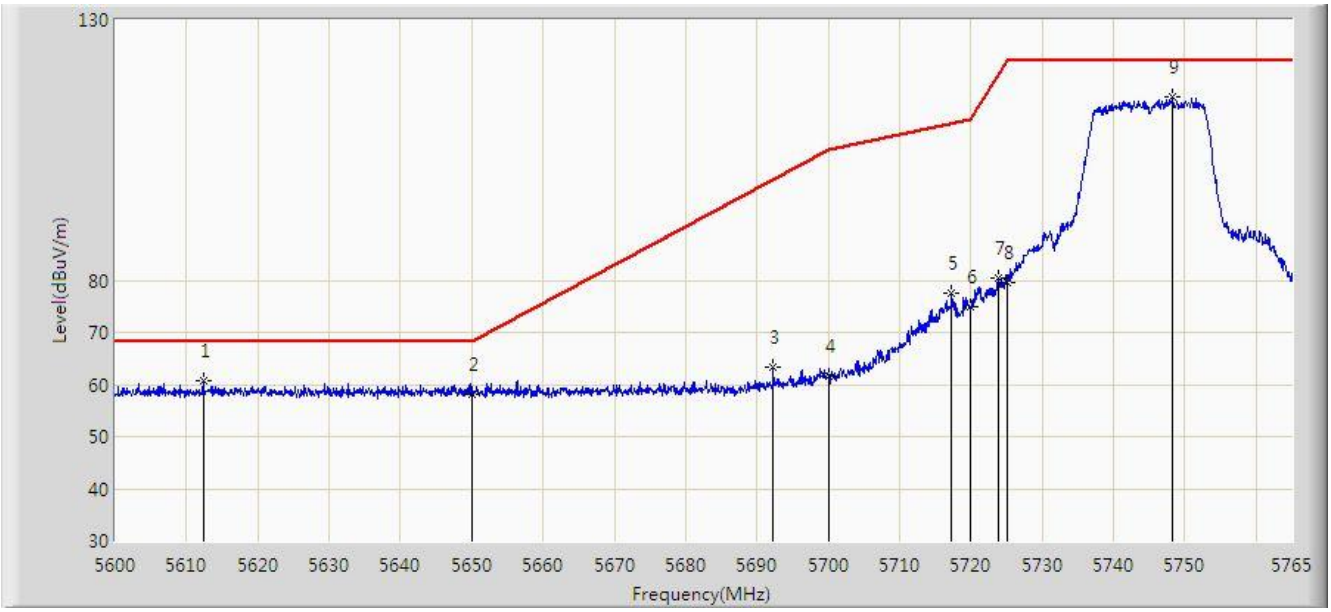


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	46.700	40.138	-7.300	54.000	6.562	AV
2		*	5183.305	97.632	91.211	N/A	N/A	6.421	AV

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

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

Site: AC1	Time: 2018/12/09 - 13:25
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 1	

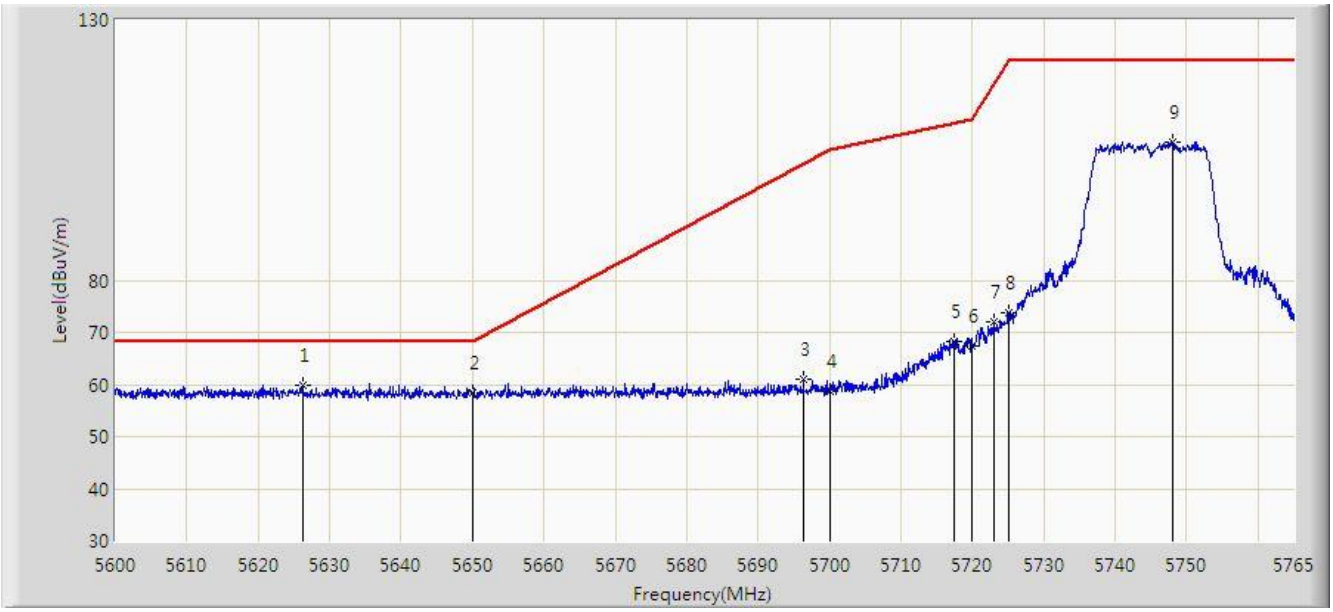


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5612.375	60.809	53.820	-7.391	68.200	6.989	PK
2			5650.000	58.254	51.249	-9.946	68.200	7.005	PK
3			5692.317	63.322	56.208	-36.214	99.536	7.113	PK
4			5700.000	61.545	54.380	-43.655	105.200	7.165	PK
5			5717.232	77.402	70.118	-32.624	110.026	7.284	PK
6			5720.000	74.829	67.530	-35.971	110.800	7.299	PK
7			5723.915	80.434	73.112	-39.293	119.727	7.322	PK
8			5725.000	79.545	72.217	-42.655	122.200	7.328	PK
9		*	5748.335	115.234	107.827	N/A	N/A	7.407	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:27
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 1	

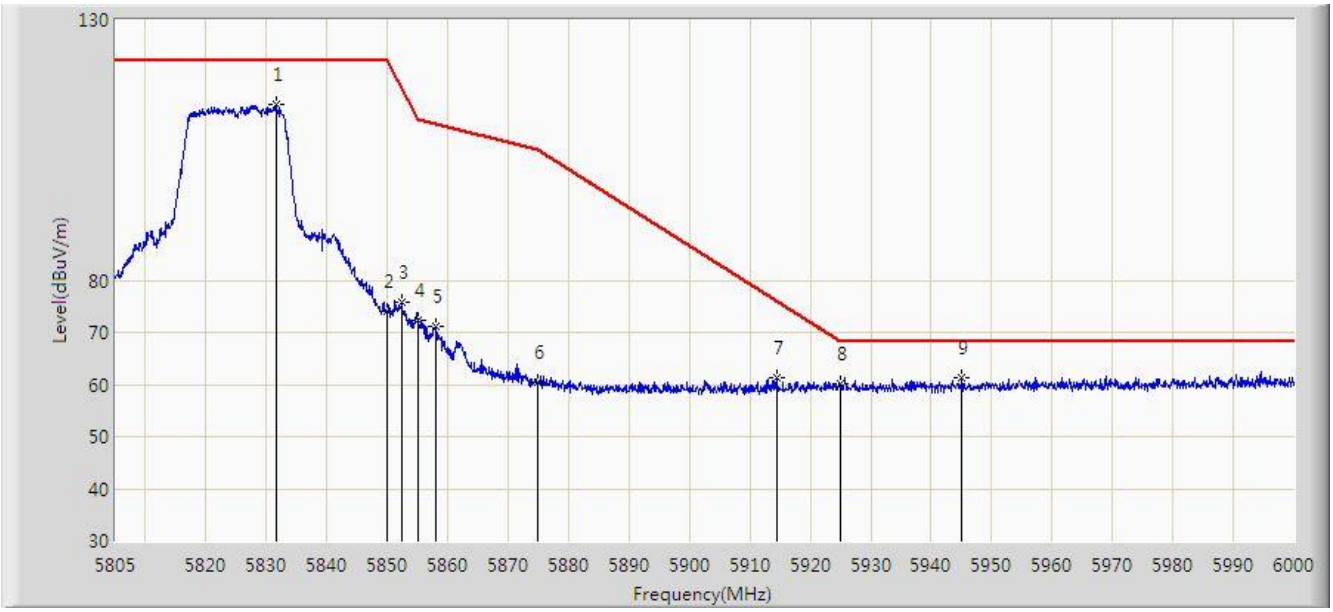


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5626.235	59.778	52.767	-8.422	68.200	7.011	PK
2			5650.000	58.407	51.402	-9.793	68.200	7.005	PK
3			5696.360	61.013	53.872	-41.505	102.517	7.140	PK
4			5700.000	58.666	51.501	-46.534	105.200	7.165	PK
5			5717.397	68.394	61.109	-41.679	110.072	7.285	PK
6			5720.000	67.353	60.054	-43.447	110.800	7.299	PK
7			5723.007	72.150	64.833	-45.508	117.657	7.316	PK
8			5725.000	73.845	66.517	-48.355	122.200	7.328	PK
9			5748.087	106.593	99.186	N/A	N/A	7.407	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:30
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 1	

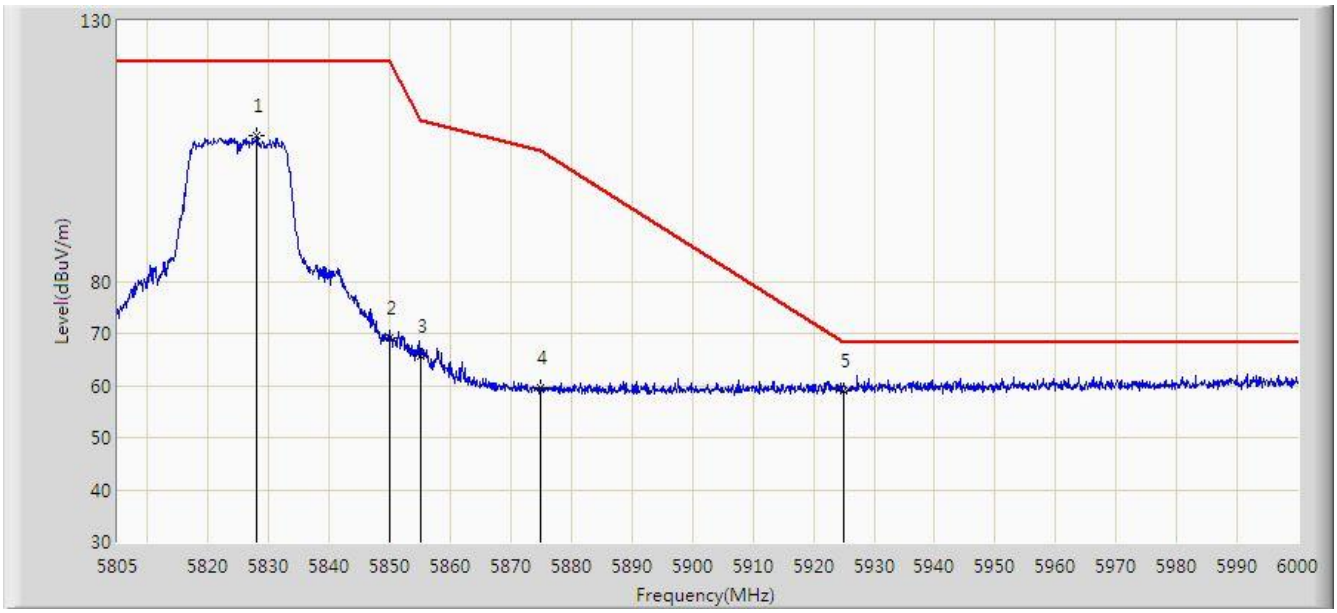


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5831.618	113.722	106.029	N/A	N/A	7.693	PK
2			5850.000	73.946	66.173	-48.254	122.200	7.774	PK
3			5852.385	75.890	68.115	-40.871	116.761	7.775	PK
4			5855.000	72.408	64.632	-38.392	110.800	7.775	PK
5			5858.040	71.226	63.448	-38.722	109.948	7.778	PK
6			5875.000	60.359	52.541	-44.841	105.200	7.818	PK
7			5914.493	61.341	53.529	-14.609	75.949	7.812	PK
8			5925.000	60.106	52.287	-8.094	68.200	7.819	PK
9		*	5945.107	61.339	53.497	-6.861	68.200	7.843	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:32
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 1	

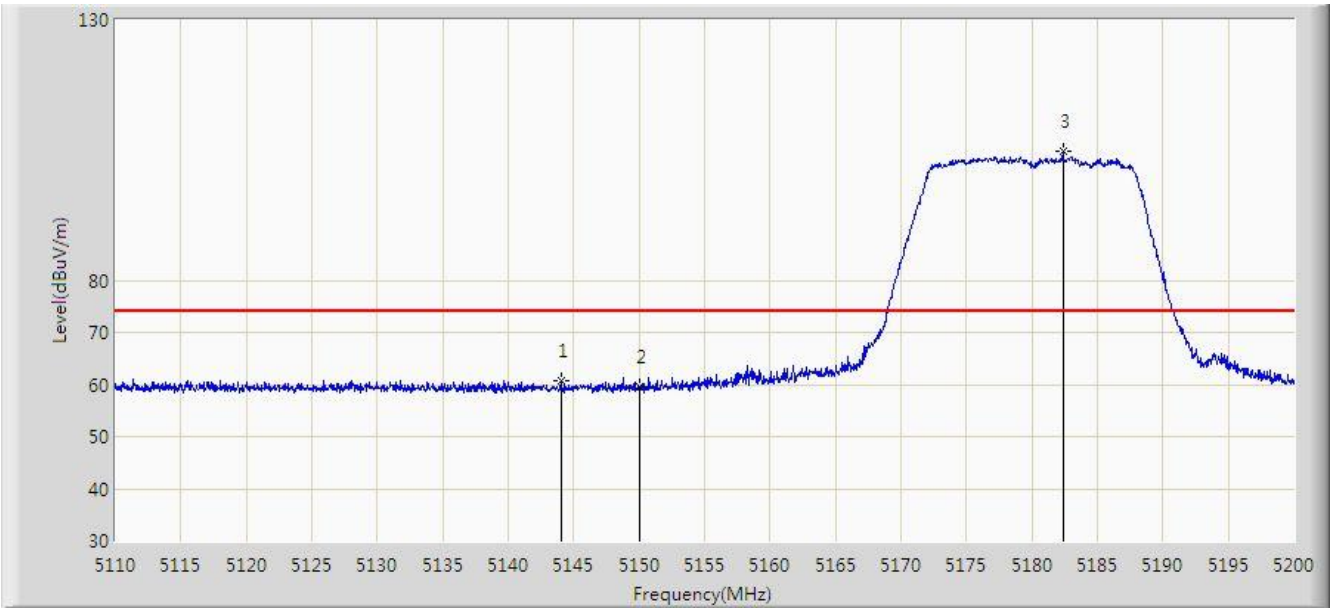


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5828.010	107.871	100.199	N/A	N/A	7.672	PK
2			5850.000	69.259	61.486	-52.941	122.200	7.774	PK
3			5855.000	65.784	58.008	-45.016	110.800	7.775	PK
4			5875.000	59.679	51.861	-45.521	105.200	7.818	PK
5		*	5925.000	59.106	51.287	-9.094	68.200	7.819	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

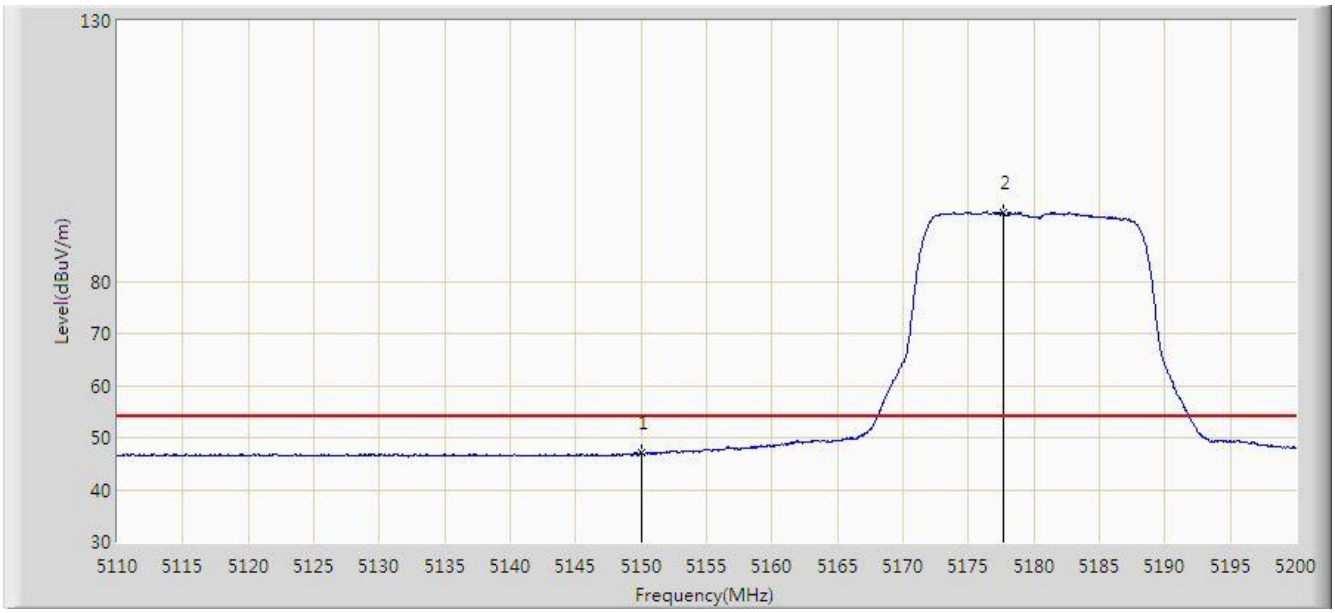


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5144.020	60.615	54.033	-13.385	74.000	6.581	PK
2			5150.000	59.692	53.130	-14.308	74.000	6.562	PK
3		*	5182.360	104.895	98.469	N/A	N/A	6.426	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

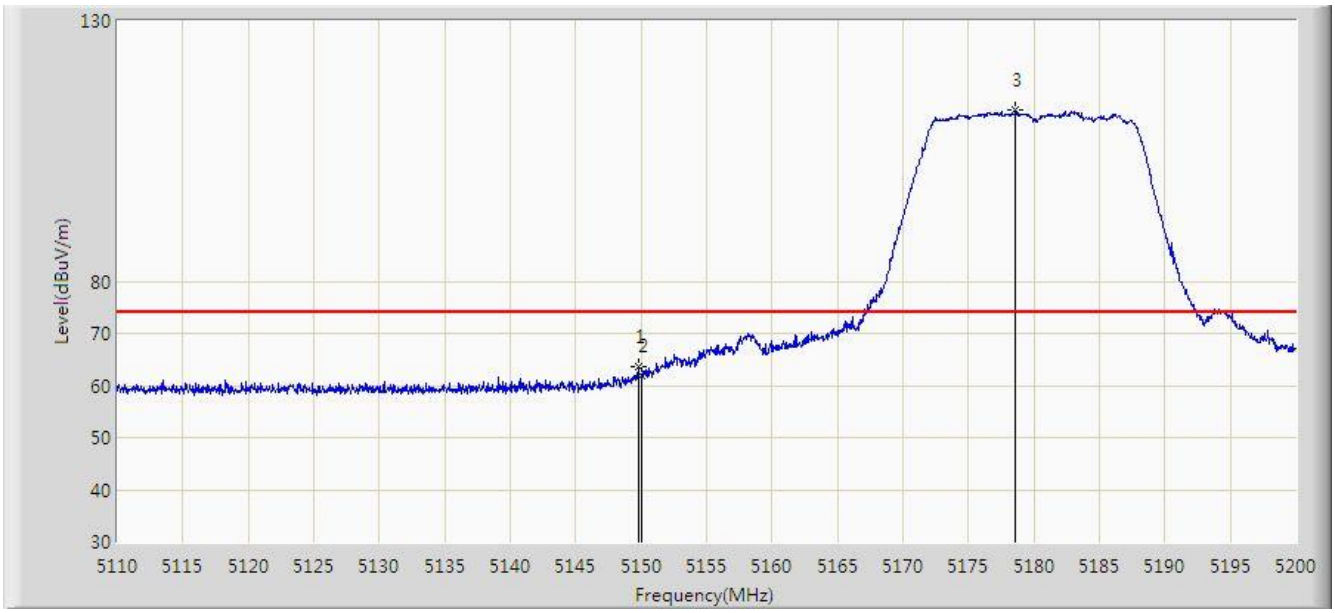


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	46.991	40.429	-7.009	54.000	6.562	AV
2		*	5177.680	93.304	86.841	N/A	N/A	6.463	AV

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

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

Site: AC1	Time: 2018/12/09 - 13:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

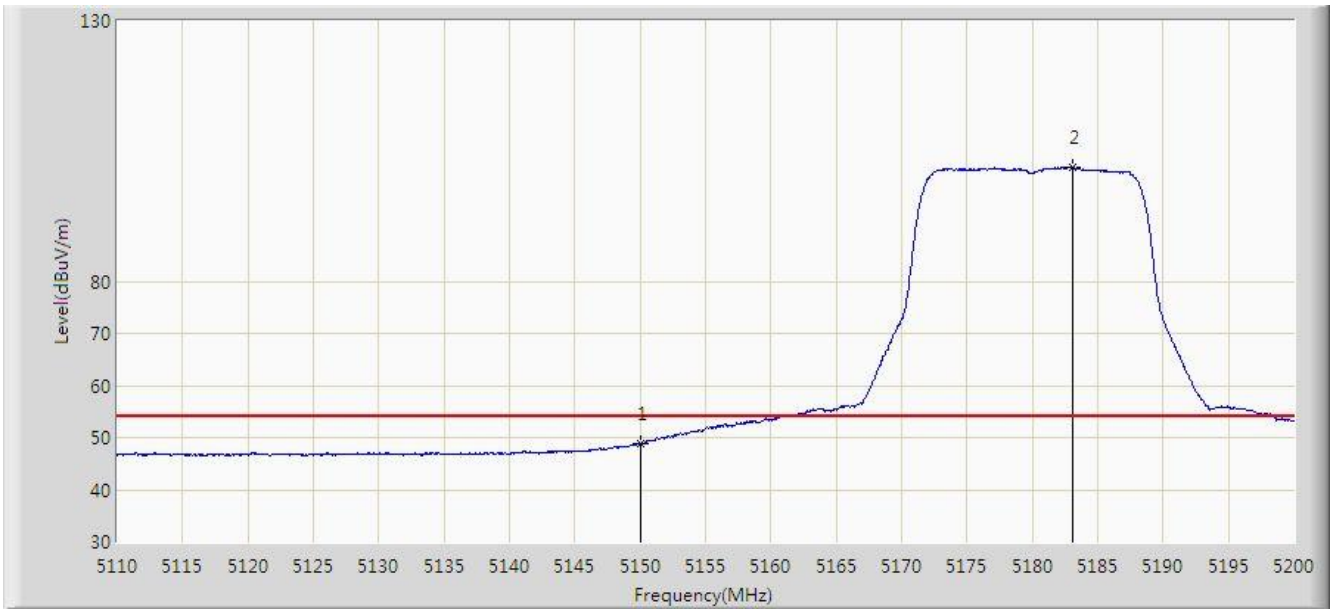


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.780	63.546	56.985	-10.454	74.000	6.561	PK
2			5150.000	61.947	55.385	-12.053	74.000	6.562	PK
3		*	5178.625	112.888	106.433	N/A	N/A	6.455	PK

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

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

Site: AC1	Time: 2018/12/09 - 13:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 2	

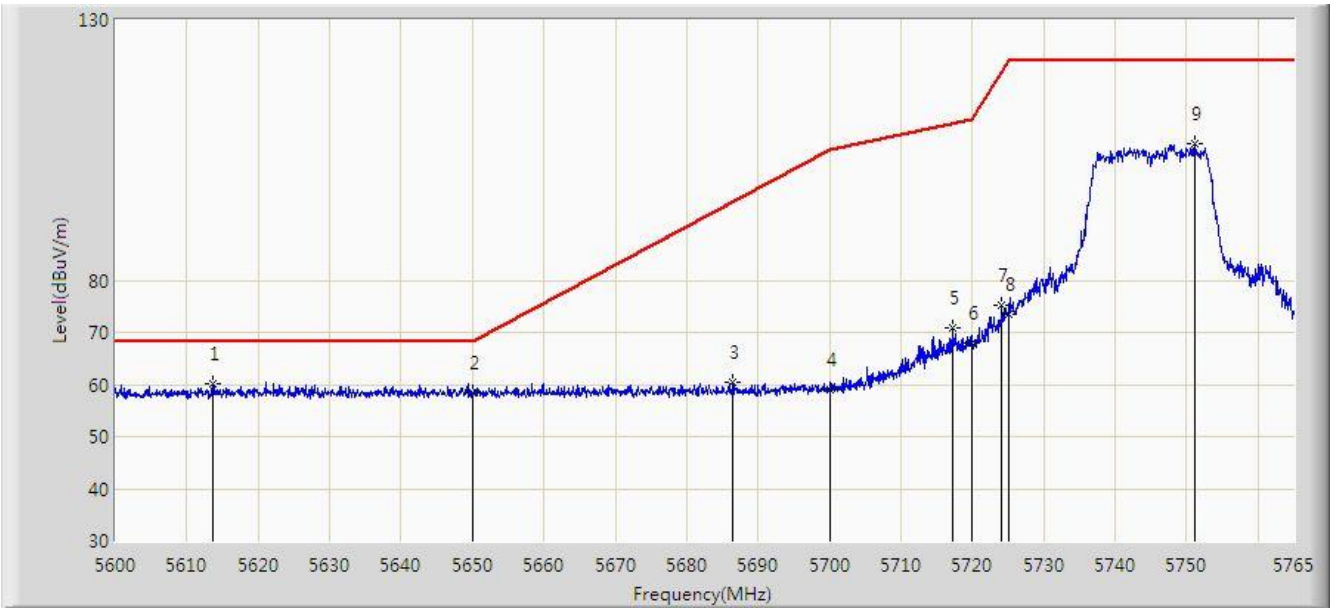


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	48.924	42.362	-5.076	54.000	6.562	AV
2		*	5183.035	101.956	95.534	N/A	N/A	6.422	AV

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

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

Site: AC1	Time: 2018/12/09 - 14:08
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 2	

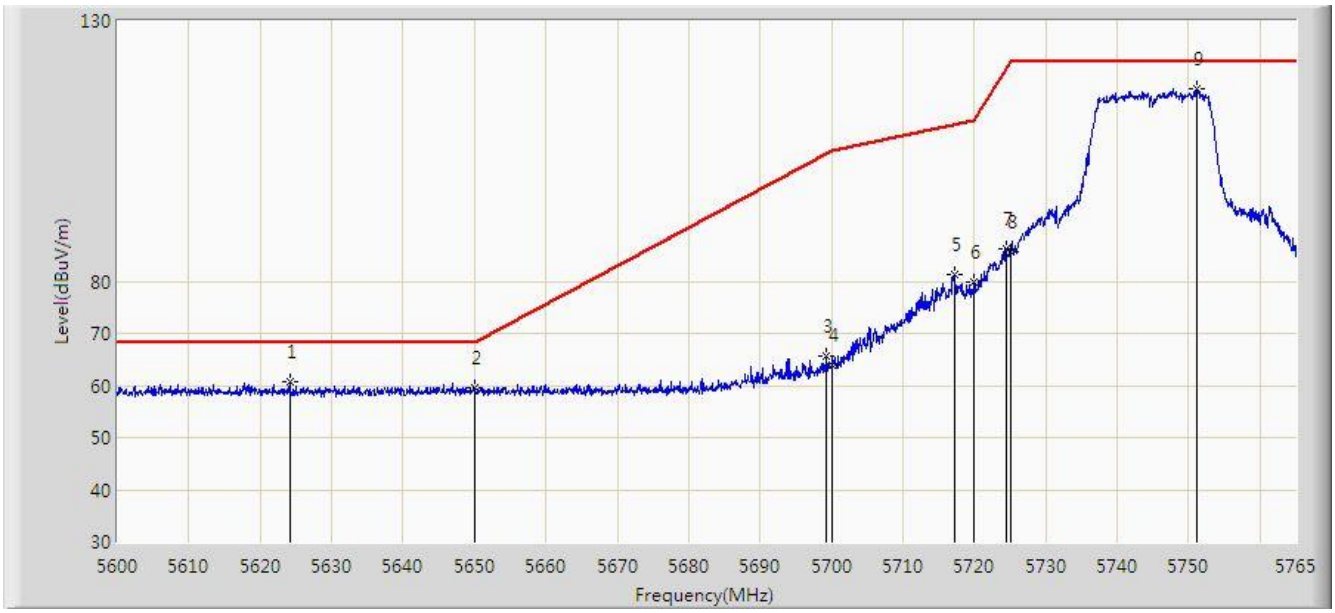


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5613.612	60.079	53.087	-8.121	68.200	6.991	PK
2			5650.000	58.290	51.285	-9.910	68.200	7.005	PK
3			5686.460	60.506	53.414	-34.707	95.213	7.092	PK
4			5700.000	58.954	51.789	-46.246	105.200	7.165	PK
5			5717.150	70.770	63.487	-39.233	110.003	7.284	PK
6			5720.000	67.928	60.629	-42.872	110.800	7.299	PK
7			5724.163	75.258	67.935	-45.034	120.292	7.324	PK
8			5725.000	73.506	66.178	-48.694	122.200	7.328	PK
9			5751.058	106.334	98.925	N/A	N/A	7.409	PK

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

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

Site: AC1	Time: 2018/12/09 - 14:10
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant 2	

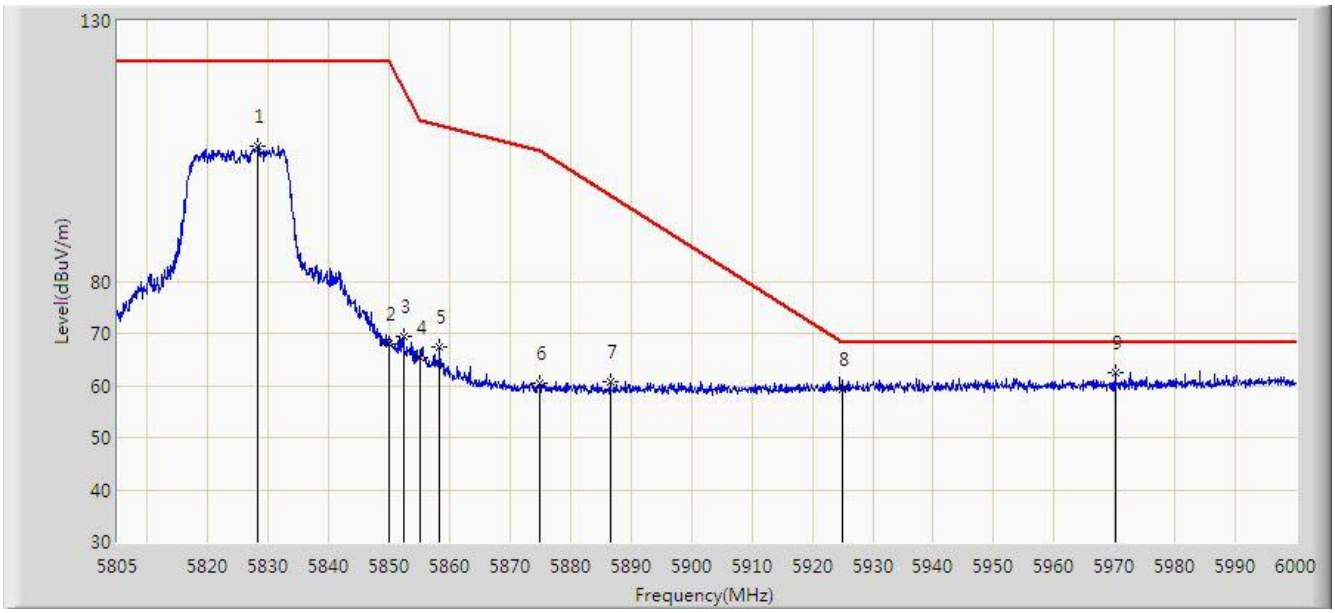


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5624.090	60.860	53.845	-7.340	68.200	7.015	PK
2			5650.000	59.569	52.564	-8.631	68.200	7.005	PK
3			5699.330	65.701	58.540	-39.005	104.706	7.161	PK
4			5700.000	64.056	56.891	-41.144	105.200	7.165	PK
5			5717.150	81.193	73.910	-28.810	110.003	7.284	PK
6			5720.000	79.829	72.530	-30.971	110.800	7.299	PK
7			5724.493	86.201	78.876	-34.843	121.044	7.326	PK
8			5725.000	85.678	78.350	-36.522	122.200	7.328	PK
9		*	5751.223	117.061	109.652	N/A	N/A	7.410	PK

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

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

Site: AC1	Time: 2018/12/09 - 14:15
Limit: FCC_Part15.407_RE(3m)	Engineer: Bacon Dong
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 7Signal Sapphire Eye	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5828.205	106.008	98.335	N/A	N/A	7.673	PK
2			5850.000	68.045	60.272	-54.155	122.200	7.774	PK
3			5852.288	69.530	61.755	-47.453	116.982	7.775	PK
4			5855.000	65.496	57.720	-45.304	110.800	7.775	PK
5			5858.333	67.358	59.580	-42.508	109.865	7.778	PK
6			5875.000	60.404	52.586	-44.796	105.200	7.818	PK
7			5886.607	60.858	53.026	-35.725	96.583	7.832	PK
8			5925.000	59.196	51.377	-9.004	68.200	7.819	PK
9		*	5970.067	62.531	54.659	-5.669	68.200	7.872	PK

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

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