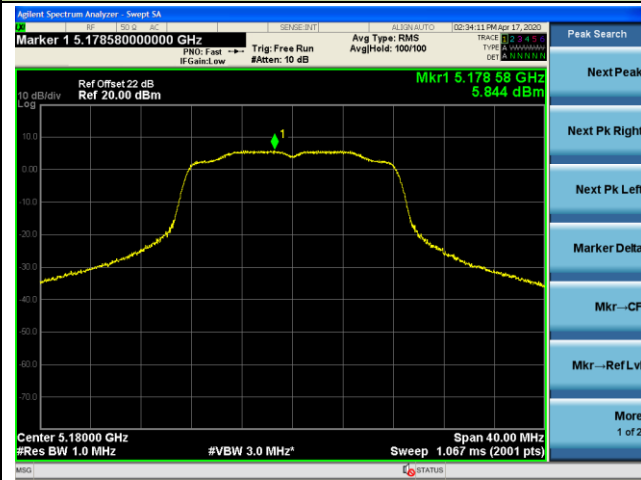
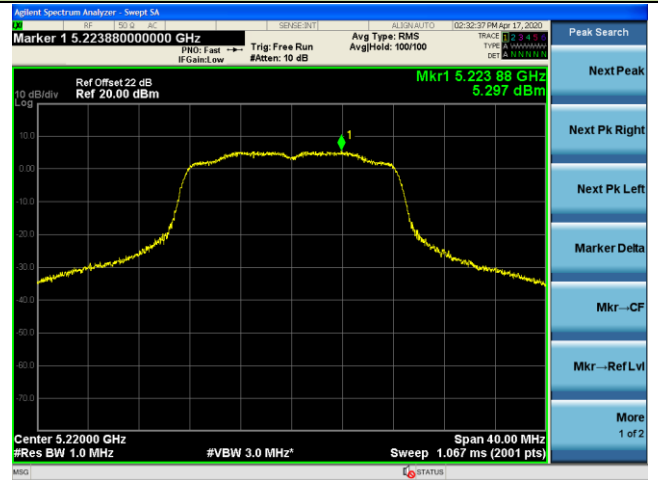


### 802.11a Power Spectral Density - Ant B

#### Channel 36 (5180MHz)



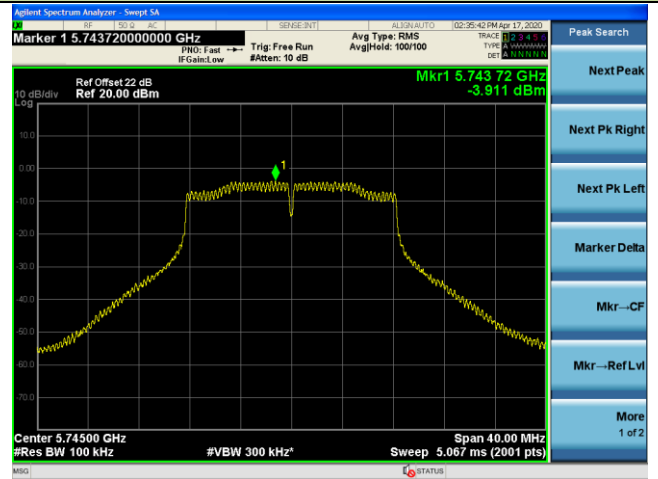
#### Channel 44 (5220MHz)



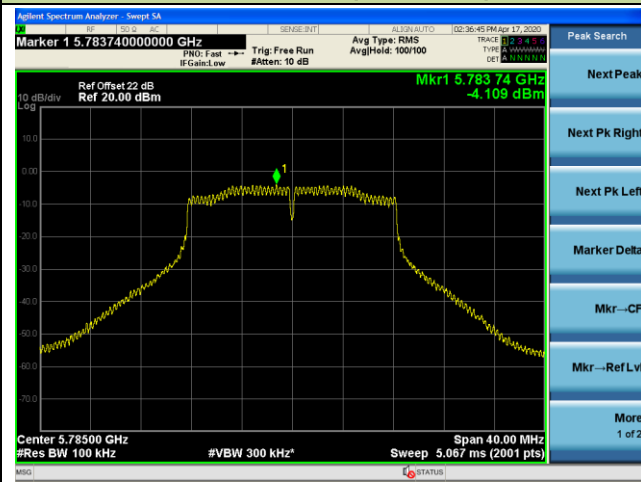
#### Channel 48 (5240MHz)



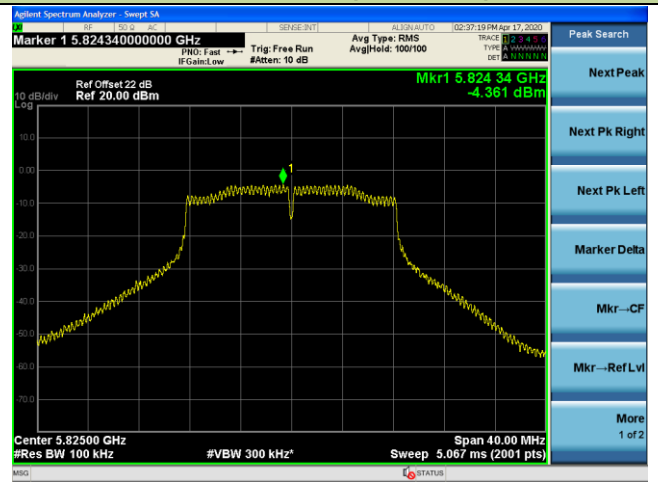
#### Channel 149 (5745MHz)



#### Channel 157 (5785MHz)

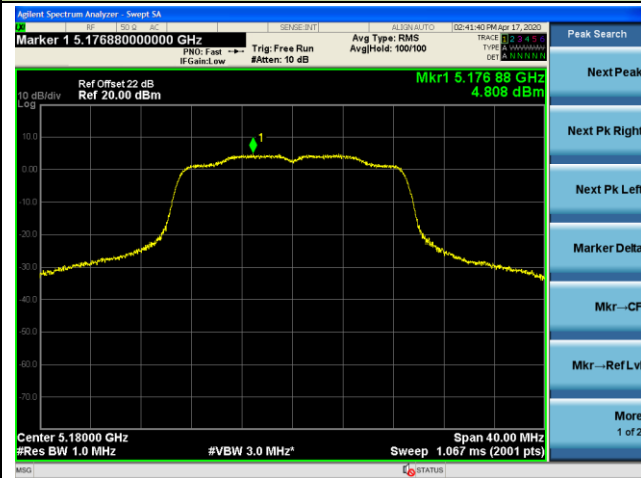


#### Channel 165 (5825MHz)



## 802.11n-HT20 Power Spectral Density - Ant B

## Channel 36 (5180MHz)



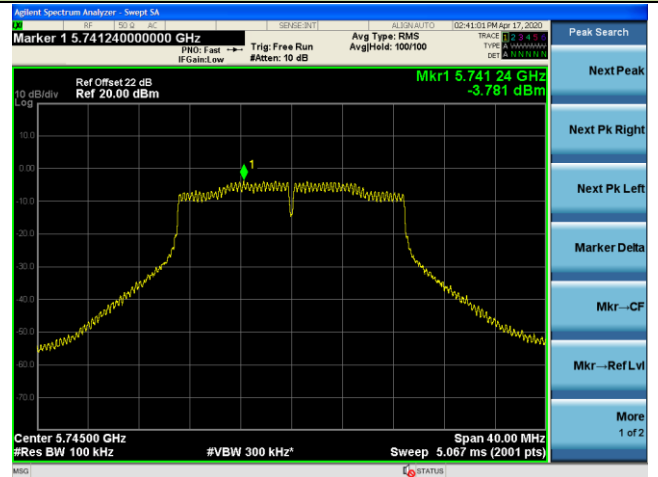
## Channel 44 (5220MHz)



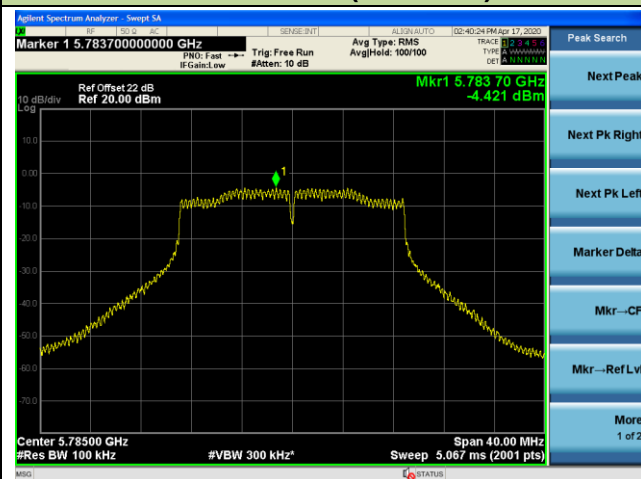
## Channel 48 (5240MHz)



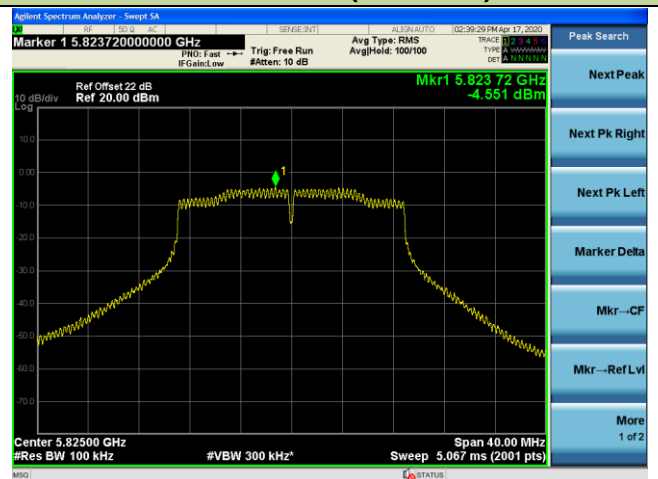
## Channel 149 (5745MHz)



## Channel 157 (5785MHz)

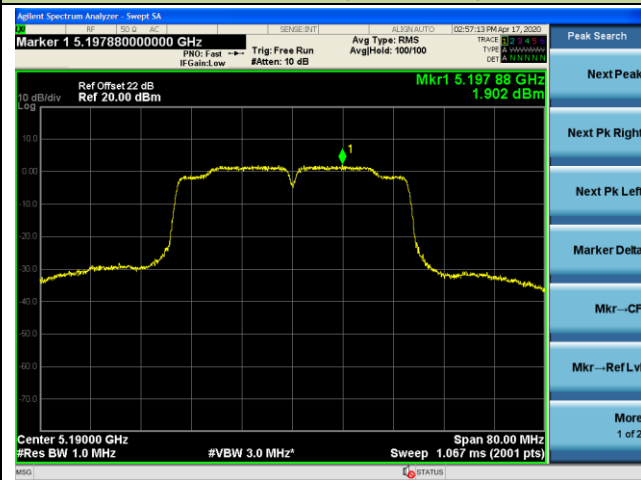


## Channel 165 (5825MHz)

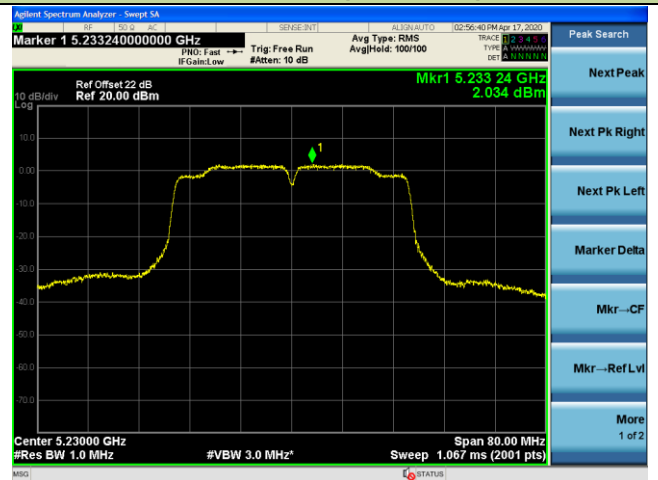


### 802.11n-HT40 Power Spectral Density - Ant B

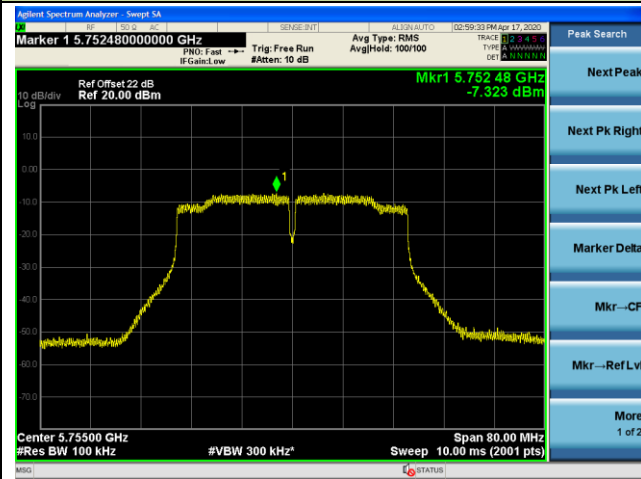
#### Channel 38 (5190MHz)



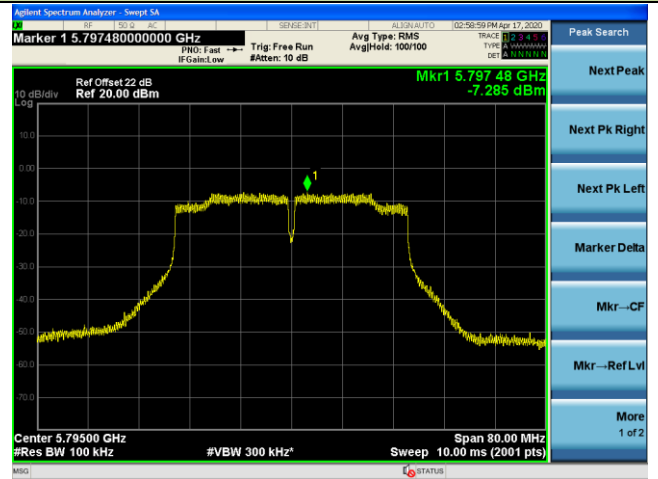
#### Channel 46 (5230MHz)



#### Channel 151 (5755MHz)

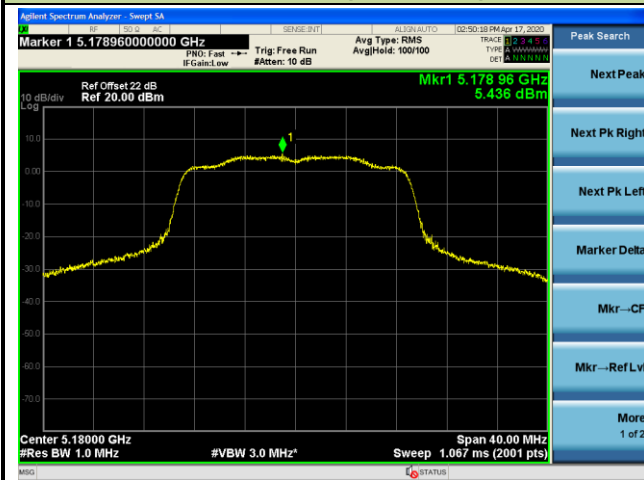


#### Channel 159 (5795MHz)

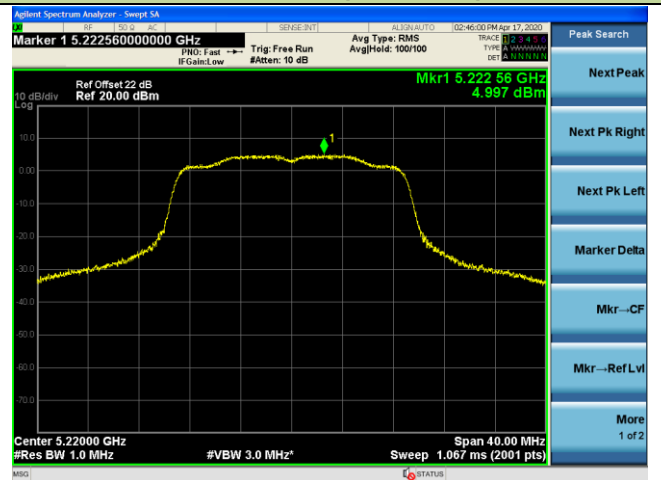


## 802.11ac-VHT20 Power Spectral Density - Ant B

## Channel 36 (5180MHz)



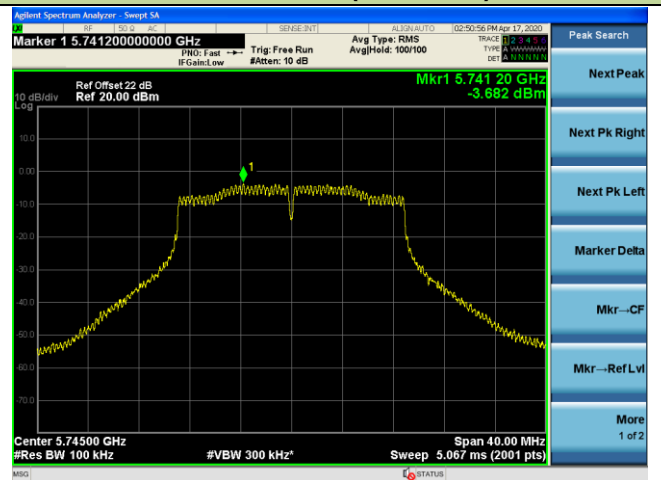
## Channel 44 (5220MHz)



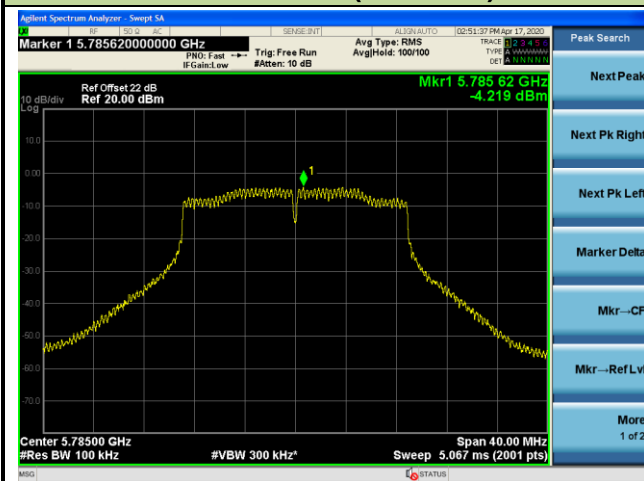
## Channel 48 (5240MHz)



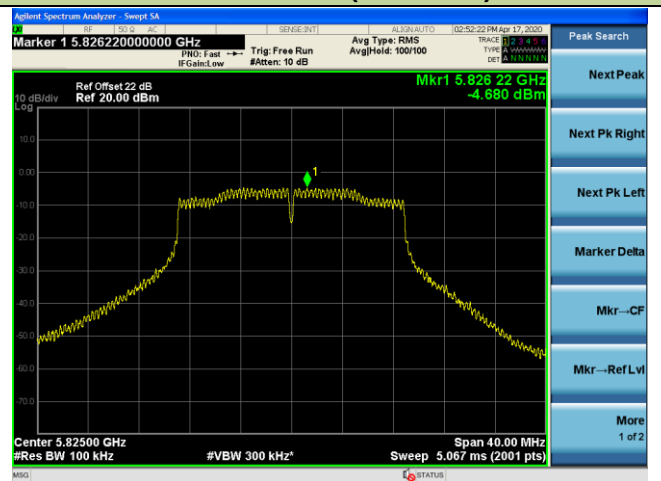
## Channel 149 (5745MHz)



## Channel 157 (5785MHz)



## Channel 165 (5825MHz)



### 802.11ac-VHT40 Power Spectral Density - Ant B

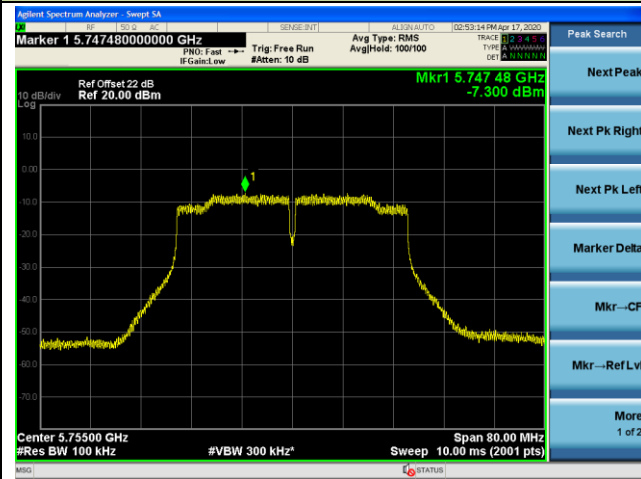
#### Channel 38 (5190MHz)



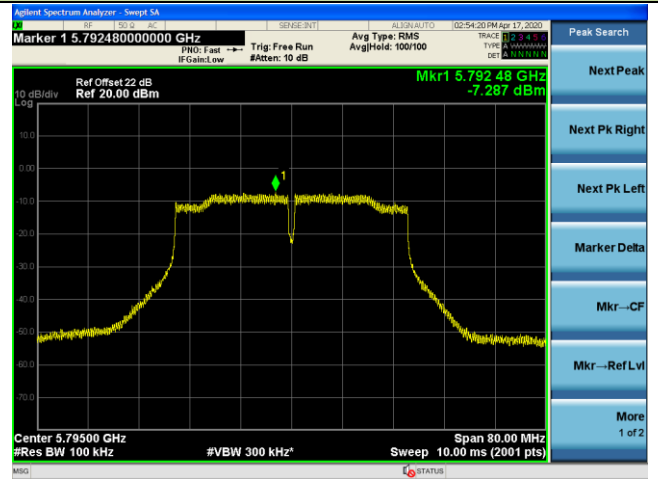
#### Channel 46 (5230MHz)

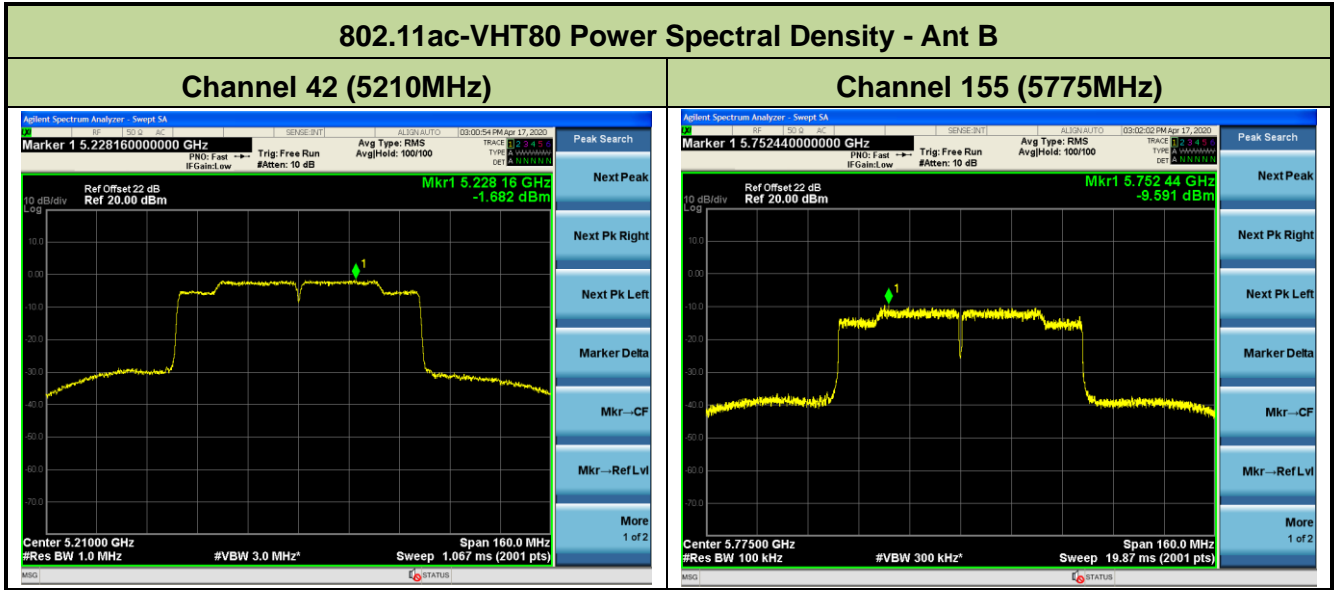


#### Channel 151 (5755MHz)



#### Channel 159 (5795MHz)





## **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  $\pm 20$  ppm maximum for the 5GHz band (IEEE 802.11 specification).

### **7.6.2. Test Procedure Used**

#### **Frequency Stability Under Temperature Variations:**

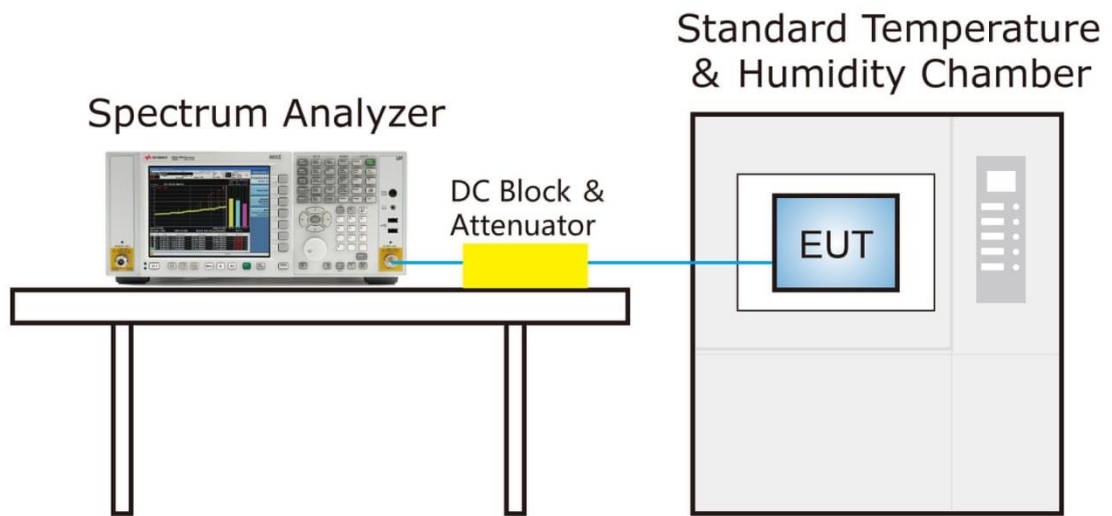
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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	Lewis Huang	Relative Humidity	53%RH
Test Site	TR3	Test Time	2020/04/17
Test Mode	5180MHz (Carrier Mode)		

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)
100%	120	- 30	-6.35
		- 20	-6.37
		- 10	-6.38
		0	-6.38
		+ 10	-6.42
		+ 20 (Ref)	-6.43
		+ 30	-6.44
		+ 40	-6.44
		+ 50	-6.45
115%	138	+ 20	-6.43
85%	102	+ 20	-6.42

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

## 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 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**

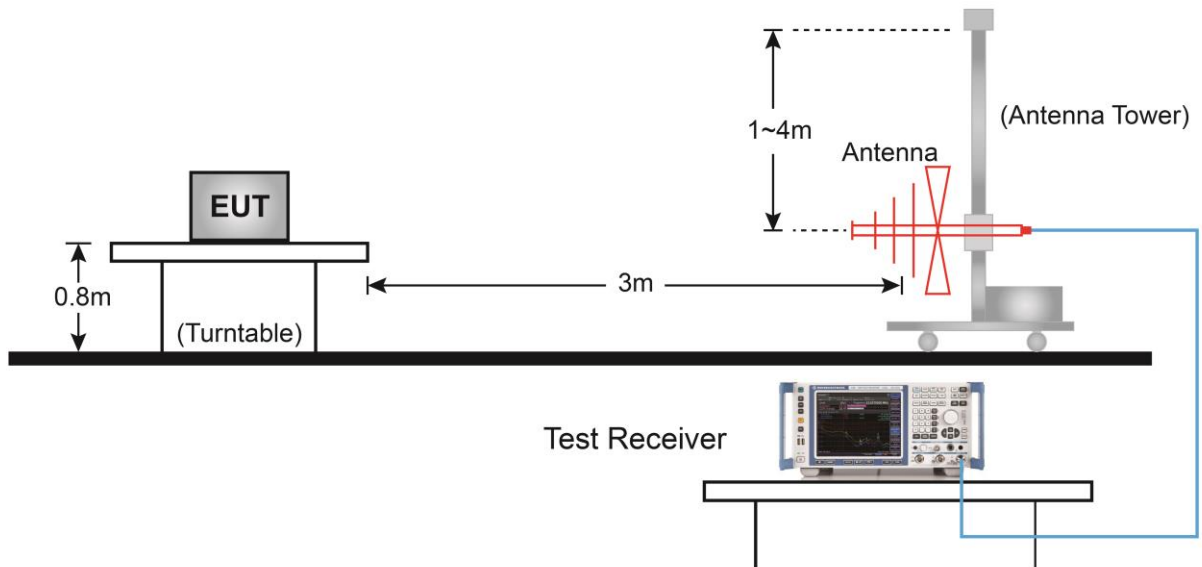
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

**Average Measurements above 1GHz**

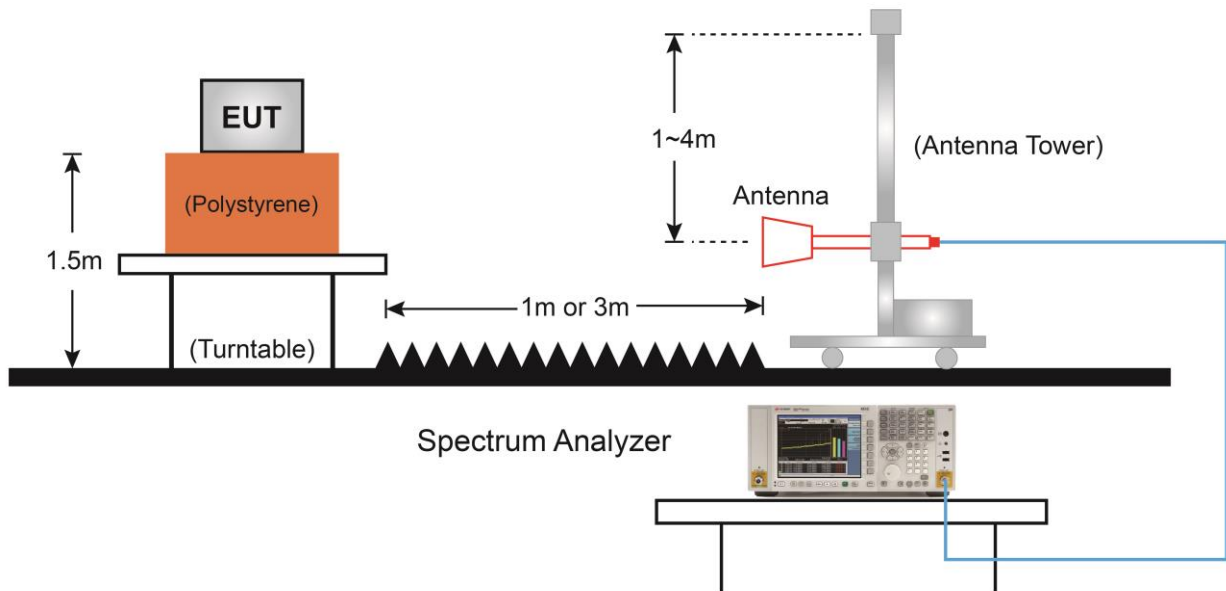
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set VBW = 10 Hz.  
If the EUT duty cycle is  $< 98\%$ , set VBW  $\geq 1/T$ . T is the minimum transmission duration.
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	2020/04/18
Test Mode:	802.11a - Ant A	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 (dB $\mu$ V)	Factor (dB)	Measure Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
*	7834.0	33.1	11.9	45.0	68.2	-23.2	Peak	Horizontal
*	8616.0	32.0	13.5	45.5	68.2	-22.7	Peak	Horizontal
	9083.5	30.6	14.8	45.4	74.0	-28.6	Peak	Horizontal
	11072.5	32.0	17.9	49.9	74.0	-24.1	Peak	Horizontal
*	7868.0	32.8	12.1	44.9	68.2	-23.3	Peak	Vertical
*	8616.0	31.7	13.5	45.2	68.2	-23.0	Peak	Vertical
	11115.0	32.3	17.5	49.8	74.0	-24.2	Peak	Vertical
	11608.0	31.4	17.5	48.9	74.0	-25.1	Peak	Vertical

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

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + 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	2020/04/18
Test Mode:	802.11a - Ant A	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
*	7970.0	32.2	12.4	44.6	68.2	-23.6	Peak	Horizontal
*	8854.0	30.9	14.4	45.3	68.2	-22.9	Peak	Horizontal
	10860.0	31.8	18.1	49.9	74.0	-24.1	Peak	Horizontal
	11574.0	31.8	17.4	49.2	74.0	-24.8	Peak	Horizontal
*	7961.5	33.3	12.4	45.7	68.2	-22.5	Peak	Vertical
*	8607.5	32.5	13.4	45.9	68.2	-22.3	Peak	Vertical
	9185.5	30.9	15.5	46.4	74.0	-27.6	Peak	Vertical
	11106.5	32.9	17.6	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	2020/04/18
Test Mode:	802.11a - Ant A	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
*	7919.0	33.1	12.3	45.4	68.2	-22.8	Peak	Horizontal
*	8871.0	30.7	14.3	45.0	68.2	-23.2	Peak	Horizontal
	11030.0	31.8	17.8	49.6	74.0	-24.4	Peak	Horizontal
	12041.5	31.8	17.0	48.8	74.0	-25.2	Peak	Horizontal
*	7808.5	33.9	11.7	45.6	68.2	-22.6	Peak	Vertical
*	8828.5	31.5	14.3	45.8	68.2	-22.4	Peak	Vertical
	11030.0	33.9	17.8	51.7	74.0	-22.3	Peak	Vertical
	11948.0	33.1	16.8	49.9	74.0	-24.1	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	2020/04/19
Test Mode:	802.11a - Ant A	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
*	8709.5	31.4	13.9	45.3	68.2	-22.9	Peak	Horizontal
*	10384.0	30.8	17.6	48.4	68.2	-19.8	Peak	Horizontal
	11038.5	32.6	17.8	50.4	74.0	-23.6	Peak	Horizontal
	11523.0	31.9	17.7	49.6	74.0	-24.4	Peak	Horizontal
*	7919.0	32.0	12.3	44.3	68.2	-23.9	Peak	Vertical
*	10154.5	30.8	16.8	47.6	68.2	-20.6	Peak	Vertical
	10962.0	31.8	17.8	49.6	74.0	-24.4	Peak	Vertical
	11531.5	30.9	17.7	48.6	74.0	-25.4	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	2020/04/19
Test Mode:	802.11a - Ant A	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
*	8905.0	31.0	14.2	45.2	68.2	-23.0	Peak	Horizontal
*	10384.0	31.0	17.6	48.6	68.2	-19.6	Peak	Horizontal
	11098.0	31.7	17.8	49.5	74.0	-24.5	Peak	Horizontal
	11871.5	31.8	16.6	48.4	74.0	-25.6	Peak	Horizontal
*	8913.5	31.4	14.3	45.7	68.2	-22.5	Peak	Vertical
*	10384.0	31.4	17.6	49.0	68.2	-19.2	Peak	Vertical
	11030.0	33.1	17.8	50.9	74.0	-23.1	Peak	Vertical
	11650.5	31.9	16.9	48.8	74.0	-25.2	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	2020/04/19
Test Mode:	802.11a - Ant A	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
*	7876.5	31.6	12.1	43.7	68.2	-24.5	Peak	Horizontal
*	8828.5	31.1	14.3	45.4	68.2	-22.8	Peak	Horizontal
	11030.0	32.0	17.8	49.8	74.0	-24.2	Peak	Horizontal
	11684.5	31.7	17.0	48.7	74.0	-25.3	Peak	Horizontal
*	8760.5	31.1	14.2	45.3	68.2	-22.9	Peak	Vertical
*	9984.5	30.5	16.7	47.2	68.2	-21.0	Peak	Vertical
	11055.5	31.5	17.8	49.3	74.0	-24.7	Peak	Vertical
	11523.0	31.4	17.7	49.1	74.0	-24.9	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	2020/04/18
Test Mode:	802.11n-HT20 - Ant A	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
*	8624.5	32.4	13.5	45.9	68.2	-22.3	Peak	Horizontal
*	10078.0	32.0	16.8	48.8	68.2	-19.4	Peak	Horizontal
	11021.5	34.7	17.9	52.6	74.0	-21.4	Peak	Horizontal
	12041.5	32.2	17.0	49.2	74.0	-24.8	Peak	Horizontal
*	7961.5	33.7	12.4	46.1	68.2	-22.1	Peak	Vertical
*	9967.5	31.7	16.7	48.4	68.2	-19.8	Peak	Vertical
	10766.5	33.4	17.7	51.1	74.0	-22.9	Peak	Vertical
	11582.5	34.0	17.4	51.4	74.0	-22.6	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	2020/04/18
Test Mode:	802.11n-HT20 - Ant A	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
*	7961.5	33.9	12.4	46.3	68.2	-21.9	Peak	Horizontal
*	8675.5	32.0	13.8	45.8	68.2	-22.4	Peak	Horizontal
	9168.5	31.6	15.3	46.9	74.0	-27.1	Peak	Horizontal
	11497.5	33.0	17.7	50.7	74.0	-23.3	Peak	Horizontal
*	7953.0	34.8	12.5	47.3	68.2	-20.9	Peak	Vertical
*	8837.0	32.4	14.3	46.7	68.2	-21.5	Peak	Vertical
	11021.5	33.2	17.9	51.1	74.0	-22.9	Peak	Vertical
	12160.5	33.3	17.2	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	2020/04/18
Test Mode:	802.11n-HT20 - Ant A	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
*	8692.5	30.9	14.0	44.9	68.2	-23.3	Peak	Horizontal
*	10384.0	32.8	17.6	50.4	68.2	-17.8	Peak	Horizontal
	10775.0	33.4	17.8	51.2	74.0	-22.8	Peak	Horizontal
	11667.5	33.4	17.0	50.4	74.0	-23.6	Peak	Horizontal
*	7842.5	33.9	11.9	45.8	68.2	-22.4	Peak	Vertical
*	8828.5	32.4	14.3	46.7	68.2	-21.5	Peak	Vertical
	11106.5	33.1	17.6	50.7	74.0	-23.3	Peak	Vertical
	12169.0	33.0	17.2	50.2	74.0	-23.8	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	2020/04/19
Test Mode:	802.11n-HT20 - Ant A	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
*	8820.0	32.0	14.3	46.3	68.2	-21.9	Peak	Horizontal
*	10537.0	31.6	17.7	49.3	68.2	-18.9	Peak	Horizontal
	11047.0	31.5	17.7	49.2	74.0	-24.8	Peak	Horizontal
	11599.5	32.1	17.5	49.6	74.0	-24.4	Peak	Horizontal
*	8769.0	31.0	14.2	45.2	68.2	-23.0	Peak	Vertical
*	10392.5	30.6	17.6	48.2	68.2	-20.0	Peak	Vertical
	11115.0	32.1	17.5	49.6	74.0	-24.4	Peak	Vertical
	11506.0	31.5	17.8	49.3	74.0	-24.7	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	2020/04/19
Test Mode:	802.11n-HT20 - Ant A	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
*	8828.5	30.9	14.3	45.2	68.2	-23.0	Peak	Horizontal
*	10384.0	31.3	17.6	48.9	68.2	-19.3	Peak	Horizontal
	11098.0	32.0	17.8	49.8	74.0	-24.2	Peak	Horizontal
	11744.0	31.8	16.8	48.6	74.0	-25.4	Peak	Horizontal
*	7961.5	32.1	12.4	44.5	68.2	-23.7	Peak	Vertical
*	8735.0	30.1	14.0	44.1	68.2	-24.1	Peak	Vertical
	11191.5	31.9	17.5	49.4	74.0	-24.6	Peak	Vertical
	11591.0	31.7	17.4	49.1	74.0	-24.9	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	2020/04/19
Test Mode:	802.11n-HT20 - Ant A	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
*	8752.0	31.5	14.2	45.7	68.2	-22.5	Peak	Horizontal
*	10384.0	31.2	17.6	48.8	68.2	-19.4	Peak	Horizontal
	11234.0	32.3	17.5	49.8	74.0	-24.2	Peak	Horizontal
	11778.0	31.8	16.7	48.5	74.0	-25.5	Peak	Horizontal
*	8735.0	30.7	14.0	44.7	68.2	-23.5	Peak	Vertical
*	10375.5	31.0	17.5	48.5	68.2	-19.7	Peak	Vertical
	11115.0	31.8	17.5	49.3	74.0	-24.7	Peak	Vertical
	11676.0	31.6	17.1	48.7	74.0	-25.3	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	2020/04/18
Test Mode:	802.11n-HT40 - Ant A	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
*	7961.5	33.9	12.4	46.3	68.2	-21.9	Peak	Horizontal
*	8854.0	30.4	14.4	44.8	68.2	-23.4	Peak	Horizontal
	10792.0	32.8	17.9	50.7	74.0	-23.3	Peak	Horizontal
	11523.0	32.4	17.7	50.1	74.0	-23.9	Peak	Horizontal
*	7885.0	33.1	12.1	45.2	68.2	-23.0	Peak	Vertical
*	8811.5	31.4	14.3	45.7	68.2	-22.5	Peak	Vertical
	10851.5	32.8	18.0	50.8	74.0	-23.2	Peak	Vertical
	11599.5	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	2020/04/18
Test Mode:	802.11n-HT40 - Ant A	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
*	7859.5	33.7	12.0	45.7	68.2	-22.5	Peak	Horizontal
*	8616.0	33.4	13.5	46.9	68.2	-21.3	Peak	Horizontal
	11123.5	34.0	17.5	51.5	74.0	-22.5	Peak	Horizontal
	11378.5	32.3	17.5	49.8	74.0	-24.2	Peak	Horizontal
*	8837.0	31.9	14.3	46.2	68.2	-22.0	Peak	Vertical
*	10061.0	31.3	16.8	48.1	68.2	-20.1	Peak	Vertical
	10792.0	34.0	17.9	51.9	74.0	-22.1	Peak	Vertical
	11599.5	32.6	17.5	50.1	74.0	-23.9	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	2020/04/19
Test Mode:	802.11n-HT40 - Ant A	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
*	8777.5	31.5	14.1	45.6	68.2	-22.6	Peak	Horizontal
*	10384.0	31.0	17.6	48.6	68.2	-19.6	Peak	Horizontal
	11030.0	31.8	17.8	49.6	74.0	-24.4	Peak	Horizontal
	11472.0	32.0	17.7	49.7	74.0	-24.3	Peak	Horizontal
*	8820.0	32.0	14.3	46.3	68.2	-21.9	Peak	Vertical
*	9806.0	31.1	16.8	47.9	68.2	-20.3	Peak	Vertical
	10622.0	31.8	17.7	49.5	74.0	-24.5	Peak	Vertical
	11115.0	32.2	17.5	49.7	74.0	-24.3	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	2020/04/19
Test Mode:	802.11n-HT40 - Ant A	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
*	8624.5	31.7	13.5	45.2	68.2	-23.0	Peak	Horizontal
*	10384.0	30.7	17.6	48.3	68.2	-19.9	Peak	Horizontal
	11115.0	32.5	17.5	50.0	74.0	-24.0	Peak	Horizontal
	11574.0	32.2	17.4	49.6	74.0	-24.4	Peak	Horizontal
*	7987.0	33.0	12.4	45.4	68.2	-22.8	Peak	Vertical
*	10528.5	31.5	17.7	49.2	68.2	-19.0	Peak	Vertical
	11123.5	33.2	17.5	50.7	74.0	-23.3	Peak	Vertical
	12033.0	31.6	16.9	48.5	74.0	-25.5	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	2020/04/18
Test Mode:	802.11ac-VHT20 - Ant A	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
*	8522.5	33.0	13.0	46.0	68.2	-22.2	Peak	Horizontal
*	9882.5	31.2	16.8	48.0	68.2	-20.2	Peak	Horizontal
	10792.0	33.1	17.9	51.0	74.0	-23.0	Peak	Horizontal
	11616.5	32.8	17.3	50.1	74.0	-23.9	Peak	Horizontal
*	8616.0	33.4	13.5	46.9	68.2	-21.3	Peak	Vertical
*	10384.0	33.2	17.6	50.8	68.2	-17.4	Peak	Vertical
	11030.0	32.9	17.8	50.7	74.0	-23.3	Peak	Vertical
	11880.0	33.1	16.6	49.7	74.0	-24.3	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	2020/04/18
Test Mode:	802.11ac-VHT20 - Ant A	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
*	7876.5	33.3	12.1	45.4	68.2	-22.8	Peak	Horizontal
*	9823.0	31.4	16.9	48.3	68.2	-19.9	Peak	Horizontal
	11030.0	33.0	17.8	50.8	74.0	-23.2	Peak	Horizontal
	11608.0	33.2	17.5	50.7	74.0	-23.3	Peak	Horizontal
*	7961.5	33.2	12.4	45.6	68.2	-22.6	Peak	Vertical
*	8862.5	32.5	14.4	46.9	68.2	-21.3	Peak	Vertical
	11030.0	33.9	17.8	51.7	74.0	-22.3	Peak	Vertical
	11531.5	32.9	17.7	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	2020/04/18
Test Mode:	802.11ac-VHT20 - Ant A	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
*	8607.5	33.3	13.4	46.7	68.2	-21.5	Peak	Horizontal
*	9874.0	31.2	16.8	48.0	68.2	-20.2	Peak	Horizontal
	11064.0	32.7	17.9	50.6	74.0	-23.4	Peak	Horizontal
	11531.5	32.7	17.7	50.4	74.0	-23.6	Peak	Horizontal
*	8871.0	32.3	14.3	46.6	68.2	-21.6	Peak	Vertical
*	10392.5	32.3	17.6	49.9	68.2	-18.3	Peak	Vertical
	11030.0	33.8	17.8	51.6	74.0	-22.4	Peak	Vertical
	11438.0	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	2020/04/19
Test Mode:	802.11ac-VHT20 - Ant A	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
*	8675.5	31.6	13.8	45.4	68.2	-22.8	Peak	Horizontal
*	10384.0	31.0	17.6	48.6	68.2	-19.6	Peak	Horizontal
	11098.0	32.6	17.8	50.4	74.0	-23.6	Peak	Horizontal
	11557.0	32.0	17.3	49.3	74.0	-24.7	Peak	Horizontal
*	7842.5	34.6	11.9	46.5	68.2	-21.7	Peak	Vertical
*	9814.5	32.0	16.8	48.8	68.2	-19.4	Peak	Vertical
	11429.5	33.4	17.7	51.1	74.0	-22.9	Peak	Vertical
	12169.0	31.7	17.2	48.9	74.0	-25.1	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	2020/04/19
Test Mode:	802.11ac-VHT20 - Ant A	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
*	8913.5	32.2	14.3	46.5	68.2	-21.7	Peak	Horizontal
*	10384.0	31.9	17.6	49.5	68.2	-18.7	Peak	Horizontal
	11115.0	33.0	17.5	50.5	74.0	-23.5	Peak	Horizontal
	11582.5	33.2	17.4	50.6	74.0	-23.4	Peak	Horizontal
*	8828.5	32.9	14.3	47.2	68.2	-21.0	Peak	Vertical
*	9823.0	31.0	16.9	47.9	68.2	-20.3	Peak	Vertical
	10783.5	32.3	17.8	50.1	74.0	-23.9	Peak	Vertical
	11599.5	32.6	17.5	50.1	74.0	-23.9	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	2020/04/19
Test Mode:	802.11ac-VHT20 - Ant A	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
*	8752.0	32.2	14.2	46.4	68.2	-21.8	Peak	Horizontal
*	10384.0	31.7	17.6	49.3	68.2	-18.9	Peak	Horizontal
	10792.0	33.0	17.9	50.9	74.0	-23.1	Peak	Horizontal
	11438.0	32.5	17.7	50.2	74.0	-23.8	Peak	Horizontal
*	8871.0	31.8	14.3	46.1	68.2	-22.1	Peak	Vertical
*	10231.0	32.1	17.2	49.3	68.2	-18.9	Peak	Vertical
	10843.0	33.4	17.9	51.3	74.0	-22.7	Peak	Vertical
	11438.0	32.5	17.7	50.2	74.0	-23.8	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	2020/04/18
Test Mode:	802.11ac-VHT40 - Ant A	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
*	8837.0	32.4	14.3	46.7	68.2	-21.5	Peak	Horizontal
*	10469.0	32.5	17.8	50.3	68.2	-17.9	Peak	Horizontal
	10868.5	32.9	18.1	51.0	74.0	-23.0	Peak	Horizontal
	11480.5	32.9	17.7	50.6	74.0	-23.4	Peak	Horizontal
*	7936.0	33.4	12.5	45.9	68.2	-22.3	Peak	Vertical
*	9831.5	31.1	16.9	48.0	68.2	-20.2	Peak	Vertical
	11013.0	32.6	18.0	50.6	74.0	-23.4	Peak	Vertical
	11446.5	32.9	17.7	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	2020/04/18
Test Mode:	802.11ac-VHT40 - Ant A	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
*	7842.5	33.3	11.9	45.2	68.2	-23.0	Peak	Horizontal
*	10384.0	32.4	17.6	50.0	68.2	-18.2	Peak	Horizontal
	11030.0	34.0	17.8	51.8	74.0	-22.2	Peak	Horizontal
	11591.0	32.8	17.4	50.2	74.0	-23.8	Peak	Horizontal
*	7970.0	34.6	12.4	47.0	68.2	-21.2	Peak	Vertical
*	8769.0	31.7	14.2	45.9	68.2	-22.3	Peak	Vertical
	11098.0	33.1	17.8	50.9	74.0	-23.1	Peak	Vertical
	11693.0	34.1	17.0	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	2020/04/19
Test Mode:	802.11ac-VHT40 - Ant A	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
*	8828.5	32.2	14.3	46.5	68.2	-21.7	Peak	Horizontal
*	10384.0	31.5	17.6	49.1	68.2	-19.1	Peak	Horizontal
	11030.0	32.9	17.8	50.7	74.0	-23.3	Peak	Horizontal
	11489.0	32.3	17.7	50.0	74.0	-24.0	Peak	Horizontal
*	8667.0	31.8	13.8	45.6	68.2	-22.6	Peak	Vertical
*	10316.0	32.1	17.3	49.4	68.2	-18.8	Peak	Vertical
	11115.0	32.8	17.5	50.3	74.0	-23.7	Peak	Vertical
	11523.0	31.9	17.7	49.6	74.0	-24.4	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	2020/04/19
Test Mode:	802.11ac-VHT40 - Ant A	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
*	8624.5	32.3	13.5	45.8	68.2	-22.4	Peak	Horizontal
*	10384.0	32.0	17.6	49.6	68.2	-18.6	Peak	Horizontal
	11030.0	33.4	17.8	51.2	74.0	-22.8	Peak	Horizontal
	11506.0	33.6	17.8	51.4	74.0	-22.6	Peak	Horizontal
*	8633.0	32.3	13.5	45.8	68.2	-22.4	Peak	Vertical
*	10384.0	31.8	17.6	49.4	68.2	-18.8	Peak	Vertical
	11030.0	33.3	17.8	51.1	74.0	-22.9	Peak	Vertical
	11557.0	32.8	17.3	50.1	74.0	-23.9	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	2020/04/18
Test Mode:	802.11ac-VHT80 - Ant A	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
*	7885.0	33.2	12.1	45.3	68.2	-22.9	Peak	Horizontal
*	8616.0	32.9	13.5	46.4	68.2	-21.8	Peak	Horizontal
	10775.0	33.3	17.8	51.1	74.0	-22.9	Peak	Horizontal
	11523.0	32.8	17.7	50.5	74.0	-23.5	Peak	Horizontal
*	7961.5	33.6	12.4	46.0	68.2	-22.2	Peak	Vertical
*	8896.5	33.7	14.2	47.9	68.2	-20.3	Peak	Vertical
	11030.0	33.4	17.8	51.2	74.0	-22.8	Peak	Vertical
	11497.5	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	2020/04/19
Test Mode:	802.11ac-VHT80 - Ant A	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
*	8922.0	31.8	14.3	46.1	68.2	-22.1	Peak	Horizontal
*	10537.0	32.6	17.7	50.3	68.2	-17.9	Peak	Horizontal
	11021.5	32.8	17.9	50.7	74.0	-23.3	Peak	Horizontal
	12067.0	32.2	16.9	49.1	74.0	-24.9	Peak	Horizontal
*	8888.0	31.9	14.2	46.1	68.2	-22.1	Peak	Vertical
*	10350.0	31.8	17.4	49.2	68.2	-19.0	Peak	Vertical
	11030.0	32.9	17.8	50.7	74.0	-23.3	Peak	Vertical
	11438.0	32.5	17.7	50.2	74.0	-23.8	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	2020/04/18
Test Mode:	802.11a - Ant B	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
*	7961.5	34.7	12.4	47.1	68.2	-21.1	Peak	Horizontal
*	8845.5	32.5	14.3	46.8	68.2	-21.4	Peak	Horizontal
	10749.5	33.1	17.7	50.8	74.0	-23.2	Peak	Horizontal
	11455.0	32.5	17.7	50.2	74.0	-23.8	Peak	Horizontal
*	7970.0	33.7	12.4	46.1	68.2	-22.1	Peak	Vertical
*	10384.0	32.8	17.6	50.4	68.2	-17.8	Peak	Vertical
	11115.0	33.4	17.5	50.9	74.0	-23.1	Peak	Vertical
	11591.0	32.9	17.4	50.3	74.0	-23.7	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	2020/04/18
Test Mode:	802.11a - Ant B	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
*	8607.5	33.0	13.4	46.4	68.2	-21.8	Peak	Horizontal
*	10392.5	32.4	17.6	50.0	68.2	-18.2	Peak	Horizontal
	11123.5	33.4	17.5	50.9	74.0	-23.1	Peak	Horizontal
	12050.0	32.5	17.1	49.6	74.0	-24.4	Peak	Horizontal
*	7910.5	31.7	12.2	43.9	68.2	-24.3	Peak	Vertical
*	8845.5	32.1	14.3	46.4	68.2	-21.8	Peak	Vertical
	10783.5	33.7	17.8	51.5	74.0	-22.5	Peak	Vertical
	11455.0	32.5	17.7	50.2	74.0	-23.8	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	2020/04/18
Test Mode:	802.11a - Ant B	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
*	7919.0	33.8	12.3	46.1	68.2	-22.1	Peak	Horizontal
*	8820.0	31.8	14.3	46.1	68.2	-22.1	Peak	Horizontal
	10800.5	33.2	18.0	51.2	74.0	-22.8	Peak	Horizontal
	11531.5	32.4	17.7	50.1	74.0	-23.9	Peak	Horizontal
*	7876.5	33.0	12.1	45.1	68.2	-23.1	Peak	Vertical
*	10231.0	32.4	17.2	49.6	68.2	-18.6	Peak	Vertical
	11030.0	33.3	17.8	51.1	74.0	-22.9	Peak	Vertical
	11574.0	32.8	17.4	50.2	74.0	-23.8	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	2020/04/19
Test Mode:	802.11a - Ant B	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
*	8820.0	31.6	14.3	45.9	68.2	-22.3	Peak	Horizontal
*	10010.0	31.3	16.8	48.1	68.2	-20.1	Peak	Horizontal
	11055.5	32.9	17.8	50.7	74.0	-23.3	Peak	Horizontal
	11616.5	32.9	17.3	50.2	74.0	-23.8	Peak	Horizontal
*	8718.0	31.9	13.9	45.8	68.2	-22.4	Peak	Vertical
*	10384.0	31.8	17.6	49.4	68.2	-18.8	Peak	Vertical
	11030.0	33.1	17.8	50.9	74.0	-23.1	Peak	Vertical
	11565.5	32.9	17.3	50.2	74.0	-23.8	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	2020/04/19
Test Mode:	802.11a - Ant B	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
*	8760.5	32.0	14.2	46.2	68.2	-22.0	Peak	Horizontal
*	10154.5	31.5	16.8	48.3	68.2	-19.9	Peak	Horizontal
	11021.5	33.1	17.9	51.0	74.0	-23.0	Peak	Horizontal
	11514.5	32.2	17.7	49.9	74.0	-24.1	Peak	Horizontal
*	8769.0	32.1	14.2	46.3	68.2	-21.9	Peak	Vertical
*	10384.0	31.2	17.6	48.8	68.2	-19.4	Peak	Vertical
	11021.5	32.7	17.9	50.6	74.0	-23.4	Peak	Vertical
	11591.0	32.0	17.4	49.4	74.0	-24.6	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	2020/04/19
Test Mode:	802.11a - Ant B	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	31.0	14.2	45.2	68.2	-23.0	Peak	Horizontal
*	10384.0	31.8	17.6	49.4	68.2	-18.8	Peak	Horizontal
	10953.5	32.9	17.9	50.8	74.0	-23.2	Peak	Horizontal
	11565.5	32.3	17.3	49.6	74.0	-24.4	Peak	Horizontal
*	8828.5	30.9	14.3	45.2	68.2	-23.0	Peak	Vertical
*	10494.5	31.5	17.7	49.2	68.2	-19.0	Peak	Vertical
	11038.5	34.0	17.8	51.8	74.0	-22.2	Peak	Vertical
	11489.0	32.9	17.7	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	2020/04/18
Test Mode:	802.11n-HT20 - Ant B	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
*	7953.0	32.4	12.5	44.9	68.2	-23.3	Peak	Horizontal
*	10290.5	32.1	17.3	49.4	68.2	-18.8	Peak	Horizontal
	11030.0	33.6	17.8	51.4	74.0	-22.6	Peak	Horizontal
	11582.5	33.9	17.4	51.3	74.0	-22.7	Peak	Horizontal
*	7961.5	33.9	12.4	46.3	68.2	-21.9	Peak	Vertical
*	8905.0	32.2	14.2	46.4	68.2	-21.8	Peak	Vertical
	11140.5	33.5	17.5	51.0	74.0	-23.0	Peak	Vertical
	11506.0	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	2020/04/18
Test Mode:	802.11n-HT20 - Ant B	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
*	7851.0	33.3	11.9	45.2	68.2	-23.0	Peak	Horizontal
*	8692.5	30.9	14.0	44.9	68.2	-23.3	Peak	Horizontal
	10783.5	34.3	17.8	52.1	74.0	-21.9	Peak	Horizontal
	11633.5	32.5	17.0	49.5	74.0	-24.5	Peak	Horizontal
*	7842.5	32.3	11.9	44.2	68.2	-24.0	Peak	Vertical
*	8828.5	31.5	14.3	45.8	68.2	-22.4	Peak	Vertical
	11030.0	32.8	17.8	50.6	74.0	-23.4	Peak	Vertical
	11591.0	32.7	17.4	50.1	74.0	-23.9	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	2020/04/18
Test Mode:	802.11n-HT20 - Ant B	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	32.2	14.3	46.5	68.2	-21.7	Peak	Horizontal
*	10146.0	32.4	16.7	49.1	68.2	-19.1	Peak	Horizontal
	11021.5	32.3	17.9	50.2	74.0	-23.8	Peak	Horizontal
	11489.0	32.1	17.7	49.8	74.0	-24.2	Peak	Horizontal
*	7978.5	34.0	12.4	46.4	68.2	-21.8	Peak	Vertical
*	8752.0	32.4	14.2	46.6	68.2	-21.6	Peak	Vertical
	11038.5	33.5	17.8	51.3	74.0	-22.7	Peak	Vertical
	11846.0	33.1	16.7	49.8	74.0	-24.2	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	2020/04/19
Test Mode:	802.11n-HT20 - Ant B	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
*	8896.5	31.9	14.2	46.1	68.2	-22.1	Peak	Horizontal
*	9993.0	29.3	16.7	46.0	68.2	-22.2	Peak	Horizontal
	11098.0	32.5	17.8	50.3	74.0	-23.7	Peak	Horizontal
	11990.5	32.8	16.8	49.6	74.0	-24.4	Peak	Horizontal
*	8633.0	32.5	13.5	46.0	68.2	-22.2	Peak	Vertical
*	10146.0	32.1	16.7	48.8	68.2	-19.4	Peak	Vertical
	11098.0	32.7	17.8	50.5	74.0	-23.5	Peak	Vertical
	11523.0	32.1	17.7	49.8	74.0	-24.2	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	2020/04/19
Test Mode:	802.11n-HT20 - Ant B	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	32.0	14.3	46.3	68.2	-21.9	Peak	Horizontal
*	9814.5	31.6	16.8	48.4	68.2	-19.8	Peak	Horizontal
	10851.5	32.3	18.0	50.3	74.0	-23.7	Peak	Horizontal
	11582.5	33.0	17.4	50.4	74.0	-23.6	Peak	Horizontal
*	8769.0	32.0	14.2	46.2	68.2	-22.0	Peak	Vertical
*	10392.5	31.3	17.6	48.9	68.2	-19.3	Peak	Vertical
	11123.5	33.7	17.5	51.2	74.0	-22.8	Peak	Vertical
	11642.0	32.7	16.9	49.6	74.0	-24.4	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	2020/04/19
Test Mode:	802.11n-HT20 - Ant B	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	31.8	14.3	46.1	68.2	-22.1	Peak	Horizontal
*	10392.5	32.4	17.6	50.0	68.2	-18.2	Peak	Horizontal
	11106.5	32.5	17.6	50.1	74.0	-23.9	Peak	Horizontal
	11523.0	32.5	17.7	50.2	74.0	-23.8	Peak	Horizontal
*	8837.0	31.2	14.3	45.5	68.2	-22.7	Peak	Vertical
*	10375.5	32.1	17.5	49.6	68.2	-18.6	Peak	Vertical
	11030.0	32.6	17.8	50.4	74.0	-23.6	Peak	Vertical
	11914.0	32.6	16.6	49.2	74.0	-24.8	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	2020/04/18
Test Mode:	802.11n-HT40 - Ant B	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
*	8854.0	31.3	14.4	45.7	68.2	-22.5	Peak	Horizontal
*	10231.0	32.0	17.2	49.2	68.2	-19.0	Peak	Horizontal
	11013.0	32.6	18.0	50.6	74.0	-23.4	Peak	Horizontal
	11650.5	33.3	16.9	50.2	74.0	-23.8	Peak	Horizontal
*	7978.5	33.5	12.4	45.9	68.2	-22.3	Peak	Vertical
*	10137.5	32.0	16.8	48.8	68.2	-19.4	Peak	Vertical
	10783.5	33.6	17.8	51.4	74.0	-22.6	Peak	Vertical
	11574.0	33.6	17.4	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	2020/04/18
Test Mode:	802.11n-HT40 - Ant B	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
*	8828.5	31.7	14.3	46.0	68.2	-22.2	Peak	Horizontal
*	10384.0	32.0	17.6	49.6	68.2	-18.6	Peak	Horizontal
	11030.0	32.9	17.8	50.7	74.0	-23.3	Peak	Horizontal
	11744.0	33.1	16.8	49.9	74.0	-24.1	Peak	Horizontal
*	8616.0	32.9	13.5	46.4	68.2	-21.8	Peak	Vertical
*	10384.0	31.7	17.6	49.3	68.2	-18.9	Peak	Vertical
	11021.5	33.8	17.9	51.7	74.0	-22.3	Peak	Vertical
	11650.5	33.4	16.9	50.3	74.0	-23.7	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	2020/04/19
Test Mode:	802.11n-HT40 - Ant B	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
*	8675.5	33.3	13.8	47.1	68.2	-21.1	Peak	Horizontal
*	9959.0	31.5	16.8	48.3	68.2	-19.9	Peak	Horizontal
	11132.0	33.1	17.5	50.6	74.0	-23.4	Peak	Horizontal
	11599.5	32.2	17.5	49.7	74.0	-24.3	Peak	Horizontal
*	8820.0	31.9	14.3	46.2	68.2	-22.0	Peak	Vertical
*	10154.5	32.3	16.8	49.1	68.2	-19.1	Peak	Vertical
	11055.5	33.1	17.8	50.9	74.0	-23.1	Peak	Vertical
	11608.0	32.4	17.5	49.9	74.0	-24.1	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	2020/04/19
Test Mode:	802.11n-HT40 - Ant B	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
*	8820.0	32.2	14.3	46.5	68.2	-21.7	Peak	Horizontal
*	10375.5	32.1	17.5	49.6	68.2	-18.6	Peak	Horizontal
	11123.5	34.2	17.5	51.7	74.0	-22.3	Peak	Horizontal
	12024.5	32.7	16.9	49.6	74.0	-24.4	Peak	Horizontal
*	8684.0	32.5	13.9	46.4	68.2	-21.8	Peak	Vertical
*	9738.0	31.6	16.7	48.3	68.2	-19.9	Peak	Vertical
	11064.0	33.3	17.9	51.2	74.0	-22.8	Peak	Vertical
	11540.0	33.5	17.6	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	2020/04/18
Test Mode:	802.11ac-VHT20 - Ant B	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
*	7961.5	33.5	12.4	45.9	68.2	-22.3	Peak	Horizontal
*	10137.5	32.8	16.8	49.6	68.2	-18.6	Peak	Horizontal
	11030.0	33.0	17.8	50.8	74.0	-23.2	Peak	Horizontal
	11574.0	32.9	17.4	50.3	74.0	-23.7	Peak	Horizontal
*	7987.0	34.0	12.4	46.4	68.2	-21.8	Peak	Vertical
*	10384.0	32.6	17.6	50.2	68.2	-18.0	Peak	Vertical
	11030.0	33.3	17.8	51.1	74.0	-22.9	Peak	Vertical
	11752.5	33.4	16.8	50.2	74.0	-23.8	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	2020/04/18
Test Mode:	802.11ac-VHT20 - Ant B	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
*	8828.5	32.0	14.3	46.3	68.2	-21.9	Peak	Horizontal
*	10375.5	32.4	17.5	49.9	68.2	-18.3	Peak	Horizontal
	11072.5	32.8	17.9	50.7	74.0	-23.3	Peak	Horizontal
	11429.5	33.1	17.7	50.8	74.0	-23.2	Peak	Horizontal
*	7944.5	32.7	12.5	45.2	68.2	-23.0	Peak	Vertical
*	9823.0	31.6	16.9	48.5	68.2	-19.7	Peak	Vertical
	10741.0	33.2	17.7	50.9	74.0	-23.1	Peak	Vertical
	11497.5	32.5	17.7	50.2	74.0	-23.8	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	2020/04/18
Test Mode:	802.11ac-VHT20 - Ant B	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
*	7953.0	33.0	12.5	45.5	68.2	-22.7	Peak	Horizontal
*	8862.5	31.6	14.4	46.0	68.2	-22.2	Peak	Horizontal
	11055.5	33.3	17.8	51.1	74.0	-22.9	Peak	Horizontal
	11761.0	33.7	16.8	50.5	74.0	-23.5	Peak	Horizontal
*	8658.5	30.4	13.7	44.1	68.2	-24.1	Peak	Vertical
*	10392.5	31.7	17.6	49.3	68.2	-18.9	Peak	Vertical
	11123.5	33.0	17.5	50.5	74.0	-23.5	Peak	Vertical
	11531.5	32.3	17.7	50.0	74.0	-24.0	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	2020/04/19
Test Mode:	802.11ac-VHT20 - Ant B	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
*	8828.5	31.6	14.3	45.9	68.2	-22.3	Peak	Horizontal
*	10316.0	31.9	17.3	49.2	68.2	-19.0	Peak	Horizontal
	11064.0	33.1	17.9	51.0	74.0	-23.0	Peak	Horizontal
	11531.5	33.0	17.7	50.7	74.0	-23.3	Peak	Horizontal
*	8709.5	31.9	13.9	45.8	68.2	-22.4	Peak	Vertical
*	9823.0	31.1	16.9	48.0	68.2	-20.2	Peak	Vertical
	11030.0	32.7	17.8	50.5	74.0	-23.5	Peak	Vertical
	11523.0	32.4	17.7	50.1	74.0	-23.9	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	2020/04/19
Test Mode:	802.11ac-VHT20 - Ant B	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
*	8752.0	31.6	14.2	45.8	68.2	-22.4	Peak	Horizontal
*	10239.5	31.7	17.1	48.8	68.2	-19.4	Peak	Horizontal
	10996.0	32.6	18.1	50.7	74.0	-23.3	Peak	Horizontal
	11676.0	32.5	17.1	49.6	74.0	-24.4	Peak	Horizontal
*	8616.0	33.1	13.5	46.6	68.2	-21.6	Peak	Vertical
*	10384.0	33.1	17.6	50.7	68.2	-17.5	Peak	Vertical
	10843.0	32.9	17.9	50.8	74.0	-23.2	Peak	Vertical
	11353.0	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	2020/04/19
Test Mode:	802.11ac-VHT20 - Ant B	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
*	8769.0	30.7	14.2	44.9	68.2	-23.3	Peak	Horizontal
*	10384.0	31.5	17.6	49.1	68.2	-19.1	Peak	Horizontal
	11021.5	33.0	17.9	50.9	74.0	-23.1	Peak	Horizontal
	11650.5	32.7	16.9	49.6	74.0	-24.4	Peak	Horizontal
*	8803.0	31.1	14.2	45.3	68.2	-22.9	Peak	Vertical
*	9916.5	32.9	16.9	49.8	68.2	-18.4	Peak	Vertical
	11047.0	32.9	17.7	50.6	74.0	-23.4	Peak	Vertical
	11489.0	31.6	17.7	49.3	74.0	-24.7	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	2020/04/18
Test Mode:	802.11ac-VHT40 - Ant B	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
*	7978.5	33.8	12.4	46.2	68.2	-22.0	Peak	Horizontal
*	8930.5	32.5	14.3	46.8	68.2	-21.4	Peak	Horizontal
	10894.0	32.6	18.0	50.6	74.0	-23.4	Peak	Horizontal
	11506.0	32.7	17.8	50.5	74.0	-23.5	Peak	Horizontal
*	7876.5	32.5	12.1	44.6	68.2	-23.6	Peak	Vertical
*	10392.5	32.0	17.6	49.6	68.2	-18.6	Peak	Vertical
	11072.5	33.6	17.9	51.5	74.0	-22.5	Peak	Vertical
	11599.5	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	2020/04/18
Test Mode:	802.11ac-VHT40 - Ant B	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
*	7987.0	32.7	12.4	45.1	68.2	-23.1	Peak	Horizontal
*	10384.0	32.2	17.6	49.8	68.2	-18.4	Peak	Horizontal
	11030.0	33.4	17.8	51.2	74.0	-22.8	Peak	Horizontal
	11633.5	32.9	17.0	49.9	74.0	-24.1	Peak	Horizontal
*	7995.5	33.6	12.5	46.1	68.2	-22.1	Peak	Vertical
*	10154.5	31.7	16.8	48.5	68.2	-19.7	Peak	Vertical
	11132.0	33.4	17.5	50.9	74.0	-23.1	Peak	Vertical
	11429.5	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	2020/04/19
Test Mode:	802.11ac-VHT40 - Ant B	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	32.6	14.3	46.9	68.2	-21.3	Peak	Horizontal
*	10307.5	31.3	17.3	48.6	68.2	-19.6	Peak	Horizontal
	11030.0	33.7	17.8	51.5	74.0	-22.5	Peak	Horizontal
	11591.0	32.8	17.4	50.2	74.0	-23.8	Peak	Horizontal
*	8837.0	32.1	14.3	46.4	68.2	-21.8	Peak	Vertical
*	10384.0	31.8	17.6	49.4	68.2	-18.8	Peak	Vertical
	11123.5	33.3	17.5	50.8	74.0	-23.2	Peak	Vertical
	11514.5	32.5	17.7	50.2	74.0	-23.8	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	2020/04/19
Test Mode:	802.11ac-VHT40 - Ant B	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
*	8837.0	32.7	14.3	47.0	68.2	-21.2	Peak	Horizontal
*	10316.0	32.5	17.3	49.8	68.2	-18.4	Peak	Horizontal
	11174.5	32.6	17.6	50.2	74.0	-23.8	Peak	Horizontal
	12160.5	32.2	17.2	49.4	74.0	-24.6	Peak	Horizontal
*	8752.0	31.9	14.2	46.1	68.2	-22.1	Peak	Vertical
*	10231.0	31.7	17.2	48.9	68.2	-19.3	Peak	Vertical
	11132.0	32.4	17.5	49.9	74.0	-24.1	Peak	Vertical
	11599.5	33.4	17.5	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	2020/04/18
Test Mode:	802.11ac-VHT80 - Ant B	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
*	7842.5	33.8	11.9	45.7	68.2	-22.5	Peak	Horizontal
*	10163.0	32.4	16.9	49.3	68.2	-18.9	Peak	Horizontal
	11030.0	33.4	17.8	51.2	74.0	-22.8	Peak	Horizontal
	11472.0	32.8	17.7	50.5	74.0	-23.5	Peak	Horizontal
*	7978.5	33.8	12.4	46.2	68.2	-22.0	Peak	Vertical
*	9823.0	31.1	16.9	48.0	68.2	-20.2	Peak	Vertical
	11072.5	33.1	17.9	51.0	74.0	-23.0	Peak	Vertical
	12084.0	32.6	16.9	49.5	74.0	-24.5	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	2020/04/18
Test Mode:	802.11ac-VHT80 - Ant B	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
*	8820.0	31.8	14.3	46.1	68.2	-22.1	Peak	Horizontal
*	10154.5	32.7	16.8	49.5	68.2	-18.7	Peak	Horizontal
	10800.5	33.2	18.0	51.2	74.0	-22.8	Peak	Horizontal
	11565.5	32.2	17.3	49.5	74.0	-24.5	Peak	Horizontal
*	8905.0	32.2	14.2	46.4	68.2	-21.8	Peak	Vertical
*	10384.0	33.0	17.6	50.6	68.2	-17.6	Peak	Vertical
	11030.0	32.6	17.8	50.4	74.0	-23.6	Peak	Vertical
	11497.5	33.1	17.7	50.8	74.0	-23.2	Peak	Vertical

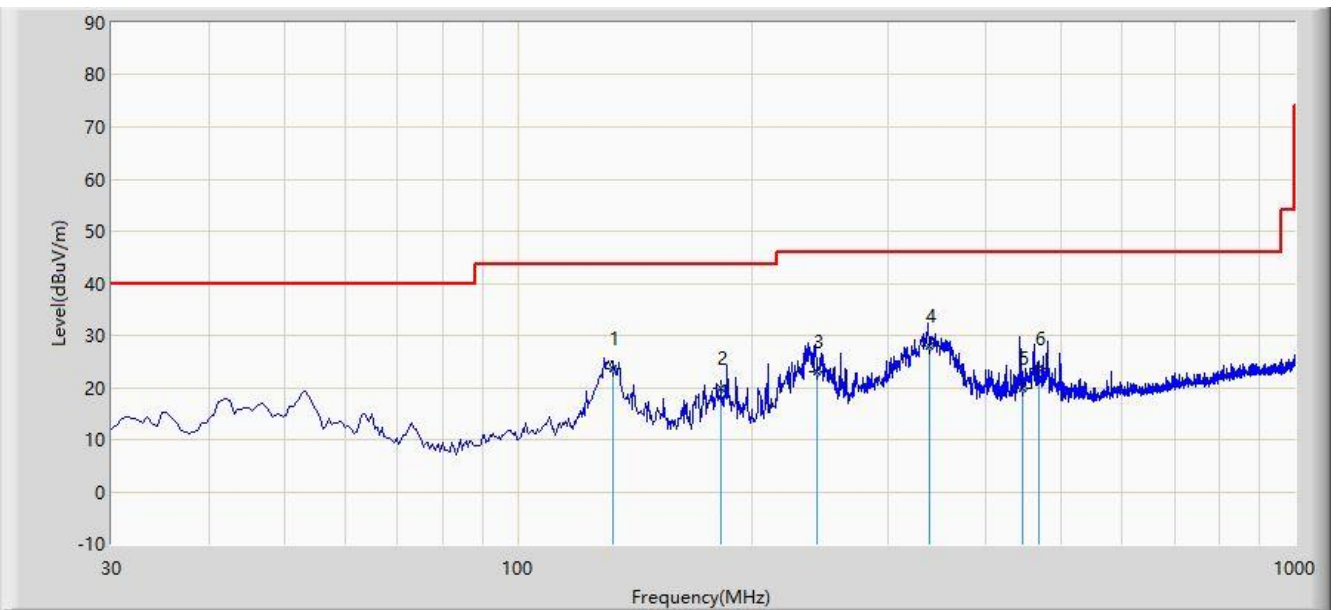
Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

**The worst case of Radiated Emission below 1GHz:**

Site: AC1	Time: 2020/04/14 - 16:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_VULB 9168 _30-2000MHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
<b>Worst Mode:</b> 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			132.820	23.713	10.116	-19.787	43.500	13.597	QP
2			182.775	19.823	6.346	-23.677	43.500	13.477	QP
3			242.915	23.001	9.342	-22.999	46.000	13.659	QP
4		*	338.945	27.870	11.170	-18.130	46.000	16.700	QP
5			446.130	19.837	0.657	-26.163	46.000	19.180	QP
6			468.925	23.529	3.928	-22.471	46.000	19.601	QP

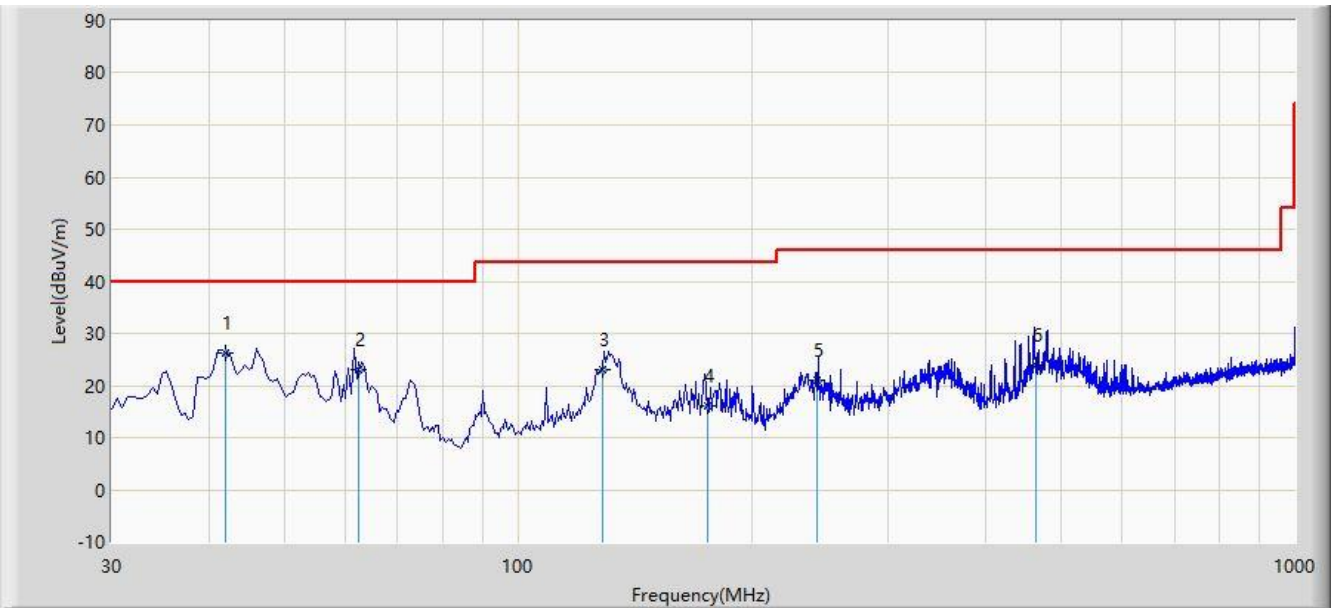
Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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.

Site: AC1	Time: 2020/04/14 - 16:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_VULB 9168 _30-2000MHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
<b>Worst Mode:</b> 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		*	42.125	26.197	11.308	-13.803	40.000	14.889	QP
2			62.495	23.149	9.172	-16.851	40.000	13.977	QP
3			128.455	23.097	9.954	-20.403	43.500	13.144	QP
4			175.500	16.104	2.139	-27.396	43.500	13.965	QP
5			242.430	21.050	7.401	-24.950	46.000	13.649	QP
6			465.045	23.808	4.279	-22.192	46.000	19.529	QP

Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + 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.

## 7.8. Radiated Restricted Band Edge Measurement

### 7.8.1. Test Limit

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
<sup>1</sup> 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	( <sup>2</sup> )
13.36 - 13.41	--	--	--

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.

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 Field Strength Measurements

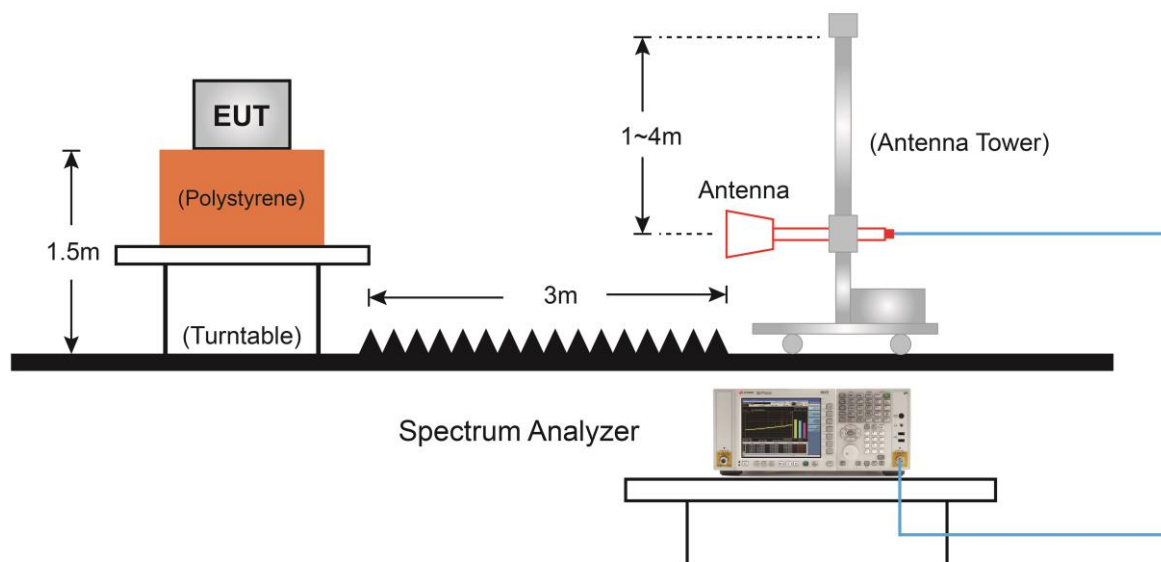
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize



### Average Field Strength Measurements

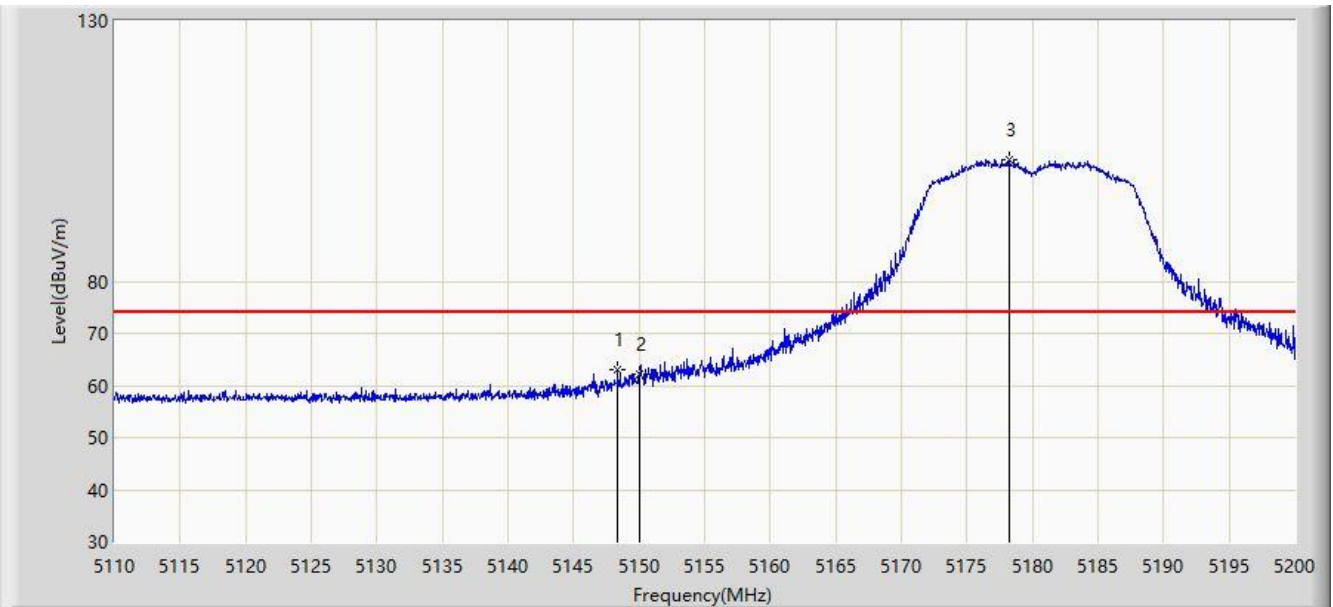
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW  $\geq 1/T$
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

#### 7.8.4. Test Setup



### 7.8.5. Test Result

Site: AC1	Time: 2020/04/17 - 21:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant A	

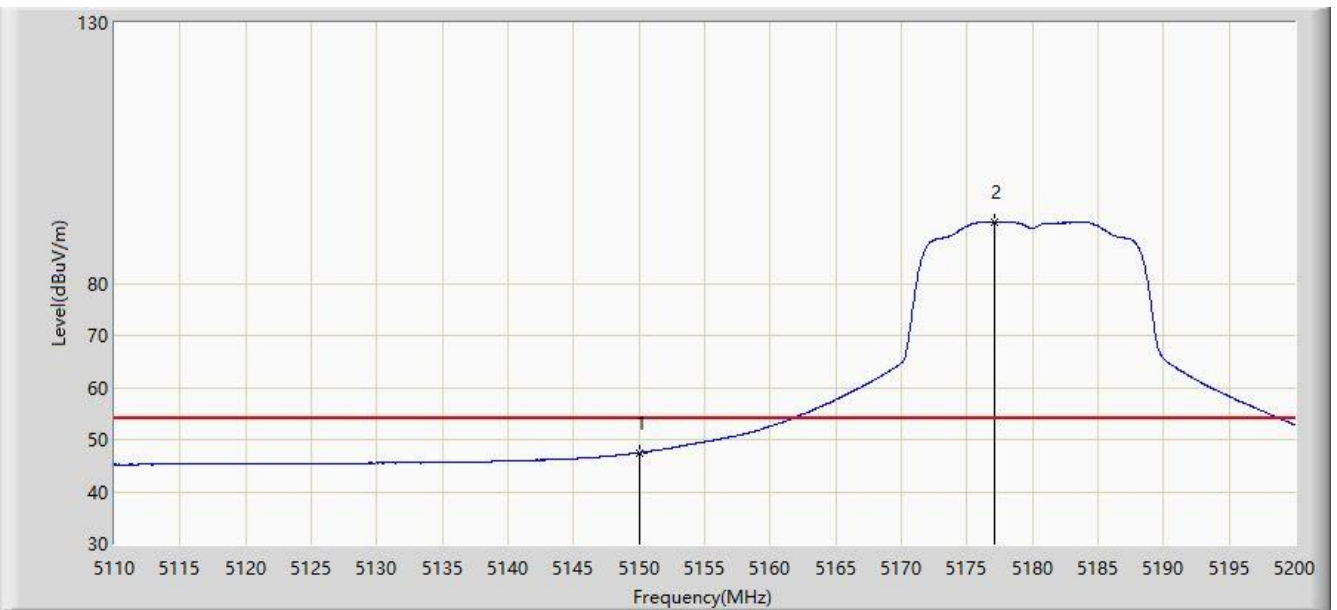


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.340	63.113	56.320	-10.887	74.000	6.793	PK
2			5150.000	62.211	55.412	-11.789	74.000	6.799	PK
3		*	5178.220	103.275	96.471	N/A	N/A	6.805	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:14
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant A	

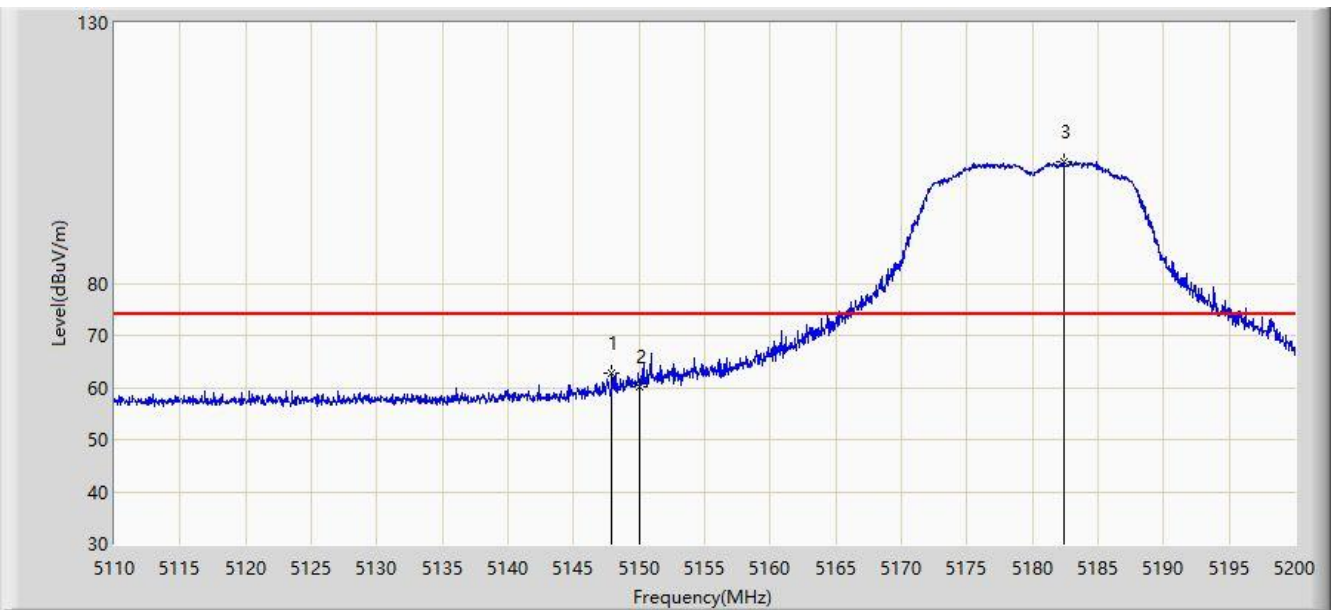


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.468	40.669	-6.532	54.000	6.799	AV
2		*	5177.050	91.658	84.850	N/A	N/A	6.808	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant A	

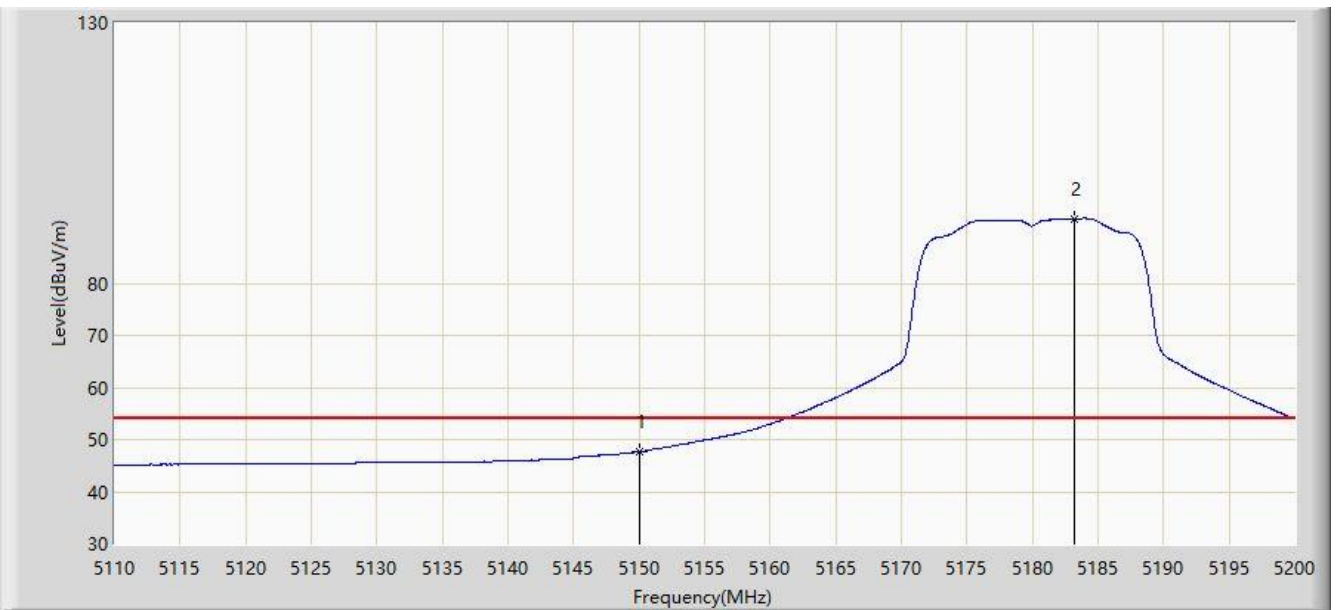


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5147.890	62.697	55.905	-11.303	74.000	6.791	PK
2			5150.000	60.206	53.407	-13.794	74.000	6.799	PK
3		*	5182.360	103.441	96.657	N/A	N/A	6.784	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant A	

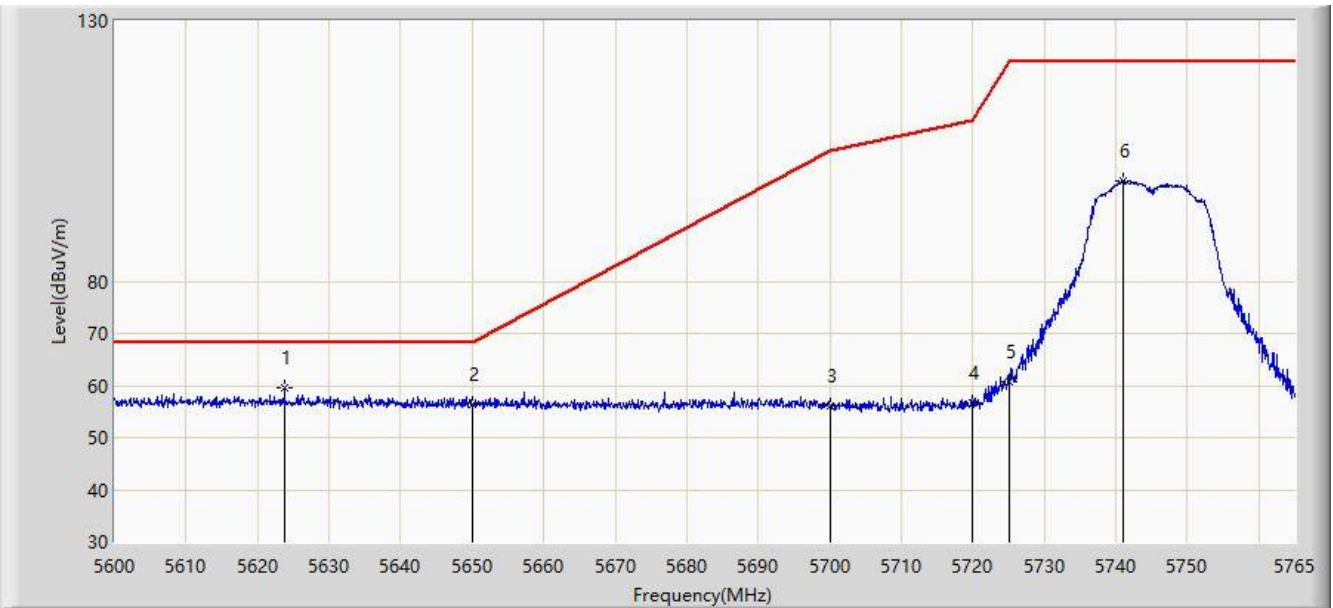


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.677	40.878	-6.323	54.000	6.799	AV
2		*	5183.170	92.360	85.589	N/A	N/A	6.771	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:17
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant A	

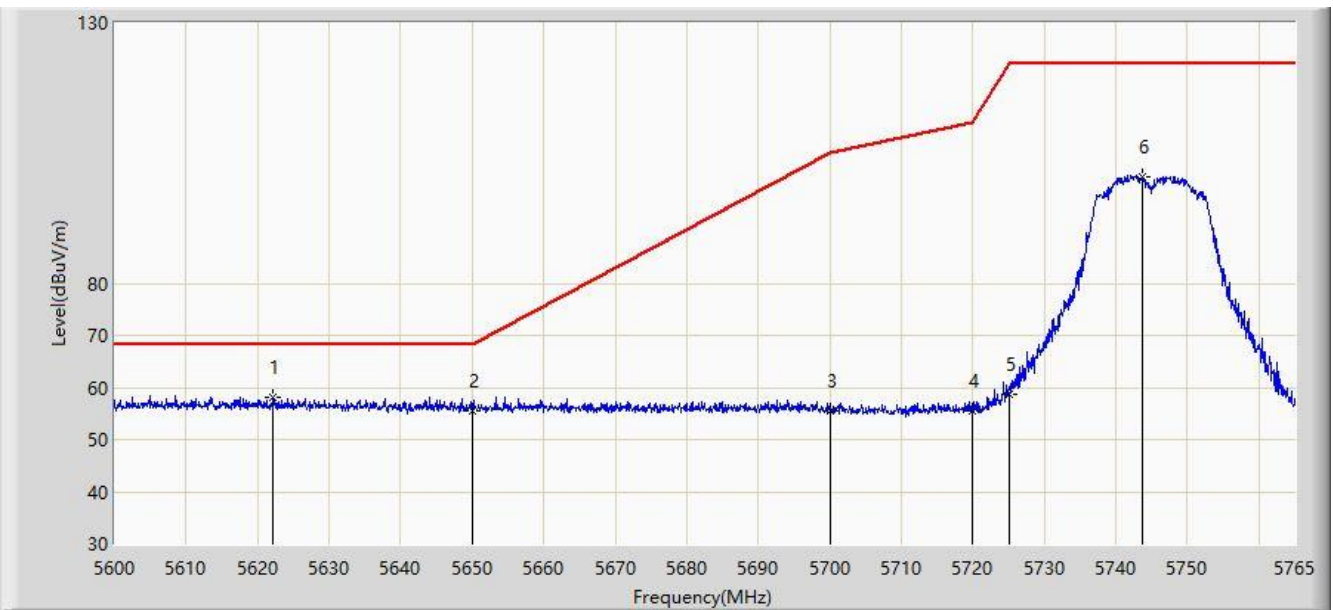


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5623.760	59.548	52.516	-8.652	68.200	7.032	PK
2			5650.000	56.421	49.281	-11.779	68.200	7.140	PK
3			5700.000	55.968	48.753	-49.232	105.200	7.215	PK
4			5720.000	56.784	49.511	-54.016	110.800	7.273	PK
5			5725.000	60.699	53.367	-61.501	122.200	7.332	PK
6			5741.075	99.142	91.708	N/A	N/A	7.435	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: 2020/04/17 - 21:18
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5745MHz Ant A	

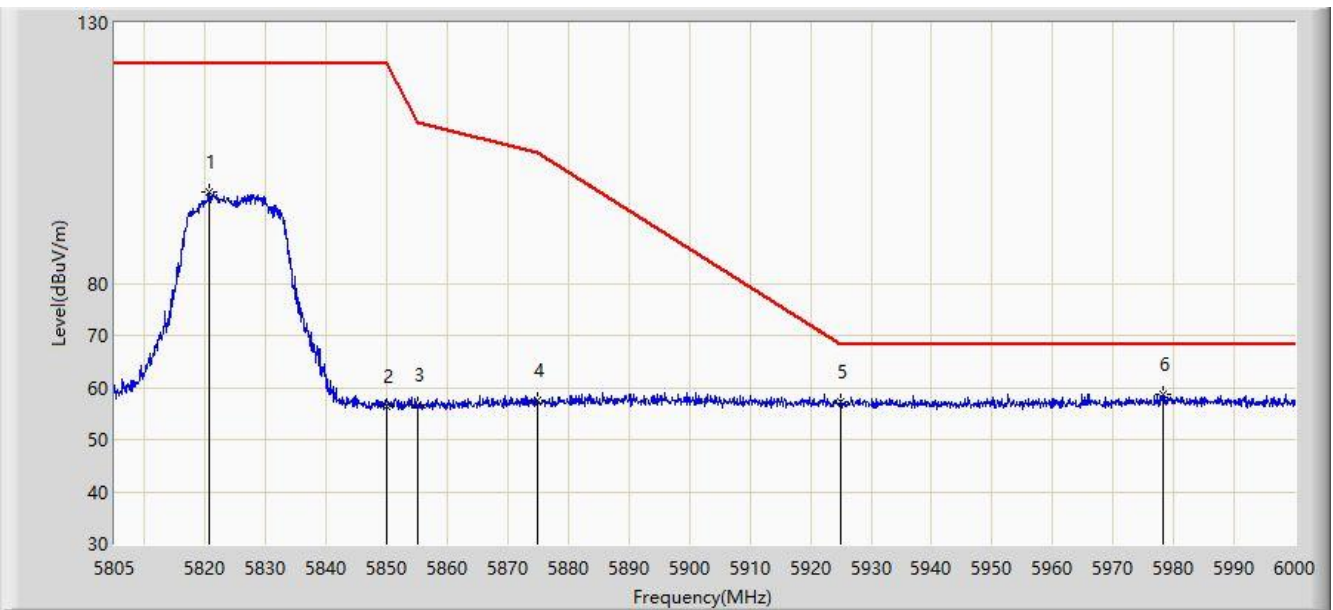


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5622.192	58.243	51.207	-9.957	68.200	7.036	PK
2			5650.000	55.606	48.466	-12.594	68.200	7.140	PK
3			5700.000	55.590	48.375	-49.610	105.200	7.215	PK
4			5720.000	55.416	48.143	-55.384	110.800	7.273	PK
5			5725.000	58.630	51.298	-63.570	122.200	7.332	PK
6			5743.632	100.375	92.930	N/A	N/A	7.445	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:21
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant A	



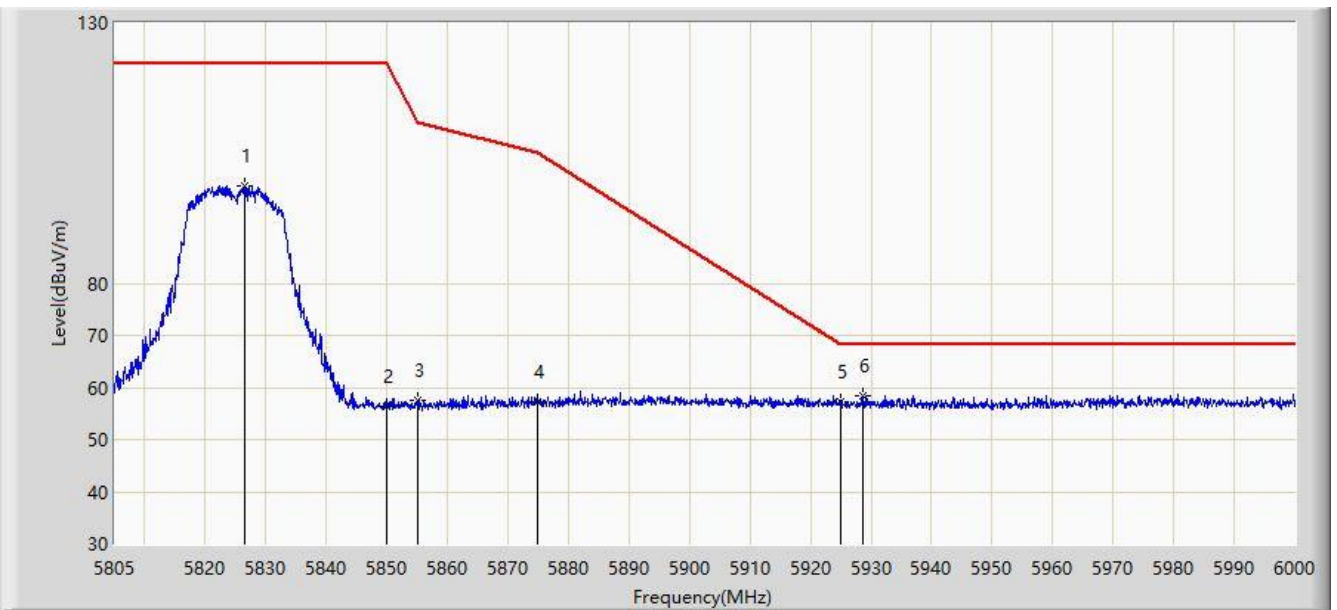
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5820.697	97.393	89.761	N/A	N/A	7.632	PK
2			5850.000	56.294	48.602	-65.906	122.200	7.692	PK
3			5855.000	56.655	49.011	-54.145	110.800	7.644	PK
4			5875.000	57.470	49.868	-47.730	105.200	7.602	PK
5			5925.000	57.269	49.443	-10.931	68.200	7.826	PK
6		*	5978.355	58.740	51.037	-9.460	68.200	7.704	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



Site: AC1	Time: 2020/04/17 - 21:22
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5825MHz Ant A	

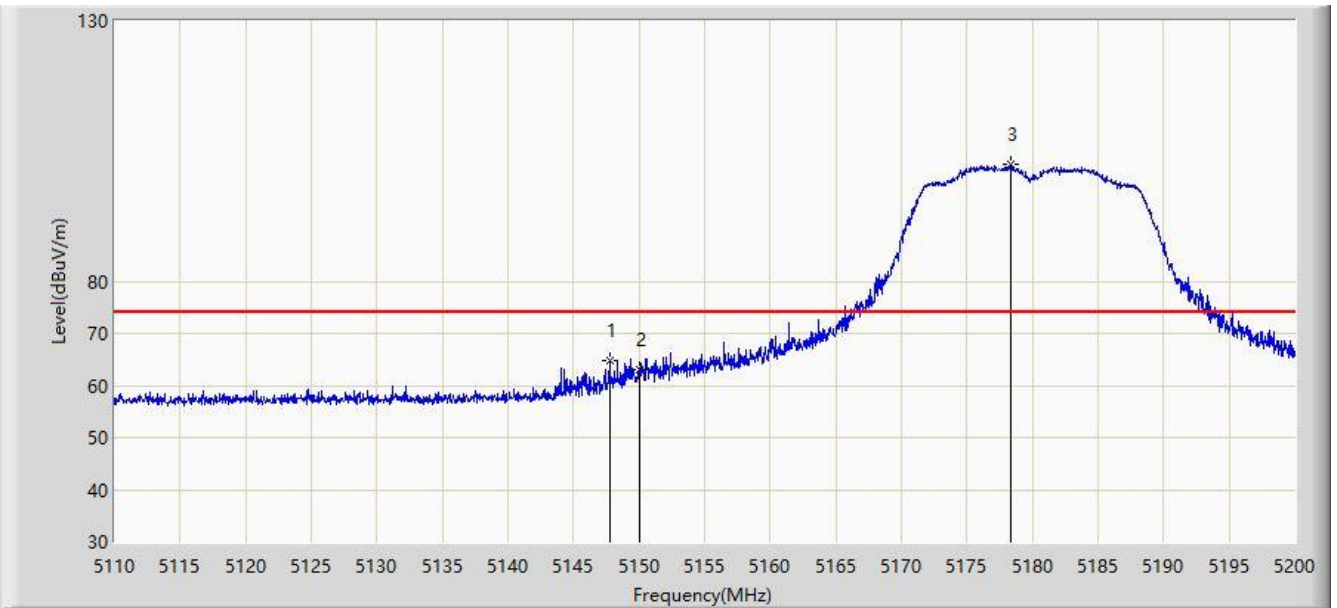


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5826.547	98.579	90.839	N/A	N/A	7.740	PK
2			5850.000	56.498	48.806	-65.702	122.200	7.692	PK
3			5855.000	57.454	49.810	-53.346	110.800	7.644	PK
4			5875.000	57.360	49.758	-47.840	105.200	7.602	PK
5			5925.000	57.382	49.556	-10.818	68.200	7.826	PK
6		*	5928.533	58.539	50.730	-9.661	68.200	7.809	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant A	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5147.755	64.792	57.999	-9.208	74.000	6.793	PK
2			5150.000	63.161	56.362	-10.839	74.000	6.799	PK
3		*	5178.310	102.338	95.535	N/A	N/A	6.803	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant A	

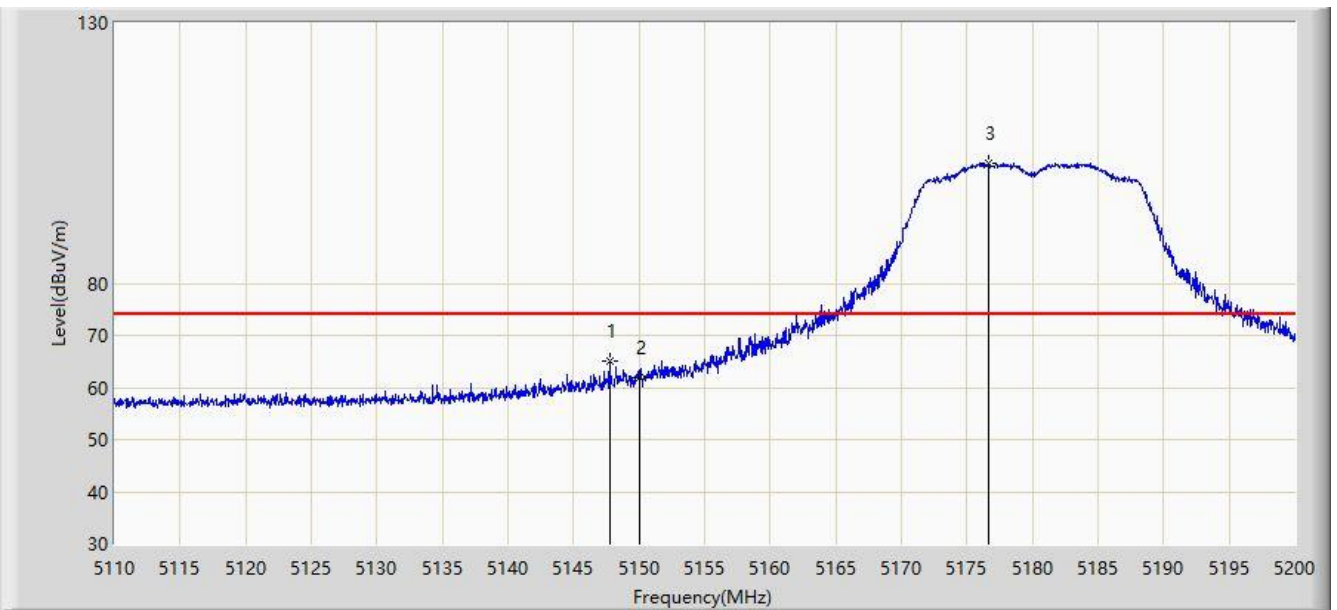


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.979	41.180	-6.021	54.000	6.799	AV
2		*	5177.005	90.762	83.954	N/A	N/A	6.808	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant A	

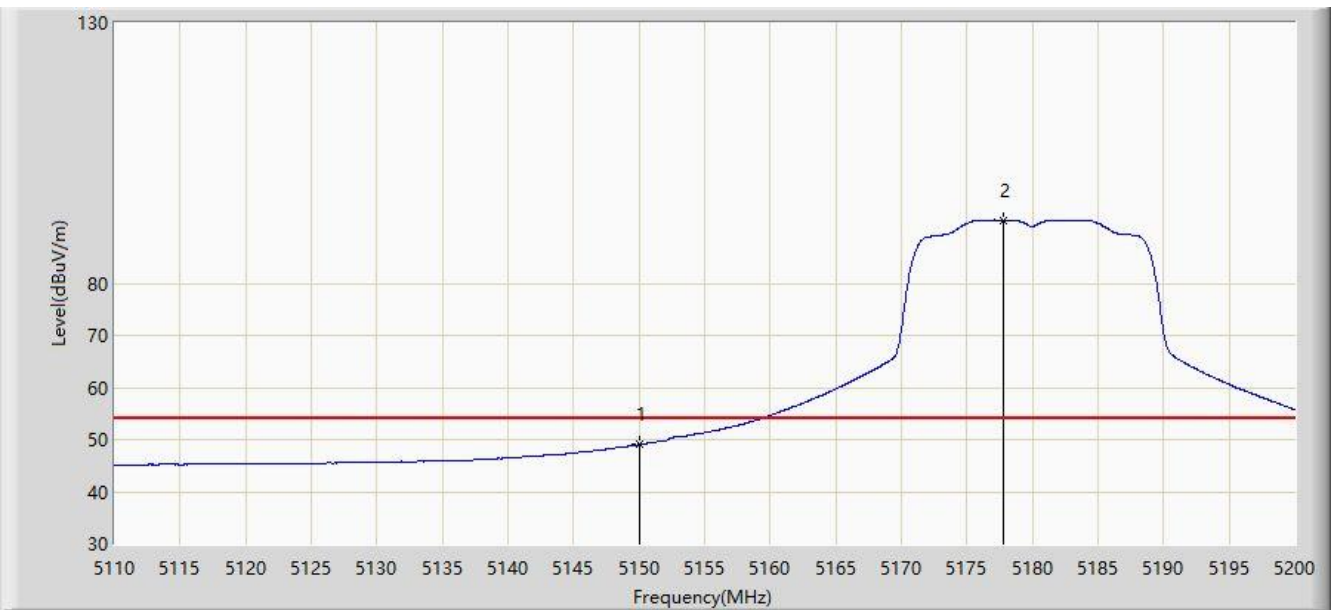


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5147.755	64.982	58.189	-9.018	74.000	6.793	PK
2			5150.000	62.007	55.208	-11.993	74.000	6.799	PK
3		*	5176.690	103.040	96.230	N/A	N/A	6.809	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:25
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5180MHz Ant A	

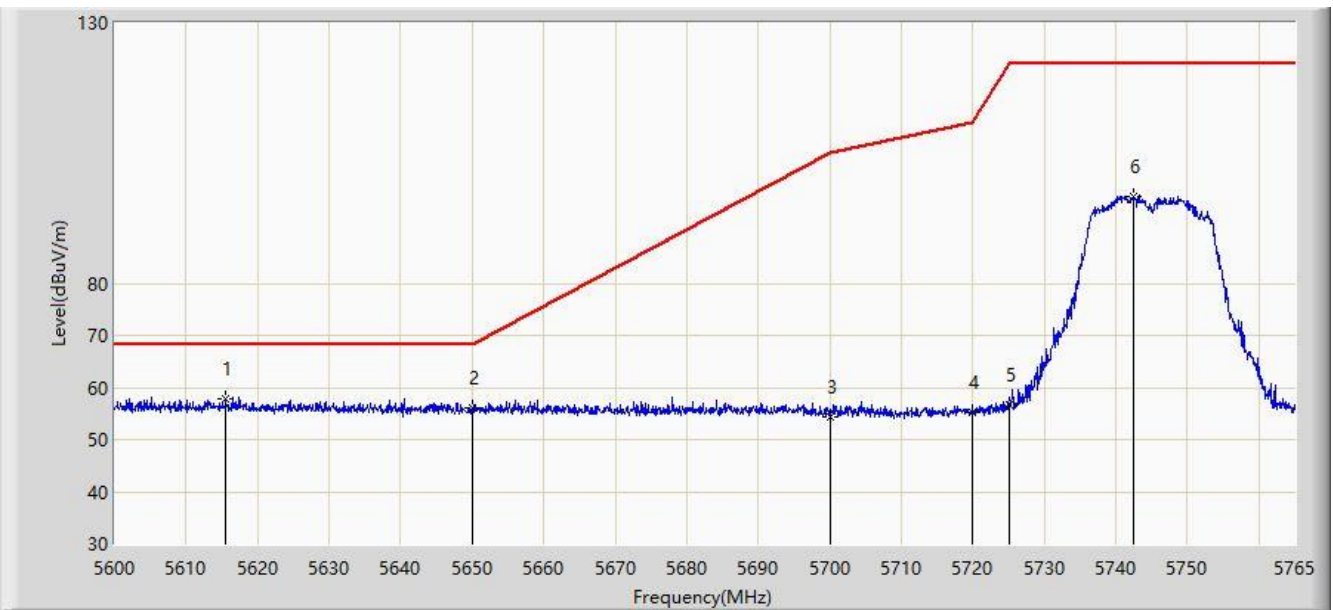


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	49.032	42.233	-4.968	54.000	6.799	AV
2		*	5177.815	92.111	85.306	N/A	N/A	6.806	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:26
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant A	

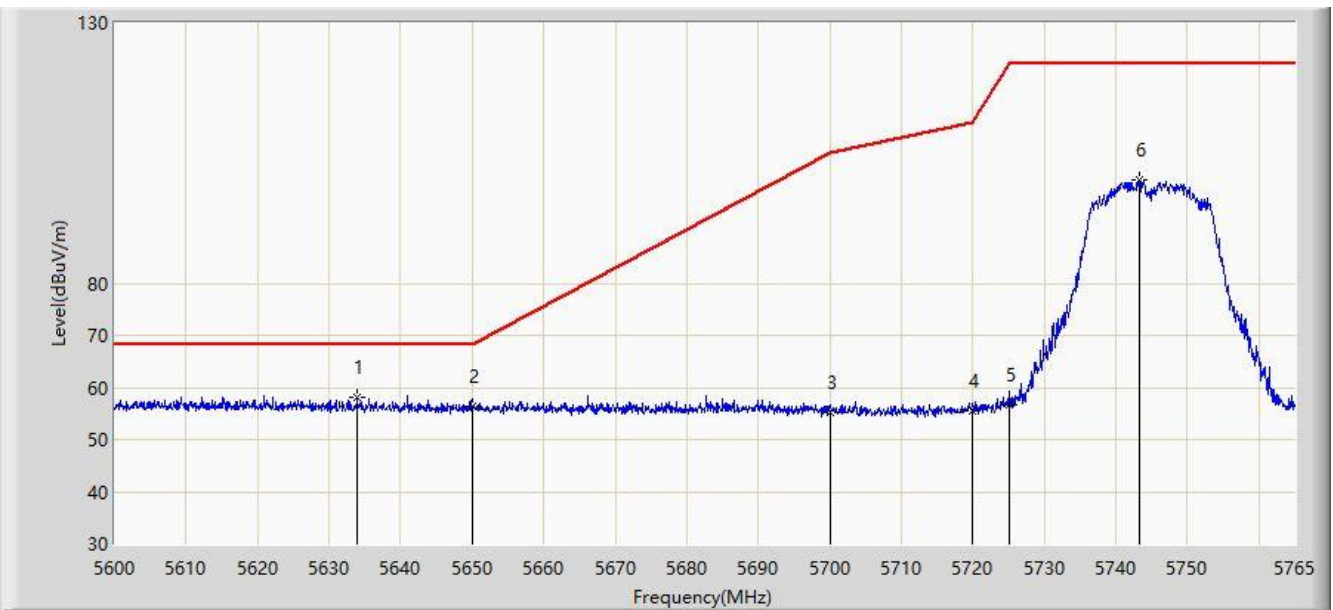


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5615.510	57.884	50.832	-10.316	68.200	7.051	PK
2			5650.000	56.029	48.889	-12.171	68.200	7.140	PK
3			5700.000	54.362	47.147	-50.838	105.200	7.215	PK
4			5720.000	55.165	47.892	-55.635	110.800	7.273	PK
5			5725.000	56.537	49.205	-65.663	122.200	7.332	PK
6			5742.560	96.799	89.356	N/A	N/A	7.442	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:26
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5745MHz Ant A	

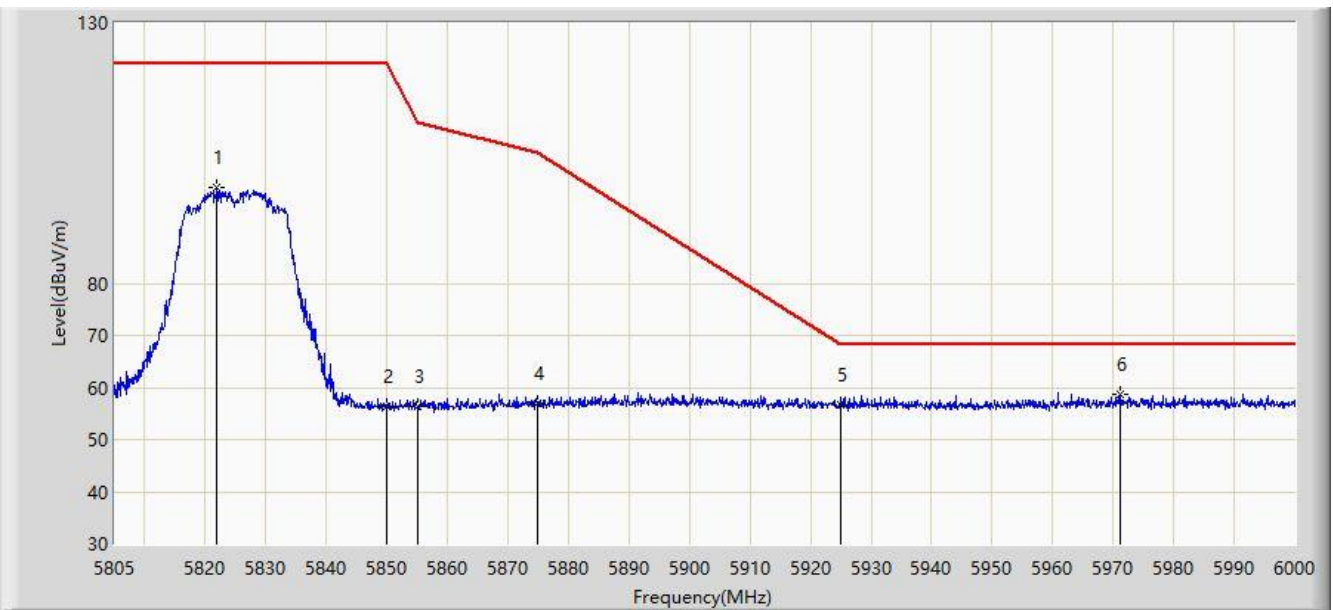


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5633.908	58.199	51.217	-10.001	68.200	6.982	PK
2			5650.000	56.381	49.241	-11.819	68.200	7.140	PK
3			5700.000	55.278	48.063	-49.922	105.200	7.215	PK
4			5720.000	55.543	48.270	-55.257	110.800	7.273	PK
5			5725.000	56.621	49.289	-65.579	122.200	7.332	PK
6			5743.220	99.733	92.288	N/A	N/A	7.445	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:28
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant A	



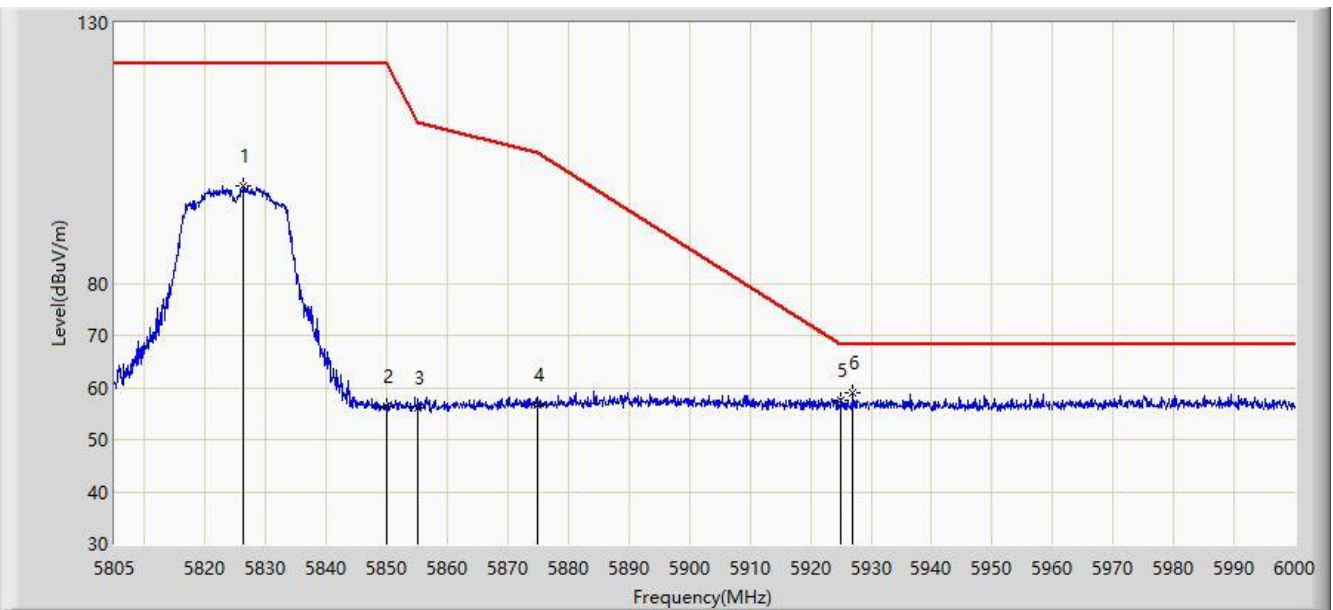
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5821.868	98.296	90.642	N/A	N/A	7.654	PK
2			5850.000	56.234	48.542	-65.966	122.200	7.692	PK
3			5855.000	56.492	48.848	-54.308	110.800	7.644	PK
4			5875.000	57.004	49.402	-48.196	105.200	7.602	PK
5			5925.000	56.673	48.847	-11.527	68.200	7.826	PK
6		*	5971.237	58.820	51.164	-9.380	68.200	7.656	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: 2020/04/17 - 21:28
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5825MHz Ant A	

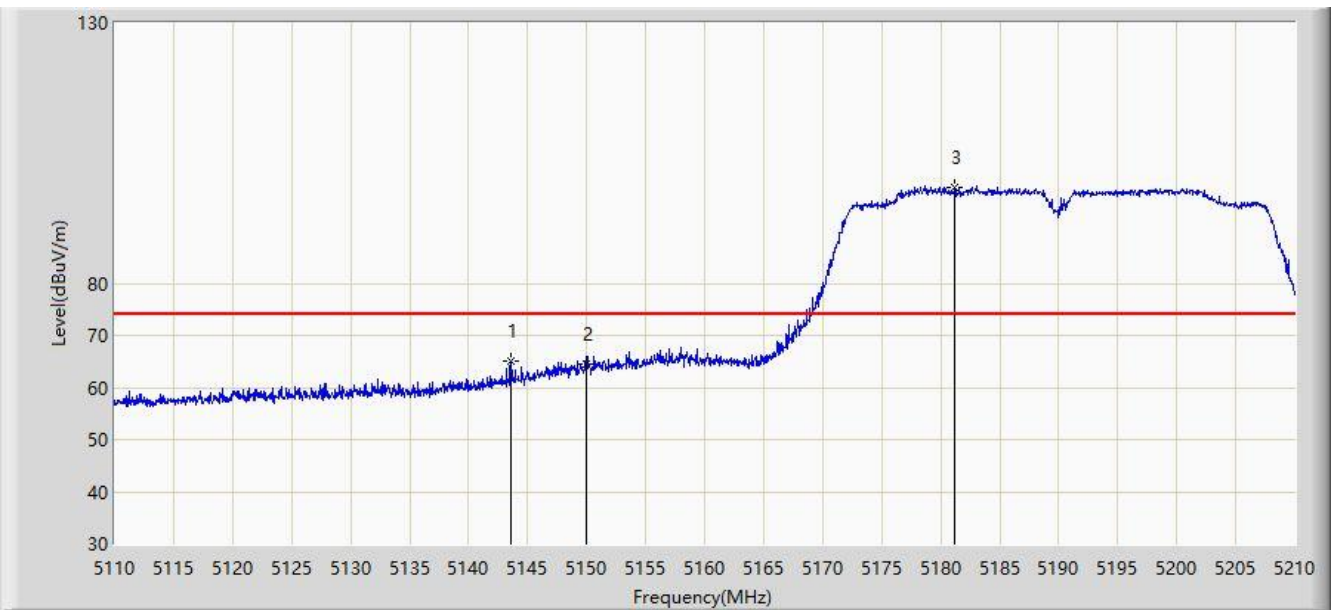


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5826.353	98.558	90.821	N/A	N/A	7.737	PK
2			5850.000	56.260	48.568	-65.940	122.200	7.692	PK
3			5855.000	56.006	48.362	-54.794	110.800	7.644	PK
4			5875.000	56.791	49.189	-48.409	105.200	7.602	PK
5			5925.000	57.661	49.835	-10.539	68.200	7.826	PK
6		*	5926.973	58.994	51.178	-9.206	68.200	7.817	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: 2020/04/17 - 21:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant A	

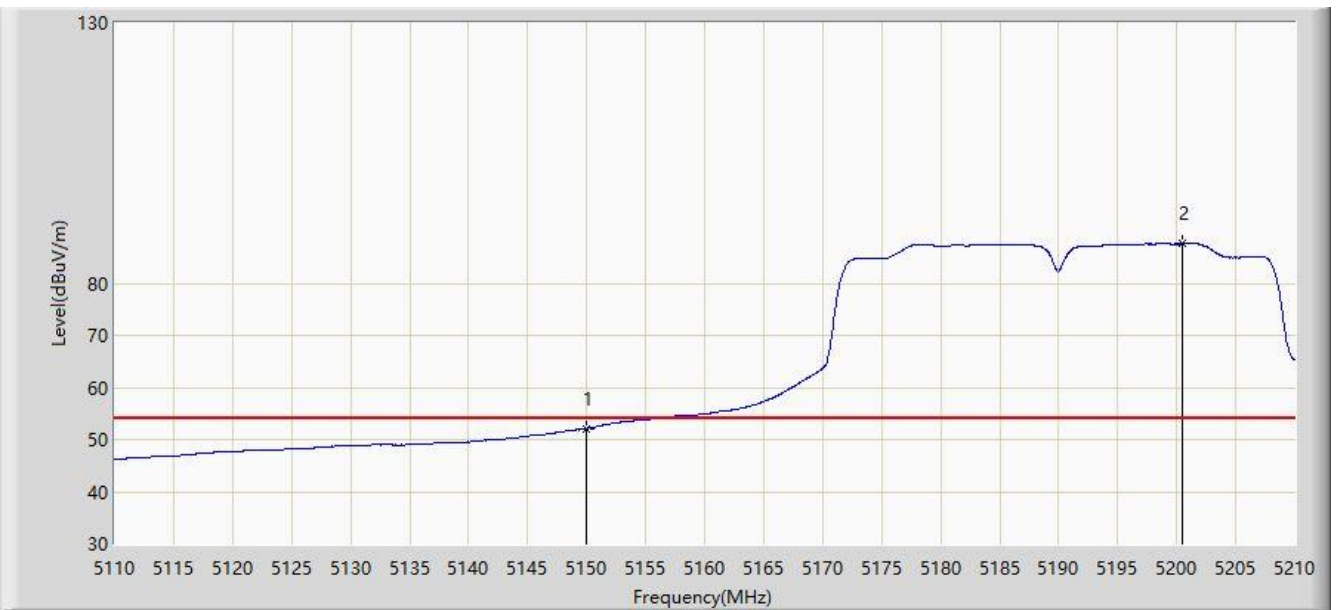


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5143.600	65.213	58.404	-8.787	74.000	6.809	PK
2			5150.000	64.355	57.556	-9.645	74.000	6.799	PK
3		*	5181.200	98.485	91.693	N/A	N/A	6.793	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant A	

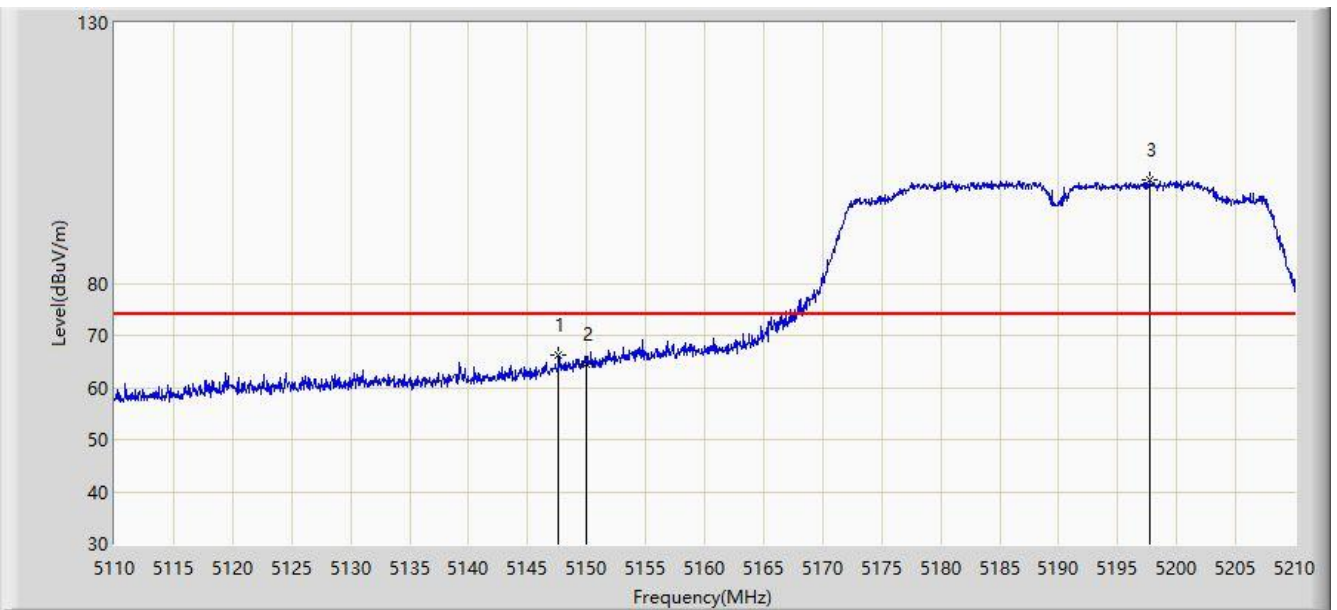


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.106	45.307	-1.894	54.000	6.799	AV
2		*	5200.500	87.613	81.092	N/A	N/A	6.520	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant A	

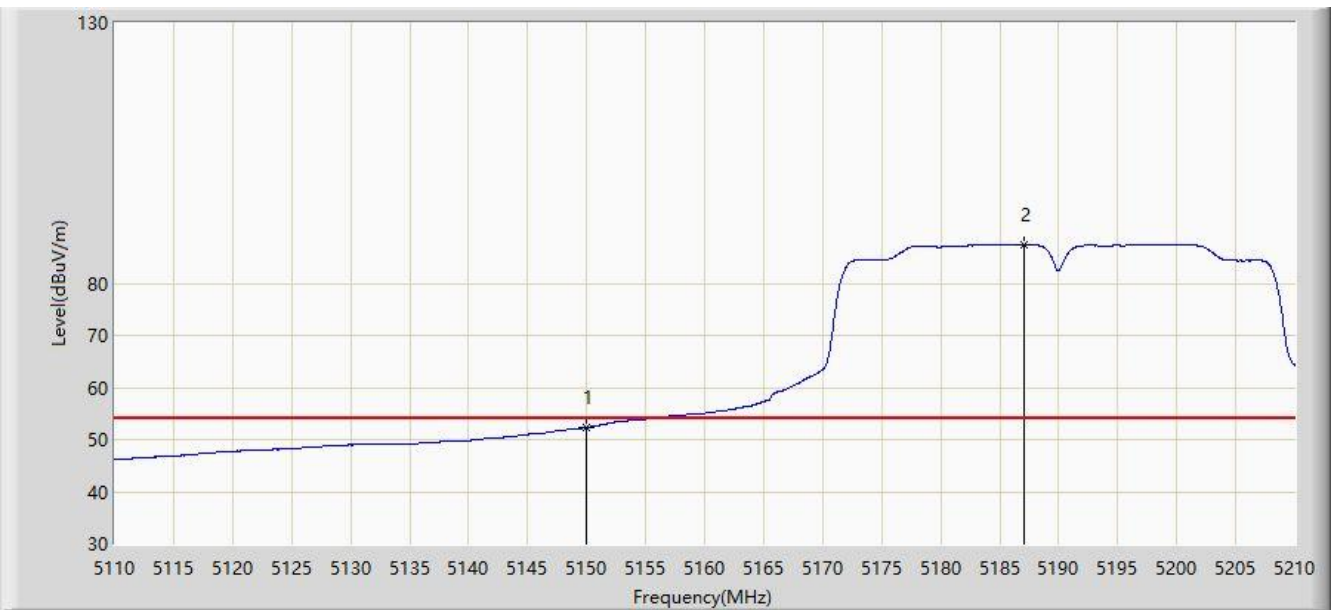


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5147.650	66.241	59.448	-7.759	74.000	6.793	PK
2			5150.000	64.577	57.778	-9.423	74.000	6.799	PK
3		*	5197.750	99.909	93.363	N/A	N/A	6.546	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5190MHz Ant A	

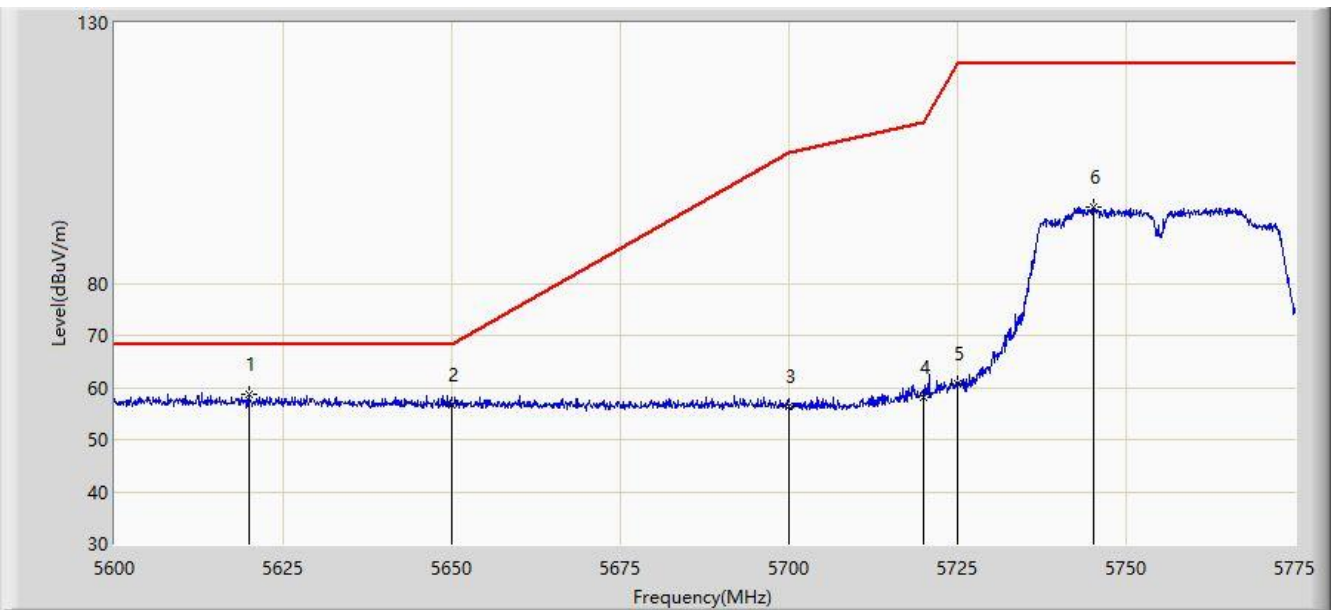


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.305	45.506	-1.695	54.000	6.799	AV
2		*	5187.100	87.484	80.773	N/A	N/A	6.710	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:32
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant A	

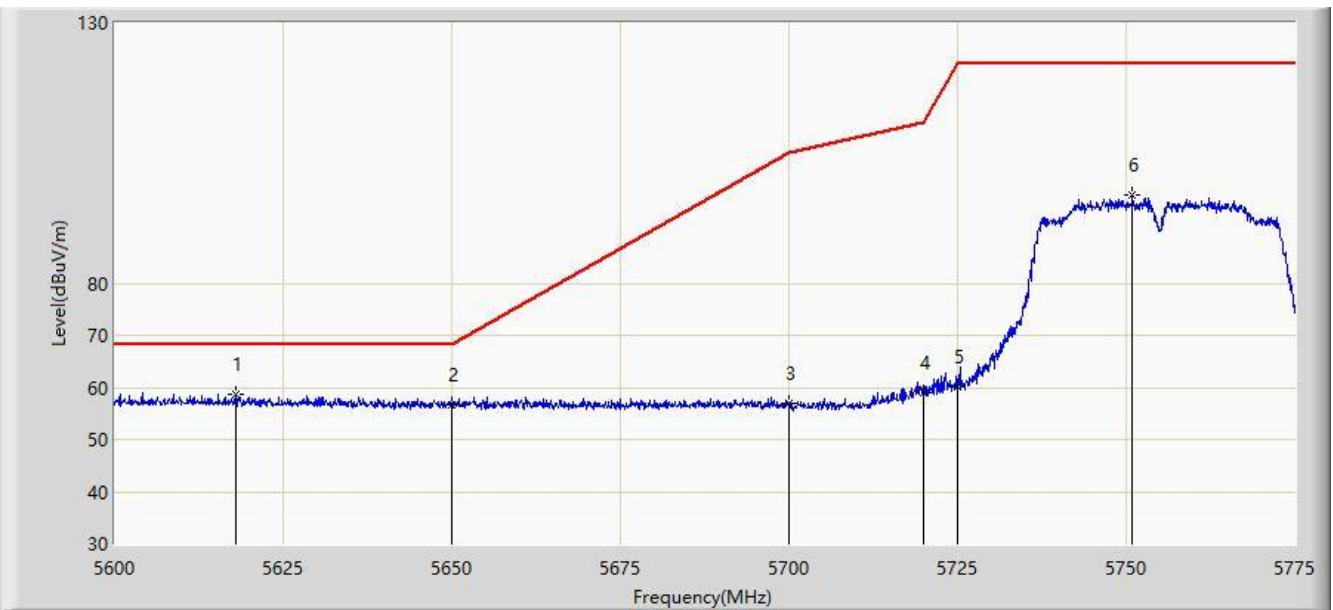


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5619.862	58.584	51.543	-9.616	68.200	7.041	PK
2			5650.000	56.727	49.587	-11.473	68.200	7.140	PK
3			5700.000	56.252	49.037	-48.948	105.200	7.215	PK
4			5720.000	58.091	50.818	-52.709	110.800	7.273	PK
5			5725.000	60.647	53.315	-61.553	122.200	7.332	PK
6			5745.075	94.644	87.201	N/A	N/A	7.443	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: 2020/04/17 - 21:37
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant A	

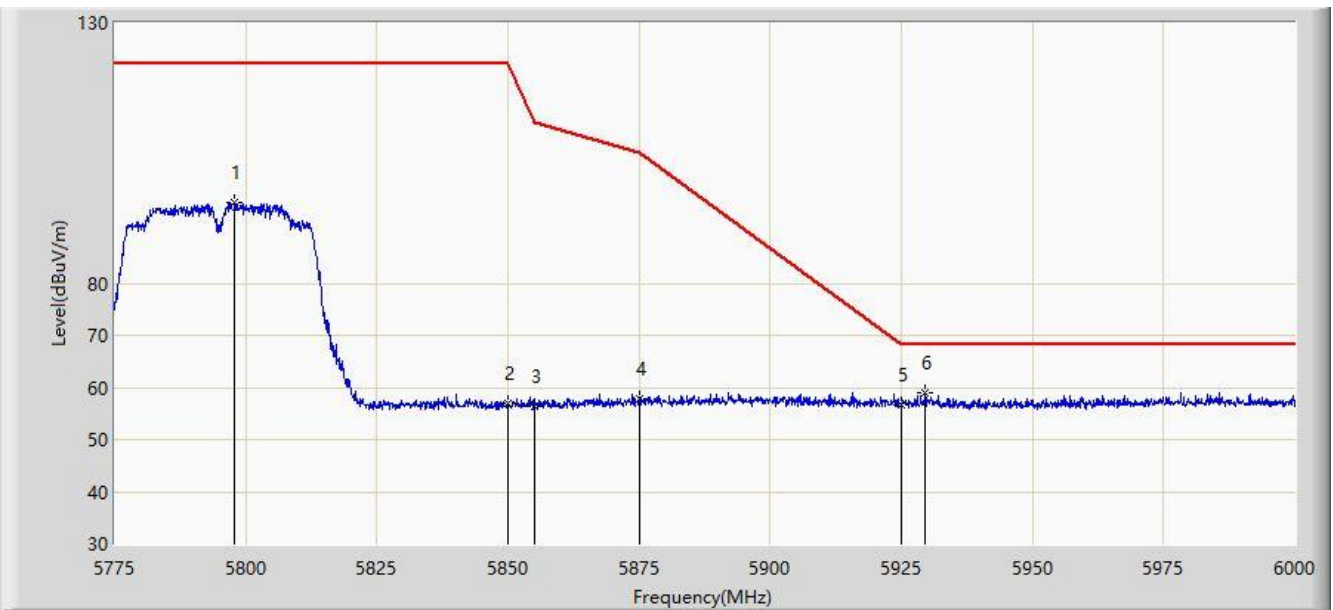


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5617.937	58.563	51.517	-9.637	68.200	7.046	PK
2			5650.000	56.801	49.661	-11.399	68.200	7.140	PK
3			5700.000	56.844	49.629	-48.356	105.200	7.215	PK
4			5720.000	59.022	51.749	-51.778	110.800	7.273	PK
5			5725.000	60.270	52.938	-61.930	122.200	7.332	PK
6			5750.937	96.938	89.501	N/A	N/A	7.436	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: 2020/04/17 - 21:41
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant A	



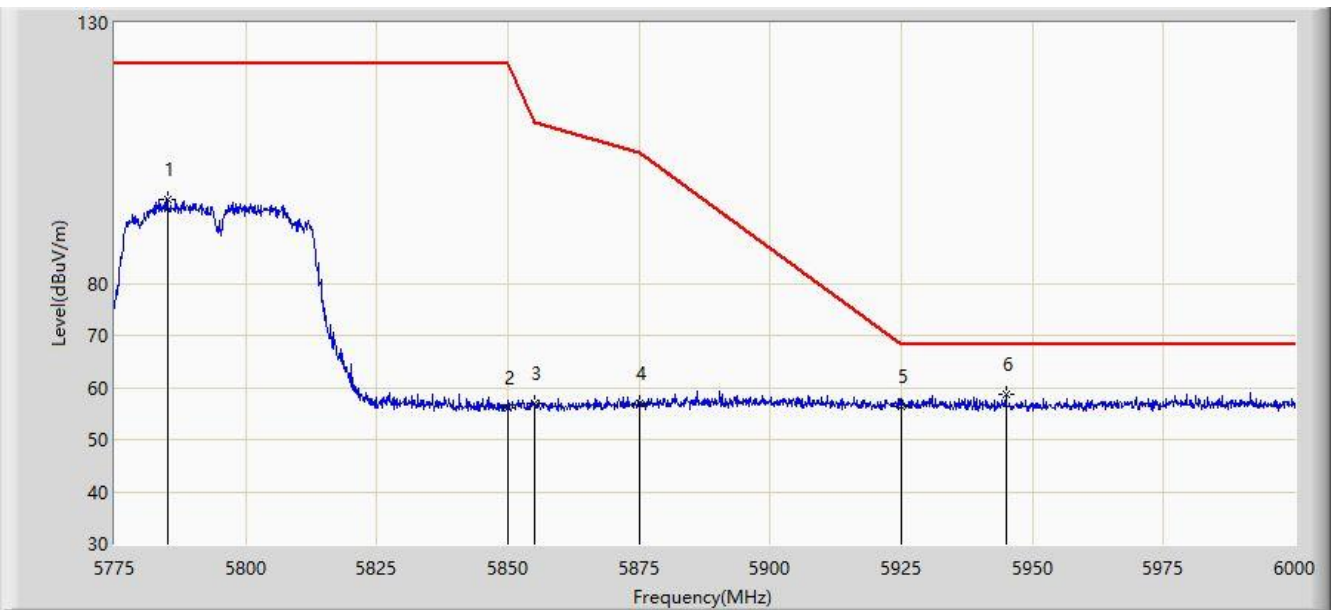
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5797.837	95.578	88.098	N/A	N/A	7.480	PK
2			5850.000	56.920	49.228	-65.280	122.200	7.692	PK
3			5855.000	56.505	48.861	-54.295	110.800	7.644	PK
4			5875.000	57.867	50.265	-47.333	105.200	7.602	PK
5			5925.000	56.586	48.760	-11.614	68.200	7.826	PK
6		*	5929.575	59.017	51.213	-9.183	68.200	7.804	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



Site: AC1	Time: 2020/04/17 - 21:44
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 5755MHz Ant A	

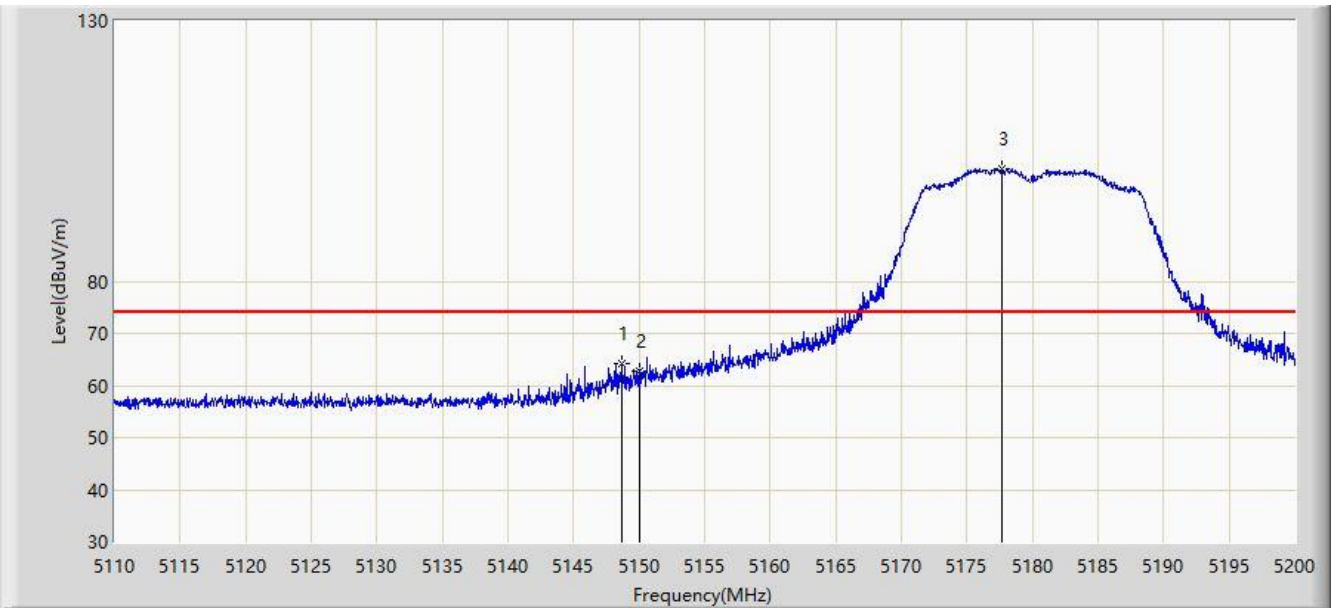


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5785.013	96.044	88.519	N/A	N/A	7.526	PK
2			5850.000	56.184	48.492	-66.016	122.200	7.692	PK
3			5855.000	56.846	49.202	-53.954	110.800	7.644	PK
4			5875.000	56.901	49.299	-48.299	105.200	7.602	PK
5			5925.000	56.270	48.444	-11.930	68.200	7.826	PK
6		*	5944.987	58.575	50.879	-9.625	68.200	7.697	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: 2020/04/17 - 21:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant A	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.655	64.123	57.329	-9.877	74.000	6.795	PK
2			5150.000	62.792	55.993	-11.208	74.000	6.799	PK
3		*	5177.725	101.679	94.873	N/A	N/A	6.806	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant A	

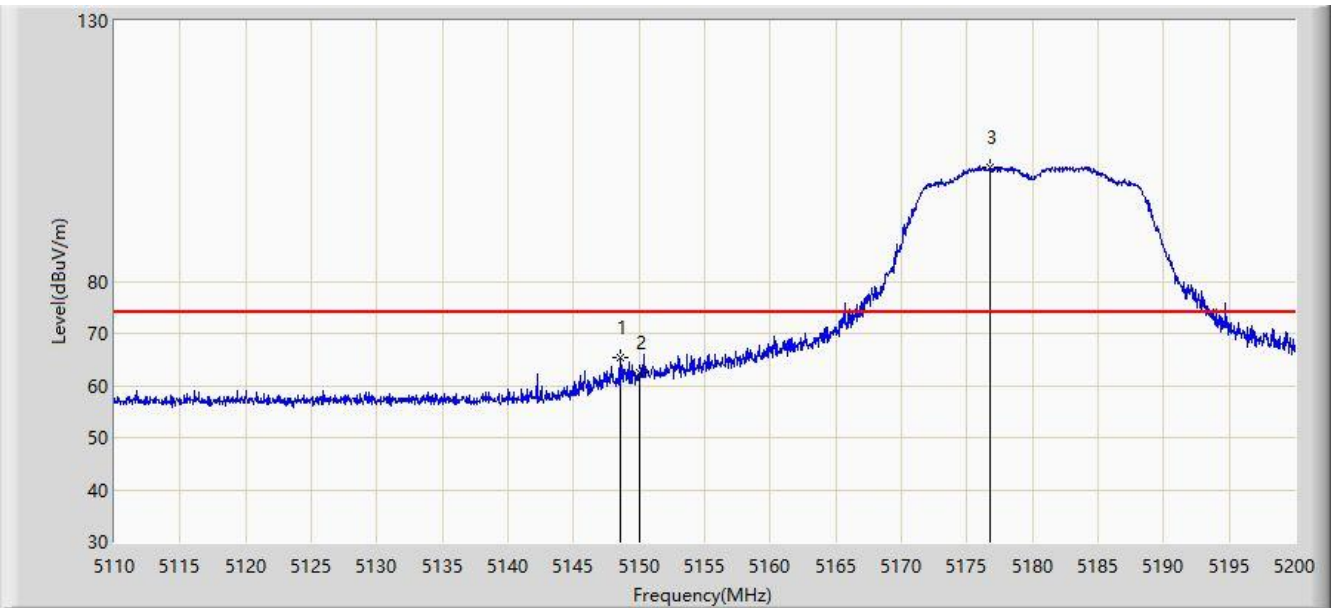


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.246	40.447	-6.754	54.000	6.799	AV
2		*	5176.735	90.447	83.638	N/A	N/A	6.810	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant A	

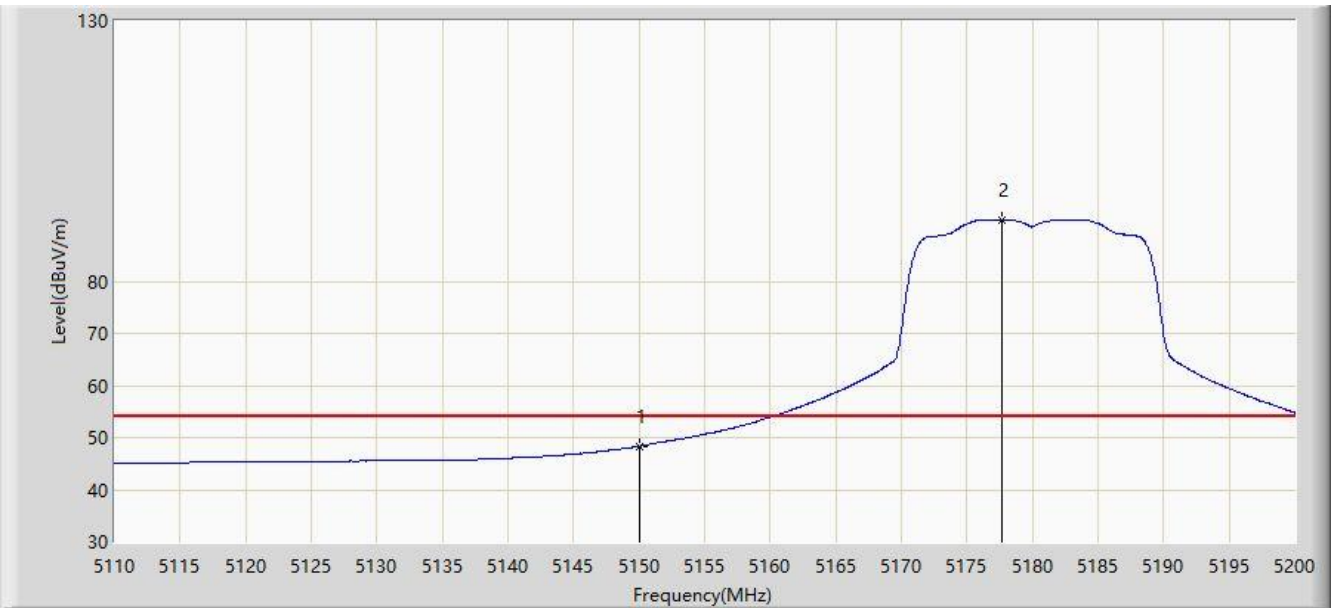


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5148.520	65.338	58.544	-8.662	74.000	6.793	PK
2			5150.000	62.405	55.606	-11.595	74.000	6.799	PK
3		*	5176.735	101.996	95.187	N/A	N/A	6.810	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant A	

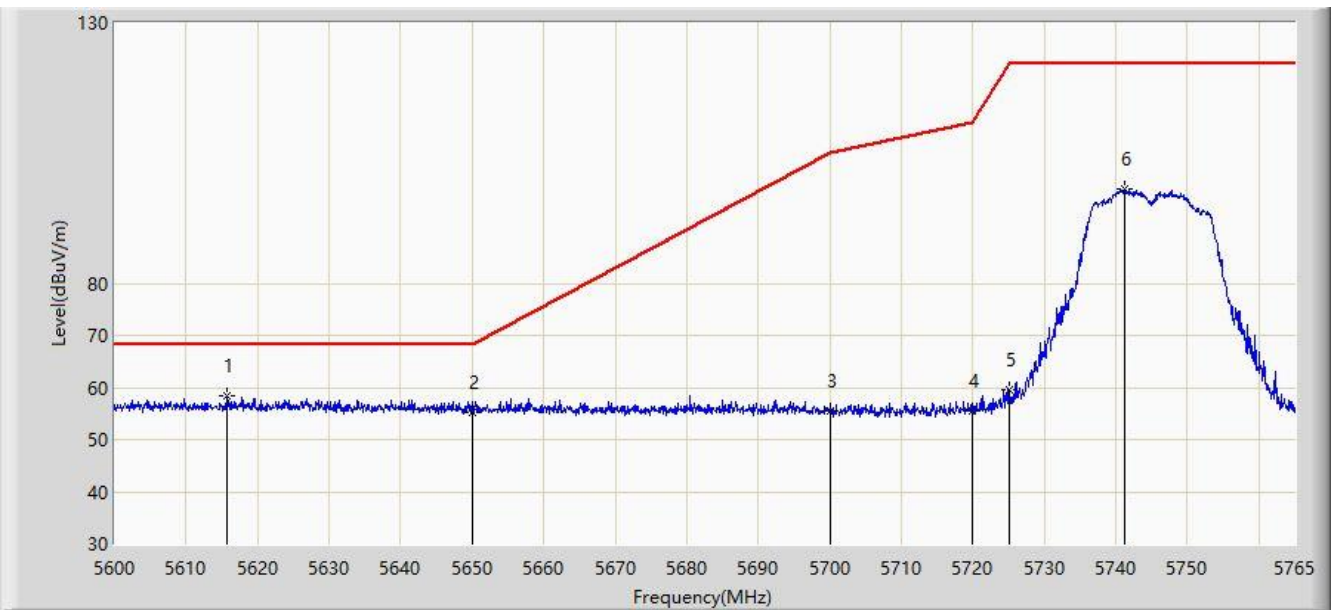


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	48.359	41.560	-5.641	54.000	6.799	AV
2		*	5177.680	91.684	84.878	N/A	N/A	6.806	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:46
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant A	

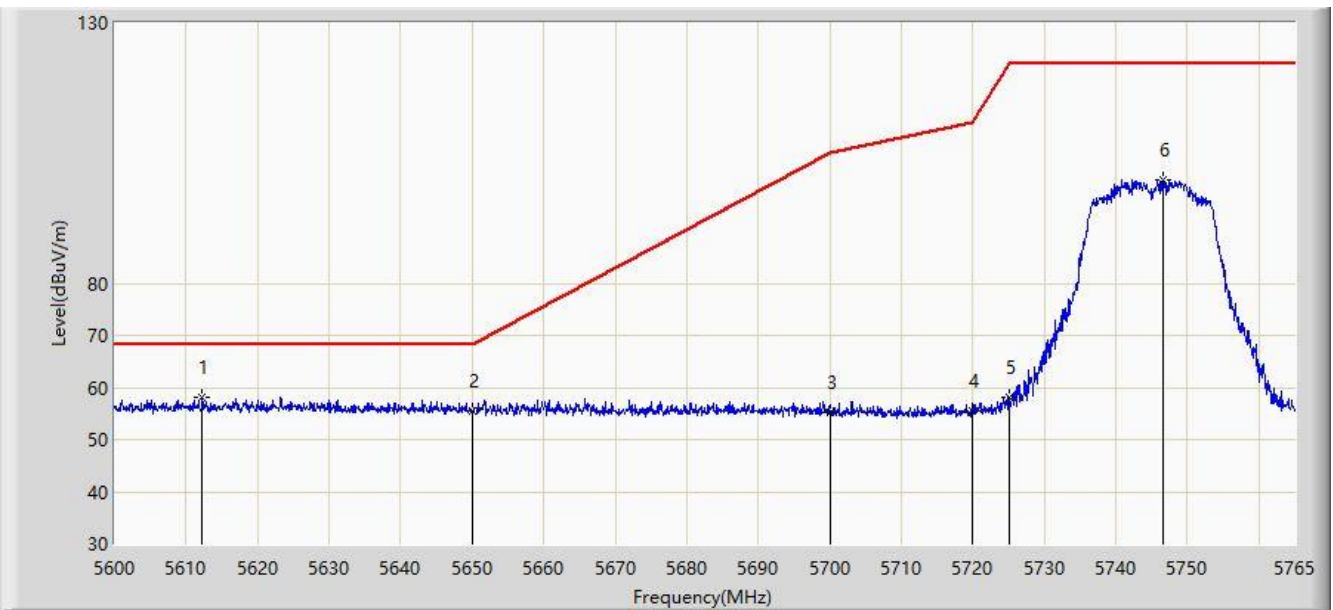


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5615.757	58.398	51.347	-9.802	68.200	7.051	PK
2			5650.000	55.334	48.194	-12.866	68.200	7.140	PK
3			5700.000	55.407	48.192	-49.793	105.200	7.215	PK
4			5720.000	55.602	48.329	-55.198	110.800	7.273	PK
5			5725.000	59.445	52.113	-62.755	122.200	7.332	PK
6			5741.240	98.018	90.583	N/A	N/A	7.435	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:47
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5745MHz Ant A	

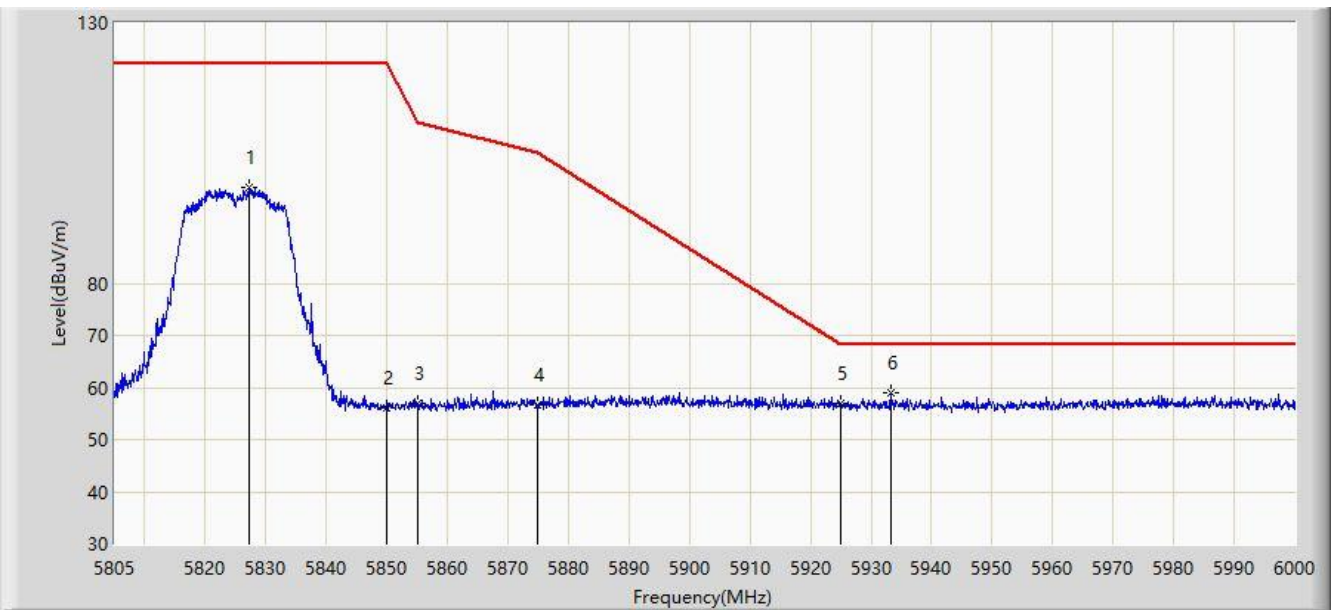


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5612.292	58.215	51.155	-9.985	68.200	7.059	PK
2			5650.000	55.525	48.385	-12.675	68.200	7.140	PK
3			5700.000	55.352	48.137	-49.848	105.200	7.215	PK
4			5720.000	55.407	48.134	-55.393	110.800	7.273	PK
5			5725.000	58.164	50.832	-64.036	122.200	7.332	PK
6			5746.520	99.776	92.334	N/A	N/A	7.442	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:48
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant A	



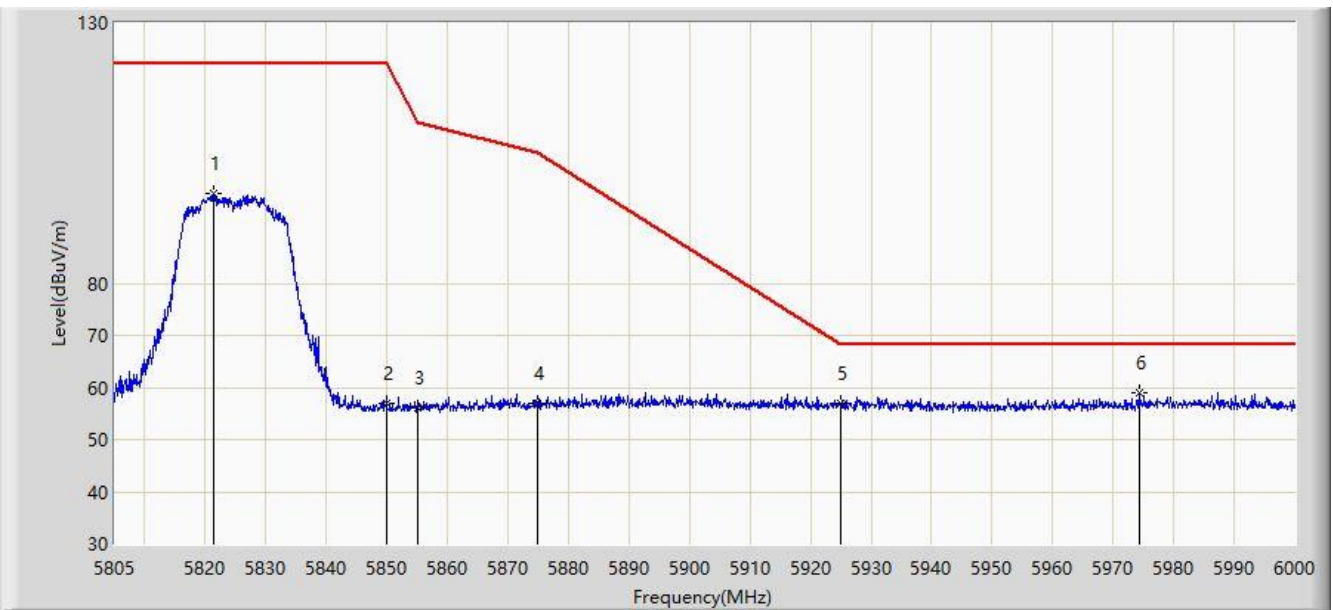
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5827.328	98.297	90.542	N/A	N/A	7.754	PK
2			5850.000	56.168	48.476	-66.032	122.200	7.692	PK
3			5855.000	56.886	49.242	-53.914	110.800	7.644	PK
4			5875.000	56.702	49.100	-48.498	105.200	7.602	PK
5			5925.000	56.840	49.014	-11.360	68.200	7.826	PK
6		*	5933.212	58.963	51.184	-9.237	68.200	7.779	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: 2020/04/17 - 21:49
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5825MHz Ant A	

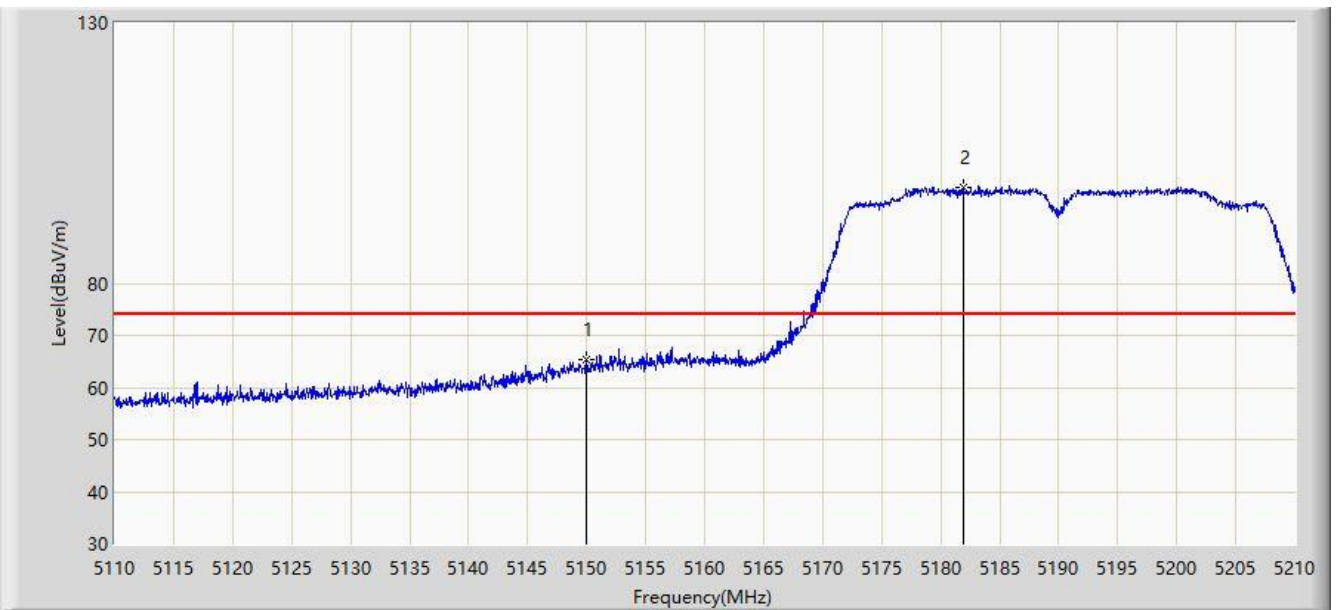


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5821.478	97.289	89.642	N/A	N/A	7.647	PK
2			5850.000	56.954	49.262	-65.246	122.200	7.692	PK
3			5855.000	56.187	48.543	-54.613	110.800	7.644	PK
4			5875.000	56.893	49.291	-48.307	105.200	7.602	PK
5			5925.000	56.840	49.014	-11.360	68.200	7.826	PK
6		*	5974.260	58.974	51.298	-9.226	68.200	7.677	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant A	

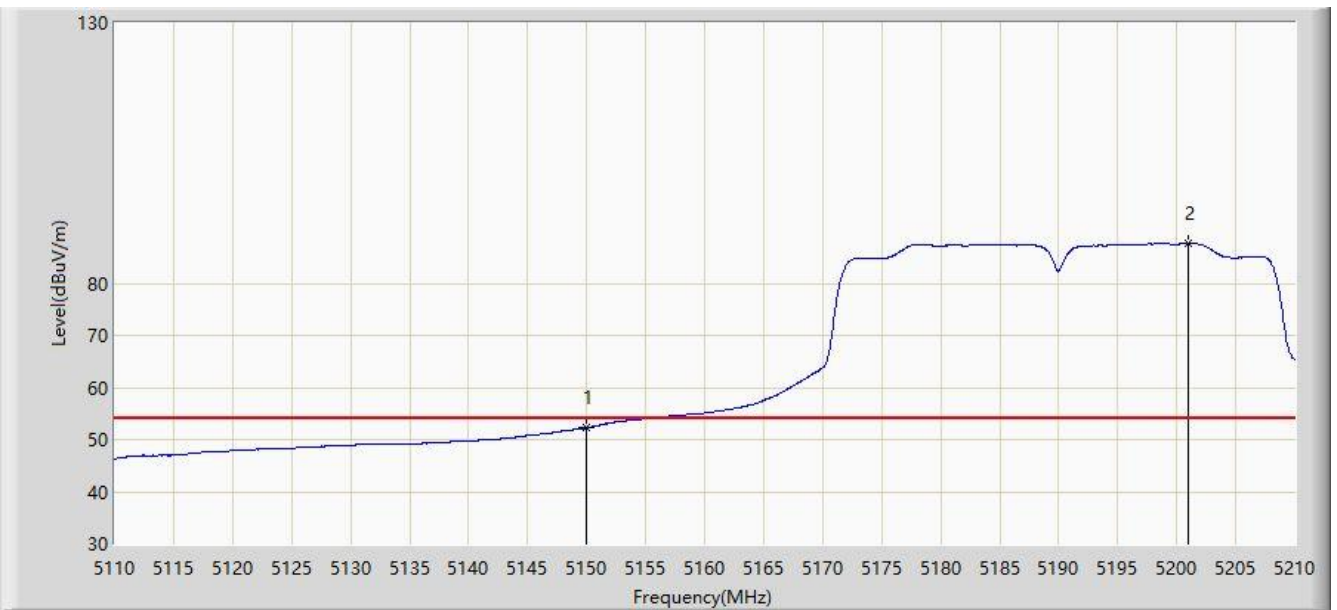


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	65.290	58.491	-8.710	74.000	6.799	PK
2		*	5181.950	98.550	91.760	N/A	N/A	6.790	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant A	

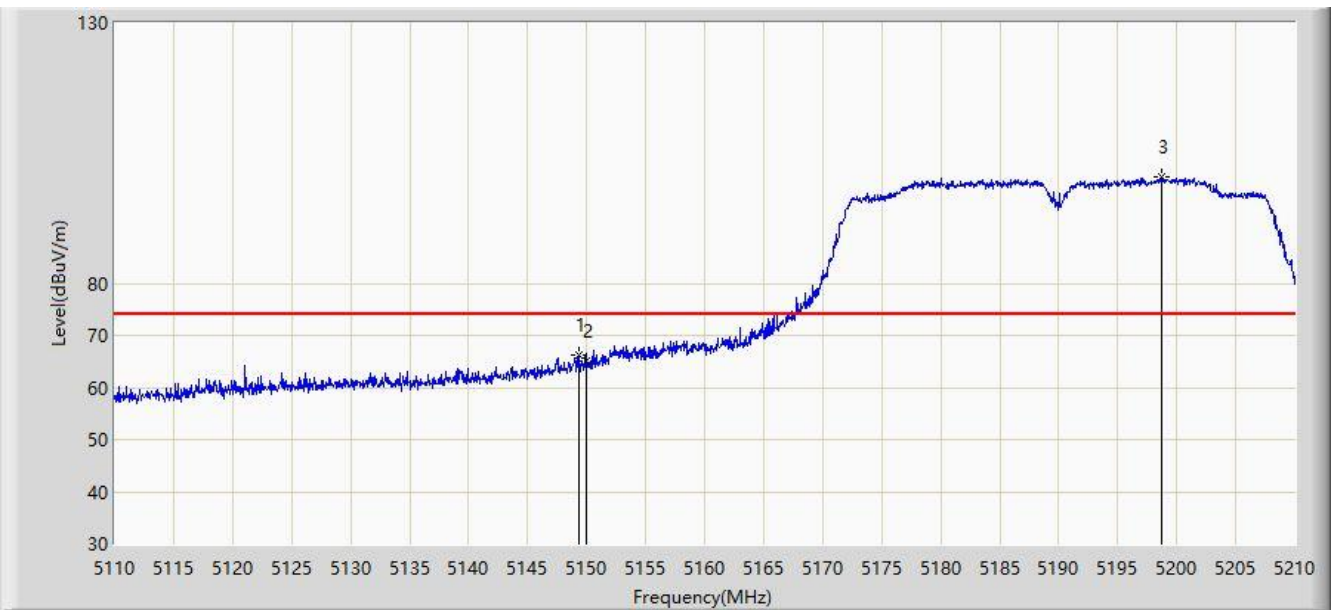


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.257	45.458	-1.743	54.000	6.799	AV
2		*	5200.950	87.650	81.131	N/A	N/A	6.519	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant A	

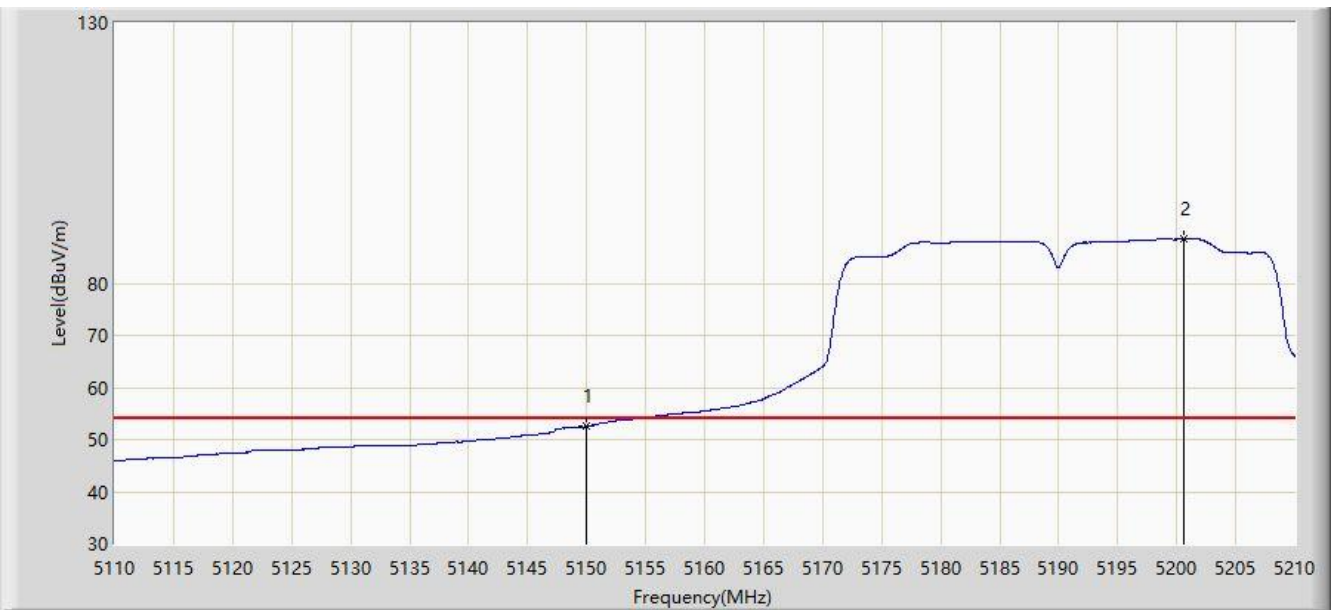


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5149.350	66.103	59.306	-7.897	74.000	6.796	PK
2			5150.000	65.210	58.411	-8.790	74.000	6.799	PK
3		*	5198.750	100.357	93.827	N/A	N/A	6.530	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant A	

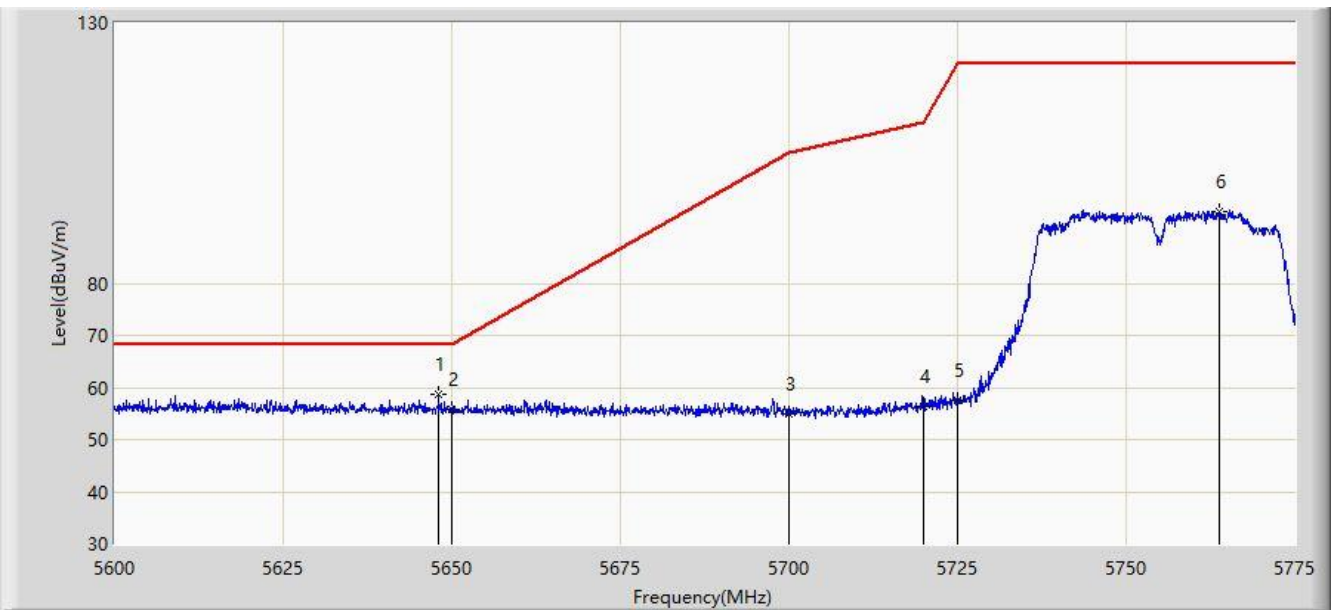


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.514	45.715	-1.486	54.000	6.799	AV
2		*	5200.650	88.545	82.025	N/A	N/A	6.520	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:52
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant A	

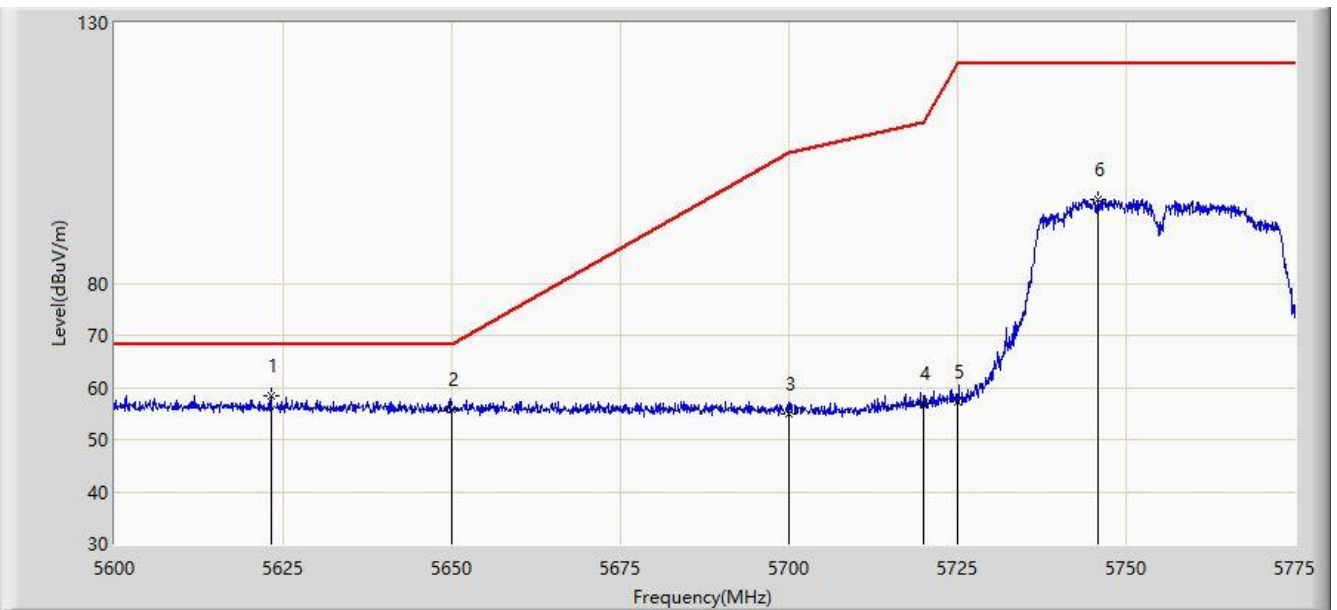


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5648.038	58.688	51.590	-9.512	68.200	7.099	PK
2			5650.000	55.805	48.665	-12.395	68.200	7.140	PK
3			5700.000	54.819	47.604	-50.381	105.200	7.215	PK
4			5720.000	56.309	49.036	-54.491	110.800	7.273	PK
5			5725.000	57.403	50.071	-64.797	122.200	7.332	PK
6			5763.800	93.841	86.384	N/A	N/A	7.457	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: 2020/04/17 - 21:53
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5755MHz Ant A	

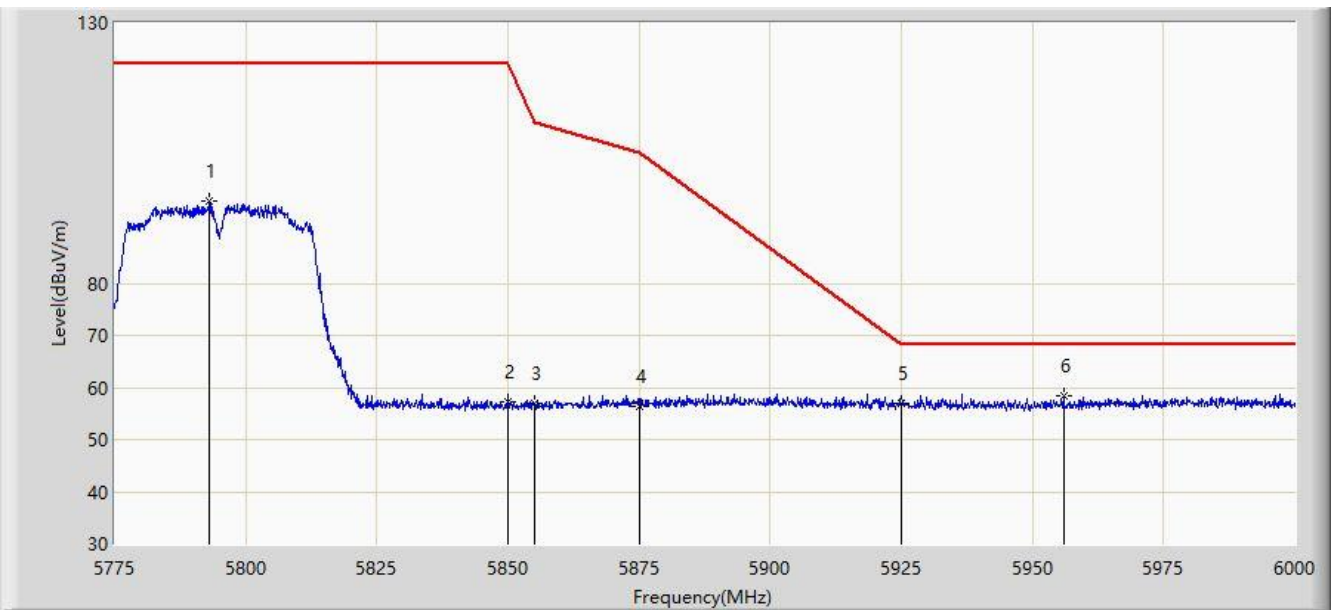


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5623.187	58.487	51.454	-9.713	68.200	7.033	PK
2			5650.000	55.670	48.530	-12.530	68.200	7.140	PK
3			5700.000	54.924	47.709	-50.276	105.200	7.215	PK
4			5720.000	57.060	49.787	-53.740	110.800	7.273	PK
5			5725.000	57.314	49.982	-64.886	122.200	7.332	PK
6			5745.862	96.135	88.693	N/A	N/A	7.442	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: 2020/04/17 - 21:55
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant A	



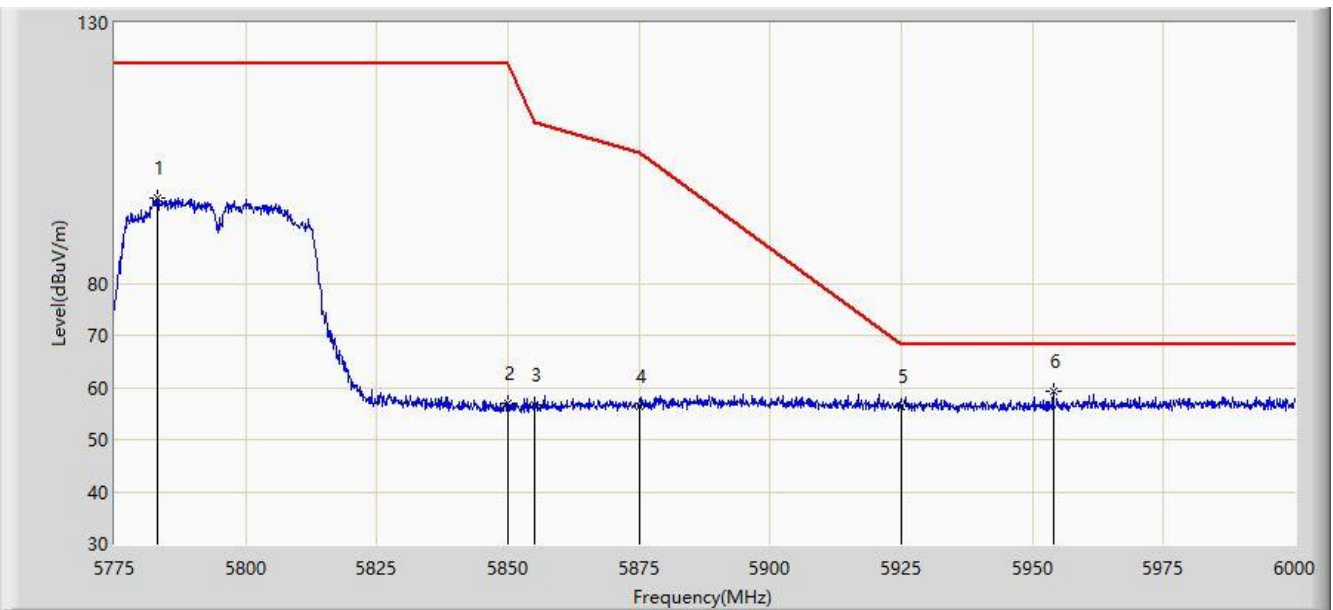
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5793.112	95.732	88.241	N/A	N/A	7.491	PK
2			5850.000	57.315	49.623	-64.885	122.200	7.692	PK
3			5855.000	56.922	49.278	-53.878	110.800	7.644	PK
4			5875.000	56.499	48.897	-48.701	105.200	7.602	PK
5			5925.000	56.933	49.107	-11.267	68.200	7.826	PK
6		*	5955.900	58.531	50.887	-9.669	68.200	7.644	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



Site: AC1	Time: 2020/04/17 - 21:56
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5795MHz Ant A	

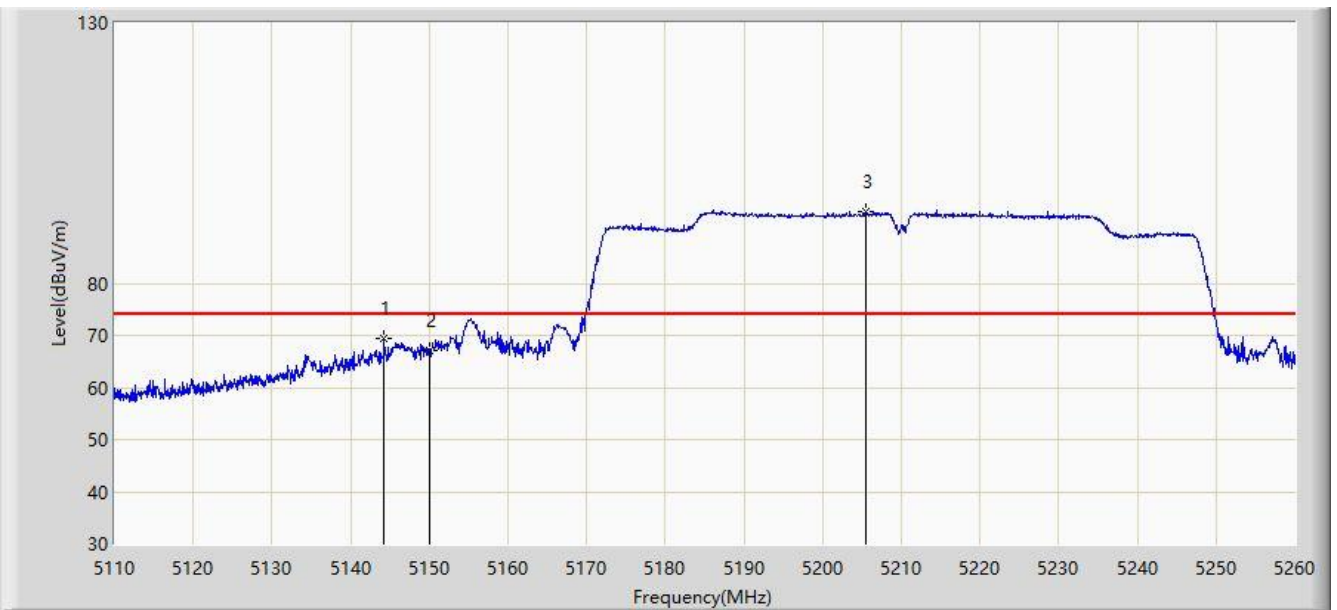


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5783.100	96.405	88.872	N/A	N/A	7.533	PK
2			5850.000	56.938	49.246	-65.262	122.200	7.692	PK
3			5855.000	56.665	49.021	-54.135	110.800	7.644	PK
4			5875.000	56.240	48.638	-48.960	105.200	7.602	PK
5			5925.000	56.304	48.478	-11.896	68.200	7.826	PK
6		*	5953.987	59.152	51.500	-9.048	68.200	7.652	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: 2020/04/17 - 21:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant A	

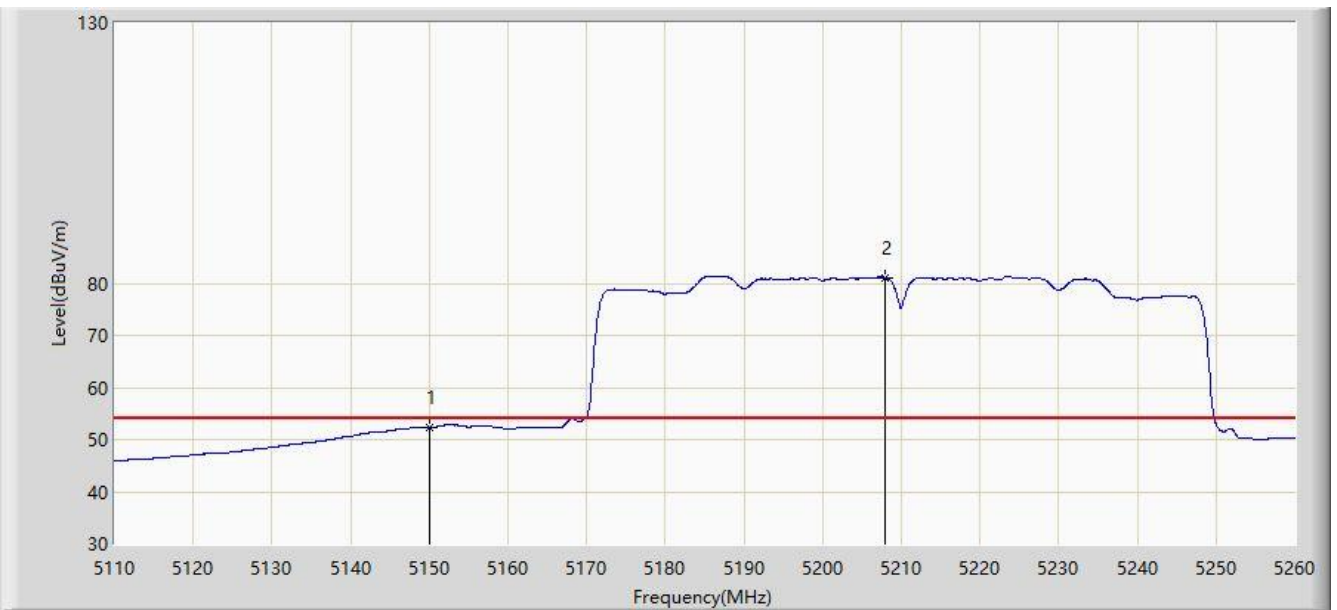


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5144.275	69.322	62.516	-4.678	74.000	6.806	PK
2			5150.000	67.224	60.425	-6.776	74.000	6.799	PK
3		*	5205.400	93.829	87.328	N/A	N/A	6.501	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant A	

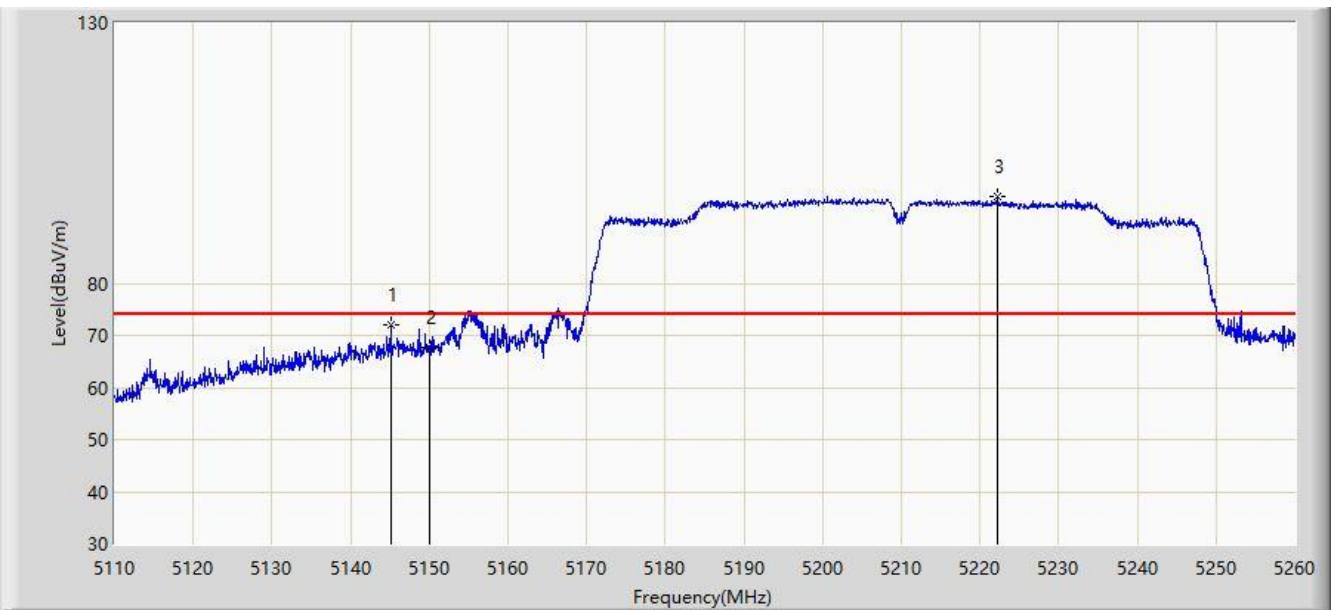


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	52.289	45.490	-1.711	54.000	6.799	AV
2		*	5207.875	81.133	74.642	N/A	N/A	6.491	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 21:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant A	

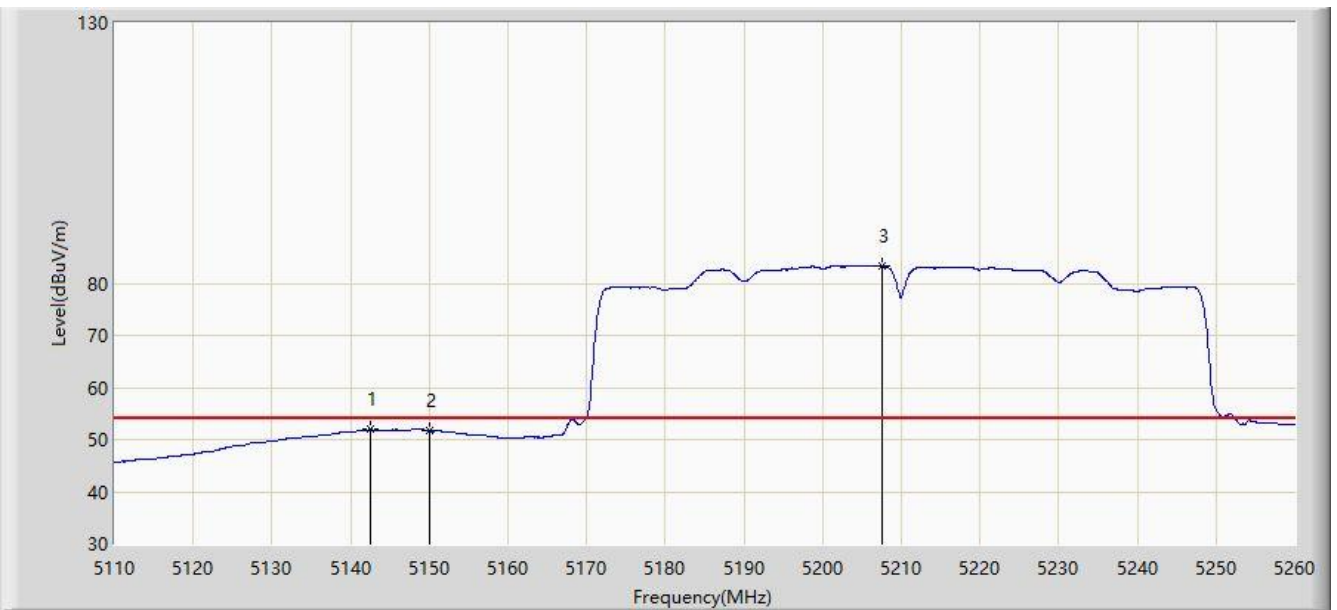


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5145.100	72.057	65.254	-1.943	74.000	6.803	PK
2			5150.000	67.538	60.739	-6.462	74.000	6.799	PK
3		*	5222.275	96.648	90.079	N/A	N/A	6.568	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 22:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5210MHz Ant A	

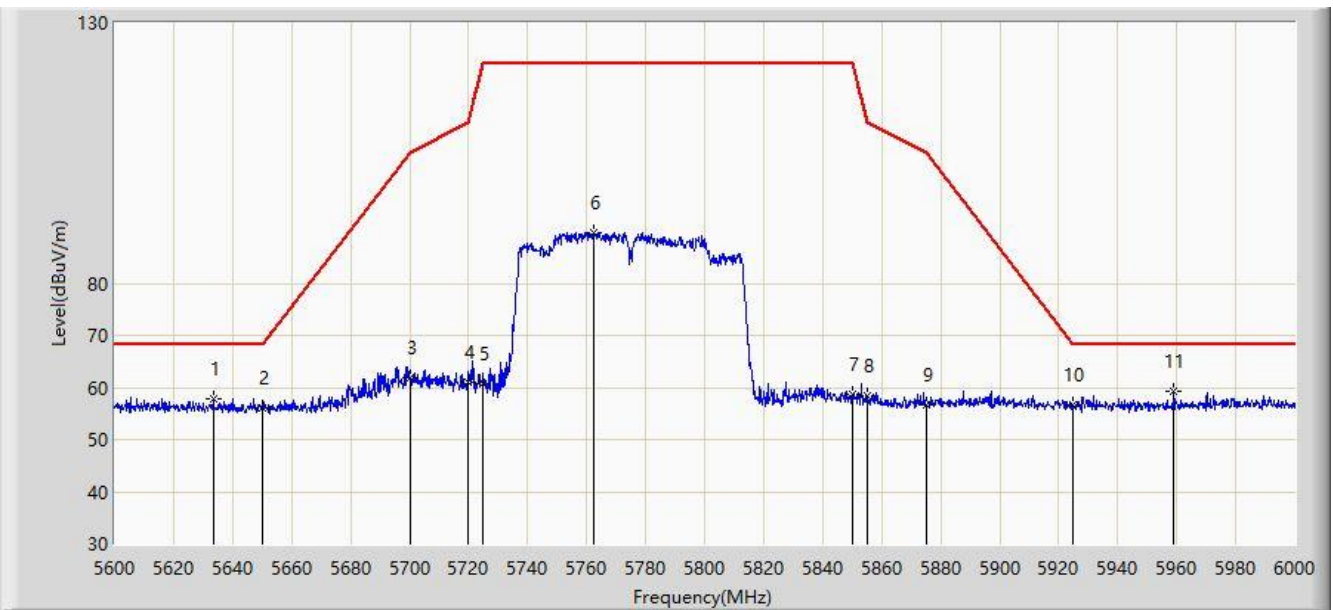


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5142.550	51.915	45.102	-2.085	54.000	6.813	AV
2			5150.000	51.679	44.880	-2.321	54.000	6.799	AV
3		*	5207.650	83.335	76.843	N/A	N/A	6.492	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 22:01
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant A	

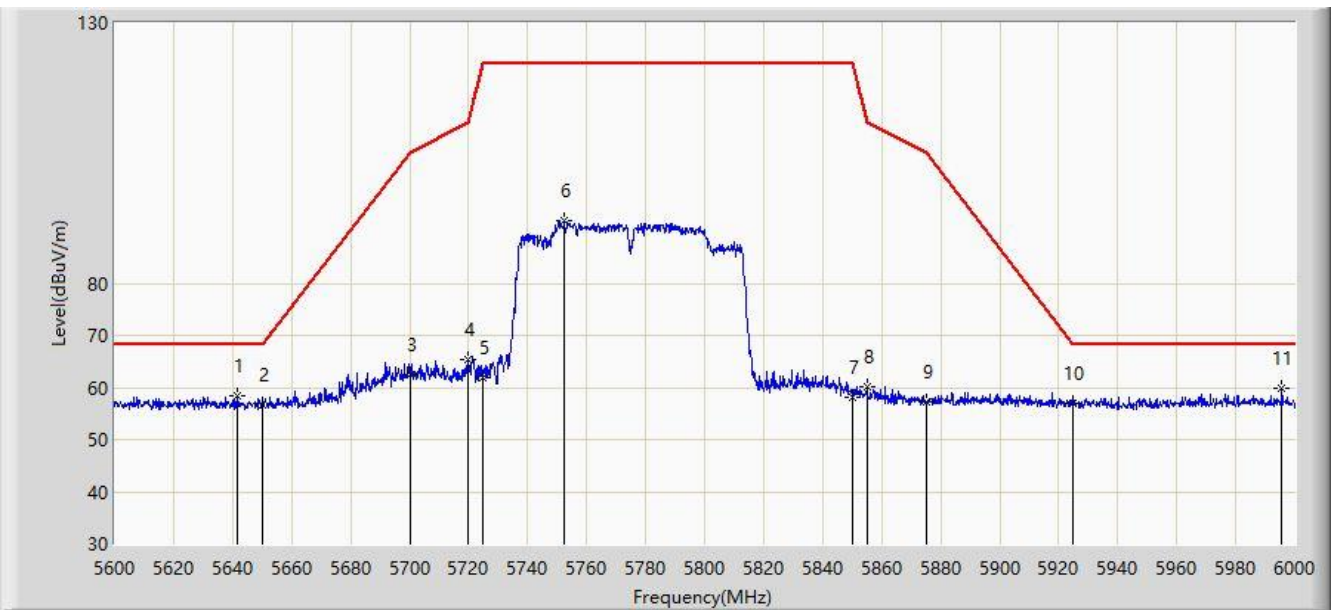


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5633.400	57.939	50.954	-10.261	68.200	6.984	PK
2			5650.000	56.026	48.886	-12.174	68.200	7.140	PK
3			5700.000	61.777	54.562	-43.423	105.200	7.215	PK
4			5720.000	60.961	53.688	-49.839	110.800	7.273	PK
5			5725.000	60.653	53.321	-61.547	122.200	7.332	PK
6			5762.600	89.829	82.381	N/A	N/A	7.448	PK
7			5850.000	58.572	50.880	-63.628	122.200	7.692	PK
8			5855.000	58.301	50.657	-52.499	110.800	7.644	PK
9			5875.000	56.800	49.198	-48.400	105.200	7.602	PK
10			5925.000	56.663	48.837	-11.537	68.200	7.826	PK
11		*	5959.000	59.191	51.561	-9.009	68.200	7.631	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 22:02
Limit: FCC_Part15.407_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant A	

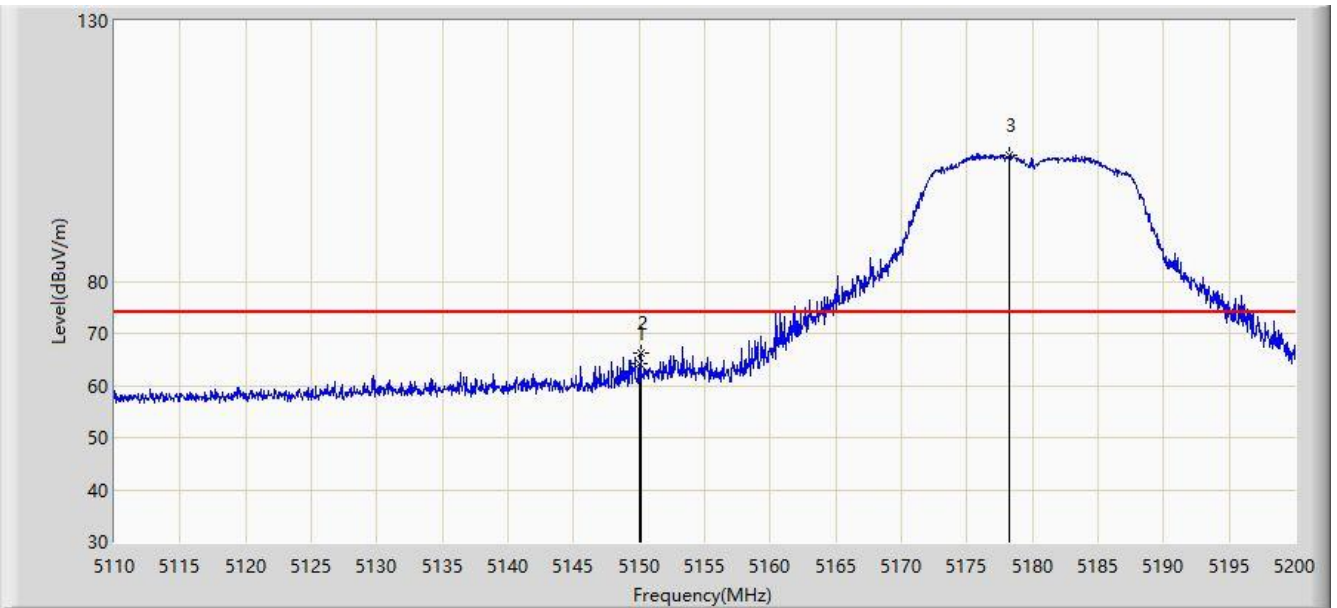


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5641.800	58.479	51.515	-9.721	68.200	6.964	PK
2			5650.000	56.716	49.576	-11.484	68.200	7.140	PK
3			5700.000	62.551	55.336	-42.649	105.200	7.215	PK
4			5720.000	65.271	57.998	-45.529	110.800	7.273	PK
5			5725.000	61.827	54.495	-60.373	122.200	7.332	PK
6			5752.400	91.977	84.541	N/A	N/A	7.435	PK
7			5850.000	58.252	50.560	-63.948	122.200	7.692	PK
8			5855.000	60.289	52.645	-50.511	110.800	7.644	PK
9			5875.000	57.144	49.542	-48.056	105.200	7.602	PK
10			5925.000	56.952	49.126	-11.248	68.200	7.826	PK
11		*	5995.600	59.773	51.883	-8.427	68.200	7.890	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 22:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant B	



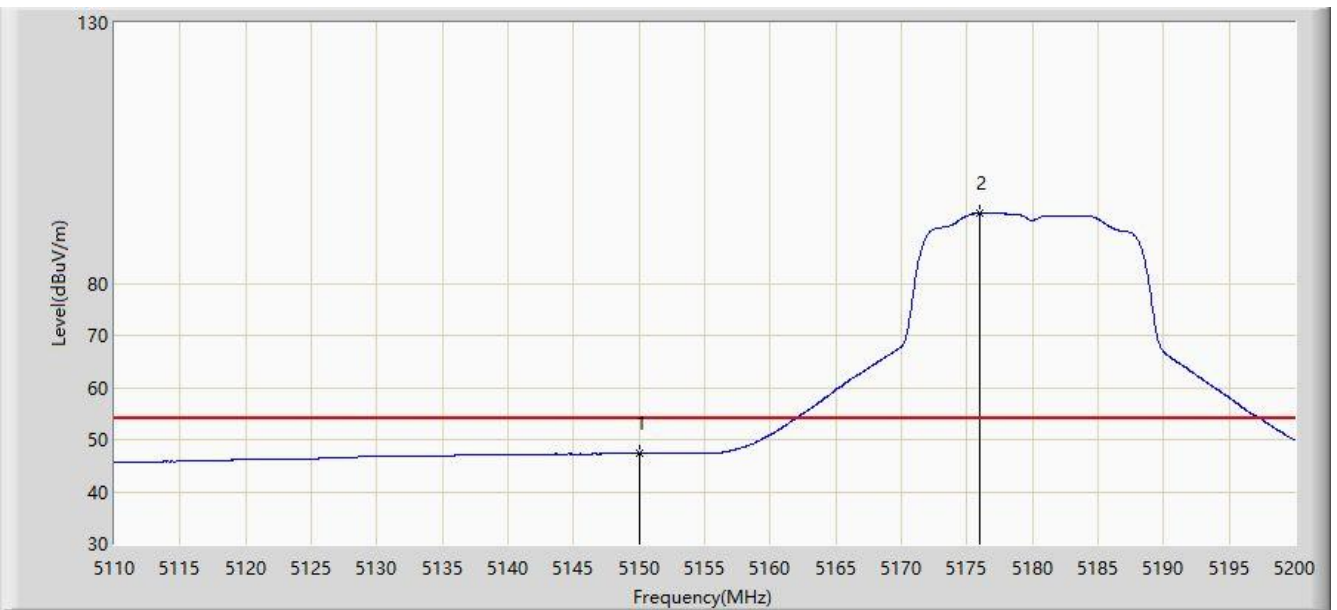
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	64.126	57.327	-9.874	74.000	6.799	PK
2			5150.095	66.122	59.323	-7.878	74.000	6.799	PK
3		*	5178.265	104.249	97.445	N/A	N/A	6.803	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



Site: AC1	Time: 2020/04/17 - 22:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant B	

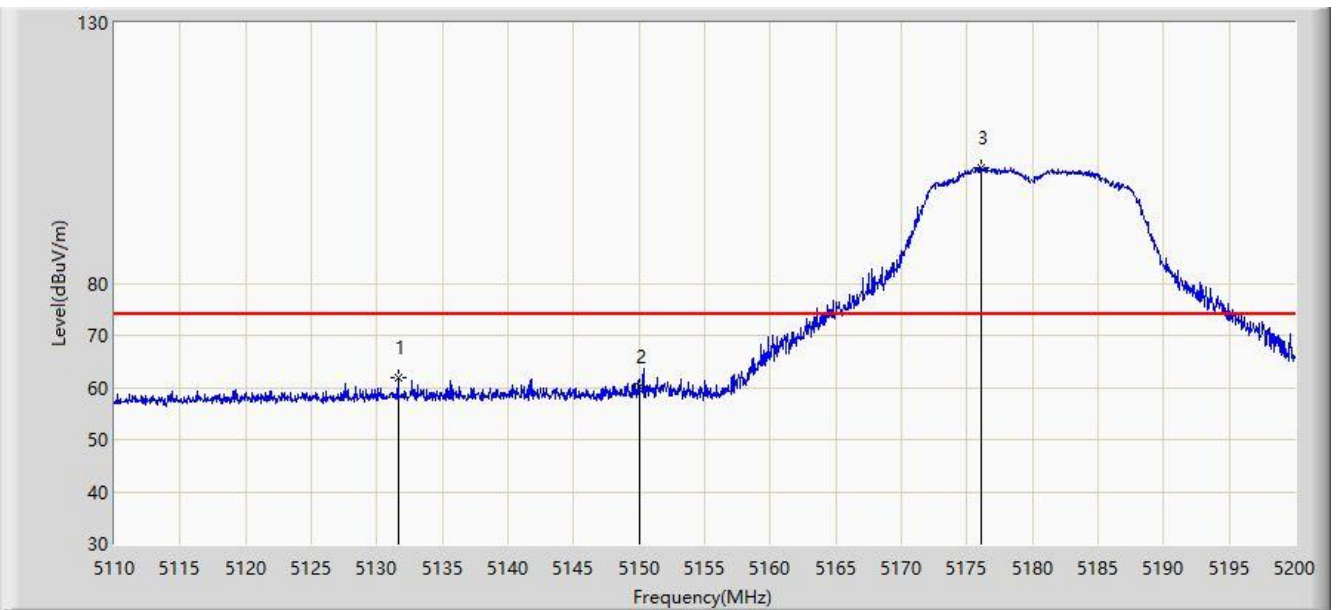


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.355	40.556	-6.645	54.000	6.799	AV
2		*	5175.970	93.524	86.712	N/A	N/A	6.813	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 22:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant B	

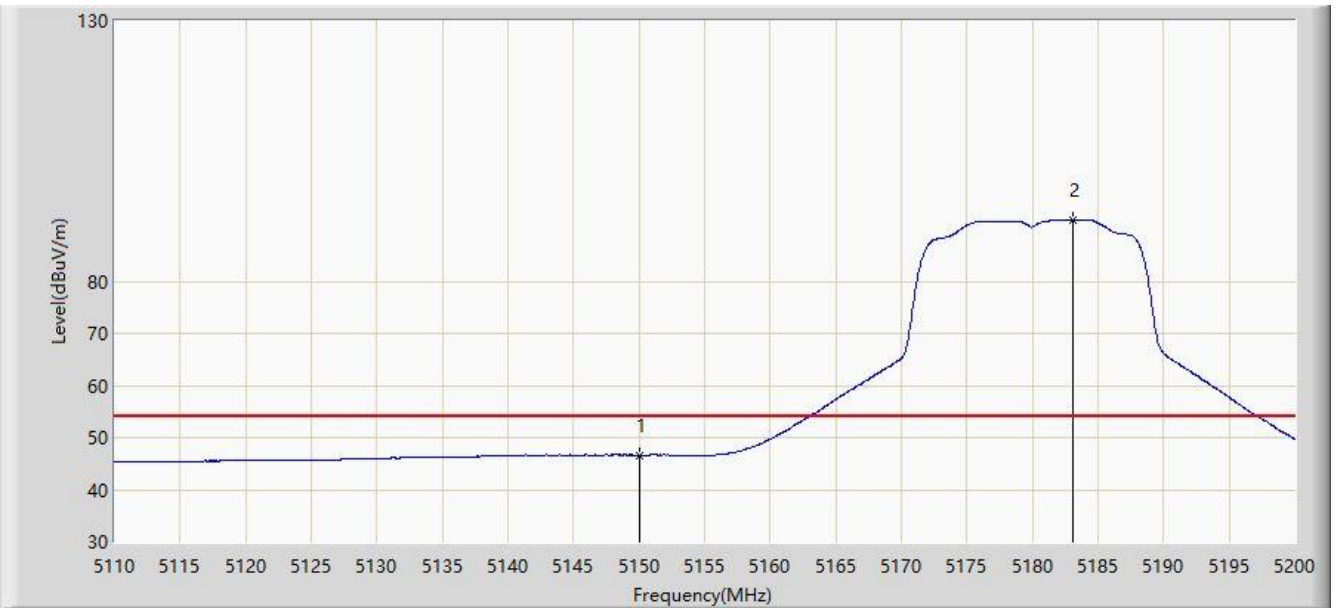


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5131.600	61.957	55.101	-12.043	74.000	6.856	PK
2			5150.000	60.256	53.457	-13.744	74.000	6.799	PK
3		*	5176.105	102.231	95.419	N/A	N/A	6.812	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Site: AC1	Time: 2020/04/17 - 22:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Lewis Huang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Notebook	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant B	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	46.655	39.856	-7.345	54.000	6.799	AV
2		*	5183.035	91.792	85.019	N/A	N/A	6.774	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)