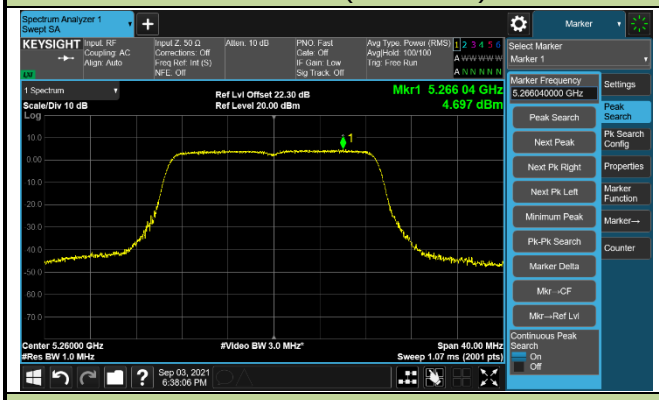
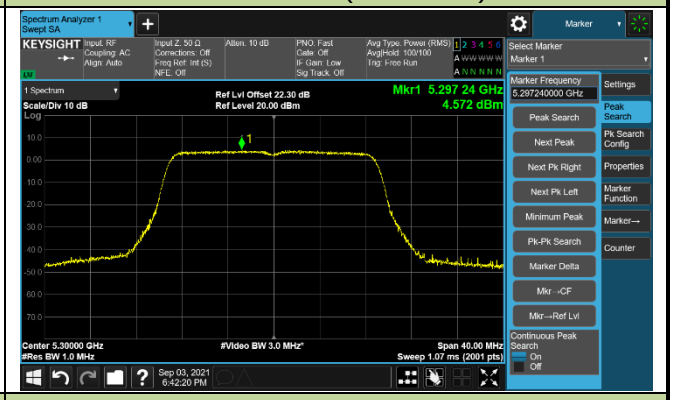
802.11ac-VHT20 Power Spectral Density - Ant 0

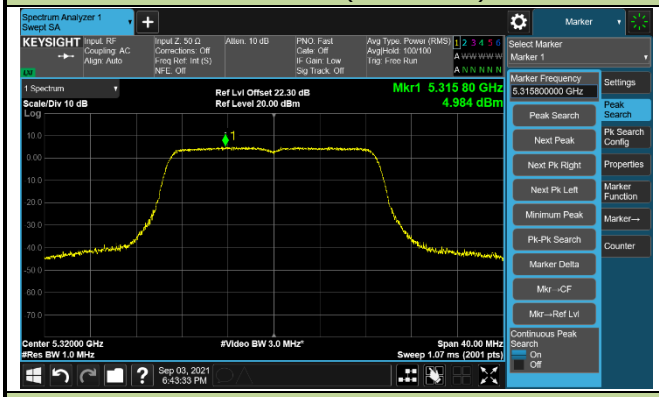
Channel 52 (5260MHz)



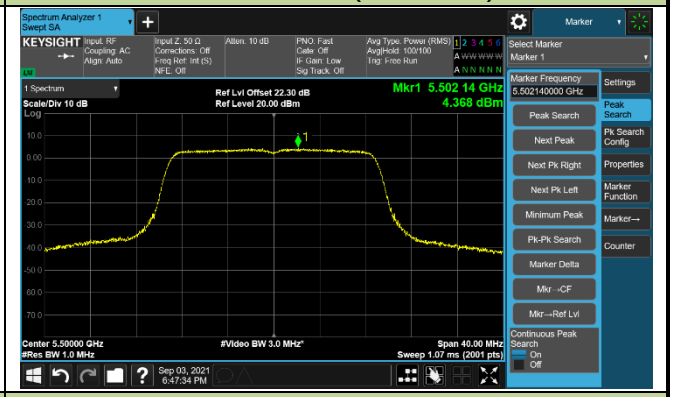
Channel 60 (5300MHz)



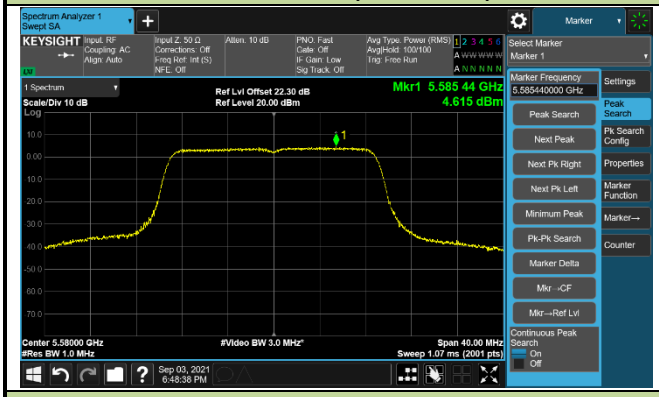
Channel 64 (5320MHz)



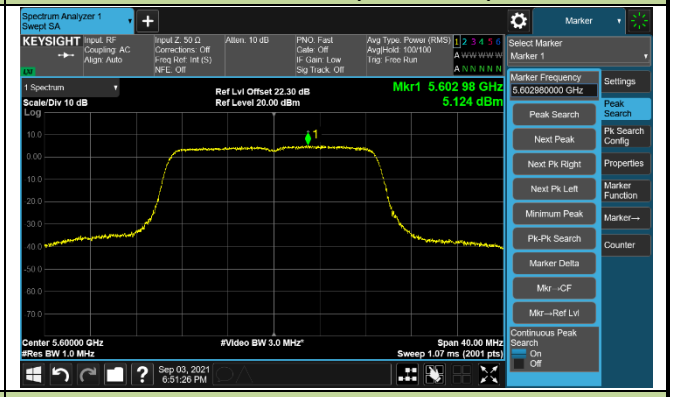
Channel 100 (5500MHz)



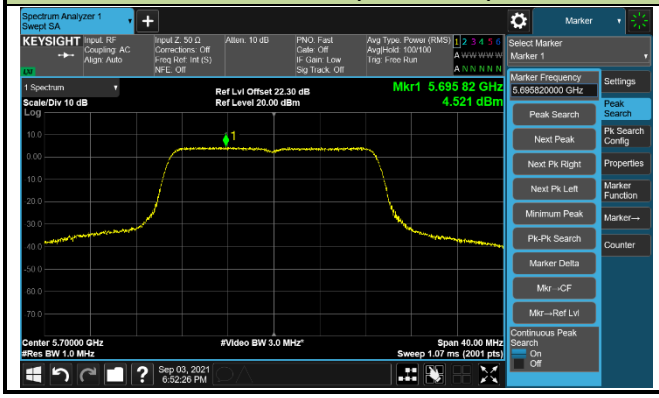
Channel 116 (5580MHz)



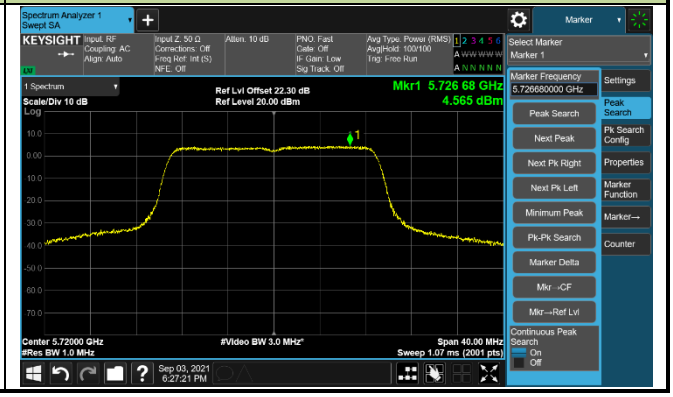
Channel 120 (5600MHz)



Channel 140 (5700MHz)

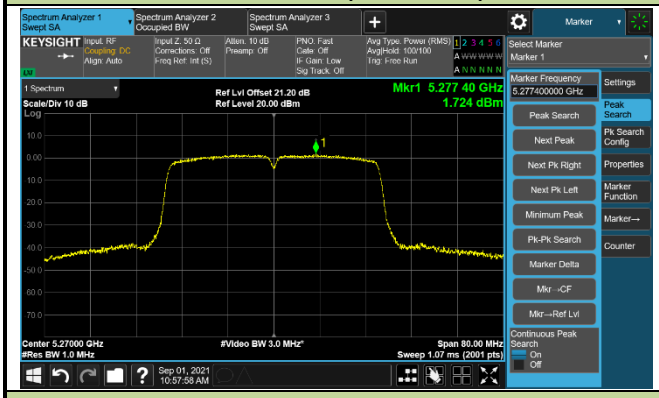


Channel 144 (5720MHz)

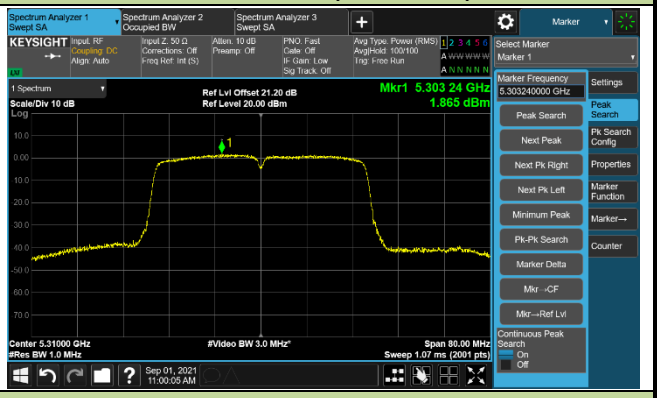


802.11ac-VHT40 Power Spectral Density - Ant 0

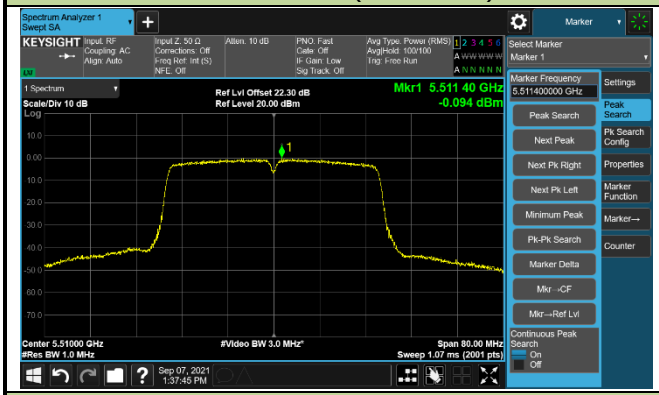
Channel 54 (5270MHz)



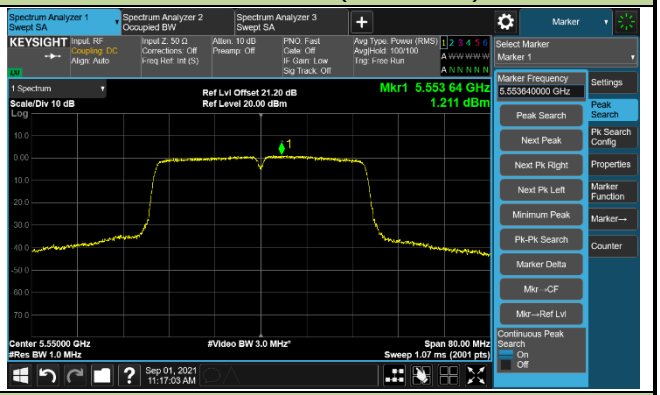
Channel 62 (5310MHz)



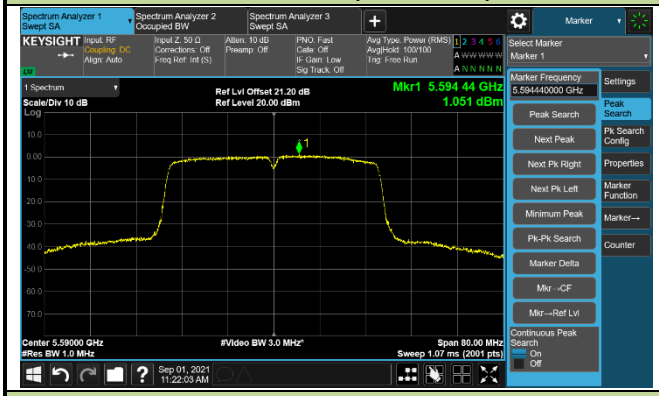
Channel 102 (5510MHz)



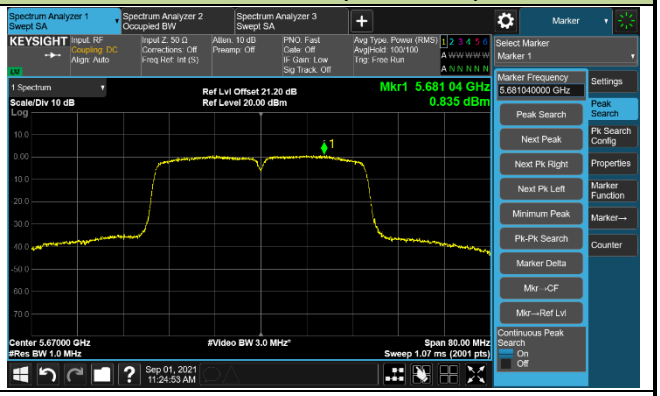
Channel 110 (5550MHz)



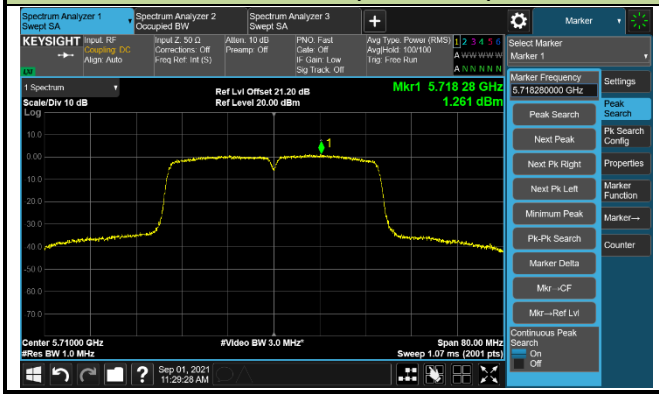
Channel 118 (5590MHz)

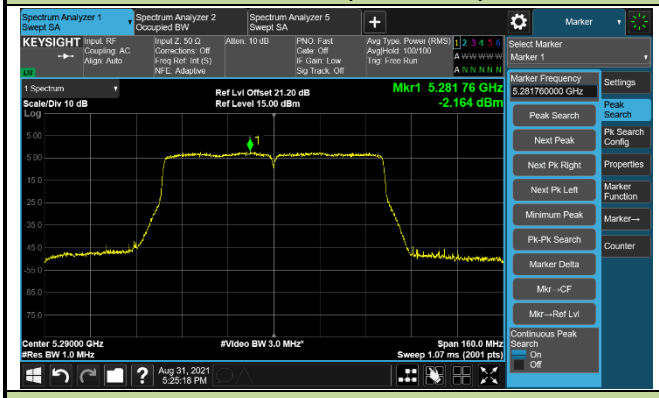
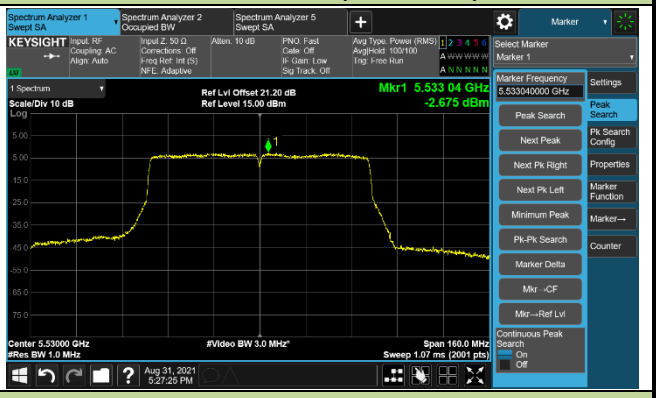
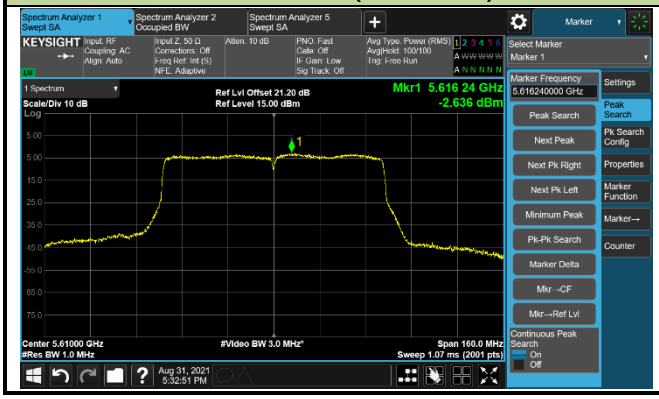
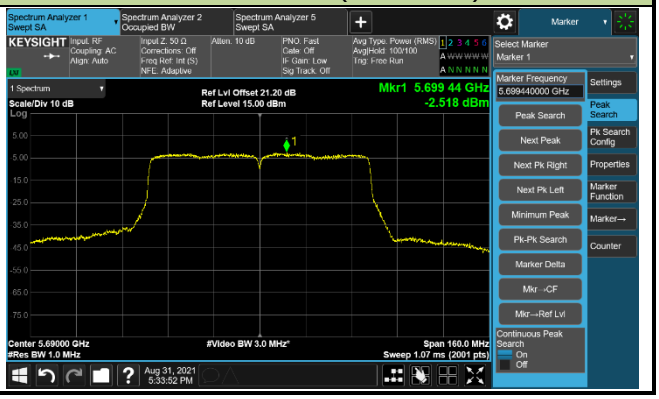


Channel 134 (5670MHz)



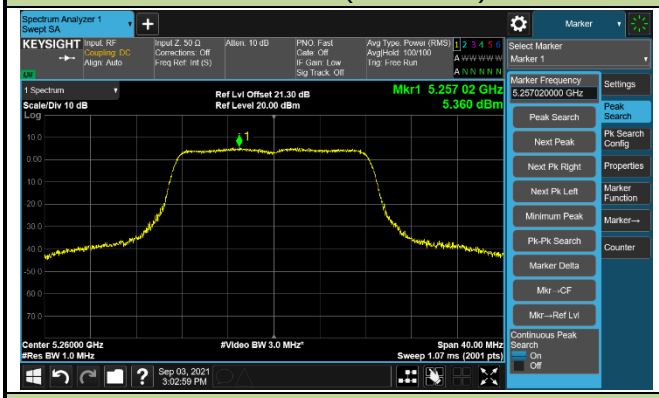
Channel 142 (5710MHz)



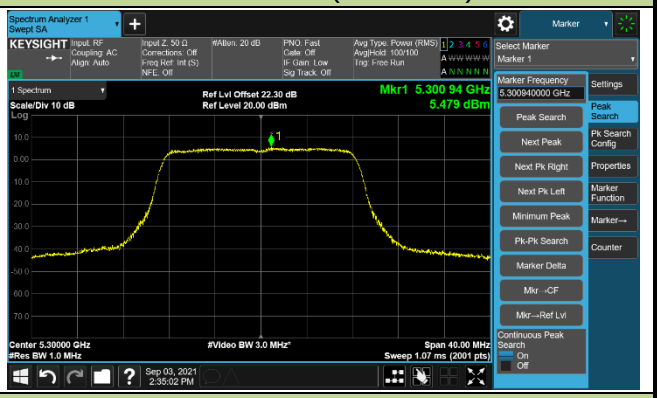
802.11ac-VHT80 Power Spectral Density - Ant 0	
Channel 58 (5290MHz)	Channel 106 (5530MHz)
	
Channel 122 (5610MHz)	Channel 138 (5690MHz)
	

802.11a Power Spectral Density - Ant 1

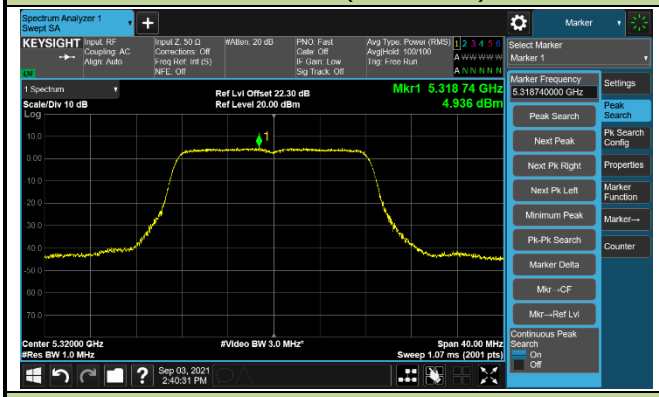
Channel 52 (5260MHz)



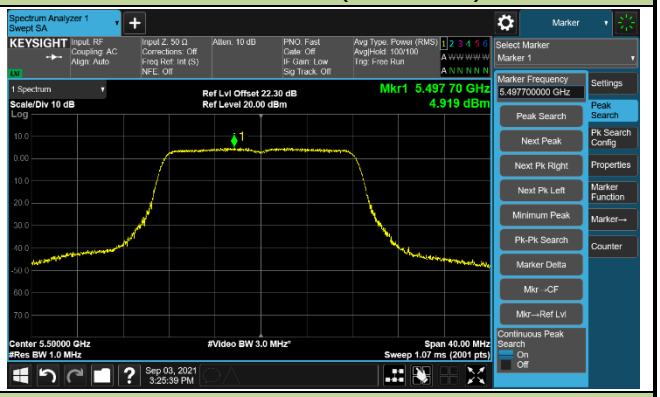
Channel 60 (5300MHz)



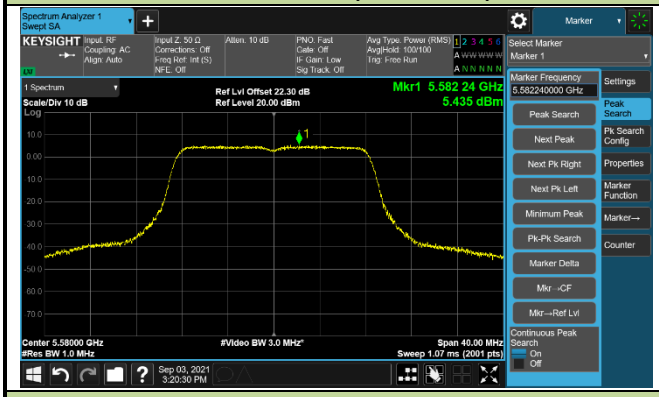
Channel 64 (5320MHz)



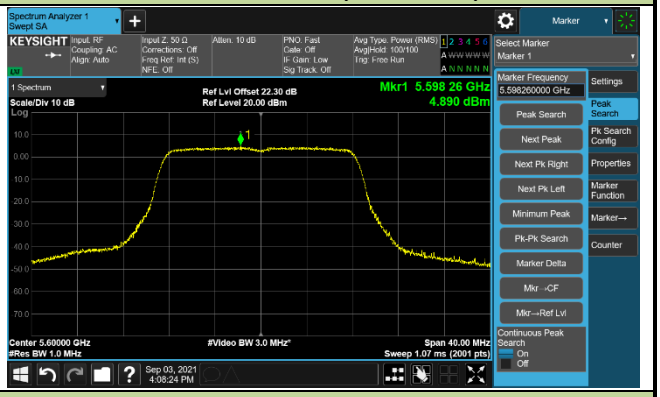
Channel 100 (5500MHz)



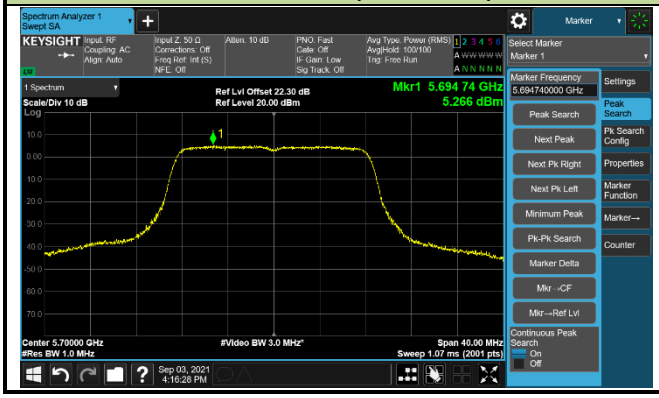
Channel 116 (5580MHz)



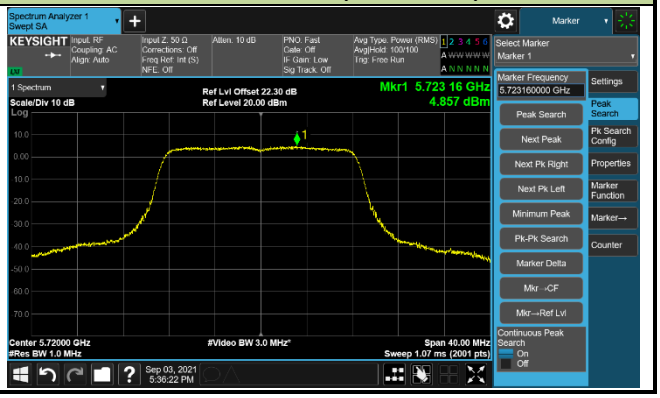
Channel 120 (5600MHz)

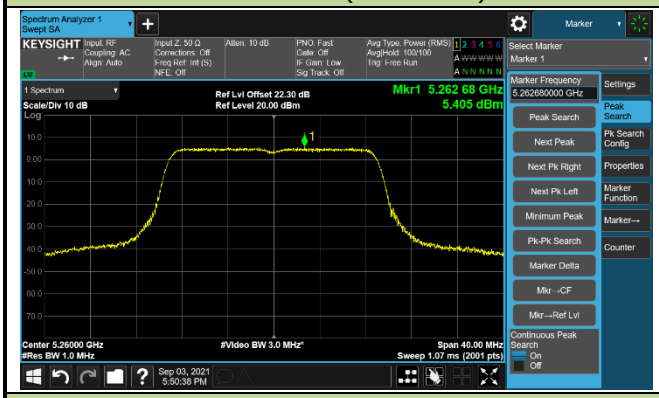
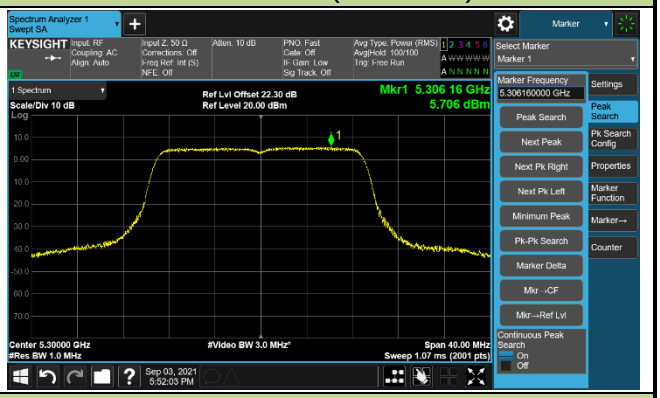
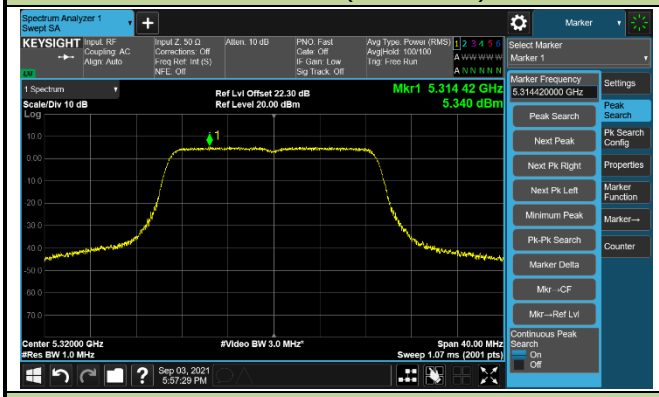
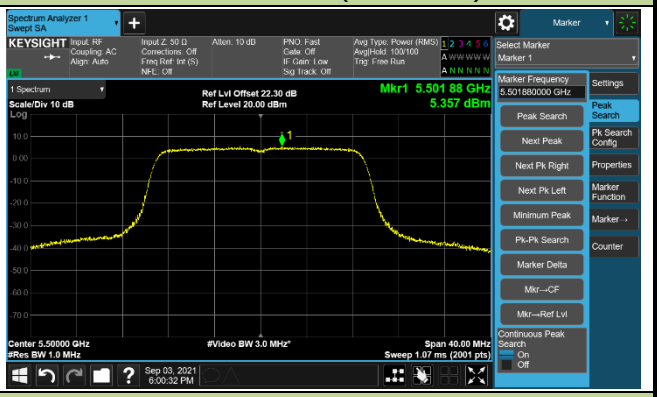
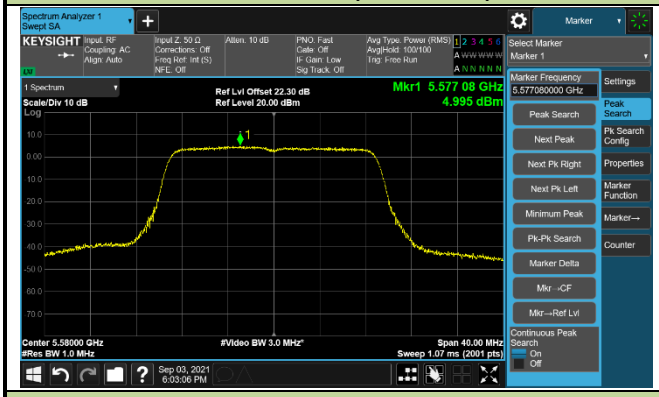
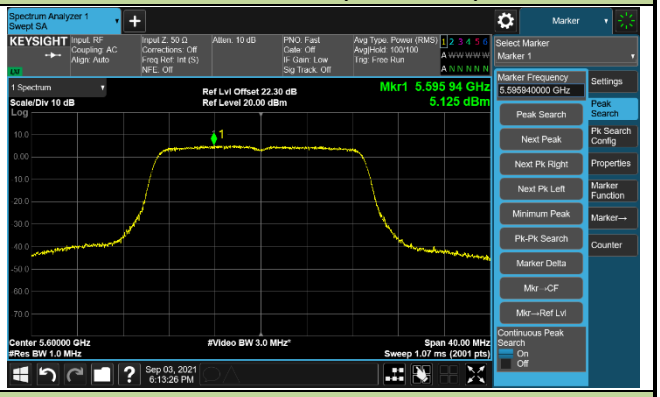
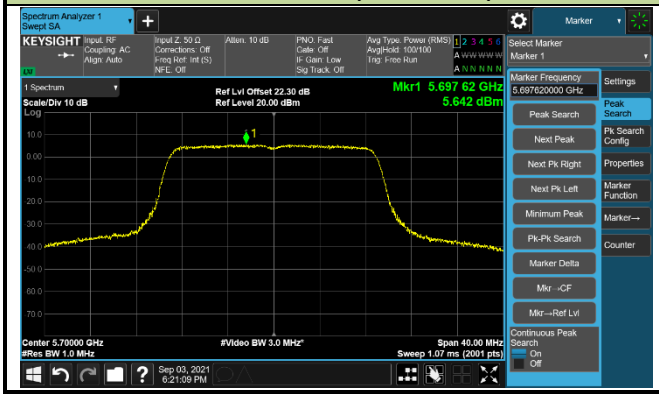
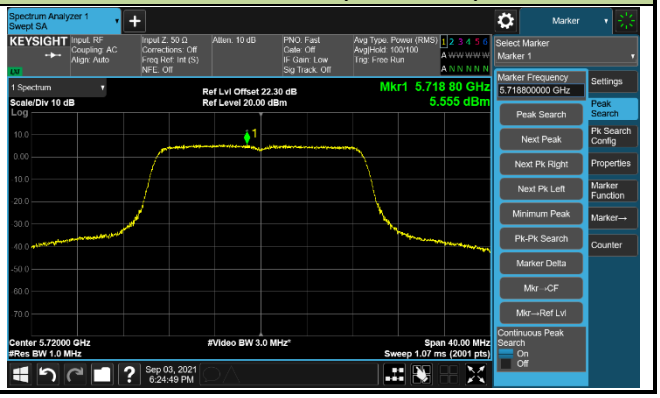


Channel 140 (5700MHz)



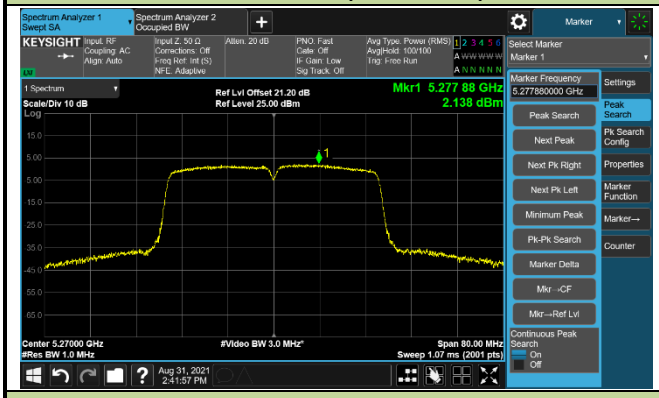
Channel 144 (5720MHz)



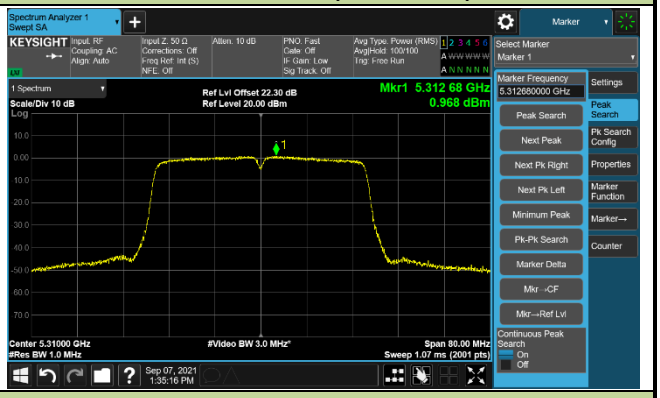
802.11n-HT20 Power Spectral Density - Ant 1	
Channel 52 (5260MHz)	Channel 60 (5300MHz)
	
Channel 64 (5320MHz)	Channel 100 (5500MHz)
	
Channel 116 (5580MHz)	Channel 120 (5600MHz)
	
Channel 140 (5700MHz)	Channel 144 (5720MHz)
	

802.11n-HT40 Power Spectral Density - Ant 1

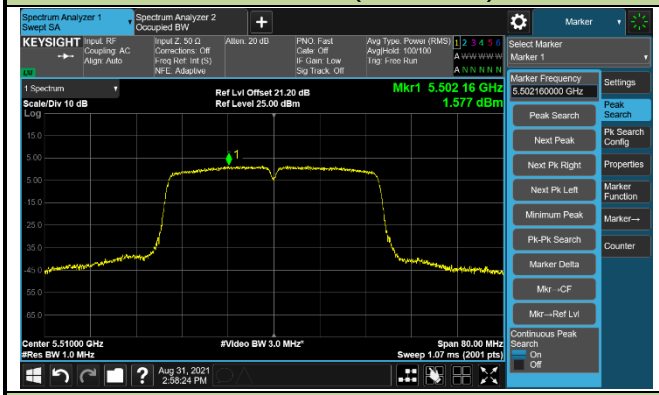
Channel 54 (5270MHz)



Channel 62 (5310MHz)

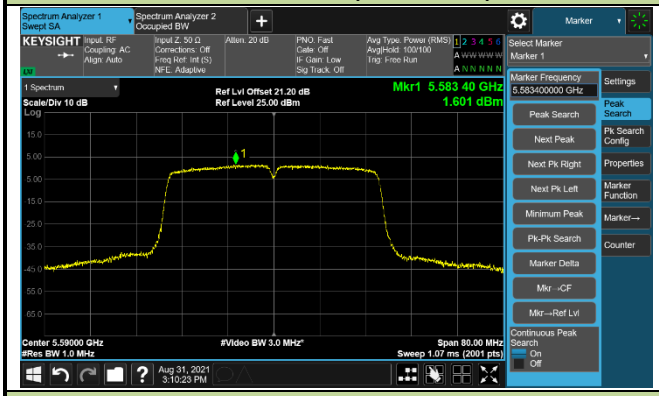


Channel 102 (5510MHz)

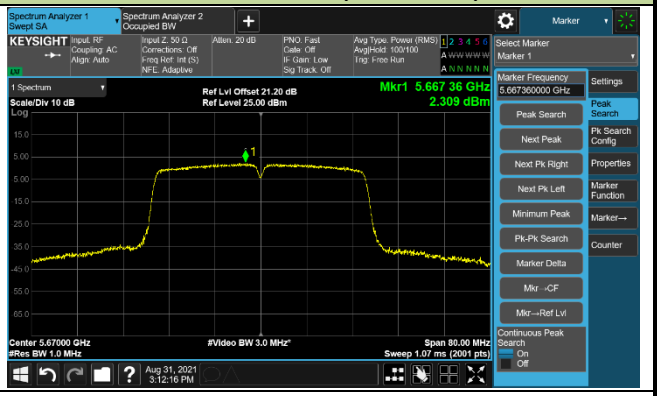


Channel 110 (5550MHz)

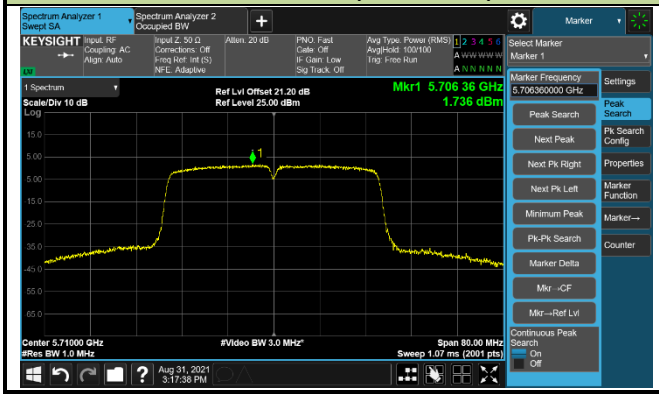
Channel 118 (5590MHz)



Channel 134 (5670MHz)

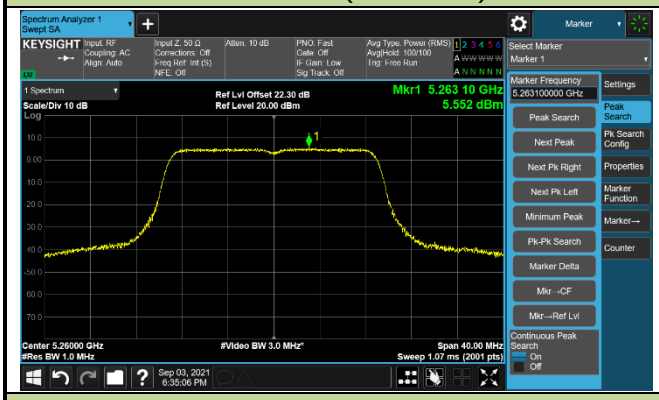


Channel 142 (5710MHz)

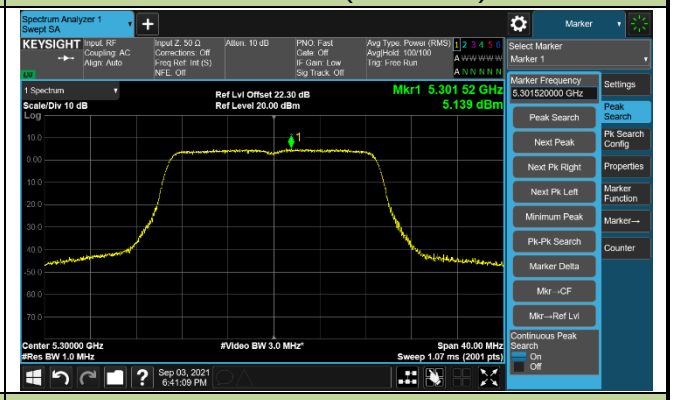


802.11ac-VHT20 Power Spectral Density - Ant 1

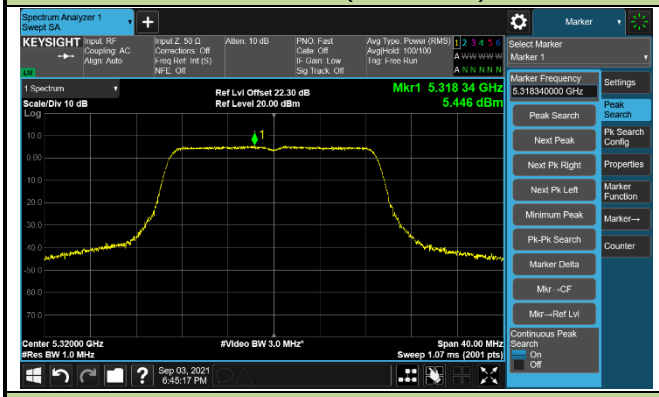
Channel 52 (5260MHz)



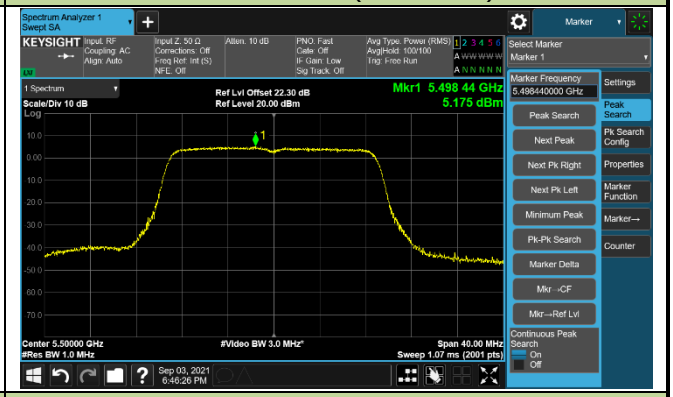
Channel 60 (5300MHz)



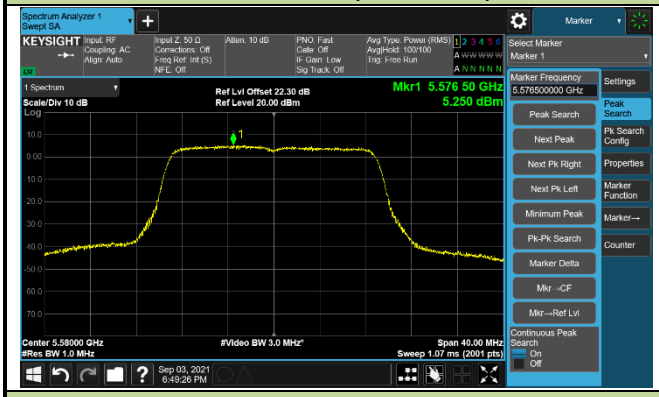
Channel 64 (5320MHz)



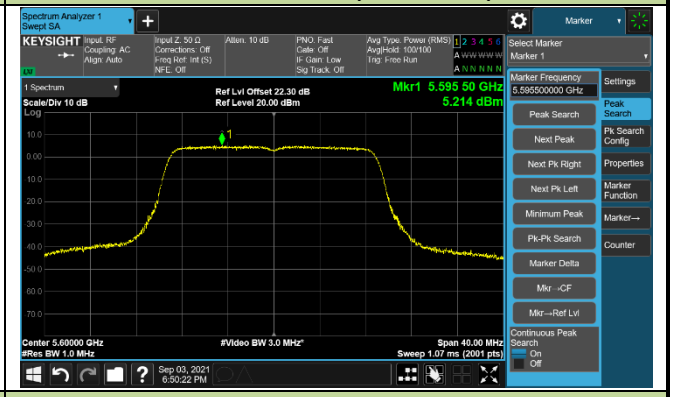
Channel 100 (5500MHz)



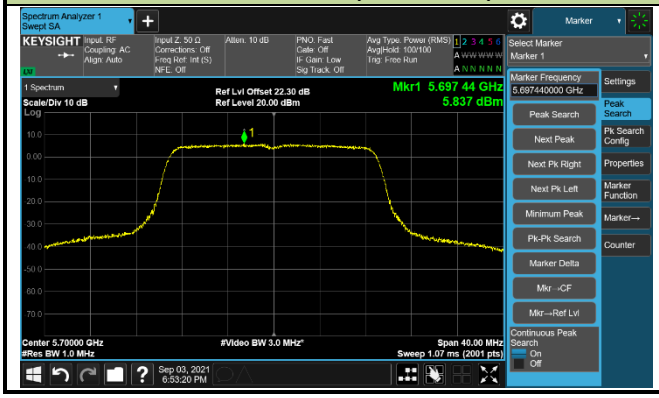
Channel 116 (5580MHz)



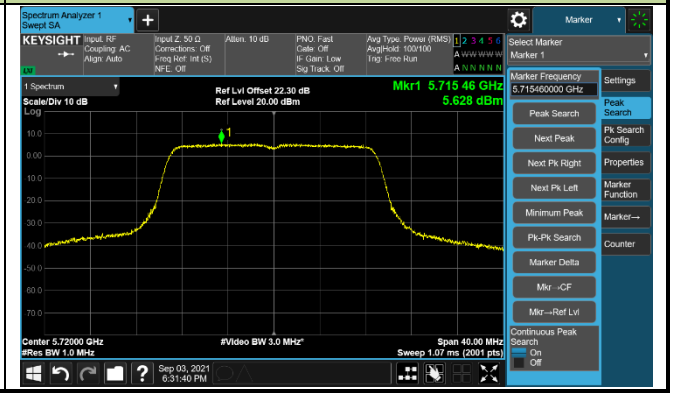
Channel 120 (5600MHz)



Channel 140 (5700MHz)

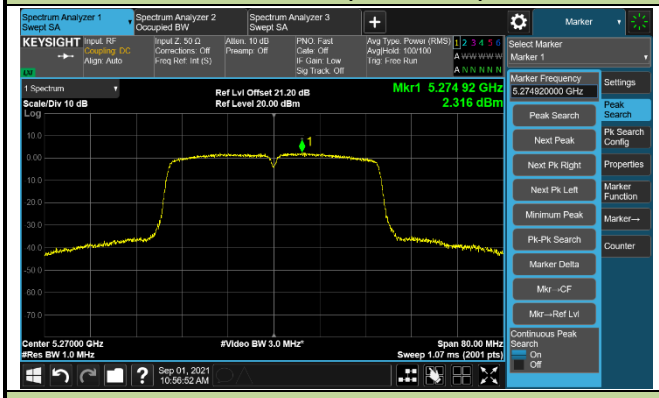


Channel 144 (5720MHz)

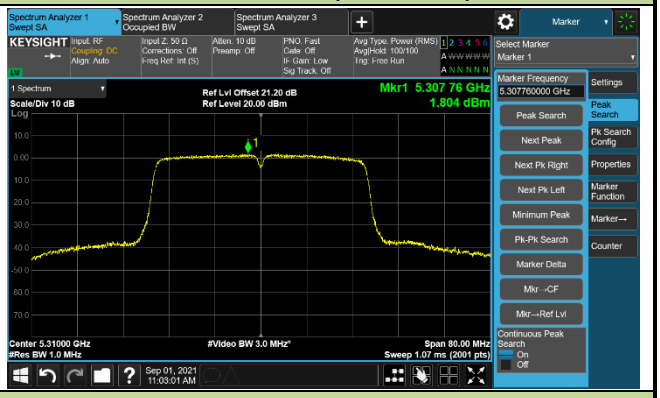


802.11ac-VHT40 Power Spectral Density - Ant 1

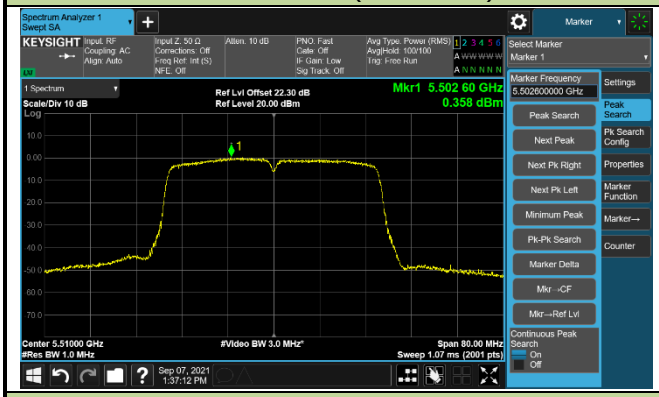
Channel 54 (5270MHz)



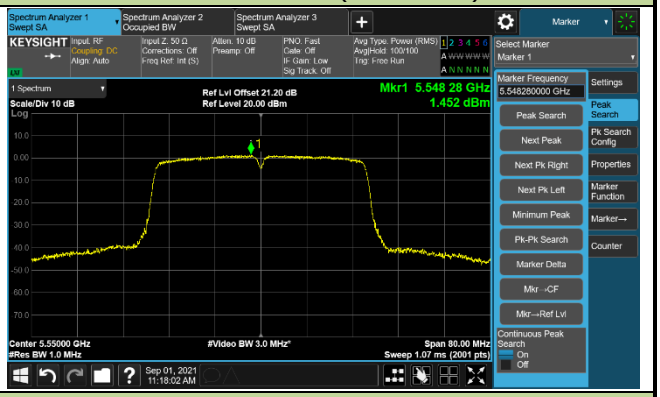
Channel 62 (5310MHz)



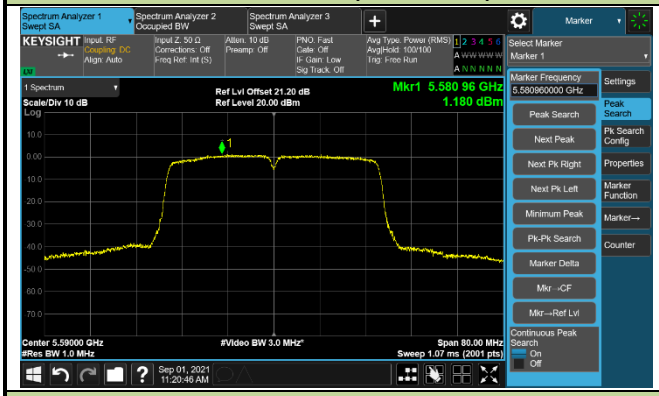
Channel 102 (5510MHz)



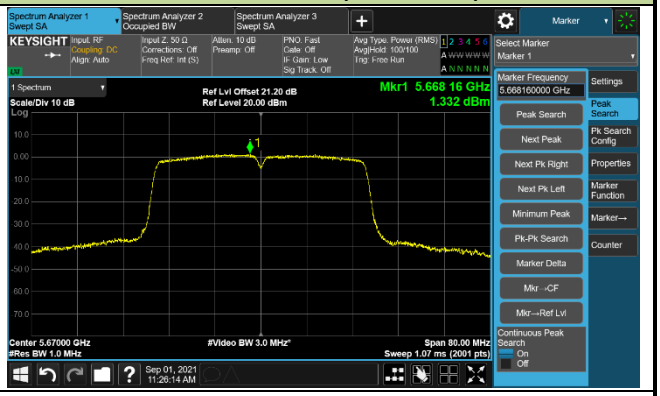
Channel 110 (5550MHz)



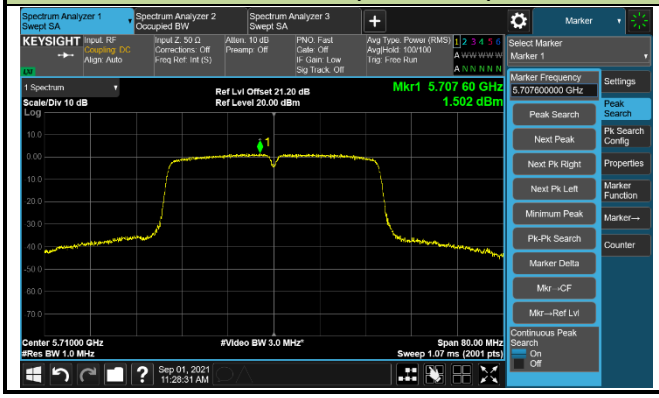
Channel 118 (5590MHz)

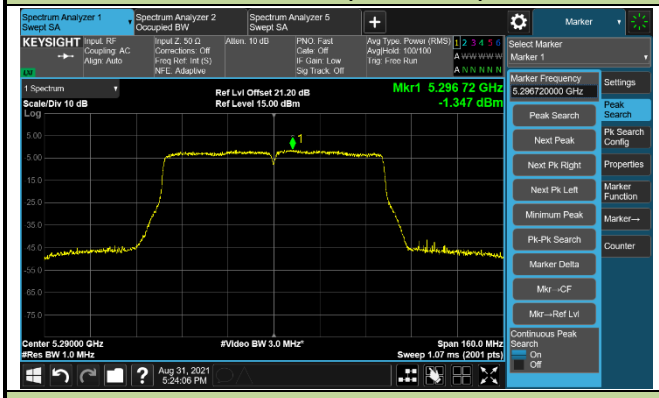
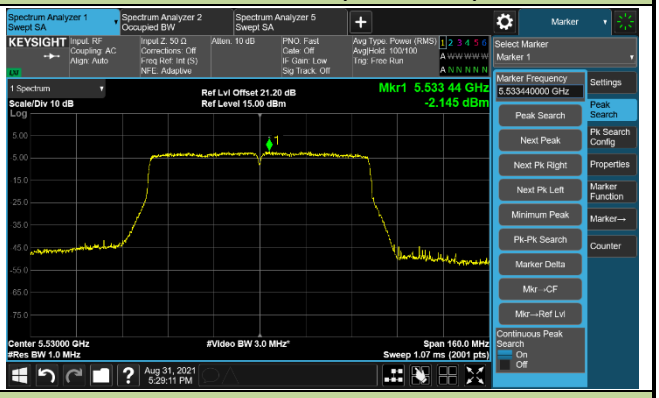
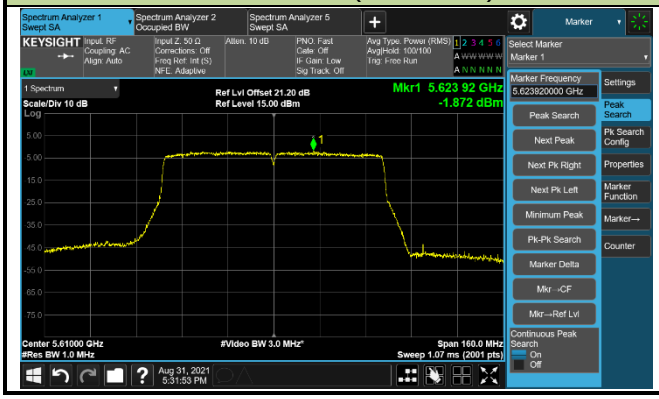
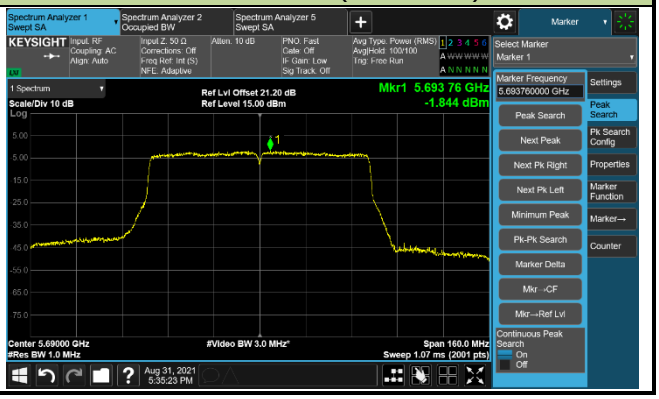


Channel 134 (5670MHz)



Channel 142 (5710MHz)



802.11ac-VHT80 Power Spectral Density - Ant 1	
Channel 58 (5290MHz)	Channel 106 (5530MHz)
	
Channel 122 (5610MHz)	Channel 138 (5690MHz)
	

6.6. Frequency Stability Measurement

6.6.1.Test Limit

Fundamental emissions must be contained within the frequency bands specified in this section during all conditions of operation.

6.6.2.Test Procedure Used

Frequency Stability Under Temperature Variations:

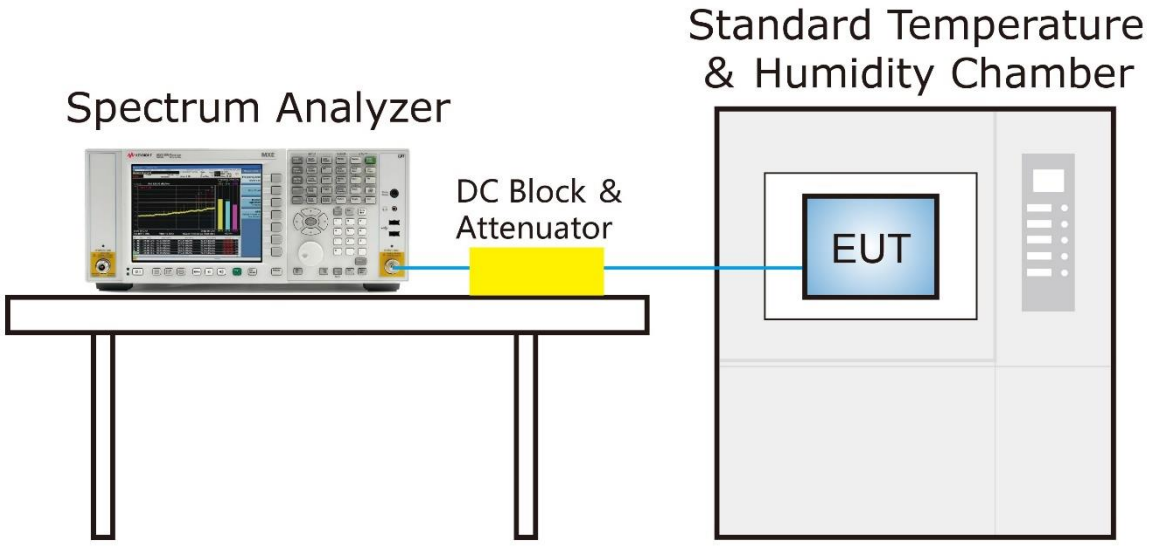
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain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

Frequency Stability Under Voltage Variations:

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

Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, recordthe maximum frequency change.

6.6.3.Test Setup



6.6.4.Test Result

Product	cAP XL ac	Test Engineer	Luis Yang
Test Site	WZ-TR3	Test Date	2021/09/06~2021/09/07
Test Mode	5260MHz (Carrier Mode)		

Voltage Ratio (%)	Voltage (V_{AC})	Temperature (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 30	-5.31	1.90	3.80	-1.90
		- 20	-1.90	-3.80	-5.70	-3.80
		- 10	0.00	-9.51	1.90	-5.70
		0	-11.41	-15.21	0.00	-7.60
		+ 10	-11.41	-7.60	0.00	-11.41
		+ 20	-7.60	-11.41	-11.41	0.00
		+ 30	-3.80	-9.51	-17.11	-13.31
		+ 40	-11.41	-9.51	-15.21	-13.31
		+ 50	-11.41	-11.41	-3.80	-3.80
115%	138	+ 25	-9.51	-13.31	-13.31	-9.51
85%	102	+ 25	-7.60	-9.51	-5.70	-13.31

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

6.7. Radiated Spurious Emission Measurement

6.7.1.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 per Section 15.209.

FCC Part 15.209 Limit		
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

6.7.2.Test Procedure Used

ANSI C63.10-2013 - Section 6.3 (General Requirements)

ANSI C63.10-2013 - Section 6.4 (Standard test method below 30MHz)

ANSI C63.10-2013 - Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10-2013 - Section 6.6 (Standard test method above 1GHz)

6.7.3.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
> 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 = 120kHz
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

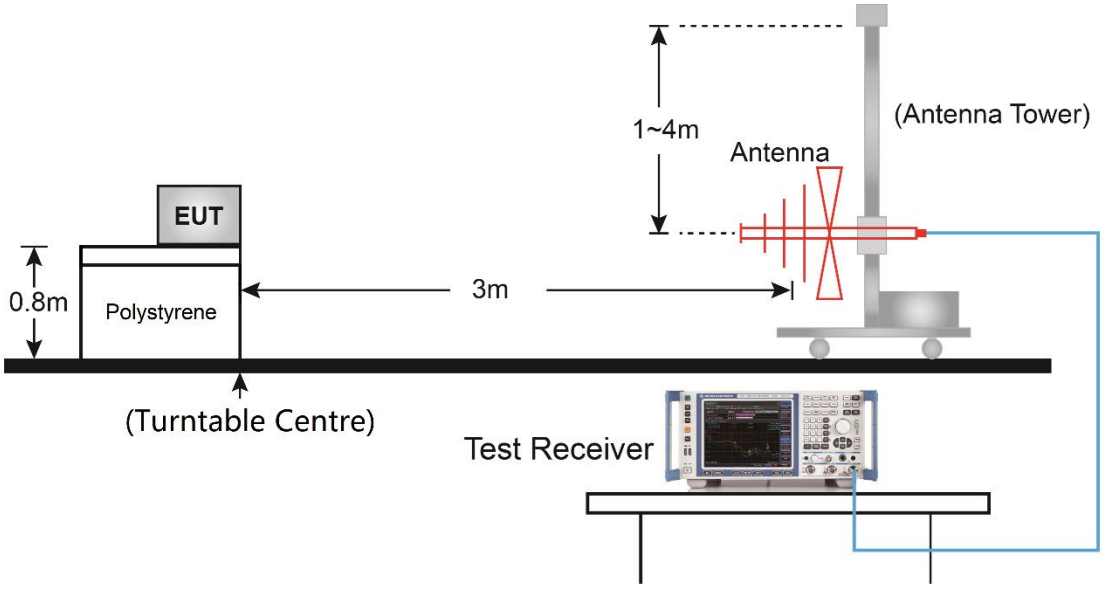
Average Measurements above 1GHz (Method VB)

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 = 10 Hz.

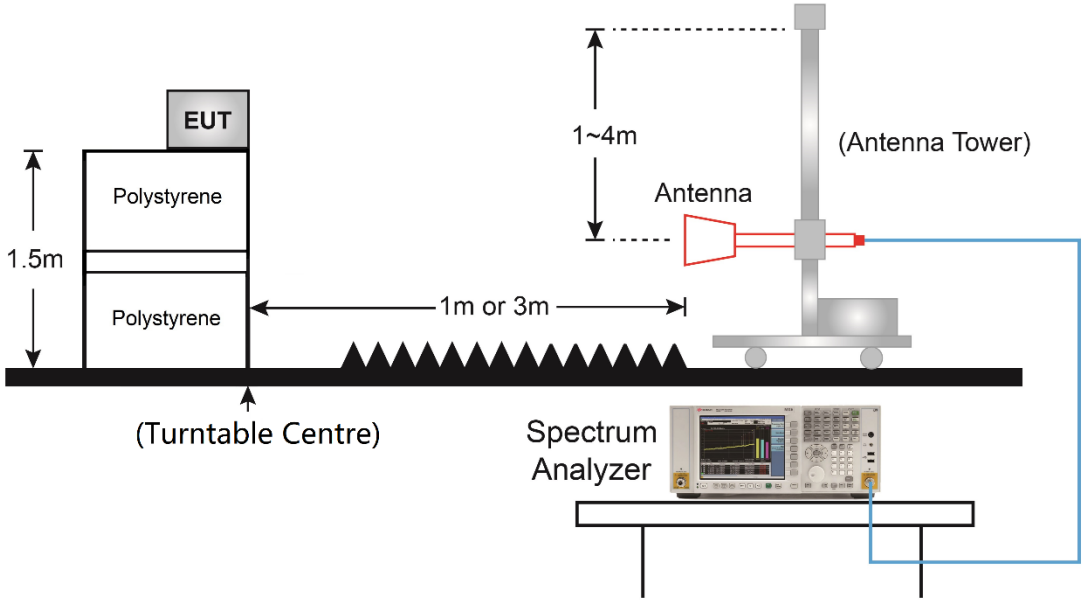
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.7.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.7.5.Test Result

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7009.5	41.0	11.0	52.0	68.2	-16.2	Peak	Horizontal
	7579.0	34.3	12.3	46.6	74.0	-27.4	Peak	Horizontal
	8352.5	34.6	12.1	46.7	74.0	-27.3	Peak	Horizontal
*	9814.5	34.2	15.3	49.5	68.2	-18.7	Peak	Horizontal
*	7009.5	44.3	11.0	55.3	68.2	-12.9	Peak	Vertical
	7468.5	31.2	12.1	43.3	74.0	-30.7	Peak	Vertical
	8276.0	34.9	11.9	46.8	74.0	-27.2	Peak	Vertical
*	9865.5	33.8	15.5	49.3	68.2	-18.9	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7069.0	39.3	11.6	50.9	68.2	-17.3	Peak	Horizontal
	7613.0	32.1	11.9	44.0	74.0	-30.0	Peak	Horizontal
	8242.0	33.5	12.2	45.7	74.0	-28.3	Peak	Horizontal
*	9823.0	34.3	15.3	49.6	68.2	-18.6	Peak	Horizontal
*	7069.0	44.6	11.6	56.2	68.2	-12.0	Peak	Vertical
	7570.5	32.0	12.3	44.3	74.0	-29.7	Peak	Vertical
	8199.5	34.7	12.3	47.0	74.0	-27.0	Peak	Vertical
*	9857.0	31.9	15.4	47.3	68.2	-20.9	Peak	Vertical

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

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

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7094.5	38.8	11.6	50.4	68.2	-17.8	Peak	Horizontal
	7366.5	33.0	12.3	45.3	74.0	-28.7	Peak	Horizontal
	8276.0	34.2	11.9	46.1	74.0	-27.9	Peak	Horizontal
*	9814.5	34.0	15.3	49.3	68.2	-18.9	Peak	Horizontal
*	7094.5	42.6	11.6	54.2	68.2	-14.0	Peak	Vertical
	7375.0	32.4	12.1	44.5	74.0	-29.5	Peak	Vertical
	8242.0	34.6	12.2	46.8	74.0	-27.2	Peak	Vertical
	10936.5	33.3	17.9	51.2	74.0	-22.8	Peak	Vertical

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

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

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7145.5	33.2	12.0	45.2	68.2	-23.0	Peak	Horizontal
	7332.5	35.5	12.2	47.7	74.0	-26.3	Peak	Horizontal
*	8777.5	33.4	14.2	47.6	68.2	-20.6	Peak	Horizontal
*	9865.5	34.2	15.5	49.7	68.2	-18.5	Peak	Horizontal
*	7086.0	33.8	11.5	45.3	68.2	-22.9	Peak	Vertical
	7341.0	33.2	12.3	45.5	74.0	-28.5	Peak	Vertical
	8225.0	34.3	12.0	46.3	74.0	-27.7	Peak	Vertical
*	9899.5	33.4	15.5	48.9	68.2	-19.3	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11a	Test Channel	116
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7086.0	33.0	11.5	44.5	68.2	-23.7	Peak	Horizontal
	7434.5	32.0	12.4	44.4	74.0	-29.6	Peak	Horizontal
	8208.0	34.3	12.1	46.4	74.0	-27.6	Peak	Horizontal
*	9882.5	33.1	15.5	48.6	68.2	-19.6	Peak	Horizontal
*	7086.0	32.7	11.5	44.2	68.2	-24.0	Peak	Vertical
	7443.0	38.0	12.2	50.2	74.0	-23.8	Peak	Vertical
	8148.5	33.4	12.6	46.0	74.0	-28.0	Peak	Vertical
*	9823.0	33.6	15.3	48.9	68.2	-19.3	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7103.0	32.5	11.7	44.2	68.2	-24.0	Peak	Horizontal
	7400.5	32.4	12.3	44.7	74.0	-29.3	Peak	Horizontal
	8216.5	34.5	12.1	46.6	74.0	-27.4	Peak	Horizontal
*	9857.0	33.6	15.4	49.0	68.2	-19.2	Peak	Horizontal
*	7069.0	32.6	11.6	44.2	68.2	-24.0	Peak	Vertical
	7468.5	36.1	12.1	48.2	74.0	-25.8	Peak	Vertical
	8259.0	34.1	12.2	46.3	74.0	-27.7	Peak	Vertical
*	9857.0	35.0	15.4	50.4	68.2	-17.8	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7086.0	33.6	11.5	45.1	68.2	-23.1	Peak	Horizontal
	7681.0	34.2	12.0	46.2	74.0	-27.8	Peak	Horizontal
	8233.5	34.3	12.1	46.4	74.0	-27.6	Peak	Horizontal
*	9840.0	33.3	15.3	48.6	68.2	-19.6	Peak	Horizontal
*	7145.5	31.7	12.0	43.7	68.2	-24.5	Peak	Vertical
	7596.0	34.3	12.1	46.4	74.0	-27.6	Peak	Vertical
	8216.5	34.9	12.1	47.0	74.0	-27.0	Peak	Vertical
*	9865.5	33.7	15.5	49.2	68.2	-19.0	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7052.0	32.2	11.6	43.8	68.2	-24.4	Peak	Horizontal
	7358.0	33.3	12.4	45.7	74.0	-28.3	Peak	Horizontal
	8174.0	33.6	12.6	46.2	74.0	-27.8	Peak	Horizontal
*	9806.0	33.4	15.3	48.7	68.2	-19.5	Peak	Horizontal
*	7120.0	32.3	11.9	44.2	68.2	-24.0	Peak	Vertical
	7434.5	33.4	12.4	45.8	74.0	-28.2	Peak	Vertical
	8233.5	34.4	12.1	46.5	74.0	-27.5	Peak	Vertical
*	9848.5	33.5	15.4	48.9	68.2	-19.3	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7009.5	41.4	11.0	52.4	68.2	-15.8	Peak	Horizontal
	7587.5	31.4	12.2	43.6	74.0	-30.4	Peak	Horizontal
	8242.0	33.9	12.2	46.1	74.0	-27.9	Peak	Horizontal
*	9797.5	34.6	15.3	49.9	68.2	-18.3	Peak	Horizontal
*	7009.5	44.7	11.0	55.7	68.2	-12.5	Peak	Vertical
	7349.5	33.2	12.3	45.5	74.0	-28.5	Peak	Vertical
	8174.0	33.8	12.6	46.4	74.0	-27.6	Peak	Vertical
*	9789.0	34.2	15.2	49.4	68.2	-18.8	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7069.0	39.6	11.6	51.2	68.2	-17.0	Peak	Horizontal
	7664.0	33.2	12.1	45.3	74.0	-28.7	Peak	Horizontal
	8242.0	33.7	12.2	45.9	74.0	-28.1	Peak	Horizontal
*	9814.5	34.5	15.3	49.8	68.2	-18.4	Peak	Horizontal
*	7069.0	43.3	11.6	54.9	68.2	-13.3	Peak	Vertical
	7400.5	31.4	12.3	43.7	74.0	-30.3	Peak	Vertical
	8182.5	34.2	12.5	46.7	74.0	-27.3	Peak	Vertical
*	9831.5	33.7	15.3	49.0	68.2	-19.2	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7094.5	37.4	11.6	49.0	68.2	-19.2	Peak	Horizontal
	7596.0	32.8	12.1	44.9	74.0	-29.1	Peak	Horizontal
	8208.0	34.1	12.1	46.2	74.0	-27.8	Peak	Horizontal
	11140.5	32.2	18.3	50.5	74.0	-23.5	Peak	Horizontal
*	7094.5	41.6	11.6	53.2	68.2	-15.0	Peak	Vertical
	7562.0	33.1	12.2	45.3	74.0	-28.7	Peak	Vertical
	8310.0	34.0	12.0	46.0	74.0	-28.0	Peak	Vertical
*	9721.0	31.2	14.9	46.1	68.2	-22.1	Peak	Vertical

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

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

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7086.0	33.1	11.5	44.6	68.2	-23.6	Peak	Horizontal
	7332.5	37.6	12.2	49.8	74.0	-24.2	Peak	Horizontal
	8182.5	34.6	12.5	47.1	74.0	-26.9	Peak	Horizontal
*	9840.0	34.5	15.3	49.8	68.2	-18.4	Peak	Horizontal
*	7128.5	31.8	11.9	43.7	68.2	-24.5	Peak	Vertical
	7332.5	39.3	12.2	51.5	74.0	-22.5	Peak	Vertical
	8131.5	30.8	12.6	43.4	74.0	-30.6	Peak	Vertical
*	9797.5	34.4	15.3	49.7	68.2	-18.5	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	Test Channel	116
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7060.5	32.4	11.6	44.0	68.2	-24.2	Peak	Horizontal
	7749.0	35.0	12.1	47.1	74.0	-26.9	Peak	Horizontal
	8242.0	33.5	12.2	45.7	74.0	-28.3	Peak	Horizontal
*	9857.0	34.1	15.4	49.5	68.2	-18.7	Peak	Horizontal
*	7145.5	32.5	12.0	44.5	68.2	-23.7	Peak	Vertical
	7443.0	36.8	12.2	49.0	74.0	-25.0	Peak	Vertical
	8216.5	34.3	12.1	46.4	74.0	-27.6	Peak	Vertical
*	9865.5	34.0	15.5	49.5	68.2	-18.7	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7060.5	32.7	11.6	44.3	68.2	-23.9	Peak	Horizontal
	7647.0	33.6	12.2	45.8	74.0	-28.2	Peak	Horizontal
	8199.5	33.8	12.3	46.1	74.0	-27.9	Peak	Horizontal
*	9823.0	33.6	15.3	48.9	68.2	-19.3	Peak	Horizontal
*	7222.0	32.9	12.2	45.1	68.2	-23.1	Peak	Vertical
	7468.5	35.3	12.1	47.4	74.0	-26.6	Peak	Vertical
	8250.5	33.8	12.2	46.0	74.0	-28.0	Peak	Vertical
*	10061.0	33.5	15.4	48.9	68.2	-19.3	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7128.5	32.6	11.9	44.5	68.2	-23.7	Peak	Horizontal
	7366.5	32.9	12.3	45.2	74.0	-28.8	Peak	Horizontal
	8208.0	34.1	12.1	46.2	74.0	-27.8	Peak	Horizontal
*	9814.5	33.9	15.3	49.2	68.2	-19.0	Peak	Horizontal
*	7052.0	32.5	11.6	44.1	68.2	-24.1	Peak	Vertical
	7596.0	34.3	12.1	46.4	74.0	-27.6	Peak	Vertical
	8165.5	33.9	12.6	46.5	74.0	-27.5	Peak	Vertical
*	9840.0	33.7	15.3	49.0	68.2	-19.2	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT20	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7086.0	31.6	11.5	43.1	68.2	-25.1	Peak	Horizontal
	7443.0	32.1	12.2	44.3	74.0	-29.7	Peak	Horizontal
	8242.0	33.9	12.2	46.1	74.0	-27.9	Peak	Horizontal
*	9806.0	33.5	15.3	48.8	68.2	-19.4	Peak	Horizontal
*	7188.0	31.9	12.2	44.1	68.2	-24.1	Peak	Vertical
	7630.0	34.7	12.0	46.7	74.0	-27.3	Peak	Vertical
	8208.0	33.3	12.1	45.4	74.0	-28.6	Peak	Vertical
*	9823.0	34.6	15.3	49.9	68.2	-18.3	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT40	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7026.5	40.9	11.2	52.1	68.2	-16.1	Peak	Horizontal
*	7842.5	31.5	12.1	43.6	68.2	-24.6	Peak	Horizontal
	8429.0	32.4	12.5	44.9	74.0	-29.1	Peak	Horizontal
	9049.5	31.7	14.7	46.4	74.0	-27.6	Peak	Horizontal
*	7026.5	43.4	11.2	54.6	68.2	-13.6	Peak	Vertical
*	7876.5	31.6	12.2	43.8	68.2	-24.4	Peak	Vertical
	8242.0	33.7	12.2	45.9	74.0	-28.1	Peak	Vertical
	9134.5	31.8	15.1	46.9	74.0	-27.1	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT40	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7077.5	38.6	11.6	50.2	68.2	-18.0	Peak	Horizontal
*	7876.5	31.0	12.2	43.2	68.2	-25.0	Peak	Horizontal
	8199.5	34.0	12.3	46.3	74.0	-27.7	Peak	Horizontal
	9134.5	30.6	15.1	45.7	74.0	-28.3	Peak	Horizontal
*	7077.5	41.8	11.6	53.4	68.2	-14.8	Peak	Vertical
*	7876.5	31.3	12.2	43.5	68.2	-24.7	Peak	Vertical
	8242.0	33.6	12.2	45.8	74.0	-28.2	Peak	Vertical
	9049.5	31.6	14.7	46.3	74.0	-27.7	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT40	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7349.5	36.8	12.3	49.1	74.0	-24.9	Peak	Horizontal
	8276.0	32.9	11.9	44.8	74.0	-29.2	Peak	Horizontal
*	8811.5	31.9	14.1	46.0	68.2	-22.2	Peak	Horizontal
*	9814.5	33.8	15.3	49.1	68.2	-19.1	Peak	Horizontal
	7349.5	40.5	12.3	52.8	74.0	-21.2	Peak	Vertical
	8165.5	34.2	12.6	46.8	74.0	-27.2	Peak	Vertical
*	8735.0	32.1	13.8	45.9	68.2	-22.3	Peak	Vertical
*	9806.0	34.7	15.3	50.0	68.2	-18.2	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT40	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7400.5	36.3	12.3	48.6	74.0	-25.4	Peak	Horizontal
	8276.0	32.5	11.9	44.4	74.0	-29.6	Peak	Horizontal
*	8769.0	31.0	14.2	45.2	68.2	-23.0	Peak	Horizontal
*	9253.5	30.9	15.2	46.1	68.2	-22.1	Peak	Horizontal
	7400.5	40.4	12.3	52.7	74.0	-21.3	Peak	Vertical
	8199.5	31.9	12.3	44.2	74.0	-29.8	Peak	Vertical
*	8735.0	31.7	13.8	45.5	68.2	-22.7	Peak	Vertical
*	9814.5	34.3	15.3	49.6	68.2	-18.6	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT40	Test Channel	118
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	32.3	12.4	44.7	74.0	-29.3	Peak	Horizontal
	8131.5	31.5	12.6	44.1	74.0	-29.9	Peak	Horizontal
*	8735.0	32.4	13.8	46.2	68.2	-22.0	Peak	Horizontal
*	9253.5	31.0	15.2	46.2	68.2	-22.0	Peak	Horizontal
	7451.5	37.9	12.1	50.0	74.0	-24.0	Peak	Vertical
	8276.0	33.0	11.9	44.9	74.0	-29.1	Peak	Vertical
*	8735.0	32.5	13.8	46.3	68.2	-21.9	Peak	Vertical
*	9814.5	34.8	15.3	50.1	68.2	-18.1	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT40	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7502.5	30.7	12.3	43.0	74.0	-31.0	Peak	Horizontal
	8182.5	34.1	12.5	46.6	74.0	-27.4	Peak	Horizontal
*	8675.5	34.4	13.7	48.1	68.2	-20.1	Peak	Horizontal
*	9857.0	33.5	15.4	48.9	68.2	-19.3	Peak	Horizontal
	7562.0	34.6	12.2	46.8	74.0	-27.2	Peak	Vertical
	8352.5	31.1	12.1	43.2	74.0	-30.8	Peak	Vertical
*	8769.0	31.1	14.2	45.3	68.2	-22.9	Peak	Vertical
*	9814.5	33.4	15.3	48.7	68.2	-19.5	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11n-HT40	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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.5	31.4	12.1	43.5	74.0	-30.5	Peak	Horizontal
	8310.0	32.3	12.0	44.3	74.0	-29.7	Peak	Horizontal
*	8735.0	31.7	13.8	45.5	68.2	-22.7	Peak	Horizontal
*	9831.5	34.0	15.3	49.3	68.2	-18.9	Peak	Horizontal
	7630.0	33.2	12.0	45.2	74.0	-28.8	Peak	Vertical
	8242.0	34.3	12.2	46.5	74.0	-27.5	Peak	Vertical
*	8735.0	31.3	13.8	45.1	68.2	-23.1	Peak	Vertical
*	9814.5	33.6	15.3	48.9	68.2	-19.3	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7009.5	41.7	11.0	52.7	68.2	-15.5	Peak	Horizontal
*	7876.5	32.3	12.2	44.5	68.2	-23.7	Peak	Horizontal
	8242.0	32.5	12.2	44.7	74.0	-29.3	Peak	Horizontal
	9092.0	31.5	14.8	46.3	74.0	-27.7	Peak	Horizontal
*	7009.5	44.4	11.0	55.4	68.2	-12.8	Peak	Vertical
*	7842.5	31.1	12.1	43.2	68.2	-25.0	Peak	Vertical
	8242.0	33.0	12.2	45.2	74.0	-28.8	Peak	Vertical
	9092.0	31.7	14.8	46.5	74.0	-27.5	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7069.0	39.8	11.6	51.4	68.2	-16.8	Peak	Horizontal
*	7842.5	31.6	12.1	43.7	68.2	-24.5	Peak	Horizontal
	8165.5	32.2	12.6	44.8	74.0	-29.2	Peak	Horizontal
	9092.0	32.0	14.8	46.8	74.0	-27.2	Peak	Horizontal
*	7069.0	43.3	11.6	54.9	68.2	-13.3	Peak	Vertical
*	7953.0	32.3	12.4	44.7	68.2	-23.5	Peak	Vertical
	8165.5	32.8	12.6	45.4	74.0	-28.6	Peak	Vertical
	9092.0	31.0	14.8	45.8	74.0	-28.2	Peak	Vertical

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

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

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7094.5	38.1	11.6	49.7	68.2	-18.5	Peak	Horizontal
*	7876.5	32.6	12.2	44.8	68.2	-23.4	Peak	Horizontal
	8242.0	34.1	12.2	46.3	74.0	-27.7	Peak	Horizontal
	9092.0	31.6	14.8	46.4	74.0	-27.6	Peak	Horizontal
*	7094.5	41.1	11.6	52.7	68.2	-15.5	Peak	Vertical
*	7842.5	33.2	12.1	45.3	68.2	-22.9	Peak	Vertical
	8199.5	32.3	12.3	44.6	74.0	-29.4	Peak	Vertical
	9092.0	31.0	14.8	45.8	74.0	-28.2	Peak	Vertical

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

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

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7332.5	36.3	12.2	48.5	74.0	-25.5	Peak	Horizontal
	8250.5	34.6	12.2	46.8	74.0	-27.2	Peak	Horizontal
*	8675.5	34.7	13.7	48.4	68.2	-19.8	Peak	Horizontal
*	9814.5	35.2	15.3	50.5	68.2	-17.7	Peak	Horizontal
	7332.5	39.0	12.2	51.2	74.0	-22.8	Peak	Vertical
	8242.0	33.9	12.2	46.1	74.0	-27.9	Peak	Vertical
*	8692.5	32.2	13.8	46.0	68.2	-22.2	Peak	Vertical
*	9789.0	35.0	15.2	50.2	68.2	-18.0	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11ac-VHT20	Test Channel	116
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7604.5	33.3	12.0	45.3	74.0	-28.7	Peak	Horizontal
	8284.5	34.4	11.8	46.2	74.0	-27.8	Peak	Horizontal
*	8658.5	33.6	13.6	47.2	68.2	-21.0	Peak	Horizontal
*	10562.5	33.3	16.6	49.9	68.2	-18.3	Peak	Horizontal
	7443.0	37.4	12.2	49.6	74.0	-24.4	Peak	Vertical
	8276.0	33.3	11.9	45.2	74.0	-28.8	Peak	Vertical
*	8692.5	32.4	13.8	46.2	68.2	-22.0	Peak	Vertical
*	9865.5	34.0	15.5	49.5	68.2	-18.7	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.5	34.0	12.1	46.1	74.0	-27.9	Peak	Horizontal
	8225.0	33.9	12.0	45.9	74.0	-28.1	Peak	Horizontal
*	8735.0	34.0	13.8	47.8	68.2	-20.4	Peak	Horizontal
*	9840.0	34.2	15.3	49.5	68.2	-18.7	Peak	Horizontal
	7468.5	35.2	12.1	47.3	74.0	-26.7	Peak	Vertical
	8089.0	33.5	13.0	46.5	74.0	-27.5	Peak	Vertical
*	8667.0	33.9	13.7	47.6	68.2	-20.6	Peak	Vertical
*	9797.5	33.7	15.3	49.0	68.2	-19.2	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7630.0	33.2	12.0	45.2	74.0	-28.8	Peak	Horizontal
	8233.5	34.2	12.1	46.3	74.0	-27.7	Peak	Horizontal
*	8769.0	32.0	14.2	46.2	68.2	-22.0	Peak	Horizontal
*	9874.0	34.6	15.5	50.1	68.2	-18.1	Peak	Horizontal
	7596.0	34.2	12.1	46.3	74.0	-27.7	Peak	Vertical
	8276.0	32.3	11.9	44.2	74.0	-29.8	Peak	Vertical
*	8735.0	33.2	13.8	47.0	68.2	-21.2	Peak	Vertical
*	9814.5	33.0	15.3	48.3	68.2	-19.9	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7502.5	31.3	12.3	43.6	74.0	-30.4	Peak	Horizontal
	8352.5	32.0	12.1	44.1	74.0	-29.9	Peak	Horizontal
*	8811.5	31.1	14.1	45.2	68.2	-23.0	Peak	Horizontal
*	9780.5	34.6	15.2	49.8	68.2	-18.4	Peak	Horizontal
*	6907.5	34.2	10.2	44.4	68.2	-23.8	Peak	Vertical
*	7842.5	30.8	12.1	42.9	68.2	-25.3	Peak	Vertical
	8310.0	32.6	12.0	44.6	74.0	-29.4	Peak	Vertical
	9049.5	31.6	14.7	46.3	74.0	-27.7	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7026.5	41.2	11.2	52.4	68.2	-15.8	Peak	Horizontal
*	7842.5	31.4	12.1	43.5	68.2	-24.7	Peak	Horizontal
	8242.0	33.4	12.2	45.6	74.0	-28.4	Peak	Horizontal
	9092.0	31.4	14.8	46.2	74.0	-27.8	Peak	Horizontal
*	7026.5	43.0	11.2	54.2	68.2	-14.0	Peak	Vertical
*	7842.5	31.0	12.1	43.1	68.2	-25.1	Peak	Vertical
	8310.0	32.2	12.0	44.2	74.0	-29.8	Peak	Vertical
	9092.0	31.5	14.8	46.3	74.0	-27.7	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7077.5	38.6	11.6	50.2	68.2	-18.0	Peak	Horizontal
*	7876.5	31.0	12.2	43.2	68.2	-25.0	Peak	Horizontal
	8310.0	32.6	12.0	44.6	74.0	-29.4	Peak	Horizontal
	9049.5	31.8	14.7	46.5	74.0	-27.5	Peak	Horizontal
*	7077.5	42.3	11.6	53.9	68.2	-14.3	Peak	Vertical
*	7842.5	31.0	12.1	43.1	68.2	-25.1	Peak	Vertical
	8310.0	33.3	12.0	45.3	74.0	-28.7	Peak	Vertical
	9381.0	31.4	15.0	46.4	74.0	-27.6	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7349.5	36.1	12.3	48.4	74.0	-25.6	Peak	Horizontal
	8199.5	33.9	12.3	46.2	74.0	-27.8	Peak	Horizontal
*	8675.5	34.2	13.7	47.9	68.2	-20.3	Peak	Horizontal
*	9848.5	34.2	15.4	49.6	68.2	-18.6	Peak	Horizontal
	7349.5	40.4	12.3	52.7	74.0	-21.3	Peak	Vertical
	8276.0	32.6	11.9	44.5	74.0	-29.5	Peak	Vertical
*	8692.5	32.3	13.8	46.1	68.2	-22.1	Peak	Vertical
*	9874.0	35.0	15.5	50.5	68.2	-17.7	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7400.5	35.4	12.3	47.7	74.0	-26.3	Peak	Horizontal
	8157.0	33.2	12.6	45.8	74.0	-28.2	Peak	Horizontal
*	8735.0	32.4	13.8	46.2	68.2	-22.0	Peak	Horizontal
*	9899.5	32.7	15.5	48.2	68.2	-20.0	Peak	Horizontal
	7400.5	39.6	12.3	51.9	74.0	-22.1	Peak	Vertical
	8199.5	32.9	12.3	45.2	74.0	-28.8	Peak	Vertical
*	8692.5	32.6	13.8	46.4	68.2	-21.8	Peak	Vertical
*	9814.5	32.9	15.3	48.2	68.2	-20.0	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11ac-VHT40	Test Channel	118
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7604.5	31.1	12.0	43.1	74.0	-30.9	Peak	Horizontal
	8352.5	31.3	12.1	43.4	74.0	-30.6	Peak	Horizontal
*	8811.5	31.9	14.1	46.0	68.2	-22.2	Peak	Horizontal
*	9806.0	33.9	15.3	49.2	68.2	-19.0	Peak	Horizontal
	7451.5	36.4	12.1	48.5	74.0	-25.5	Peak	Vertical
	8233.5	34.1	12.1	46.2	74.0	-27.8	Peak	Vertical
*	8692.5	33.5	13.8	47.3	68.2	-20.9	Peak	Vertical
*	9857.0	33.2	15.4	48.6	68.2	-19.6	Peak	Vertical

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

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

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7400.5	32.9	12.3	45.2	74.0	-28.8	Peak	Horizontal
	8310.0	32.5	12.0	44.5	74.0	-29.5	Peak	Horizontal
*	8769.0	31.5	14.2	45.7	68.2	-22.5	Peak	Horizontal
*	9848.5	34.1	15.4	49.5	68.2	-18.7	Peak	Horizontal
	7562.0	33.5	12.2	45.7	74.0	-28.3	Peak	Vertical
	8250.5	34.6	12.2	46.8	74.0	-27.2	Peak	Vertical
*	8667.0	33.1	13.7	46.8	68.2	-21.4	Peak	Vertical
*	10265.0	33.6	16.3	49.9	68.2	-18.3	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	31.7	12.4	44.1	74.0	-29.9	Peak	Horizontal
	8276.0	31.8	11.9	43.7	74.0	-30.3	Peak	Horizontal
*	8735.0	31.8	13.8	45.6	68.2	-22.6	Peak	Horizontal
*	9797.5	34.0	15.3	49.3	68.2	-18.9	Peak	Horizontal
	7596.0	33.1	12.1	45.2	74.0	-28.8	Peak	Vertical
	8157.0	33.5	12.6	46.1	74.0	-27.9	Peak	Vertical
*	8675.5	33.6	13.7	47.3	68.2	-20.9	Peak	Vertical
*	9823.0	33.9	15.3	49.2	68.2	-19.0	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11ac-VHT80	Test Channel	58
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7052.0	39.5	11.6	51.1	68.2	-17.1	Peak	Horizontal
*	7953.0	31.4	12.4	43.8	68.2	-24.4	Peak	Horizontal
	8199.5	33.7	12.3	46.0	74.0	-28.0	Peak	Horizontal
	9092.0	32.5	14.8	47.3	74.0	-26.7	Peak	Horizontal
*	7052.0	43.5	11.6	55.1	68.2	-13.1	Peak	Vertical
*	7842.5	30.7	12.1	42.8	68.2	-25.4	Peak	Vertical
	8276.0	32.5	11.9	44.4	74.0	-29.6	Peak	Vertical
	9381.0	31.4	15.0	46.4	74.0	-27.6	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11ac-VHT40	Test Channel	106
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7375.0	36.2	12.1	48.3	74.0	-25.7	Peak	Horizontal
	8276.0	32.7	11.9	44.6	74.0	-29.4	Peak	Horizontal
*	8888.0	30.9	14.0	44.9	68.2	-23.3	Peak	Horizontal
*	9840.0	34.0	15.3	49.3	68.2	-18.9	Peak	Horizontal
	7375.0	40.4	12.1	52.5	74.0	-21.5	Peak	Vertical
	8199.5	32.1	12.3	44.4	74.0	-29.6	Peak	Vertical
*	8692.5	32.3	13.8	46.1	68.2	-22.1	Peak	Vertical
*	9814.5	33.8	15.3	49.1	68.2	-19.1	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11ac-VHT80	Test Channel	122
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	31.1	12.4	43.5	74.0	-30.5	Peak	Horizontal
	8199.5	31.9	12.3	44.2	74.0	-29.8	Peak	Horizontal
*	8718.0	34.1	13.7	47.8	68.2	-20.4	Peak	Horizontal
*	10545.5	34.0	16.7	50.7	68.2	-17.5	Peak	Horizontal
	7477.0	34.4	12.2	46.6	74.0	-27.4	Peak	Vertical
	8276.0	34.5	11.9	46.4	74.0	-27.6	Peak	Vertical
*	8684.0	34.0	13.8	47.8	68.2	-20.4	Peak	Vertical
*	10443.5	33.5	16.7	50.2	68.2	-18.0	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/m)

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

Product	cAP XL ac	Test Engineer	Messiah Li
Test Site	WZ-AC2	Test Date	2021/09/06
Test Mode	802.11ac-VHT80	Test Channel	138
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/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	31.0	12.4	43.4	74.0	-30.6	Peak	Horizontal
	8199.5	32.3	12.3	44.6	74.0	-29.4	Peak	Horizontal
*	8658.5	32.5	13.6	46.1	68.2	-22.1	Peak	Horizontal
*	9831.5	33.7	15.3	49.0	68.2	-19.2	Peak	Horizontal
	7341.0	33.2	12.3	45.5	74.0	-28.5	Peak	Vertical
	8208.0	34.6	12.1	46.7	74.0	-27.3	Peak	Vertical
*	8769.0	31.5	14.2	45.7	68.2	-22.5	Peak	Vertical
*	9780.5	34.0	15.2	49.2	68.2	-19.0	Peak	Vertical

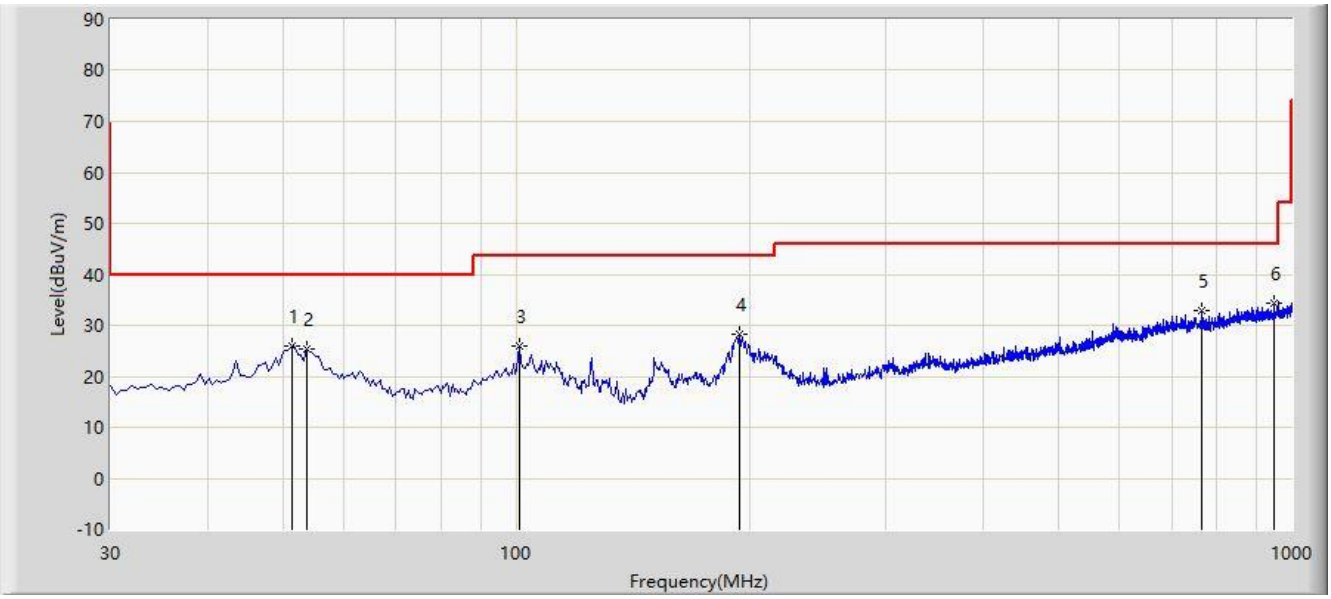
Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

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

The Result of Radiated Emission below 1GHz

Site: WZ-AC2	Test Date: 2021/09/07
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5300MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			51.340	25.844	5.260	-14.156	40.000	20.584	PK
2			53.765	25.410	5.132	-14.590	40.000	20.278	PK
3			100.810	25.873	7.340	-17.627	43.500	18.534	PK
4			193.930	28.263	9.812	-15.237	43.500	18.451	PK
5			766.715	32.878	3.192	-13.122	46.000	29.686	PK
6		*	947.620	34.299	2.902	-11.701	46.000	31.397	PK

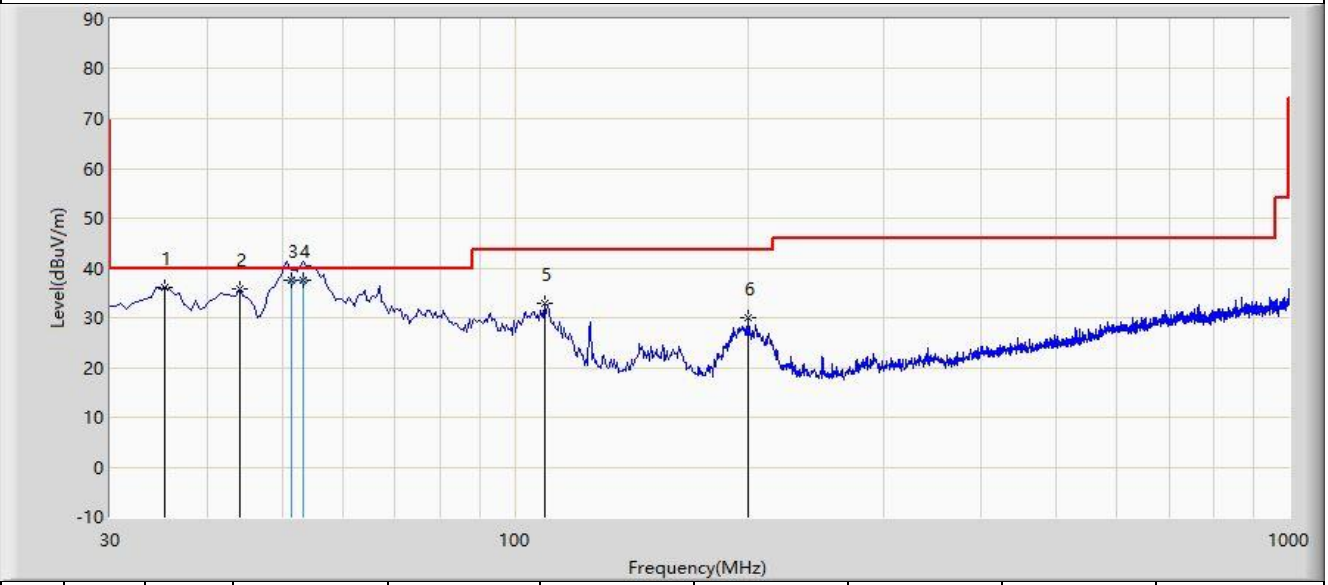
Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

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

Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 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: WZ-AC2	Test Date: 2021/09/07
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_VULB9162_0.03-7GHz	Polarity: Vertical
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 5300MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			35.335	35.975	17.904	-4.025	40.000	18.071	PK
2			44.065	35.681	15.334	-4.319	40.000	20.348	PK
3		*	51.395	37.677	17.100	-2.323	40.000	20.577	QP
4			53.274	37.440	17.100	-2.560	40.000	20.340	QP
5			109.540	32.983	14.901	-10.517	43.500	18.082	PK
6			199.750	29.983	11.225	-13.517	43.500	18.759	PK

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

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

Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 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.

6.8. Radiated Restricted Band Edge Measurement

6.8.1.Test Limit

For 15.205 Requirement:

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

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1] 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 – 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41	--	--	--

For 15.407(b) Requirement:

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

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27dBm/MHz.

FCC Part 15.209 Limit		
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

ANSI C63.10-2013 - Section 6.3 (General Requirements)

ANSI C63.10-2013 - Section 6.6 (Standard test method above 1GHz)

6.8.3.Test Setting

Peak Measurements above 1GHz

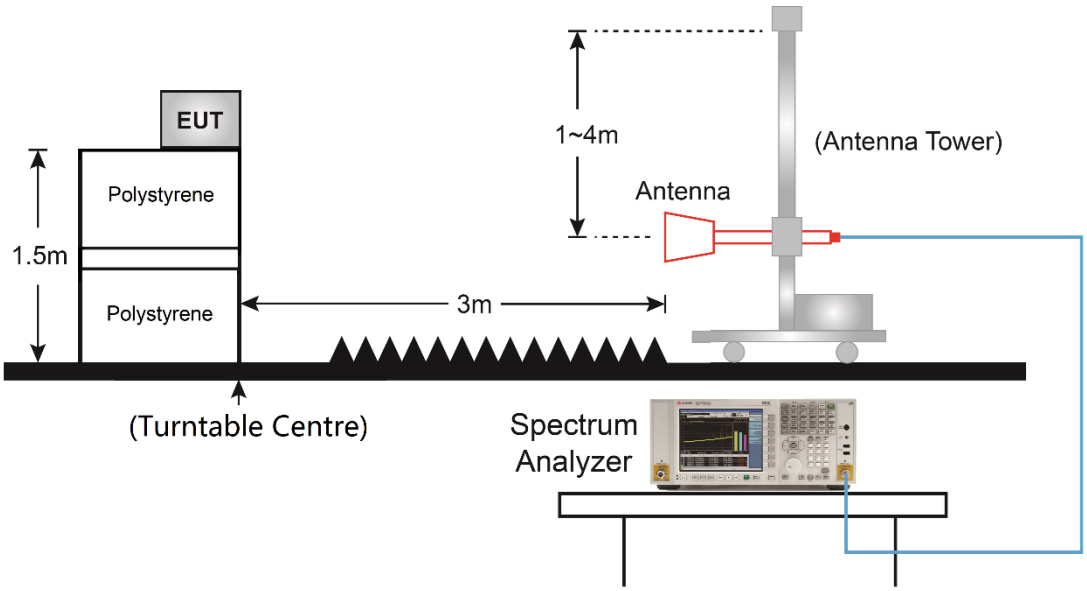
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

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

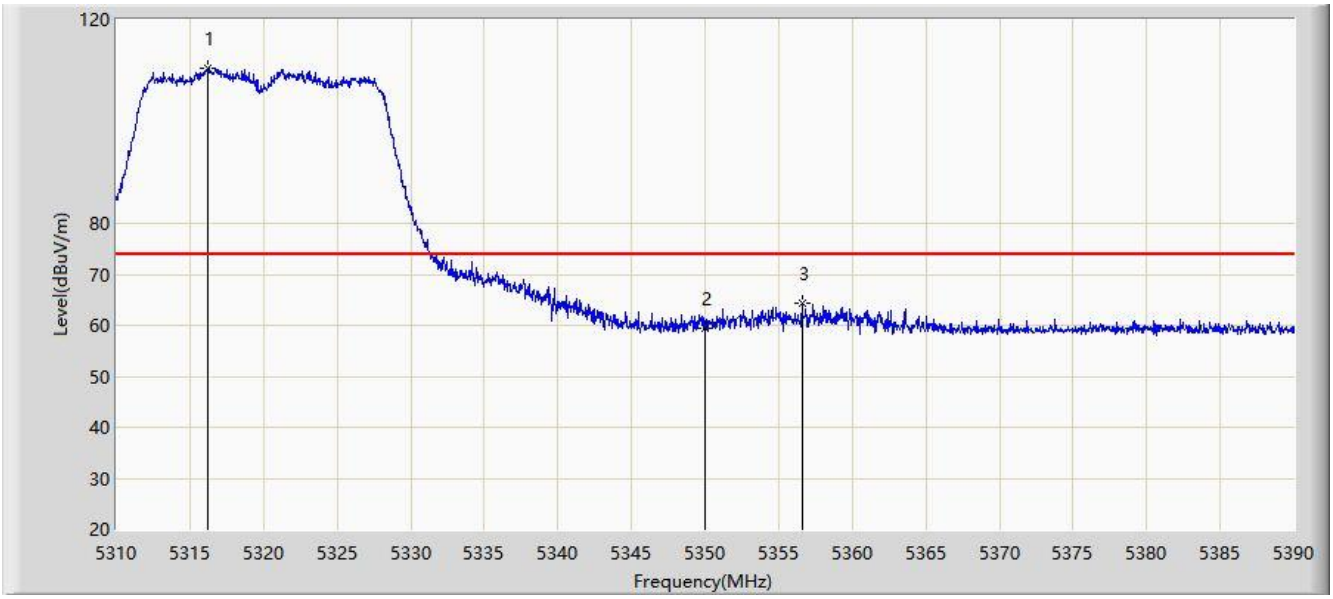
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.8.4.Test Setup



6.8.5.Test Result

Site: WZ-AC2	Test Date: 2021/09/06
Limit: FCC_Part15_15.209 RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

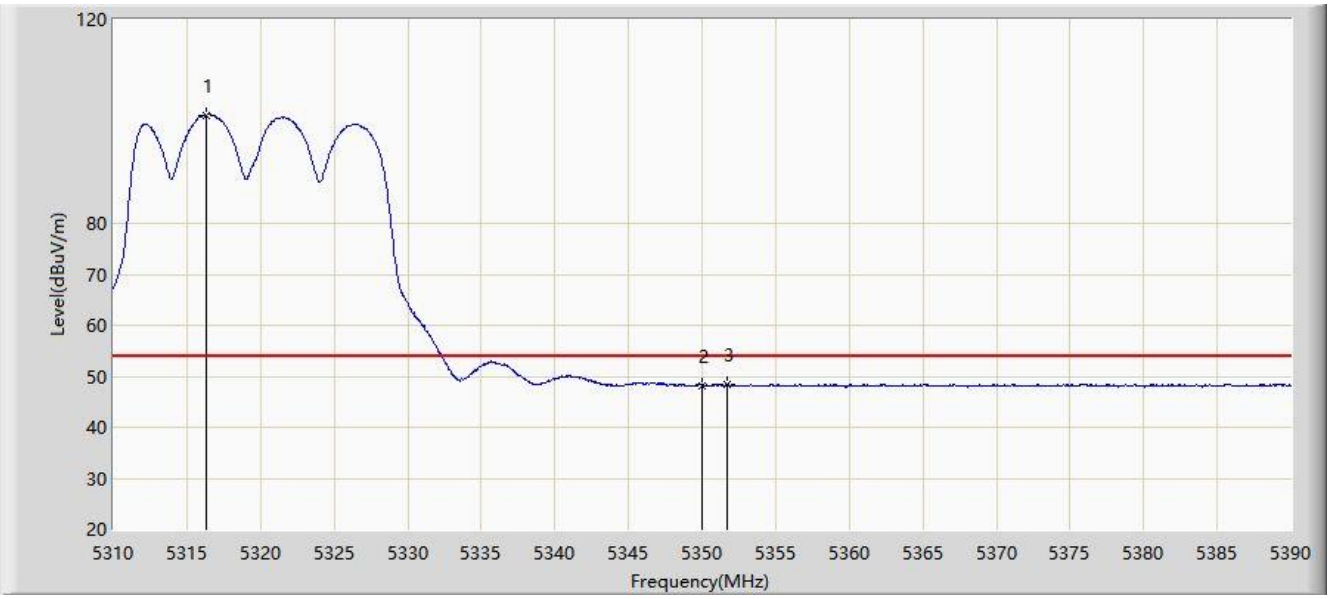


No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		*	5316.240	110.516	106.187	N/A	N/A	4.328	PK
2			5350.000	59.433	54.788	-14.567	74.000	4.645	PK
3			5356.600	64.425	59.720	-9.575	74.000	4.705	PK

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

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

Site: WZ-AC2	Test Date: 2021/09/06
Limit: FCC_Part15_15.209 RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

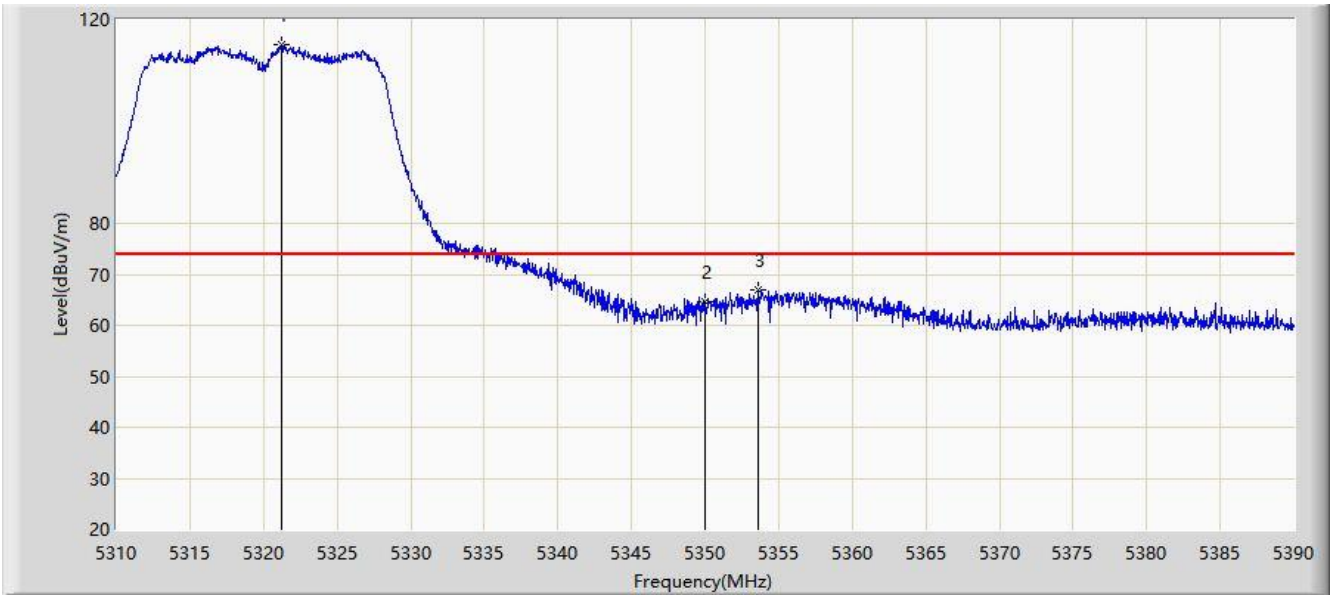


No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		*	5316.320	101.276	96.948	N/A	N/A	4.328	AV
2			5350.000	48.132	43.487	-5.868	54.000	4.645	AV
3			5351.720	48.465	43.797	-5.535	54.000	4.667	AV

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

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

Site: WZ-AC2	Test Date: 2021/09/06
Limit: FCC_Part15_15.209 RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

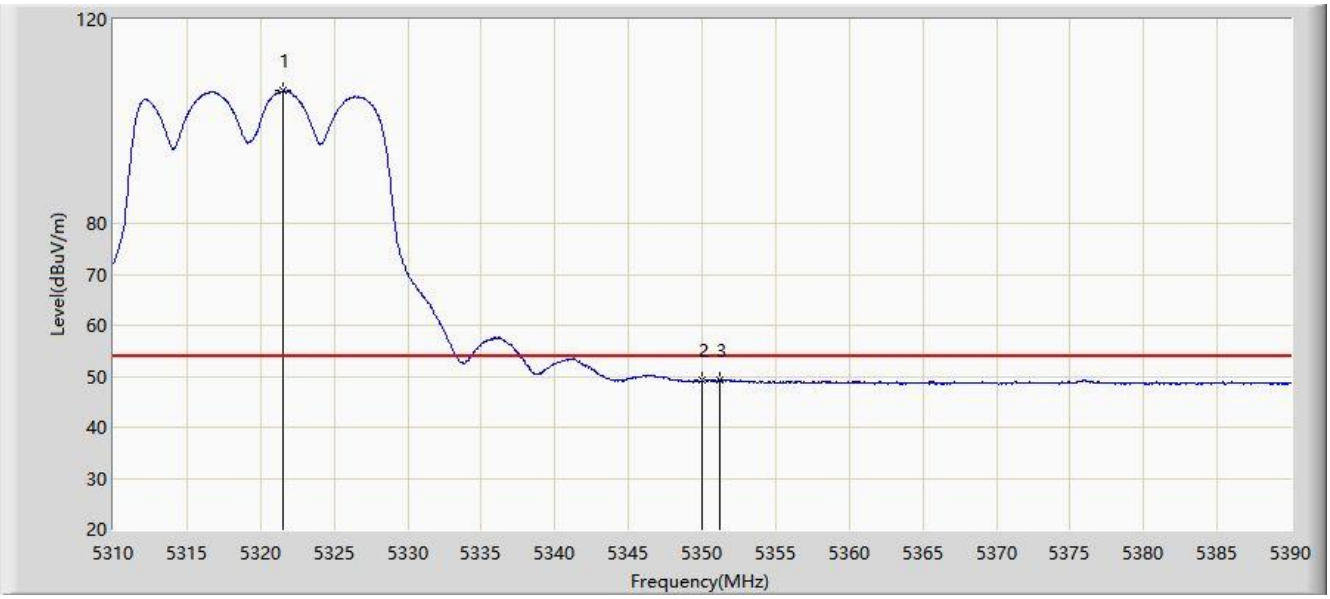


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	5321.200	115.008	110.660	N/A	N/A	4.348	PK
2			5350.000	64.502	59.857	-9.498	74.000	4.645	PK
3			5353.640	66.825	62.142	-7.175	74.000	4.683	PK

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

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

Site: WZ-AC2	Test Date: 2021/09/06
Limit: FCC_Part15_15.209 RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5320MHz	

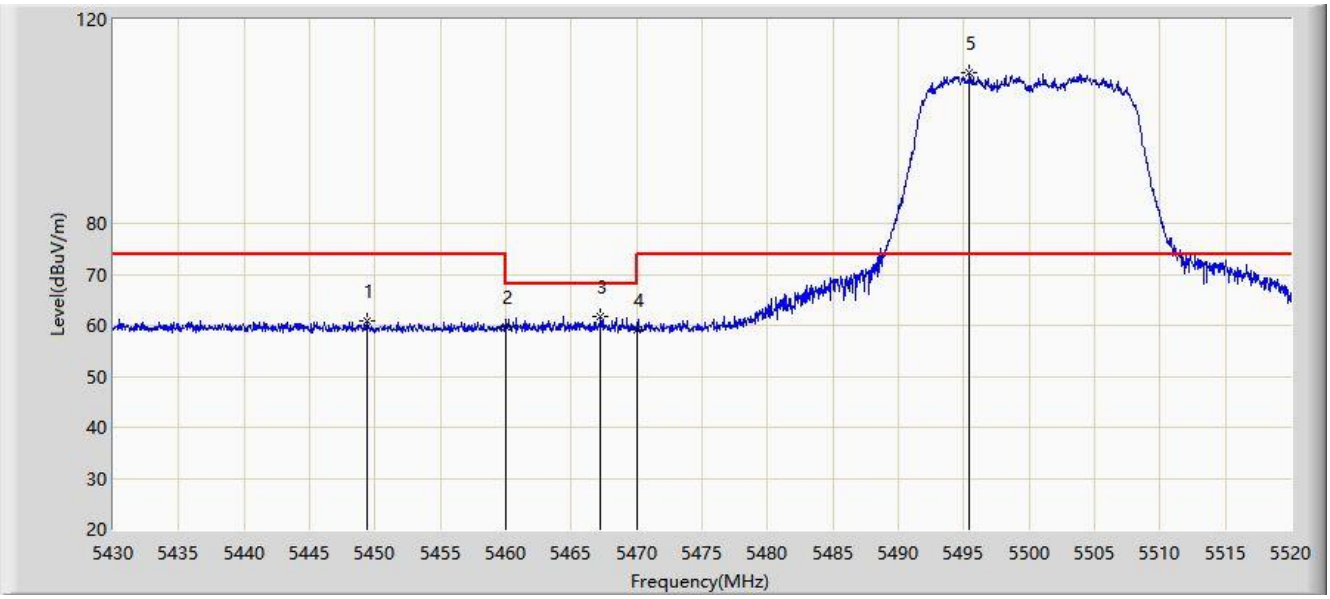


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	5321.520	106.019	101.668	N/A	N/A	4.351	AV
2			5350.000	49.134	44.489	-4.866	54.000	4.645	AV
3			5351.240	49.327	44.665	-4.673	54.000	4.662	AV

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

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

Site: WZ-AC2	Test Date: 2021/09/06
Limit: FCC_Part15_15.209 RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

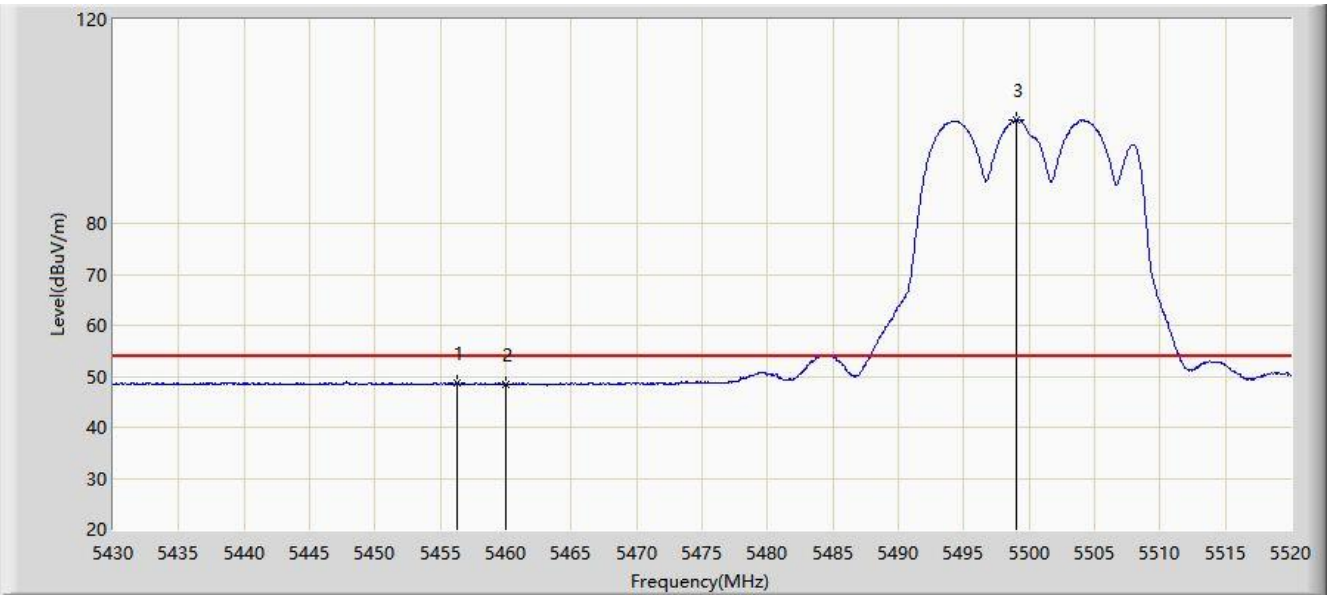


No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1			5449.350	60.980	56.079	-13.020	74.000	4.901	PK
2			5460.000	59.790	54.993	-14.210	74.000	4.797	PK
3			5467.260	61.835	57.090	-6.365	68.200	4.746	PK
4			5470.000	59.042	54.316	-9.158	68.200	4.726	PK
5		*	5495.430	109.447	104.468	N/A	N/A	4.979	PK

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

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

Site: WZ-AC2	Test Date: 2021/09/06
Limit: FCC_Part15_15.209 RE(3m)	Engineer: Messiah Li
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: cAP XL ac	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			5456.325	48.749	43.925	-5.251	54.000	4.824	AV
2			5460.000	48.425	43.628	-5.575	54.000	4.797	AV
3		*	5499.030	100.299	95.286	N/A	N/A	5.013	AV

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

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