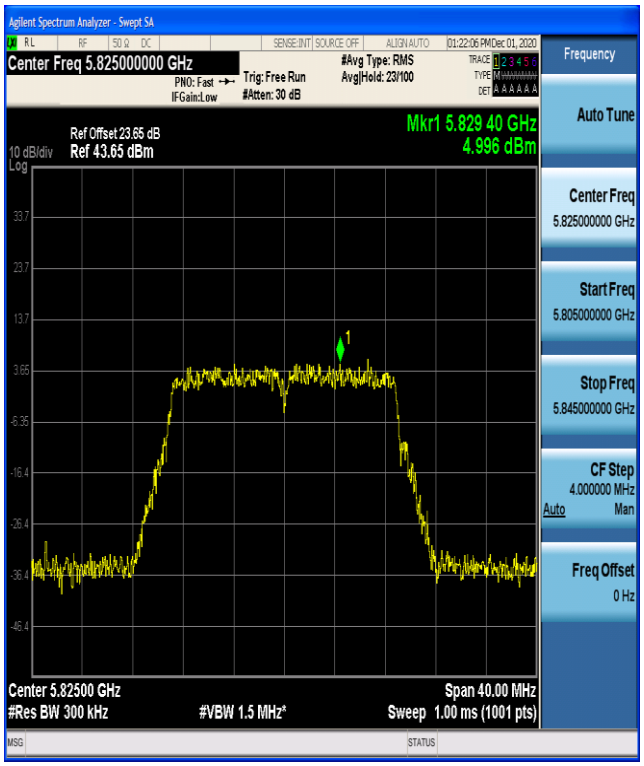
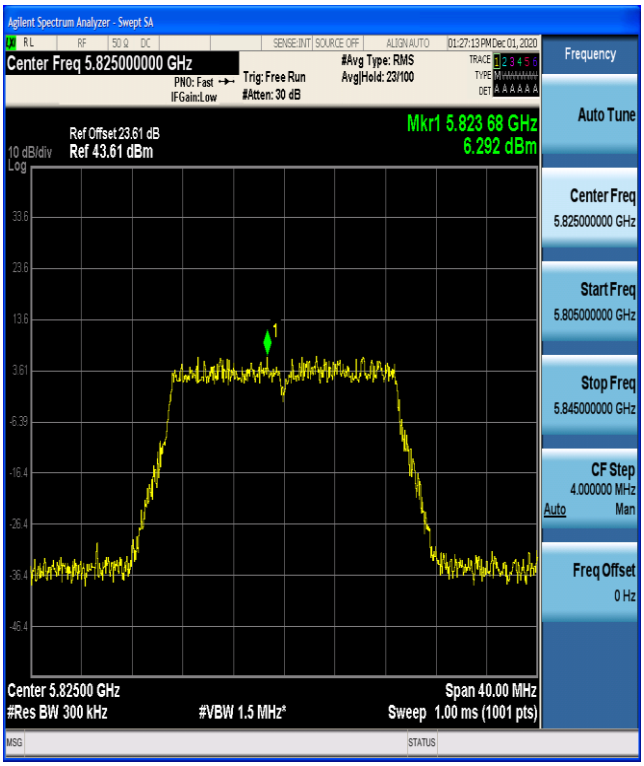
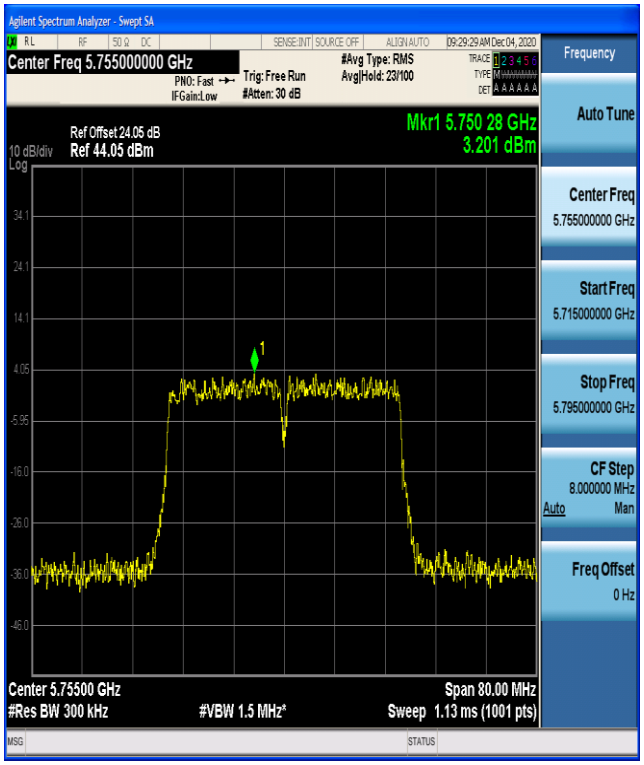




802.11n(HT40)

ANT0



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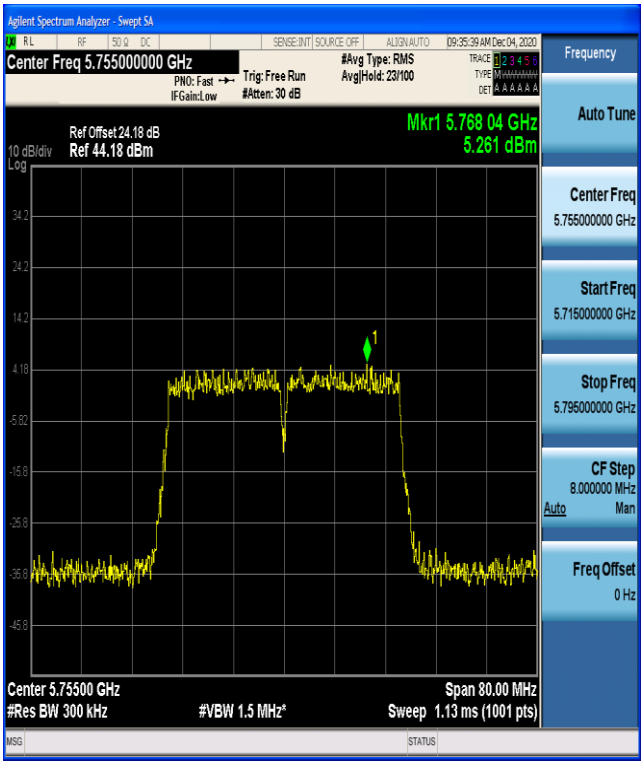
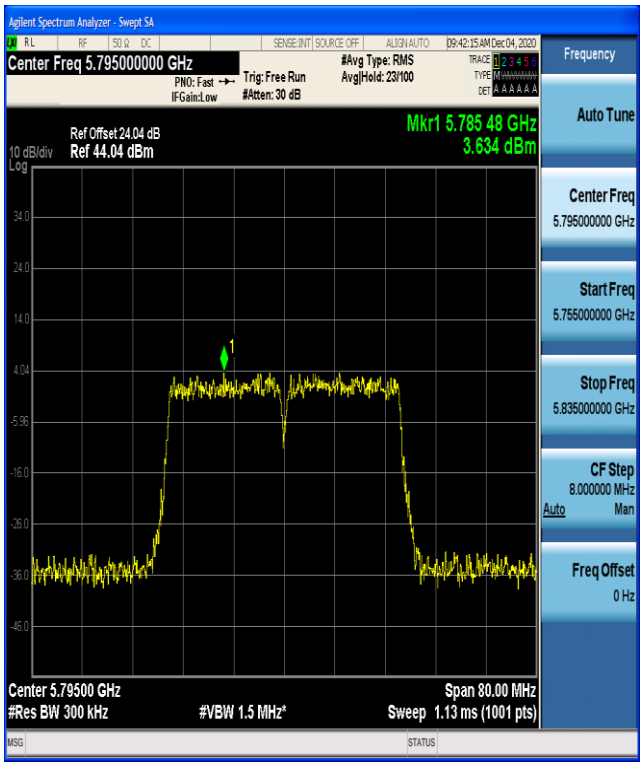
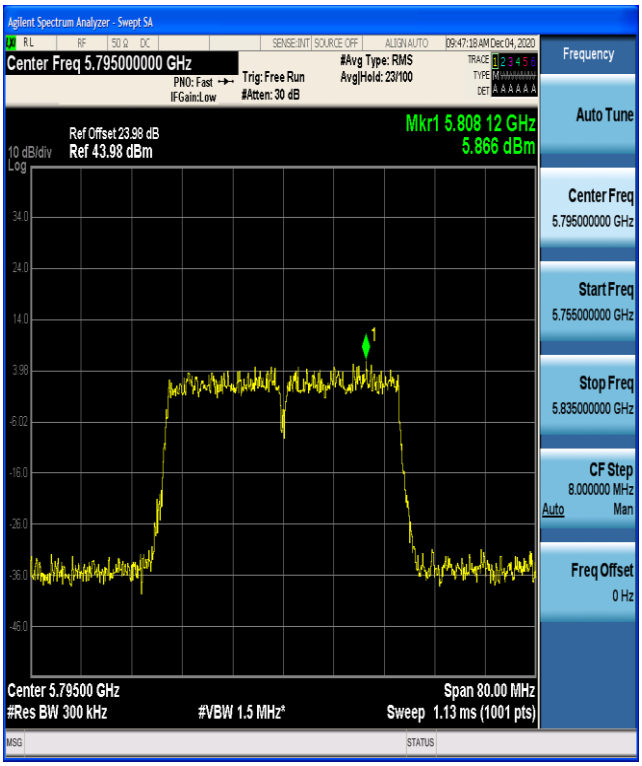
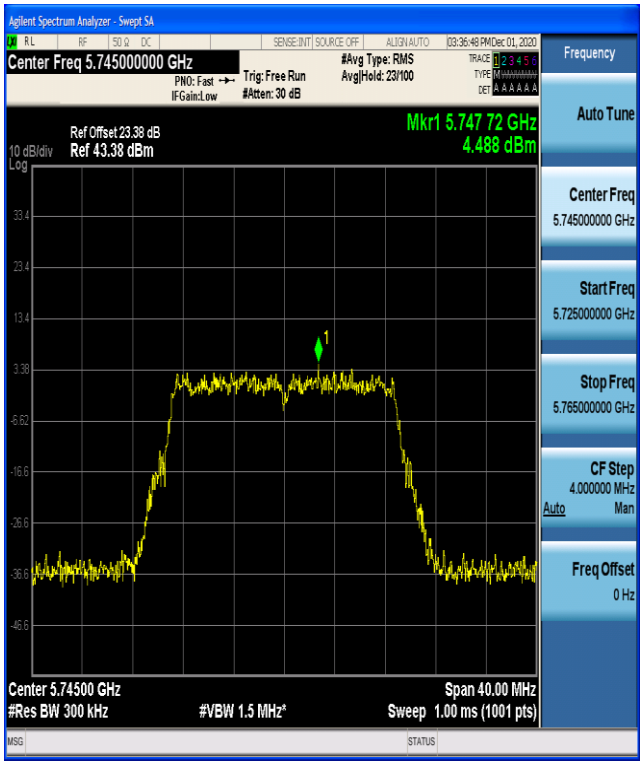




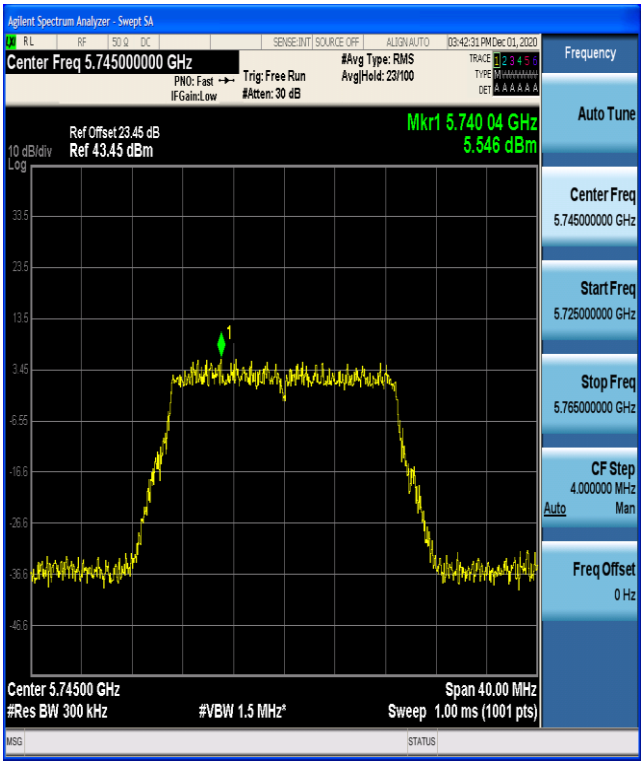


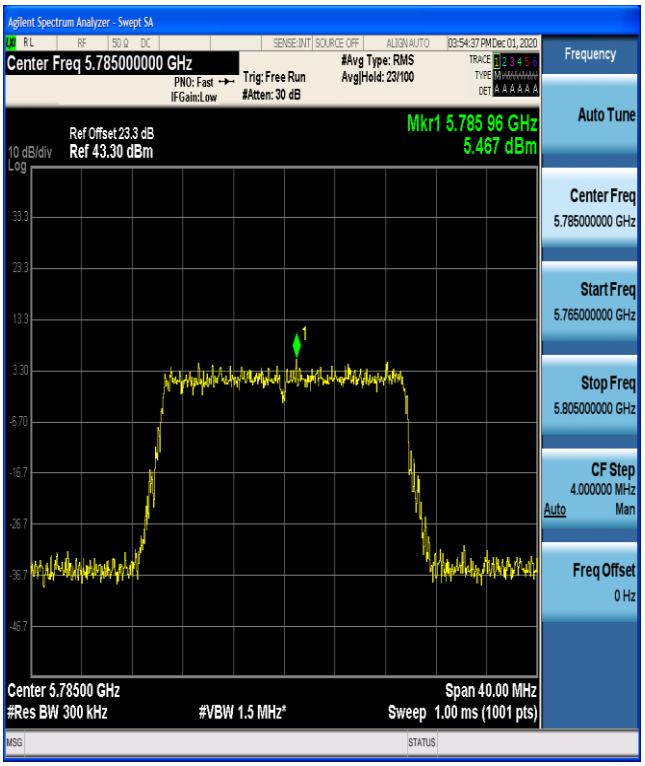
802.11ax(HT20)

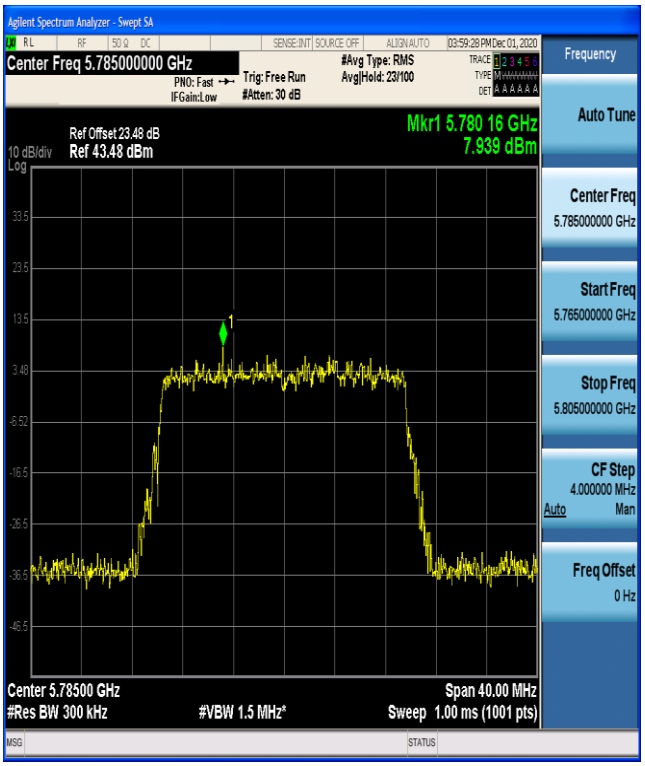
ANT0

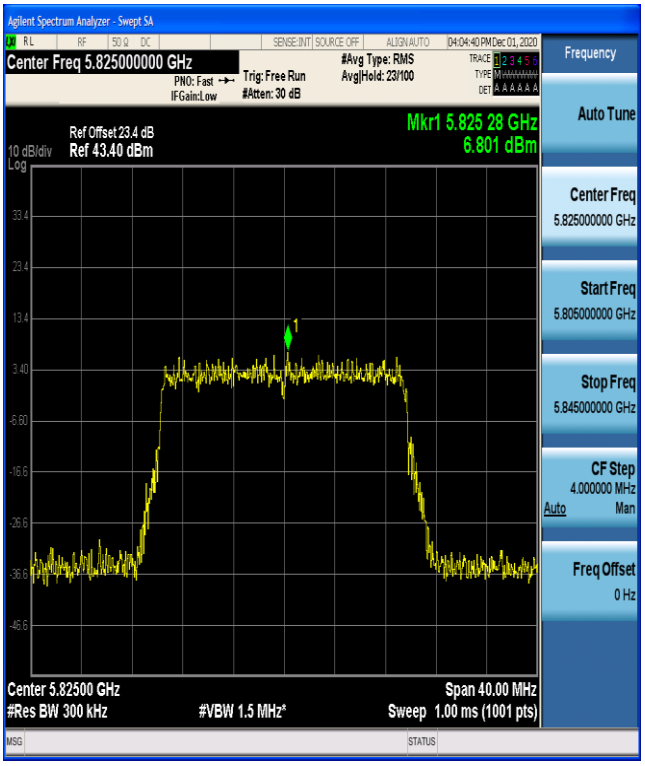


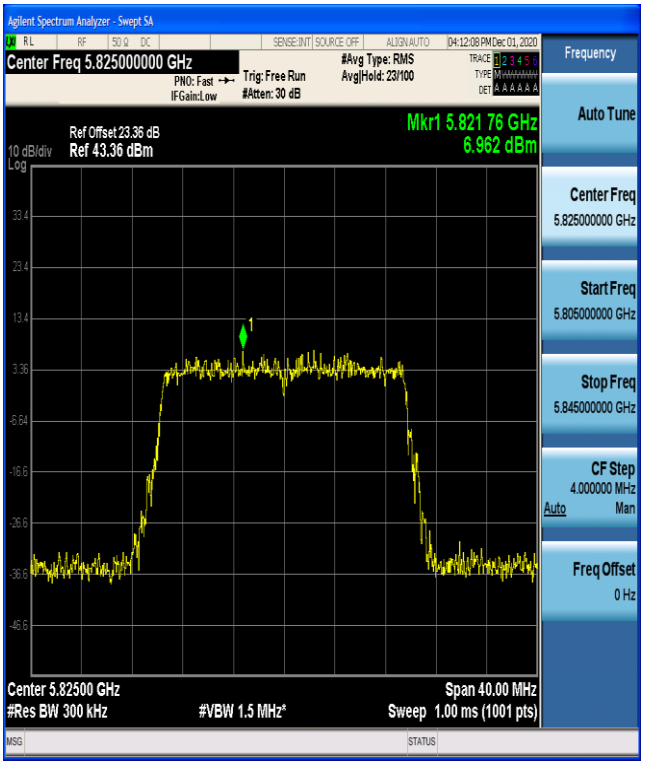
ANT1




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 23/100
03:54:37 PM Dec 01, 2020
Ref Offset 23.3 dB
10 dB/div Ref 43.30 dBm
Mkr1 5.785 96 GHz
5.467 dBm
Center 5.78500 GHz
#Res BW 300 kHz
#VBW 1.5 MHz*
Span 40.00 MHz
Sweep 1.00 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.785000000 GHz
Start Freq 5.765000000 GHz
Stop Freq 5.805000000 GHz
CF Step 4.000000 MHz
Auto Man
Freq Offset 0 Hz

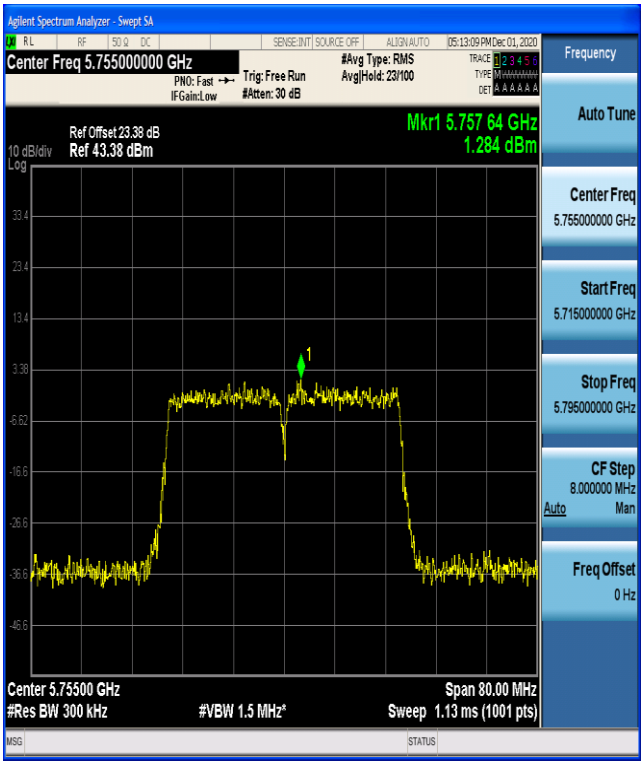

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 23/100
03:59:28 PM Dec 01, 2020
Ref Offset 23.48 dB
10 dB/div Ref 43.48 dBm
Mkr1 5.780 16 GHz
7.939 dBm
Center 5.78500 GHz
#Res BW 300 kHz
#VBW 1.5 MHz*
Span 40.00 MHz
Sweep 1.00 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.785000000 GHz
Start Freq 5.765000000 GHz
Stop Freq 5.805000000 GHz
CF Step 4.000000 MHz
Auto Man
Freq Offset 0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 23/100
04:04:40 PM Dec 01, 2020
Ref Offset 23.4 dB
10 dB/div Ref 43.40 dBm
Mkr1 5.825 28 GHz
6.801 dBm
Center 5.82500 GHz
#Res BW 300 kHz
#VBW 1.5 MHz*
Span 40.00 MHz
Sweep 1.00 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.825000000 GHz
Start Freq 5.805000000 GHz
Stop Freq 5.845000000 GHz
CF Step 4.000000 MHz
Auto Man
Freq Offset 0 Hz

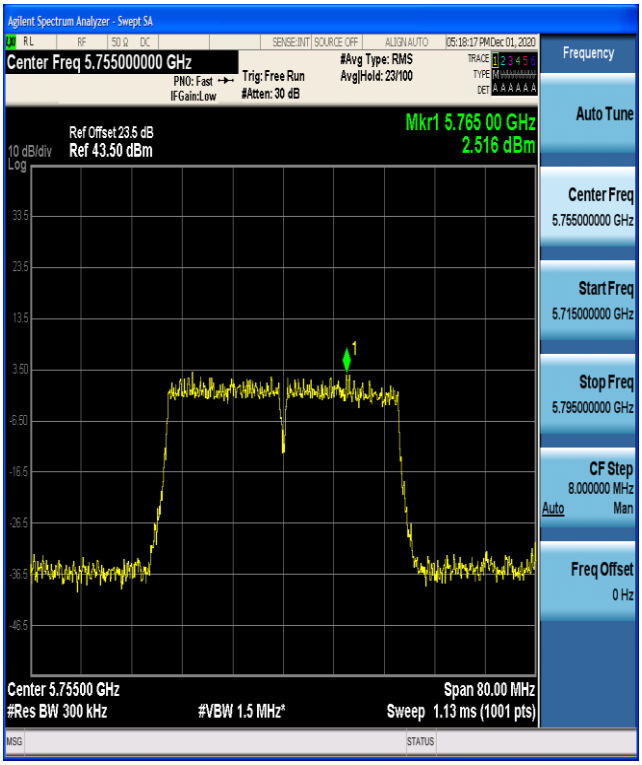

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 23/100
04:12:08 PM Dec 01, 2020
Ref Offset 23.36 dB
10 dB/div Ref 43.36 dBm
Mkr1 5.821 76 GHz
6.962 dBm
Center 5.82500 GHz
#Res BW 300 kHz
#VBW 1.5 MHz*
Span 40.00 MHz
Sweep 1.00 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.825000000 GHz
Start Freq 5.805000000 GHz
Stop Freq 5.845000000 GHz
CF Step 4.000000 MHz
Auto Man
Freq Offset 0 Hz

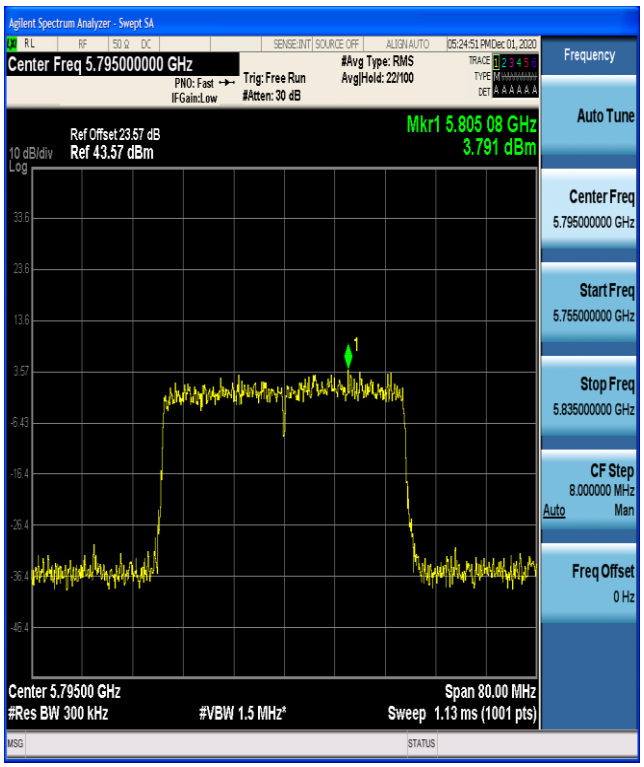
802.11ax(HT40)

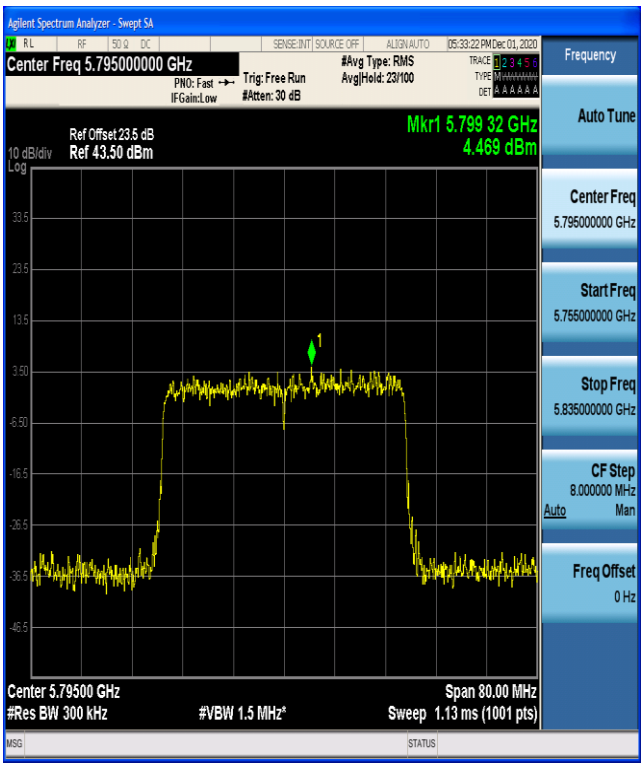
ANT0



ANT1

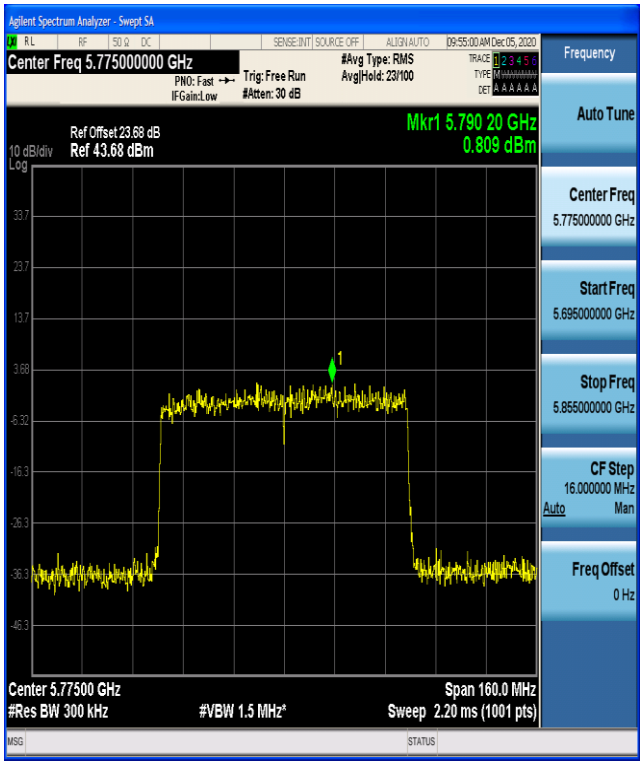




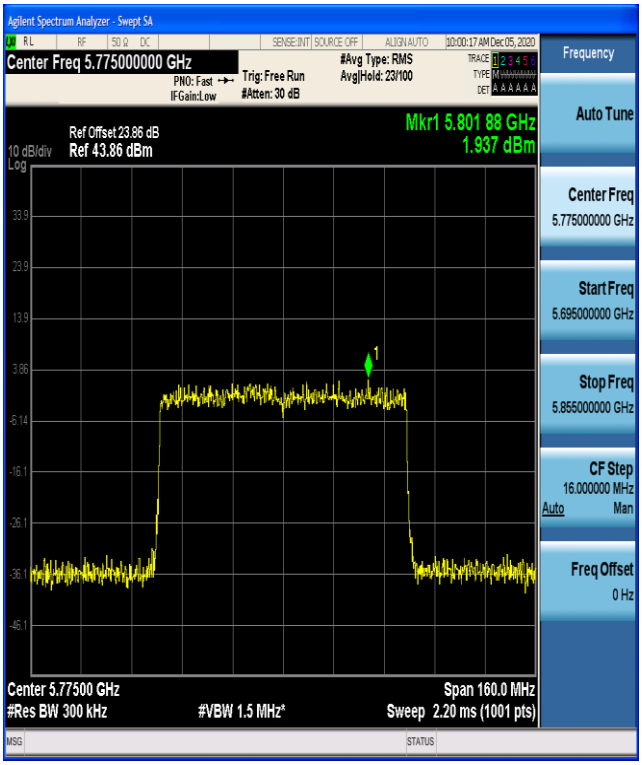


802.11ax(HT80)

ANT0



ANT1

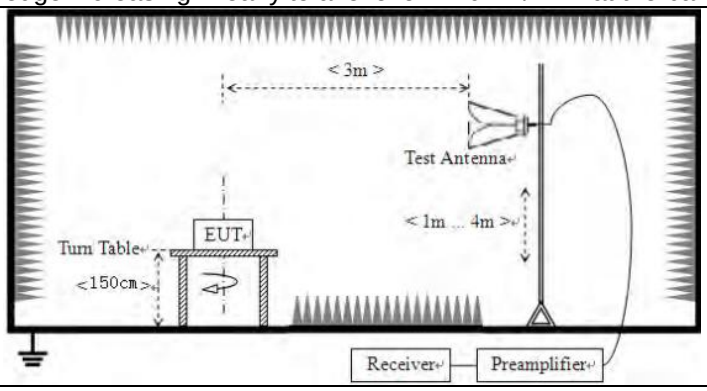


7.6 Band edge

7.6.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	9kHz to 40GHz, only worse case is reported
Test site:	Measurement Distance: 3m
Receiver setup:	

Frequency	Detector	RBW	VBW	Value
Above 1GHz	Peak	1MHz	3MHz	Peak
	RMS	1MHz	3MHz	RMS

Limit:	All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
Test setup:	
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.

Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Remarks:

1. *Only the worst case Main Antenna test data..*
2. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.*
5. *According to KDB 789033 D02v02r01 section G) 1) d),for measurements above 1000 MHz @3m distance, the limit of field strength is computed as follows:*

   E[dBuV/m] = EIRP[dBm] + 95.2;

   E[dBuV/m] = -27 + 95.2 = 68.2dBuV/m.

   E[dBuV/m] = 10 + 95.2 = 105.2dBuV/m.

   E[dBuV/m] = 15.6 + 95.2 = 110.8dBuV/m.

   E[dBuV/m] = 27 + 95.2 = 122.2dBuV/m

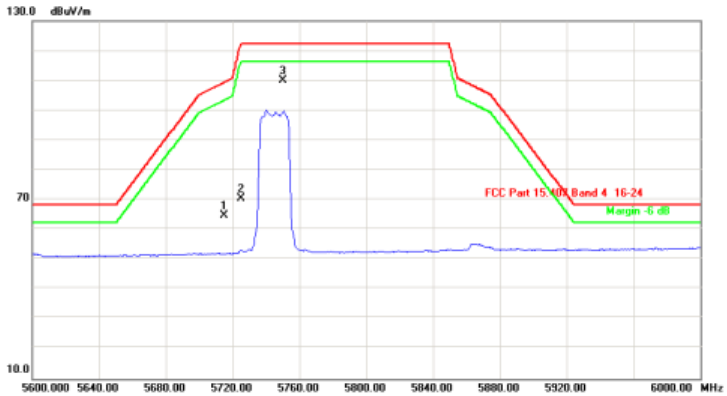
Measurement Data:

All the antennas were tested, and only show the worst case (ANT0) in this report.

802.11a	5745

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11a20 5745
Note: 74

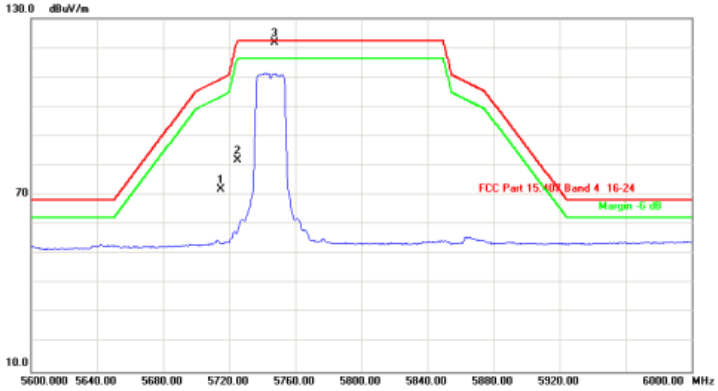
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	63.18	1.66	64.84	109.40	-44.56	peak	
2		5725.000	68.72	1.69	70.41	122.20	-51.79	peak	
3	*	5750.050	108.24	1.76	110.00	122.20	-12.20	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11a20 5745
Note: 74

Radiated Emission

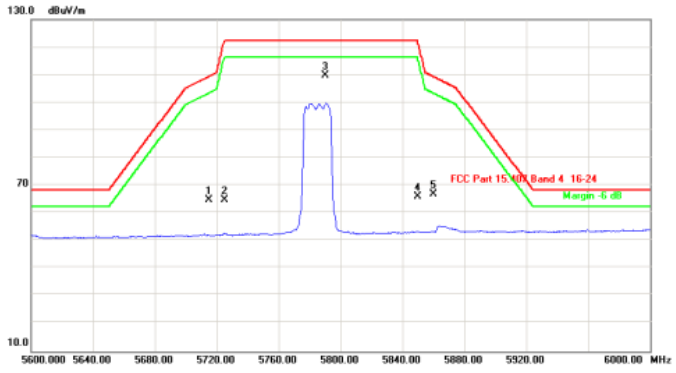


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	70.20	1.66	71.86	109.40	-37.54	peak	
2		5725.000	80.11	1.69	81.80	122.20	-40.40	peak	
3	*	5747.650	120.08	1.76	121.84	122.20	-0.36	peak	

802.11a	5200

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11a20 5785
Note: 74

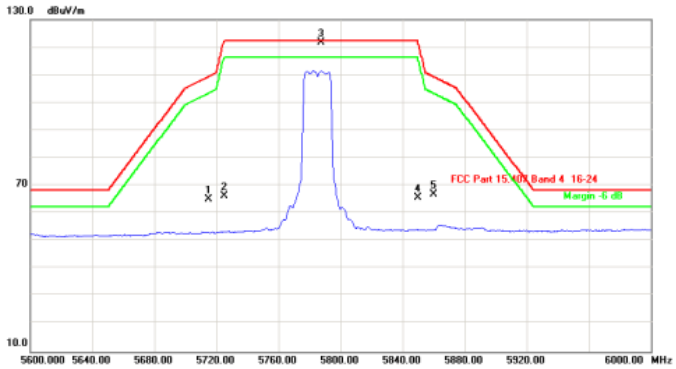
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	63.04	1.66	64.70	109.40	-44.70	peak	
2		5725.000	63.08	1.69	64.77	122.20	-57.43	peak	
3	*	5790.010	107.93	1.88	109.81	122.20	-12.39	peak	
4		5850.000	63.76	2.07	65.83	122.20	-56.37	peak	
5		5860.000	64.79	2.10	66.89	109.40	-42.51	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11a20 5785
Note: 74

Radiated Emission

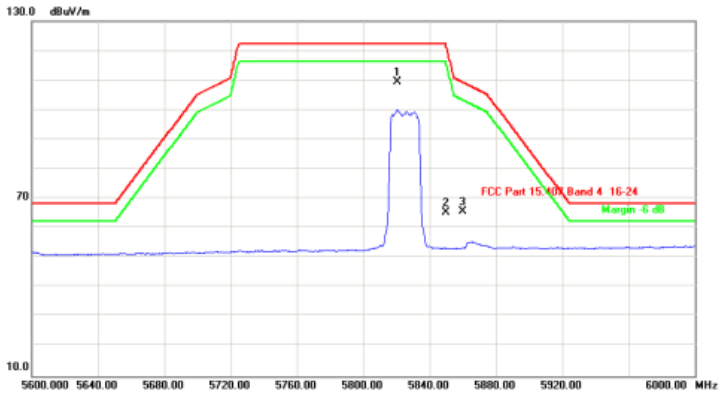


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	63.44	1.66	65.10	109.40	-44.30	peak	
2		5725.000	64.52	1.69	66.21	122.20	-55.99	peak	
3	*	5787.610	119.74	1.88	121.62	122.20	-0.58	peak	
4		5850.000	63.65	2.07	65.72	122.20	-56.48	peak	
5		5860.000	64.90	2.10	67.00	109.40	-42.40	peak	

802.11a	5825

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11a20 5825
Note: 74

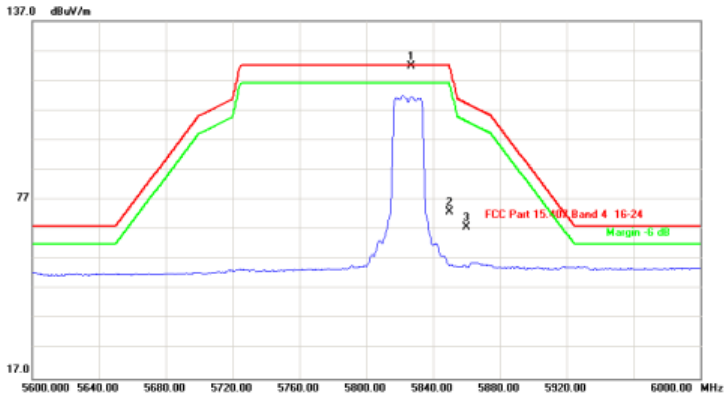
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5820.780	107.48	1.98	109.46	122.20	-12.74	peak	
2		5850.000	63.34	2.07	65.41	122.20	-56.79	peak	
3		5860.000	63.43	2.10	65.53	109.40	-43.87	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11a20 5825
Note: 74

Radiated Emission



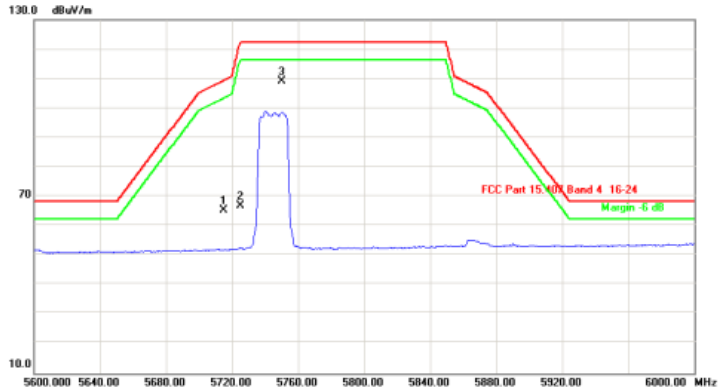
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5827.170	119.77	2.00	121.77	122.20	-0.43	peak	
2		5850.000	70.83	2.07	72.90	122.20	-49.30	peak	
3		5860.000	65.81	2.10	67.91	109.40	-41.49	peak	

All mode (MIMO mode & SISO mode) were tested, and only show the worst case (MIMO mode) in this report.

802.11axHT20	5745

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT20 5745
Note: 70

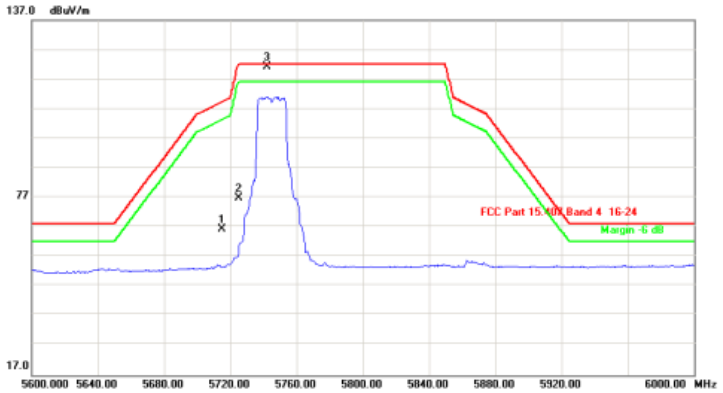
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	63.59	1.66	65.25	109.40	-44.15	peak	
2		5725.000	65.24	1.69	66.93	122.20	-55.27	peak	
3	*	5750.050	107.49	1.76	109.25	122.20	-12.95	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT20 5745
Note: 70

Radiated Emission

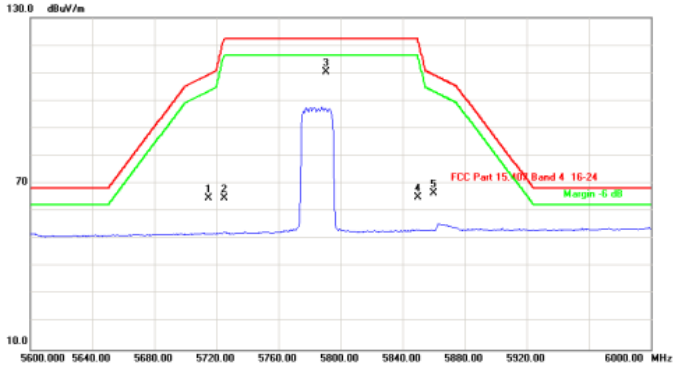


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	64.71	1.66	66.37	109.40	-43.03	peak	
2		5725.000	75.17	1.69	76.86	122.20	-45.34	peak	
3	*	5742.060	119.52	1.74	121.26	122.20	-0.94	peak	

802.11axHT20	5785

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT20 5785
Note: 70

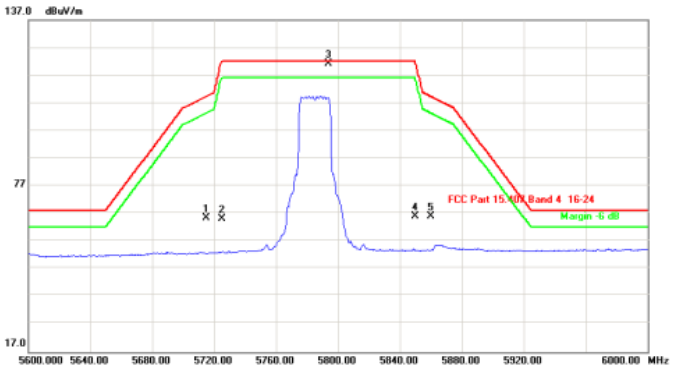
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	62.99	1.66	64.65	109.40	-44.75	peak	
2		5725.000	63.04	1.69	64.73	122.20	-57.47	peak	
3	*	5790.410	108.60	1.88	110.48	122.20	-11.72	peak	
4		5850.000	63.12	2.07	65.19	122.20	-57.01	peak	
5		5860.000	64.30	2.10	66.40	109.40	-43.00	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT20 5785
Note: 70

Radiated Emission

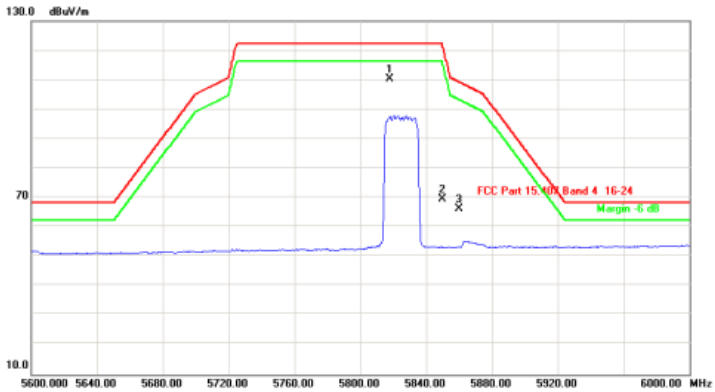


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	63.92	1.66	65.58	109.40	-43.82	peak	
2		5725.000	63.57	1.69	65.26	122.20	-56.94	peak	
3	*	5794.010	119.47	1.90	121.37	122.20	-0.83	peak	
4		5850.000	63.96	2.07	66.03	122.20	-56.17	peak	
5		5860.000	64.01	2.10	66.11	109.40	-43.29	peak	

802.11axHT20	5825

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT20 5825
Note: 70

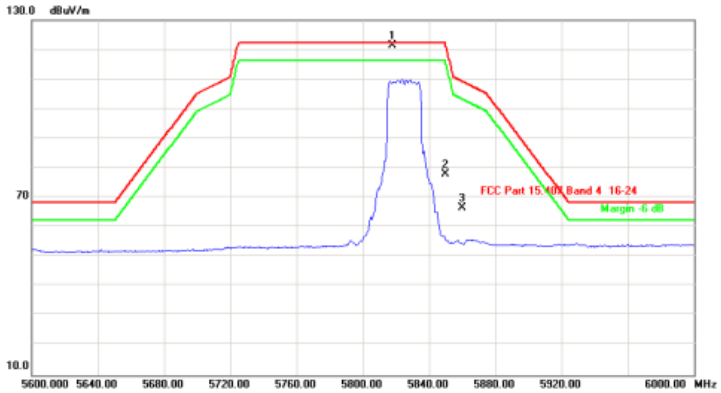
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5817.980	108.37	1.97	110.34	122.20	-11.86	peak	
2		5850.000	67.56	2.07	69.63	122.20	-52.57	peak	
3		5860.000	64.24	2.10	66.34	109.40	-43.06	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT20 5825
Note: 70

Radiated Emission

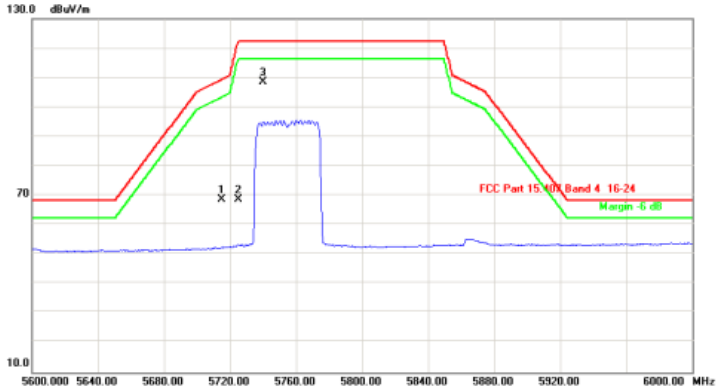


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5817.980	119.34	1.97	121.31	122.20	-0.89	peak	
2		5850.000	75.81	2.07	77.88	122.20	-44.32	peak	
3		5860.000	64.56	2.10	66.66	109.40	-42.74	peak	

802.11axHT40	5755

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT40 5755
Note: 72

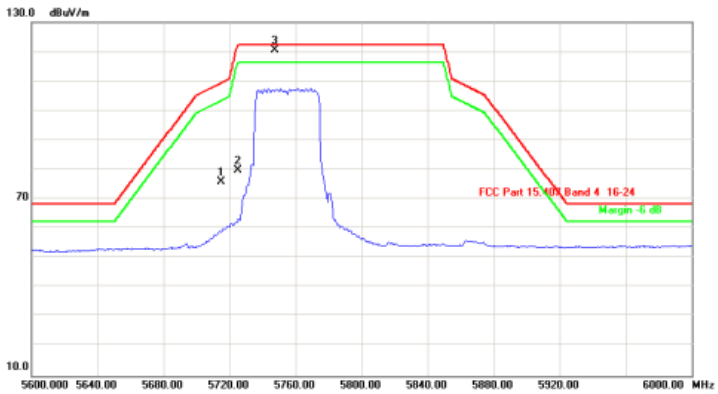
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	66.85	1.66	68.51	109.40	-40.89	peak	
2		5725.000	67.02	1.69	68.71	122.20	-53.49	peak	
3	*	5740.060	106.89	1.73	108.62	122.20	-13.58	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT40 5755
Note: 72

Radiated Emission

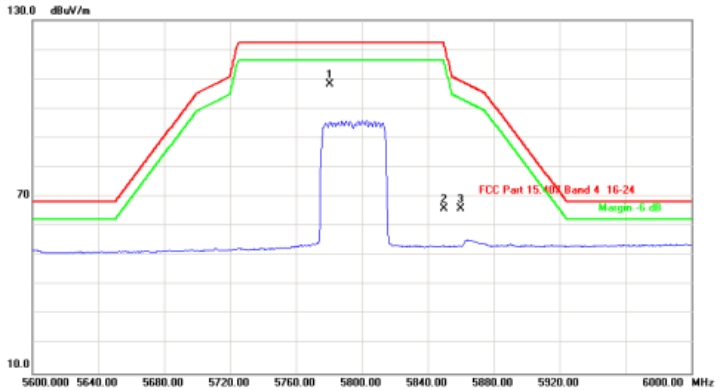


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	74.19	1.66	75.85	109.40	-33.55	peak	
2		5725.000	78.11	1.69	79.80	122.20	-42.40	peak	
3	*	5747.250	118.89	1.75	120.64	122.20	-1.56	peak	

802.11ax HT40	5795

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT40 5795
Note: 72

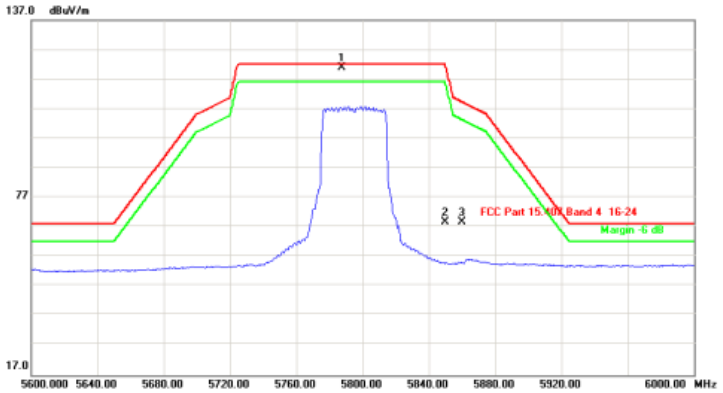
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5780.420	106.47	1.85	108.32	122.20	-13.88	peak	
2		5850.000	63.76	2.07	65.83	122.20	-56.37	peak	
3		5860.000	63.83	2.10	65.93	109.40	-43.47	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT40 5795
Note: 72

Radiated Emission

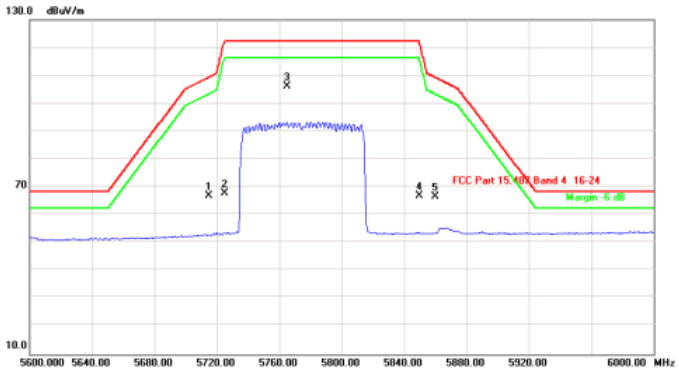


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5787.210	118.94	1.88	120.82	122.20	-1.38	peak	
2		5850.000	66.64	2.07	68.71	122.20	-53.49	peak	
3		5860.000	66.57	2.10	68.67	109.40	-40.73	peak	

802.11ax HT80	5775

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Horizontal* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT80 5775
Note: 74

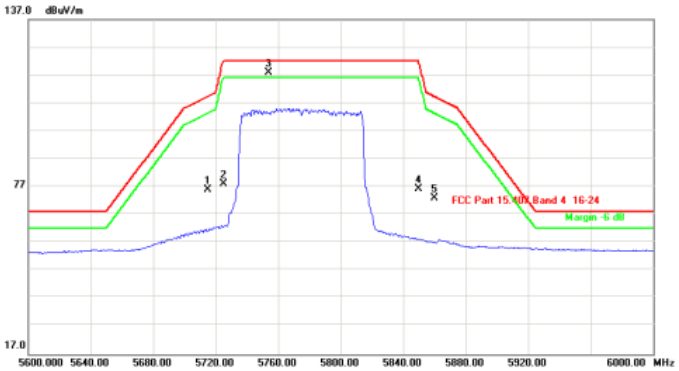
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	65.27	1.66	66.93	109.40	-42.47	peak	
2		5725.000	66.01	1.69	67.70	122.20	-54.50	peak	
3	*	5765.230	104.31	1.81	106.12	122.20	-16.08	peak	
4		5850.000	64.75	2.07	66.82	122.20	-55.38	peak	
5		5860.000	64.53	2.10	66.63	109.40	-42.77	peak	

Site site #1
Limit: FCC Part 15.407 Band 4 16-24 Polarization: *Vertical* Temperature: 26
EUT: W6 WIFI6 Power: Humidity: 60 %
M/N:
Mode: 11ax HT80 5775
Note: 74

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	74.35	1.66	76.01	109.40	-33.39	peak	
2		5725.000	76.43	1.69	78.12	122.20	-44.08	peak	
3	*	5753.650	116.08	1.77	117.85	122.20	-4.35	peak	
4		5850.000	74.32	2.07	76.39	122.20	-45.81	peak	
5		5860.000	70.93	2.10	73.03	109.40	-36.37	peak	

7.7 Spurious Emission

7.7.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209, Part 15E Section 15.407(b)(4)
Test Method:	ANSI C63.10:2013
Test Frequency Range:	9kHz to 40GHz
Test site:	Measurement Distance: 3m

Receiver setup:

Frequency	Detector	RBW	VBW	Value
9kHz-150KHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	AV	1MHz	3MHz	Average Value

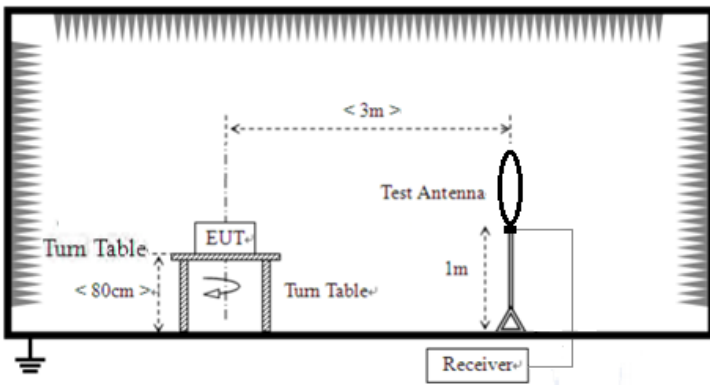
Limit:

Frequency	Limit (uV/m)	Value	Measurement Distance
0.009MHz-0.490MHz	2400/F(KHz)	QP	300m
0.490MHz-1.705MHz	24000/F(KHz)	QP	300m
1.705MHz-30MHz	30	QP	30m
30MHz-88MHz	100	QP	3m
88MHz-216MHz	150	QP	
216MHz-960MHz	200	QP	
960MHz-1GHz	500	QP	

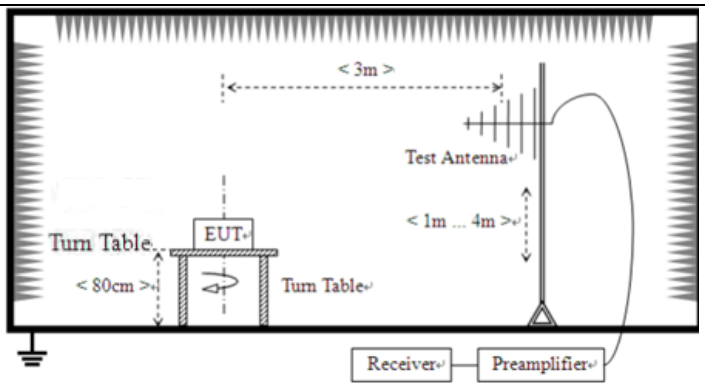
Frequency	Limit (dBm/MHz)	Remark
Above 1GHz	-27.0	Peak Value

Test setup:

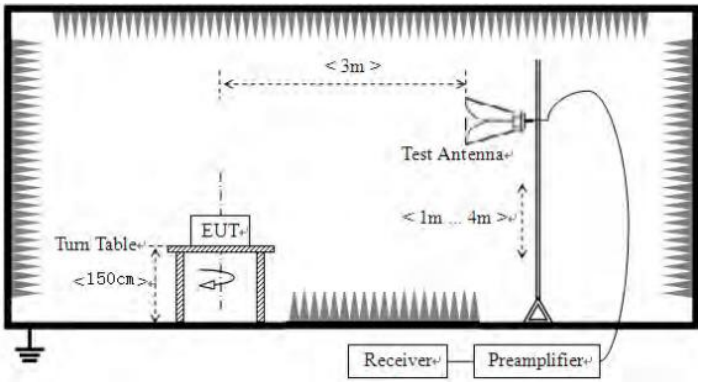
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test

	worst case mode is recorded in the report.					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

Remarks:

1. *Only the worst case Main Antenna test data.*
2. *Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.*

Measurement Data:

9 kHz ~ 30 MHz

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

All mode (MIMO mode & SISO mode) were tested, and only show the worst case (MIMO mode) in this report.

Ant 0° value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
0.0151	36.90	20.71	57.61	124.03	-66.42	AVG
0.0281	33.40	19.88	53.28	118.63	-65.35	AVG
0.0450	30.80	19.61	50.41	114.54	-64.13	AVG
0.1914	27.20	17.18	44.38	101.97	-57.59	AVG
2.2847	31.40	16.95	48.35	69.54	-21.19	QP
4.0920	22.70	15.69	38.39	69.54	-31.15	QP

Ant 90° value:

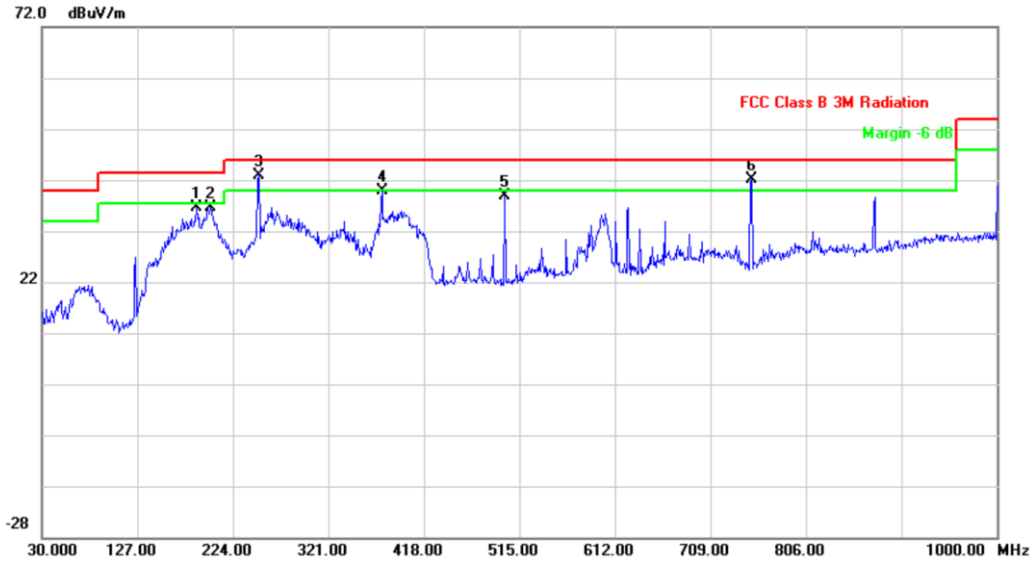
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
0.0150	33.60	20.72	54.32	124.08	-69.76	AVG
0.0354	27.70	19.77	47.47	116.62	-69.15	AVG
0.0554	27.20	19.42	46.62	112.73	-66.11	AVG
0.2280	25.30	17.10	42.40	100.45	-58.05	AVG
2.2486	26.90	16.97	43.87	69.54	-25.67	QP
6.5227	22.60	14.91	37.51	69.54	-32.03	QP

Below 1GHz

Pre-scan all test modes, found worst case at 802.11n(HT40), and so only show the test result of 802.11n(HT40)

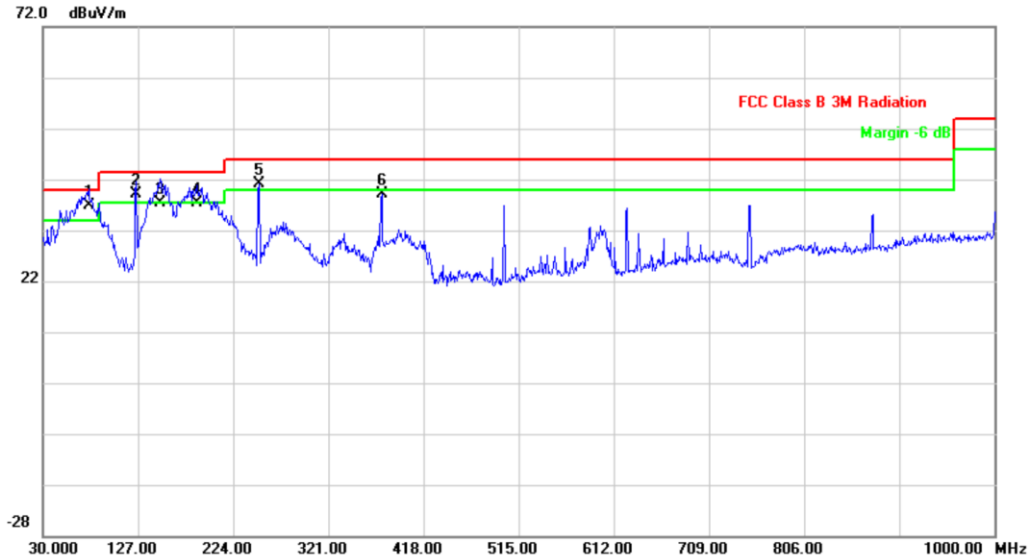
All mode (MIMO mode & SISO mode) were tested, and only show the worst case (MIMO mode) in this report.

Horizontal:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		187.1400	21.89	14.85	36.74	43.50	-6.76	QP	200	54	
2		200.7200	21.08	15.67	36.75	43.50	-6.75	QP	200	297	
3	*	250.0100	26.34	16.45	42.79	46.00	-3.21	QP	100	74	
4		375.3200	20.83	19.00	39.83	46.00	-6.17	QP	100	227	
5		500.4500	17.44	21.46	38.90	46.00	-7.10	QP	200	49	
6	!	750.7100	16.95	25.08	42.03	46.00	-3.97	QP	100	43	

Vertical:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	76.5600	22.19	14.73	36.92	40.00	-3.08	QP	100	327	
2	!	125.0000	24.22	14.88	39.10	43.50	-4.40	QP	100	78	
3		149.3100	22.33	15.09	37.42	43.50	-6.08	QP	100	178	
4		187.5200	21.90	15.52	37.42	43.50	-6.08	QP	100	180	
5	!	250.1900	24.77	16.45	41.22	46.00	-4.78	QP	200	37	
6		375.3200	20.11	19.00	39.11	46.00	-6.89	QP	100	135	

Above 1GHz:

All the antennas were tested, and only show the worst case (ANT1) in this report.

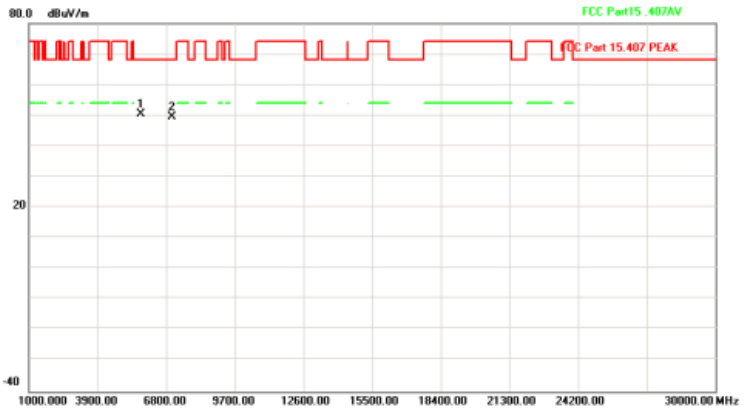
802.11a	5745

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11a20 5745
Note: 74

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



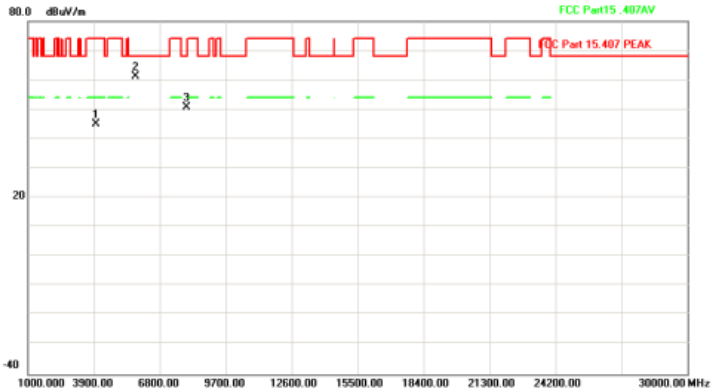
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5727.000	48.64	1.69	50.33	68.20	-17.87	peak	
2		7032.000	45.58	4.09	49.67	68.20	-18.53	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11a20 5745
Note: 74

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	51.82	-6.89	44.93	74.00	-29.07	peak	
2	*	5727.000	59.59	1.69	61.28	68.20	-6.92	peak	
3		7960.000	45.09	5.60	50.69	68.20	-17.51	peak	

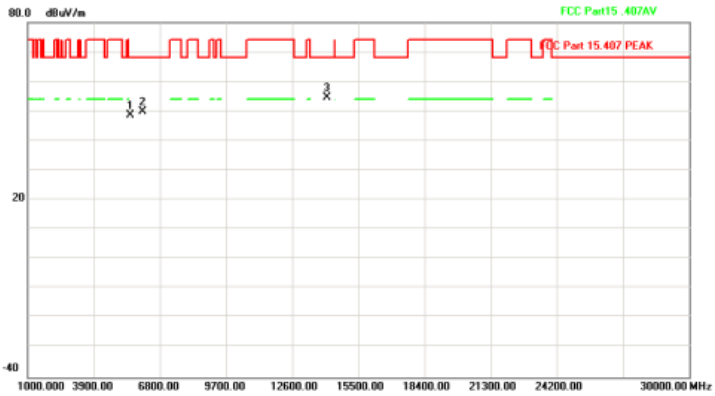
802.11a	5785

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11a20 5785
Note: 74

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



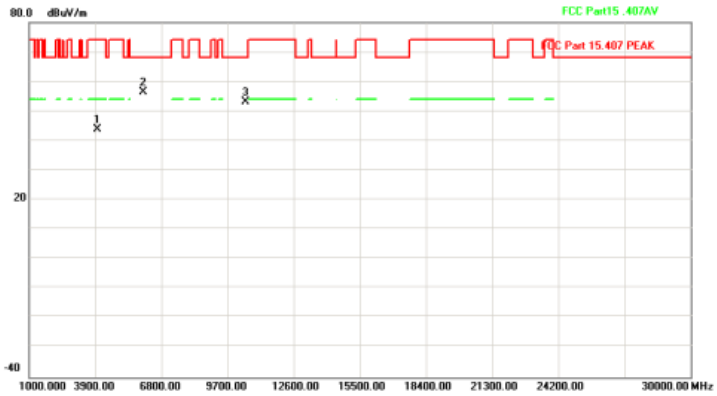
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5495.000	47.68	0.99	48.67	68.20	-19.53	peak	
2		6046.000	47.23	2.59	49.82	68.20	-18.38	peak	
3	*	14108.000	43.11	11.65	54.76	68.20	-13.44	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11a20 5785
Note: 74

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	50.89	-6.89	44.00	74.00	-30.00	peak	
2	*	6017.000	53.97	2.55	56.52	68.20	-11.68	peak	
3		10483.000	44.10	8.92	53.02	68.20	-15.18	peak	

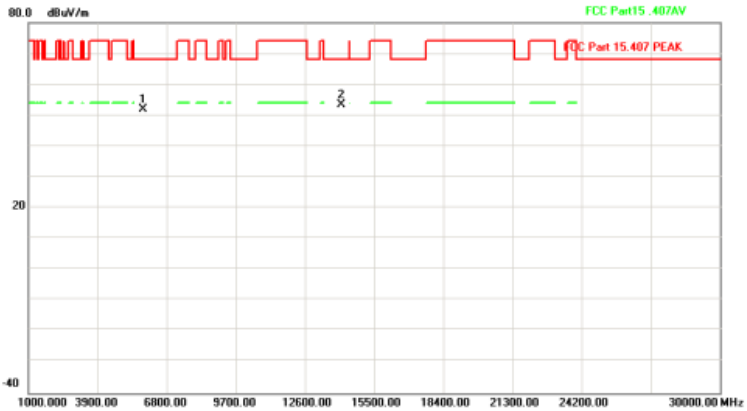
802.11a	5825

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11a20 5825
Note: 74

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



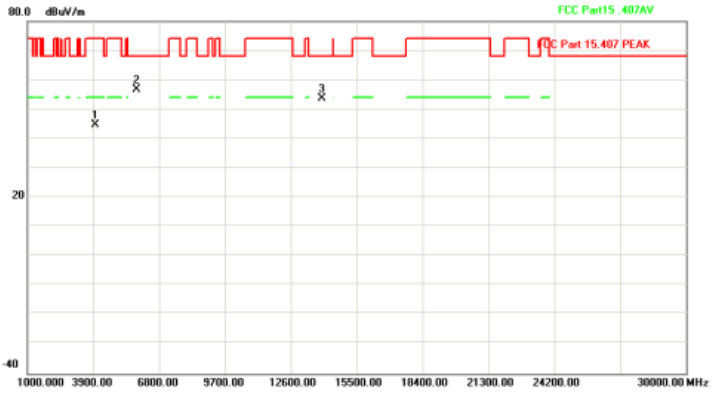
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5814.000	49.93	1.96	51.89	68.20	-16.31	peak	
2	*	14137.000	41.99	11.56	53.55	68.20	-14.65	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11a20 5825
Note: 74

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	51.68	-6.89	44.79	74.00	-29.21	peak	
2	*	5814.000	54.91	1.96	56.87	68.20	-11.33	peak	
3		13963.000	41.91	11.99	53.90	68.20	-14.30	peak	

All mode (MIMO mode & SISO mode) were tested, and only show the worst case (MIMO mode) in this report.

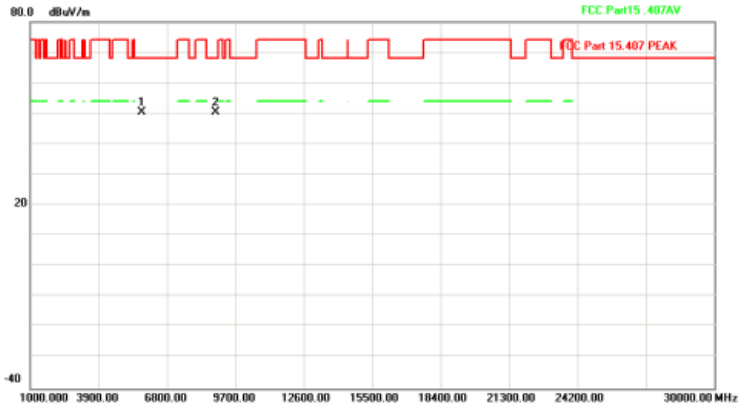
802.11axHT20	5745

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT20 5745
Note: 70

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



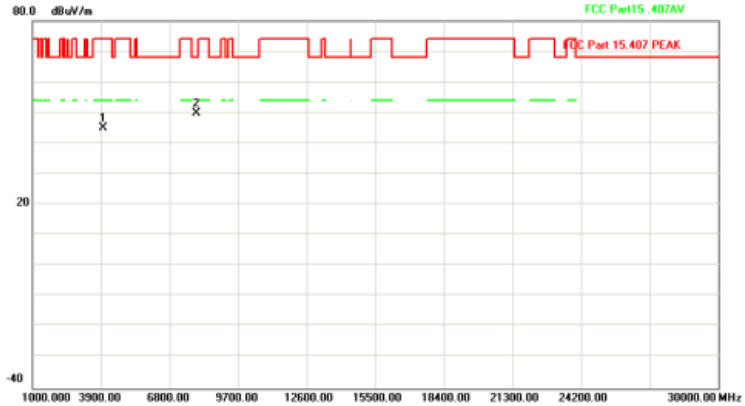
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5727.000	48.90	1.69	50.59	68.20	-17.61	peak	
2		8859.000	43.65	6.89	50.54	68.20	-17.66	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT20 5745
Note: 70

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	52.05	-6.89	45.16	74.00	-28.84	peak	
2	*	7931.000	44.32	5.55	49.87	68.20	-18.33	peak	

802.11axHT20	5785

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT20 5785
Note: 70

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission

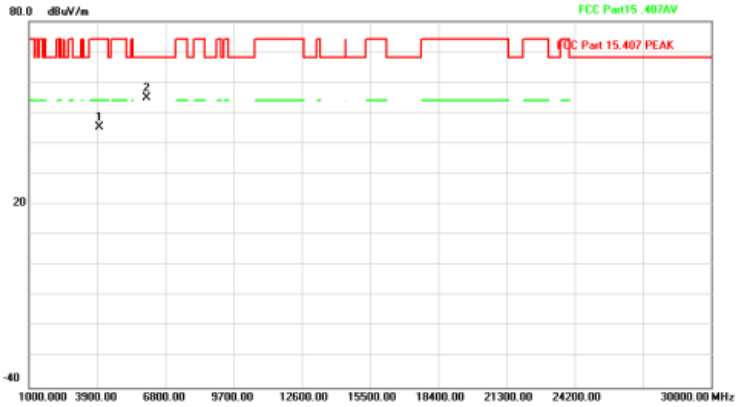
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5988.000	46.50	2.48	48.98	68.20	-19.22	peak	
2	*	7931.000	45.12	5.55	50.67	68.20	-17.53	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT20 5785
Note: 70

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	52.10	-6.89	45.21	74.00	-28.79	peak	
2	*	6017.000	52.50	2.55	55.05	68.20	-13.15	peak	

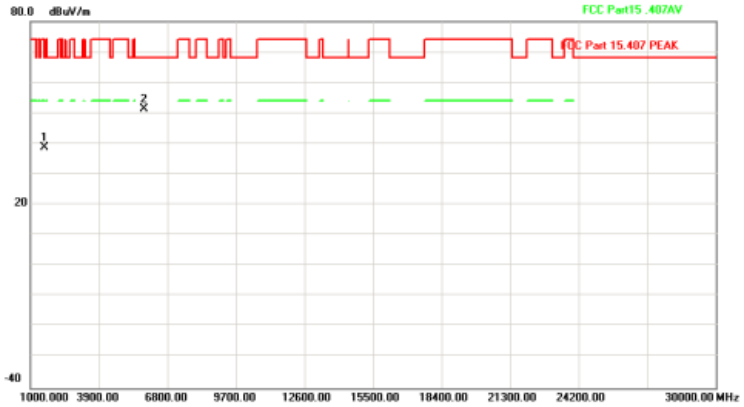
802.11axHT20	5825

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT20 5825
Note: 70

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		1609.000	49.61	-10.75	38.86	74.00	-35.14	peak	
2	*	5814.000	49.31	1.96	51.27	68.20	-16.93	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT20 5825
Note: 70

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	51.37	-6.89	44.48	74.00	-29.52	peak	
2	*	5814.000	54.17	1.96	56.13	68.20	-12.07	peak	

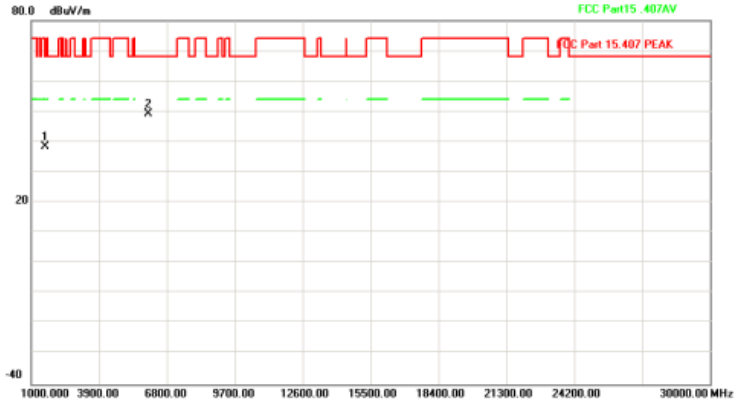
802.11axHT40	5755

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT40 5755
Note: 72

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



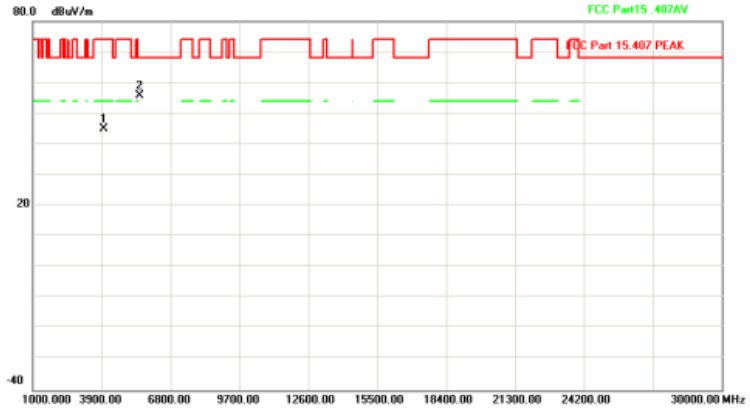
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		1609.000	49.19	-10.75	38.44	74.00	-35.56	peak	
2	*	6017.000	46.72	2.55	49.27	68.20	-18.93	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT40 5755
Note: 72

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	51.87	-6.89	44.98	74.00	-29.02	peak	
2	*	5495.000	54.75	0.99	55.74	68.20	-12.46	peak	

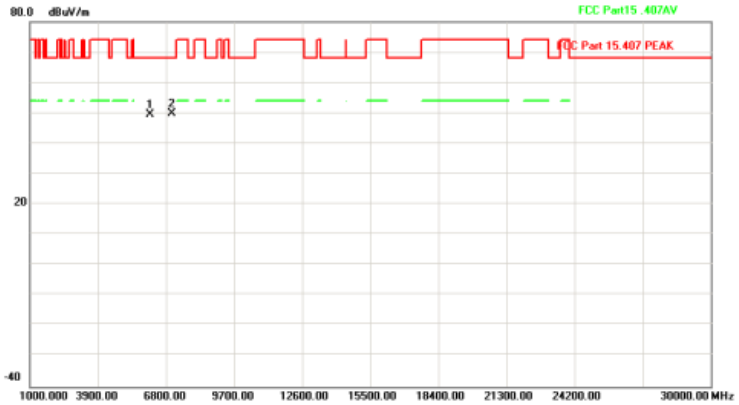
802.11ax HT40	5795

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT40 5795
Note: 72

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



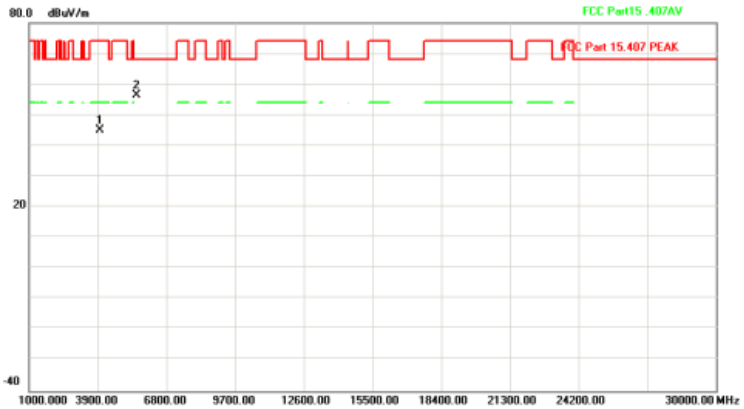
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		6133.000	46.88	2.72	49.60	68.20	-18.60	peak	
2	*	7061.000	45.61	4.14	49.75	68.20	-18.45	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT40 5795
Note: 72

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	52.05	-6.89	45.16	74.00	-28.84	peak	
2	*	5553.000	55.24	1.17	56.41	68.20	-11.79	peak	

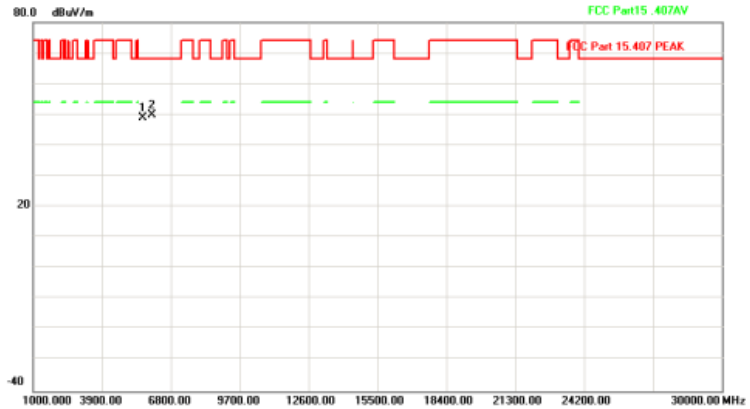
802.11ax HT80	5775

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT80 5775
Note: 74

Polarization: *Horizontal*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5611.000	47.53	1.34	48.87	68.20	-19.33	peak	
2	*	6017.000	47.23	2.55	49.78	68.20	-18.42	peak	

Site site #1
Limit: FCC Part 15.407 PEAK
EUT: W6 WIFI6
M/N:
Mode: 11ax HT80 5775
Note: 74

Polarization: *Vertical*
Power:

Temperature: 26
Humidity: 60 %

Radiated Emission

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3987.000	52.57	-6.89	45.68	74.00	-28.32	peak	
2	*	5553.000	56.16	1.17	57.33	68.20	-10.87	peak	
3		6017.000	52.98	2.55	55.53	68.20	-12.67	peak	
4		14224.000	42.05	11.29	53.34	68.20	-14.86	peak	

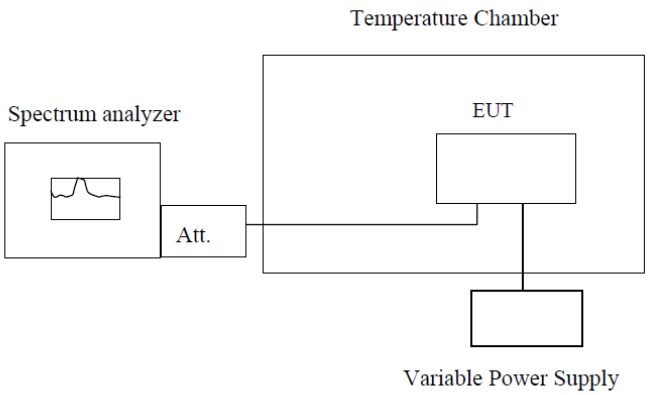
Notes:

1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

7.8 Frequency stability

Test Requirement:	FCC Part15 C Section 15.407(g)
Test Method:	ANSI C63.10:2013, FCC Part 2.1055
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
Test Procedure:	The EUT was setup to ANSI C63.4, 2003; tested to 2.1055 for compliance to FCC Part 15.407(g) requirements.
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5745.0000
138	5744.9635
120	5744.9716
102	5744.9843
Max. Deviation (MHz)	0.0365
Max. Deviation (ppm)	6.35

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(℃)	5745.0000
-5	5744.9761
5	5744.9813
15	5744.9816
25	5744.9913
35	5744.9728
45	5744.9831
Max. Deviation (MHz)	0.0272
Max. Deviation (ppm)	4.73

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

------END------