6.6.5.Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-SR5	Test Date	2020/11/09
Test Item	Power Spectral Density (NII-1 & NII-2A & NII-2C)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ MHz)	Duty Cycle (%)	Final PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
11a	6Mbps	36	5180	1.18	82.54	2.01	≤ 9.07	Pass
11a	6Mbps	44	5220	1.22	82.54	2.05	≤ 9.07	Pass
11a	6Mbps	48	5240	1.27	82.54	2.11	≤ 9.07	Pass
11a	6Mbps	52	5260	-0.08	82.54	0.75	≤ 9.07	Pass
11a	6Mbps	60	5300	1.16	82.54	2.00	≤ 9.07	Pass
11a	6Mbps	64	5320	1.20	82.54	2.03	≤ 9.07	Pass
11a	6Mbps	100	5500	0.97	82.54	1.81	≤ 8.74	Pass
11a	6Mbps	120	5600	1.15	82.54	1.98	≤ 8.74	Pass
11a	6Mbps	140	5700	2.13	82.54	2.96	≤ 8.74	Pass
11a	6Mbps	144	5720	1.75	82.54	2.59	≤ 8.74	Pass
11ac-VHT20	MCS0	36	5180	-1.36	44.62	2.15	≤ 9.07	Pass
11ac-VHT20	MCS0	44	5220	-1.08	44.62	2.42	≤ 9.07	Pass
11ac-VHT20	MCS0	48	5240	-1.24	44.62	2.27	≤ 9.07	Pass
11ac-VHT20	MCS0	52	5260	-2.51	44.62	1.00	≤ 9.07	Pass
11ac-VHT20	MCS0	60	5300	-1.83	44.62	1.67	≤ 9.07	Pass
11ac-VHT20	MCS0	64	5320	-1.50	44.62	2.00	≤ 9.07	Pass
11ac-VHT20	MCS0	100	5500	-1.48	44.62	2.02	≤ 8.74	Pass
11ac-VHT20	MCS0	120	5600	-1.23	44.62	2.27	≤ 8.74	Pass
11ac-VHT20	MCS0	140	5700	-0.96	44.62	2.55	≤ 8.74	Pass
11ac-VHT20	MCS0	144	5720	-0.40	44.62	3.11	≤ 8.74	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ MHz)	Duty Cycle (%)	Final PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT40	MCS0	38	5190	-5.82	70.69	-4.31	≤ 9.07	Pass
11ac-VHT40	MCS0	46	5230	-5.77	70.69	-4.26	≤ 9.07	Pass
11ac-VHT40	MCS0	54	5270	-5.39	70.69	-3.89	≤ 9.07	Pass
11ac-VHT40	MCS0	62	5310	-5.77	70.69	-4.26	≤ 9.07	Pass
11ac-VHT40	MCS0	102	5510	-6.10	70.69	-4.59	≤ 8.74	Pass
11ac-VHT40	MCS0	118	5590	-6.46	70.69	-4.96	≤ 8.74	Pass
11ac-VHT40	MCS0	134	5670	-6.87	70.69	-5.36	≤ 8.74	Pass
11ac-VHT40	MCS0	142	5710	-6.01	70.69	-4.51	≤ 8.74	Pass
11ac-VHT80	MCS0	42	5210	-11.50	54.60	-8.87	≤ 9.07	Pass
11ac-VHT80	MCS0	58	5290	-11.67	54.60	-9.04	≤ 9.07	Pass
11ac-VHT80	MCS0	106	5530	-11.97	54.60	-9.34	≤ 9.07	Pass
11ac-VHT80	MCS0	122	5610	-12.22	54.60	-9.59	≤ 8.74	Pass
11ac-VHT80	MCS0	138	5690	-12.07	54.60	-9.45	≤ 8.74	Pass

Note 1: When EUT duty cycle ≥ 98%, Final PSD (dBm/MHz) = PSD (dBm/MHz)

When EUT duty cycle < 98%, Final PSD (dBm/MHz) = PSD (dBm/MHz) + 10*log (1/Duty Cycle)

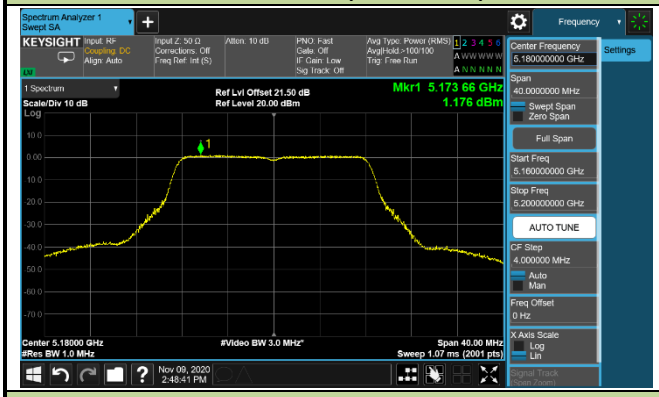
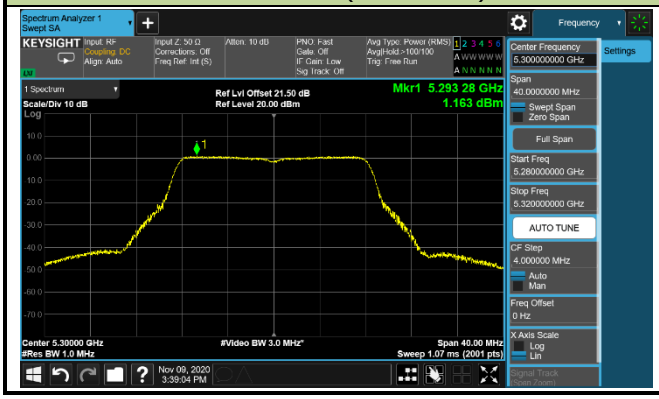
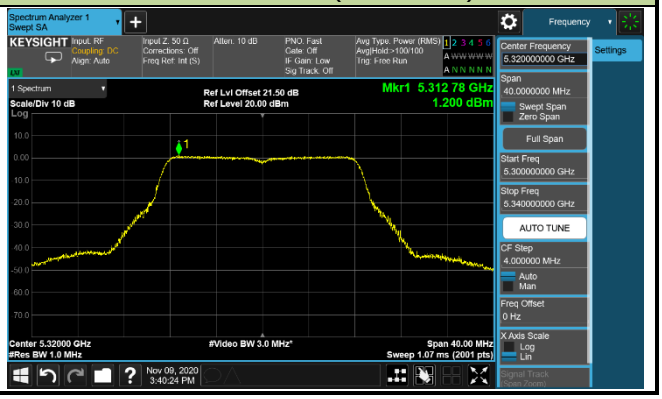
Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-SR5	Test Date	2020/11/09 ~ 2020/11/20
Test Item	Power Spectral Density (NII-3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ 510kHz)	Duty Cycle (%)	Final PSD (dBm/ 510kHz)	Limit (dBm/ 500kHz)	Result
11a	6Mbps	149	5745	-1.39	82.54	-0.56	≤ 27.74	Pass
11a	6Mbps	157	5785	-1.56	82.54	-0.73	≤ 27.74	Pass
11a	6Mbps	165	5825	-1.82	82.54	-0.99	≤ 27.74	Pass
11ac-VHT20	MCS0	149	5745	-3.75	44.62	-0.25	≤ 27.74	Pass
11ac-VHT20	MCS0	157	5785	-4.11	44.62	-0.61	≤ 27.74	Pass
11ac-VHT20	MCS0	165	5825	-3.95	44.62	-0.45	≤ 27.74	Pass
11ac-VHT40	MCS0	151	5755	-8.90	70.69	-7.39	≤ 27.74	Pass
11ac-VHT40	MCS0	159	5795	-9.53	70.69	-8.02	≤ 27.74	Pass
11ac-VHT80	MCS0	155	5775	-14.84	54.60	-12.21	≤ 27.74	Pass

Note:

When EUT duty cycle > 98%, Final PSD (dBm / 510kHz) = Ant 0 PSD (dBm / 510kHz).

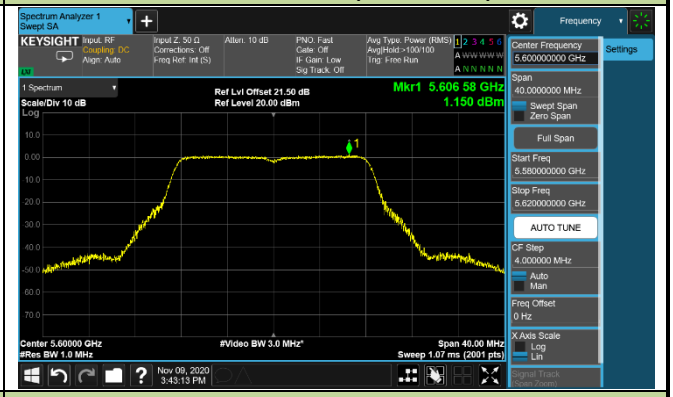
When EUT duty cycle < 98%, Final PSD (dBm / 510kHz) = Ant 0 PSD (dBm / 510kHz) +10*log(1/Duty cycle)

802.11a Power Spectral Density	
Channel 36 (5180MHz)	Channel 44 (5220MHz)
	
Channel 48 (5240MHz)	Channel 52 (5260MHz)
	
Channel 60 (5300MHz)	Channel 64 (5320MHz)
	

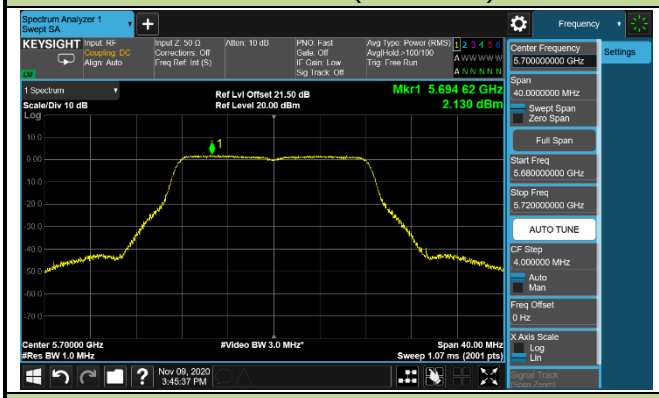
802.11a Power Spectral Density

Channel 100 (5500MHz)

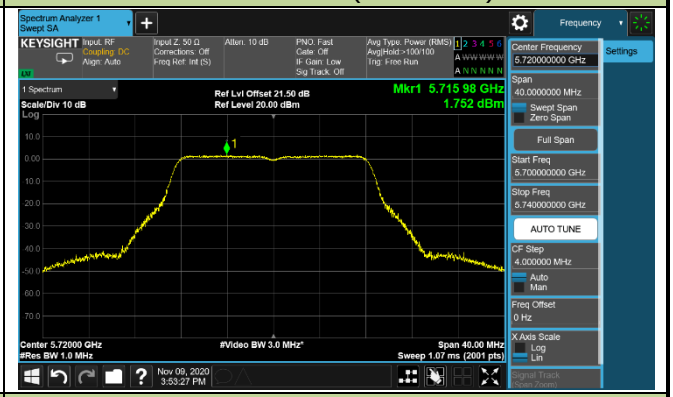
Channel 120 (5600MHz)



Channel 140 (5700MHz)

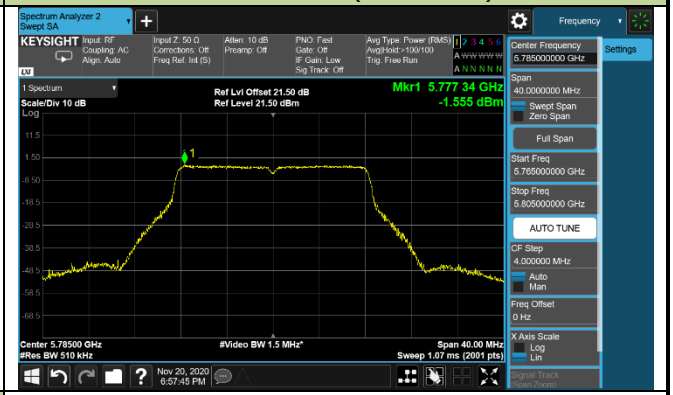


Channel 144 (5720MHz)

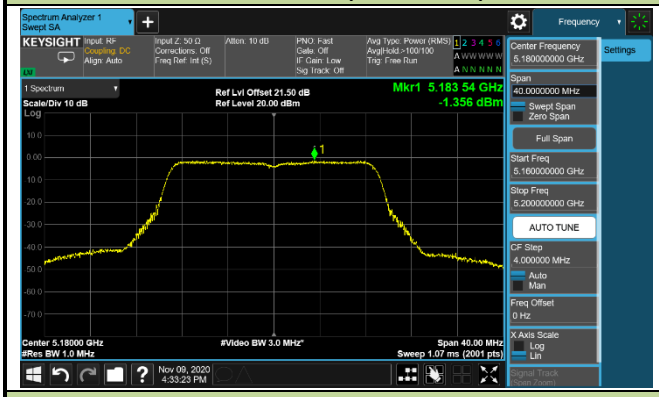
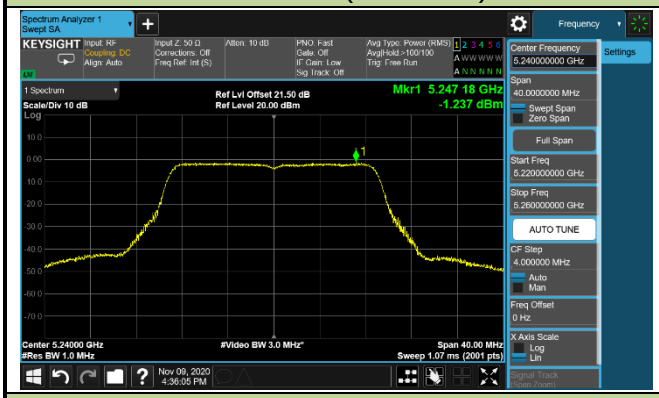
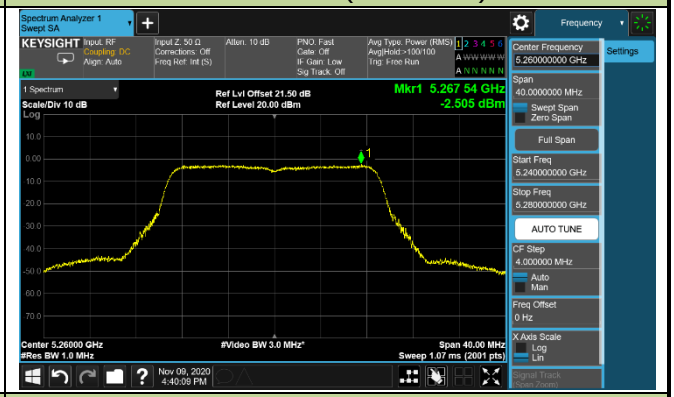
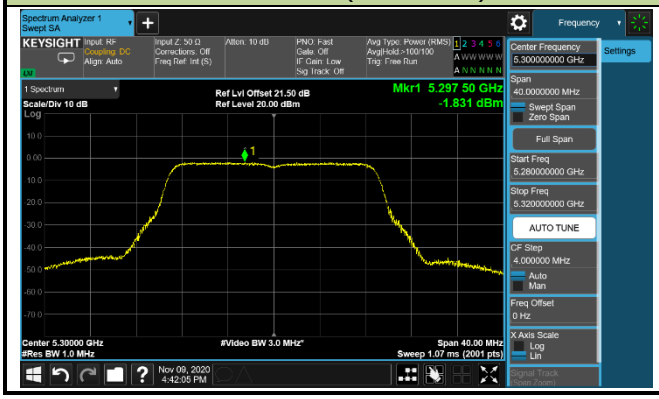
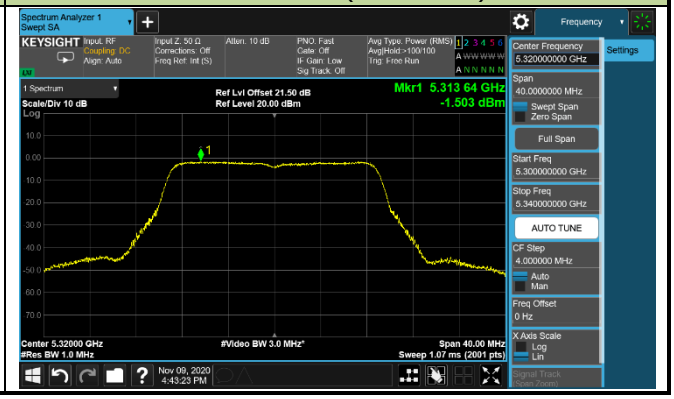


Channel 149 (5745MHz)

Channel 157 (5785MHz)



Channel 165 (5825MHz)

802.11ac-VHT20 Power Spectral Density	
Channel 36 (5180MHz)	Channel 44 (5220MHz)
	
Channel 48 (5240MHz)	Channel 52 (5260MHz)
	
Channel 60 (5300MHz)	Channel 64 (5320MHz)
	

802.11ac-VHT20 Power Spectral Density

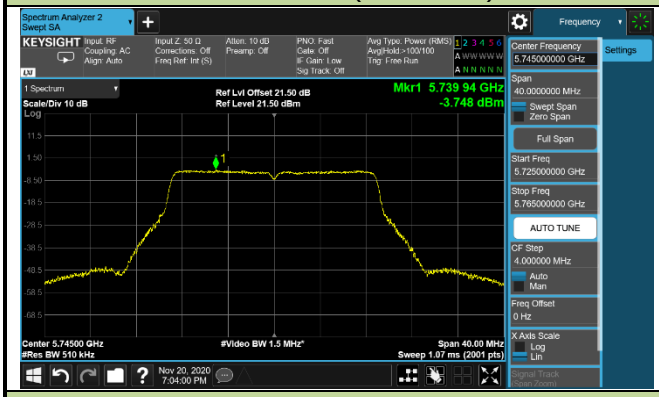
Channel 100 (5500MHz)

Channel 120 (5600MHz)

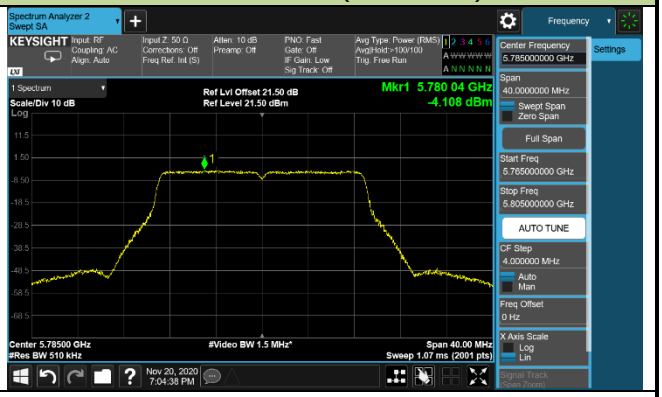
Channel 140 (5700MHz)

Channel 144 (5720MHz)

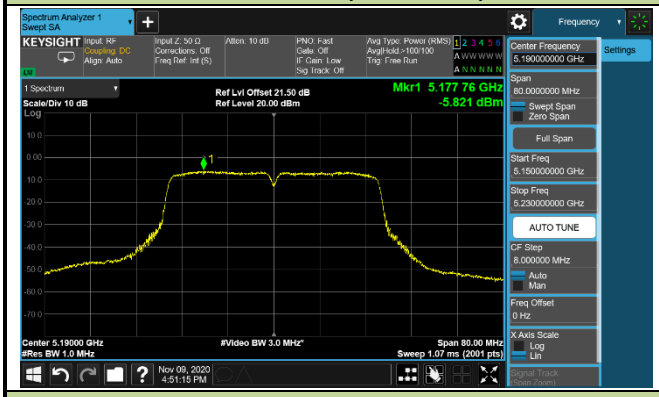
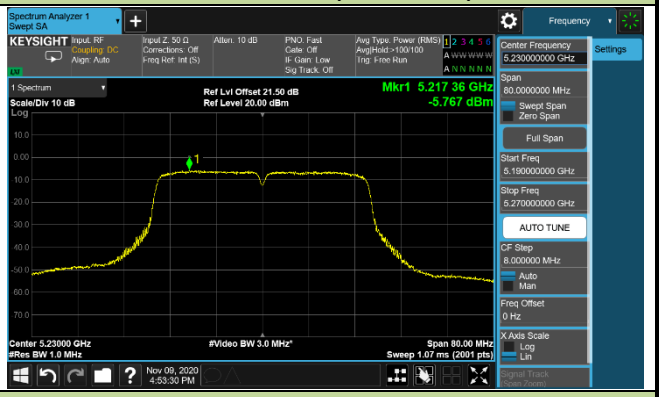
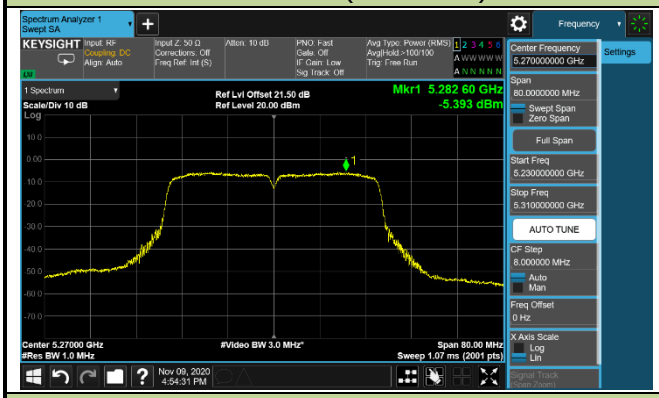
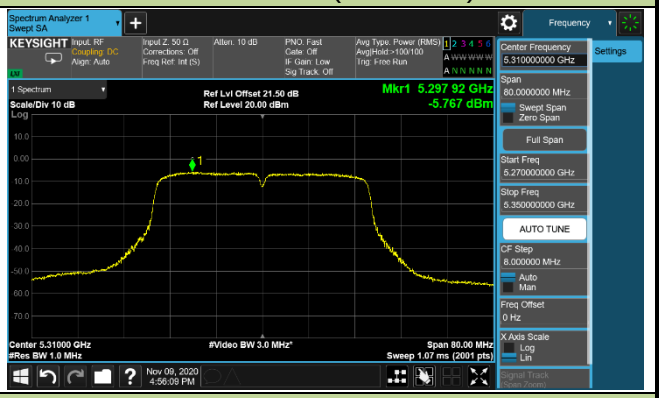
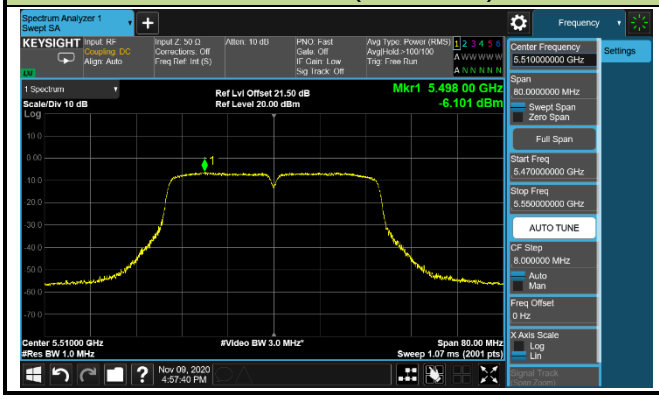
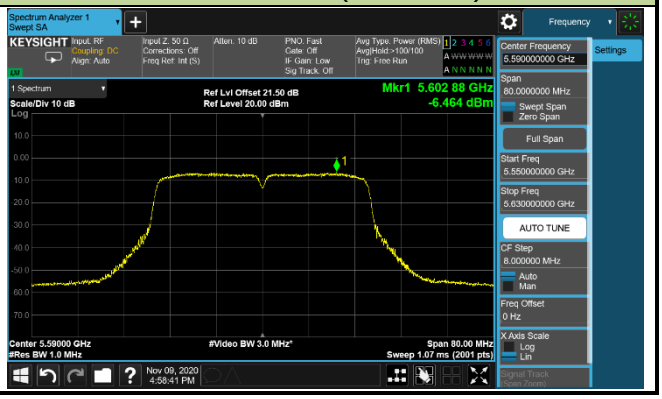
Channel 149 (5745MHz)

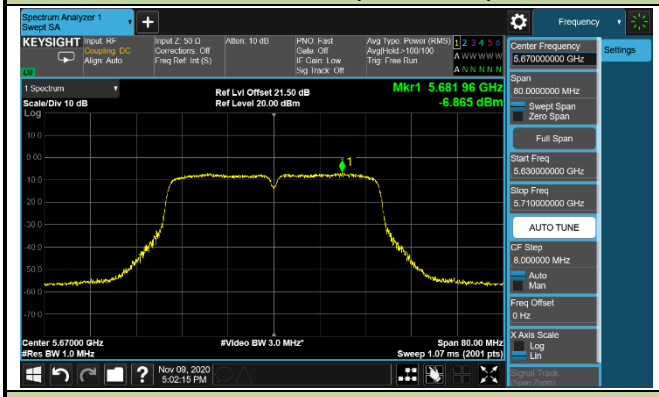
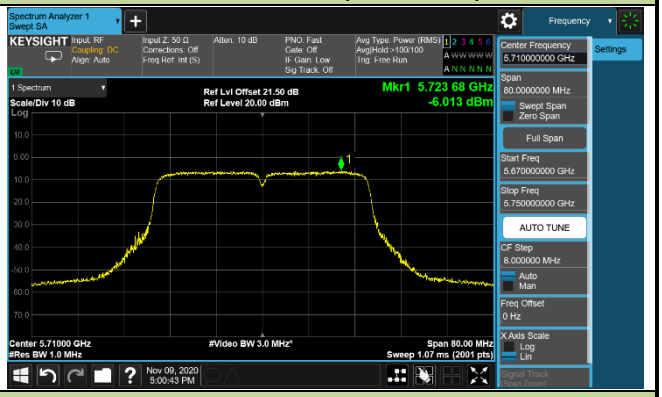
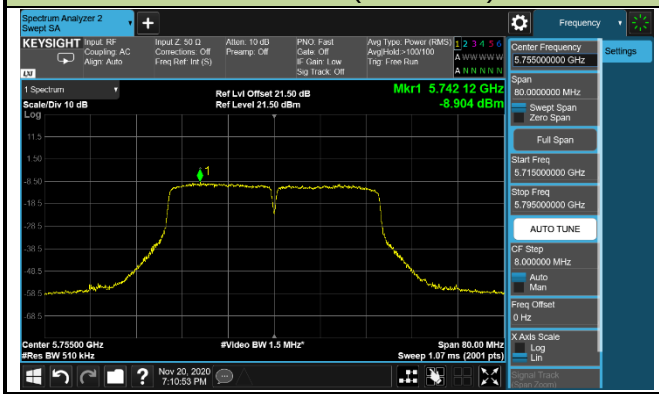
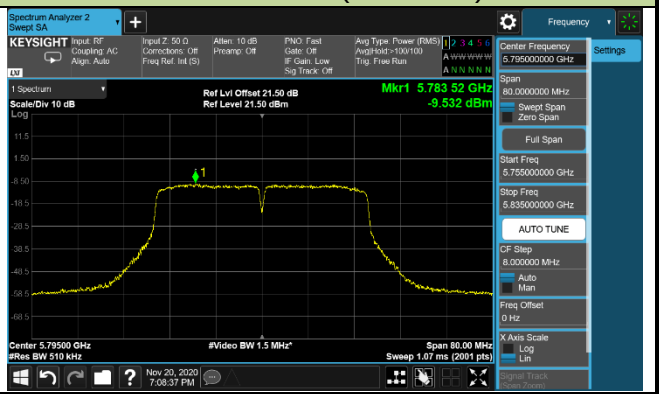


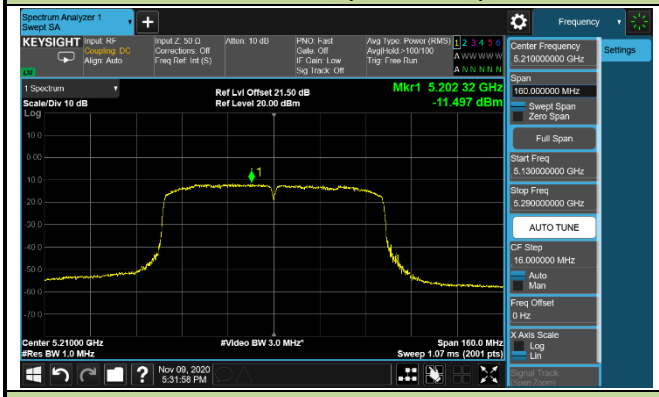
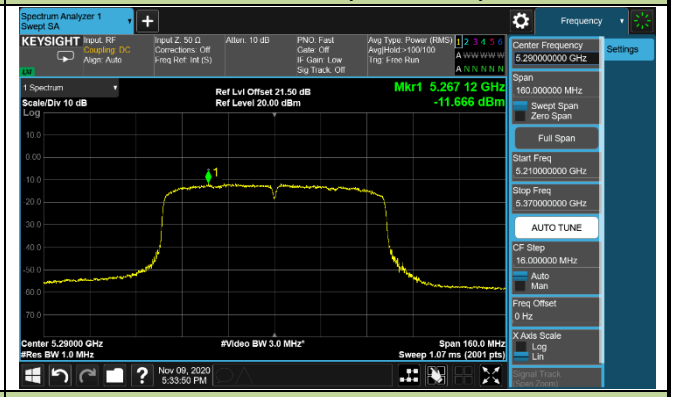
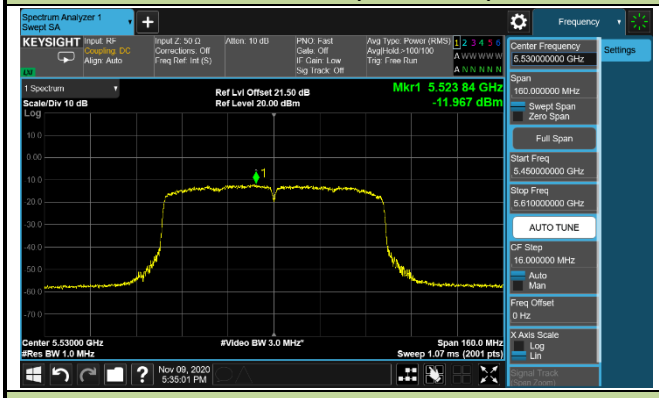
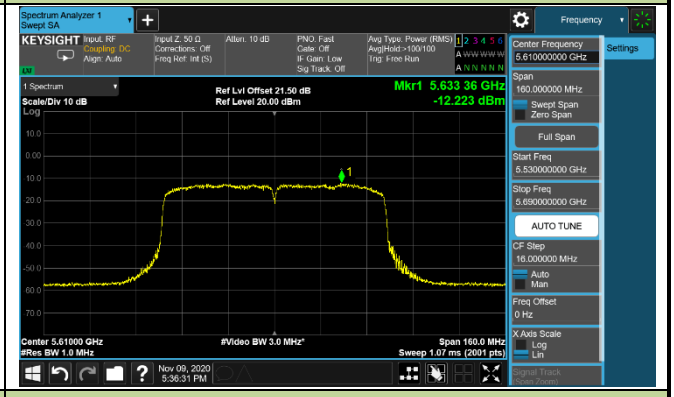
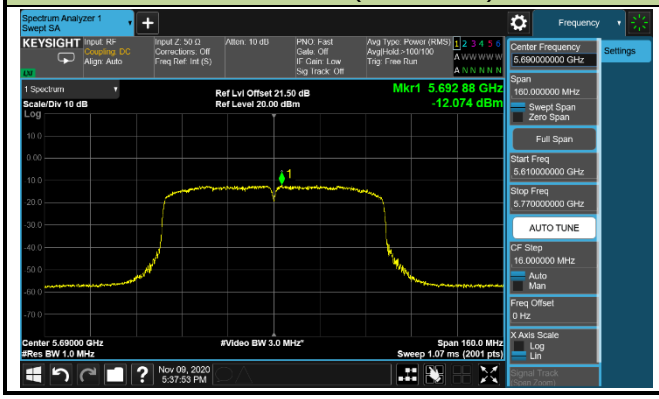
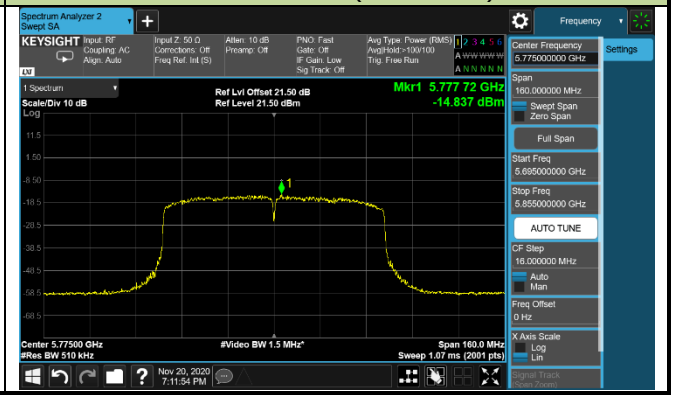
Channel 157 (5785MHz)



Channel 165 (5825MHz)

802.11ac-VHT40 Power Spectral Density	
Channel 38 (5190MHz)	Channel 46 (5230MHz)
	
Channel 54 (5270MHz)	Channel 62 (5310MHz)
	
Channel 102 (5510MHz)	Channel 118 (5590MHz)
	

802.11ac-VHT40 Power Spectral Density	
Channel 134 (5670MHz)	Channel 142 (5710MHz)
	
Channel 151 (5755MHz)	Channel 159 (5795MHz)
	

802.11ac-VHT80 Power Spectral Density	
Channel 42 (5210MHz)	Channel 58 (5290MHz)
	
Channel 106 (5530MHz)	Channel 122 (5610MHz)
	
Channel 138 (5690MHz)	Channel 155 (5775MHz)
	

6.7. Frequency Stability Measurement

6.7.1.Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

6.7.2.Test Procedure Used

Frequency Stability Under Temperature Variations:

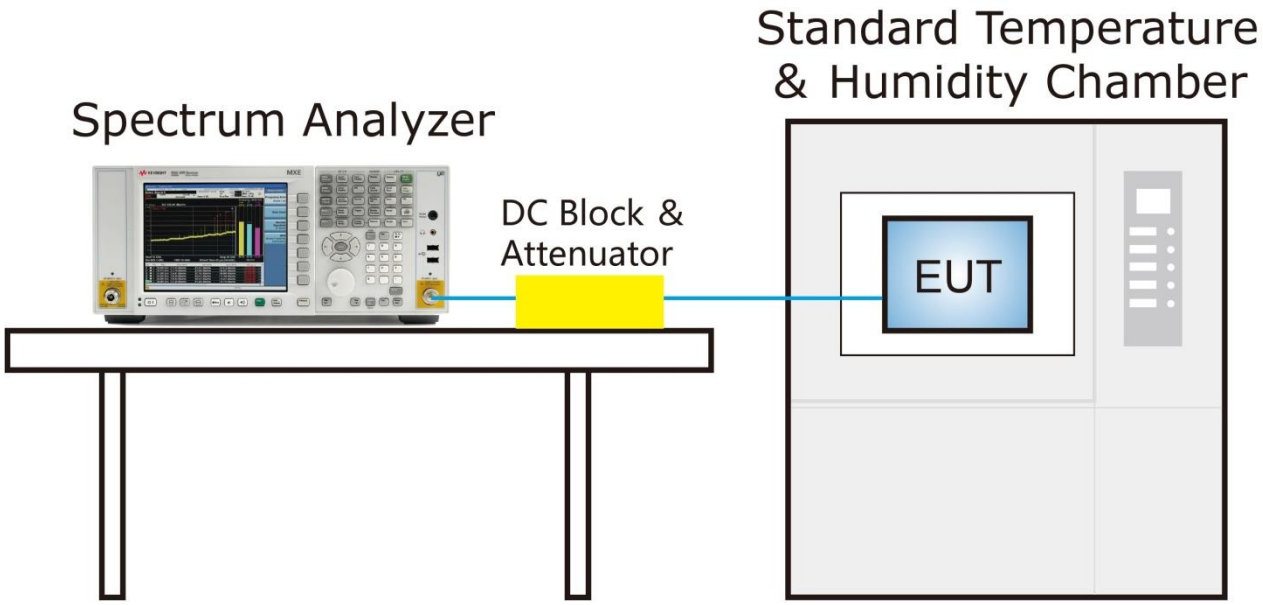
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change. For hand-carried battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

6.7.3.Test Setup



6.7.4.Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-SR5	Test Time	2020/11/12
Test Mode	5180MHz (Carrier Mode)		

Voltage (%)	Power (V_{DC})	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	3.6	- 30	-6.54	-6.48	-6.47	-6.45
		- 20	-6.60	-6.58	-6.63	-6.65
		- 10	-6.82	-6.74	-6.75	-6.81
		0	-6.82	-6.79	-6.74	-6.75
		+ 10	-6.83	-6.71	-6.75	-6.88
		+ 20 (Ref)	-6.83	-6.84	-6.88	-6.78
		+ 30	-6.83	-6.84	-6.77	-6.82
		+ 40	-6.84	-6.88	-6.91	-6.82
		+ 50	-6.84	-6.84	-6.88	-6.78
Battery Upper	4.2	+ 20	-6.85	-6.85	-6.84	-6.88
Battery Endpoint	3.4	+ 20	-6.85	-6.82	-6.79	-6.77

Note 1: Frequency Tolerance (ppm) = {[Measured Frequency (MHz) - Declared Frequency (MHz)] / Declared Frequency (MHz)} *10^6.

Note 2: Battery upper voltage is 4.2Vdc, battery endpoint voltage is 3.4Vdc, which are declared by the manufacturer.

6.8. Radiated Spurious Emission Measurement

6.8.1.Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Field Strength (μV/m)	Measured Distance (m)
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

6.8.2.Test Procedure Used

KDB 789033 D02v02r01- Section G

6.8.3.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
> 1000 MHz	1 MHz

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

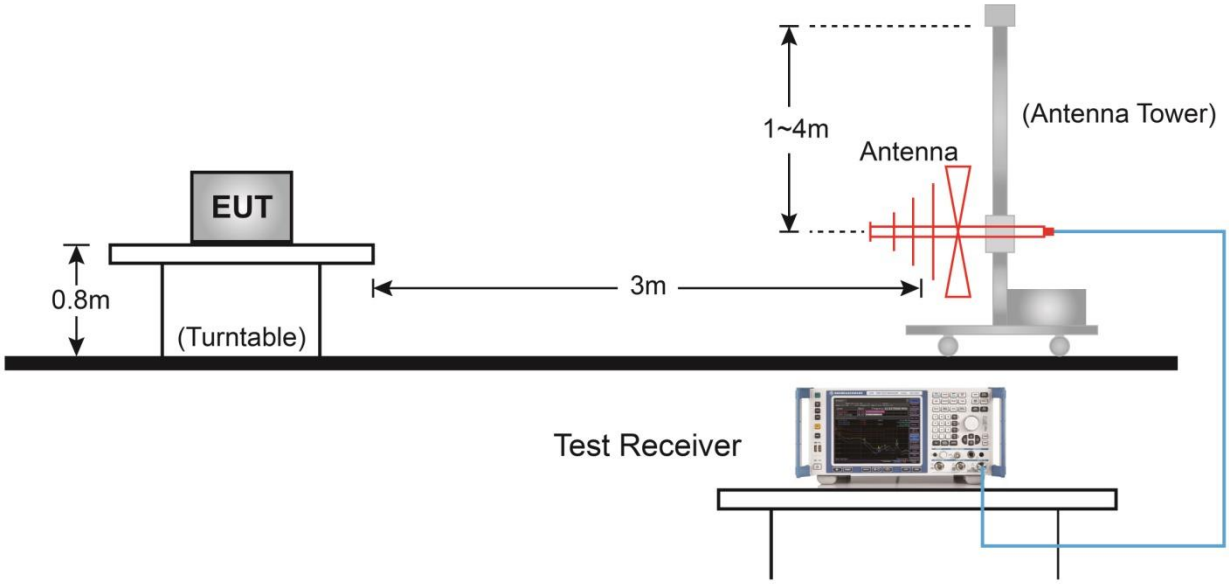
Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW;If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10Hz

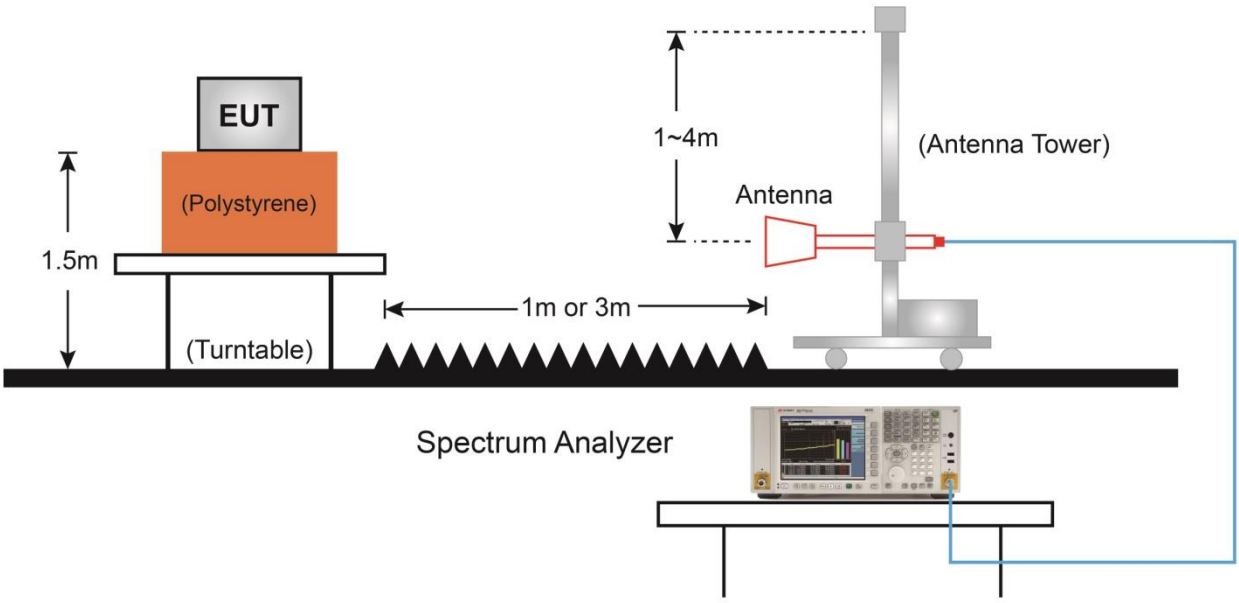
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.8.4.Test Setup

Below 1GHz Test Setup:



Above1GHz Test Setup:



6.8.5.Test Result

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	36
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11004.5	51.0	-3.4	47.6	74.0	-26.4	Peak	Horizontal
	11786.5	50.0	-3.6	46.4	74.0	-27.6	Peak	Horizontal
*	14294.0	48.7	1.7	50.4	68.2	-17.8	Peak	Horizontal
*	16835.5	48.2	4.7	52.9	68.2	-15.3	Peak	Horizontal
	10953.5	50.1	-3.5	46.6	74.0	-27.4	Peak	Vertical
	12186.0	50.3	-3.3	47.0	74.0	-27.0	Peak	Vertical
*	14175.0	49.3	1.0	50.3	68.2	-17.9	Peak	Vertical
*	16572.0	48.6	4.5	53.1	68.2	-15.1	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	44
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	10902.5	50.3	-3.2	47.1	74.0	-26.9	Peak	Horizontal
	11897.0	50.3	-3.3	47.0	74.0	-27.0	Peak	Horizontal
*	14132.5	49.3	1.1	50.4	68.2	-17.8	Peak	Horizontal
*	16682.5	47.7	4.7	52.4	68.2	-15.8	Peak	Horizontal
	10834.5	50.1	-3.4	46.7	74.0	-27.3	Peak	Vertical
	12109.5	50.2	-3.1	47.1	74.0	-26.9	Peak	Vertical
*	14243.0	49.1	1.3	50.4	68.2	-17.8	Peak	Vertical
*	17303.0	48.5	4.8	53.3	68.2	-14.9	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	48
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11149.0	50.3	-3.4	46.9	74.0	-27.1	Peak	Horizontal
	12075.5	50.4	-3.4	47.0	74.0	-27.0	Peak	Horizontal
*	14880.5	48.3	2.3	50.6	68.2	-17.6	Peak	Horizontal
*	17320.0	47.8	5.1	52.9	68.2	-15.3	Peak	Horizontal
	11319.0	50.3	-3.2	47.1	74.0	-26.9	Peak	Vertical
	12330.5	50.8	-3.3	47.5	74.0	-26.5	Peak	Vertical
*	14217.5	49.1	1.0	50.1	68.2	-18.1	Peak	Vertical
*	16835.5	48.0	4.7	52.7	68.2	-15.5	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	52
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
	11030.0	50.1	-3.3	46.8	74.0	-27.2	Peak	Horizontal
	11888.5	51.1	-3.6	47.5	74.0	-26.5	Peak	Horizontal
*	13809.5	50.1	0.0	50.1	68.2	-18.1	Peak	Horizontal
*	16810.0	48.0	4.6	52.6	68.2	-15.6	Peak	Horizontal
	11140.5	50.1	-3.5	46.6	74.0	-27.4	Peak	Vertical
	11786.5	50.7	-3.6	47.1	74.0	-26.9	Peak	Vertical
*	14821.0	48.1	2.5	50.6	68.2	-17.6	Peak	Vertical
*	17396.5	48.4	4.9	53.3	68.2	-14.9	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	60
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
	10902.5	50.0	-3.2	46.8	74.0	-27.2	Peak	Horizontal
	11973.5	50.7	-3.7	47.0	74.0	-27.0	Peak	Horizontal
*	14812.5	47.8	2.5	50.3	68.2	-17.9	Peak	Horizontal
*	16784.5	48.0	4.9	52.9	68.2	-15.3	Peak	Horizontal
	10724.0	50.5	-3.3	47.2	74.0	-26.8	Peak	Vertical
	11778.0	50.7	-3.4	47.3	74.0	-26.7	Peak	Vertical
*	14073.0	48.8	1.0	49.8	68.2	-18.4	Peak	Vertical
*	17141.5	48.2	4.5	52.7	68.2	-15.5	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	64
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
	11030.0	50.1	-3.3	46.8	74.0	-27.2	Peak	Horizontal
	12101.0	50.3	-3.2	47.1	74.0	-26.9	Peak	Horizontal
*	14761.5	47.5	2.0	49.5	68.2	-18.7	Peak	Horizontal
*	17303.0	48.2	4.8	53.0	68.2	-15.2	Peak	Horizontal
	11072.5	50.0	-3.3	46.7	74.0	-27.3	Peak	Vertical
	11914.0	50.6	-3.8	46.8	74.0	-27.2	Peak	Vertical
*	13894.5	48.8	0.4	49.2	68.2	-19.0	Peak	Vertical
*	16895.0	48.3	4.7	53.0	68.2	-15.2	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	100
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
	11081.0	50.3	-3.2	47.1	74.0	-26.9	Peak	Horizontal
	11778.0	50.7	-3.4	47.3	74.0	-26.7	Peak	Horizontal
*	15280.0	47.3	2.8	50.1	68.2	-18.1	Peak	Horizontal
*	16478.5	48.4	4.6	53.0	68.2	-15.2	Peak	Horizontal
	10979.0	50.6	-3.2	47.4	74.0	-26.6	Peak	Vertical
	12109.5	49.9	-3.1	46.8	74.0	-27.2	Peak	Vertical
*	16776.0	47.9	5.1	53.0	68.2	-15.2	Peak	Vertical
*	17320.0	48.3	5.1	53.4	68.2	-14.8	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	120
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
	10834.5	50.1	-3.4	46.7	74.0	-27.3	Peak	Horizontal
	12067.0	50.2	-3.4	46.8	74.0	-27.2	Peak	Horizontal
*	15076.0	48.4	2.3	50.7	68.2	-17.5	Peak	Horizontal
*	16776.0	47.6	5.1	52.7	68.2	-15.5	Peak	Horizontal
	11004.5	50.0	-3.4	46.6	74.0	-27.4	Peak	Vertical
	11710.0	50.5	-3.4	47.1	74.0	-26.9	Peak	Vertical
*	14226.0	49.0	1.1	50.1	68.2	-18.1	Peak	Vertical
*	16776.0	48.0	5.1	53.1	68.2	-15.1	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	140
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
	10741.0	50.0	-3.0	47.0	74.0	-27.0	Peak	Horizontal
	11778.0	50.2	-3.4	46.8	74.0	-27.2	Peak	Horizontal
*	14149.5	48.7	1.1	49.8	68.2	-18.4	Peak	Horizontal
*	16946.0	48.3	4.6	52.9	68.2	-15.3	Peak	Horizontal
	11149.0	50.5	-3.4	47.1	74.0	-26.9	Peak	Vertical
	12415.5	50.1	-2.9	47.2	74.0	-26.8	Peak	Vertical
*	14311.0	48.6	1.5	50.1	68.2	-18.1	Peak	Vertical
*	16385.0	47.7	4.7	52.4	68.2	-15.8	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	144
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
	10817.5	51.0	-3.3	47.7	74.0	-26.3	Peak	Horizontal
	11608.0	50.8	-3.6	47.2	74.0	-26.8	Peak	Horizontal
*	13894.5	49.3	0.4	49.7	68.2	-18.5	Peak	Horizontal
*	16869.5	47.9	4.9	52.8	68.2	-15.4	Peak	Horizontal
	11064.0	50.3	-3.3	47.0	74.0	-27.0	Peak	Vertical
	12084.0	50.4	-3.4	47.0	74.0	-27.0	Peak	Vertical
*	13622.5	50.9	-0.7	50.2	68.2	-18.0	Peak	Vertical
*	17481.5	47.8	5.2	53.0	68.2	-15.2	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	149
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	10732.5	50.4	-3.1	47.3	74.0	-26.7	Peak	Horizontal
	11642.0	51.5	-3.9	47.6	74.0	-26.4	Peak	Horizontal
*	14744.5	48.6	2.2	50.8	68.2	-17.4	Peak	Horizontal
*	16776.0	47.6	5.1	52.7	68.2	-15.5	Peak	Horizontal
	10987.5	50.3	-3.3	47.0	74.0	-27.0	Peak	Vertical
	11642.0	51.5	-3.9	47.6	74.0	-26.4	Peak	Vertical
*	14744.5	48.6	2.2	50.8	68.2	-17.4	Peak	Vertical
*	16776.0	47.6	5.1	52.7	68.2	-15.5	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	157
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11225.5	50.4	-4.0	46.4	74.0	-27.6	Peak	Horizontal
	12101.0	50.4	-3.2	47.2	74.0	-26.8	Peak	Horizontal
*	14727.5	48.2	2.2	50.4	68.2	-17.8	Peak	Horizontal
*	16725.0	48.0	4.7	52.7	68.2	-15.5	Peak	Horizontal
	11004.5	50.4	-3.4	47.0	74.0	-27.0	Peak	Vertical
	12186.0	50.0	-3.3	46.7	74.0	-27.3	Peak	Vertical
*	14073.0	48.9	1.0	49.9	68.2	-18.3	Peak	Vertical
*	16878.0	47.9	5.0	52.9	68.2	-15.3	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11a	Test Channel	165
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11030.0	50.7	-3.3	47.4	74.0	-26.6	Peak	Horizontal
	12611.0	50.5	-2.7	47.8	74.0	-26.2	Peak	Horizontal
*	13996.5	49.0	0.6	49.6	68.2	-18.6	Peak	Horizontal
*	16767.5	48.2	4.8	53.0	68.2	-15.2	Peak	Horizontal
	10911.0	50.1	-3.1	47.0	74.0	-27.0	Peak	Vertical
	11727.0	50.8	-3.7	47.1	74.0	-26.9	Peak	Vertical
*	15195.0	48.1	2.6	50.7	68.2	-17.5	Peak	Vertical
*	16767.5	47.8	4.8	52.6	68.2	-15.6	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	36
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11089.5	49.8	-3.4	46.4	74.0	-27.6	Peak	Horizontal
	12602.5	49.4	-2.7	46.7	74.0	-27.3	Peak	Horizontal
*	14812.5	48.3	2.5	50.8	68.2	-17.4	Peak	Horizontal
*	17388.0	47.4	5.0	52.4	68.2	-15.8	Peak	Horizontal
	11591.0	51.3	-3.7	47.6	74.0	-26.4	Peak	Vertical
	12534.5	50.0	-2.8	47.2	74.0	-26.8	Peak	Vertical
*	13979.5	49.4	0.7	50.1	68.2	-18.1	Peak	Vertical
*	16708.0	47.4	4.7	52.1	68.2	-16.1	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	44
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11659.0	50.8	-3.2	47.6	74.0	-26.4	Peak	Horizontal
	12007.5	50.5	-3.1	47.4	74.0	-26.6	Peak	Horizontal
*	14753.0	47.8	2.1	49.9	68.2	-18.3	Peak	Horizontal
*	17158.5	47.5	4.6	52.1	68.2	-16.1	Peak	Horizontal
	11259.5	50.5	-3.7	46.8	74.0	-27.2	Peak	Vertical
	11795.0	50.4	-3.9	46.5	74.0	-27.5	Peak	Vertical
*	14812.5	46.8	2.5	49.3	68.2	-18.9	Peak	Vertical
*	16767.5	47.1	4.8	51.9	68.2	-16.3	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	48
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	10800.5	50.1	-3.3	46.8	74.0	-27.2	Peak	Horizontal
	12160.5	50.5	-3.6	46.9	74.0	-27.1	Peak	Horizontal
*	14277.0	49.0	1.2	50.2	68.2	-18.0	Peak	Horizontal
*	16776.0	47.4	5.1	52.5	68.2	-15.7	Peak	Horizontal
	11064.0	50.0	-3.3	46.7	74.0	-27.3	Peak	Vertical
	11999.0	50.2	-2.9	47.3	74.0	-26.7	Peak	Vertical
*	14838.0	48.2	2.3	50.5	68.2	-17.7	Peak	Vertical
*	16478.5	47.9	4.6	52.5	68.2	-15.7	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	52
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
	11659.0	50.4	-3.2	47.2	74.0	-26.8	Peak	Horizontal
	12475.0	49.9	-3.2	46.7	74.0	-27.3	Peak	Horizontal
*	13733.0	49.3	0.0	49.3	68.2	-18.9	Peak	Horizontal
*	16835.5	47.1	4.7	51.8	68.2	-16.4	Peak	Horizontal
	11540.0	50.5	-3.8	46.7	74.0	-27.3	Peak	Vertical
	11897.0	49.8	-3.3	46.5	74.0	-27.5	Peak	Vertical
*	13894.5	48.9	0.4	49.3	68.2	-18.9	Peak	Vertical
*	16648.5	47.5	4.3	51.8	68.2	-16.4	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	60
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
	11429.5	50.3	-3.8	46.5	74.0	-27.5	Peak	Horizontal
	11999.0	49.7	-2.9	46.8	74.0	-27.2	Peak	Horizontal
*	14073.0	49.4	1.0	50.4	68.2	-17.8	Peak	Horizontal
*	16827.0	47.4	4.8	52.2	68.2	-16.0	Peak	Horizontal
	10749.5	49.9	-3.2	46.7	74.0	-27.3	Peak	Vertical
	11659.0	49.8	-3.2	46.6	74.0	-27.4	Peak	Vertical
*	14719.0	48.6	2.1	50.7	68.2	-17.5	Peak	Vertical
*	16767.5	47.7	4.8	52.5	68.2	-15.7	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	64
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
	10996.0	50.7	-3.4	47.3	74.0	-26.7	Peak	Horizontal
	12313.5	50.0	-3.1	46.9	74.0	-27.1	Peak	Horizontal
*	14804.0	47.9	2.5	50.4	68.2	-17.8	Peak	Horizontal
*	16682.5	46.7	4.7	51.4	68.2	-16.8	Peak	Horizontal
	11540.0	50.9	-3.8	47.1	74.0	-26.9	Peak	Vertical
	12568.5	50.0	-3.1	46.9	74.0	-27.1	Peak	Vertical
*	14634.0	47.9	1.9	49.8	68.2	-18.4	Peak	Vertical
*	16793.0	47.7	4.8	52.5	68.2	-15.7	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	100
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
	11072.5	50.4	-3.3	47.1	74.0	-26.9	Peak	Horizontal
	12126.5	50.5	-3.2	47.3	74.0	-26.7	Peak	Horizontal
*	15280.0	47.7	2.8	50.5	68.2	-17.7	Peak	Horizontal
*	16674.0	47.2	4.7	51.9	68.2	-16.3	Peak	Horizontal
	10987.5	49.7	-3.3	46.4	74.0	-27.6	Peak	Vertical
	12152.0	50.3	-3.7	46.6	74.0	-27.4	Peak	Vertical
*	14081.5	49.1	0.9	50.0	68.2	-18.2	Peak	Vertical
*	16699.5	47.2	4.7	51.9	68.2	-16.3	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	120
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
	11310.5	49.9	-3.5	46.4	74.0	-27.6	Peak	Horizontal
	12245.5	50.4	-3.4	47.0	74.0	-27.0	Peak	Horizontal
*	15042.0	46.6	2.6	49.2	68.2	-19.0	Peak	Horizontal
*	17388.0	47.8	5.0	52.8	68.2	-15.4	Peak	Horizontal
	11081.0	49.8	-3.2	46.6	74.0	-27.4	Peak	Vertical
	11897.0	50.3	-3.3	47.0	74.0	-27.0	Peak	Vertical
*	15288.5	48.4	2.8	51.2	68.2	-17.0	Peak	Vertical
*	16682.5	47.4	4.7	52.1	68.2	-16.1	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	140
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
	10979.0	50.0	-3.2	46.8	74.0	-27.2	Peak	Horizontal
	11599.5	50.5	-3.6	46.9	74.0	-27.1	Peak	Horizontal
*	14838.0	48.2	2.3	50.5	68.2	-17.7	Peak	Horizontal
*	16767.5	47.4	4.8	52.2	68.2	-16.0	Peak	Horizontal
	11319.0	49.6	-3.2	46.4	74.0	-27.6	Peak	Vertical
	12245.5	50.2	-3.4	46.8	74.0	-27.2	Peak	Vertical
*	14821.0	47.8	2.5	50.3	68.2	-17.9	Peak	Vertical
*	17388.0	47.9	5.0	52.9	68.2	-15.3	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	144
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
	10664.5	50.5	-3.2	47.3	74.0	-26.7	Peak	Horizontal
	11803.5	51.0	-3.9	47.1	74.0	-26.9	Peak	Horizontal
*	16470.0	47.4	4.6	52.0	68.2	-16.2	Peak	Horizontal
*	17141.5	47.3	4.5	51.8	68.2	-16.4	Peak	Horizontal
	10970.5	49.9	-3.2	46.7	74.0	-27.3	Peak	Vertical
	11642.0	51.5	-3.9	47.6	74.0	-26.4	Peak	Vertical
*	14795.5	48.0	2.2	50.2	68.2	-18.0	Peak	Vertical
*	16699.5	47.0	4.7	51.7	68.2	-16.5	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	149
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11565.5	50.3	-3.7	46.6	74.0	-27.4	Peak	Horizontal
	12220.0	50.6	-3.2	47.4	74.0	-26.6	Peak	Horizontal
*	13971.0	48.9	0.8	49.7	68.2	-18.5	Peak	Horizontal
*	16776.0	47.0	5.1	52.1	68.2	-16.1	Peak	Horizontal
	11081.0	49.8	-3.2	46.6	74.0	-27.4	Peak	Vertical
	12126.5	49.7	-3.2	46.5	74.0	-27.5	Peak	Vertical
*	15263.0	47.1	3.1	50.2	68.2	-18.0	Peak	Vertical
*	16767.5	47.1	4.8	51.9	68.2	-16.3	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	157
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11429.5	50.2	-3.8	46.4	74.0	-27.6	Peak	Horizontal
	12237.0	50.0	-3.1	46.9	74.0	-27.1	Peak	Horizontal
*	13903.0	48.8	0.4	49.2	68.2	-19.0	Peak	Horizontal
*	16937.5	47.2	4.7	51.9	68.2	-16.3	Peak	Horizontal
	11004.5	50.8	-3.4	47.4	74.0	-26.6	Peak	Vertical
	12118.0	49.5	-3.0	46.5	74.0	-27.5	Peak	Vertical
*	15118.5	47.8	2.3	50.1	68.2	-18.1	Peak	Vertical
*	16674.0	47.5	4.7	52.2	68.2	-16.0	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT20	Test Channel	165
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11089.5	50.1	-3.4	46.7	74.0	-27.3	Peak	Horizontal
	11591.0	50.1	-3.7	46.4	74.0	-27.6	Peak	Horizontal
*	14387.5	48.8	1.6	50.4	68.2	-17.8	Peak	Horizontal
*	17150.0	47.7	4.8	52.5	68.2	-15.7	Peak	Horizontal
	11429.5	51.2	-3.8	47.4	74.0	-26.6	Peak	Vertical
	12262.5	50.9	-3.6	47.3	74.0	-26.7	Peak	Vertical
*	14804.0	48.0	2.5	50.5	68.2	-17.7	Peak	Vertical
*	16759.0	47.9	4.6	52.5	68.2	-15.7	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	38
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11081.0	49.6	-3.2	46.4	74.0	-27.6	Peak	Horizontal
	12016.0	50.8	-3.3	47.5	74.0	-26.5	Peak	Horizontal
*	15212.0	47.9	2.9	50.8	68.2	-17.4	Peak	Horizontal
*	16818.5	48.2	4.7	52.9	68.2	-15.3	Peak	Horizontal
	11064.0	49.7	-3.3	46.4	74.0	-27.6	Peak	Vertical
	11999.0	50.3	-2.9	47.4	74.0	-26.6	Peak	Vertical
*	13894.5	49.1	0.4	49.5	68.2	-18.7	Peak	Vertical
*	16538.0	47.6	4.0	51.6	68.2	-16.6	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	46
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	10783.5	50.4	-3.4	47.0	74.0	-27.0	Peak	Horizontal
	12415.5	50.5	-2.9	47.6	74.0	-26.4	Peak	Horizontal
*	14744.5	47.6	2.2	49.8	68.2	-18.4	Peak	Horizontal
*	16801.5	47.5	4.7	52.2	68.2	-16.0	Peak	Horizontal
	10877.0	49.8	-3.7	46.1	74.0	-27.9	Peak	Vertical
	12526.0	49.8	-2.6	47.2	74.0	-26.8	Peak	Vertical
*	14149.5	48.3	1.1	49.4	68.2	-18.8	Peak	Vertical
*	16589.0	47.4	4.2	51.6	68.2	-16.6	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	54
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
	10979.0	49.6	-3.2	46.4	74.0	-27.6	Peak	Horizontal
	11990.5	49.9	-3.2	46.7	74.0	-27.3	Peak	Horizontal
*	14829.5	48.0	2.4	50.4	68.2	-17.8	Peak	Horizontal
*	16929.0	47.6	4.8	52.4	68.2	-15.8	Peak	Horizontal
	10792.0	49.6	-3.2	46.4	74.0	-27.6	Peak	Vertical
	11897.0	51.0	-3.3	47.7	74.0	-26.3	Peak	Vertical
*	14821.0	47.4	2.5	49.9	68.2	-18.3	Peak	Vertical
*	16589.0	48.1	4.2	52.3	68.2	-15.9	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	62
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
	10792.0	49.6	-3.2	46.4	74.0	-27.6	Peak	Horizontal
	11786.5	49.3	-3.6	45.7	74.0	-28.3	Peak	Horizontal
*	14549.0	48.5	1.7	50.2	68.2	-18.0	Peak	Horizontal
*	17430.5	47.5	5.3	52.8	68.2	-15.4	Peak	Horizontal
	11089.5	49.8	-3.4	46.4	74.0	-27.6	Peak	Vertical
	11727.0	50.4	-3.7	46.7	74.0	-27.3	Peak	Vertical
*	14829.5	47.4	2.4	49.8	68.2	-18.4	Peak	Vertical
*	17396.5	48.0	4.9	52.9	68.2	-15.3	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	102
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
	11072.5	50.4	-3.3	47.1	74.0	-26.9	Peak	Horizontal
	11540.0	50.3	-3.8	46.5	74.0	-27.5	Peak	Horizontal
*	13894.5	48.9	0.4	49.3	68.2	-18.9	Peak	Horizontal
*	16903.5	47.4	4.6	52.0	68.2	-16.2	Peak	Horizontal
	11072.5	50.4	-3.3	47.1	74.0	-26.9	Peak	Vertical
	11990.5	50.6	-3.2	47.4	74.0	-26.6	Peak	Vertical
*	15280.0	47.8	2.8	50.6	68.2	-17.6	Peak	Vertical
*	16393.5	47.2	4.6	51.8	68.2	-16.4	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	110
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
	11310.5	50.3	-3.5	46.8	74.0	-27.2	Peak	Horizontal
	11999.0	50.7	-2.9	47.8	74.0	-26.2	Peak	Horizontal
*	14889.0	47.6	2.3	49.9	68.2	-18.3	Peak	Horizontal
*	16674.0	47.7	4.7	52.4	68.2	-15.8	Peak	Horizontal
	11072.5	50.0	-3.3	46.7	74.0	-27.3	Peak	Vertical
	11990.5	50.6	-3.2	47.4	74.0	-26.6	Peak	Vertical
*	15237.5	47.3	3.0	50.3	68.2	-17.9	Peak	Vertical
*	16801.5	48.1	4.7	52.8	68.2	-15.4	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	134
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
	10902.5	49.7	-3.2	46.5	74.0	-27.5	Peak	Horizontal
	12084.0	51.0	-3.4	47.6	74.0	-26.4	Peak	Horizontal
*	15127.0	47.5	2.4	49.9	68.2	-18.3	Peak	Horizontal
*	16453.0	47.1	4.3	51.4	68.2	-16.8	Peak	Horizontal
	11064.0	50.8	-3.3	47.5	74.0	-26.5	Peak	Vertical
	11999.0	50.3	-2.9	47.4	74.0	-26.6	Peak	Vertical
*	13826.5	48.9	0.3	49.2	68.2	-19.0	Peak	Vertical
*	16776.0	46.6	5.1	51.7	68.2	-16.5	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	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12~2020/11/16
Test Mode	802.11ac-VHT40	Test Channel	142
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
	11089.5	49.8	-3.4	46.4	74.0	-27.6	Peak	Horizontal
	12118.0	49.5	-3.0	46.5	74.0	-27.5	Peak	Horizontal
*	14753.0	47.9	2.1	50.0	68.2	-18.2	Peak	Horizontal
*	16546.5	47.8	4.3	52.1	68.2	-16.1	Peak	Horizontal
	10970.5	50.0	-3.2	46.8	74.0	-27.2	Peak	Vertical
	12109.5	50.5	-3.1	47.4	74.0	-26.6	Peak	Vertical
*	15237.5	47.3	3.0	50.3	68.2	-17.9	Peak	Vertical
*	16827.0	47.9	4.8	52.7	68.2	-15.5	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)