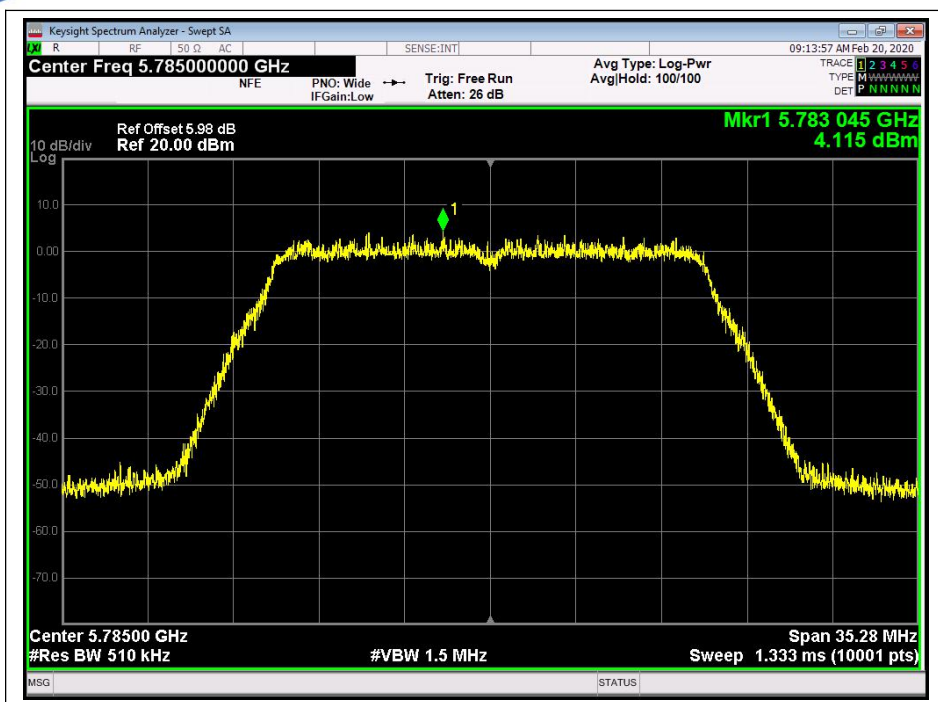
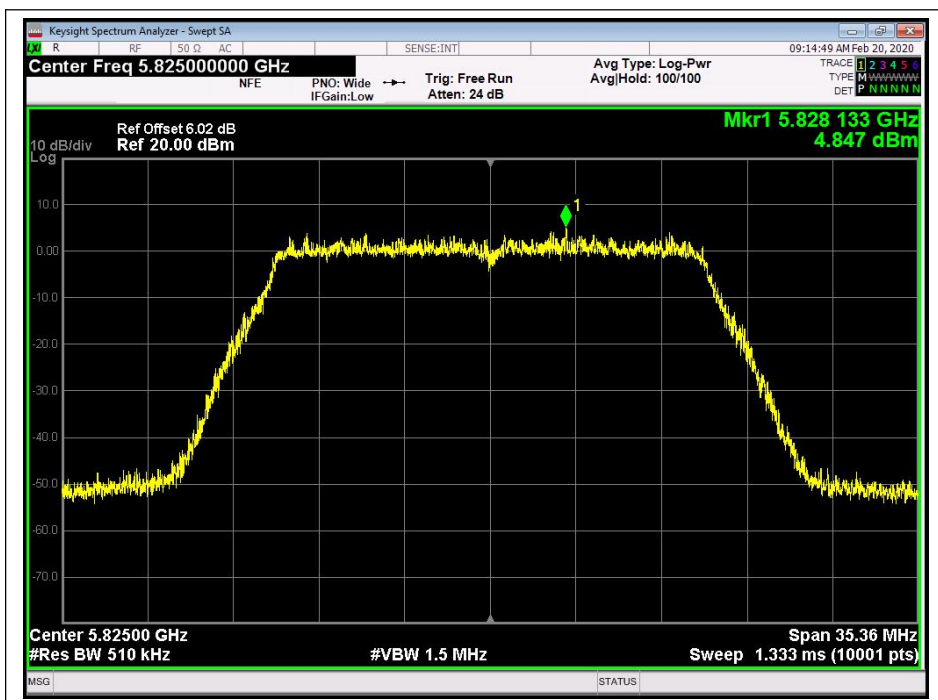




(Channel 157, 5785MHz, 802.11ac,ANT1)



(Channel 165, 5825MHz, 802.11ac,ANT1)

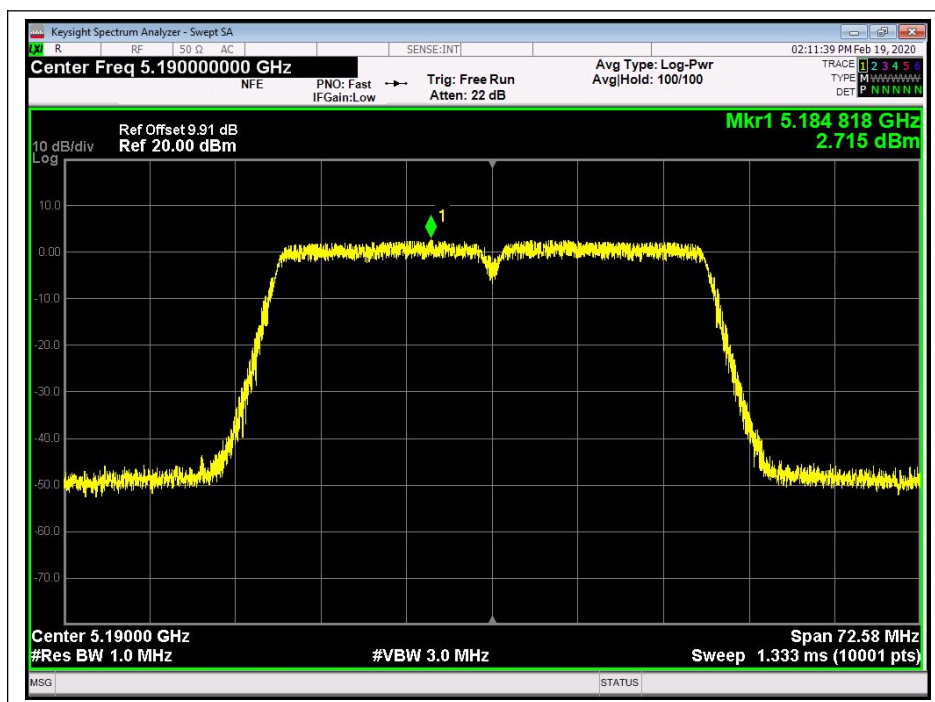


802.11ac (HT40) Test mode

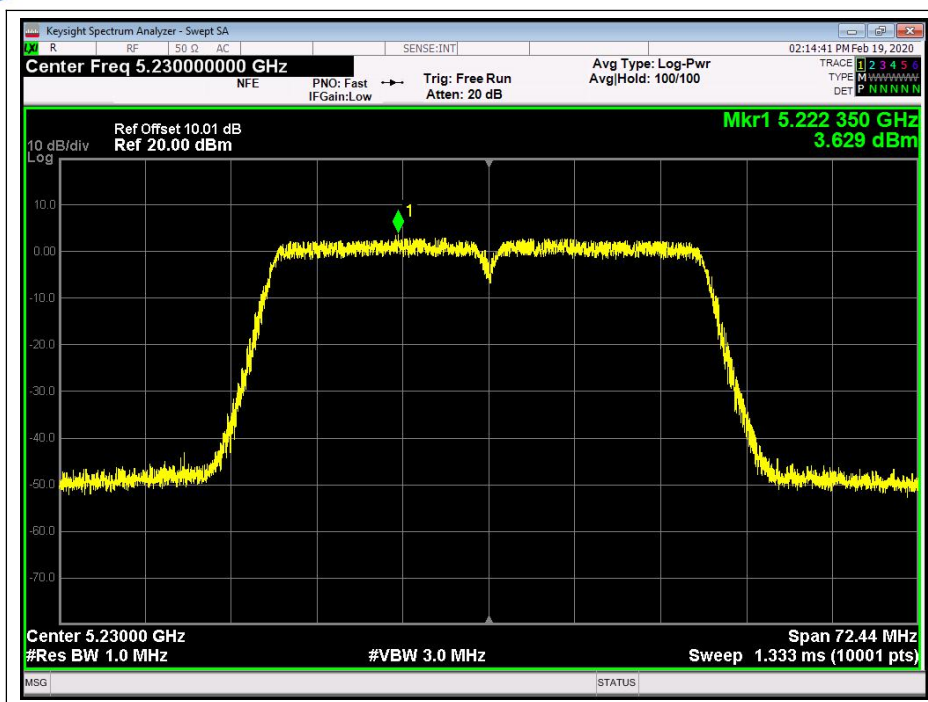
A. Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
		ANT0	ANT1	Total		
38	5190	2.715	4.711	6.837	11	PASS
46	5230	3.629	4.993	7.375		
Channel	Frequency (MHz)	Measured PSD (dBm/500KHz)			Limit (dBm/500KHz)	Verdict
		ANT0	ANT1	Total		
151	5755	-0.836	1.918	3.766	30	PASS
159	5795	-1.101	1.097	3.146		

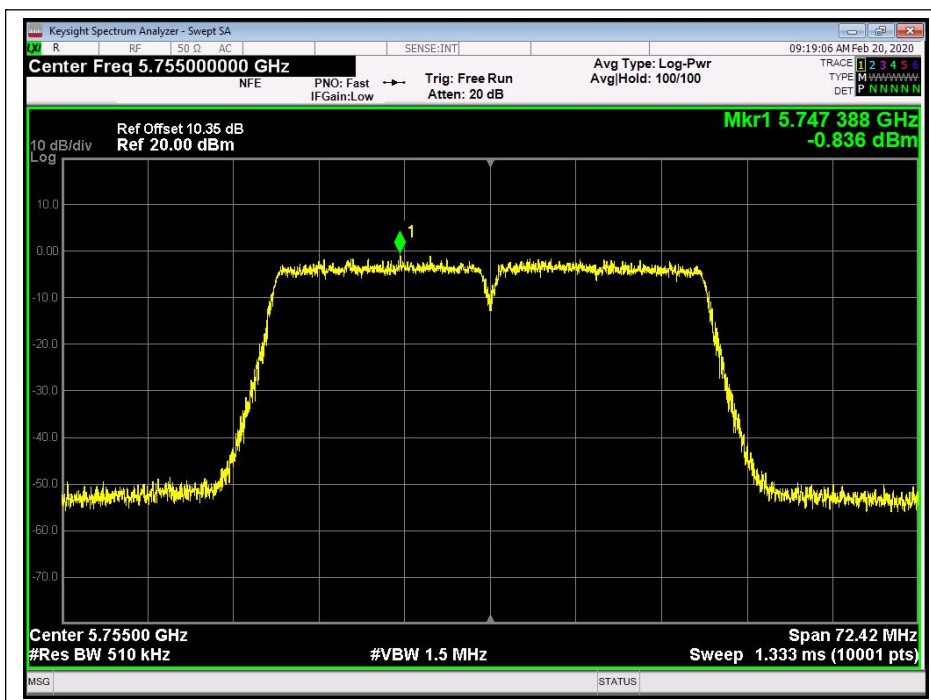
B. Test Plots



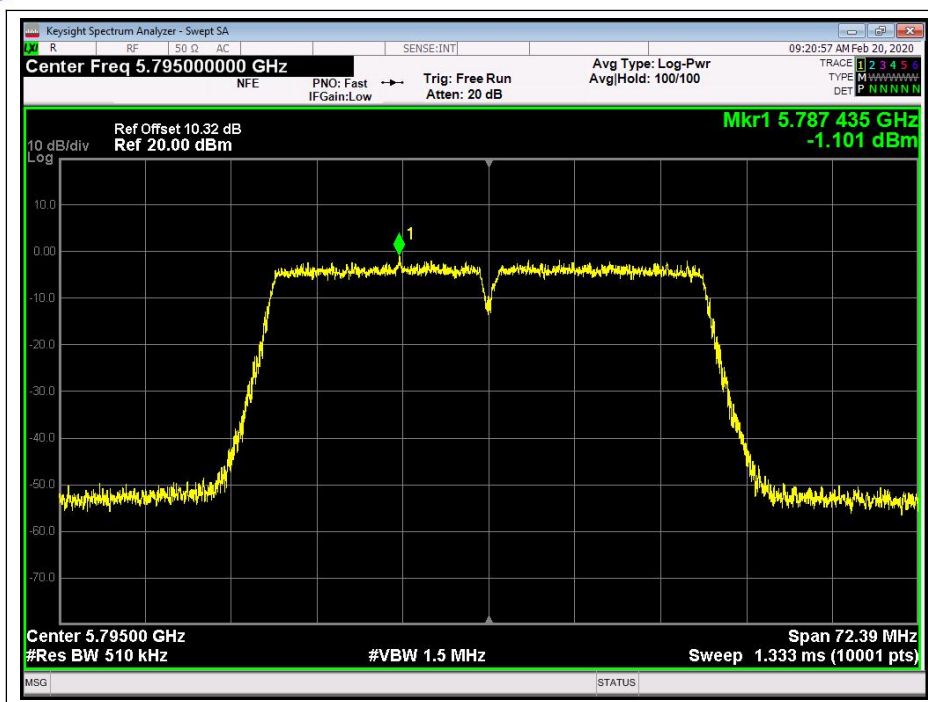
(Channel 38, 5190MHz, 802.11ac (HT40),ANT0)



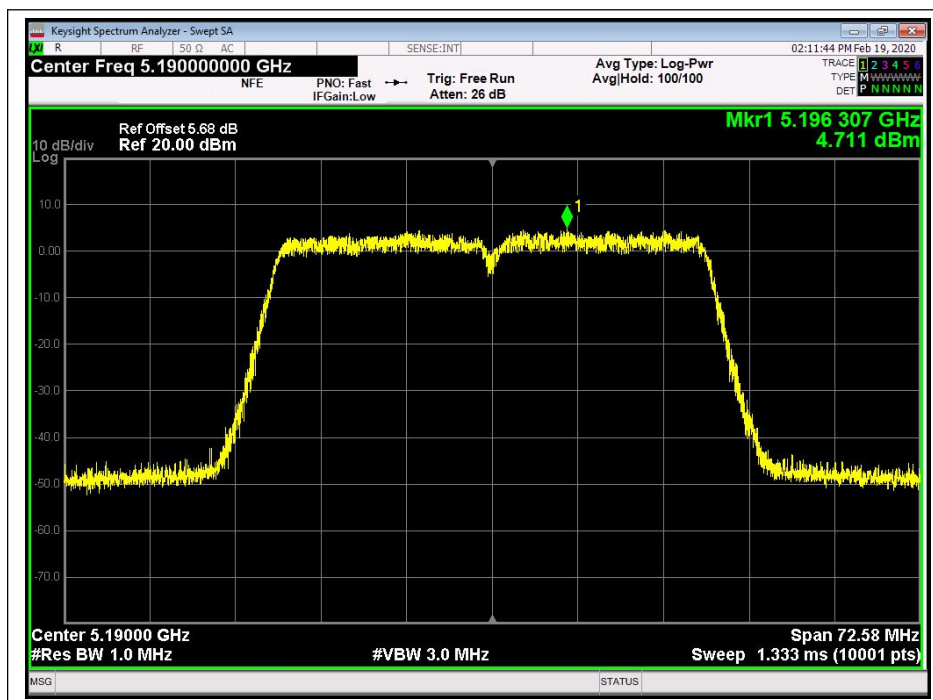
(Channel 46, 5230 MHz, 802.11ac (HT40),ANT0)



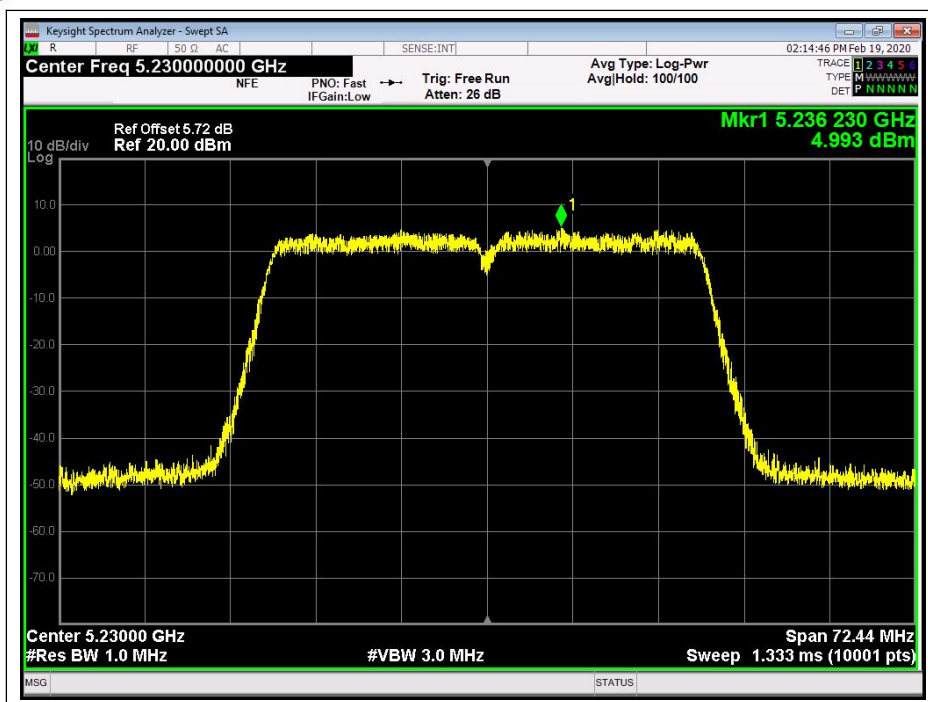
(Channel 151, 5755 MHz, 802.11ac (HT40),ANT0)



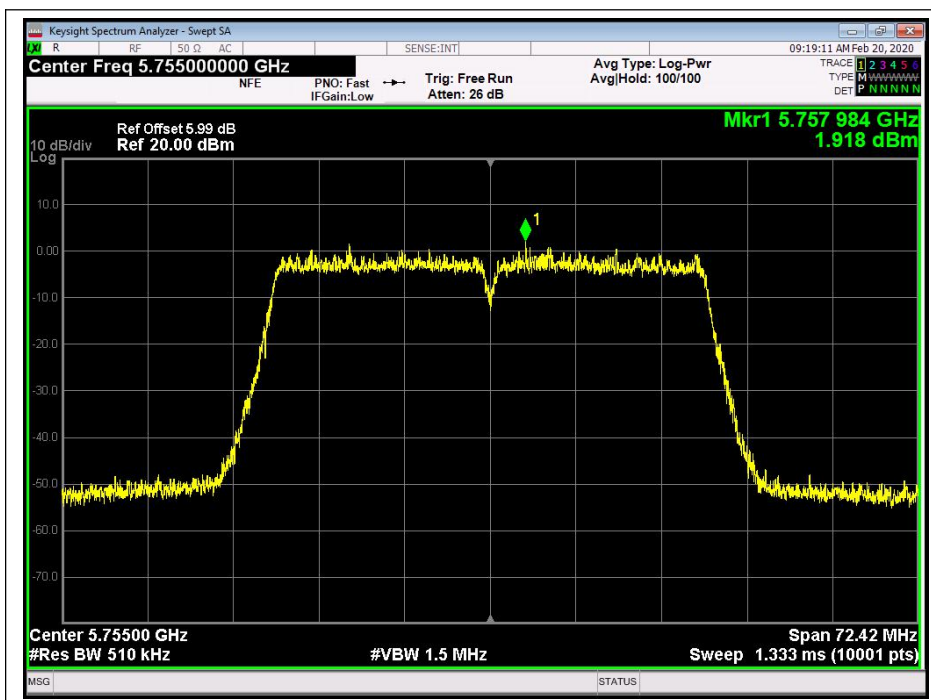
(Channel 159, 5795MHz, 802.11ac (HT40),ANT0)



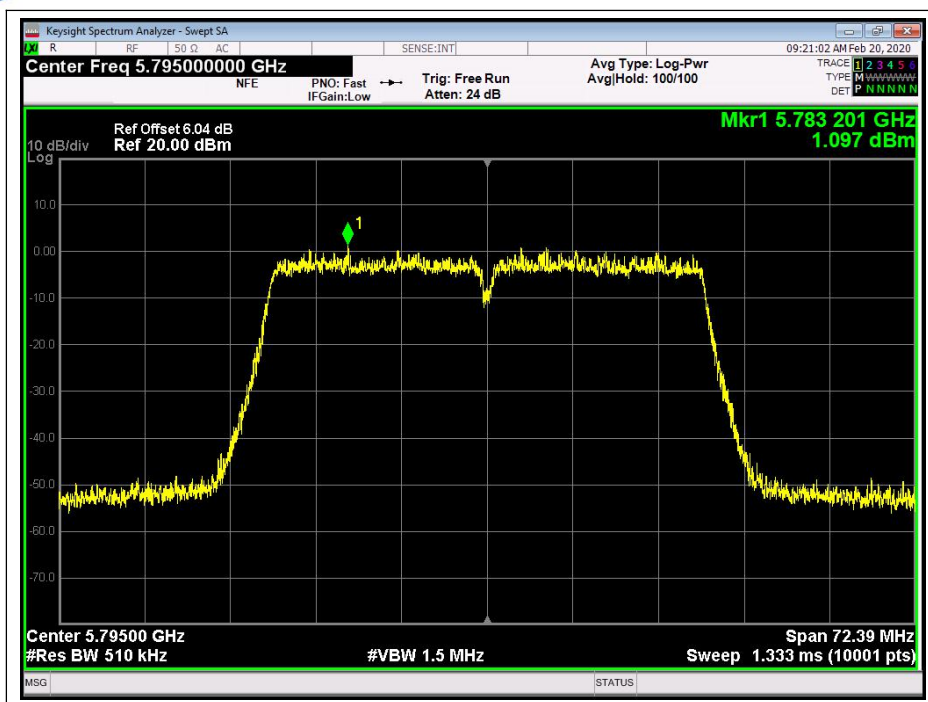
(Channel 38, 5190MHz, 802.11ac (HT40),ANT1)



(Channel 46, 5230 MHz, 802.11ac (HT40),ANT1)



(Channel 151, 5755 MHz, 802.11ac (HT40),ANT1)



(Channel 159, 5795MHz, 802.11ac (HT40),ANT1)

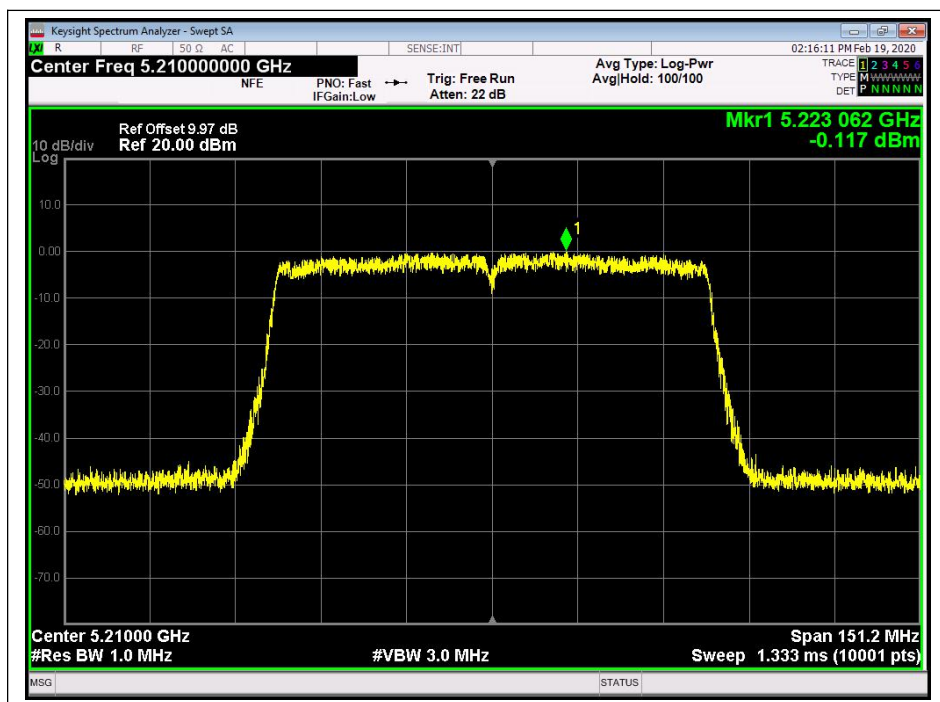
802.11ac (HT80) Test mode

C. Test Verdict:

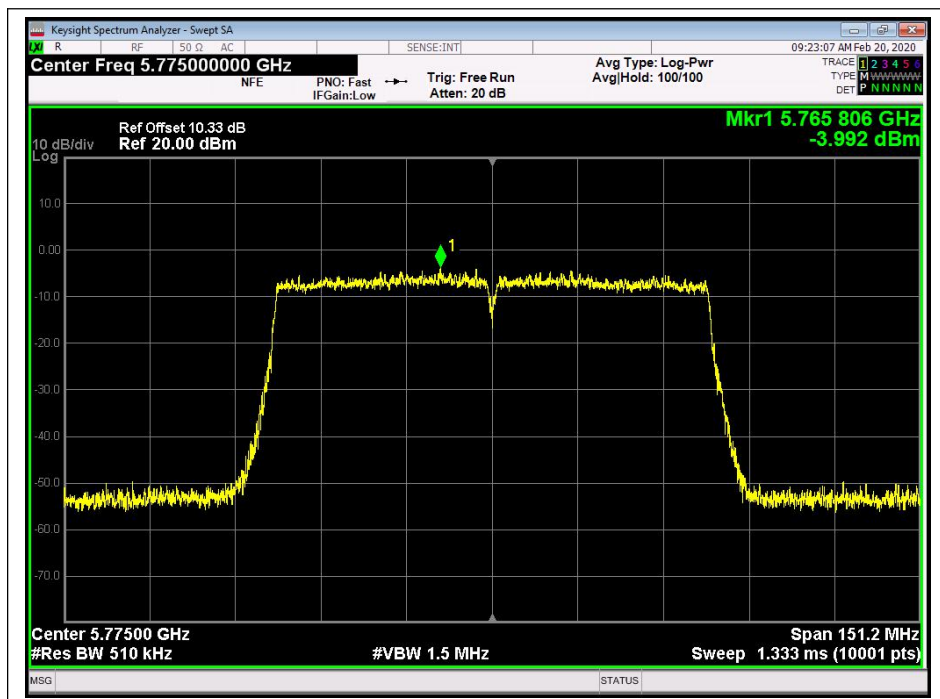
Channel	Frequency (MHz)	Measured PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
		ANT0	ANT1	Total		
42	5210	-0.117	1.835	3.978	11	PASS
Channel	Frequency (MHz)	Measured PSD (dBm/500KHz)			Limit (dBm/500KHz)	Verdict
		ANT0	ANT1	Total		
155	5775	-3.992	-0.808	0.896	30	PASS



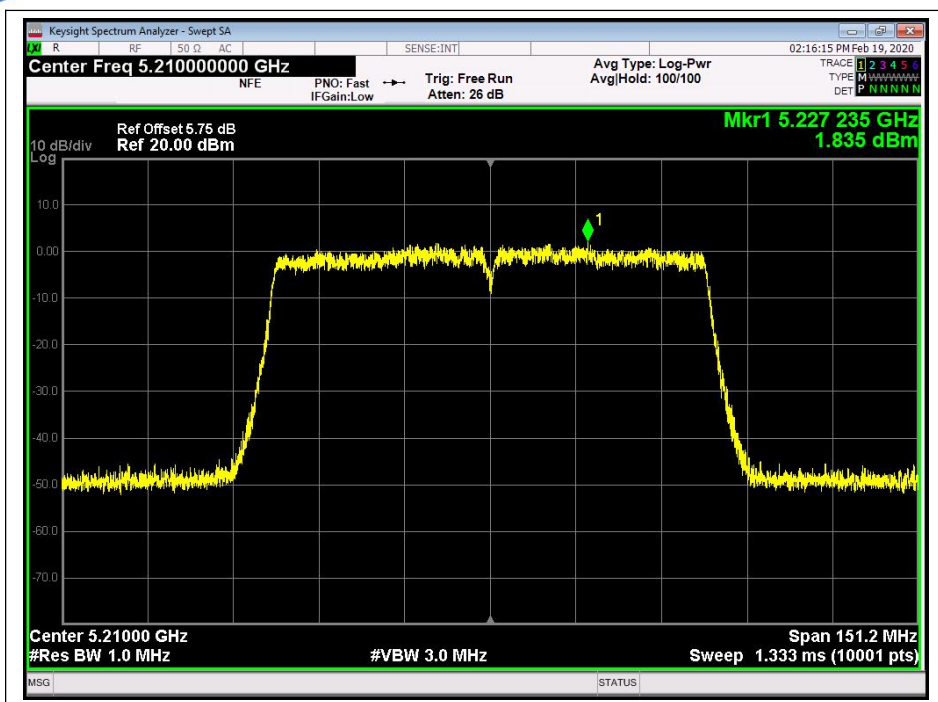
D. Test Plots



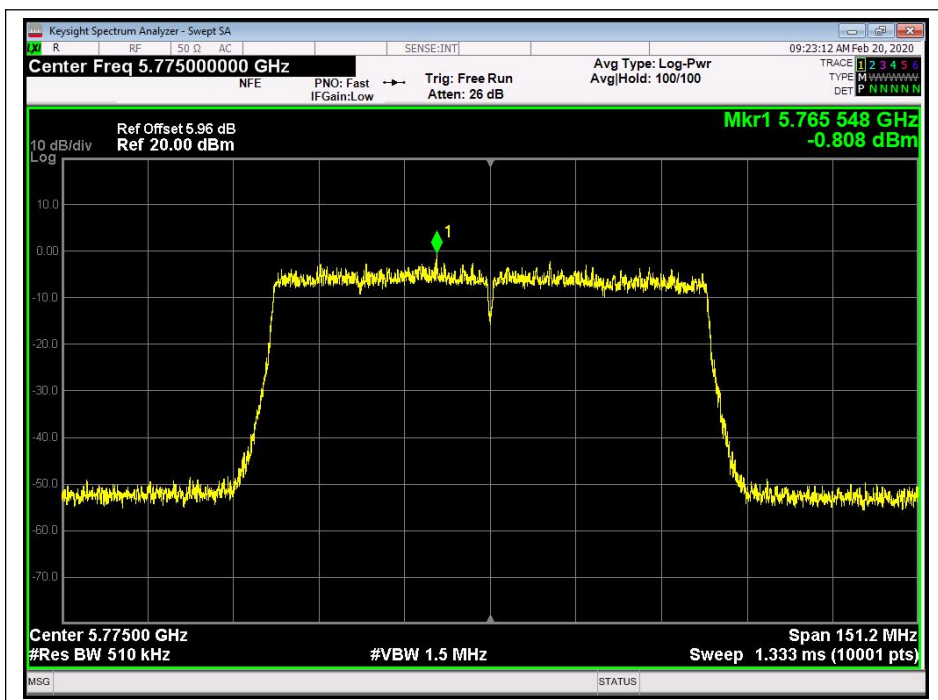
(Channel 42, 5210MHz, 802.11ac (HT80),ANT0)



(Channel 155, 5775MHz, 802.11ac (HT80),ANT0)



(Channel 42, 5210MHz, 802.11ac (HT80),ANT1)



(Channel 155, 5775MHz, 802.11ac (HT80),ANT1)

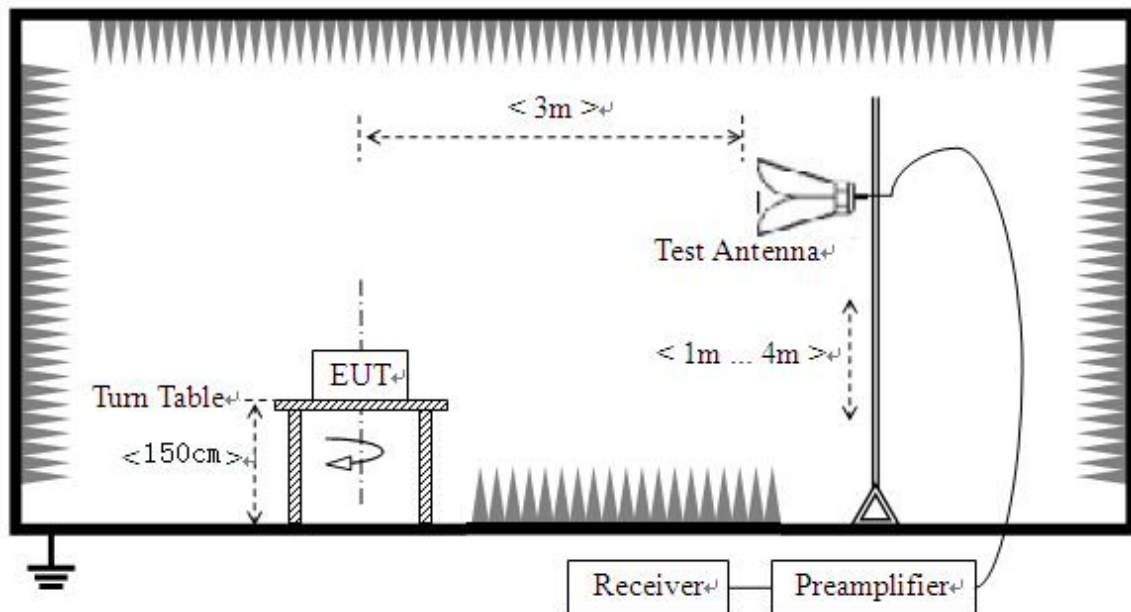
2.5. Restricted Frequency Bands

2.5.1. Requirement

According to FCC section 15.407(b)(7), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

2.5.2. Test Description

A. Test Setup



The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

KDB 789033 Section H) 3)5)6(d)) was used in order to prove compliance

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.



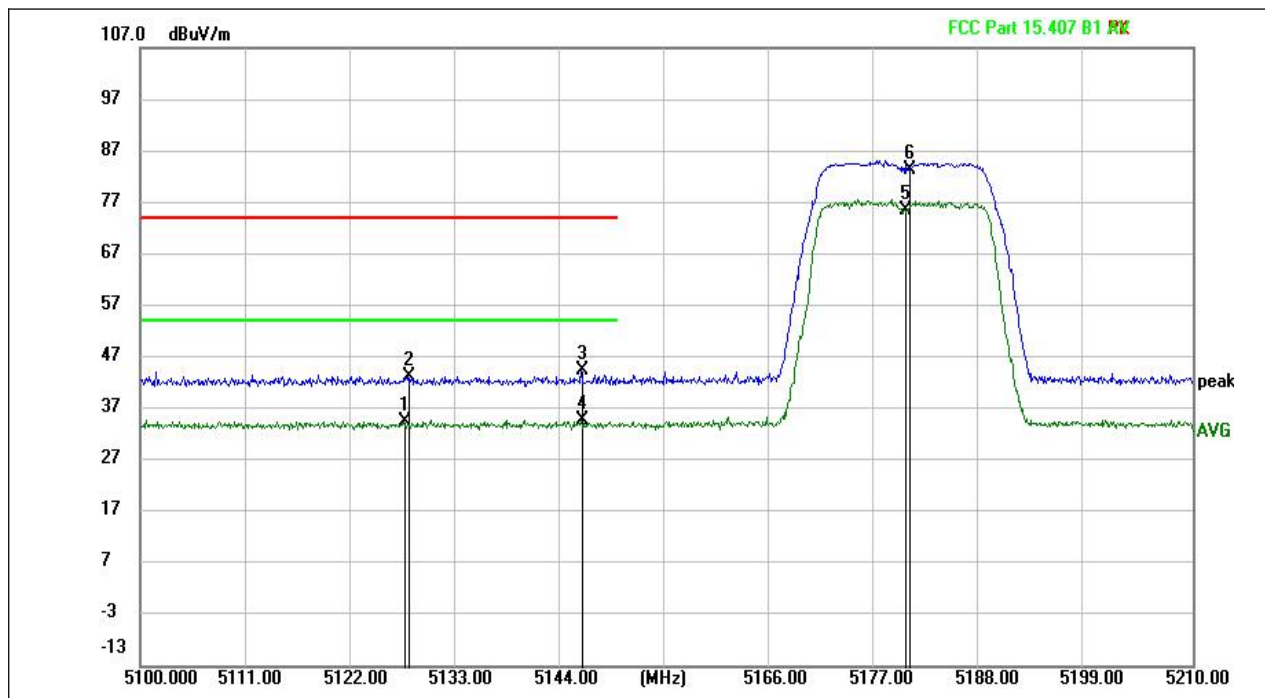
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. 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 rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasipeak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
- 4. All modes of operation were investigated and the worst-case emissions are reported.

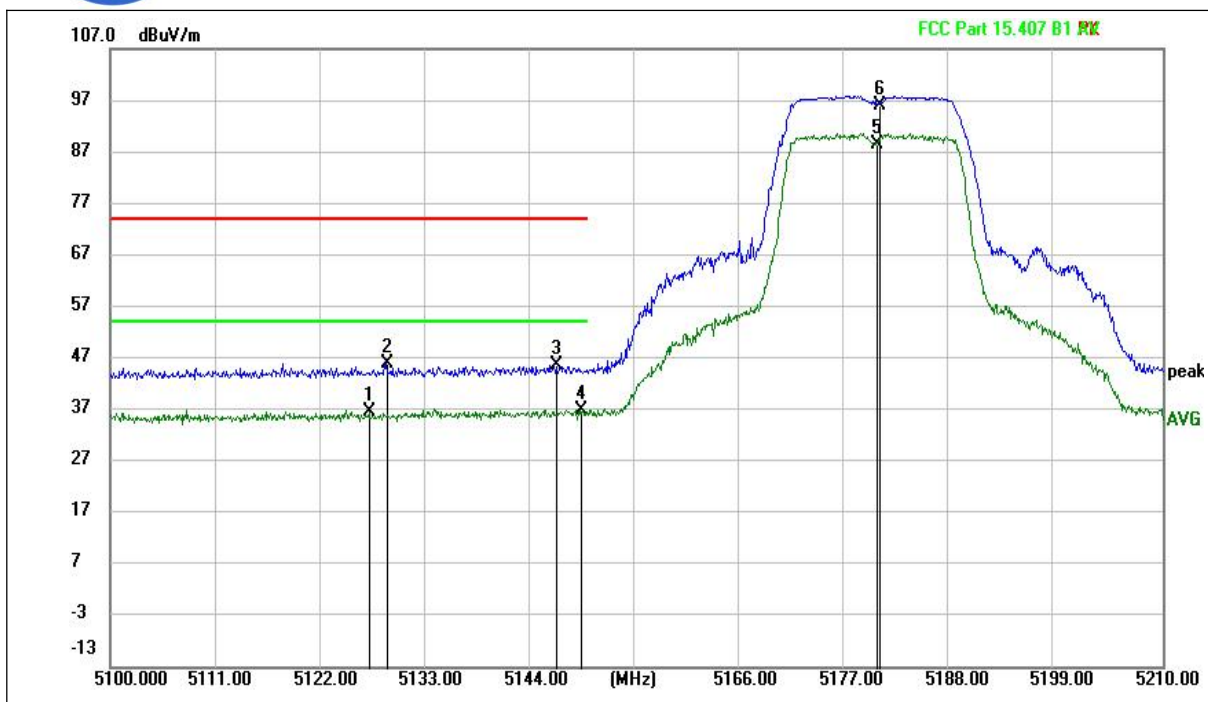
2.5.3. Test Result

802.11ac20 Test mode



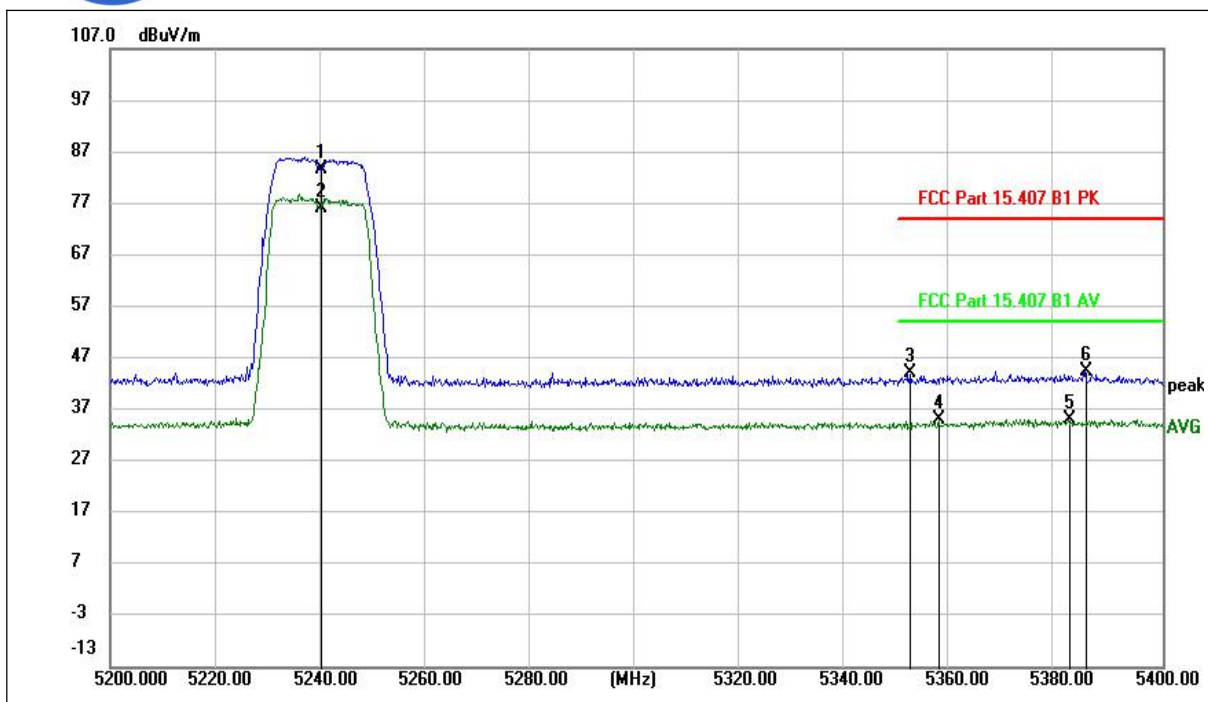
(802.11ac_5180MHz, Antenna Horizontal)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5127.593	37.75	-3.13	34.62	54.00	-19.38	AVG	H
5128.122	46.29	-3.13	43.16	74.00	-30.84	peak	H
5146.167	47.61	-3.22	44.39	74.00	-29.61	peak	H
5146.167	37.92	-3.22	34.70	54.00	-19.30	AVG	H
5179.893	78.63	-3.04	75.59			AVG	H
5180.333	86.31	-3.04	83.27			peak	H



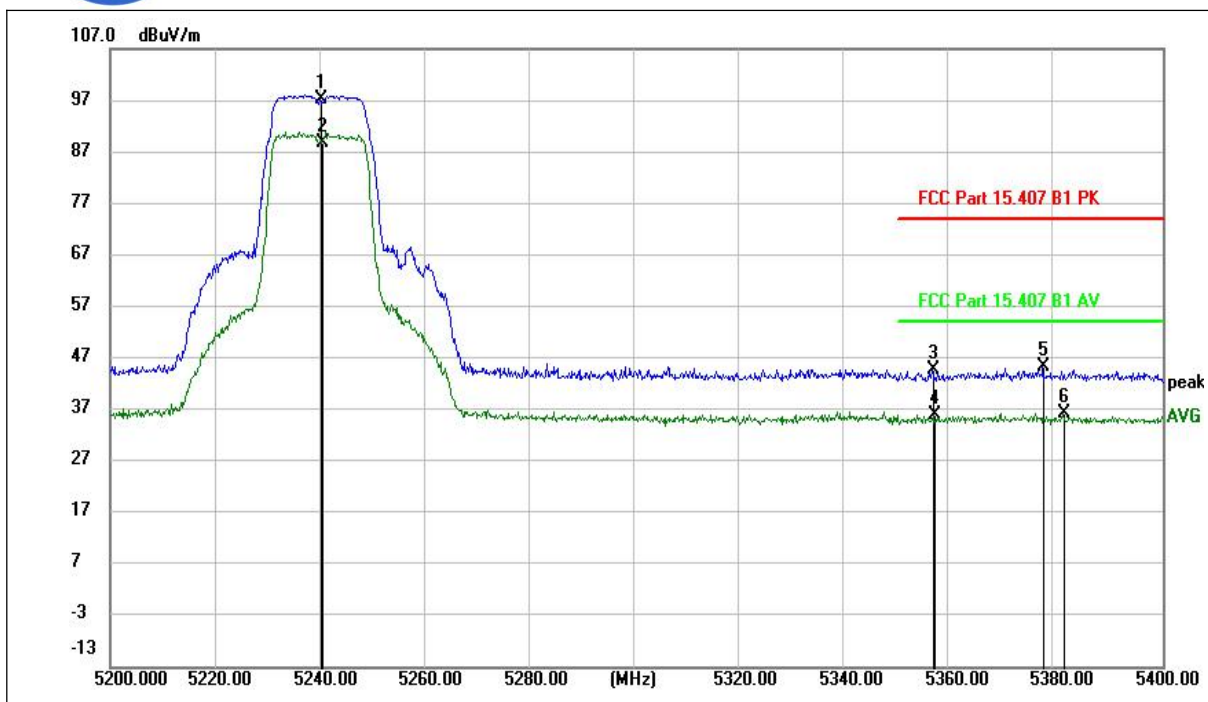
(802.11ac _5180MHz, Antenna Vertical)

Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Det.	Pol
5127.082	39.81	-3.13	36.68	54.00	-17.32	AVG	V
5129.007	49.14	-3.13	46.01	74.00	-27.99	peak	V
5146.579	48.87	-3.22	45.65	74.00	-28.35	peak	V
5149.181	40.24	-3.24	37.00	54.00	-17.00	AVG	V
5180.102	91.49	-3.04	88.45			AVG	V
5180.350	99.02	-3.04	95.98			peak	V



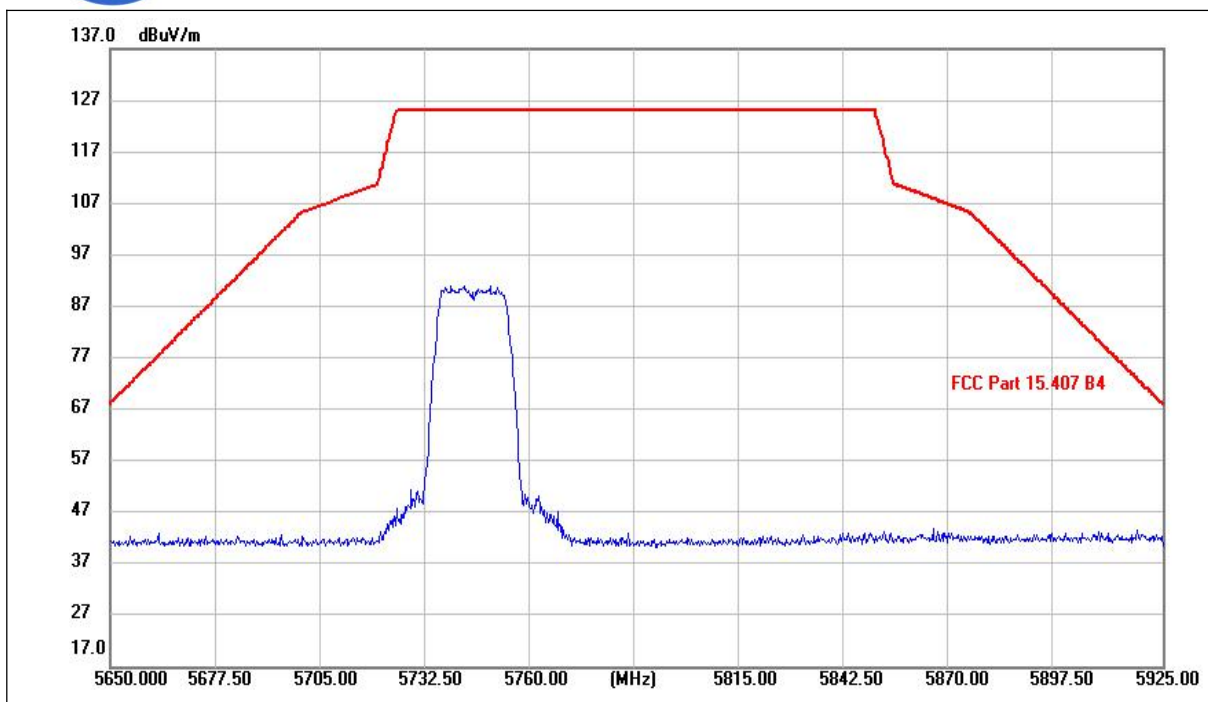
(802.11ac_5240MHz, Antenna Horizontal)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5240.010	86.62	-3.05	83.57			peak	H
5240.010	79.19	-3.05	76.14			AVG	H
5351.910	46.78	-2.54	44.24	74.00	-29.76	peak	H
5357.590	37.55	-2.46	35.09	54.00	-18.91	AVG	H
5382.390	37.27	-2.31	34.96	54.00	-19.04	AVG	H
5385.420	46.73	-2.35	44.38	74.00	-29.62	peak	H

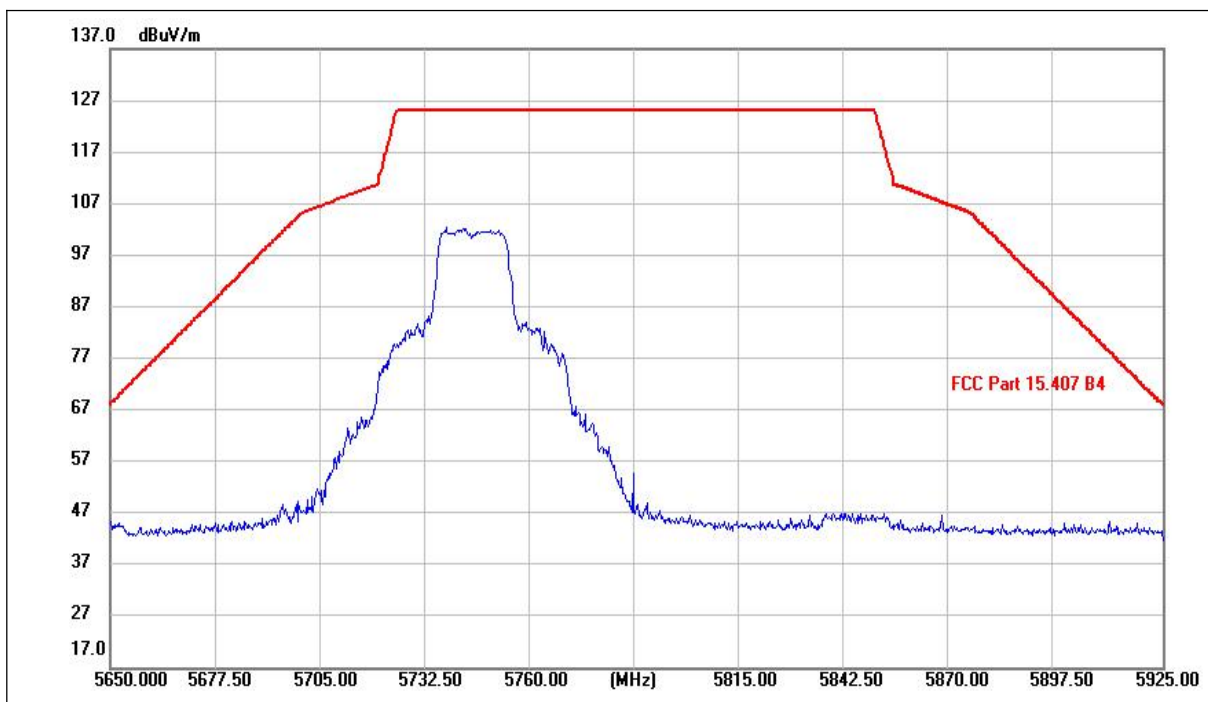


(802.11ac _5240MHz, Antenna Vertical)

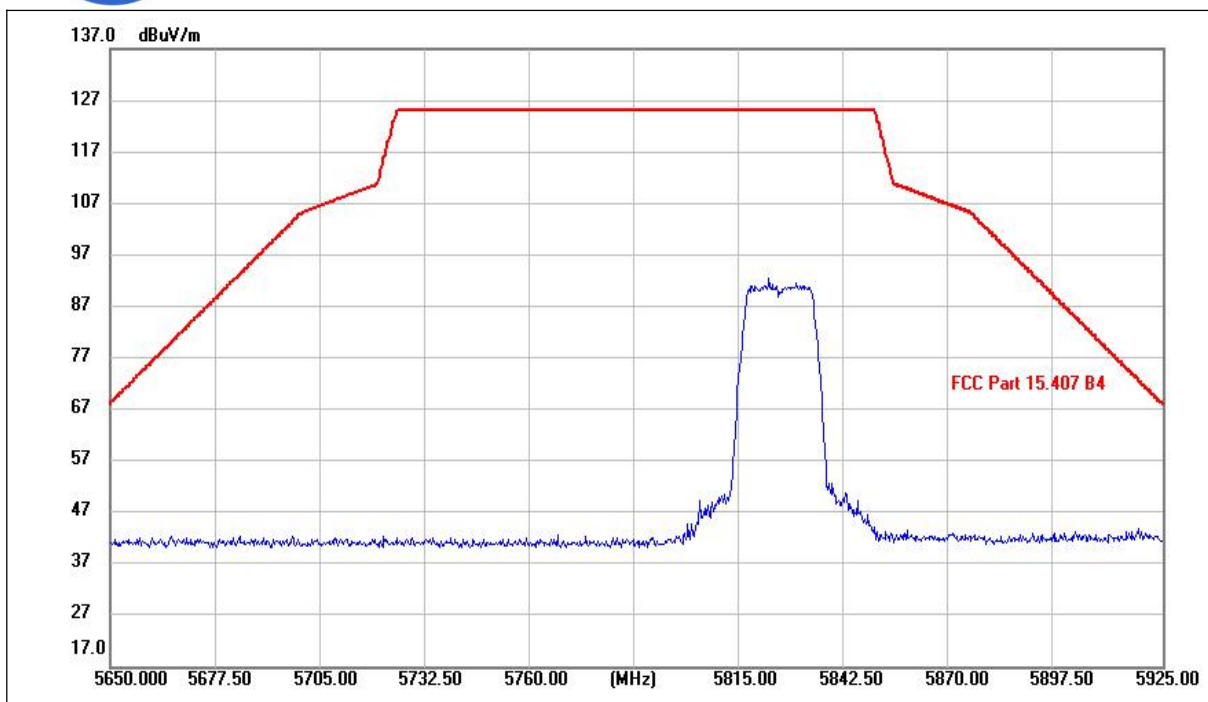
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5239.990	100.18	-3.05	97.13			peak	V
5240.290	91.75	-3.05	88.70			AVG	V
5356.420	47.32	-2.47	44.85	74.00	-29.15	peak	V
5356.720	38.52	-2.47	36.05	54.00	-17.95	AVG	V
5377.280	47.69	-2.25	45.44	74.00	-28.56	peak	V
5381.020	38.64	-2.29	36.35	54.00	-17.65	AVG	V



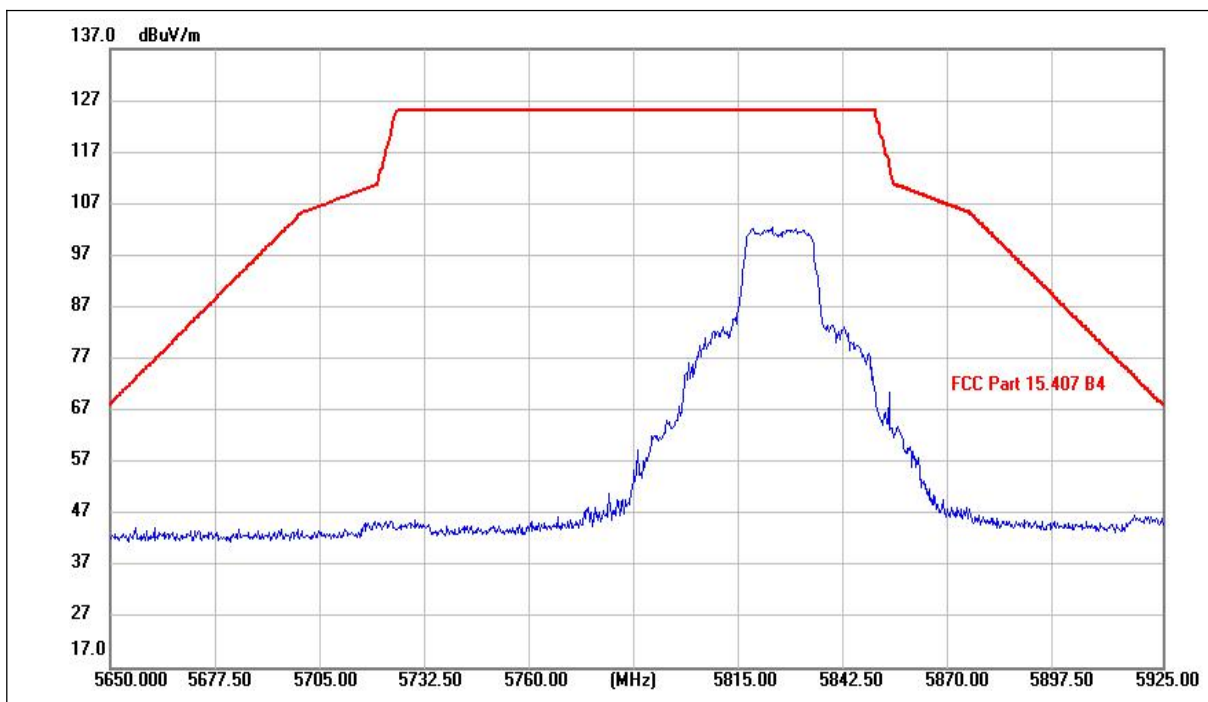
(802.11ac_5745MHz, Antenna Horizontal)



(802.11ac_5745MHz, Antenna Vertical)



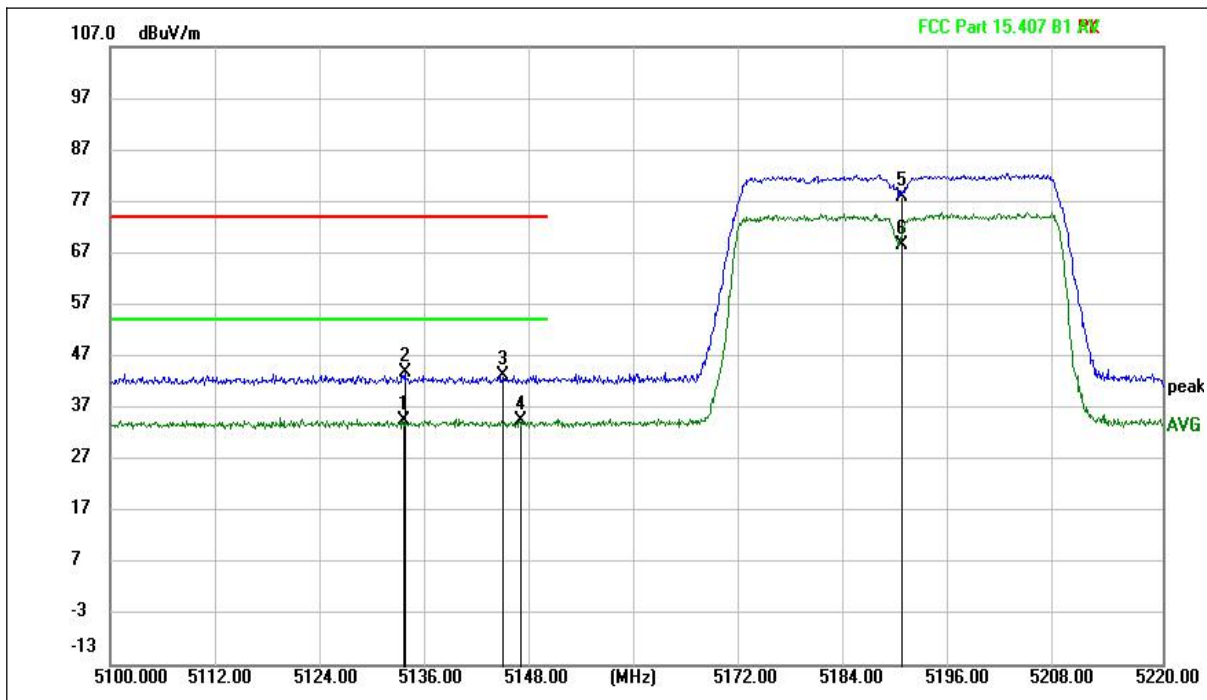
(802.11ac_5825MHz, Antenna Horizontal)



(802.11ac_5825MHz, Antenna Vertical)

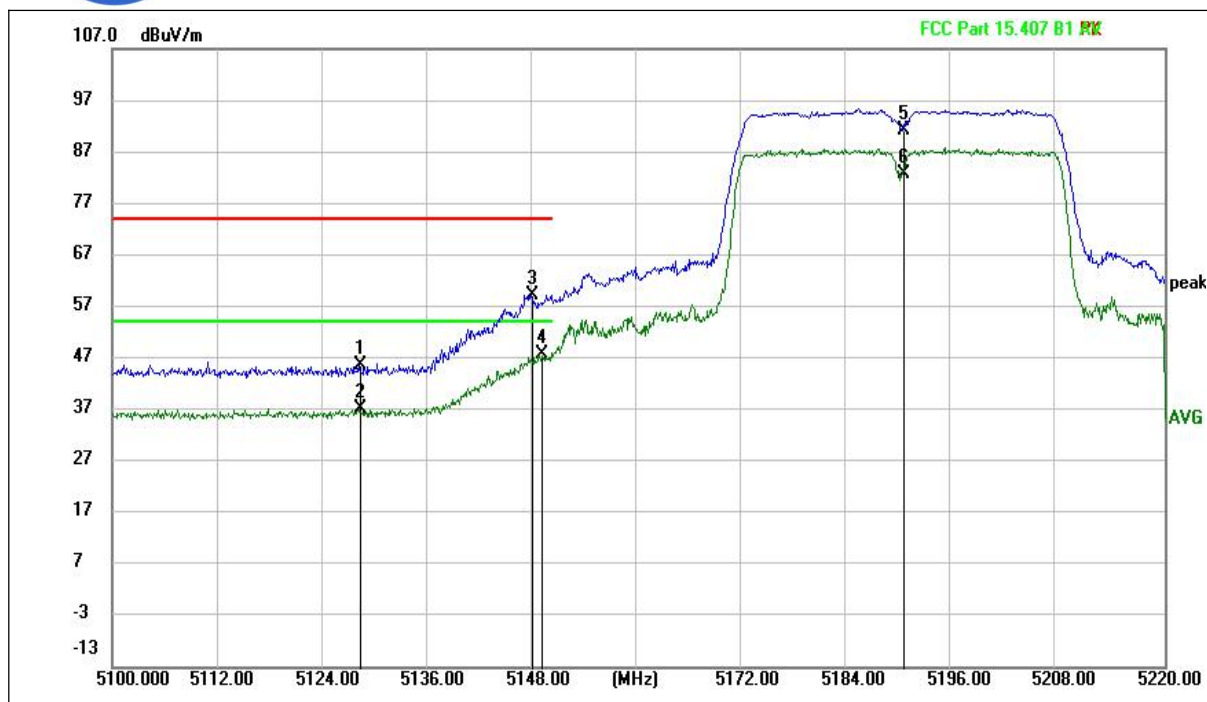


802.11ac (HT40) Test mode



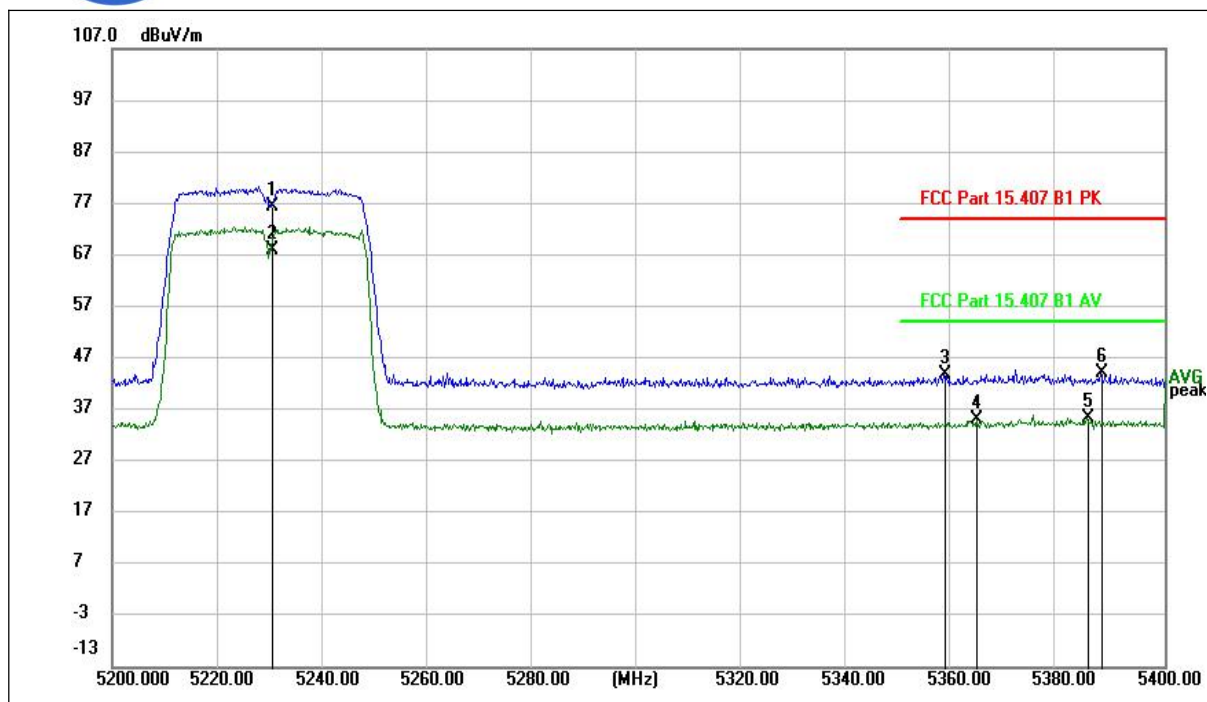
(802.11ac (HT40) _5190MHz, Antenna Horizontal)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5133.450	37.72	-3.15	34.57	54.00	-19.43	AVG	H
5133.684	47.09	-3.16	43.93	74.00	-30.07	peak	H
5144.646	46.55	-3.22	43.33	74.00	-30.67	peak	H
5146.734	37.75	-3.22	34.53	54.00	-19.47	AVG	H
5190.126	80.89	-3.02	77.87			peak	H
5190.126	71.57	-3.02	68.55			AVG	H



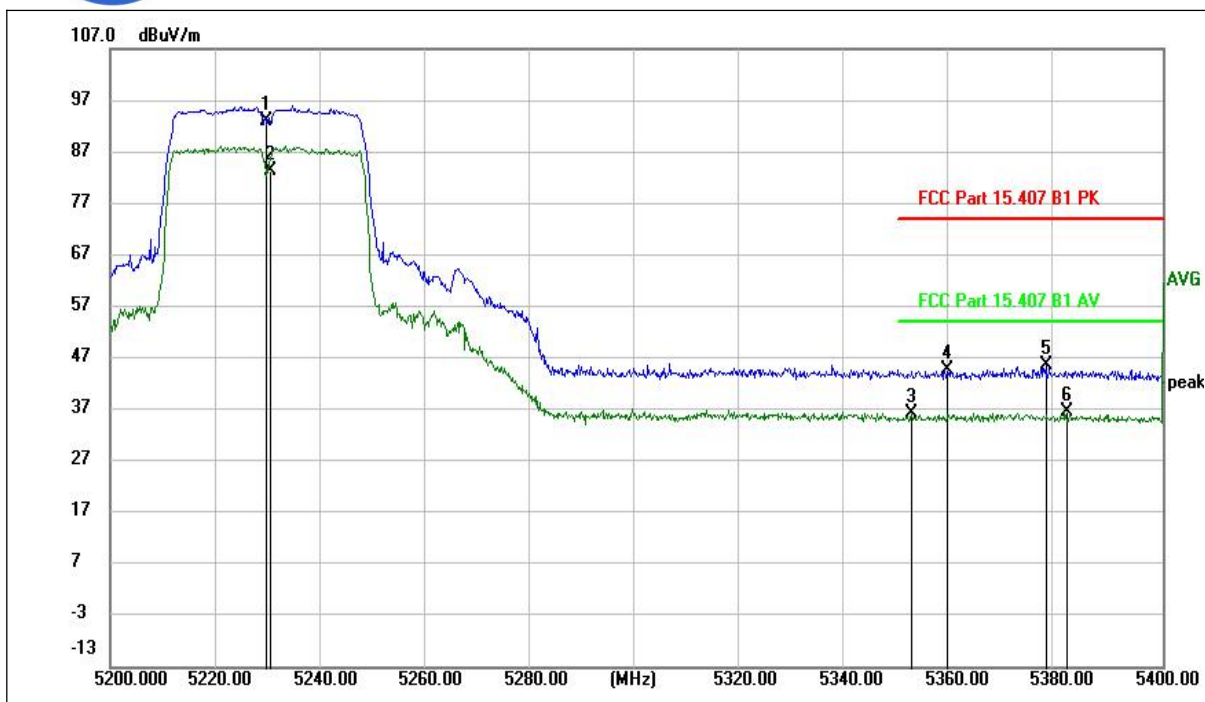
(802.11ac (HT40) _5190MHz, Antenna Vertical)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5128.230	48.83	-3.13	45.70	74.00	-28.30	peak	V
5128.230	40.19	-3.13	37.06	54.00	-16.94	AVG	V
5147.844	62.53	-3.23	59.30	74.00	-14.70	peak	V
5148.894	51.03	-3.24	47.79	54.00	-6.21	AVG	V
5190.210	94.19	-3.02	91.17			peak	V
5190.240	85.76	-3.02	82.74			AVG	V



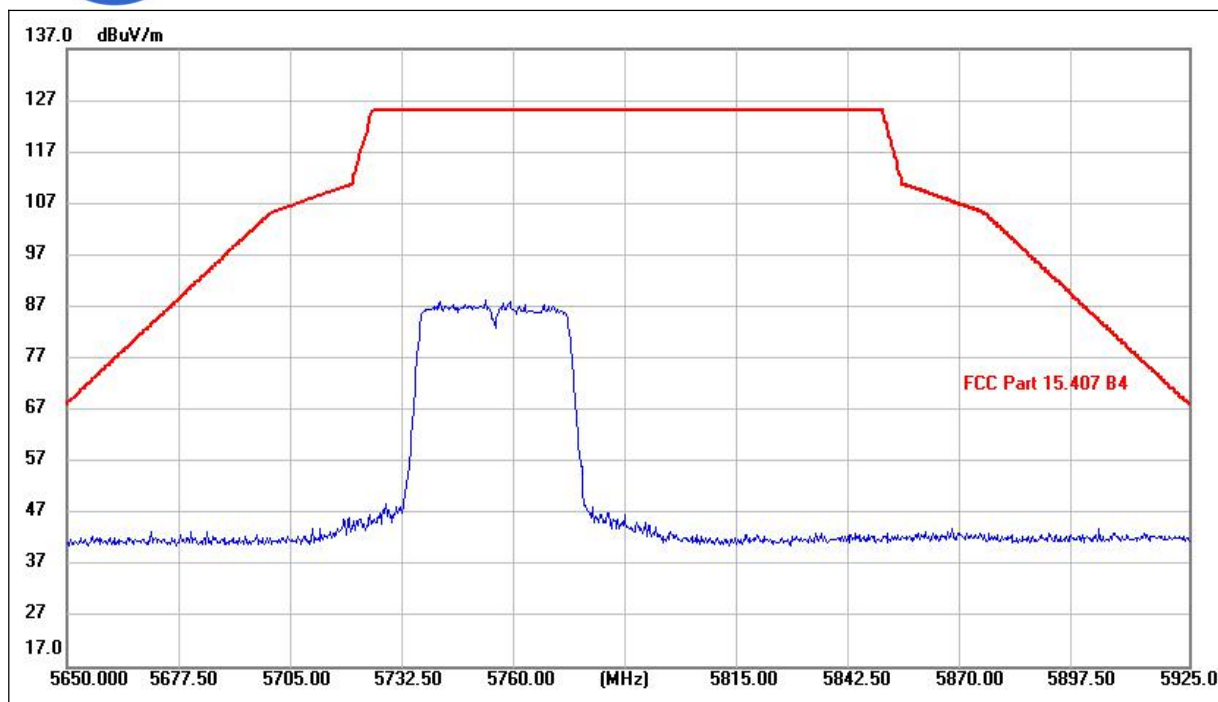
(802.11ac (HT40) _5230MHz, Antenna Horizontal)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5230.260	79.34	-3.00	76.34			peak	H
5230.260	70.89	-3.00	67.89			AVG	H
5358.140	46.24	-2.45	43.79	74.00	-30.21	peak	H
5364.290	37.50	-2.35	35.15	54.00	-18.85	AVG	H
5385.430	37.62	-2.35	35.27	54.00	-18.73	AVG	H
5388.000	46.52	-2.37	44.15	74.00	-29.85	peak	H

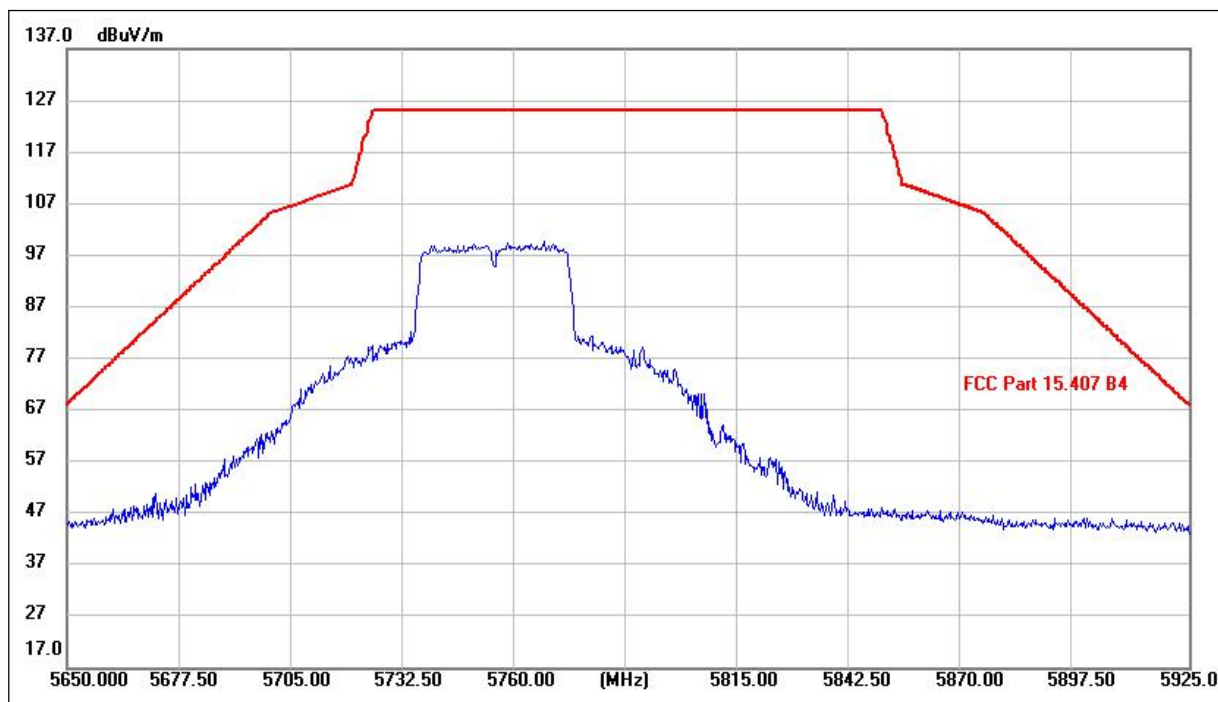


(802.11ac (HT40) _5230MHz, Antenna Vertical)

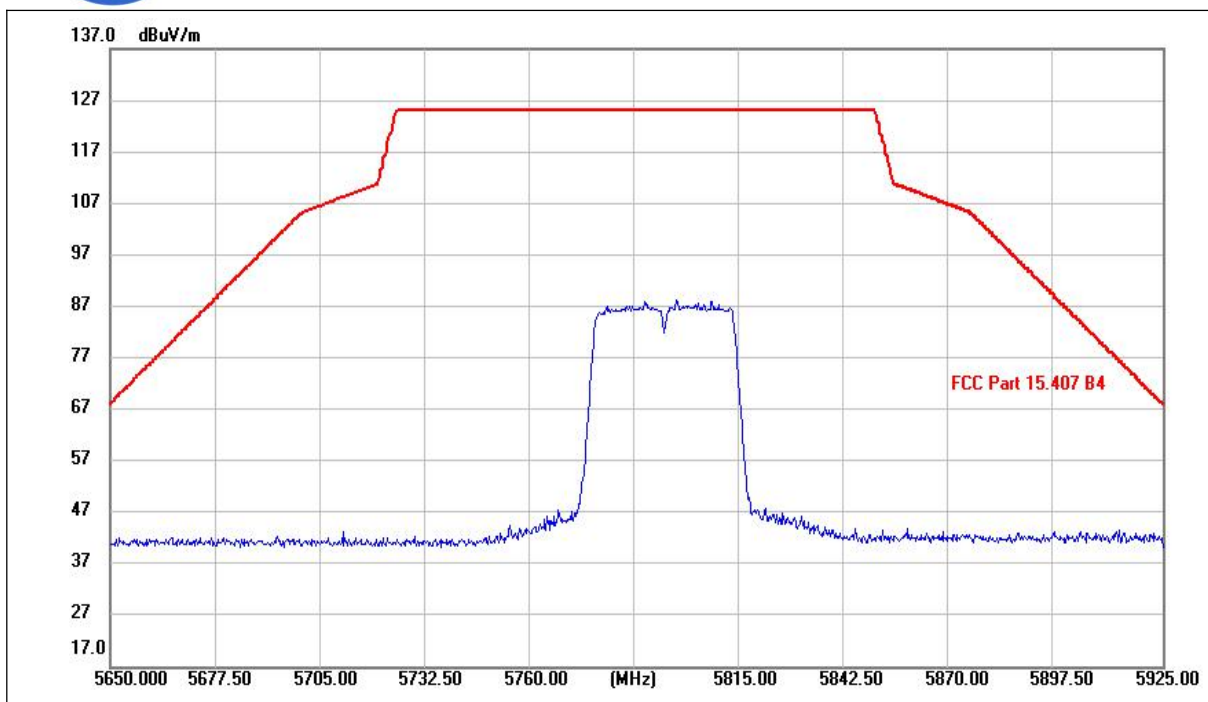
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5229.650	96.07	-3.00	93.07			peak	V
5230.240	86.35	-3.00	83.35			AVG	V
5352.320	38.87	-2.53	36.34	54.00	-17.66	AVG	V
5358.860	47.24	-2.43	44.81	74.00	-29.19	peak	V
5377.990	47.98	-2.26	45.72	74.00	-28.28	peak	V
5381.700	38.78	-2.30	36.48	54.00	-17.52	AVG	V



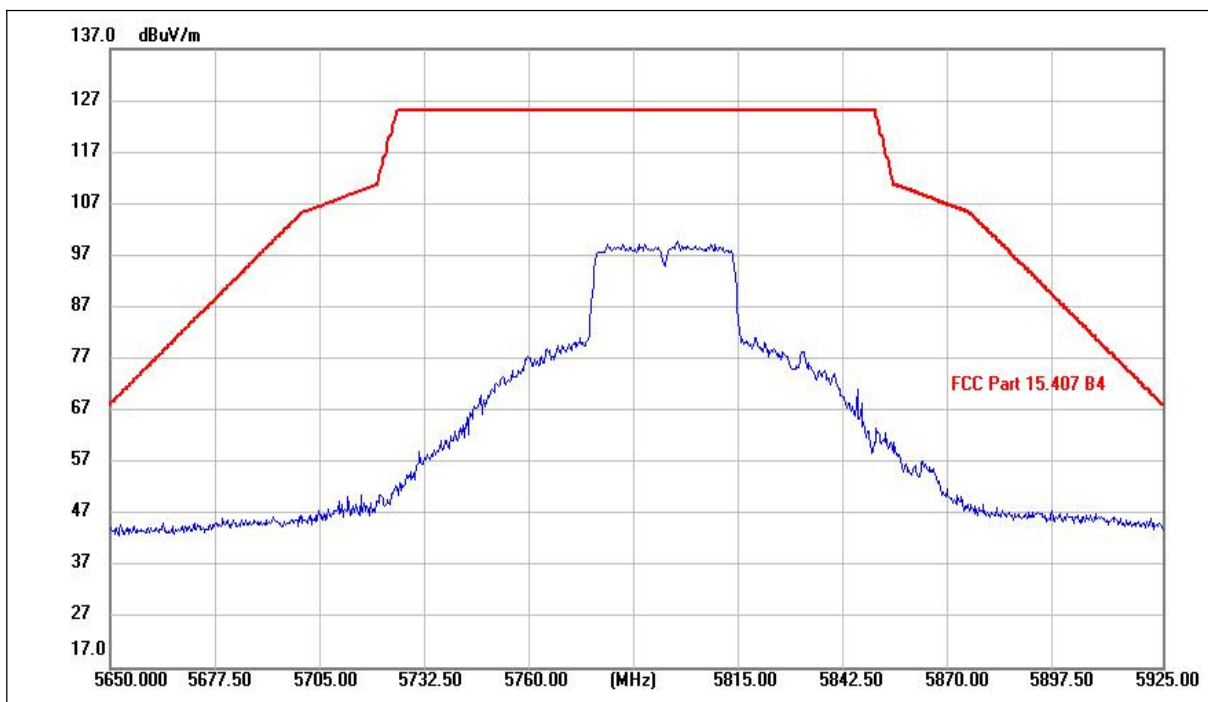
(802.11ac(HT40) _5755MHz, Antenna Horizontal)



(802.11ac(HT40) _5755MHz, Antenna Vertical)



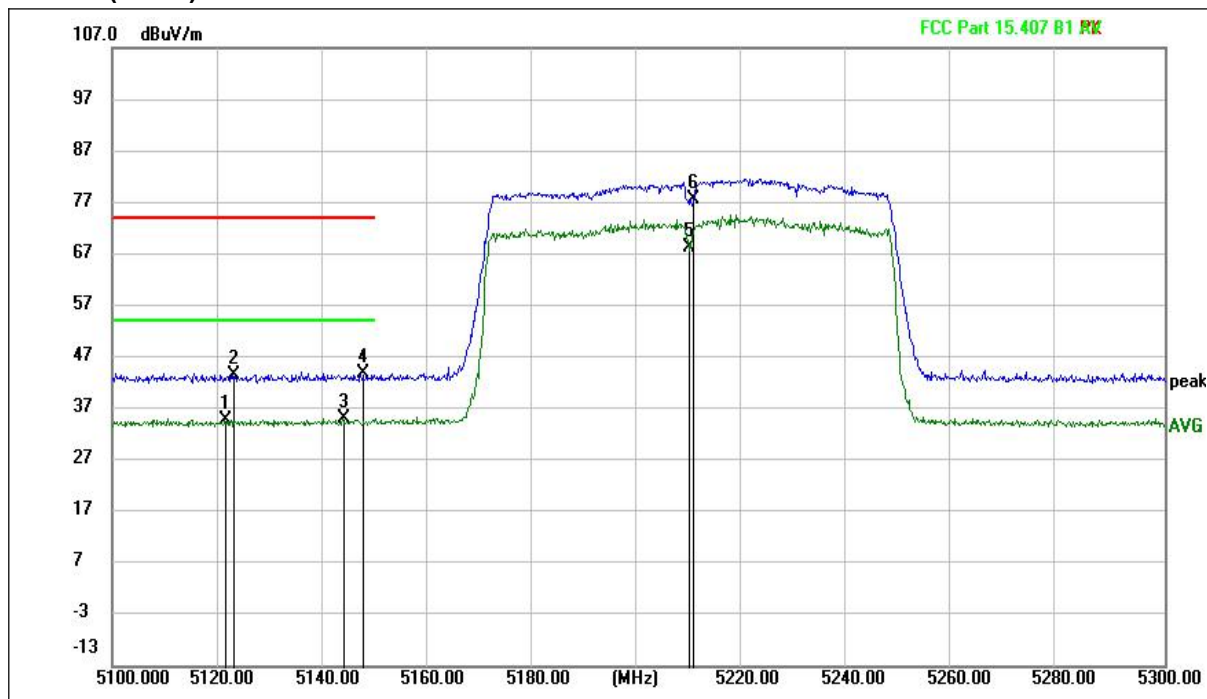
(802.11ac(HT40)_5795MHz, Antenna Horizontal)



(802.11ac(HT40)_5795MHz, Antenna Vertical)

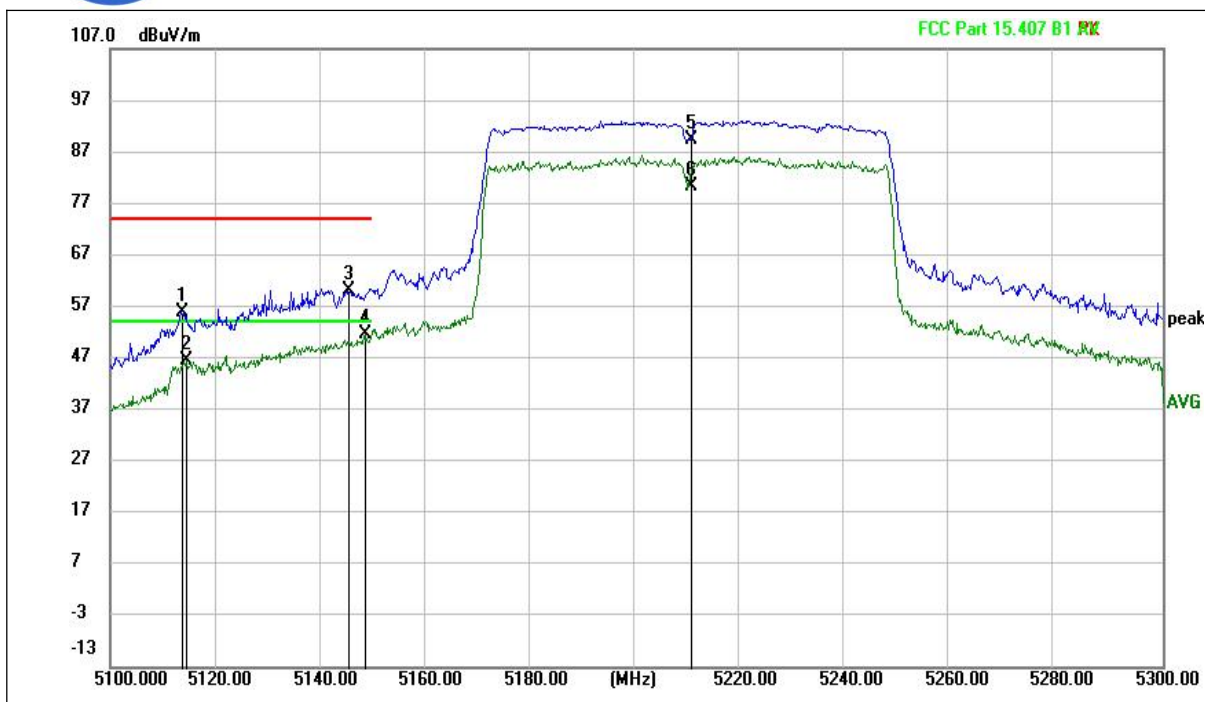


802.11ac (HT80) Test mode



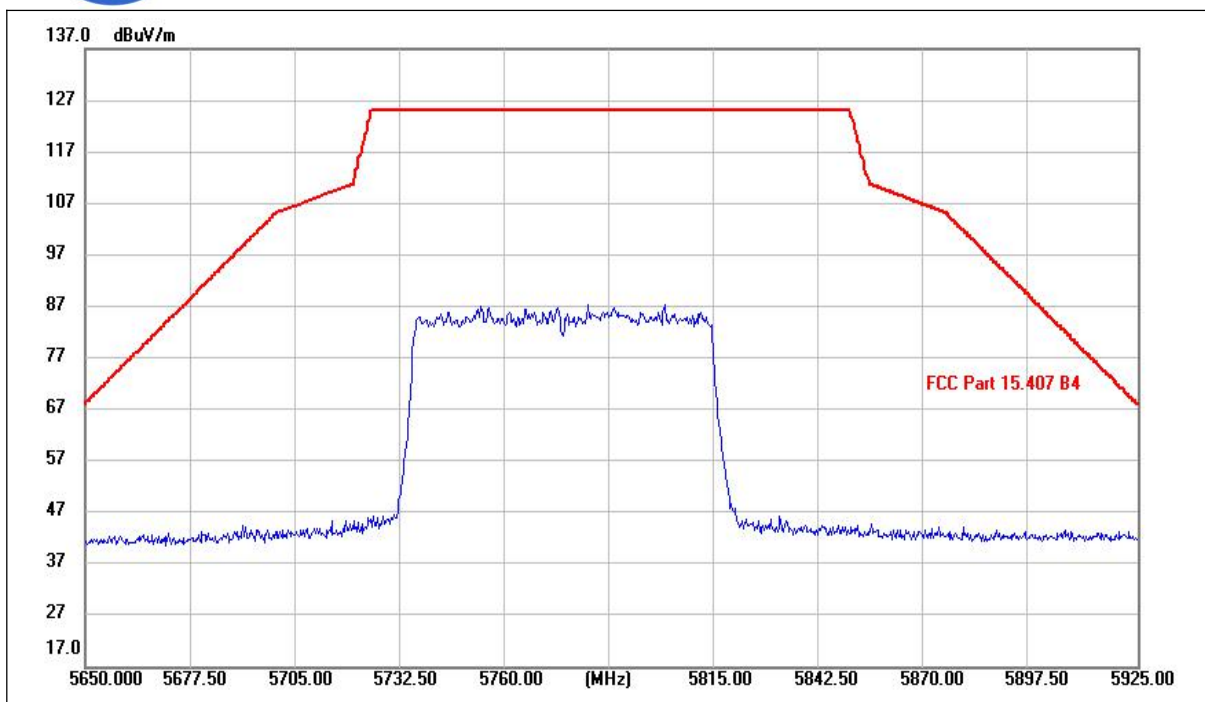
(802.11ac (HT80) _5210MHz, Antenna Horizontal)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5121.460	38.01	-3.10	34.91	54.00	-19.09	AVG	H
5123.030	46.67	-3.11	43.56	74.00	-30.44	peak	H
5143.930	38.40	-3.21	35.19	54.00	-18.81	AVG	H
5147.540	47.00	-3.22	43.78	74.00	-30.22	peak	H
5209.680	71.33	-2.95	68.38			AVG	H
5210.210	80.49	-2.95	77.54			peak	H



(802.11ac (HT80) _5210MHz, Antenna Vertical)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
5113.490	58.96	-3.06	55.90	74.00	-18.10	peak	V
5114.440	49.70	-3.06	46.64	54.00	-7.36	AVG	V
5145.270	63.40	-3.22	60.18	74.00	-13.82	peak	V
5148.580	54.78	-3.24	51.54	54.00	-2.46	AVG	V
5210.260	92.36	-2.95	89.41			peak	V
5210.260	83.15	-2.95	80.20			AVG	V



(802.11ac(HT80)_5775MHz, Antenna Horizontal)



(802.11ac(HT80)_5775MHz, Antenna Vertical)



2.6. Frequency Stability

2.6.1. Requirement

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

2.6.2. Test Procedure

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between 0°C to 40°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

2.6.3. Test Result

Frequency Stability Measurements for UNII Band 1 (Ch. 36)

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (MHz)	Freq Dev. (Hz)	Deviation (%)
100%	12	0(Ref)	5180.032	32000	6.18
100%		10	5180.020	20000	3.86
100%		20	5179.989	-11000	-2.12
100%		30	5179.984	-16000	-3.09
100%		40	5179.955	-45000	-8.69
85%	11.4	20	5180.028	28000	5.41
115%	12.6	20	5180.009	9000	1.74

**Frequency Stability Measurements for UNII Band 3 (Ch. 149)**

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (MHz)	Freq Dev. (Hz)	Deviation (%)
100%	12	0(Ref)	5180.041	41000	7.92
100%		10	5179.983	-17000	-3.28
100%		20	5180.036	36000	6.95
100%		30	5180.023	23000	4.44
100%		40	5179.974	-26000	-5.02
85%	11.4	20	5180.015	15000	2.90
115%	12.6	20	5180.033	33000	6.37

Note: Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

2.7. Conducted Emission

2.7.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

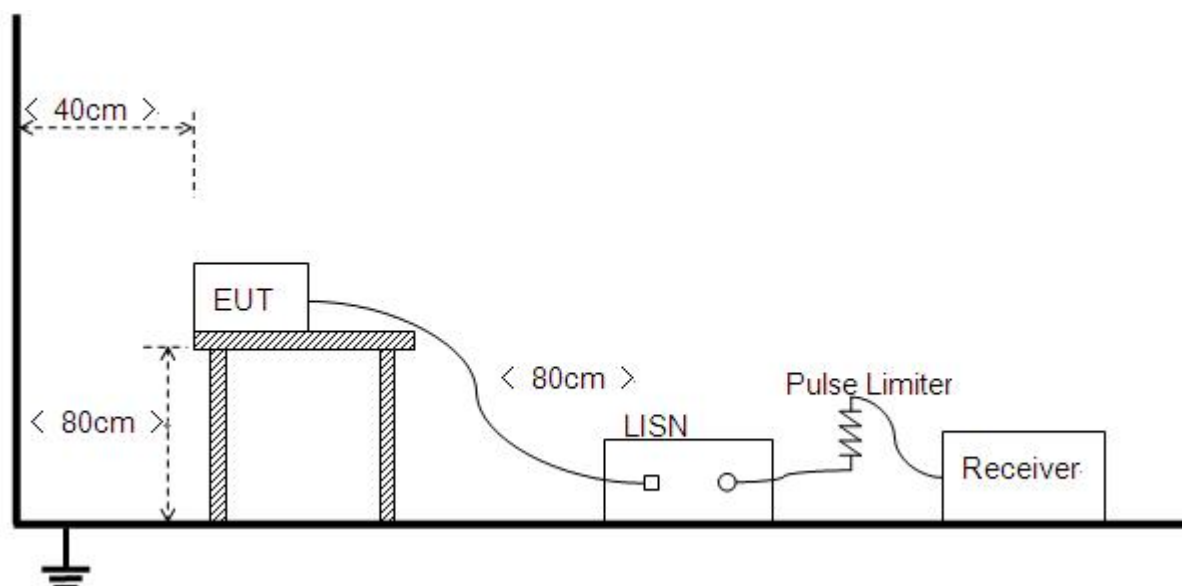
Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

- The lower limit shall apply at the band edges.
- The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

2.7.2. Test Description

A. Test Setup:



The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10: 2013.



2.7.3. Test Result

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

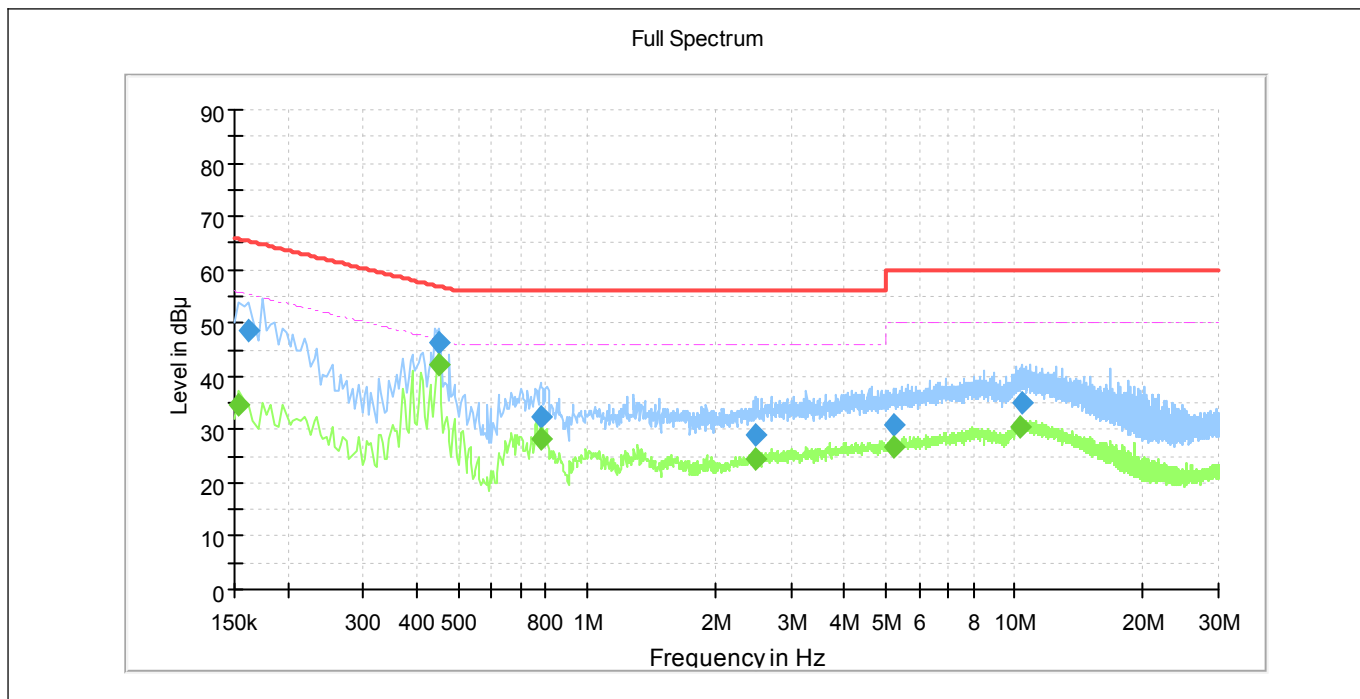
Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test setup:

The EUT configuration of the emission tests is Charging + Wlan 5G Link.

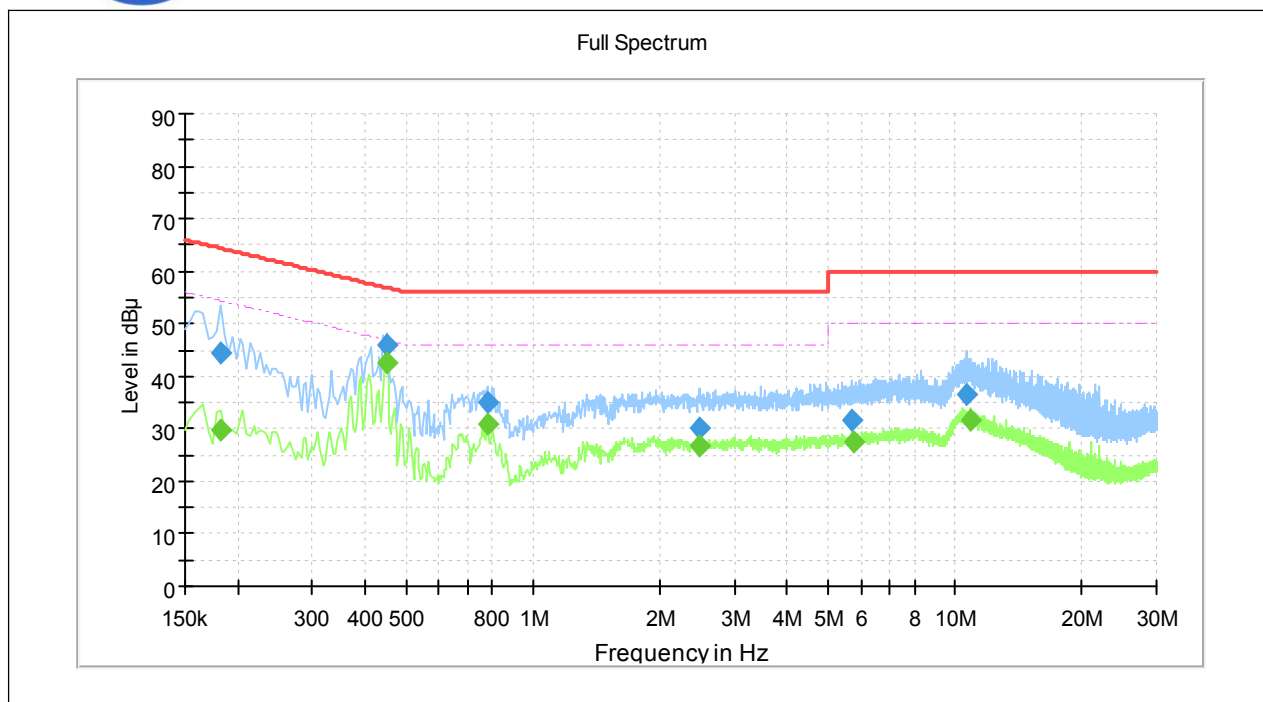
Note: The test voltage is AC 120V/60Hz.

A. Test Plots:



(Plot A: L Phase)

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.154000	---	34.58	55.78	21.21	L1	10.2
0.162000	48.50	---	65.36	16.86	L1	10.2
0.450000	---	42.25	46.88	4.63	L1	10.2
0.450000	46.37	---	56.88	10.50	L1	10.2
0.778000	32.22	---	56.00	23.78	L1	10.2
0.782000	---	28.32	46.00	17.68	L1	10.2
2.482000	29.09	---	56.00	26.91	L1	10.3
2.490000	---	24.31	46.00	21.69	L1	10.3
5.242000	30.70	---	60.00	29.30	L1	10.4
5.242000	---	26.79	50.00	23.21	L1	10.4
10.358000	---	30.37	50.00	19.63	L1	10.6
10.366000	35.17	---	60.00	24.83	L1	10.6



(Plot B: N Phase)

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.182000	---	29.71	54.39	24.68	N	10.5
0.182000	44.38	---	64.39	20.01	N	10.5
0.450000	---	42.52	46.88	4.35	N	10.4
0.450000	45.98	---	56.88	10.90	N	10.4
0.782000	---	31.06	46.00	14.94	N	10.4
0.782000	35.09	---	56.00	20.91	N	10.4
2.490000	29.96	---	56.00	26.04	N	10.5
2.490000	---	26.58	46.00	19.42	N	10.5
5.694000	31.71	---	60.00	28.29	N	10.7
5.730000	---	27.63	50.00	22.37	N	10.7
10.678000	36.36	---	60.00	23.64	N	10.9
10.906000	---	31.54	50.00	18.46	N	10.9

2.8. Radiated Emission

2.8.1. Requirement

The peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (2) For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (3) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

The following formula is used to convert the equipment isotropic radiated power(eirp) to field strength (dBμV/m);

$$E = 1000000 \times \sqrt{30P} / 3 \mu\text{V/m}$$

where P is the EIRP in Watts

Therefore: -27 dBm/MHz = 68.23 dBuV/m

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

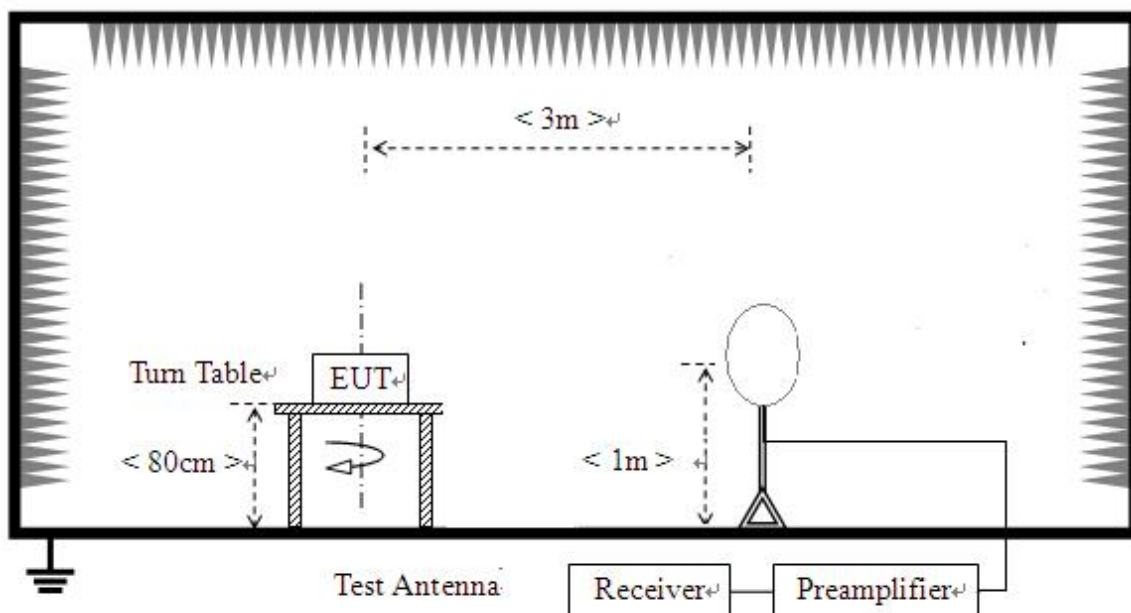
Note:

For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

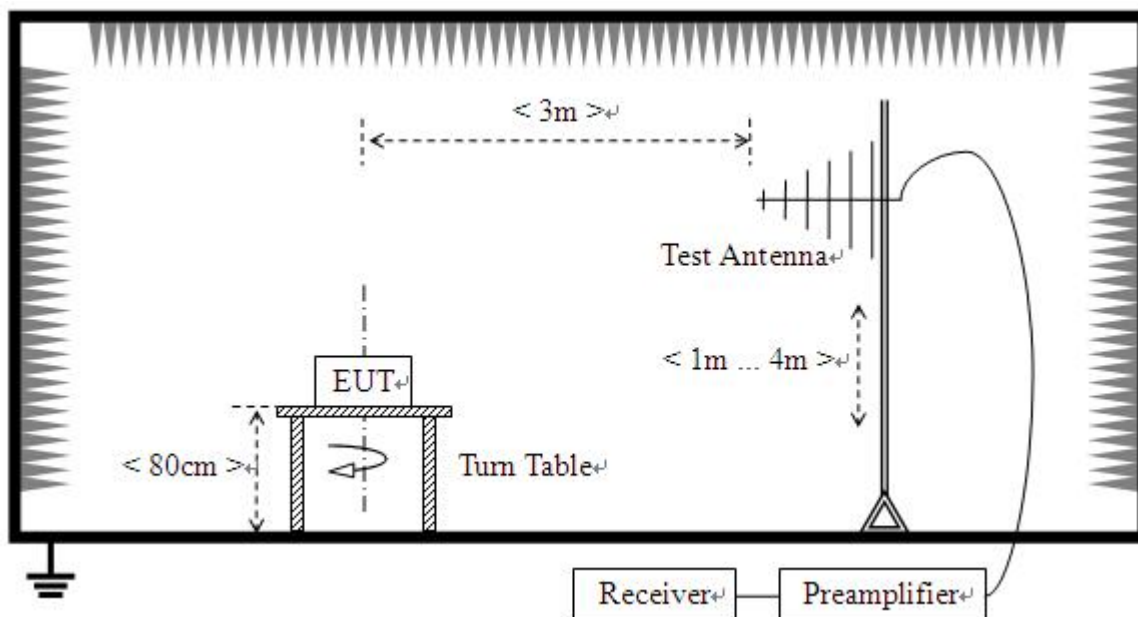
In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table)

2.8.2. Test Description
A. Test Setup:

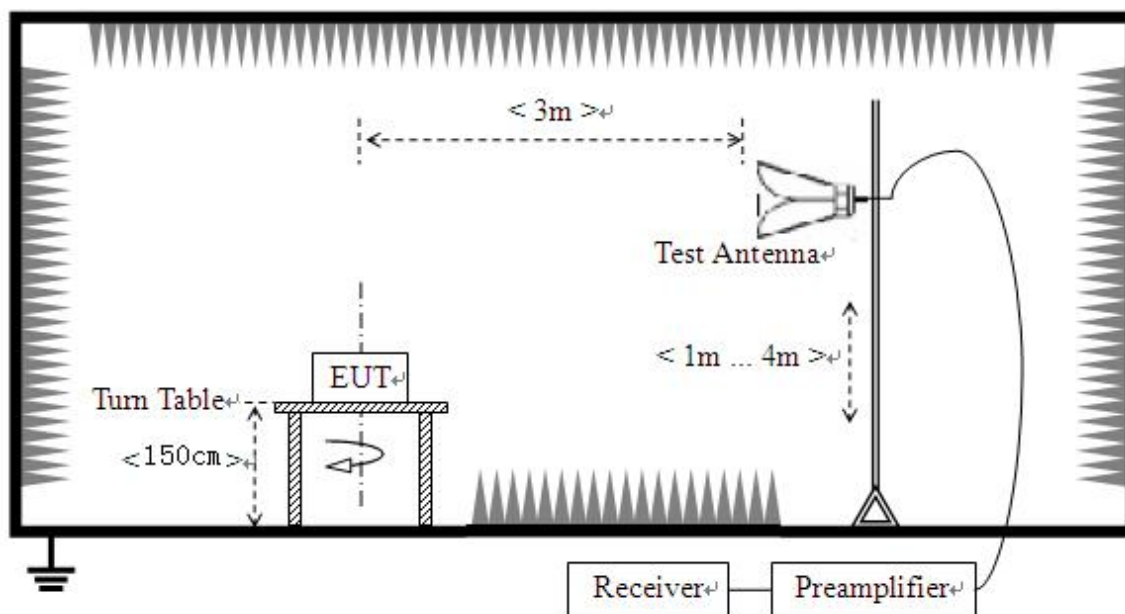
- 1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



The RF absorbing material used on the reference ground plane and on the turntable have a maximum height (thickness) of 30 cm (12 in) and have a minimum-rated attenuation of 20 dB at all frequencies from 1 GHz to 18 GHz.

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4dB according to the standards: ANSI C63.10 (2013). For radiated emissions below or equal to 1GHz, The EUT was set-up on insulator 80cm above the Ground Plane, For radiated emissions above 1GHz, The EUT



was set-up on insulator 150cm above the Ground Plane. The set-up and test methods were according to ANSI C63.10

For the Test Antenna:

(a) In the frequency range of 9kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.

(b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Place the test antenna at 3m away from area of the EUT, while keeping the test antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The test antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final test antenna elevation shall be that which maximizes the emissions. The test antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. The emission levels at both horizontal and vertical polarizations should be tested.

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.



- c. The height of antenna 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.
- d. 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 rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasipeak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
- 4. All modes of operation were investigated and the worst-case emissions are reported.

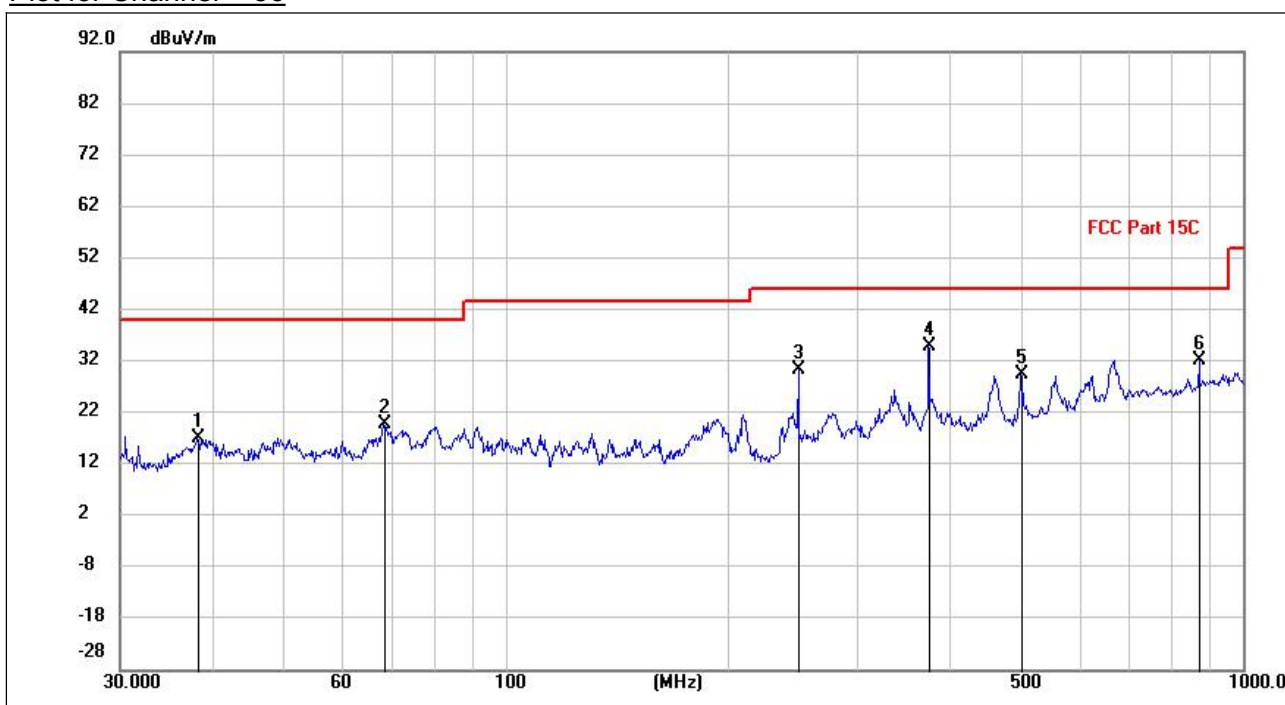
2.8.3. Test Result

Note1: For the frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note2: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

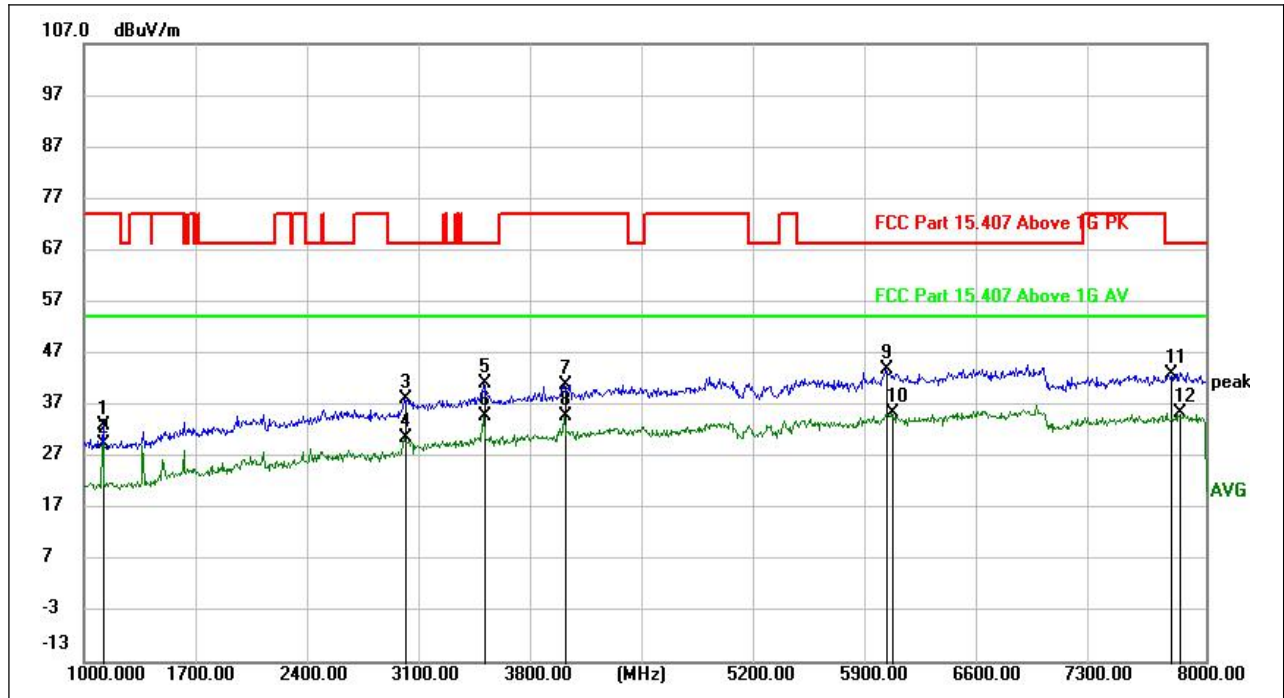
802.11ac Test mode

Plot for Channel = 36



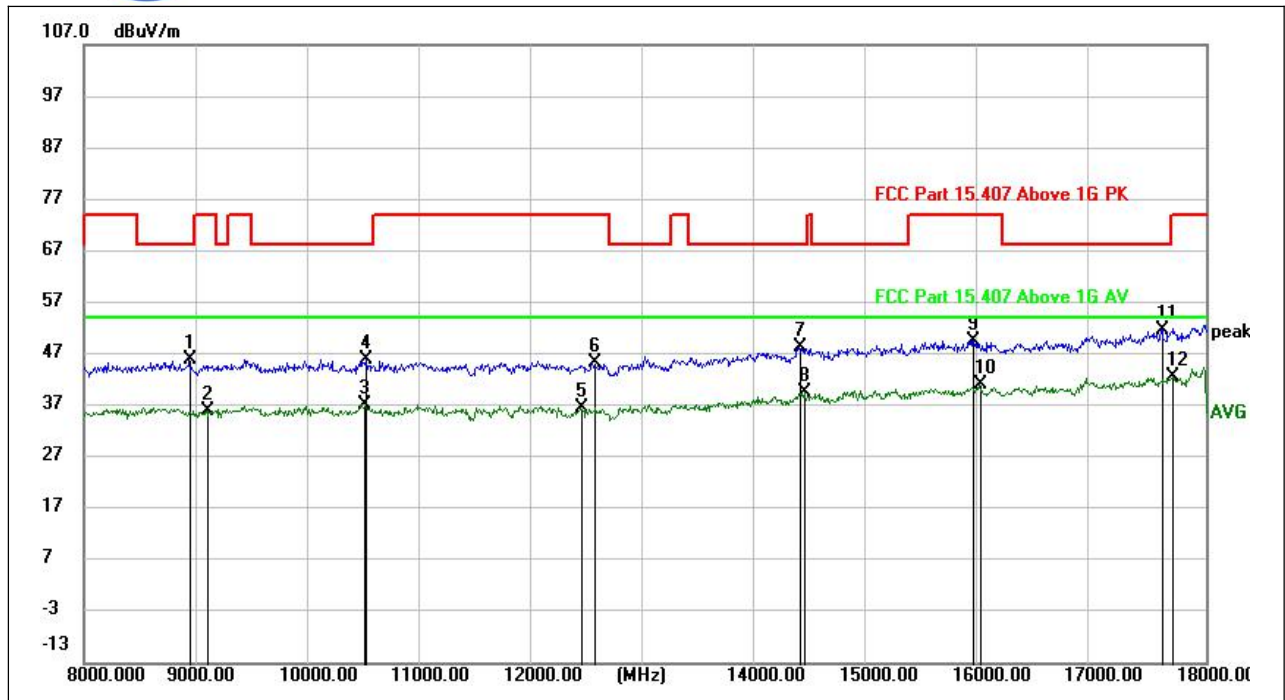
(802.11ac _5180MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
38.3059	3.15	14.04	17.19	40.00	-22.81	peak	H
68.5228	7.48	12.34	19.82	40.00	-20.18	peak	H
249.9942	15.39	14.89	30.28	46.00	-15.72	peak	H
375.0169	16.44	18.39	34.83	46.00	-11.17	peak	H
500.0380	7.57	22.00	29.57	46.00	-16.43	peak	H
875.0935	4.79	27.50	32.29	46.00	-13.71	peak	H



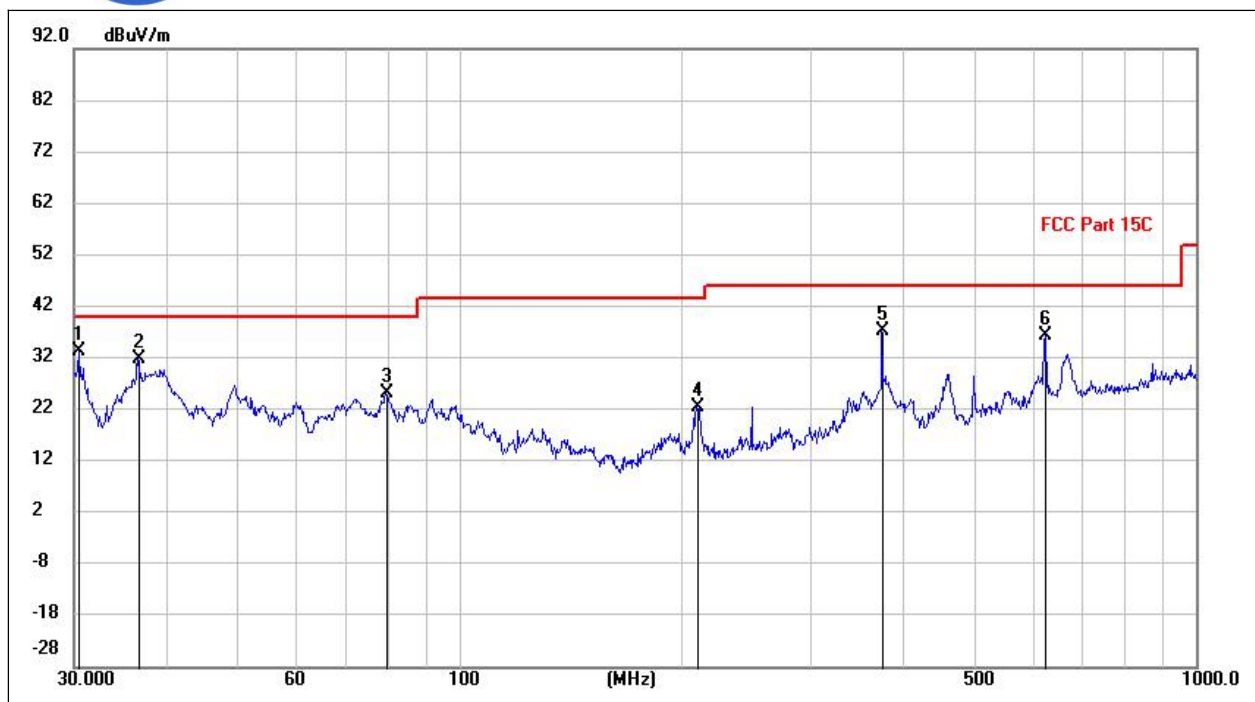
(802.11ac_5180MHz, Antenna Horizontal, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	50.72	-17.66	33.06	74.00	-40.94	peak	H
1124.950	47.00	-17.66	29.34	54.00	-24.66	AVG	H
3005.150	47.32	-9.12	38.20	68.20	-30.00	peak	H
3005.150	39.60	-9.12	30.48	54.00	-23.52	AVG	H
3493.400	49.06	-7.89	41.17	68.20	-27.03	peak	H
3493.400	42.76	-7.89	34.87	54.00	-19.13	AVG	H
3999.850	47.43	-6.68	40.75	74.00	-33.25	peak	H
3999.850	41.33	-6.68	34.65	54.00	-19.35	AVG	H
6012.000	46.65	-2.76	43.89	68.20	-24.31	peak	H
6043.150	38.19	-2.93	35.26	54.00	-18.74	AVG	H
7780.550	43.21	-0.18	43.03	68.20	-25.17	peak	H
7832.700	35.45	0.02	35.47	54.00	-18.53	AVG	H



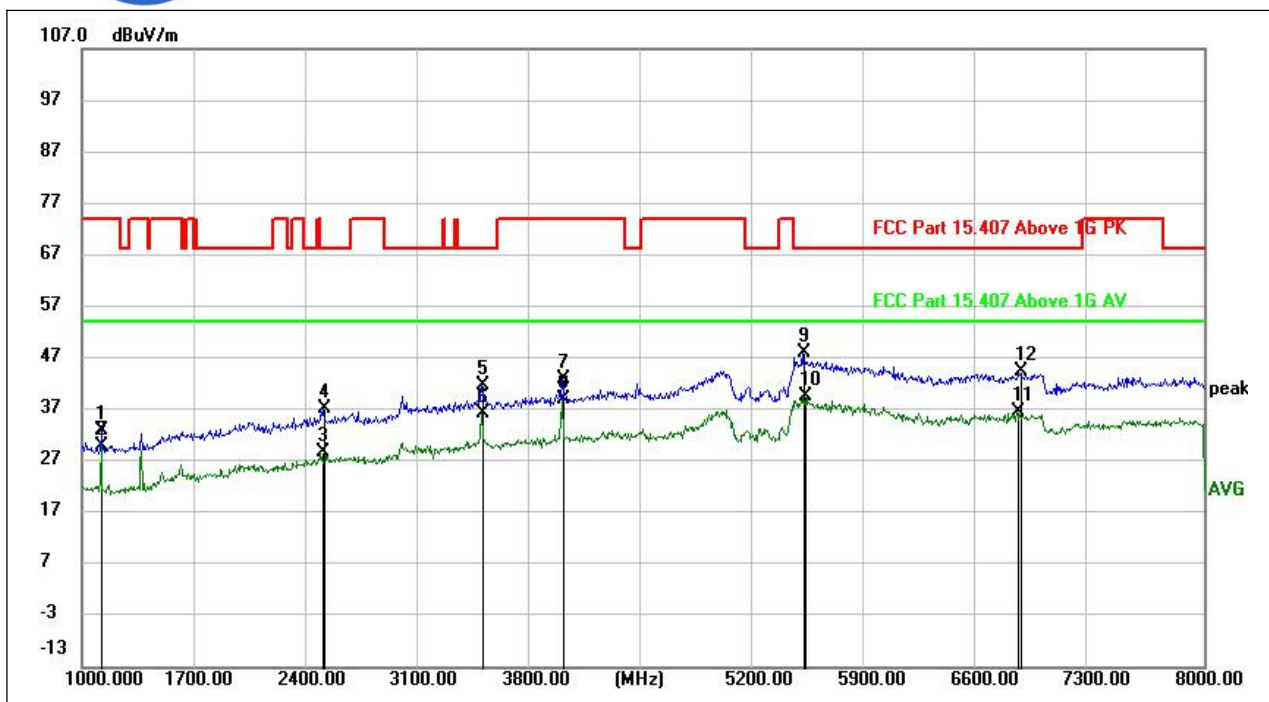
(802.11ac_5180MHz, Antenna Horizontal, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8943.500	44.28	1.70	45.98	68.20	-22.22	peak	H
9100.000	34.31	1.68	35.99	54.00	-18.01	AVG	H
10496.500	34.01	3.17	37.18	54.00	-16.82	AVG	H
10513.500	42.68	3.12	45.80	68.20	-22.40	peak	H
12439.500	31.89	4.72	36.61	54.00	-17.39	AVG	H
12544.500	40.32	4.88	45.20	74.00	-28.80	peak	H
14382.500	39.22	9.06	48.28	68.20	-19.92	peak	H
14426.000	30.88	8.63	39.51	54.00	-14.49	AVG	H
15923.000	38.42	11.27	49.69	74.00	-24.31	peak	H
15984.500	29.51	11.66	41.17	54.00	-12.83	AVG	H
17617.500	38.19	13.54	51.73	68.20	-16.47	peak	H
17707.000	28.22	14.44	42.66	54.00	-11.34	AVG	H



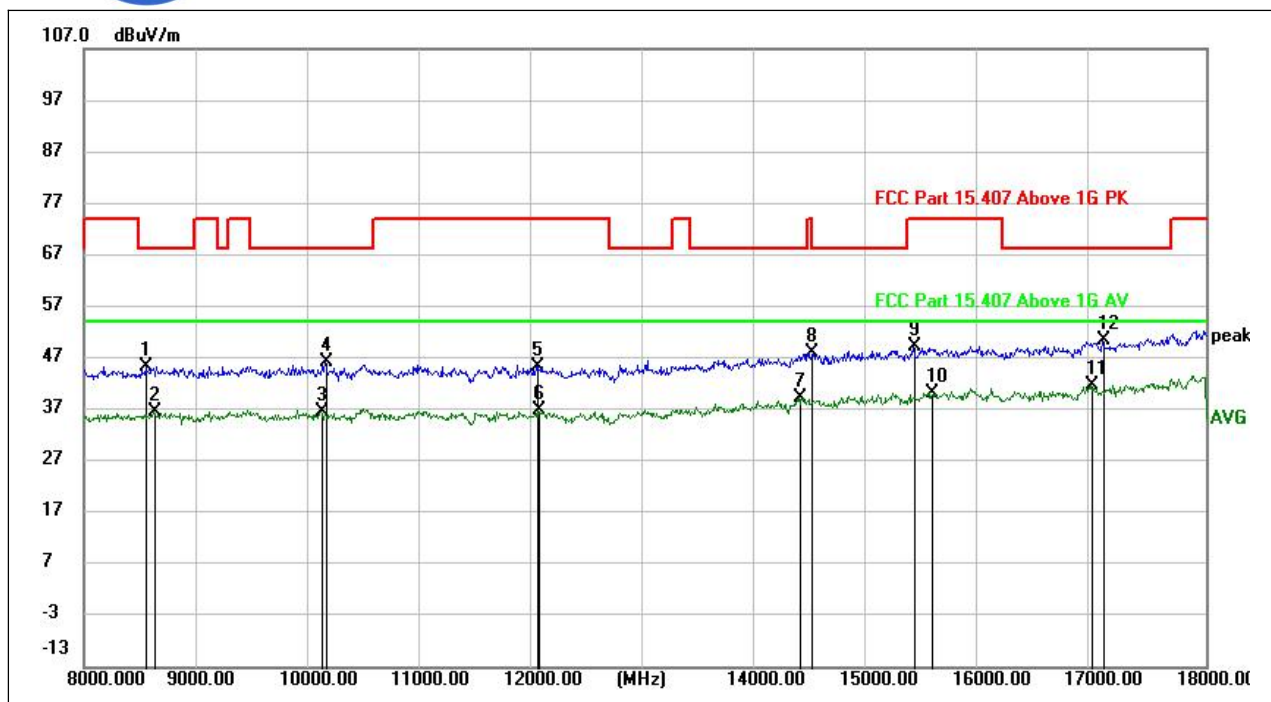
(802.11ac_5180MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
30.4504	20.37	13.09	33.46	40.00	-6.54	peak	V
36.6889	18.53	13.43	31.96	40.00	-8.04	peak	V
79.6745	14.33	10.74	25.07	40.00	-14.93	peak	V
210.5644	9.25	13.34	22.59	43.50	-20.91	peak	V
375.0169	19.03	18.39	37.42	46.00	-8.58	peak	V
625.0780	12.66	23.84	36.50	46.00	-9.50	peak	V



(802.11ac_5180MHz, Antenna Vertical , 1GHz to 8GHz)

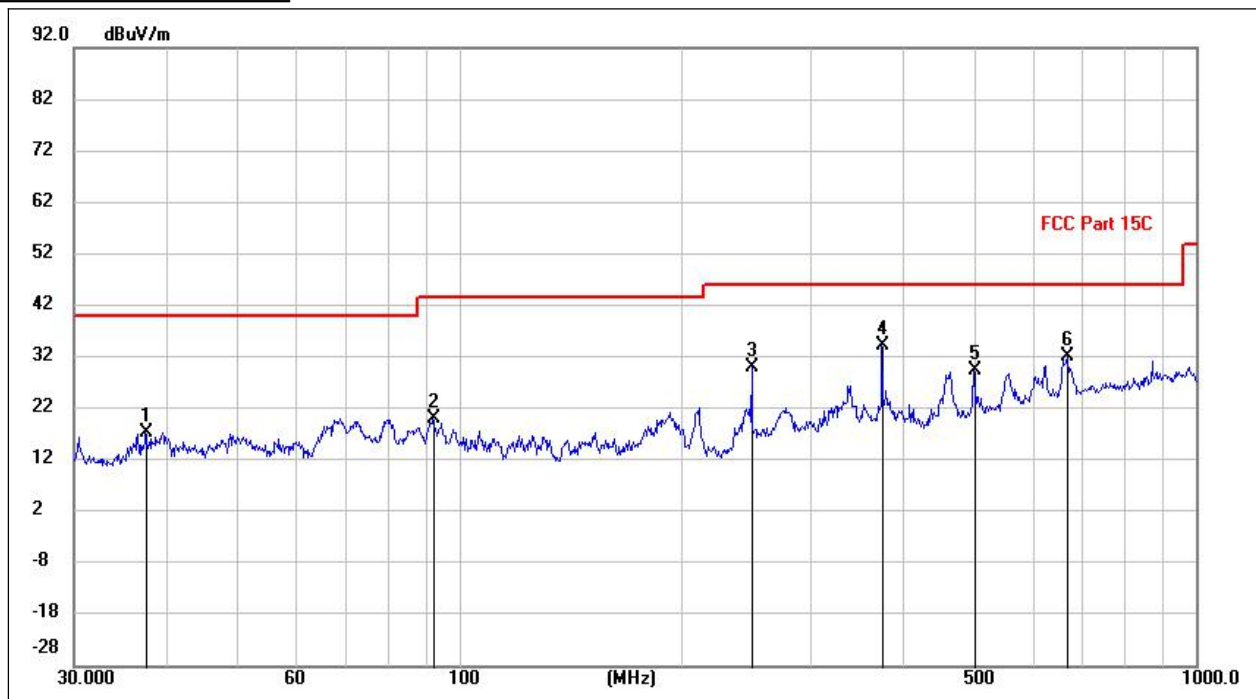
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	50.63	-17.66	32.97	74.00	-41.03	peak	V
1124.950	47.68	-17.66	30.02	54.00	-23.98	AVG	V
2500.100	38.08	-9.41	28.67	54.00	-25.33	AVG	V
2510.950	47.71	-10.48	37.23	68.20	-30.97	peak	V
3493.400	47.20	-5.37	41.83	68.20	-26.37	peak	V
3493.400	41.80	-5.37	36.43	54.00	-17.57	AVG	V
3999.850	46.76	-3.98	42.78	74.00	-31.22	peak	V
3999.850	42.98	-3.98	39.00	54.00	-15.00	AVG	V
5502.750	49.84	-1.80	48.04	68.20	-20.16	peak	V
5508.350	41.45	-1.87	39.58	54.00	-14.42	AVG	V
6840.800	38.10	-1.43	36.67	54.00	-17.33	AVG	V
6854.800	45.84	-1.35	44.49	68.20	-23.71	peak	V



(802.11ac_5180MHz, Antenna Vertical, 8GHz to 18GHz)

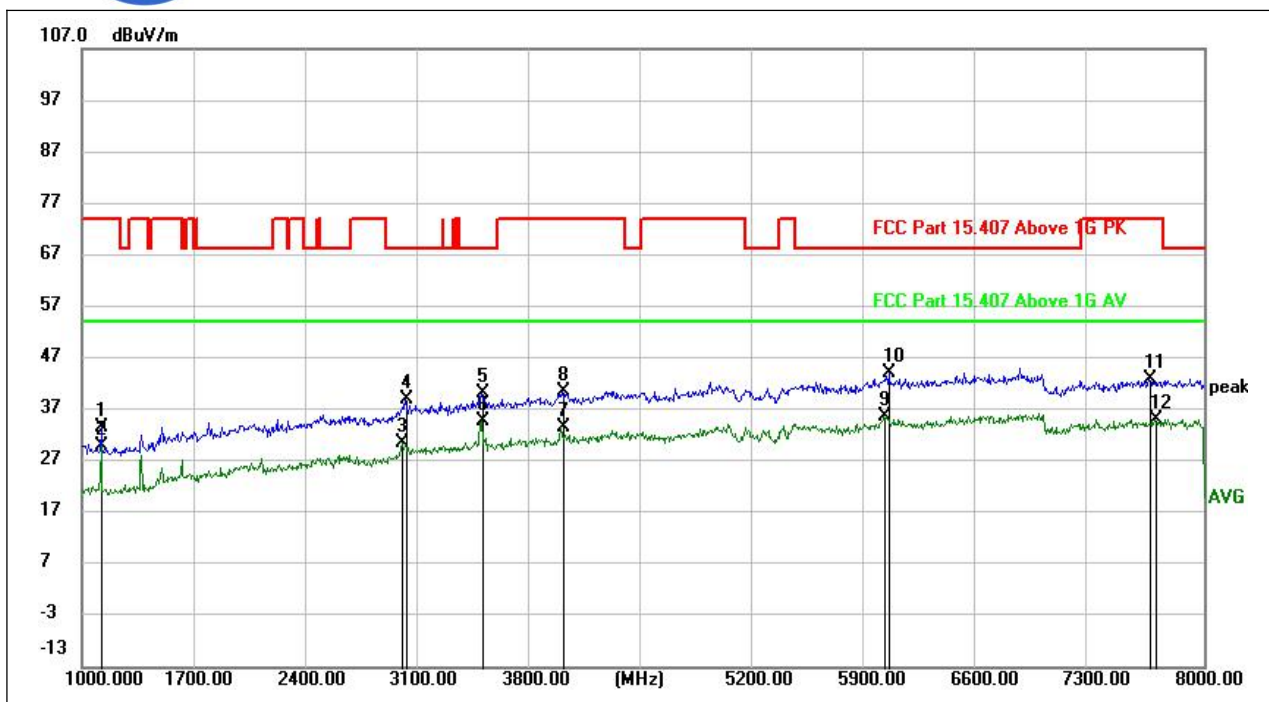
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8557.500	43.78	1.64	45.42	68.20	-22.78	peak	V
8637.000	35.04	1.52	36.56	54.00	-17.44	AVG	V
10126.000	33.84	2.64	36.48	54.00	-17.52	AVG	V
10157.500	43.50	2.66	46.16	68.20	-22.04	peak	V
12039.000	40.46	5.03	45.49	74.00	-28.51	peak	V
12053.000	31.76	5.08	36.84	54.00	-17.16	AVG	V
14381.500	30.30	9.07	39.37	54.00	-14.63	AVG	V
14486.000	38.98	9.03	48.01	74.00	-25.99	peak	V
15397.500	39.04	10.16	49.20	74.00	-24.80	peak	V
15552.500	29.54	10.66	40.20	54.00	-13.80	AVG	V
16987.000	28.64	13.05	41.69	54.00	-12.31	AVG	V
17089.500	38.02	12.43	50.45	68.20	-17.75	peak	V

Plots for Channel = 40



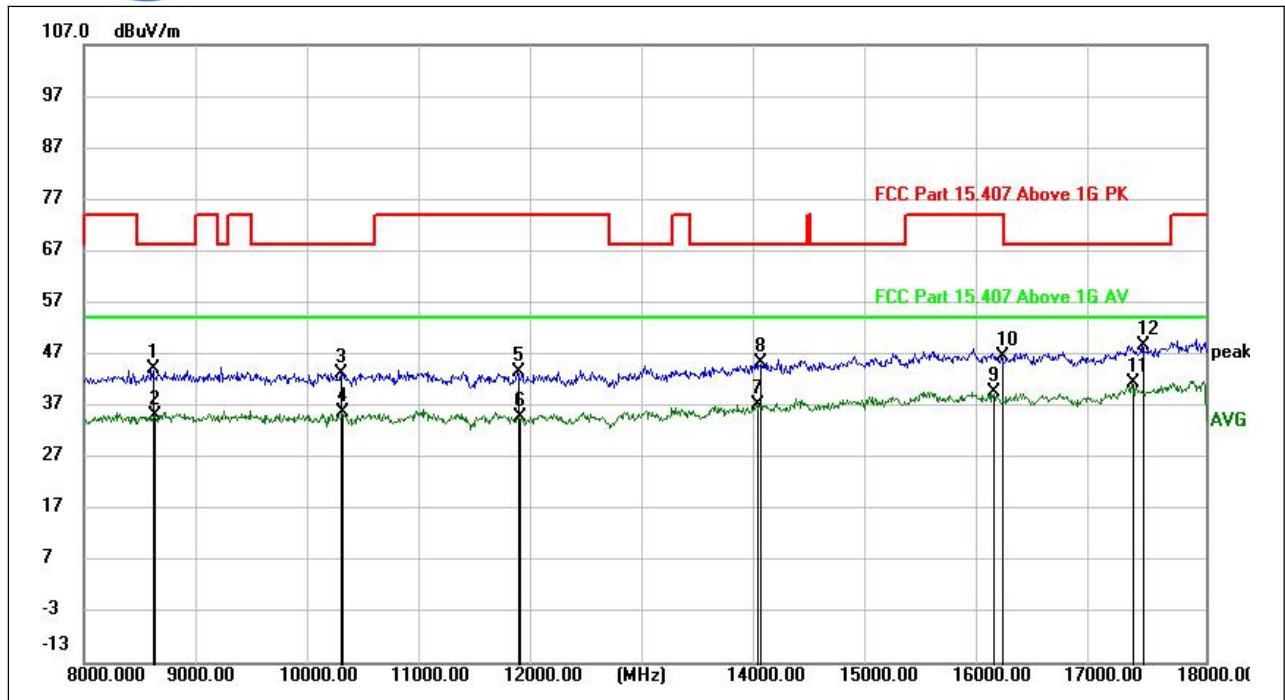
(802.11ac _5200MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
37.5940	3.49	13.84	17.33	40.00	-22.67	peak	H
92.2681	7.62	12.61	20.23	43.50	-23.27	peak	H
249.9942	15.25	14.89	30.14	46.00	-15.86	peak	H
375.0169	15.77	18.39	34.16	46.00	-11.84	peak	H
500.0380	7.40	22.00	29.40	46.00	-16.60	peak	H
668.3766	7.63	24.46	32.09	46.00	-13.91	peak	H



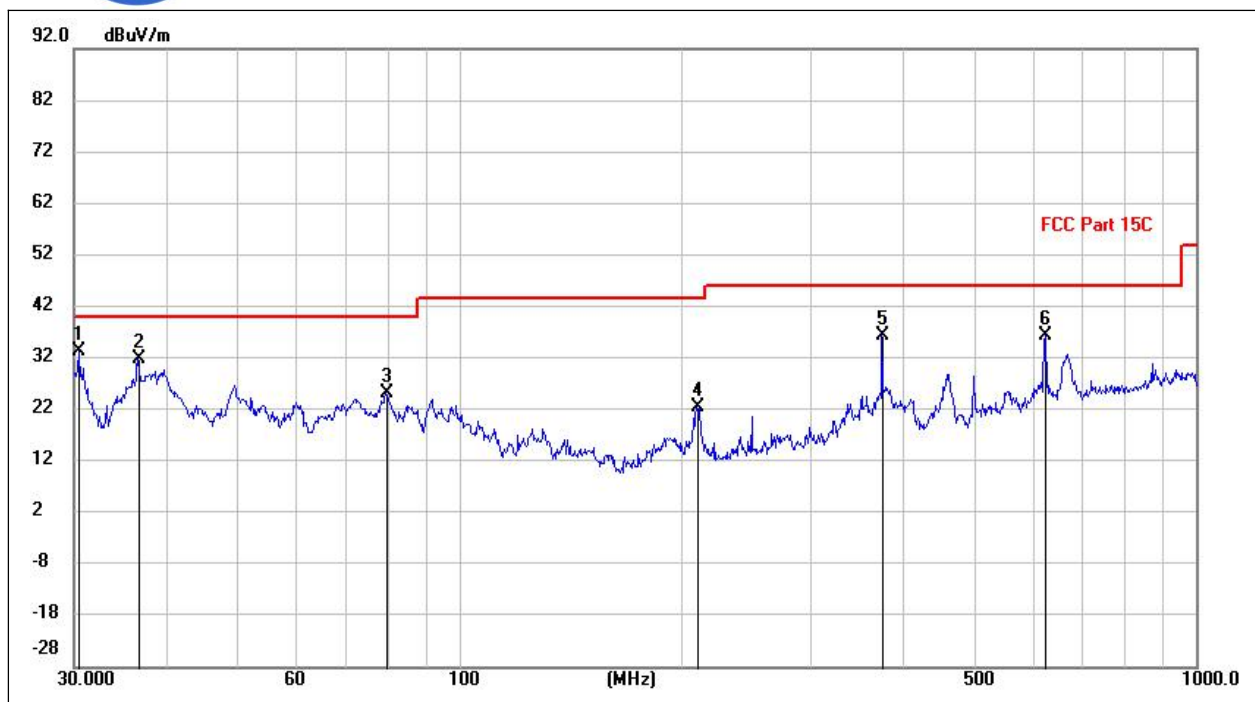
(802.11ac _5200MHz, Antenna Horizontal, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	51.10	-17.66	33.44	74.00	-40.56	peak	H
1124.950	47.51	-17.66	29.85	54.00	-24.15	AVG	H
3001.650	39.74	-9.17	30.57	54.00	-23.43	AVG	H
3019.850	48.00	-8.86	39.14	68.20	-29.06	peak	H
3493.400	48.24	-7.89	40.35	68.20	-27.85	peak	H
3493.400	42.59	-7.89	34.70	54.00	-19.30	AVG	H
3999.850	40.23	-6.68	33.55	54.00	-20.45	AVG	H
4000.550	47.22	-6.65	40.57	74.00	-33.43	peak	H
6007.800	38.51	-2.74	35.77	54.00	-18.23	AVG	H
6038.600	46.95	-2.91	44.04	68.20	-24.16	peak	H
7663.650	42.50	0.29	42.79	74.00	-31.21	peak	H
7700.050	35.27	-0.05	35.22	54.00	-18.78	AVG	H



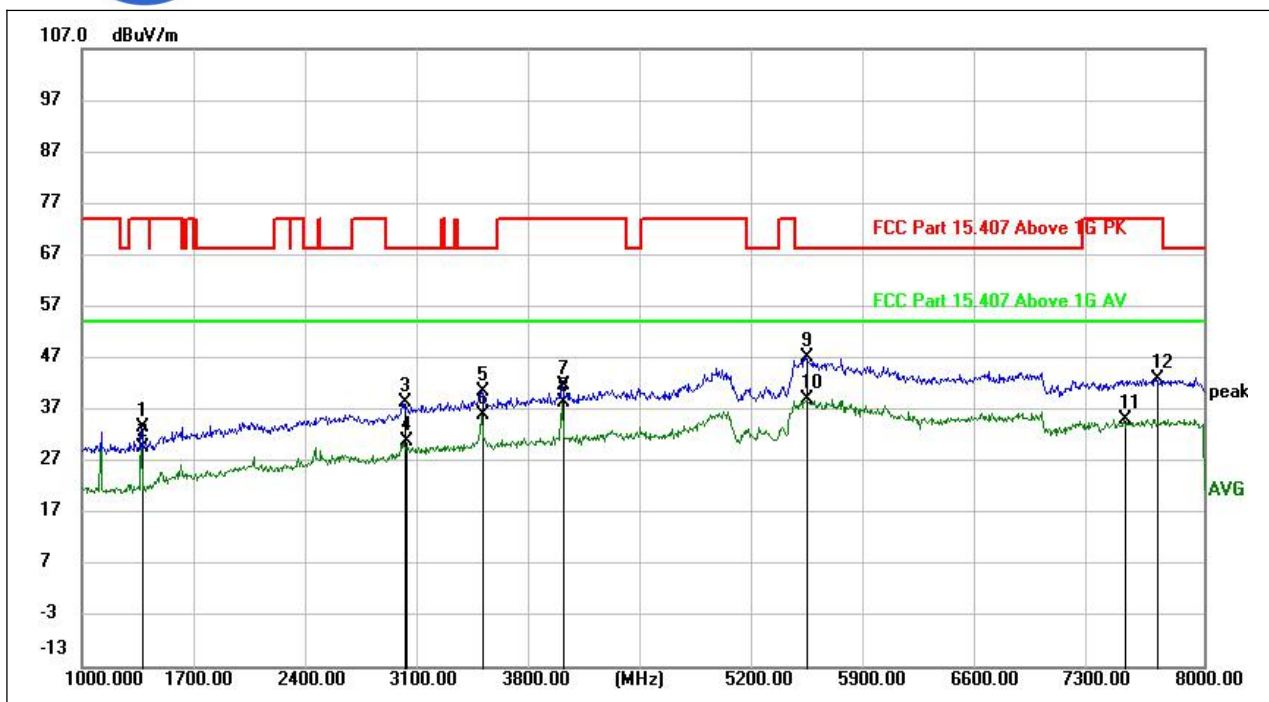
(802.11ac_5200MHz, Antenna Horizontal, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8615.000	42.56	1.48	44.04	68.20	-24.16	peak	H
8625.500	33.60	1.50	35.10	54.00	-18.90	AVG	H
10297.500	40.95	2.40	43.35	68.20	-24.85	peak	H
10307.500	33.17	2.45	35.62	54.00	-18.38	AVG	H
11874.500	39.42	4.06	43.48	74.00	-30.52	peak	H
11881.000	30.65	4.03	34.68	54.00	-19.32	AVG	H
13999.500	28.77	8.43	37.20	54.00	-16.80	AVG	H
14025.500	36.83	8.42	45.25	68.20	-22.95	peak	H
16103.000	28.22	11.28	39.50	54.00	-14.50	AVG	H
16185.000	35.49	10.92	46.41	74.00	-27.59	peak	H
17340.500	28.34	13.05	41.39	54.00	-12.61	AVG	H
17433.000	35.68	13.09	48.77	68.20	-19.43	peak	H



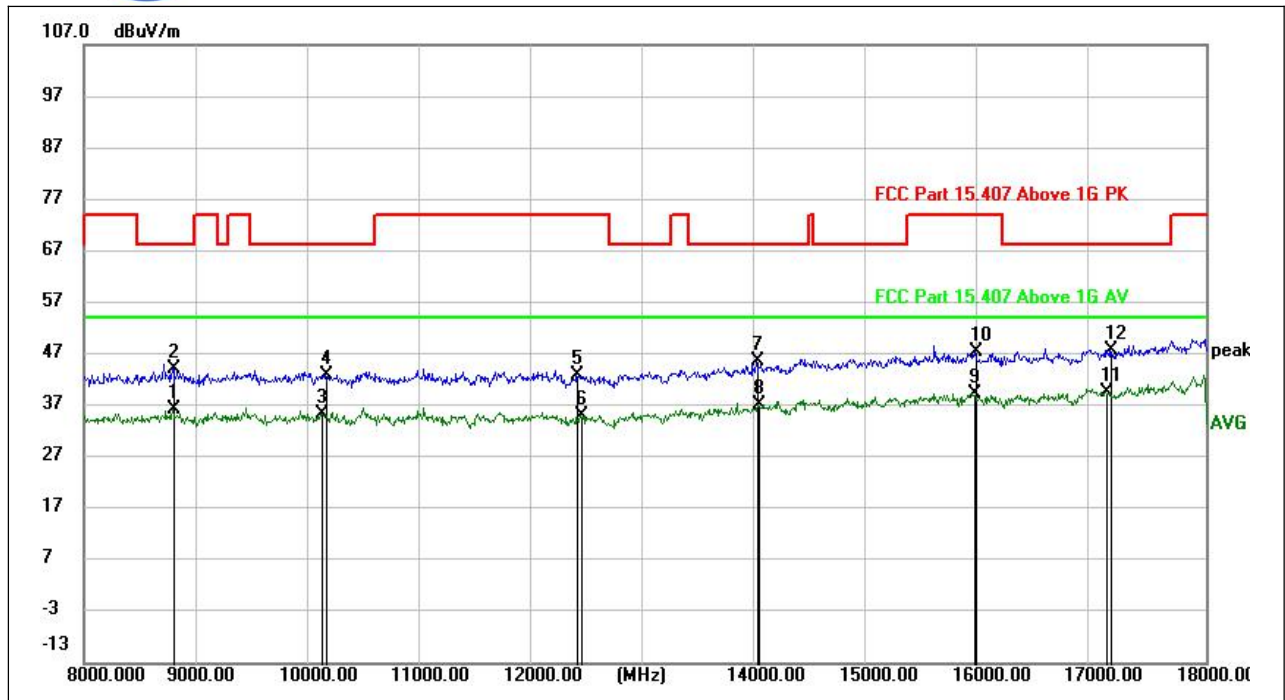
(802.11ac _5200MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
30.4504	20.37	13.09	33.46	40.00	-6.54	peak	V
36.6889	18.53	13.43	31.96	40.00	-8.04	peak	V
79.6745	14.33	10.74	25.07	40.00	-14.93	peak	V
210.5644	9.25	13.34	22.59	43.50	-20.91	peak	V
375.0169	17.86	18.39	36.25	46.00	-9.75	peak	V
625.0780	12.66	23.84	36.50	46.00	-9.50	peak	V



(802.11ac_5200MHz, Antenna Vertical , 1GHz to 8GHz)

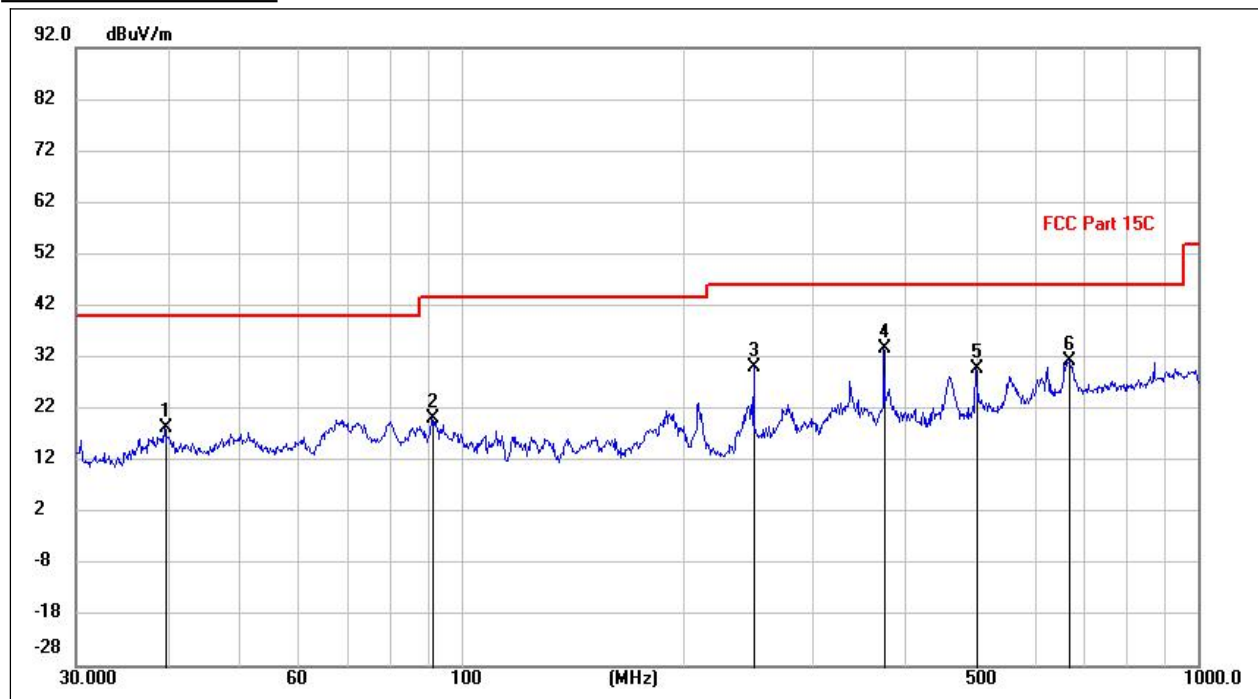
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1374.850	50.55	-17.03	33.52	74.00	-40.48	peak	V
1374.850	46.66	-17.03	29.63	54.00	-24.37	AVG	V
3011.800	45.62	-7.26	38.36	68.20	-29.84	peak	V
3018.800	38.16	-7.44	30.72	54.00	-23.28	AVG	V
3493.400	45.98	-5.37	40.61	68.20	-27.59	peak	V
3493.400	41.34	-5.37	35.97	54.00	-18.03	AVG	V
3999.850	45.69	-3.98	41.71	74.00	-32.29	peak	V
3999.850	42.44	-3.98	38.46	54.00	-15.54	AVG	V
5518.150	49.00	-1.98	47.02	68.20	-21.18	peak	V
5529.000	41.01	-2.11	38.90	54.00	-15.10	AVG	V
7508.950	35.41	-0.24	35.17	54.00	-18.83	AVG	V
7707.750	43.15	-0.13	43.02	74.00	-30.98	peak	V



(802.11a _5200MHz, Antenna Vertical, 8GHz to 18GHz)

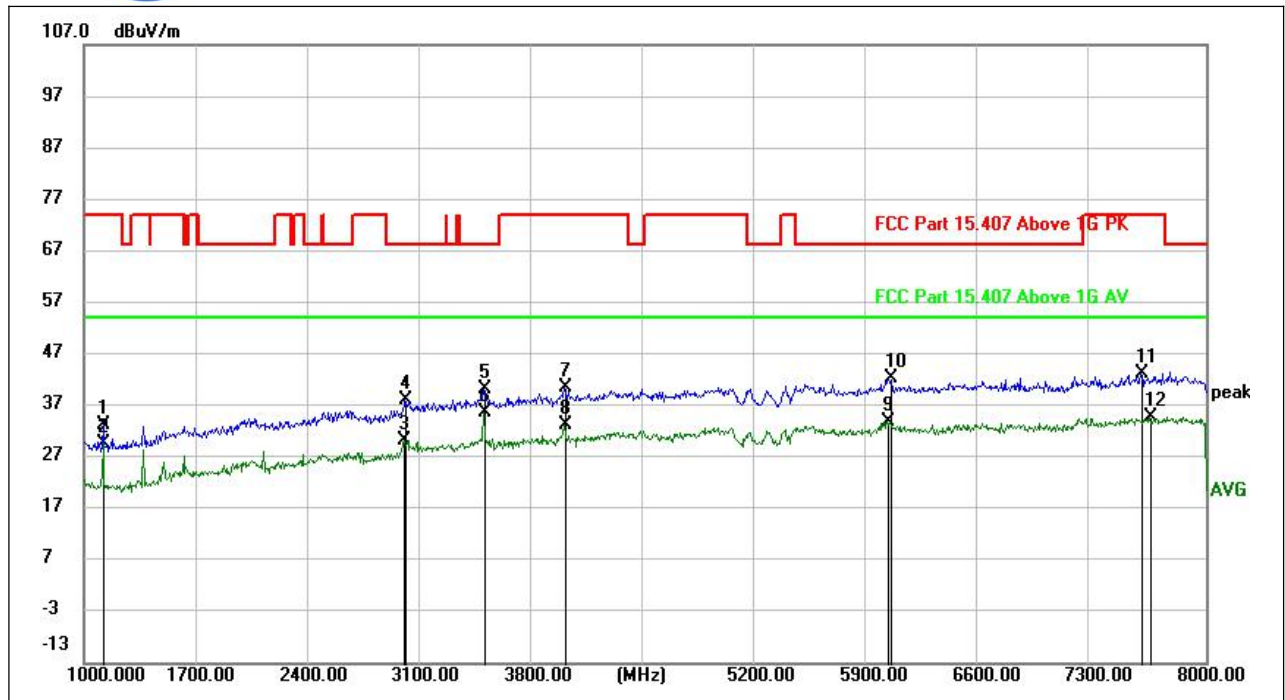
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8804.500	34.42	1.81	36.23	54.00	-17.77	AVG	V
8805.000	42.30	1.81	44.11	68.20	-24.09	peak	V
10124.500	32.83	2.63	35.46	54.00	-18.54	AVG	V
10158.000	40.35	2.65	43.00	68.20	-25.20	peak	V
12396.500	38.42	4.41	42.83	74.00	-31.17	peak	V
12435.500	30.59	4.50	35.09	54.00	-18.91	AVG	V
14002.500	37.34	8.35	45.69	68.20	-22.51	peak	V
14011.000	28.89	8.39	37.28	54.00	-16.72	AVG	V
15934.000	27.91	11.29	39.20	54.00	-14.80	AVG	V
15950.000	35.94	11.40	47.34	74.00	-26.66	peak	V
17119.000	26.93	12.59	39.52	54.00	-14.48	AVG	V
17150.500	34.88	12.85	47.73	68.20	-20.47	peak	V

Plot for Channel = 48



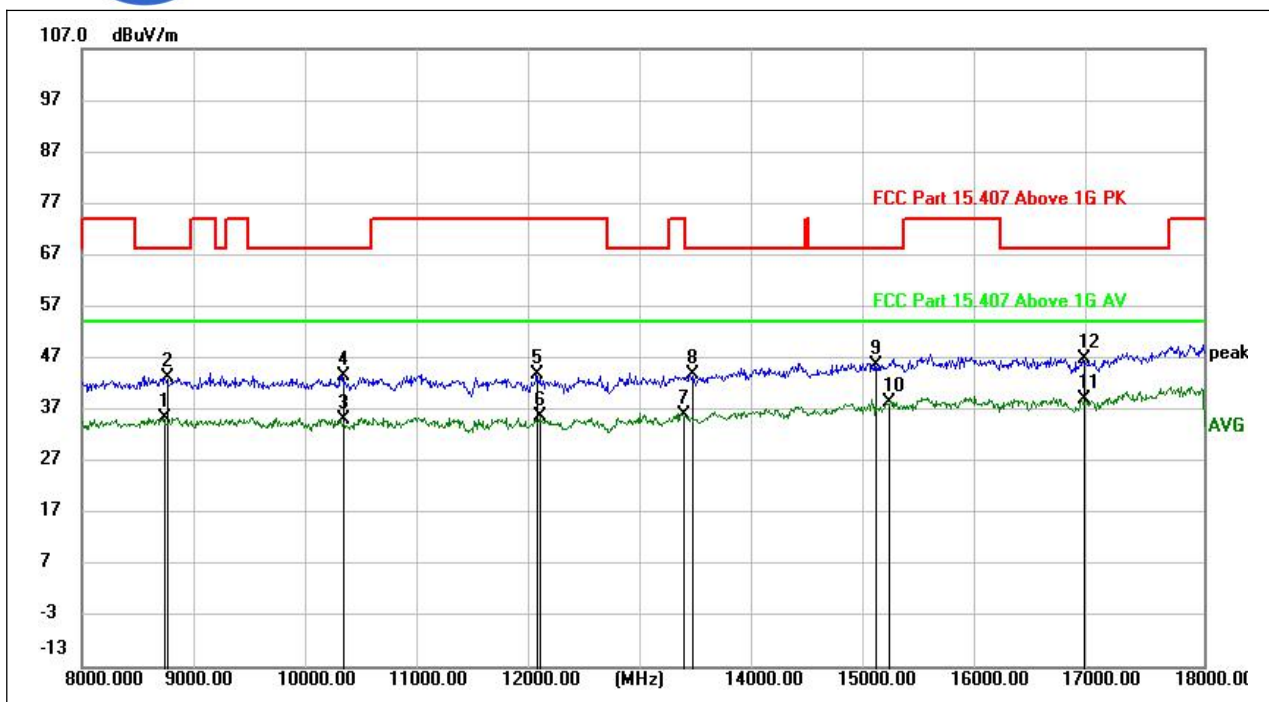
(802.11ac _5240MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
39.7078	2.93	15.26	18.19	40.00	-21.81	peak	H
91.3826	7.20	12.83	20.03	43.50	-23.47	peak	H
249.9942	15.05	14.89	29.94	46.00	-16.06	peak	H
375.0169	15.33	18.39	33.72	46.00	-12.28	peak	H
500.0380	7.87	22.00	29.87	46.00	-16.13	peak	H
669.7843	6.83	24.52	31.35	46.00	-14.65	peak	H



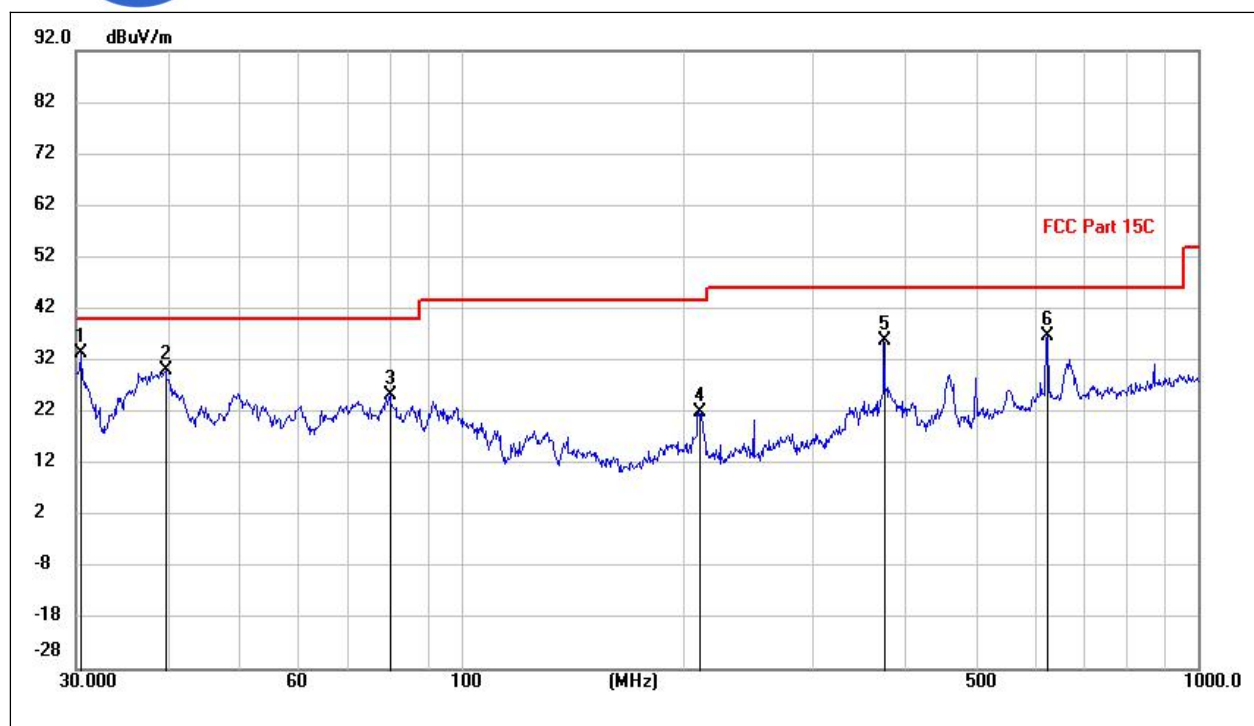
(802.11ac _5240MHz, Antenna Horizontal, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	50.84	-17.66	33.18	74.00	-40.82	peak	H
1124.950	47.44	-17.66	29.78	54.00	-24.22	AVG	H
2999.900	39.55	-9.20	30.35	54.00	-23.65	AVG	H
3005.500	47.21	-9.11	38.10	68.20	-30.10	peak	H
3493.050	47.98	-7.88	40.10	68.20	-28.10	peak	H
3493.050	43.46	-7.88	35.58	54.00	-18.42	AVG	H
3999.850	47.12	-6.68	40.44	74.00	-33.56	peak	H
3999.850	39.85	-6.68	33.17	54.00	-20.83	AVG	H
6015.500	36.69	-2.79	33.90	54.00	-20.10	AVG	H
6029.500	45.08	-2.86	42.22	68.20	-25.98	peak	H
7598.550	43.44	-0.18	43.26	74.00	-30.74	peak	H
7654.900	34.47	0.32	34.79	54.00	-19.21	AVG	H



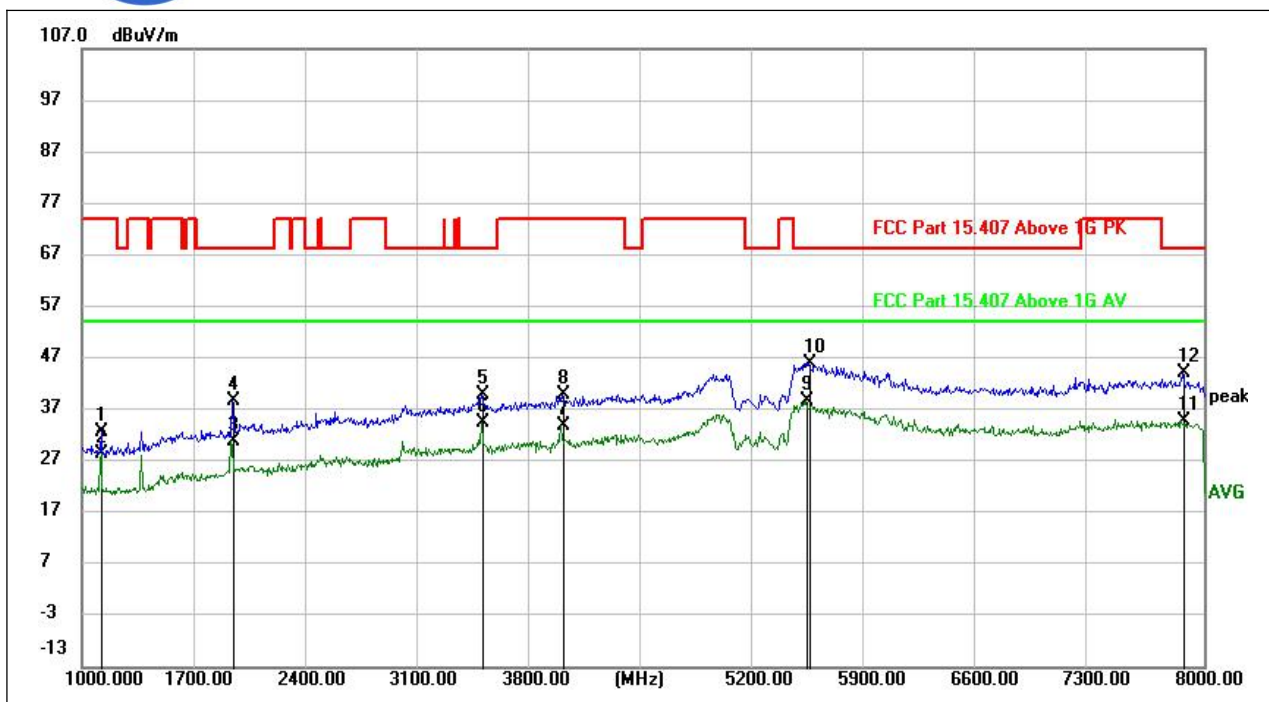
(802.11ac _5240MHz, Antenna Horizontal, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8732.000	33.74	1.69	35.43	54.00	-18.57	AVG	H
8753.000	41.44	1.66	43.10	68.20	-25.10	peak	H
10326.500	32.45	2.56	35.01	54.00	-18.99	AVG	H
10328.500	40.99	2.57	43.56	68.20	-24.64	peak	H
12058.500	39.39	4.51	43.90	74.00	-30.10	peak	H
12089.000	31.38	4.20	35.58	54.00	-18.42	AVG	H
13363.500	29.28	6.63	35.91	54.00	-18.09	AVG	H
13434.000	37.19	6.61	43.80	68.20	-24.40	peak	H
15074.500	35.21	10.49	45.70	68.20	-22.50	peak	H
15182.000	28.35	9.92	38.27	54.00	-15.73	AVG	H
16921.500	27.74	11.25	38.99	54.00	-15.01	AVG	H
16927.000	35.71	11.28	46.99	68.20	-21.21	peak	H



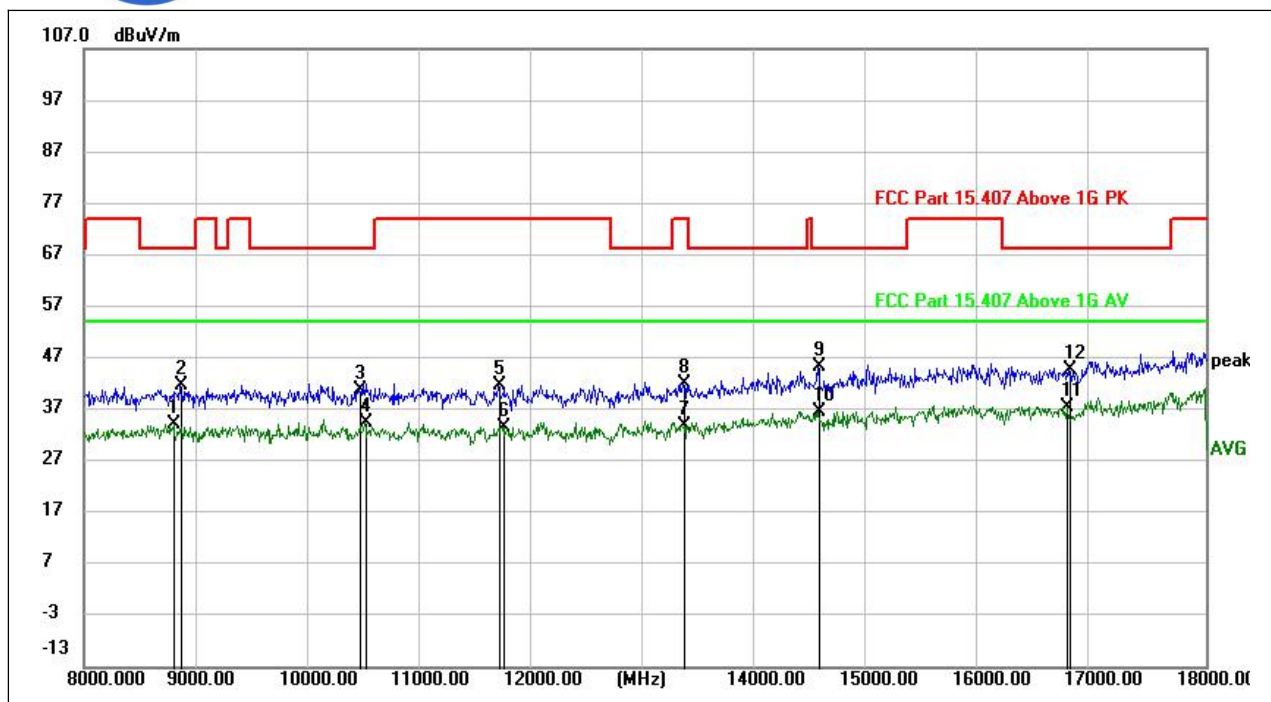
(802.11ac _5240MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
30.4558	20.40	13.08	33.48	40.00	-6.52	peak	V
39.7217	14.75	15.28	30.03	40.00	-9.97	peak	V
80.2774	14.38	10.84	25.22	40.00	-14.78	peak	V
210.2324	8.52	13.32	21.84	43.50	-21.66	peak	V
375.0169	17.28	18.39	35.67	46.00	-10.33	peak	V
625.0780	12.88	23.84	36.72	46.00	-9.28	peak	V



(802.11ac_5240MHz, Antenna Vertical, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	50.45	-17.66	32.79	74.00	-41.21	peak	V
1124.950	46.12	-17.66	28.46	54.00	-25.54	AVG	V
1943.250	44.01	-13.15	30.86	54.00	-23.14	AVG	V
1943.950	51.88	-13.13	38.75	68.20	-29.45	peak	V
3493.050	45.25	-5.38	39.87	68.20	-28.33	peak	V
3493.050	39.79	-5.38	34.41	54.00	-19.59	AVG	V
3999.850	38.00	-3.98	34.02	54.00	-19.98	AVG	V
4002.650	44.03	-4.00	40.03	74.00	-33.97	peak	V
5524.800	40.65	-2.06	38.59	54.00	-15.41	AVG	V
5538.450	48.22	-2.23	45.99	68.20	-22.21	peak	V
7868.400	34.80	0.12	34.92	54.00	-19.08	AVG	V
7876.450	44.04	0.13	44.17	68.20	-24.03	peak	V

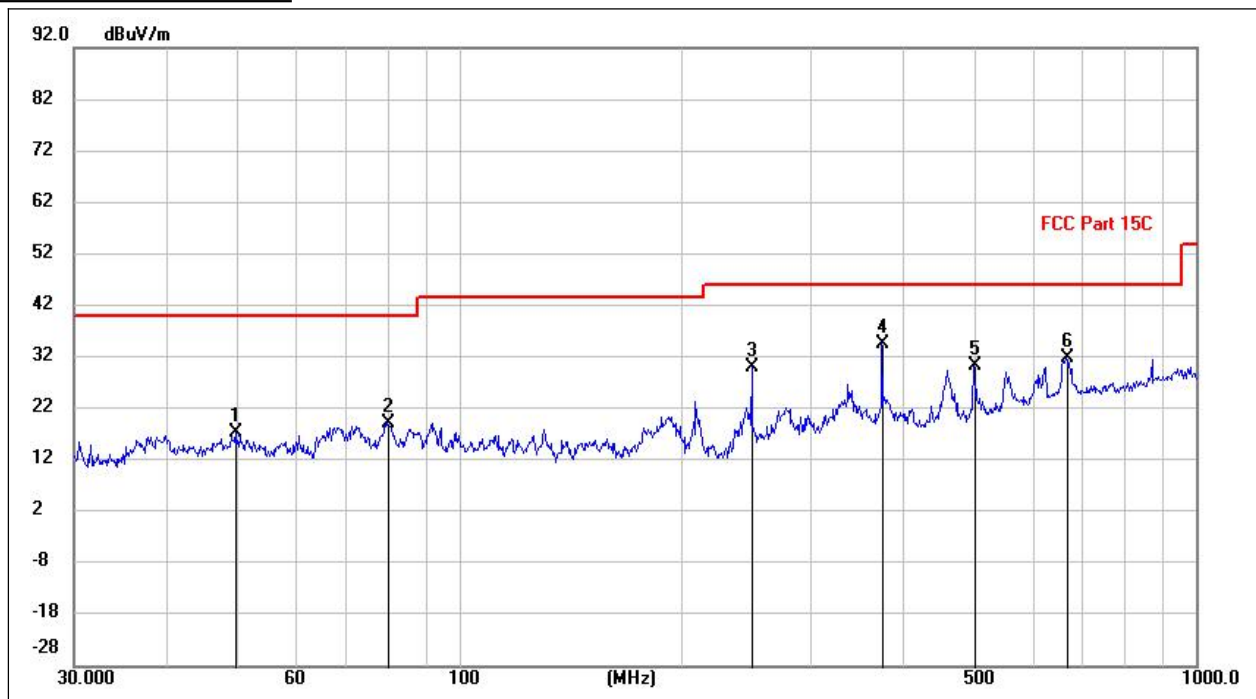


(802.11ac_5240MHz, Antenna Vertical, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8805.000	32.45	1.81	34.26	54.00	-19.74	AVG	V
8866.500	39.98	1.81	41.79	68.20	-26.41	peak	V
10462.000	37.42	3.46	40.88	68.20	-27.32	peak	V
10516.500	30.72	3.76	34.48	54.00	-19.52	AVG	V
11694.500	37.68	3.93	41.61	74.00	-32.39	peak	V
11739.500	29.51	4.14	33.65	54.00	-20.35	AVG	V
13342.500	27.55	6.43	33.98	54.00	-20.02	AVG	V
13343.500	35.58	6.45	42.03	74.00	-31.97	peak	V
14547.500	36.30	8.98	45.28	68.20	-22.92	peak	V
14547.500	27.54	8.98	36.52	54.00	-17.48	AVG	V
16761.500	26.04	11.60	37.64	54.00	-16.36	AVG	V
16783.500	33.12	11.51	44.63	68.20	-23.57	peak	V

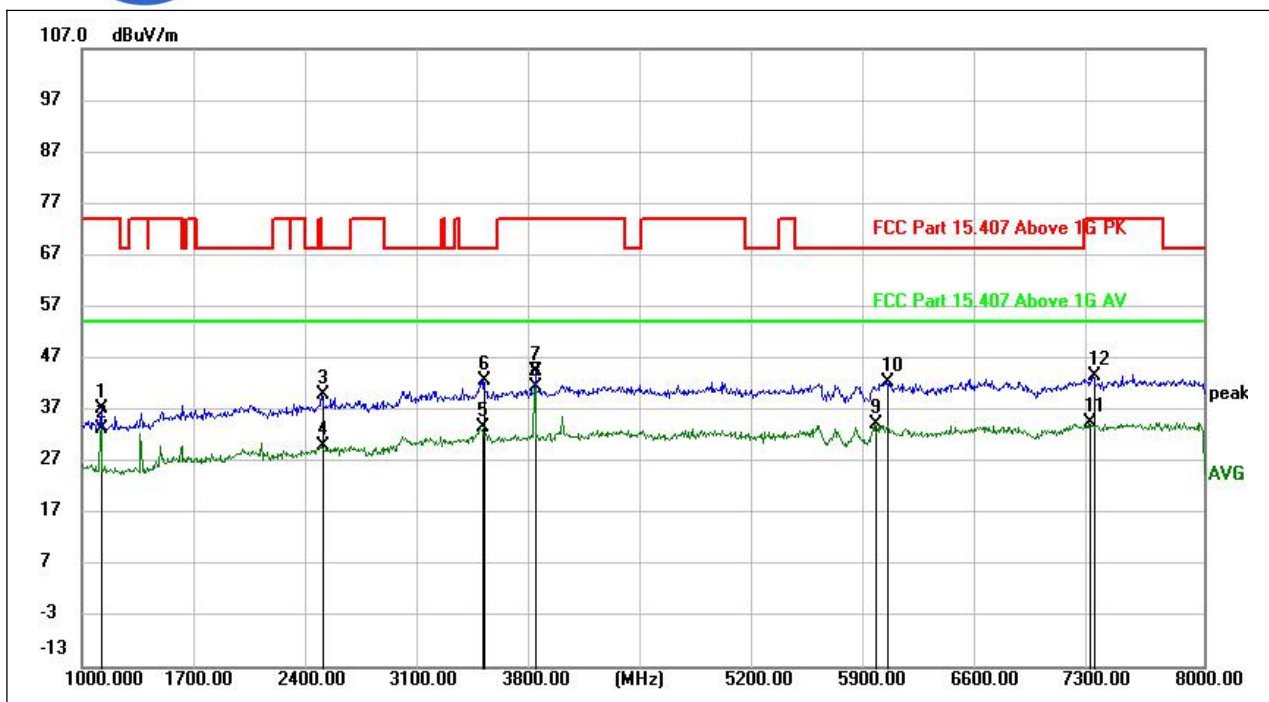


Plot for Channel = 149



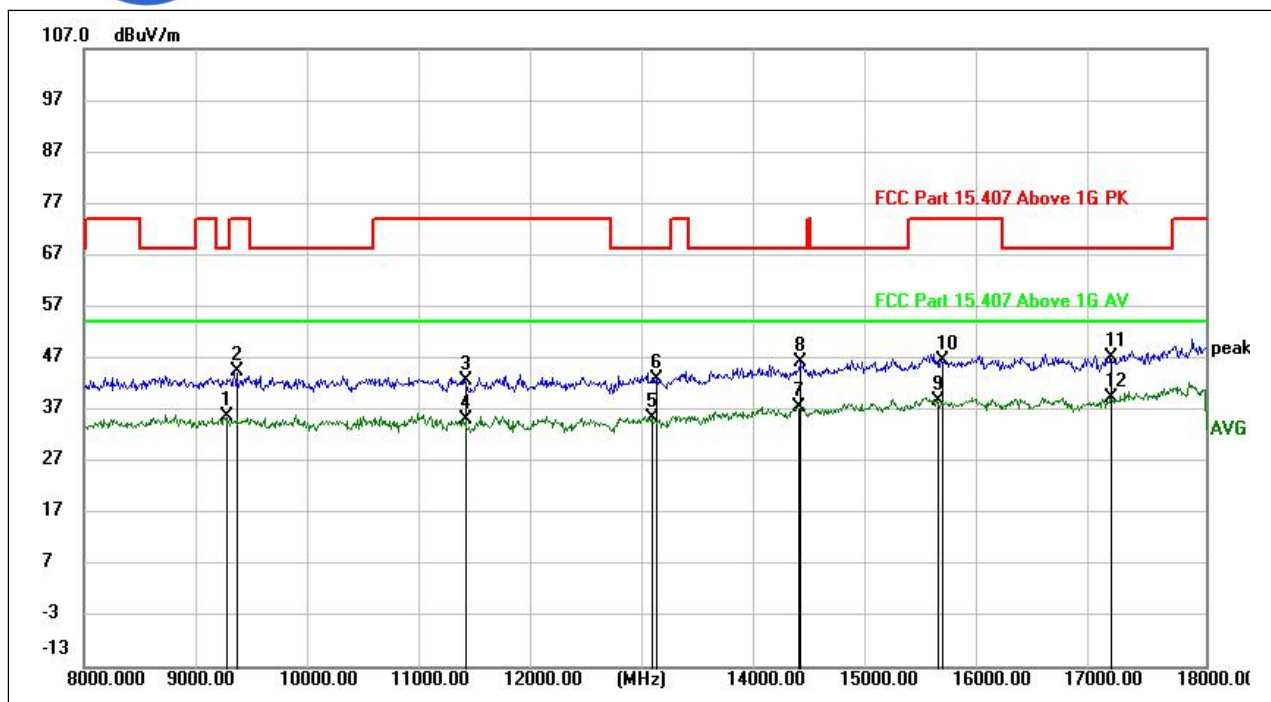
(802.11ac _5745MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
49.7330	1.25	16.03	17.28	40.00	-22.72	peak	H
79.8143	8.29	10.85	19.14	40.00	-20.86	peak	H
249.9942	15.09	14.89	29.98	46.00	-16.02	peak	H
375.0169	16.32	18.39	34.71	46.00	-11.29	peak	H
500.0380	8.34	22.00	30.34	46.00	-15.66	peak	H
665.9202	7.44	24.34	31.78	46.00	-14.22	peak	H



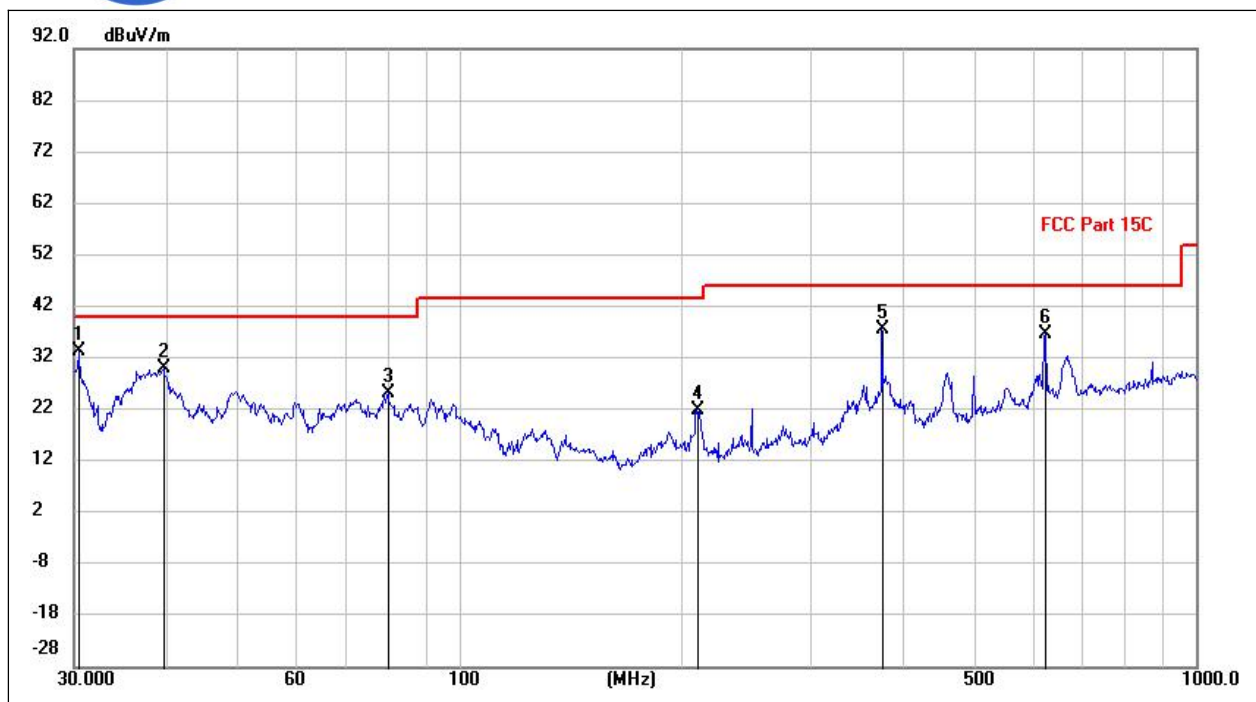
(802.11a _5745MHz, Antenna Horizontal, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	52.20	-14.86	37.34	74.00	-36.66	peak	H
1124.950	48.15	-14.86	33.29	54.00	-20.71	AVG	H
2500.450	50.21	-10.22	39.99	68.20	-28.21	peak	H
2500.450	40.25	-10.22	30.03	54.00	-23.97	AVG	H
3494.450	40.56	-6.97	33.59	54.00	-20.41	AVG	H
3513.000	49.44	-6.82	42.62	68.20	-25.58	peak	H
3830.100	49.40	-4.92	44.48	74.00	-29.52	peak	H
3830.100	46.29	-4.92	41.37	54.00	-12.63	AVG	H
5949.350	36.45	-2.37	34.08	54.00	-19.92	AVG	H
6021.450	45.77	-3.47	42.30	68.20	-25.90	peak	H
7288.800	35.55	-1.13	34.42	54.00	-19.58	AVG	H
7311.900	44.62	-1.19	43.43	74.00	-30.57	peak	H



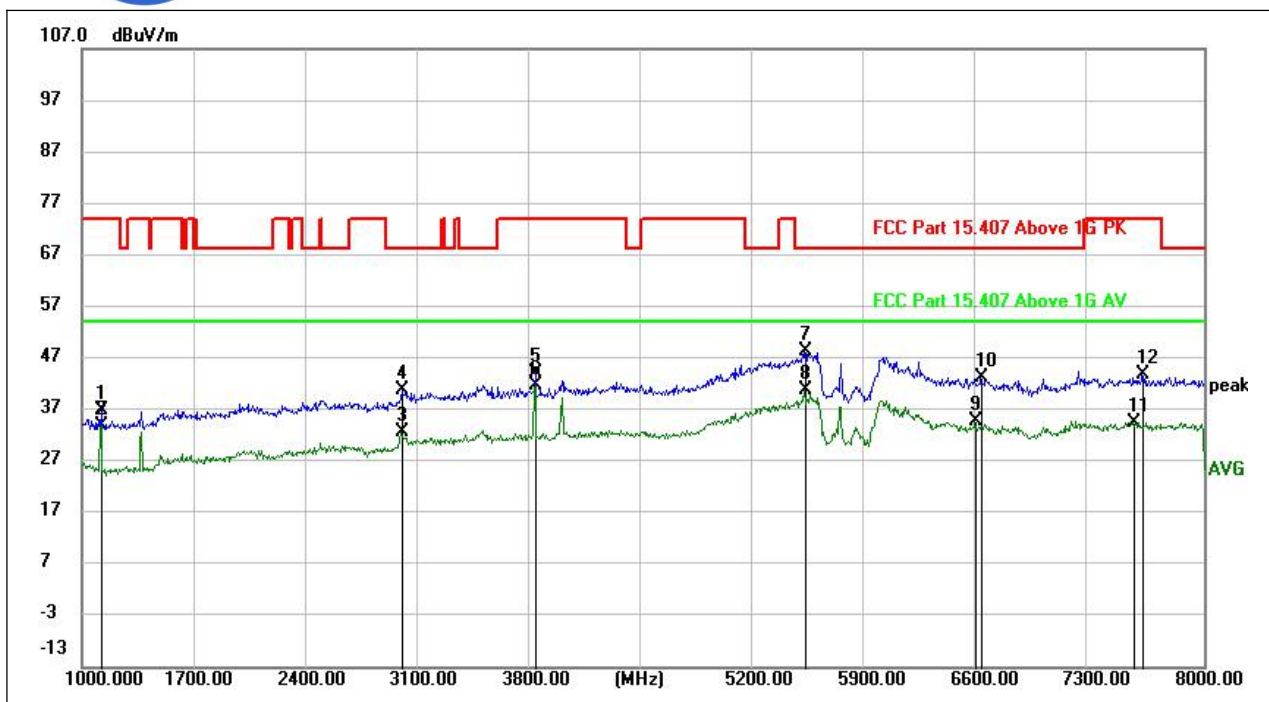
(802.11ac _5745MHz, Antenna Horizontal, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
9261.000	33.42	2.20	35.62	54.00	-18.38	AVG	H
9357.000	42.45	2.07	44.52	74.00	-29.48	peak	H
11399.500	38.84	3.81	42.65	74.00	-31.35	peak	H
11404.000	31.23	3.76	34.99	54.00	-19.01	AVG	H
13070.000	29.03	6.26	35.29	54.00	-18.71	AVG	H
13101.500	36.97	5.87	42.84	68.20	-25.36	peak	H
14365.500	28.49	9.14	37.63	54.00	-16.37	AVG	H
14388.500	37.28	9.04	46.32	68.20	-21.88	peak	H
15606.500	28.47	10.26	38.73	54.00	-15.27	AVG	H
15644.500	35.73	10.84	46.57	74.00	-27.43	peak	H
17156.500	34.67	12.50	47.17	68.20	-21.03	peak	H
17156.500	26.80	12.50	39.30	54.00	-14.70	AVG	H



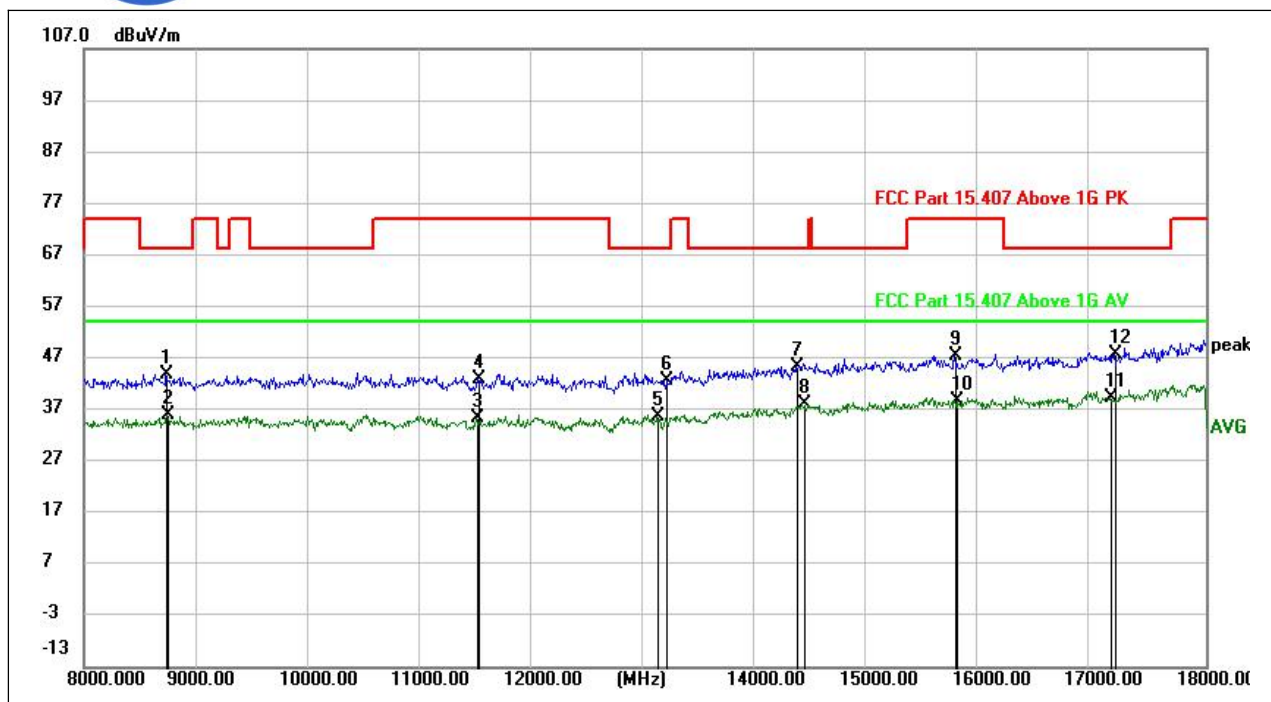
(802.11ac_5745MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
30.4558	20.40	13.08	33.48	40.00	-6.52	peak	V
39.7217	14.75	15.28	30.03	40.00	-9.97	peak	V
80.2774	14.38	10.84	25.22	40.00	-14.78	peak	V
210.2324	8.52	13.32	21.84	43.50	-21.66	peak	V
375.0169	19.10	18.39	37.49	46.00	-8.51	peak	V
625.0780	12.88	23.84	36.72	46.00	-9.28	peak	V



(802.11ac _5745MHz, Antenna Vertical, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	51.73	-14.86	36.87	74.00	-37.13	peak	V
1124.950	48.76	-14.86	33.90	54.00	-20.10	AVG	V
3000.250	37.86	-5.31	32.55	54.00	-21.45	AVG	V
3001.650	46.28	-5.35	40.93	68.20	-27.27	peak	V
3830.100	49.20	-4.92	44.28	74.00	-29.72	peak	V
3830.100	46.53	-4.92	41.61	54.00	-12.39	AVG	V
5512.200	51.48	-3.01	48.47	68.20	-19.73	peak	V
5512.200	43.71	-3.01	40.70	54.00	-13.30	AVG	V
6575.150	36.63	-1.94	34.69	54.00	-19.31	AVG	V
6613.300	44.87	-1.74	43.13	68.20	-25.07	peak	V
7565.300	35.80	-1.20	34.60	54.00	-19.40	AVG	V
7618.150	45.02	-1.07	43.95	74.00	-30.05	peak	V

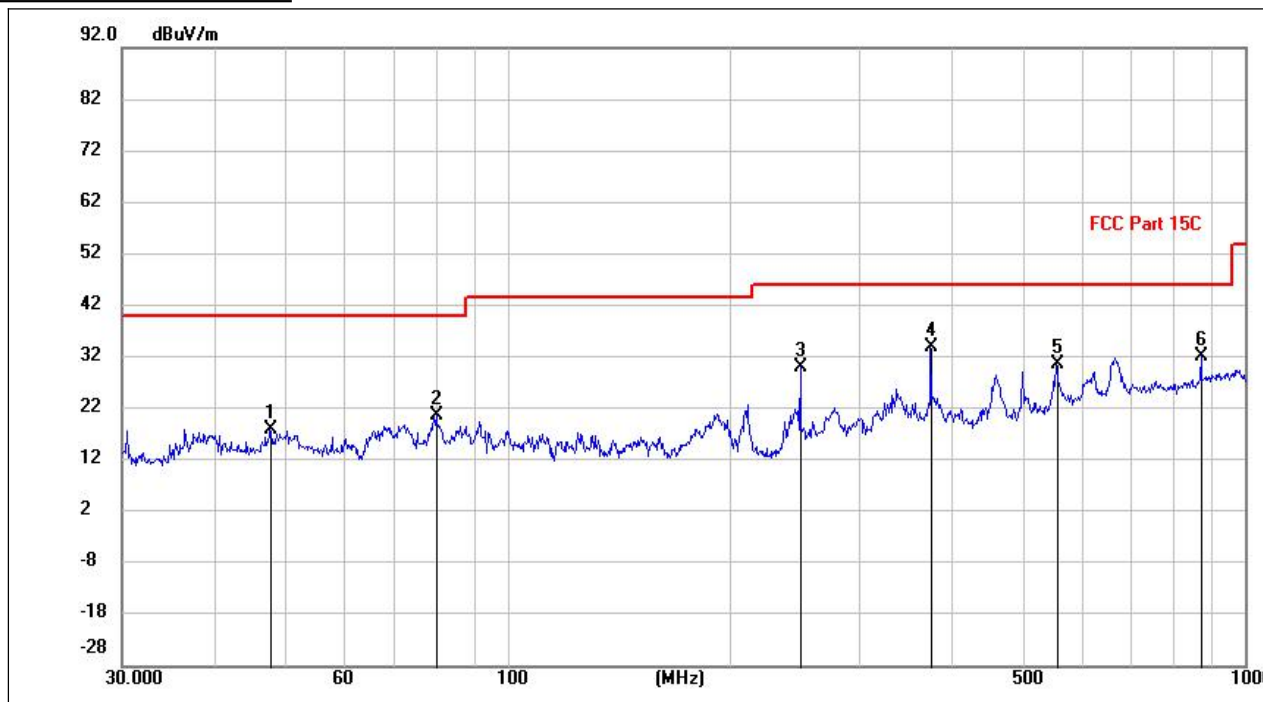


(802.11ac_5745MHz, Antenna Vertical, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8738.000	42.08	1.68	43.76	68.20	-24.44	peak	V
8746.500	34.37	1.67	36.04	54.00	-17.96	AVG	V
11510.000	31.34	3.93	35.27	54.00	-18.73	AVG	V
11513.500	38.99	3.92	42.91	74.00	-31.09	peak	V
13118.000	29.99	5.60	35.59	54.00	-18.41	AVG	V
13199.500	37.07	5.56	42.63	68.20	-25.57	peak	V
14351.000	36.48	9.01	45.49	68.20	-22.71	peak	V
14412.500	29.00	8.96	37.96	54.00	-16.04	AVG	V
15766.000	37.06	10.37	47.43	74.00	-26.57	peak	V
15781.000	28.52	10.29	38.81	54.00	-15.19	AVG	V
17154.000	26.51	12.88	39.39	54.00	-14.61	AVG	V
17186.000	34.93	12.69	47.62	68.20	-20.58	peak	V

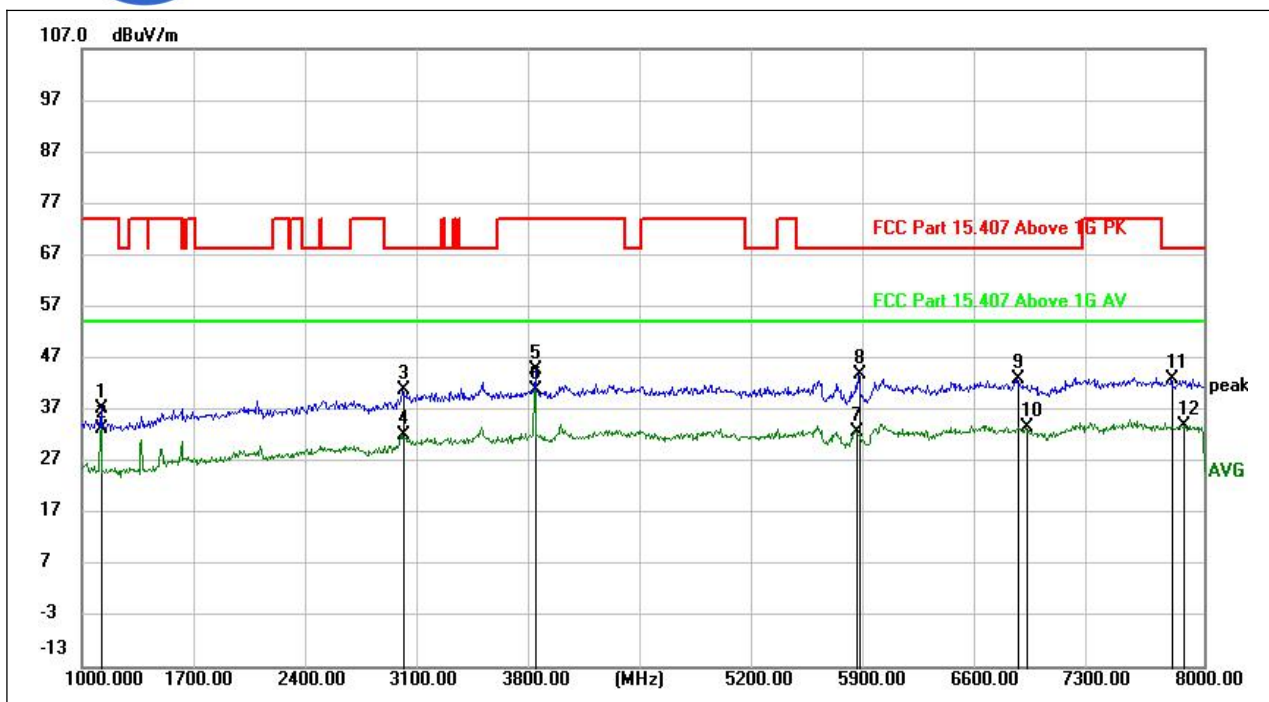


Plot for Channel = 157



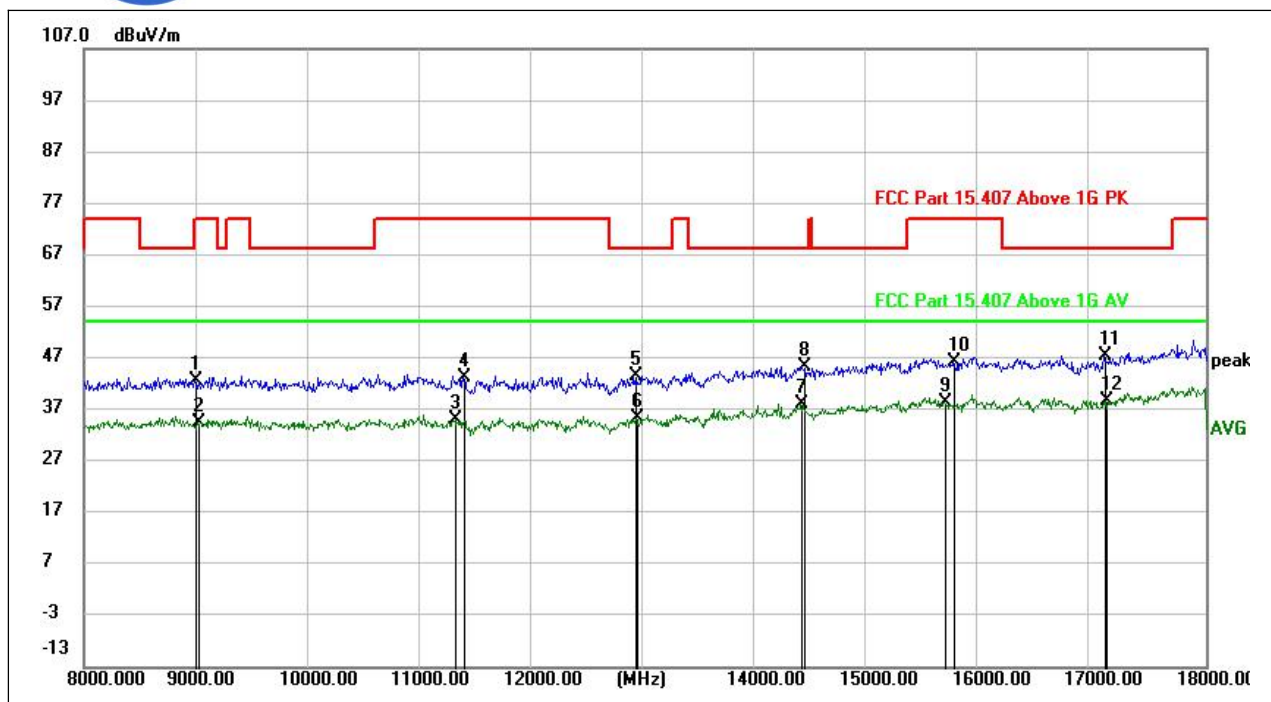
(802.11ac _5785MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
47.8176	2.43	15.50	17.93	40.00	-22.07	peak	H
80.1930	9.80	10.89	20.69	40.00	-19.31	peak	H
249.9942	15.21	14.89	30.10	46.00	-15.90	peak	H
375.0169	15.48	18.39	33.87	46.00	-12.13	peak	H
555.7016	8.05	22.66	30.71	46.00	-15.29	peak	H
875.0935	4.78	27.50	32.28	46.00	-13.72	peak	H



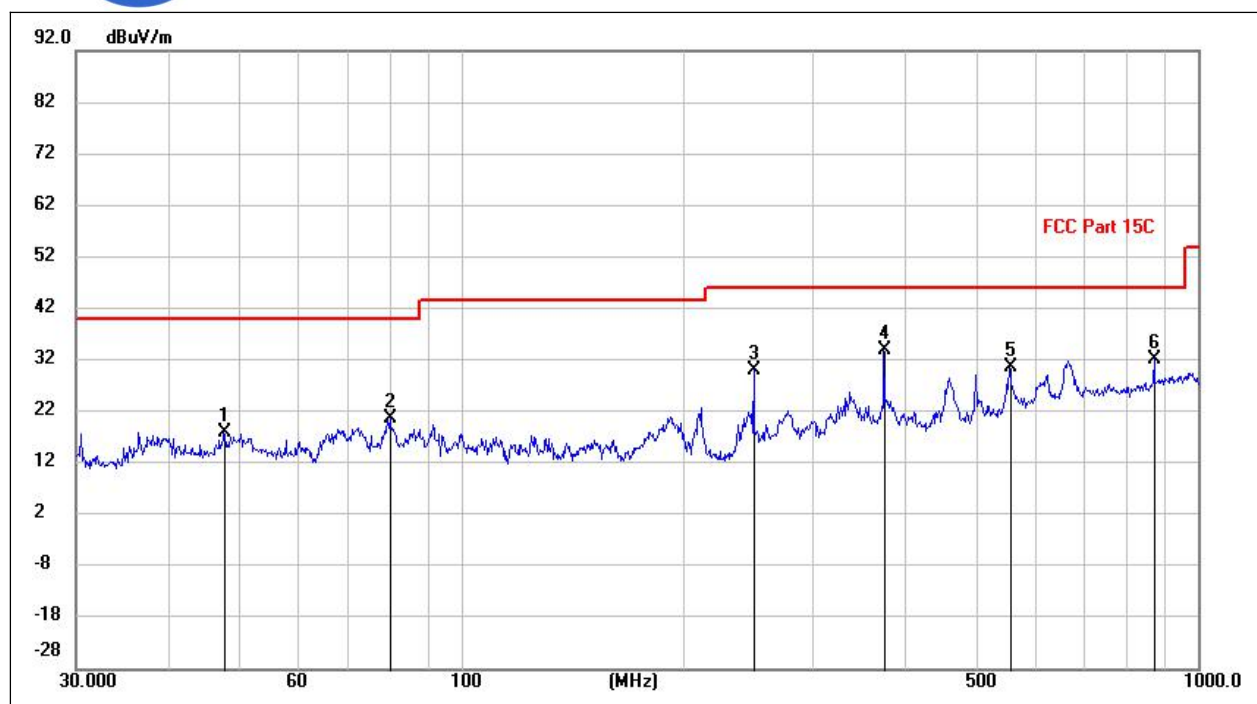
(802.11ac _5785MHz, Antenna Horizontal, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	51.97	-14.86	37.11	74.00	-36.89	peak	H
1124.950	48.25	-14.86	33.39	54.00	-20.61	AVG	H
3002.700	48.30	-7.56	40.74	68.20	-27.46	peak	H
3002.700	39.65	-7.56	32.09	54.00	-21.91	AVG	H
3830.100	49.74	-4.92	44.82	74.00	-29.18	peak	H
3830.100	45.78	-4.92	40.86	54.00	-13.14	AVG	H
5831.750	35.52	-2.81	32.71	54.00	-21.29	AVG	H
5849.600	46.47	-2.77	43.70	68.20	-24.50	peak	H
6833.800	44.83	-1.93	42.90	68.20	-25.30	peak	H
6892.600	35.57	-1.98	33.59	54.00	-20.41	AVG	H
7802.600	44.70	-1.72	42.98	68.20	-25.22	peak	H
7867.350	35.56	-1.54	34.02	54.00	-19.98	AVG	H



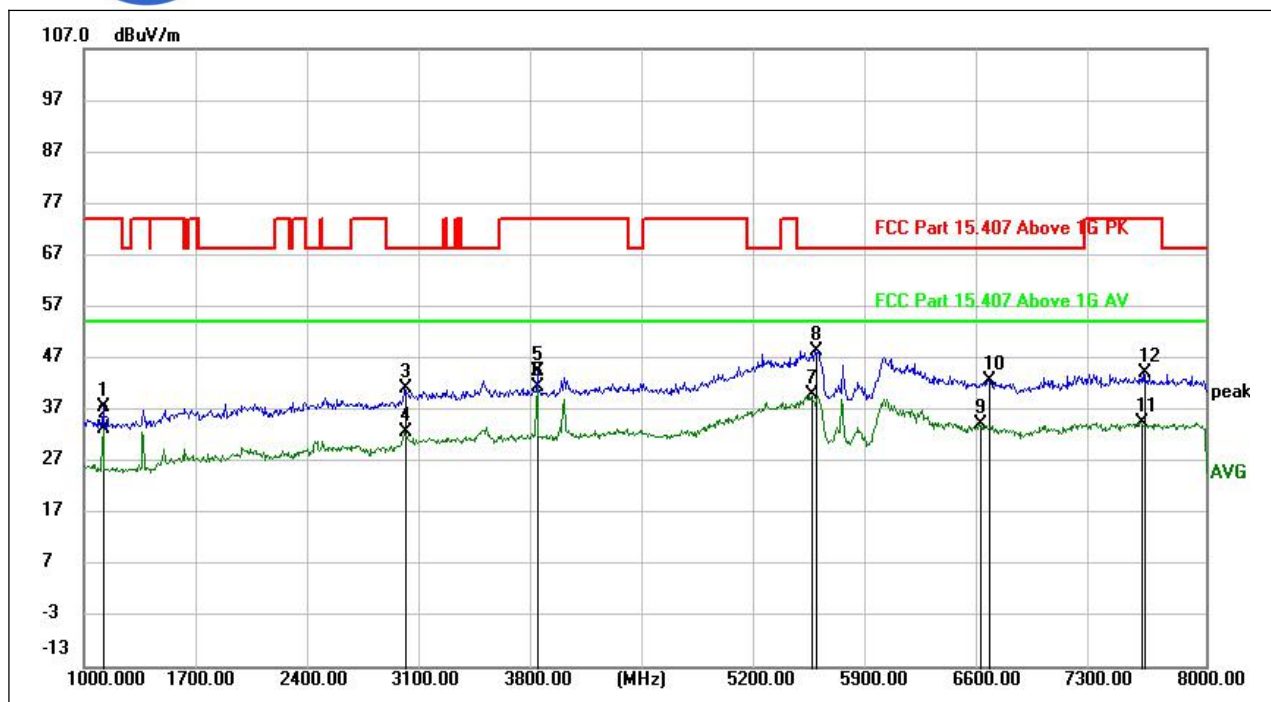
(802.11ac_5785MHz, Antenna Horizontal, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8992.000	40.87	1.62	42.49	68.20	-25.71	peak	H
9023.000	33.00	1.54	34.54	54.00	-19.46	AVG	H
11313.000	31.61	3.35	34.96	54.00	-19.04	AVG	H
11388.500	39.48	3.70	43.18	74.00	-30.82	peak	H
12914.000	38.00	5.48	43.48	68.20	-24.72	peak	H
12926.500	29.67	5.59	35.26	54.00	-18.74	AVG	H
14400.000	29.07	8.98	38.05	54.00	-15.95	AVG	H
14411.500	36.56	8.82	45.38	68.20	-22.82	peak	H
15678.000	27.13	11.27	38.40	54.00	-15.60	AVG	H
15755.000	35.76	10.42	46.18	74.00	-27.82	peak	H
17104.000	35.85	11.60	47.45	68.20	-20.75	peak	H
17111.000	27.03	11.72	38.75	54.00	-15.25	AVG	H



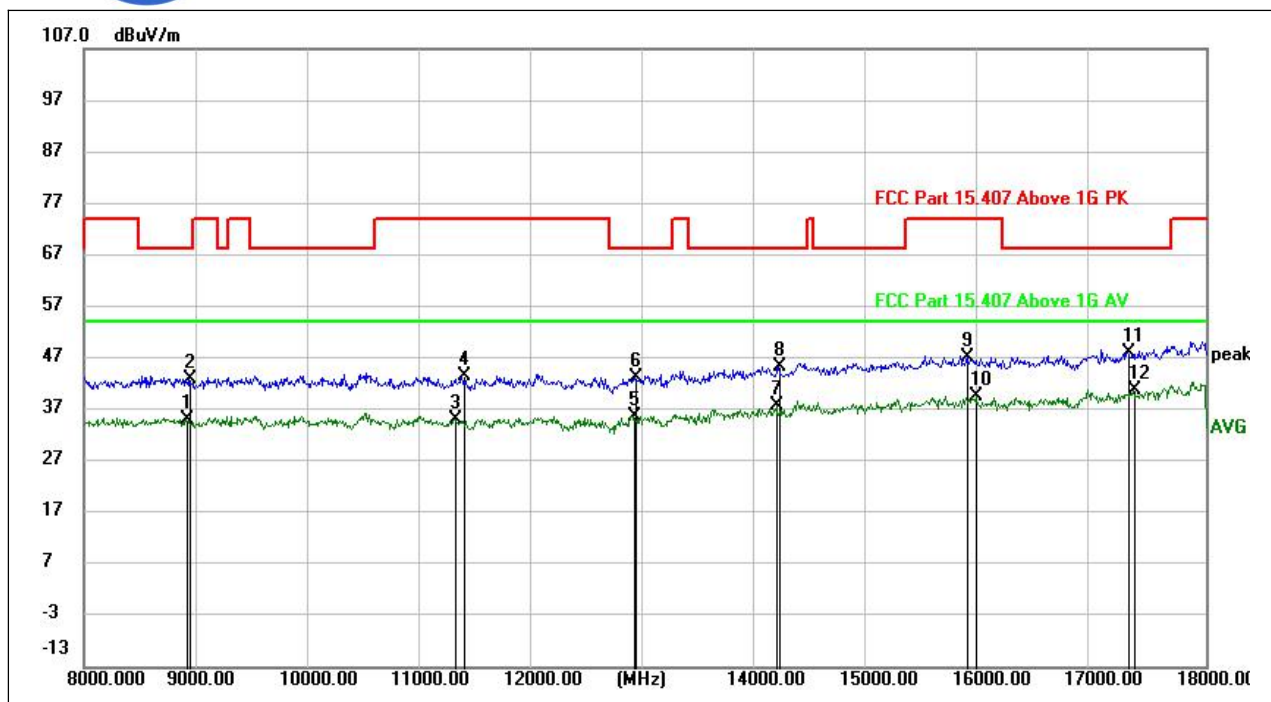
(802.11ac_5785MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
47.8176	2.43	15.50	17.93	40.00	-22.07	peak	V
80.1930	9.80	10.89	20.69	40.00	-19.31	peak	V
249.9942	15.21	14.89	30.10	46.00	-15.90	peak	V
375.0169	15.48	18.39	33.87	46.00	-12.13	peak	V
555.7016	8.05	22.66	30.71	46.00	-15.29	peak	V
875.0935	4.78	27.50	32.28	46.00	-13.72	peak	V



(802.11ac _5785MHz, Antenna Vertical, 1GHz to 8GHz)

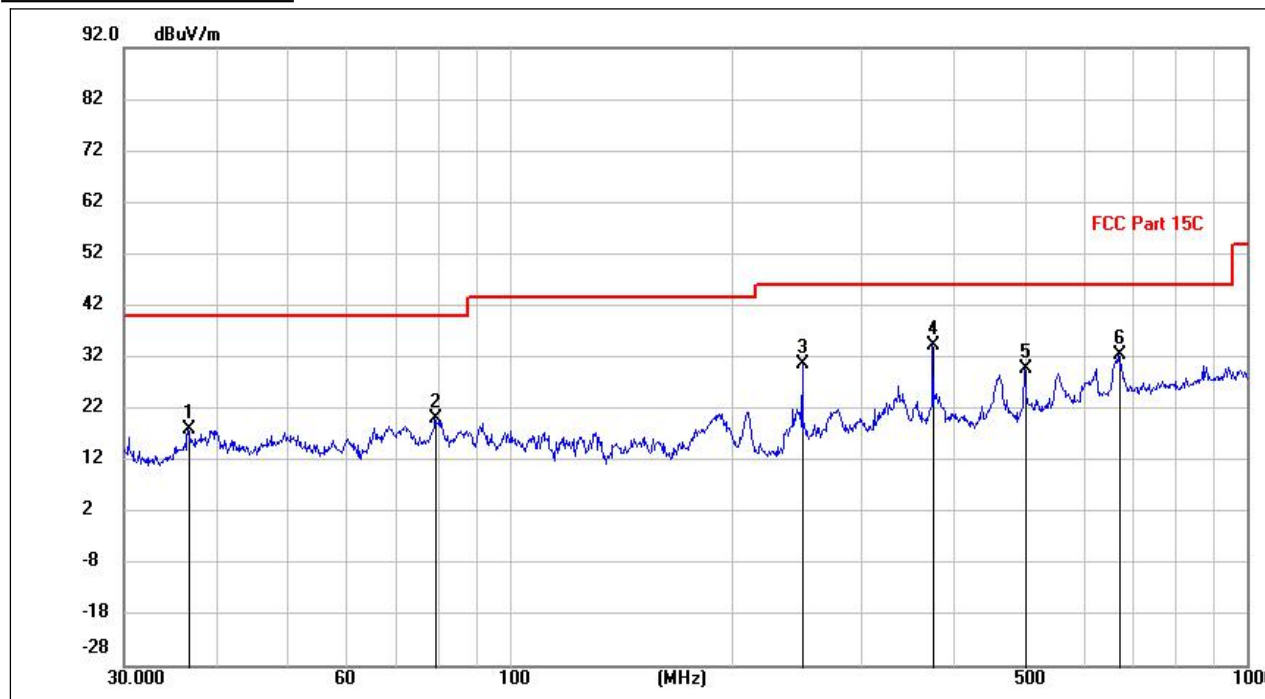
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.600	52.48	-14.86	37.62	74.00	-36.38	peak	V
1124.600	48.17	-14.86	33.31	54.00	-20.69	AVG	V
3005.500	46.72	-5.46	41.26	68.20	-26.94	peak	V
3005.500	38.04	-5.46	32.58	54.00	-21.42	AVG	V
3830.100	49.43	-4.92	44.51	74.00	-29.49	peak	V
3830.100	46.27	-4.92	41.35	54.00	-12.65	AVG	V
5538.100	43.28	-3.22	40.06	54.00	-13.94	AVG	V
5564.700	51.54	-3.07	48.47	68.20	-19.73	peak	V
6593.000	35.99	-1.86	34.13	54.00	-19.87	AVG	V
6648.650	44.16	-1.52	42.64	68.20	-25.56	peak	V
7597.850	35.34	-0.89	34.45	54.00	-19.55	AVG	V
7616.750	45.17	-1.05	44.12	74.00	-29.88	peak	V



(802.11ac_5785MHz, Antenna Vertical, 8GHz to 18GHz)

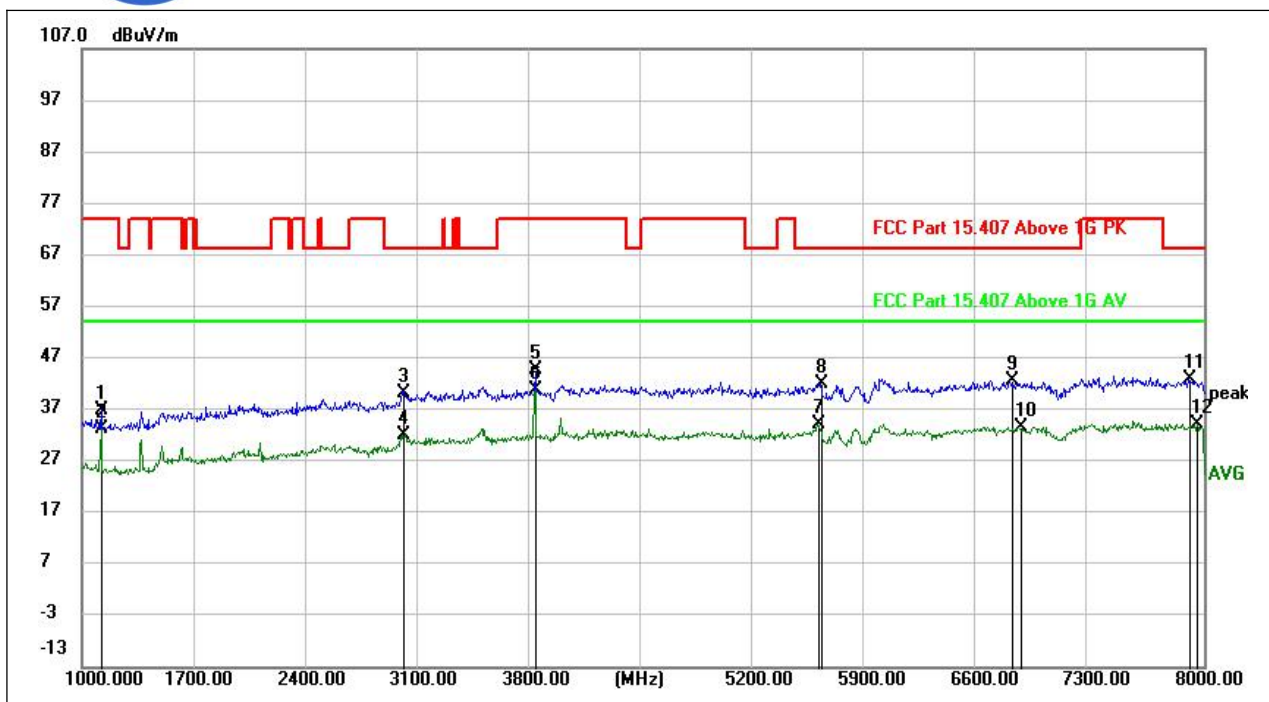
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8914.500	33.66	1.37	35.03	54.00	-18.97	AVG	V
8946.000	41.45	1.41	42.86	68.20	-25.34	peak	V
11313.500	31.60	3.35	34.95	54.00	-19.05	AVG	V
11381.500	39.86	3.61	43.47	74.00	-30.53	peak	V
12901.500	30.50	5.26	35.76	54.00	-18.24	AVG	V
12916.000	37.88	5.38	43.26	68.20	-24.94	peak	V
14180.000	29.32	8.35	37.67	54.00	-16.33	AVG	V
14198.500	37.02	8.34	45.36	68.20	-22.84	peak	V
15878.500	36.10	11.01	47.11	74.00	-26.89	peak	V
15953.500	28.09	11.42	39.51	54.00	-14.49	AVG	V
17313.000	34.94	12.98	47.92	68.20	-20.28	peak	V
17357.000	27.86	13.09	40.95	54.00	-13.05	AVG	V

Plot for Channel = 165



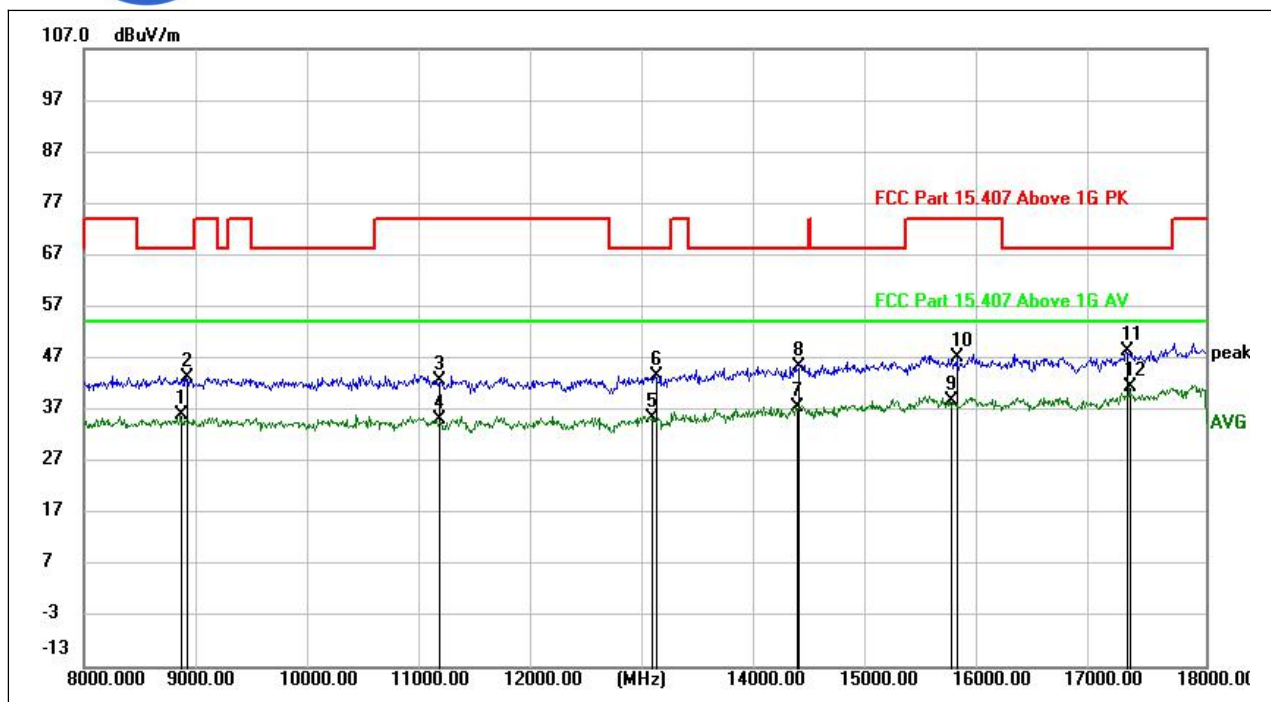
(802.11ac _5825MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
36.7146	4.40	13.44	17.84	40.00	-22.16	peak	H
79.2982	9.64	10.47	20.11	40.00	-19.89	peak	H
249.9942	15.67	14.89	30.56	46.00	-15.44	peak	H
375.0169	15.85	18.39	34.24	46.00	-11.76	peak	H
500.0380	7.67	22.00	29.67	46.00	-16.33	peak	H
671.7836	7.91	24.58	32.49	46.00	-13.51	peak	H



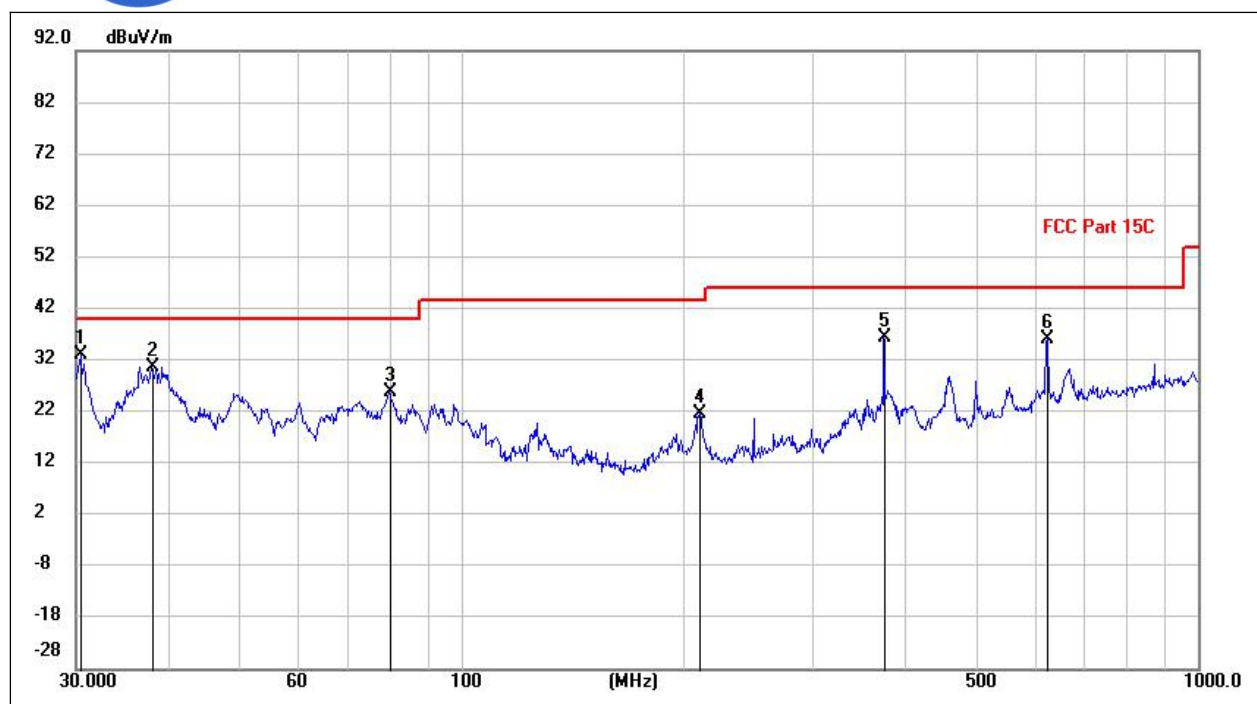
(802.11ac_5825MHz, Antenna Horizontal, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	51.86	-14.86	37.00	74.00	-37.00	peak	H
1124.950	48.17	-14.86	33.31	54.00	-20.69	AVG	H
3002.350	47.89	-7.56	40.33	68.20	-27.87	peak	H
3002.350	39.66	-7.56	32.10	54.00	-21.90	AVG	H
3830.100	49.51	-4.92	44.59	74.00	-29.41	peak	H
3830.100	45.75	-4.92	40.83	54.00	-13.17	AVG	H
5593.400	36.82	-2.66	34.16	54.00	-19.84	AVG	H
5612.650	44.82	-2.71	42.11	68.20	-26.09	peak	H
6801.950	44.42	-1.93	42.49	68.20	-25.71	peak	H
6855.150	35.61	-1.97	33.64	54.00	-20.36	AVG	H
7907.950	44.17	-1.32	42.85	68.20	-25.35	peak	H
7952.400	35.42	-1.22	34.20	54.00	-19.80	AVG	H



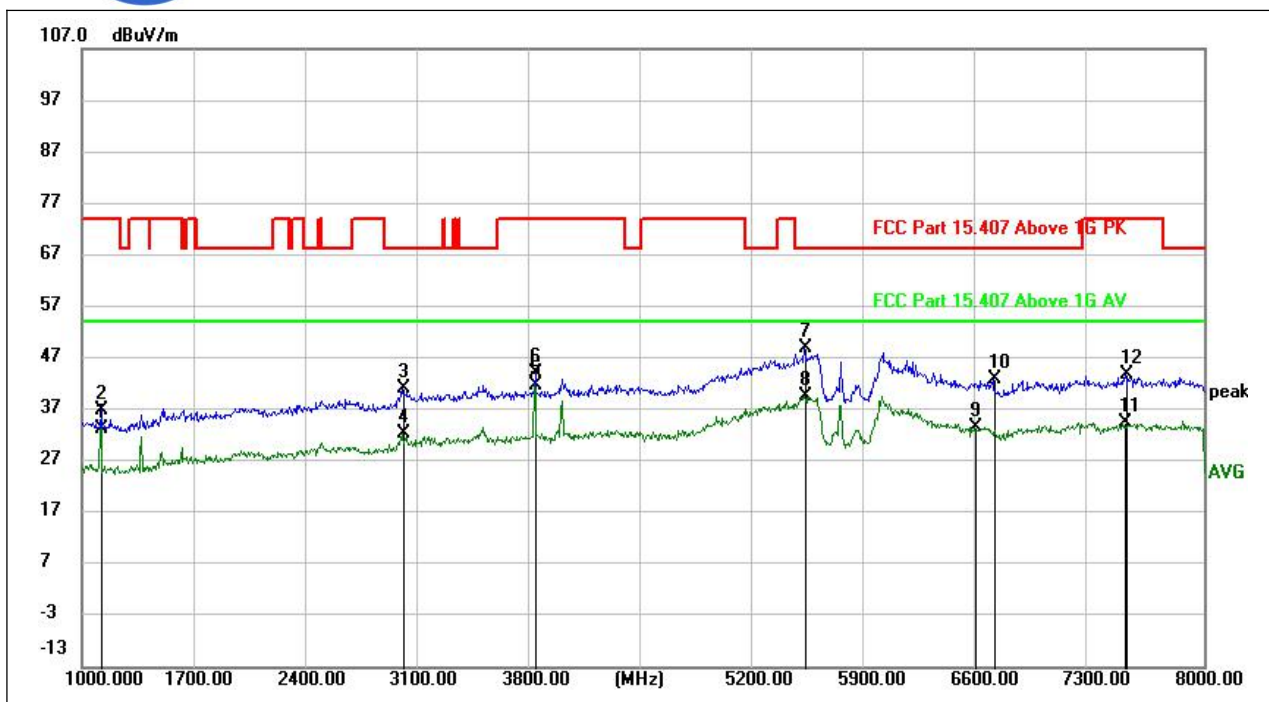
(802.11ac _5825MHz, Antenna Horizontal, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8869.500	33.95	1.92	35.87	54.00	-18.13	AVG	H
8918.000	41.72	1.61	43.33	68.20	-24.87	peak	H
11161.500	39.43	3.21	42.64	74.00	-31.36	peak	H
11161.500	31.87	3.21	35.08	54.00	-18.92	AVG	H
13068.000	29.17	6.28	35.45	54.00	-18.55	AVG	H
13102.000	37.71	5.87	43.58	68.20	-24.62	peak	H
14350.500	28.51	9.00	37.51	54.00	-16.49	AVG	H
14361.000	36.24	9.10	45.34	68.20	-22.86	peak	H
15723.000	28.11	10.66	38.77	54.00	-15.23	AVG	H
15782.500	36.84	10.28	47.12	74.00	-26.88	peak	H
17298.000	35.36	12.95	48.31	68.20	-19.89	peak	H
17323.000	28.38	13.01	41.39	54.00	-12.61	AVG	H



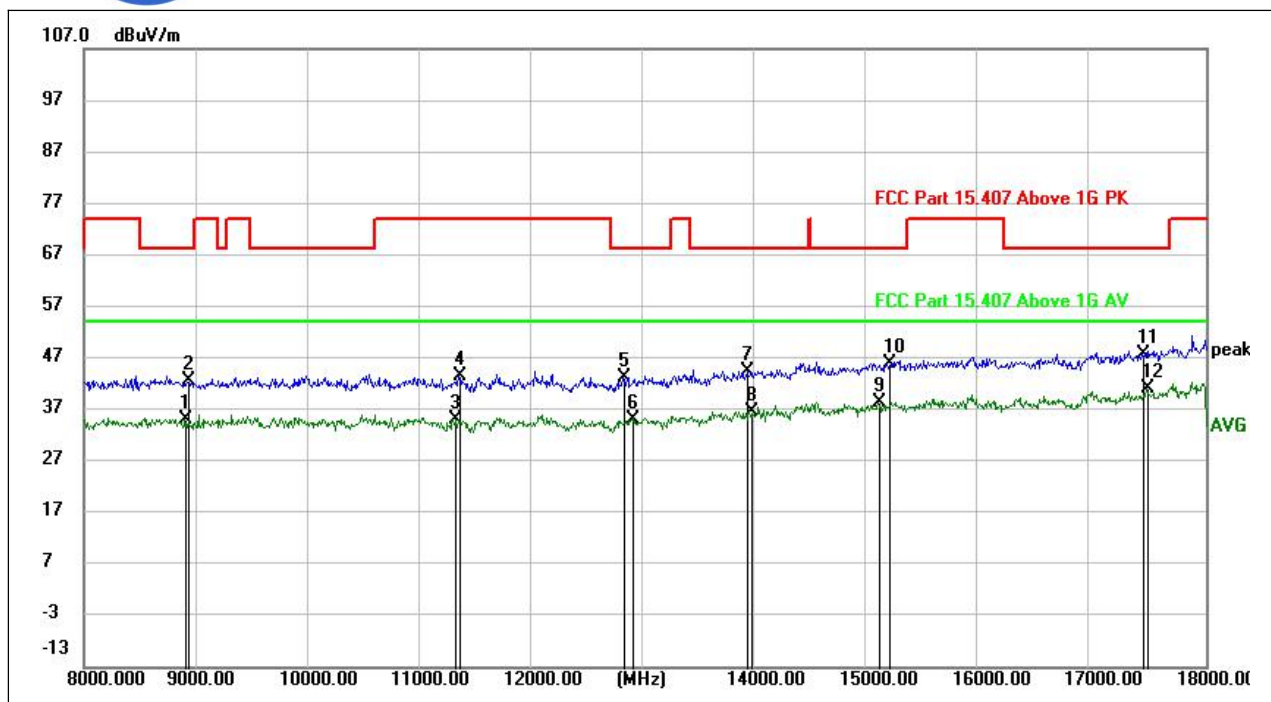
(802.11ac_5825MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
30.4878	20.09	13.03	33.12	40.00	-6.88	peak	V
38.0382	16.64	13.99	30.63	40.00	-9.37	peak	V
79.8143	14.94	10.85	25.79	40.00	-14.21	peak	V
210.7860	8.14	13.36	21.50	43.50	-22.00	peak	V
375.0169	17.89	18.39	36.28	46.00	-9.72	peak	V
625.0780	12.37	23.84	36.21	46.00	-9.79	peak	V



(802.11ac_5825MHz, Antenna Vertical , 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.600	48.18	-14.86	33.32	54.00	-20.68	AVG	V
1124.950	51.78	-14.86	36.92	74.00	-37.08	peak	V
3004.800	46.59	-5.45	41.14	68.20	-27.06	peak	V
3004.800	37.77	-5.45	32.32	54.00	-21.68	AVG	V
3829.750	46.56	-4.92	41.64	54.00	-12.36	AVG	V
3830.100	49.17	-4.92	44.25	74.00	-29.75	peak	V
5513.250	52.03	-3.01	49.02	68.20	-19.18	peak	V
5513.250	42.73	-3.01	39.72	54.00	-14.28	AVG	V
6577.250	35.65	-1.93	33.72	54.00	-20.28	AVG	V
6692.750	45.14	-2.07	43.07	68.20	-25.13	peak	V
7507.550	35.83	-1.44	34.39	54.00	-19.61	AVG	V
7514.900	45.20	-1.44	43.76	74.00	-30.24	peak	V



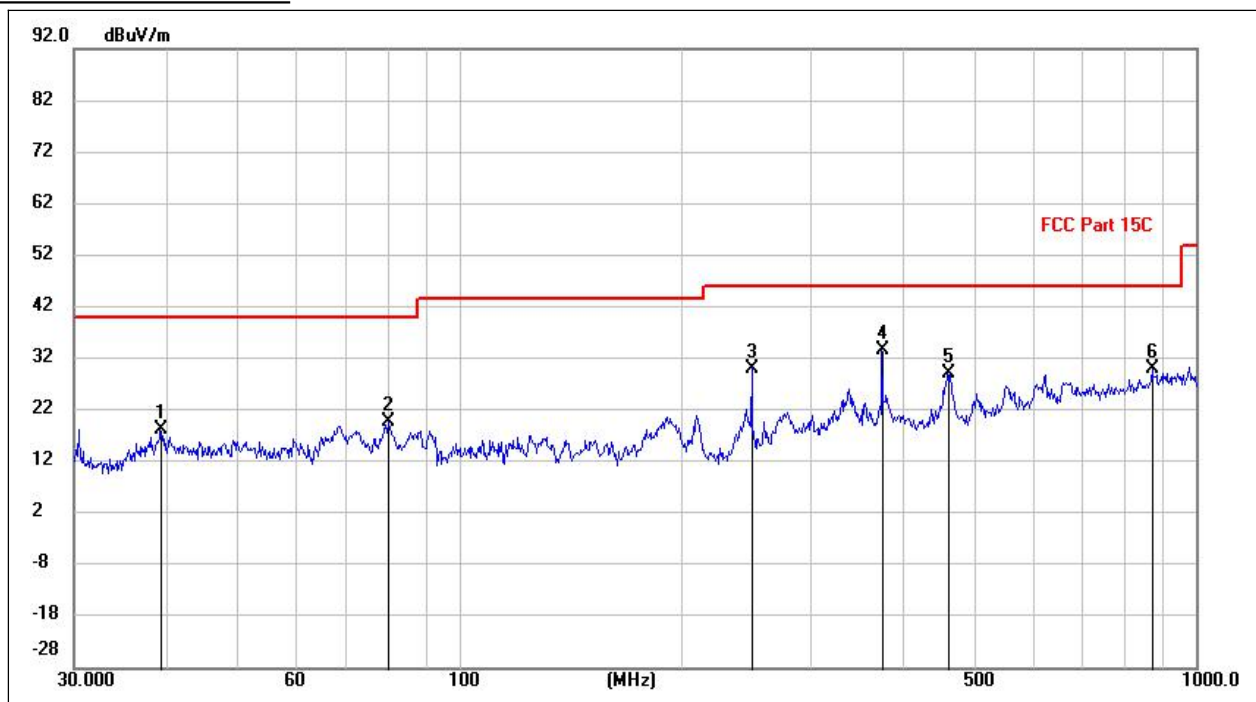
(802.11ac_5825MHz, Antenna Vertical, 8GHz to 18GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
8910.000	33.71	1.36	35.07	54.00	-18.93	AVG	V
8931.000	41.09	1.39	42.48	68.20	-25.72	peak	V
11315.500	31.74	3.32	35.06	54.00	-18.94	AVG	V
11345.000	40.29	3.13	43.42	74.00	-30.58	peak	V
12813.500	38.06	5.18	43.24	68.20	-24.96	peak	V
12887.500	30.05	5.14	35.19	54.00	-18.81	AVG	V
13919.500	36.77	7.80	44.57	68.20	-23.63	peak	V
13948.000	28.87	7.87	36.74	54.00	-17.26	AVG	V
15082.500	28.02	10.40	38.42	54.00	-15.58	AVG	V
15171.000	36.20	9.81	46.01	68.20	-22.19	peak	V
17436.500	34.32	13.45	47.77	68.20	-20.43	peak	V
17480.500	26.80	14.26	41.06	54.00	-12.94	AVG	V



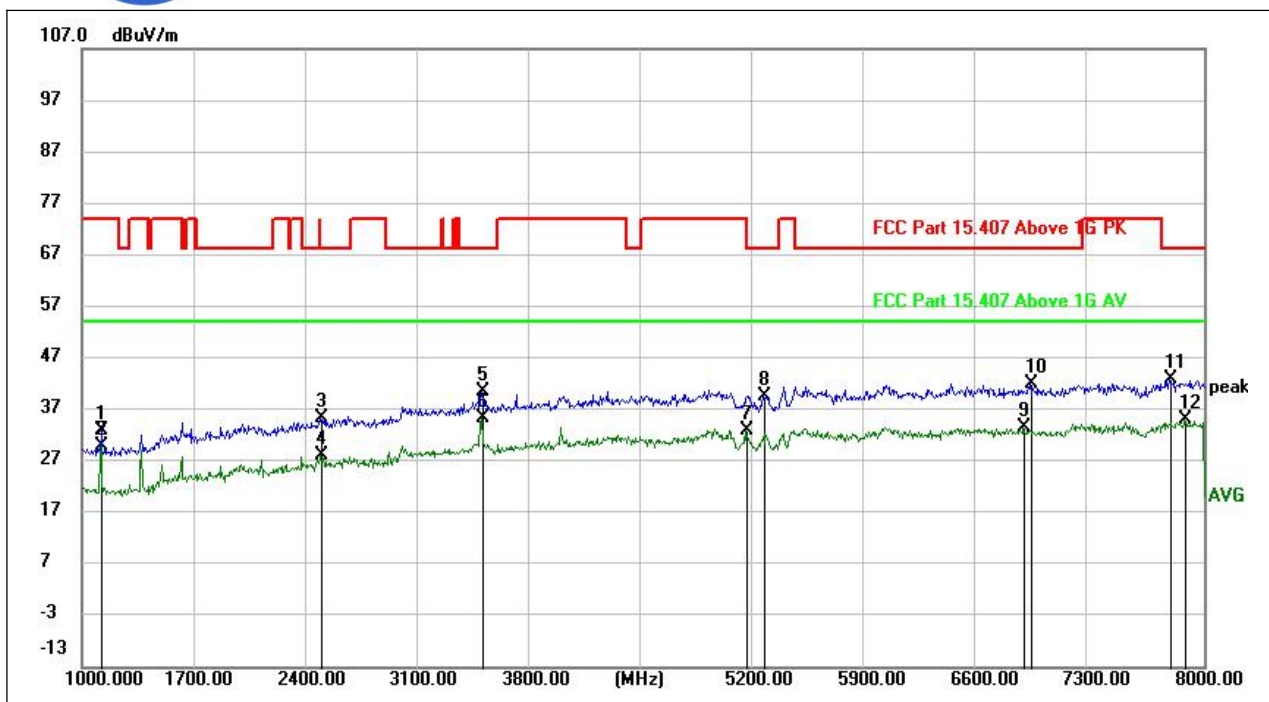
802.11ac (HT40) Test mode

Plots for Channel = 38



(802.11ac _5190MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
39.3819	3.57	14.77	18.34	40.00	-21.66	peak	H
80.2915	8.88	10.83	19.71	40.00	-20.29	peak	H
249.9942	15.30	14.89	30.19	46.00	-15.81	peak	H
375.0169	15.18	18.39	33.57	46.00	-12.43	peak	H
461.2121	8.00	21.00	29.00	46.00	-17.00	peak	H
875.0935	2.69	27.50	30.19	46.00	-15.81	peak	H



(802.11ac_5190MHz, Antenna Horizontal, 1GHz to 8GHz)

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Pol
1124.950	50.59	-17.66	32.93	74.00	-41.07	peak	H
1124.950	47.65	-17.66	29.99	54.00	-24.01	AVG	H
2492.050	46.13	-10.76	35.37	74.00	-38.63	peak	H
2498.000	39.55	-11.31	28.24	54.00	-25.76	AVG	H
3493.400	48.38	-7.89	40.49	68.20	-27.71	peak	H
3493.400	43.19	-7.89	35.30	54.00	-18.70	AVG	H
5145.050	35.89	-2.93	32.96	54.00	-21.04	AVG	H
5259.850	42.72	-2.98	39.74	68.20	-28.46	peak	H
6876.500	34.88	-1.27	33.61	54.00	-20.39	AVG	H
6922.000	43.22	-1.27	41.95	68.20	-26.25	peak	H
7785.800	43.05	-0.16	42.89	68.20	-25.31	peak	H
7886.250	34.96	0.05	35.01	54.00	-18.99	AVG	H