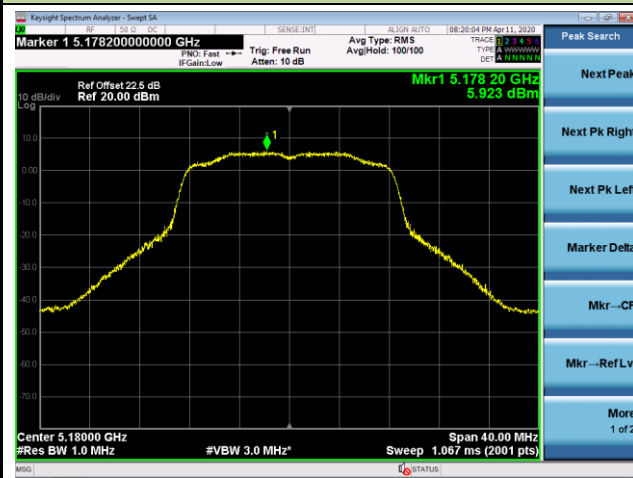
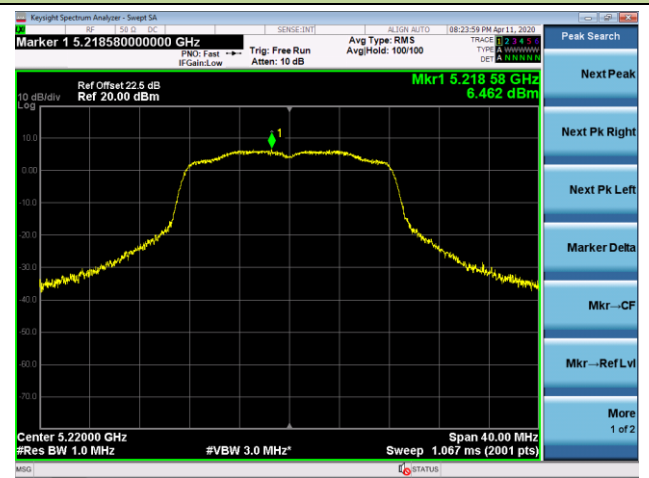


802.11a Power Spectral Density - Ant A / Ant A + B

Channel 36 (5180MHz)



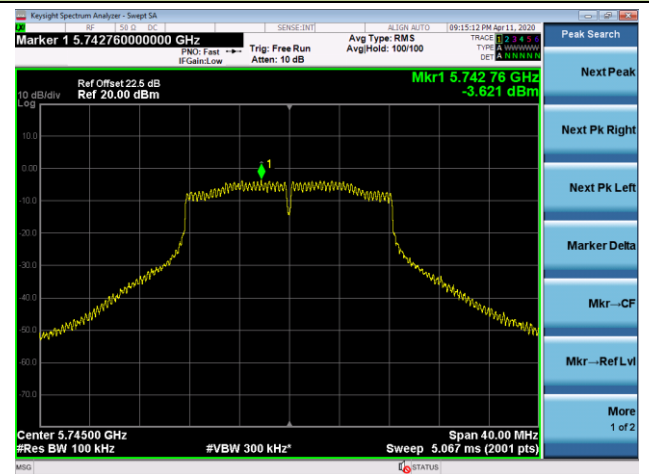
Channel 44 (5220MHz)



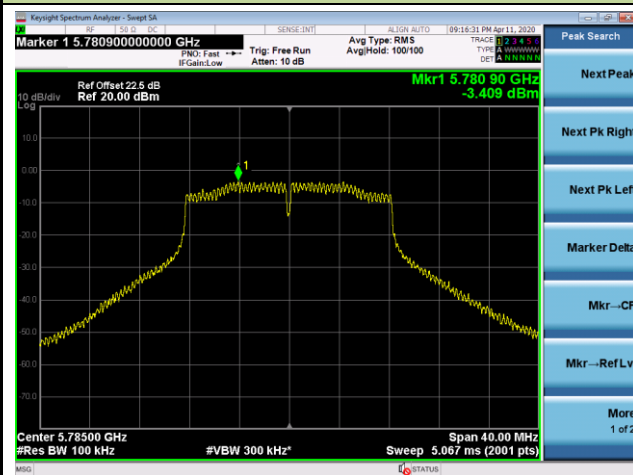
Channel 48 (5240MHz)



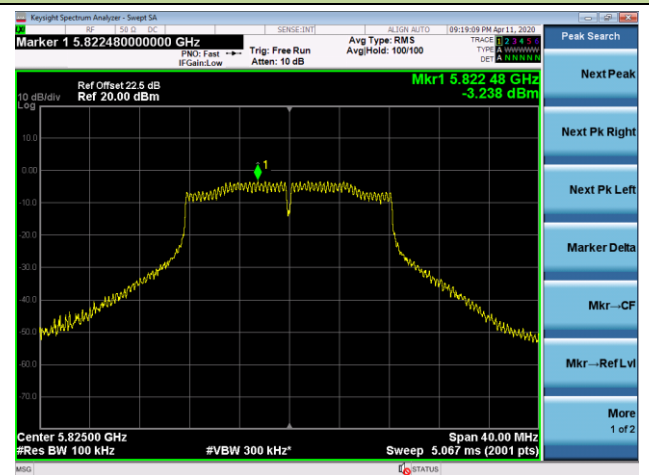
Channel 149 (5745MHz)



Channel 157 (5785MHz)

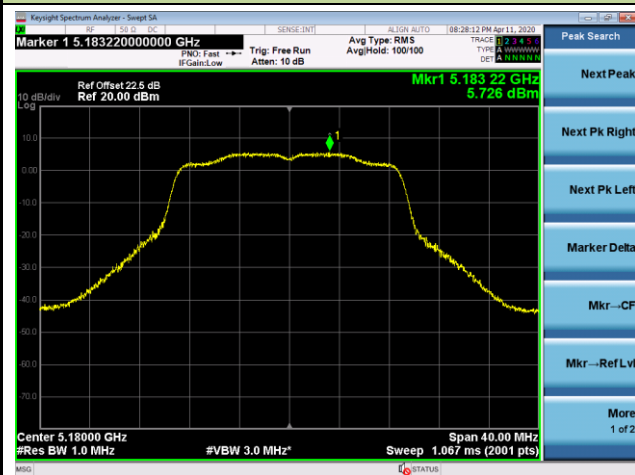


Channel 165 (5825MHz)

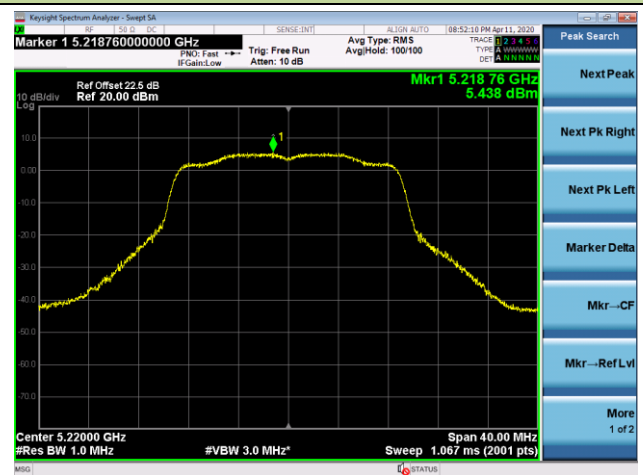


802.11n-HT20 Power Spectral Density - Ant A / Ant A + B

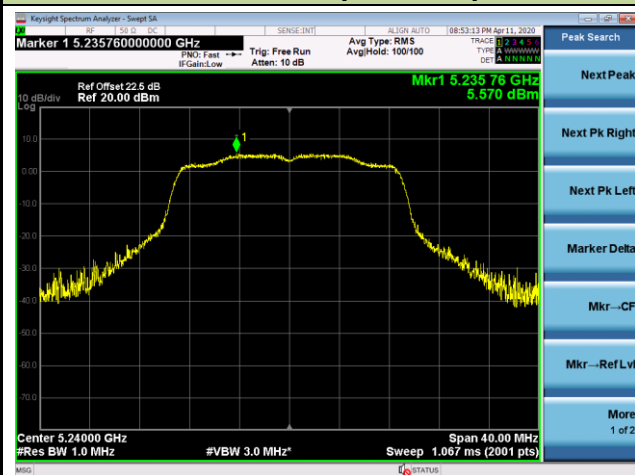
Channel 36 (5180MHz)



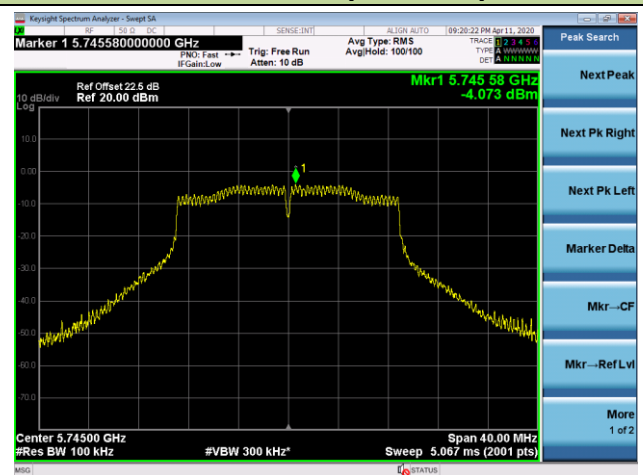
Channel 44 (5220MHz)



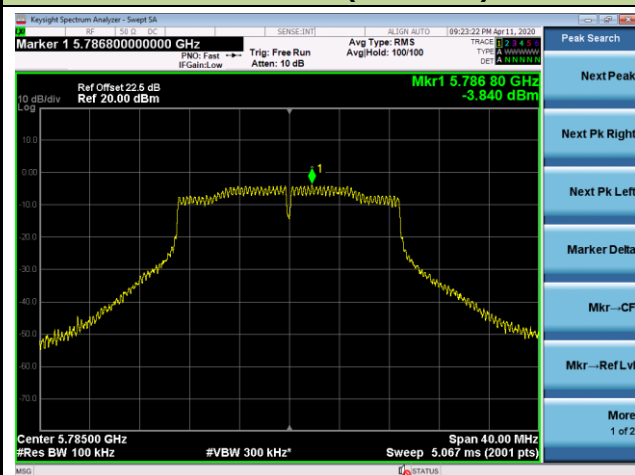
Channel 48 (5240MHz)



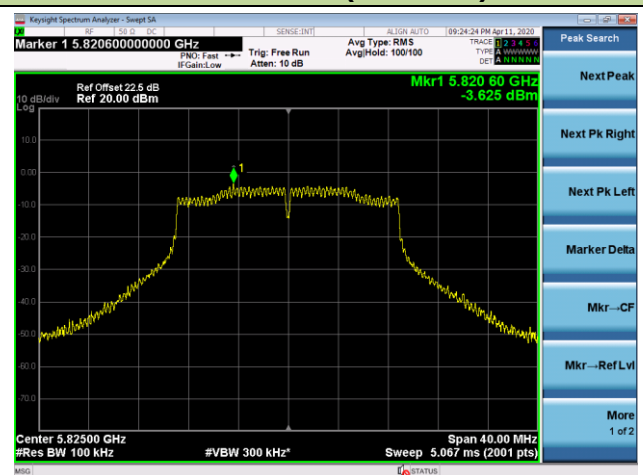
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



802.11n-HT40 Power Spectral Density - Ant A / Ant A + B

Channel 38 (5190MHz)



Channel 46 (5230MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)

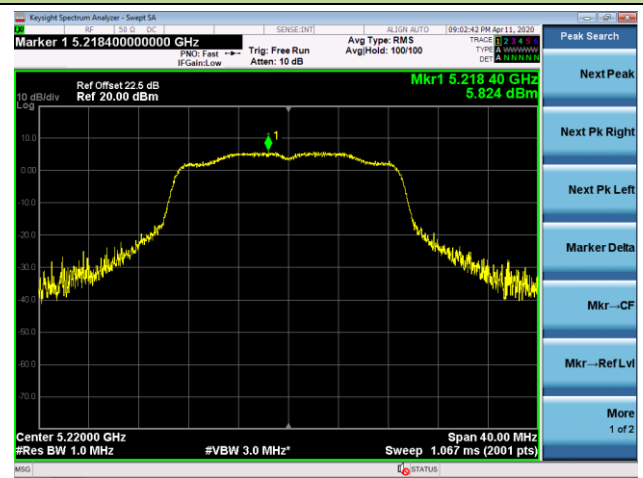


802.11ac-VHT20 Power Spectral Density - Ant A / Ant A + B

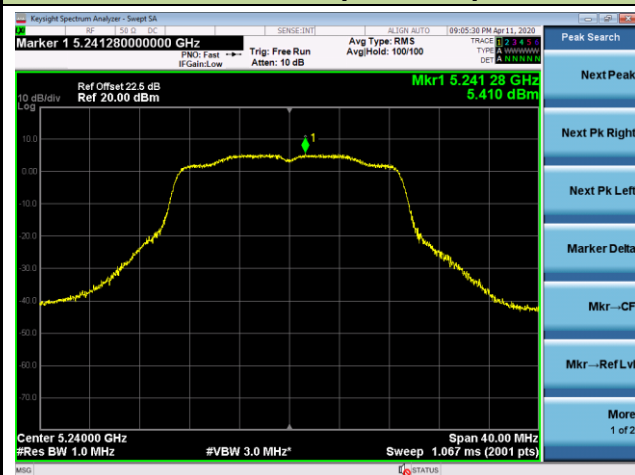
Channel 36 (5180MHz)



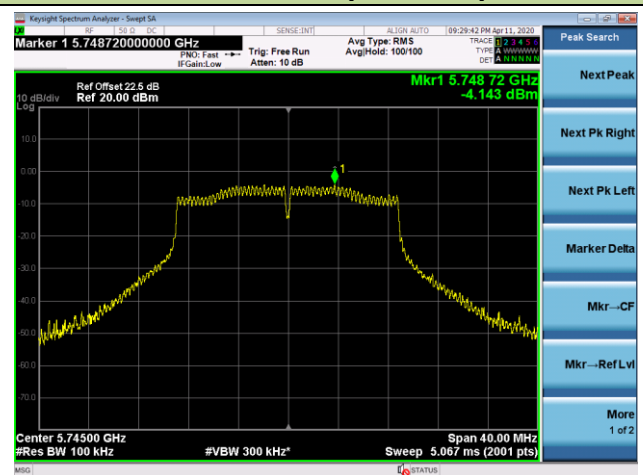
Channel 44 (5220MHz)



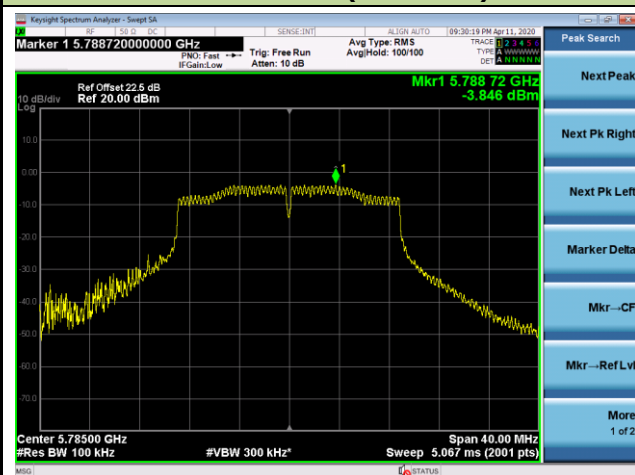
Channel 48 (5240MHz)



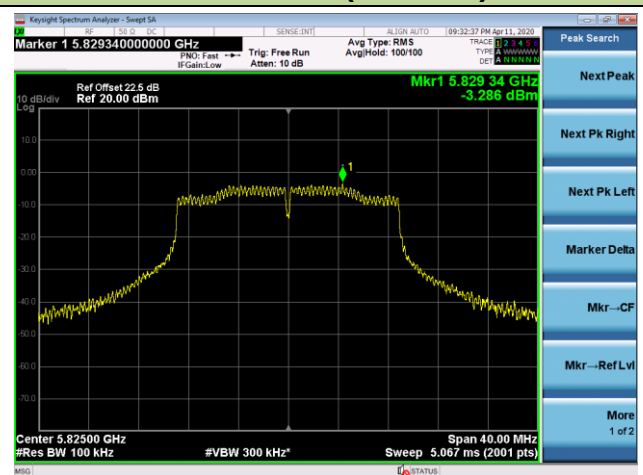
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



802.11ac-VHT40 Power Spectral Density - Ant A / Ant A + B

Channel 38 (5190MHz)



Channel 46 (5230MHz)



Channel 151 (5755MHz)

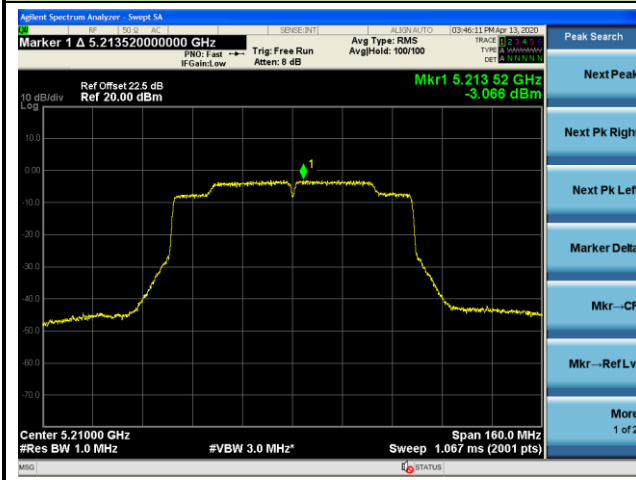


Channel 159 (5795MHz)



802.11ac-VHT80 Power Spectral Density - Ant A / Ant A + B

Channel 42 (5210MHz)



Channel 155 (5775MHz)

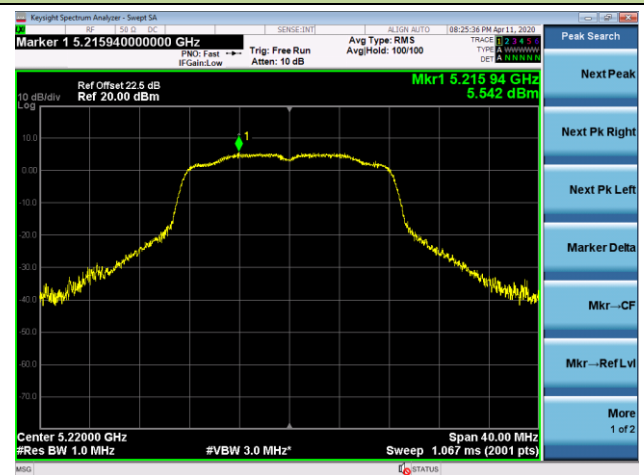


802.11a Power Spectral Density - Ant B / Ant A + B

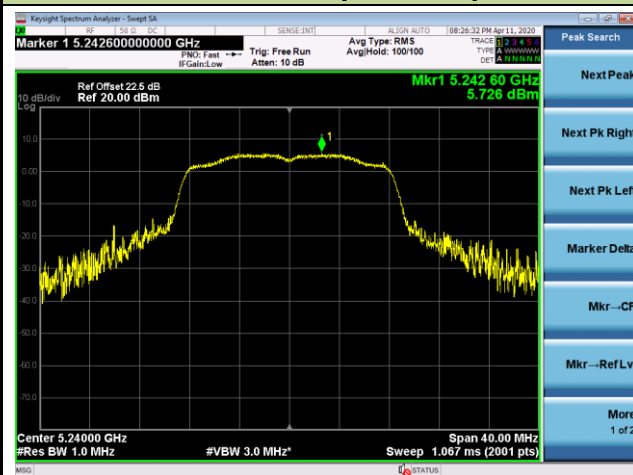
Channel 36 (5180MHz)



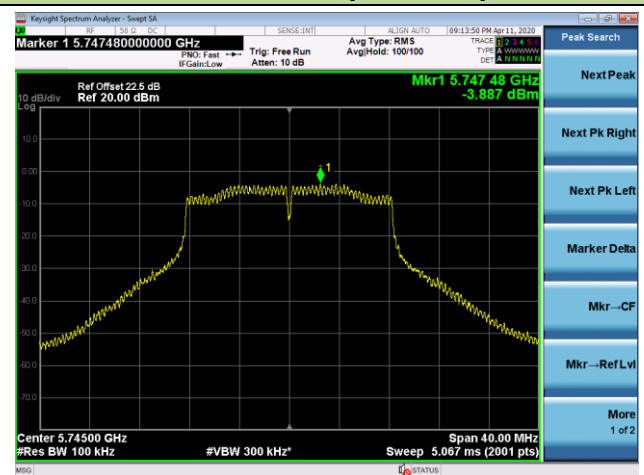
Channel 44 (5220MHz)



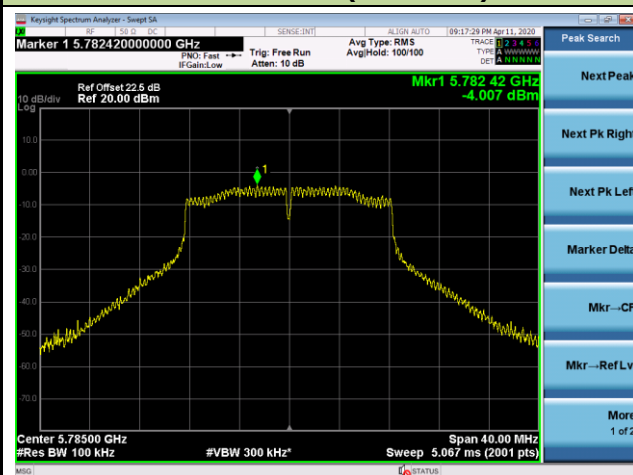
Channel 48 (5240MHz)



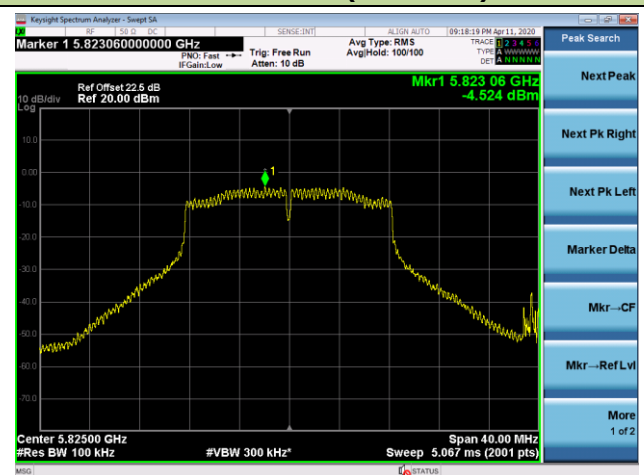
Channel 149 (5745MHz)



Channel 157 (5785MHz)

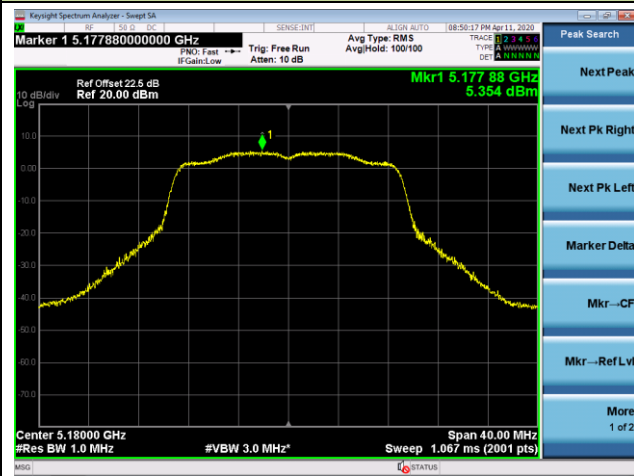


Channel 165 (5825MHz)



802.11n-HT20 Power Spectral Density - Ant B / Ant A + B

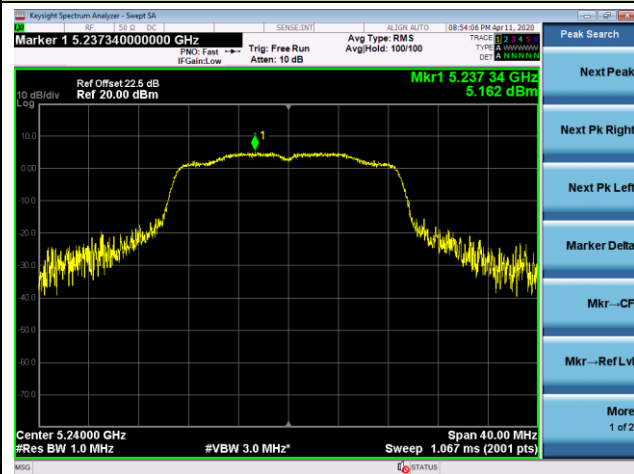
Channel 36 (5180MHz)



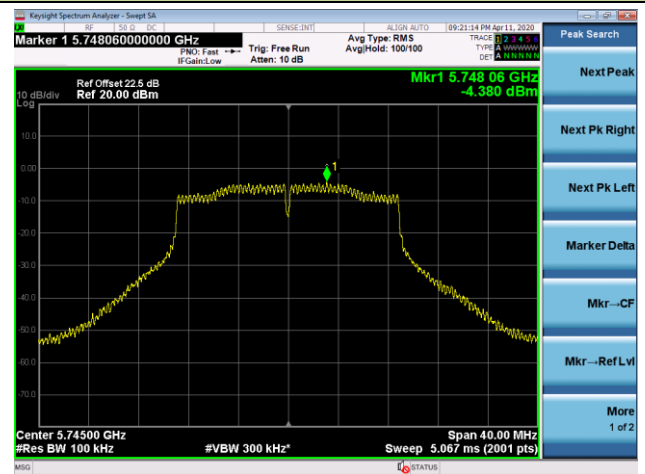
Channel 44 (5220MHz)



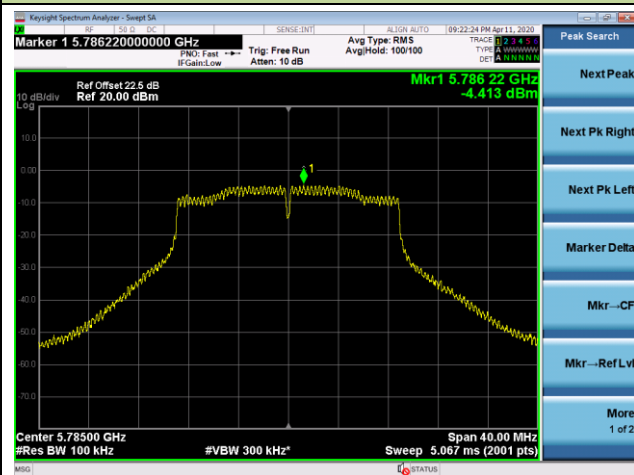
Channel 48 (5240MHz)



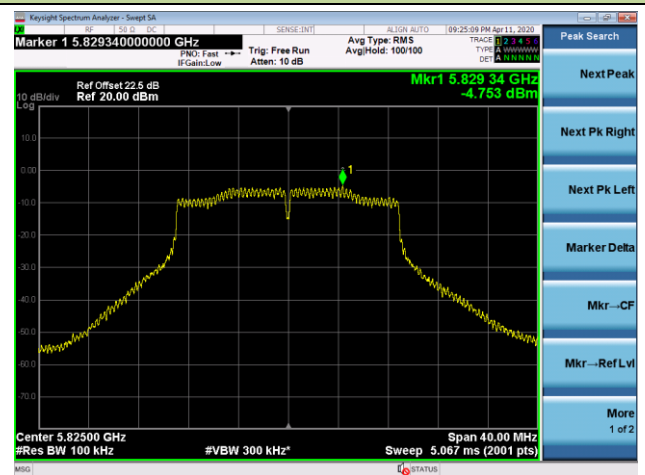
Channel 149 (5745MHz)



Channel 157 (5785MHz)

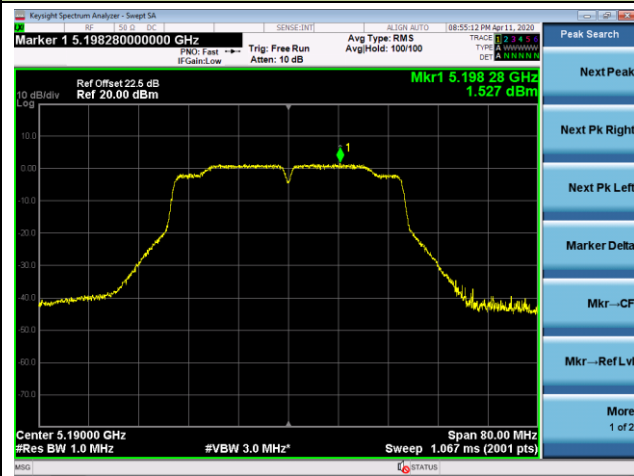


Channel 165 (5825MHz)

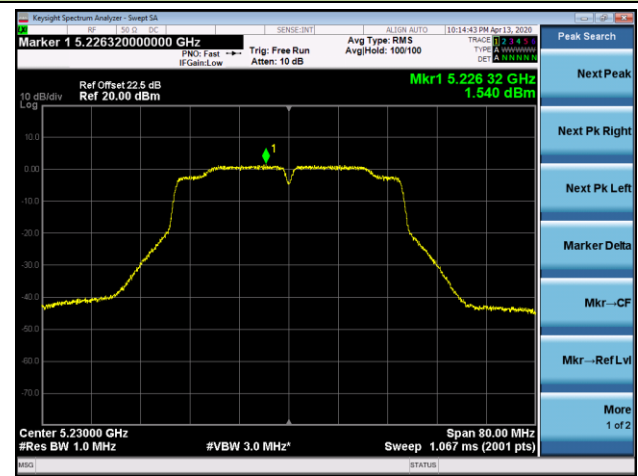


802.11n-HT40 Power Spectral Density - Ant B / Ant A + B

Channel 38 (5190MHz)



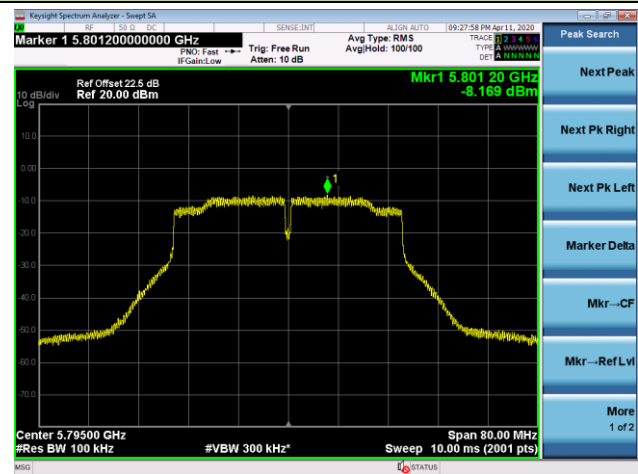
Channel 46 (5230MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)

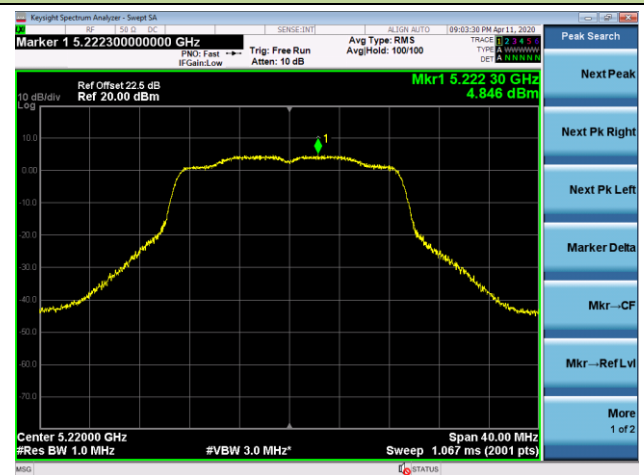


802.11ac-VHT20 Power Spectral Density - Ant B / Ant A + B

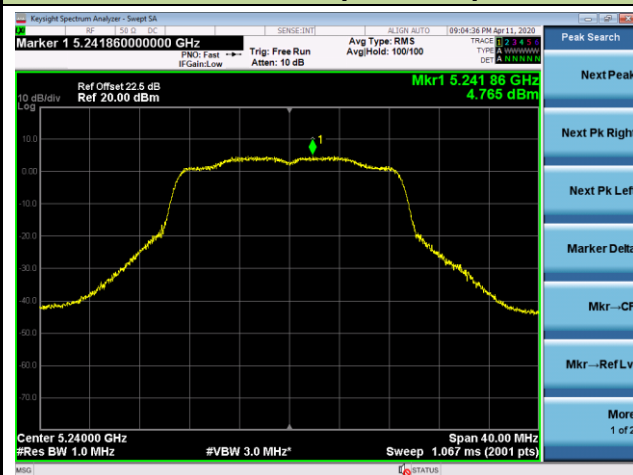
Channel 36 (5180MHz)



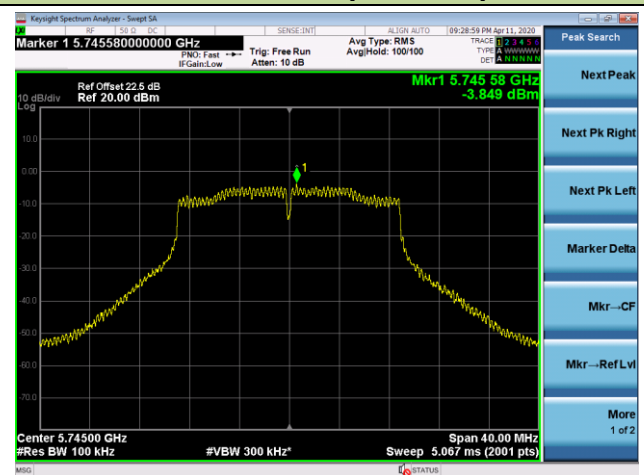
Channel 44 (5220MHz)



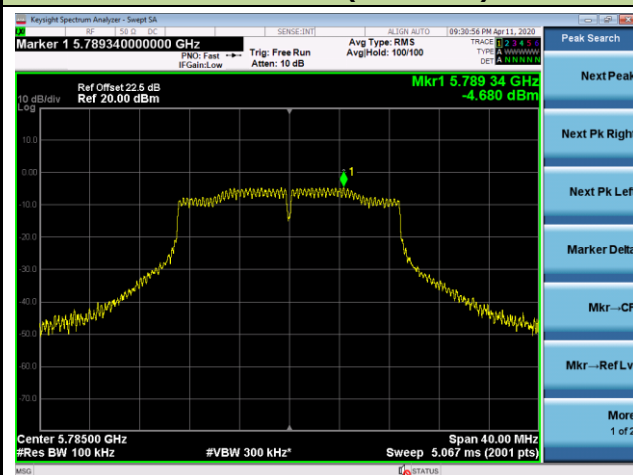
Channel 48 (5240MHz)



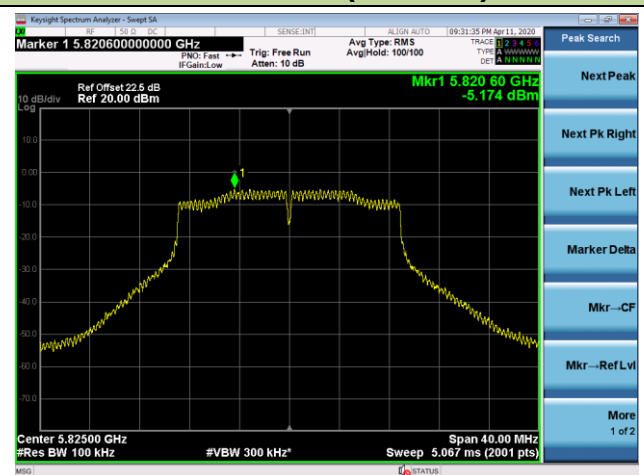
Channel 149 (5745MHz)



Channel 157 (5785MHz)

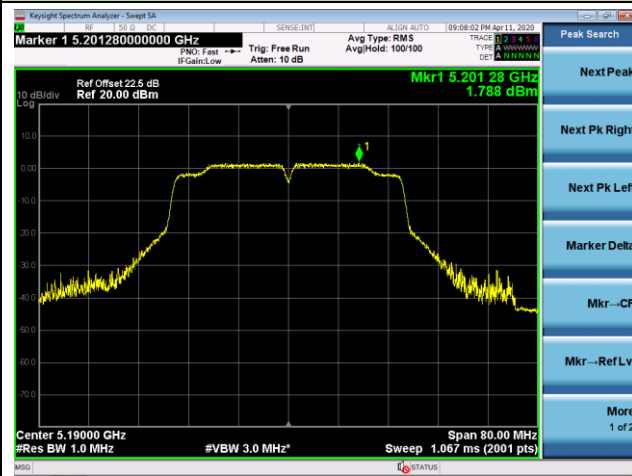


Channel 165 (5825MHz)



802.11ac-VHT40 Power Spectral Density - Ant B / Ant A + B

Channel 38 (5190MHz)



Channel 46 (5230MHz)



Channel 151 (5755MHz)

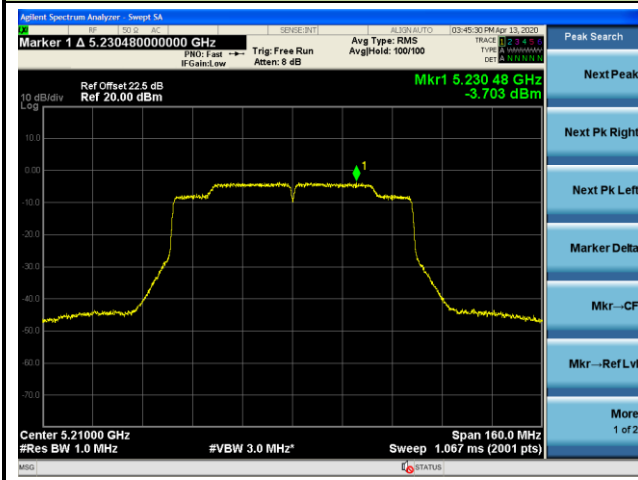


Channel 159 (5795MHz)

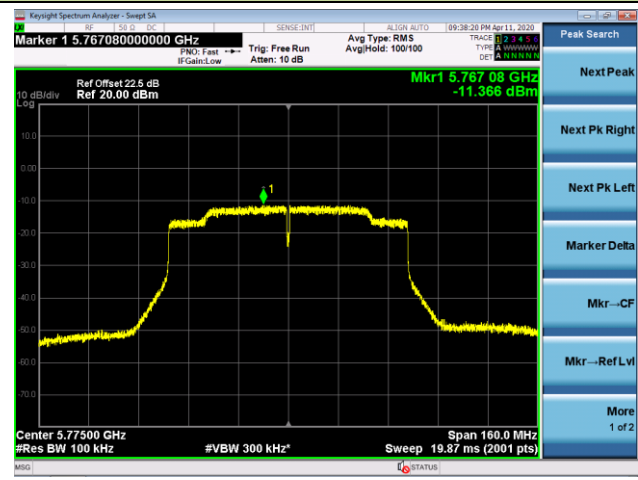


802.11ac-VHT80 Power Spectral Density - Ant B / Ant A + B

Channel 42 (5210MHz)



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:

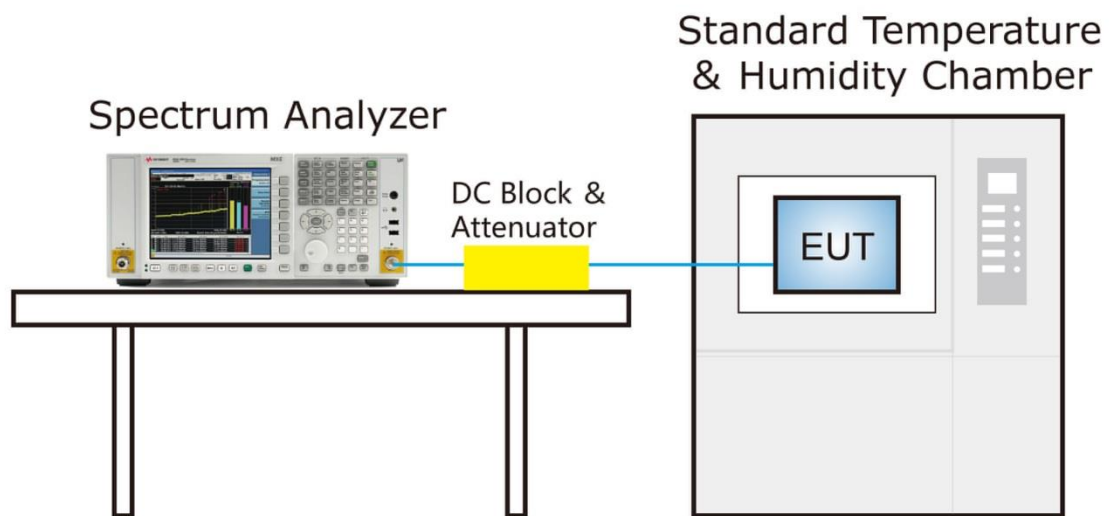
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain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

7.6.3. Test Setup



7.6.4. Test Result

Product	Notebook	Temperature	-30 ~ 50°C
Test Engineer	Flag Yang	Relative Humidity	53%RH
Test Site	TR3	Test Time	2020/04/11
Test Mode	5180MHz (Carrier Mode)		

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)
100%	120	- 30	-5.38
		- 20	-5.37
		- 10	-5.36
		0	-5.29
		+ 10	-5.30
		+ 20 (Ref)	-5.28
		+ 30	-5.27
		+ 40	-5.26
		+ 50	-5.23
115%	138	+ 20	-5.29
85%	102	+ 20	-5.28

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

7.7. Radiated Spurious Emission Measurement

7.7.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.7.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

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

7.7.3. Test Setting

Table 1 - RBW as a function of frequency

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

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 = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

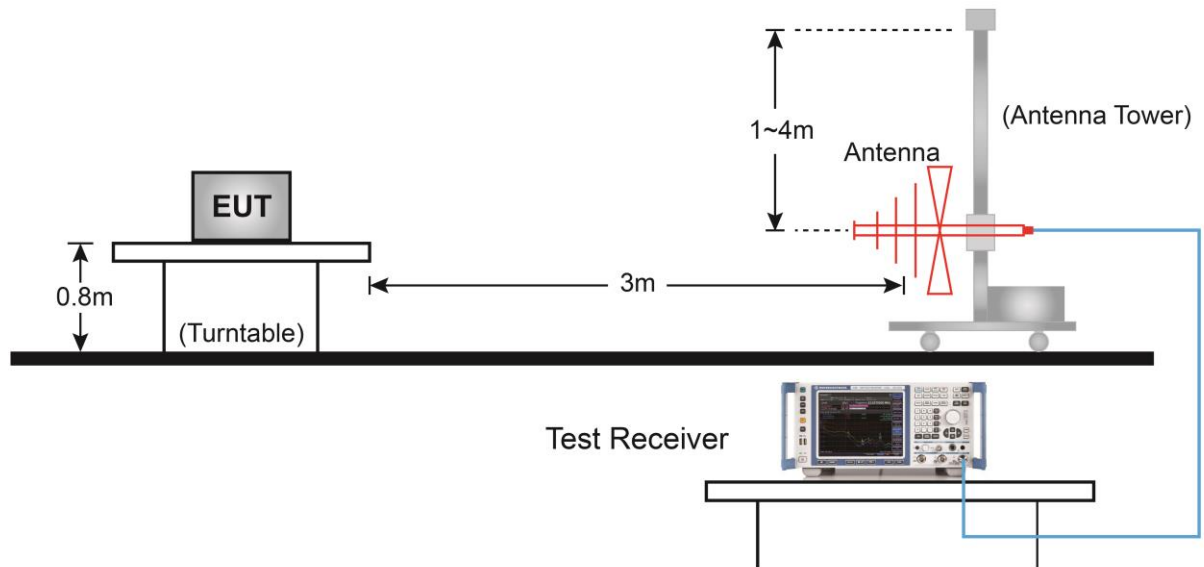
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz

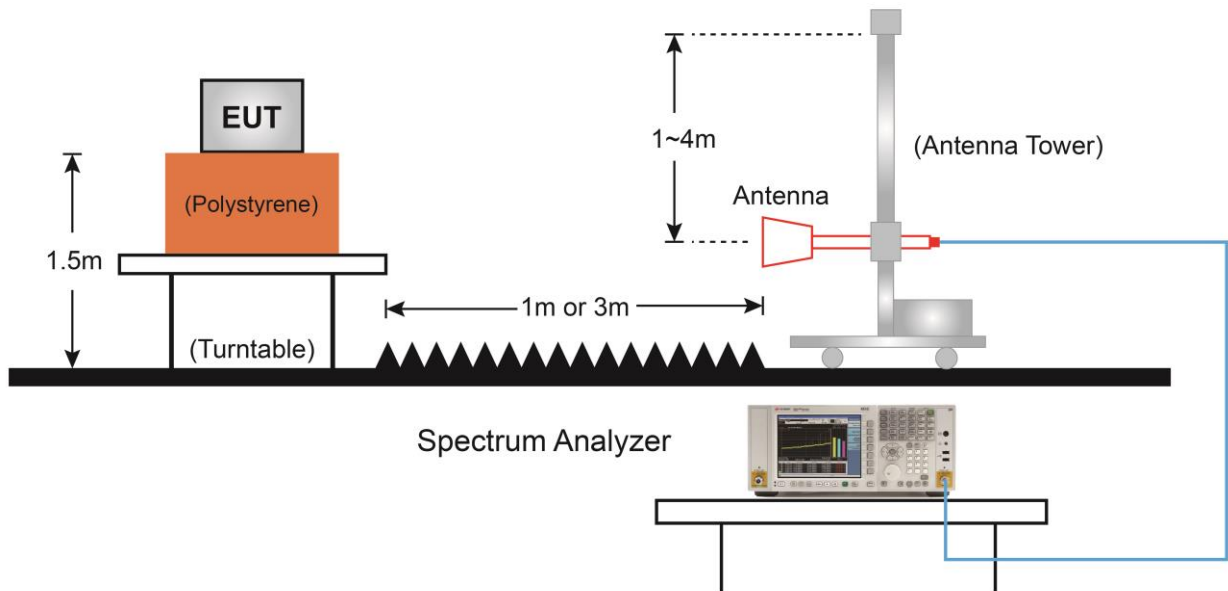
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

7.7.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



7.7.5. Test Result

Product	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11a	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
*	6831.0	33.0	10.0	43.0	68.2	-25.2	Peak	Horizontal
	7307.0	33.3	11.7	45.0	74.0	-29.0	Peak	Horizontal
*	10384.0	31.3	17.6	48.9	68.2	-19.3	Peak	Horizontal
	11098.0	32.5	17.8	50.3	74.0	-23.7	Peak	Horizontal
*	6831.0	33.4	10.0	43.4	68.2	-24.8	Peak	Vertical
	7307.0	34.2	11.7	45.9	74.0	-28.1	Peak	Vertical
*	10146.0	31.9	16.7	48.6	68.2	-19.6	Peak	Vertical
	11115.0	33.2	17.5	50.7	74.0	-23.3	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11a	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
*	6831.0	33.4	10.0	43.4	68.2	-24.8	Peak	Horizontal
	7596.0	33.0	11.8	44.8	74.0	-29.2	Peak	Horizontal
*	9806.0	31.2	16.8	48.0	68.2	-20.2	Peak	Horizontal
	10792.0	33.2	17.9	51.1	74.0	-22.9	Peak	Horizontal
*	6848.0	32.8	10.0	42.8	68.2	-25.4	Peak	Vertical
	7494.0	33.2	11.8	45.0	74.0	-29.0	Peak	Vertical
*	10367.0	32.1	17.5	49.6	68.2	-18.6	Peak	Vertical
	11013.0	32.4	18.0	50.4	74.0	-23.6	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11a	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
*	7069.0	33.0	11.0	44.0	68.2	-24.2	Peak	Horizontal
	7596.0	34.4	11.8	46.2	74.0	-27.8	Peak	Horizontal
*	9823.0	31.4	16.9	48.3	68.2	-19.9	Peak	Horizontal
	10945.0	32.5	18.0	50.5	74.0	-23.5	Peak	Horizontal
*	6814.0	33.1	9.8	42.9	68.2	-25.3	Peak	Vertical
	7307.0	34.3	11.7	46.0	74.0	-28.0	Peak	Vertical
*	10231.0	32.6	17.2	49.8	68.2	-18.4	Peak	Vertical
	11115.0	33.1	17.5	50.6	74.0	-23.4	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11a	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
	7545.0	33.4	9.6	43.0	74.0	-31.0	Peak	Horizontal
*	7817.0	33.6	9.3	42.9	68.2	-25.3	Peak	Horizontal
	8361.0	33.3	9.8	43.1	74.0	-30.9	Peak	Horizontal
*	10001.5	36.7	12.7	49.4	68.2	-18.8	Peak	Horizontal
	7545.0	34.3	9.6	43.9	74.0	-30.1	Peak	Vertical
*	7876.5	33.7	9.3	43.0	68.2	-25.2	Peak	Vertical
	8208.0	34.0	9.6	43.6	74.0	-30.4	Peak	Vertical
*	10001.5	34.7	12.7	47.4	68.2	-20.8	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11a	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
	7587.5	35.4	9.7	45.1	74.0	-28.9	Peak	Horizontal
*	7885.0	33.9	9.2	43.1	68.2	-25.1	Peak	Horizontal
	8182.5	34.0	10.0	44.0	74.0	-30.0	Peak	Horizontal
*	10001.5	36.1	12.7	48.8	68.2	-19.4	Peak	Horizontal
	7468.5	34.8	9.5	44.3	74.0	-29.7	Peak	Vertical
*	7885.0	34.0	9.2	43.2	68.2	-25.0	Peak	Vertical
	8386.5	35.2	9.8	45.0	74.0	-29.0	Peak	Vertical
*	10375.5	34.0	13.8	47.8	68.2	-20.4	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11a	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
	7443.0	33.4	9.6	43.0	74.0	-31.0	Peak	Horizontal
*	8004.0	33.8	10.3	44.1	68.2	-24.1	Peak	Horizontal
	8310.0	32.6	9.6	42.2	74.0	-31.8	Peak	Horizontal
*	10001.5	36.7	12.7	49.4	68.2	-18.8	Peak	Horizontal
	7468.5	34.7	9.5	44.2	74.0	-29.8	Peak	Vertical
*	7842.5	33.1	9.5	42.6	68.2	-25.6	Peak	Vertical
	8165.5	34.4	9.7	44.1	74.0	-29.9	Peak	Vertical
*	9993.0	35.8	12.7	48.5	68.2	-19.7	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT20	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
*	6848.0	33.4	10.0	43.4	68.2	-24.8	Peak	Horizontal
	7290.0	34.6	11.7	46.3	74.0	-27.7	Peak	Horizontal
*	10384.0	32.7	17.6	50.3	68.2	-17.9	Peak	Horizontal
	11523.0	32.8	17.7	50.5	74.0	-23.5	Peak	Horizontal
*	7018.0	32.8	11.0	43.8	68.2	-24.4	Peak	Vertical
	7596.0	34.0	11.8	45.8	74.0	-28.2	Peak	Vertical
*	10146.0	32.6	16.7	49.3	68.2	-18.9	Peak	Vertical
	11132.0	33.5	17.5	51.0	74.0	-23.0	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT20	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
*	7103.0	33.2	11.3	44.5	68.2	-23.7	Peak	Horizontal
	7596.0	34.9	11.8	46.7	74.0	-27.3	Peak	Horizontal
*	10384.0	32.9	17.6	50.5	68.2	-17.7	Peak	Horizontal
	11064.0	33.6	17.9	51.5	74.0	-22.5	Peak	Horizontal
*	6491.0	34.1	9.4	43.5	68.2	-24.7	Peak	Vertical
	7596.0	33.9	11.8	45.7	74.0	-28.3	Peak	Vertical
*	10384.0	32.6	17.6	50.2	68.2	-18.0	Peak	Vertical
	11064.0	33.6	17.9	51.5	74.0	-22.5	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT20	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
*	7018.0	32.9	11.0	43.9	68.2	-24.3	Peak	Horizontal
	7477.0	33.3	11.7	45.0	74.0	-29.0	Peak	Horizontal
*	10384.0	32.1	17.6	49.7	68.2	-18.5	Peak	Horizontal
	11472.0	32.8	17.7	50.5	74.0	-23.5	Peak	Horizontal
*	7069.0	33.4	11.0	44.4	68.2	-23.8	Peak	Vertical
	7324.0	34.3	11.5	45.8	74.0	-28.2	Peak	Vertical
*	9738.0	31.6	16.7	48.3	68.2	-19.9	Peak	Vertical
	11030.0	33.1	17.8	50.9	74.0	-23.1	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT20	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
	7655.5	34.8	9.3	44.1	74.0	-29.9	Peak	Horizontal
*	7919.0	34.9	9.6	44.5	68.2	-23.7	Peak	Horizontal
	8199.5	34.0	9.8	43.8	74.0	-30.2	Peak	Horizontal
*	10001.5	36.8	12.7	49.5	68.2	-18.7	Peak	Horizontal
	7545.0	34.1	9.6	43.7	74.0	-30.3	Peak	Vertical
*	7919.0	34.4	9.6	44.0	68.2	-24.2	Peak	Vertical
	8233.5	34.1	9.8	43.9	74.0	-30.1	Peak	Vertical
*	10001.5	34.5	12.7	47.2	68.2	-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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT20	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
	7324.0	34.5	9.7	44.2	74.0	-29.8	Peak	Horizontal
*	7910.5	34.1	9.5	43.6	68.2	-24.6	Peak	Horizontal
	8242.0	32.4	10.1	42.5	74.0	-31.5	Peak	Horizontal
*	10001.5	36.9	12.7	49.6	68.2	-18.6	Peak	Horizontal
	7545.0	34.1	9.6	43.7	74.0	-30.3	Peak	Vertical
*	7936.0	33.7	9.7	43.4	68.2	-24.8	Peak	Vertical
	8352.5	32.7	9.9	42.6	74.0	-31.4	Peak	Vertical
*	10001.5	34.0	12.7	46.7	68.2	-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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT20	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
	7630.0	34.7	9.5	44.2	74.0	-29.8	Peak	Horizontal
*	7842.5	33.1	9.5	42.6	68.2	-25.6	Peak	Horizontal
	8182.5	35.0	10.0	45.0	74.0	-29.0	Peak	Horizontal
*	10001.5	36.1	12.7	48.8	68.2	-19.4	Peak	Horizontal
	7502.5	34.4	9.4	43.8	74.0	-30.2	Peak	Vertical
*	7927.5	33.6	9.6	43.2	68.2	-25.0	Peak	Vertical
	8276.0	32.8	9.6	42.4	74.0	-31.6	Peak	Vertical
*	10001.5	35.0	12.7	47.7	68.2	-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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT40	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
*	6763.0	33.2	9.9	43.1	68.2	-25.1	Peak	Horizontal
	7545.0	33.5	11.7	45.2	74.0	-28.8	Peak	Horizontal
*	10248.0	32.4	17.1	49.5	68.2	-18.7	Peak	Horizontal
	11098.0	33.0	17.8	50.8	74.0	-23.2	Peak	Horizontal
*	6542.0	33.1	9.5	42.6	68.2	-25.6	Peak	Vertical
	7579.0	34.5	11.6	46.1	74.0	-27.9	Peak	Vertical
*	10384.0	33.2	17.6	50.8	68.2	-17.4	Peak	Vertical
	11489.0	33.1	17.7	50.8	74.0	-23.2	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT40	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
*	7120.0	32.7	11.3	44.0	68.2	-24.2	Peak	Horizontal
	7409.0	31.0	11.8	42.8	74.0	-31.2	Peak	Horizontal
*	9840.0	31.7	16.9	48.6	68.2	-19.6	Peak	Horizontal
	11574.0	33.4	17.4	50.8	74.0	-23.2	Peak	Horizontal
*	6729.0	33.2	9.7	42.9	68.2	-25.3	Peak	Vertical
	7307.0	33.9	11.7	45.6	74.0	-28.4	Peak	Vertical
*	10384.0	32.4	17.6	50.0	68.2	-18.2	Peak	Vertical
	11030.0	33.0	17.8	50.8	74.0	-23.2	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT40	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
	7400.5	34.4	9.6	44.0	74.0	-30.0	Peak	Horizontal
*	7876.5	33.5	9.3	42.8	68.2	-25.4	Peak	Horizontal
	8293.0	33.2	9.7	42.9	74.0	-31.1	Peak	Horizontal
*	10001.5	36.2	12.7	48.9	68.2	-19.3	Peak	Horizontal
	7570.5	34.3	9.6	43.9	74.0	-30.1	Peak	Vertical
*	7842.5	33.2	9.5	42.7	68.2	-25.5	Peak	Vertical
	8361.0	34.6	9.8	44.4	74.0	-29.6	Peak	Vertical
*	10001.5	35.4	12.7	48.1	68.2	-20.1	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11n-HT40	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
	7596.0	34.4	9.7	44.1	74.0	-29.9	Peak	Horizontal
*	7876.5	34.5	9.3	43.8	68.2	-24.4	Peak	Horizontal
	8208.0	33.4	9.6	43.0	74.0	-31.0	Peak	Horizontal
*	10001.5	37.1	12.7	49.8	68.2	-18.4	Peak	Horizontal
	7494.0	34.4	9.5	43.9	74.0	-30.1	Peak	Vertical
*	7885.0	33.7	9.2	42.9	68.2	-25.3	Peak	Vertical
	8369.5	33.2	9.8	43.0	74.0	-31.0	Peak	Vertical
*	10001.5	34.0	12.7	46.7	68.2	-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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT20	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
*	6848.0	32.5	10.0	42.5	68.2	-25.7	Peak	Horizontal
	7596.0	33.5	11.8	45.3	74.0	-28.7	Peak	Horizontal
*	10146.0	32.5	16.7	49.2	68.2	-19.0	Peak	Horizontal
	10945.0	33.1	18.0	51.1	74.0	-22.9	Peak	Horizontal
*	7018.0	33.0	11.0	44.0	68.2	-24.2	Peak	Vertical
	7596.0	32.9	11.8	44.7	74.0	-29.3	Peak	Vertical
*	10214.0	31.8	17.0	48.8	68.2	-19.4	Peak	Vertical
	11438.0	32.8	17.7	50.5	74.0	-23.5	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT20	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
*	6474.0	33.9	9.1	43.0	68.2	-25.2	Peak	Horizontal
	7494.0	33.7	11.8	45.5	74.0	-28.5	Peak	Horizontal
*	9976.0	32.1	16.6	48.7	68.2	-19.5	Peak	Horizontal
	11166.0	32.8	17.7	50.5	74.0	-23.5	Peak	Horizontal
*	6814.0	33.2	9.8	43.0	68.2	-25.2	Peak	Vertical
	7579.0	33.2	11.6	44.8	74.0	-29.2	Peak	Vertical
*	9942.0	31.3	16.9	48.2	68.2	-20.0	Peak	Vertical
	11115.0	33.7	17.5	51.2	74.0	-22.8	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT20	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
*	6780.0	33.0	9.9	42.9	68.2	-25.3	Peak	Horizontal
	7732.0	34.3	11.4	45.7	74.0	-28.3	Peak	Horizontal
*	9976.0	31.8	16.6	48.4	68.2	-19.8	Peak	Horizontal
	11013.0	32.7	18.0	50.7	74.0	-23.3	Peak	Horizontal
*	6831.0	33.3	10.0	43.3	68.2	-24.9	Peak	Vertical
	7494.0	33.6	11.8	45.4	74.0	-28.6	Peak	Vertical
*	10452.0	32.1	17.7	49.8	68.2	-18.4	Peak	Vertical
	11030.0	33.8	17.8	51.6	74.0	-22.4	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT20	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
	7536.5	33.8	9.4	43.2	74.0	-30.8	Peak	Horizontal
*	7876.5	33.2	9.3	42.5	68.2	-25.7	Peak	Horizontal
	8284.5	33.9	9.7	43.6	74.0	-30.4	Peak	Horizontal
*	10001.5	37.4	12.7	50.1	68.2	-18.1	Peak	Horizontal
	7570.5	34.4	9.6	44.0	74.0	-30.0	Peak	Vertical
*	8004.0	33.8	10.3	44.1	68.2	-24.1	Peak	Vertical
	8318.5	34.3	9.7	44.0	74.0	-30.0	Peak	Vertical
*	10001.5	35.4	12.7	48.1	68.2	-20.1	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT20	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
	7494.0	34.1	9.5	43.6	74.0	-30.4	Peak	Horizontal
*	7902.0	33.6	9.5	43.1	68.2	-25.1	Peak	Horizontal
	8131.5	34.7	10.1	44.8	74.0	-29.2	Peak	Horizontal
*	10001.5	38.3	12.7	51.0	68.2	-17.2	Peak	Horizontal
	7511.0	34.9	9.3	44.2	74.0	-29.8	Peak	Vertical
*	7876.5	33.4	9.3	42.7	68.2	-25.5	Peak	Vertical
	8131.5	34.3	10.1	44.4	74.0	-29.6	Peak	Vertical
*	10001.5	34.5	12.7	47.2	68.2	-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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT20	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
	7562.0	34.5	9.5	44.0	74.0	-30.0	Peak	Horizontal
*	7859.5	34.1	9.4	43.5	68.2	-24.7	Peak	Horizontal
	8182.5	33.8	10.0	43.8	74.0	-30.2	Peak	Horizontal
*	10001.5	35.4	12.7	48.1	68.2	-20.1	Peak	Horizontal
	7621.5	34.9	9.4	44.3	74.0	-29.7	Peak	Vertical
*	7978.5	34.2	9.9	44.1	68.2	-24.1	Peak	Vertical
	8131.5	34.2	10.1	44.3	74.0	-29.7	Peak	Vertical
*	10001.5	34.8	12.7	47.5	68.2	-20.7	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT40	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
*	7188.0	35.6	9.1	44.7	68.2	-23.5	Peak	Horizontal
	7494.0	35.2	10.5	45.7	74.0	-28.3	Peak	Horizontal
*	10299.0	35.8	13.5	49.3	68.2	-18.9	Peak	Horizontal
	11659.0	34.3	16.1	50.4	74.0	-23.6	Peak	Horizontal
*	6899.0	33.4	10.0	43.4	68.2	-24.8	Peak	Vertical
	7596.0	34.4	11.8	46.2	74.0	-27.8	Peak	Vertical
*	10384.0	32.1	17.6	49.7	68.2	-18.5	Peak	Vertical
	11030.0	33.4	17.8	51.2	74.0	-22.8	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT40	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
*	7069.0	33.3	11.0	44.3	68.2	-23.9	Peak	Horizontal
	7494.0	34.4	11.8	46.2	74.0	-27.8	Peak	Horizontal
*	10384.0	31.7	17.6	49.3	68.2	-18.9	Peak	Horizontal
	11098.0	33.0	17.8	50.8	74.0	-23.2	Peak	Horizontal
*	7103.0	31.9	11.3	43.2	68.2	-25.0	Peak	Vertical
	7494.0	33.2	11.8	45.0	74.0	-29.0	Peak	Vertical
*	10384.0	32.0	17.6	49.6	68.2	-18.6	Peak	Vertical
	11098.0	33.3	17.8	51.1	74.0	-22.9	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT40	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
	7604.5	34.5	9.5	44.0	74.0	-30.0	Peak	Horizontal
*	7876.5	33.5	9.3	42.8	68.2	-25.4	Peak	Horizontal
	8174.0	34.5	9.9	44.4	74.0	-29.6	Peak	Horizontal
*	10001.5	36.4	12.7	49.1	68.2	-19.1	Peak	Horizontal
	7460.0	33.4	9.6	43.0	74.0	-31.0	Peak	Vertical
*	7893.5	33.4	9.3	42.7	68.2	-25.5	Peak	Vertical
	8165.5	33.4	9.7	43.1	74.0	-30.9	Peak	Vertical
*	10001.5	35.3	12.7	48.0	68.2	-20.2	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT40	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
	7570.5	33.9	9.6	43.5	74.0	-30.5	Peak	Horizontal
*	7978.5	34.9	9.9	44.8	68.2	-23.4	Peak	Horizontal
	8208.0	34.4	9.6	44.0	74.0	-30.0	Peak	Horizontal
*	10001.5	36.4	12.7	49.1	68.2	-19.1	Peak	Horizontal
	7596.0	34.5	9.7	44.2	74.0	-29.8	Peak	Vertical
*	7944.5	33.8	9.8	43.6	68.2	-24.6	Peak	Vertical
	8242.0	32.6	10.1	42.7	74.0	-31.3	Peak	Vertical
*	10299.0	34.1	13.6	47.7	68.2	-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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT80	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
*	6848.0	33.3	10.0	43.3	68.2	-24.9	Peak	Horizontal
	7596.0	33.4	11.8	45.2	74.0	-28.8	Peak	Horizontal
*	9908.0	31.1	16.9	48.0	68.2	-20.2	Peak	Horizontal
	11013.0	33.0	18.0	51.0	74.0	-23.0	Peak	Horizontal
*	6848.0	33.4	10.0	43.4	68.2	-24.8	Peak	Vertical
	7494.0	33.4	11.8	45.2	74.0	-28.8	Peak	Vertical
*	10231.0	31.8	17.2	49.0	68.2	-19.2	Peak	Vertical
	11047.0	33.6	17.7	51.3	74.0	-22.7	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	Notebook	Temperature	26°C
Test Engineer	Messiah Li	Relative Humidity	57 %
Test Site	AC1	Test Date	2020/04/13
Test Mode:	802.11ac-VHT80	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
	7587.5	33.9	9.7	43.6	74.0	-30.4	Peak	Horizontal
*	7851.0	33.8	9.5	43.3	68.2	-24.9	Peak	Horizontal
	8208.0	34.1	9.6	43.7	74.0	-30.3	Peak	Horizontal
*	10001.5	37.4	12.7	50.1	68.2	-18.1	Peak	Horizontal
	7681.0	34.4	9.8	44.2	74.0	-29.8	Peak	Vertical
*	7944.5	33.5	9.8	43.3	68.2	-24.9	Peak	Vertical
	8216.5	33.6	9.5	43.1	74.0	-30.9	Peak	Vertical
*	10392.5	33.5	13.8	47.3	68.2	-20.9	Peak	Vertical

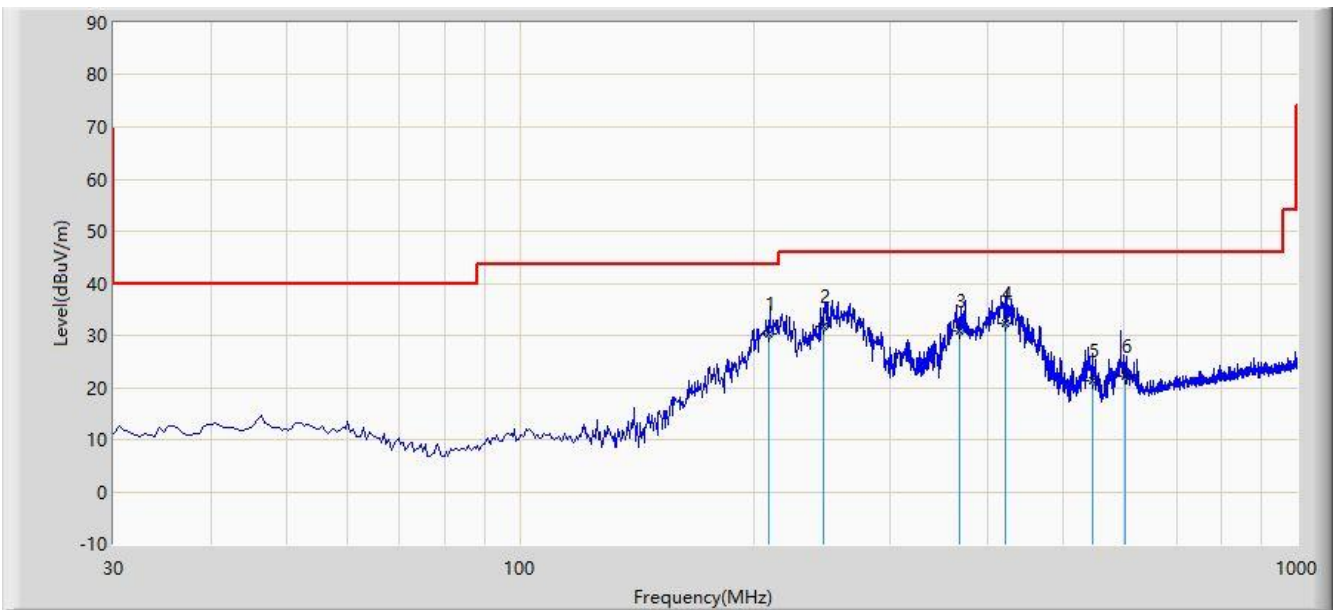
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2020/04/10 - 15:00
Limit: FCC_Part15.209_RSE(3m)	Engineer: Lewis Huang
Probe: AC1_VULB 9168 _30-2000MHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Worst Mode: Transmit by 802.11a at channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	209.450	30.304	18.067	-13.196	43.500	12.237	QP
2			245.825	31.621	17.881	-14.379	46.000	13.741	QP
3			367.560	30.881	13.655	-15.119	46.000	17.226	QP
4			421.395	32.341	13.742	-13.659	46.000	18.599	QP
5			545.070	21.173	0.187	-24.827	46.000	20.986	QP
6			601.815	22.238	-0.133	-23.762	46.000	22.371	QP

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

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

Note 2: The amplitude of Radiated emissions (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.