



802.11ac (VHT20) Mode

A. Test Verdict:

Channel	Frequency (MHz)	Measured PPSD (dBm/MHz)	Duty Factor	Corrected PPSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
36	5180	2.98	0.09	3.07	11	PASS
44	5220	2.88		2.97		
48	5240	2.63		2.72		
52	5260	2.68		2.77		
60	5300	3.29		3.38		
64	5320	2.98		3.07		
100	5500	3.51		3.60		
120	5600	3.68		3.77		
144	5720	3.69		3.78		
Channel	Frequency (MHz)	Measured PPSD (dBm/500KHz)	Duty Factor	Corrected (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
144	5720	1.02	0.09	1.11	30	PASS
149	5745	0.64		0.73		
157	5785	0.74		0.83		
165	5825	1.08		1.17		



B. Test Plot:



(Channel 36, 5180MHz, 802.11ac (VHT20))



(Channel 44, 5220MHz, 802.11ac (VHT20))



(Channel 48, 5240MHz, 802.11ac (VHT20))



(Channel 52, 5260MHz, 802.11ac (VHT20))



(Channel 60, 5300MHz, 802.11ac (VHT20))



(Channel 64, 5320MHz, 802.11ac (VHT20))



(Channel 100, 5500MHz, 802.11ac (VHT20))



(Channel 120, 5600MHz, 802.11ac (VHT20))



(Channel 144, 5720MHz, 802.11ac (VHT20))



(Channel 144, 5720MHz, 802.11ac(VHT20))



(Channel 149, 5745MHz, 802.11ac (VHT20))



(Channel 157, 5785MHz, 802.11ac (VHT20))



(Channel 165, 5825MHz, 802.11ac (VHT20))



802.11ac (VHT40) Mode

A. Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/MHz)	Duty Factor	Corrected PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
38	5190	-1.28	0.14	-1.14	11	PASS
46	5230	-1.23		-1.09		
54	5270	-1.51		-1.37		
62	5310	-1.32		-1.18		
102	5510	-0.83		-0.69		
126	5630	-0.46		-0.32		
142	5710	-0.93		-0.79		
Channel	Frequency (MHz)	Measured PSD (dBm/500KHz)	Duty Factor	Corrected (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
142	5710	-3.63	0.14	-3.49	30	PASS
151	5755	-3.78		-3.64		
155	5795	-3.68		-3.54		

B. Test Plot:



(Channel 38, 5190MHz, 802.11ac (VHT40))



(Channel 46, 5230MHz, 802.11ac (VHT40))



(Channel 54, 5270MHz, 802.11ac (VHT40))



(Channel 62, 5310MHz, 802.11ac (VHT40))



(Channel 102, 5510MHz, 802.11ac (VHT40))



(Channel 126, 5630MHz, 802.11ac (VHT40))



(Channel 142, 5710MHz, 802.11ac (VHT40))



(Channel 142, 5710MHz, 802.11ac (VHT40))



(Channel 151, 5755MHz, 802.11ac (VHT40))



(Channel 159, 5795MHz, 802.11ac (VHT40))



802.11ac (VHT80) Mode

A. Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/MHz)	Duty Factor	Corrected PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
42	5210	-4.85	0.27	-4.58	11	PASS
58	5290	-4.84		-4.57		
106	5530	-4.46		-4.19		
122	5610	-4.40		-4.13		
138	5690	-4.16		-3.89		
Channel	Frequency (MHz)	Measured PSD (dBm/500KHz)	Duty Factor	Corrected (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
138	5690	-6.96	0.27	-6.69	30	PASS
155	5775	-7.17		-6.90		

B. Test Plot:



(Channel 42, 5210MHz, 802.11ac (VHT80))



(Channel 58, 5290MHz, 802.11ac (VHT80))



(Channel 106, 5530MHz, 802.11ac (VHT80))



(Channel 122, 5610MHz, 802.11ac (VHT80))



(Channel 138, 5690MHz, 802.11ac (VHT80))



(Channel 138, 5690MHz, 802.11ac (VHT80))



(Channel 155, 5775MHz, 802.11ac (VHT80))



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 5°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

U-NII-1 (Ch. 36) 5180MHz				
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	Fre. Dev. (kHz)	Deviation (ppm)
100%	5.00	+20(Ref)	34	6.564
100%		-30	29	5.598
100%		-20	24	4.633
100%		-10	28	5.405
100%		0	24	4.633
100%		+10	21	4.054
100%		+20	31	5.985
100%		+30	25	4.826
100%		+40	24	4.633
100%		+50	26	5.019
85%		4.25	+20	27
115%	5.75	+20	29	5.598



U-NII-2A (Ch. 52)				
5260MHz				
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	Fre. Dev. (kHz)	Deviation (ppm)
100%	5.00	+20(Ref)	17	3.232
100%		-30	21	3.992
100%		-20	26	4.943
100%		-10	24	4.563
100%		0	24	4.563
100%		+10	21	3.992
100%		+20	22	4.183
100%		+30	17	3.232
100%		+40	19	3.612
100%		+50	24	4.563
85%	4.25	+20	18	3.422
115%	5.75	+20	20	3.802

U-NII-2C (Ch. 100)				
5500MHz				
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	Fre. Dev. (kHz)	Deviation (ppm)
100%	5.00	+20(Ref)	24	4.364
100%		-30	26	4.727
100%		-20	28	5.091
100%		-10	31	5.636
100%		0	24	4.364
100%		+10	25	4.545
100%		+20	18	3.273
100%		+30	19	3.455
100%		+40	24	4.364
100%		+50	30	5.455
85%	4.25	+20	31	5.636
115%	5.75	+20	29	5.273



U-NII-3 (Ch. 149)				
5745MHz				
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	Fre. Dev. (kHz)	Deviation (ppm)
100%	5.00	+20(Ref)	21	3.655
100%		-30	25	4.352
100%		-20	24	4.178
100%		-10	26	4.526
100%		0	29	5.048
100%		+10	31	5.396
100%		+20	30	5.222
100%		+30	29	5.048
100%		+40	27	4.700
100%		+50	25	4.352
85%		4.25	+20	26
115%	5.75	+20	27	4.700

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 50μH/50Ω line impedance stabilization network (LISN).

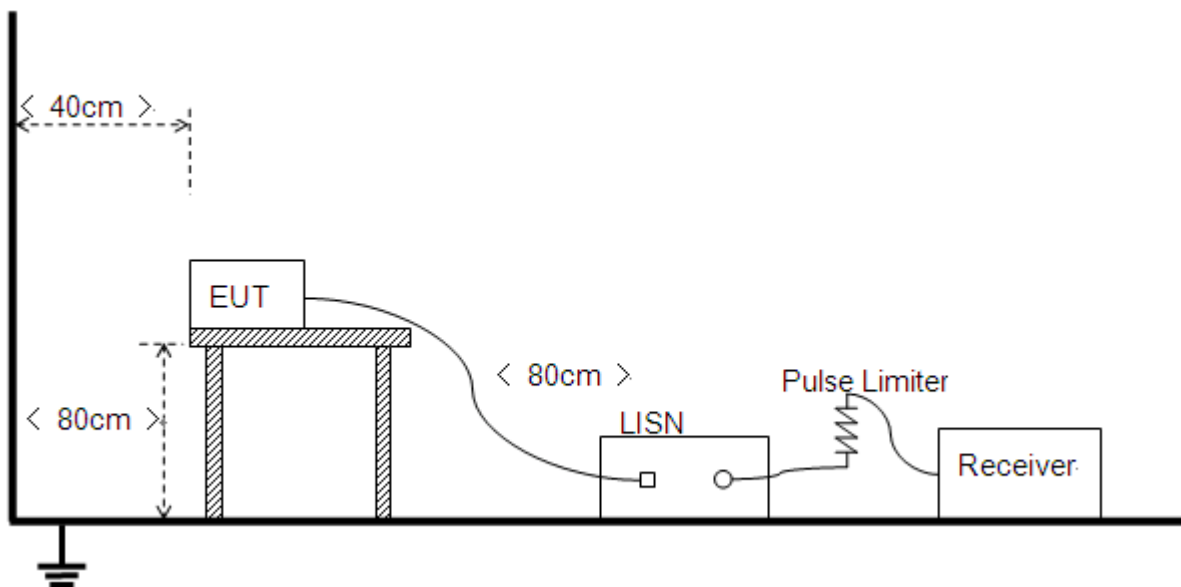
Frequency Range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

Note:

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

2.7.2. Test Description

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. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and Plot 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:

Test Mode: EUT+ ADAPTER+WIFI TX

Test Voltage: AC 120V/60Hz

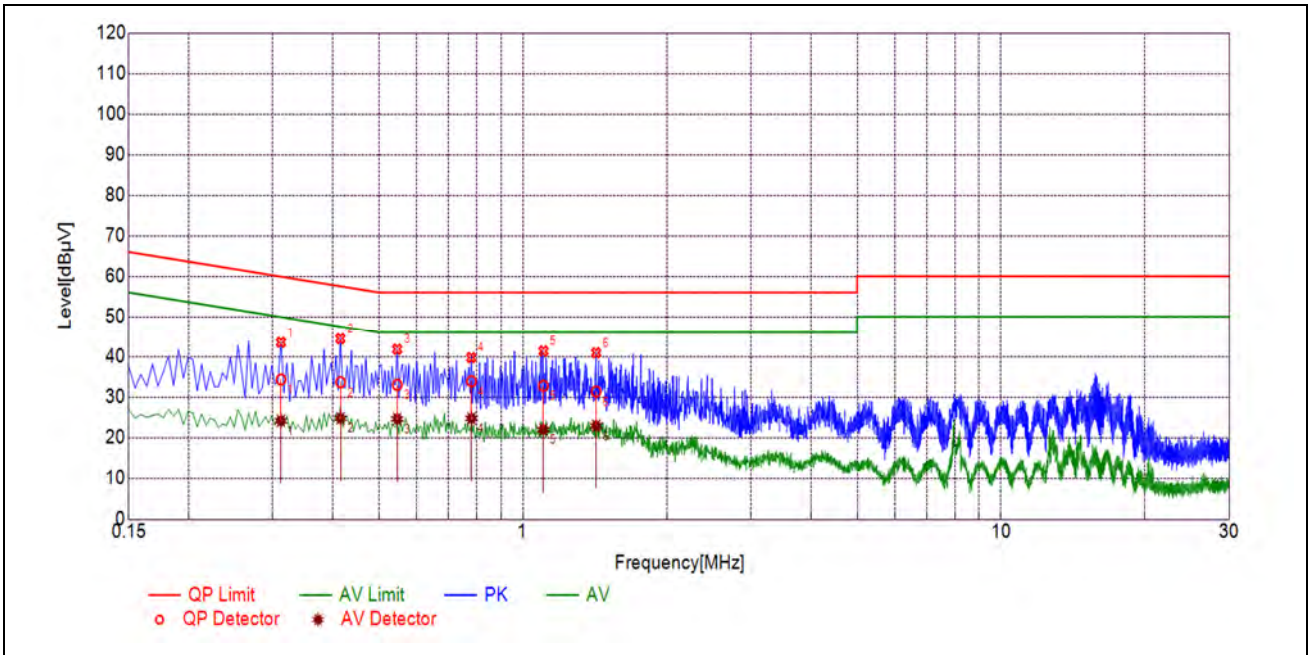
The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V]} = U_R + L_{\text{Cable loss}} \text{ [dB]} + A_{\text{Factor}}$$

U_R : Receiver Reading

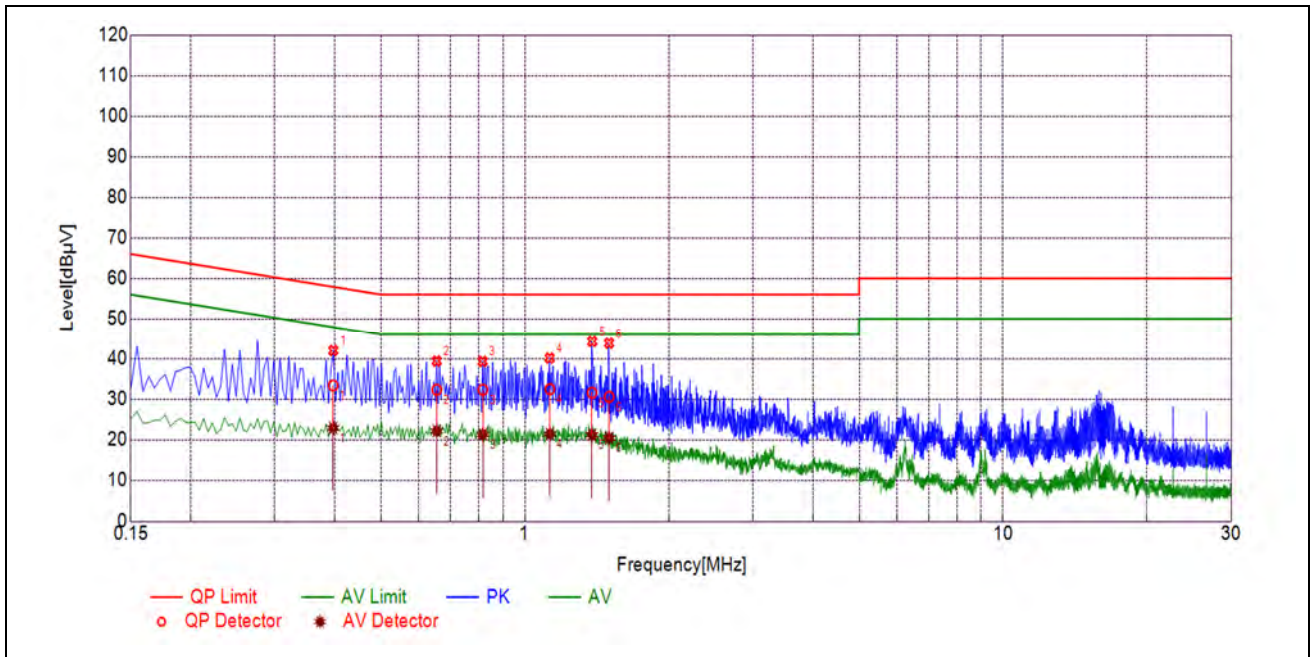
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.3120	34.32	24.14	59.92	49.92	Line	PASS
2	0.4157	33.65	24.77	57.53	47.53		PASS
3	0.5460	33.00	24.60	56.00	46.00		PASS
4	0.7807	33.89	24.73	56.00	46.00		PASS
5	1.1035	32.78	21.95	56.00	46.00		PASS
6	1.4226	31.37	22.91	56.00	46.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.3973	33.35	22.89	57.91	47.91	Neutral	PASS
2	0.6541	32.31	22.13	56.00	46.00		PASS
3	0.8167	32.31	21.28	56.00	46.00		PASS
4	1.1275	32.44	21.40	56.00	46.00		PASS
5	1.3818	31.57	21.20	56.00	46.00		PASS
6	1.5001	30.56	20.42	56.00	46.00		PASS

2.8. Restricted Frequency Bands

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 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) 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.

The following formula is used to convert the equipment isotropic radiated power(e.i.r.p.) 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

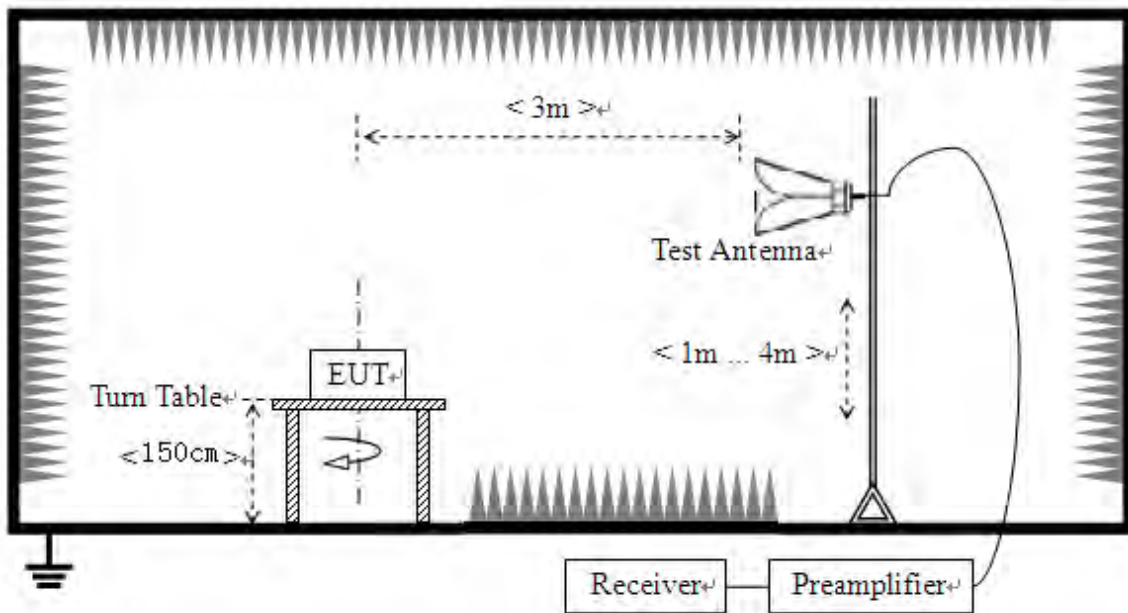
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following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

Frequency (MHz)	Field Strength ($\mu\text{V}/\text{m}$)	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

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

Test Setup





The EUT 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.

2.8.3. Test Result

The lowest and highest channels are tested to verify Restricted Frequency Bands.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

A_T : Total correction Factor except Antenna; U_R : Receiver Reading

G_{preamp} : Preamplifier Gain; A_{Factor} : Antenna Factor at 3m

Note 1: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (vertical) was recorded in this test report.

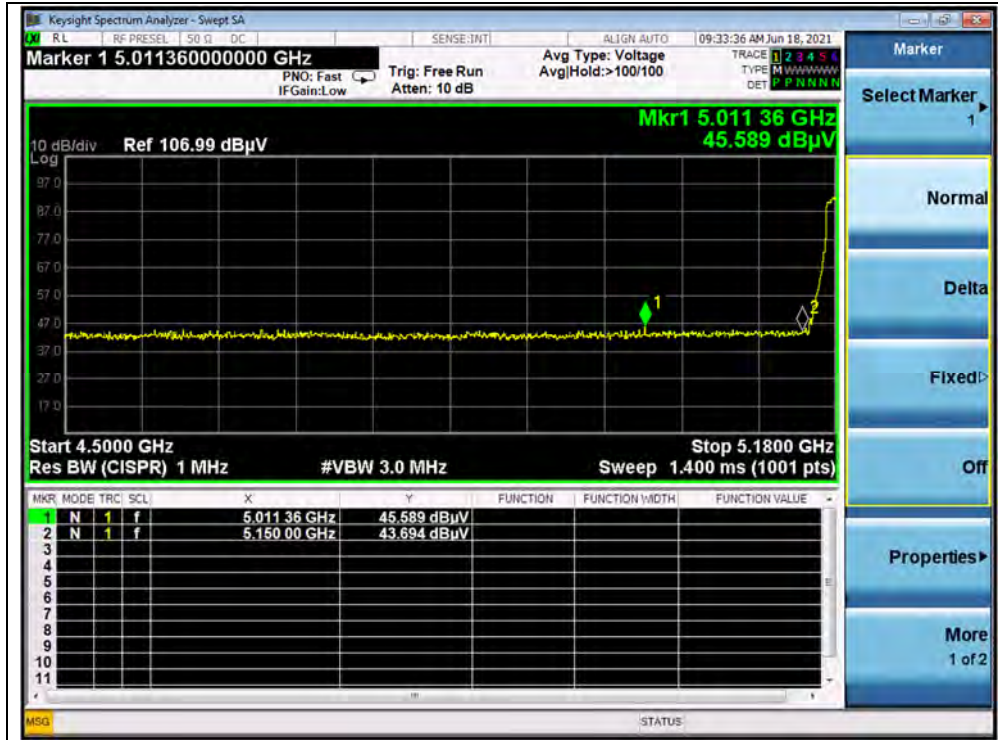
Note 2 All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

802.11a Mode

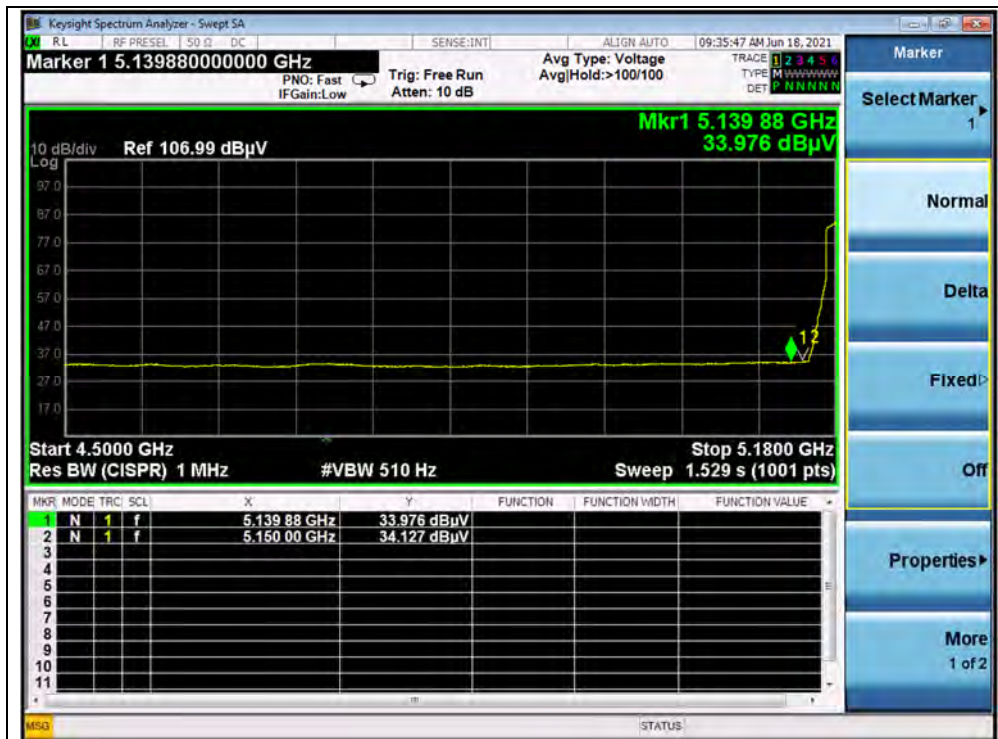
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)					
36	5011.36	PK	45.59	-19.54	32.20	58.25	74	PASS
36	5150.00	AV	34.13	-19.54	32.20	46.79	54	PASS
64	5388.60	PK	42.90	-18.80	32.20	56.30	74	PASS
64	5358.64	AV	32.06	-18.80	32.20	45.46	54	PASS
100	5470.00	PK	43.43	-19.20	32.20	56.43	68.23	PASS
100	5470.00	AV	32.55	-19.20	32.20	45.55	54	PASS
144	5766.50	PK	44.43	-19.20	32.20	57.43	68.23	PASS
144	5725.00	AV	33.51	-19.20	32.20	46.51	54	PASS
149	5720.00	PK	42.80	-19.01	32.20	55.99	100.83	PASS
165	5850.00	PK	41.68	-19.01	32.20	54.87	122.23	PASS

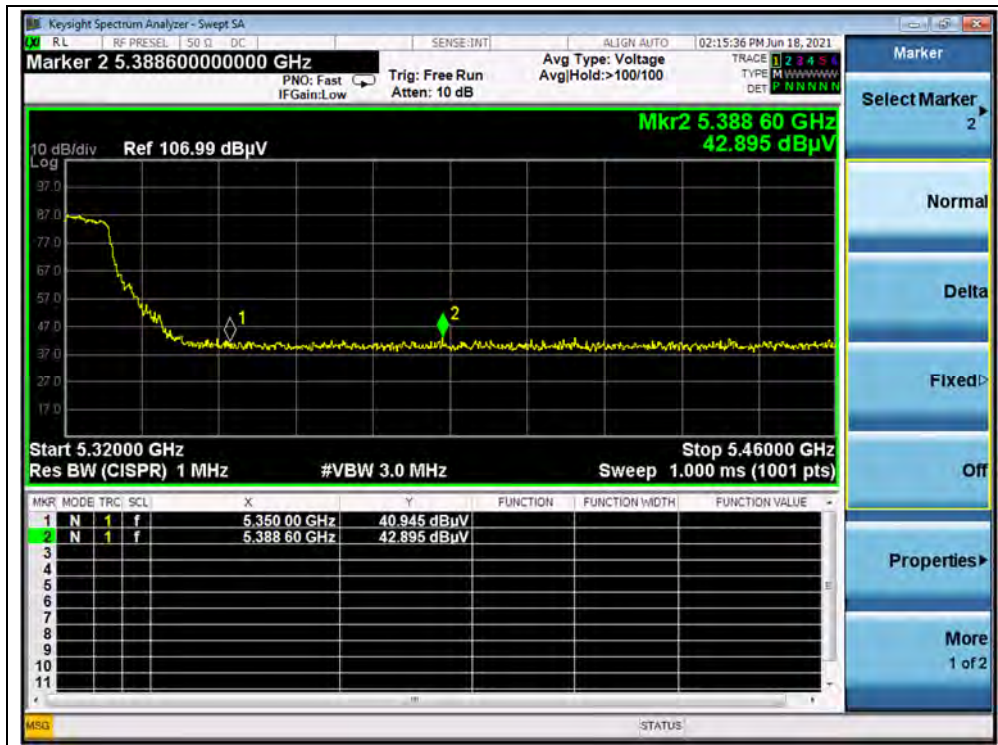
B.Test Plot:



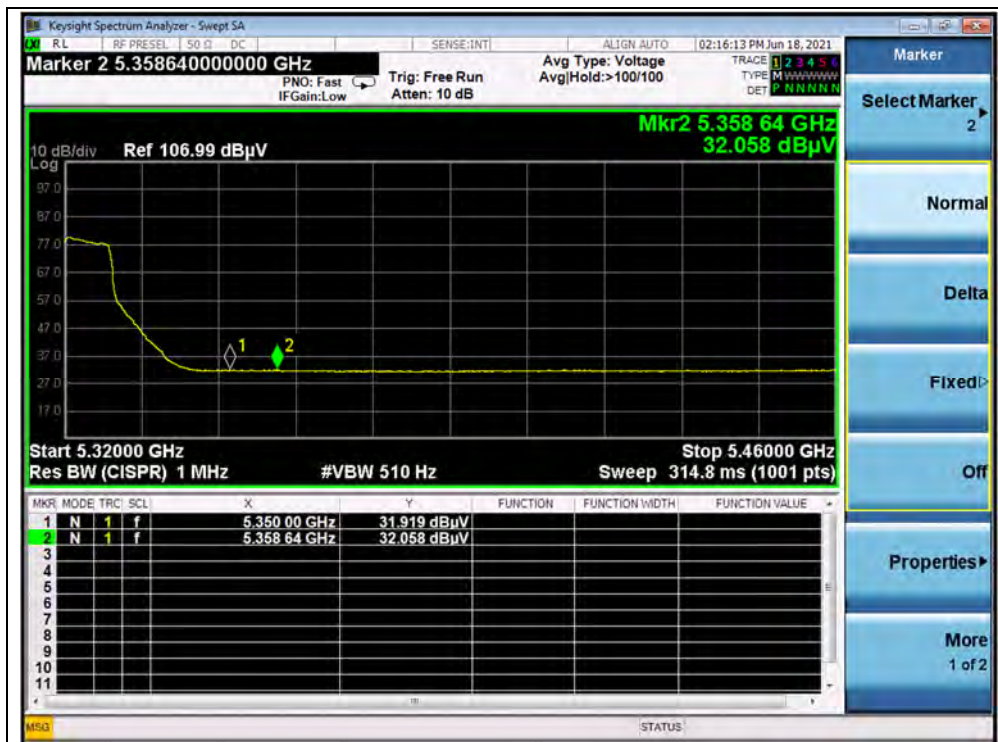
(PEAK, Channel 36, 802.11a)



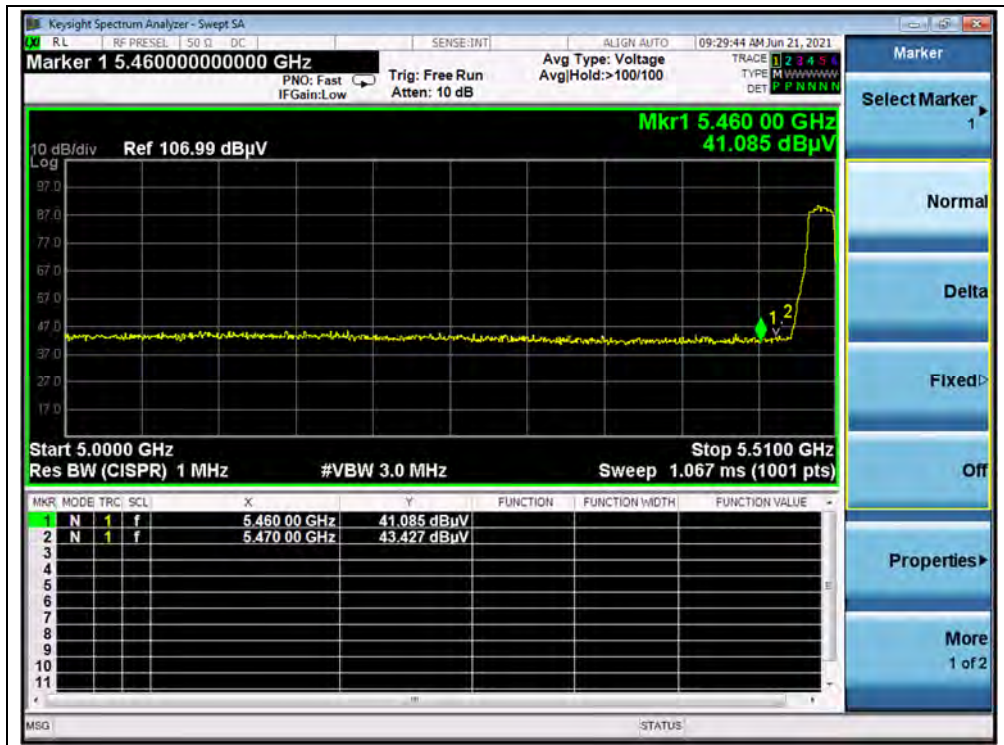
(AVERAGE, Channel 36, 802.11a)



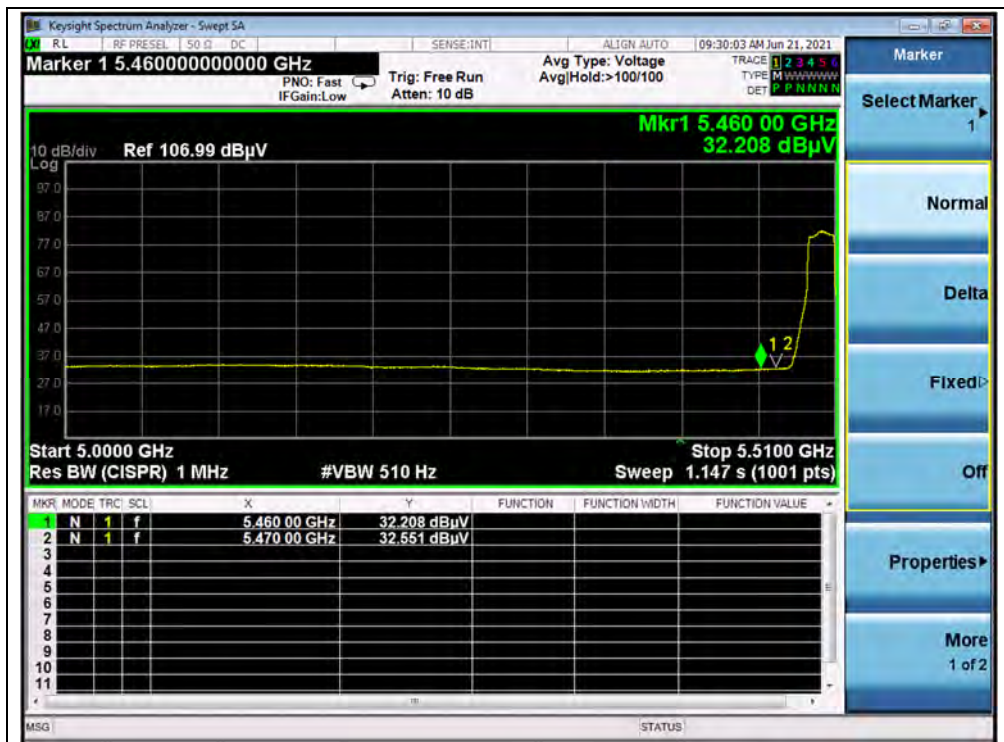
(PEAK, Channel 64, 802.11a)



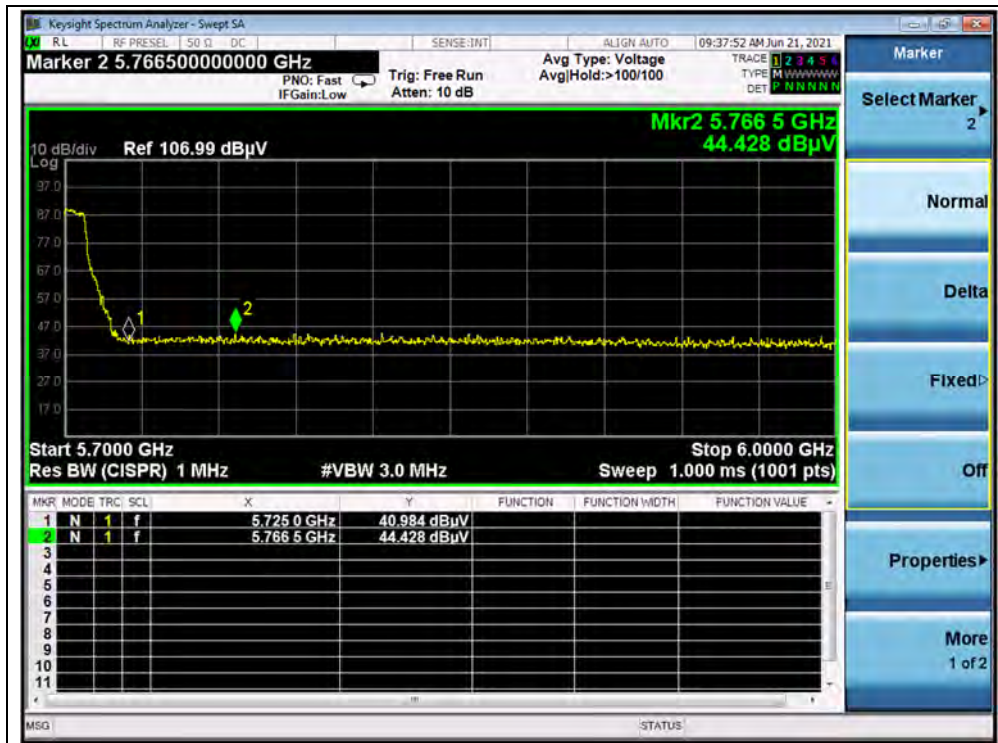
(AVERAGE, Channel 64, 802.11a)



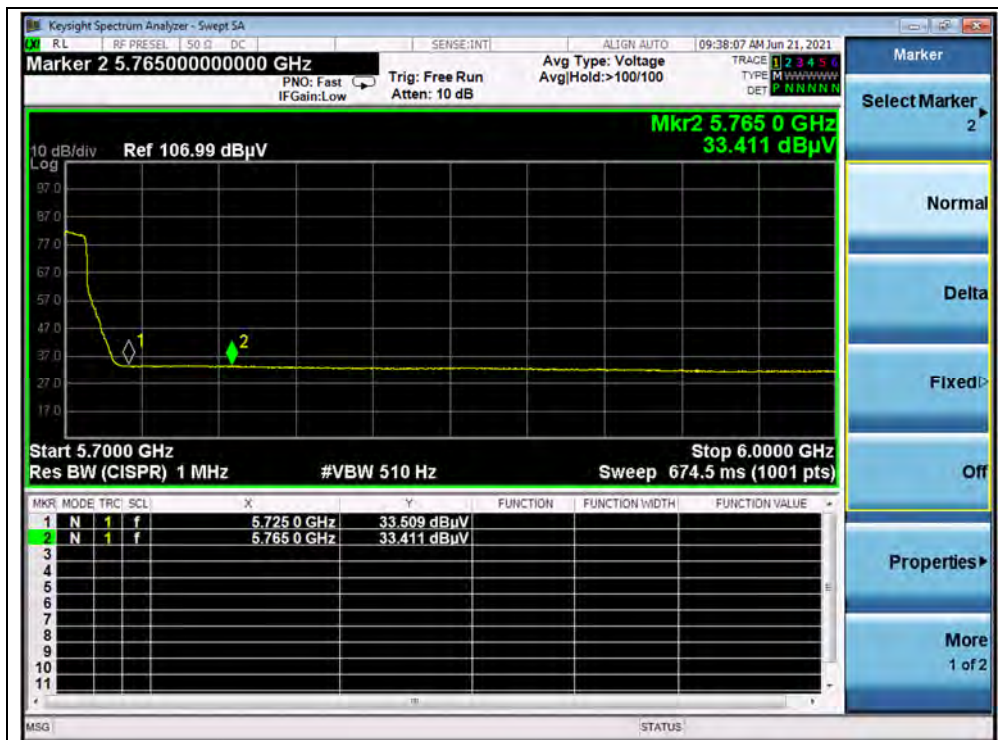
(PEAK, Channel 100, 802.11a)



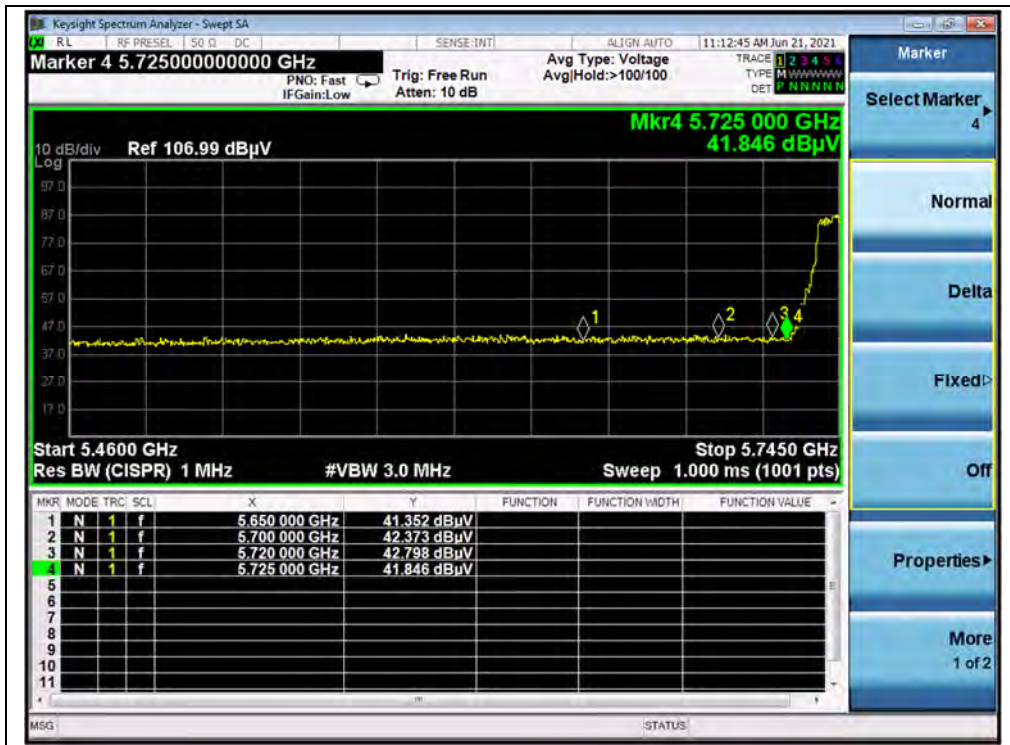
(AVERAGE, Channel 100, 802.11a)



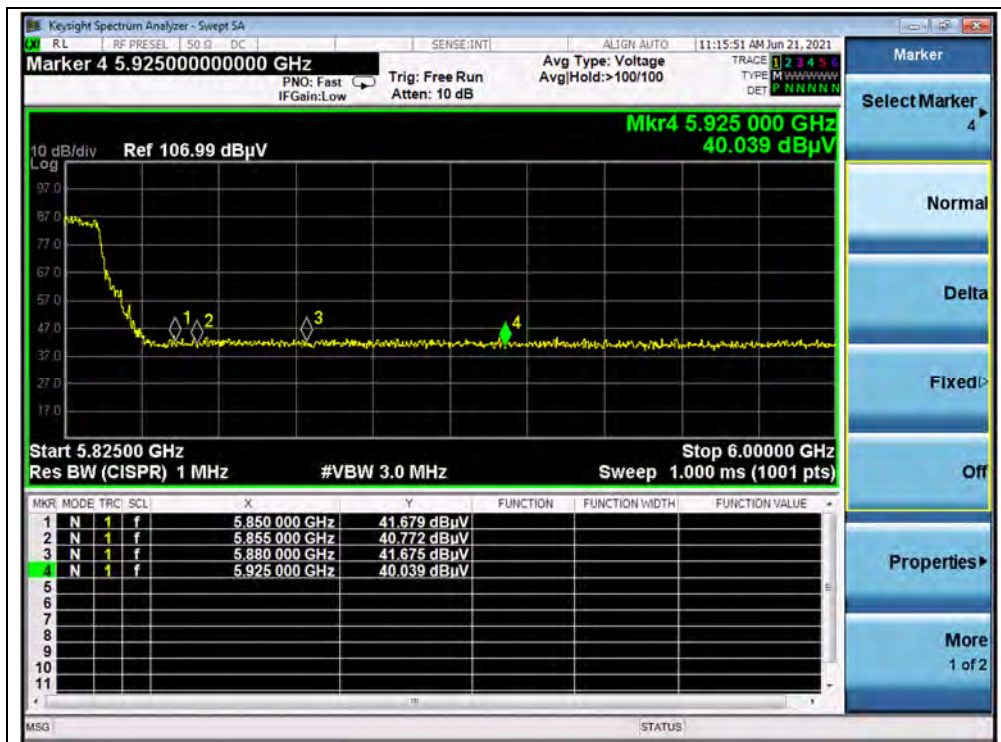
(PEAK, Channel 144, 802.11a)



(AVERAGE, Channel 144, 802.11a)



(PEAK, Channel 149, 802.11a)

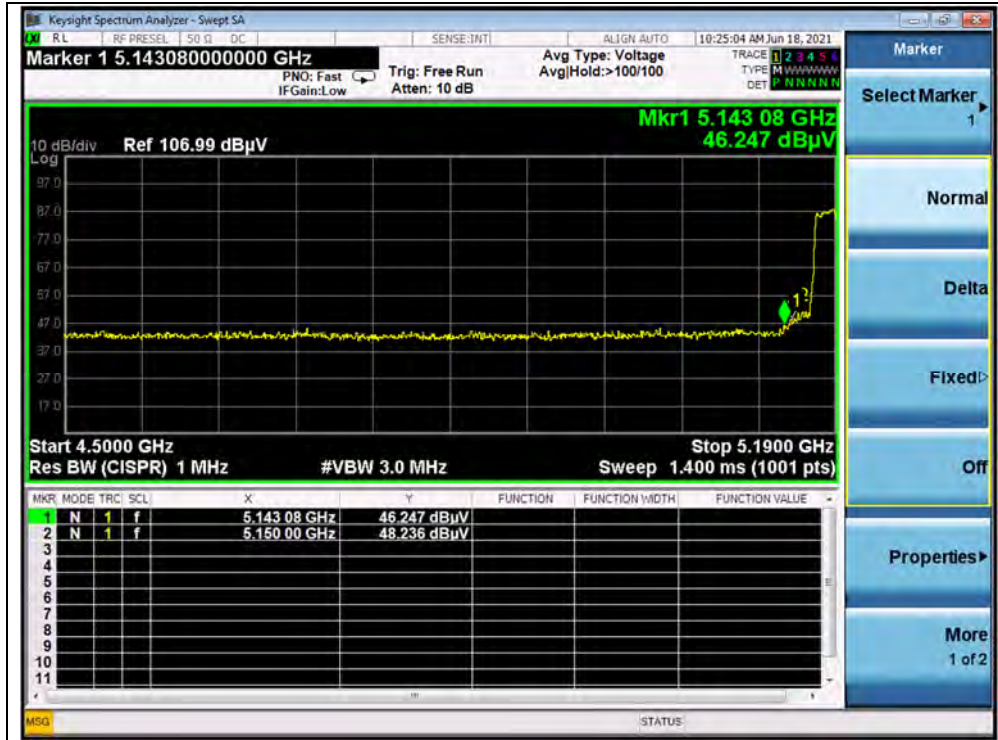


(PEAK, Channel 165, 802.11a)

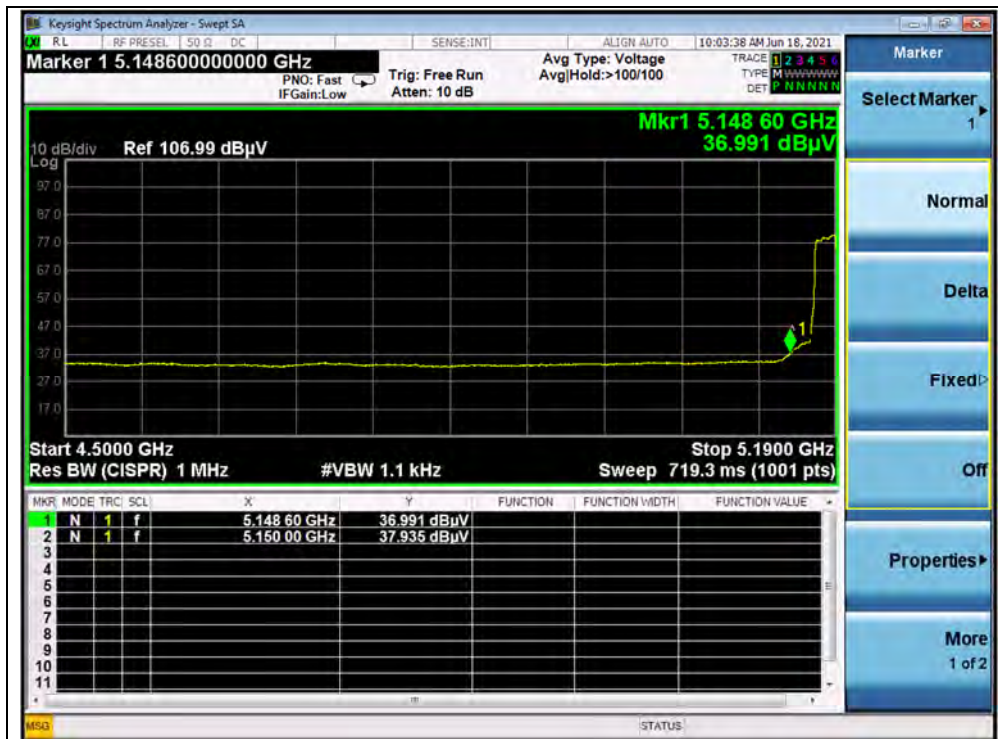
**802.11n (HT40) Mode****A.Test Verdict:**

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)					
38	5150.00	PK	48.24	-19.54	32.20	60.90	74	PASS
38	5150.00	AV	37.94	-19.54	32.20	50.60	54	PASS
62	5350.00	PK	45.94	-18.80	32.20	59.34	74	PASS
62	5350.00	AV	34.55	-18.80	32.20	47.95	54	PASS
102	5452.35	PK	43.90	-19.20	32.20	56.90	74	PASS
102	5470.00	AV	32.86	-19.20	32.20	45.86	54	PASS
142	5767.02	PK	44.23	-19.20	32.20	57.23	68.23	PASS
142	5748.87	AV	33.49	-19.20	32.20	46.49	54	PASS
151	5720.00	PK	43.88	-19.01	32.20	57.07	110.83	PASS
159	5850.00	PK	42.31	-19.01	32.20	55.50	122.23	PASS

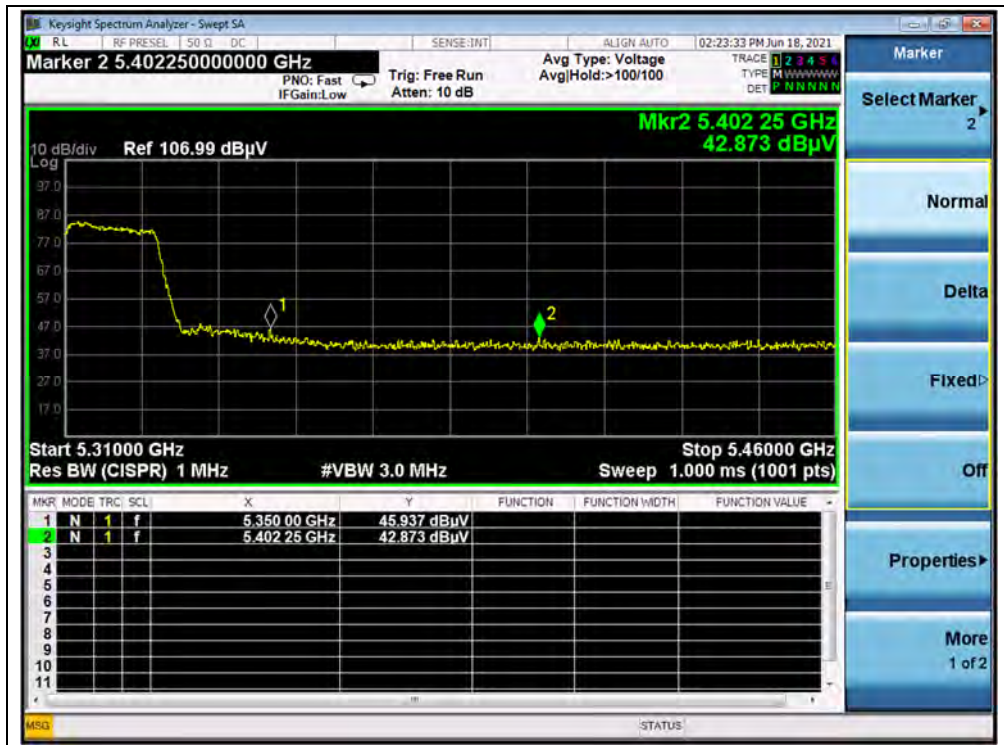
B.Test Plot:



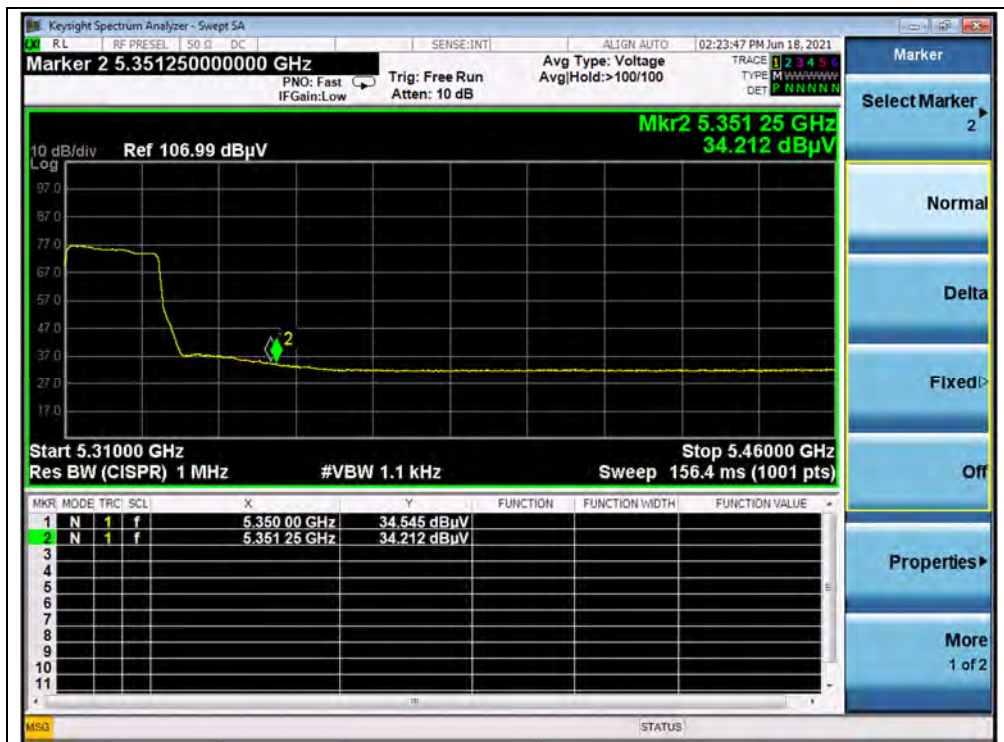
(PEAK, Channel 38, 802.11n (HT40))



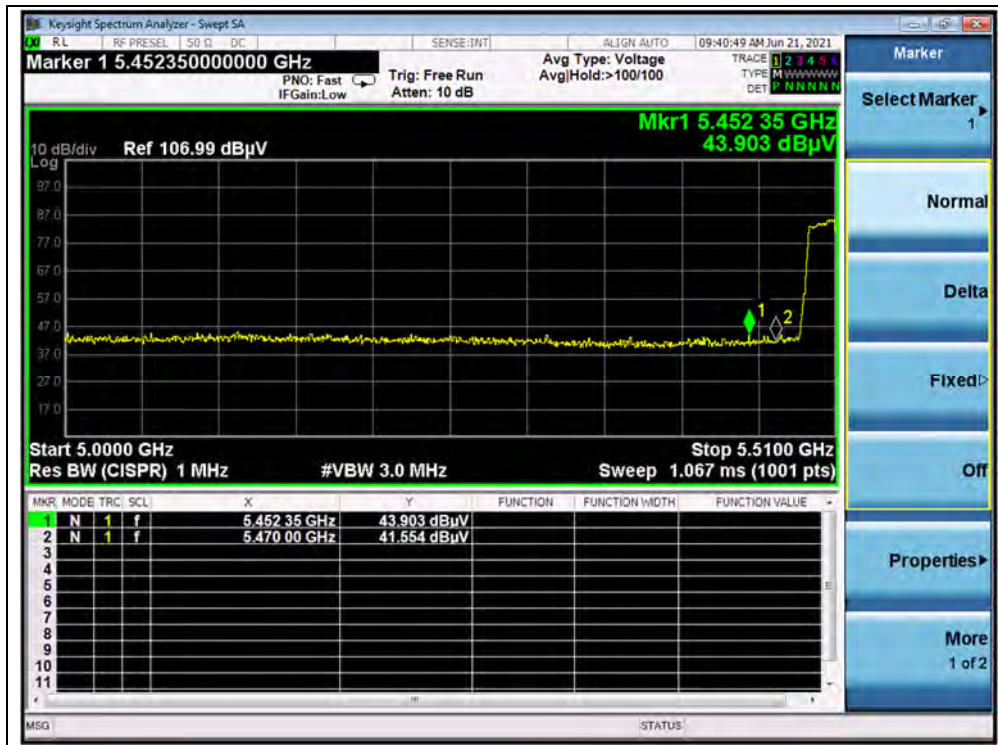
(AVERAGE, Channel 38, 802.11n (HT40))



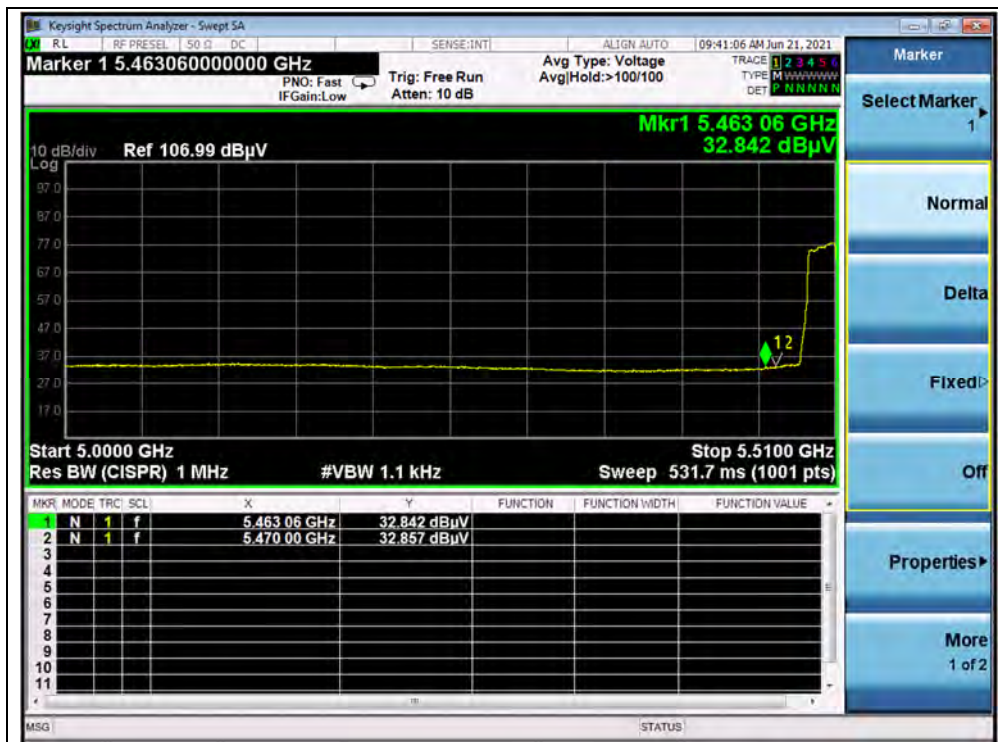
(PEAK, Channel 62, 802.11n (HT40))



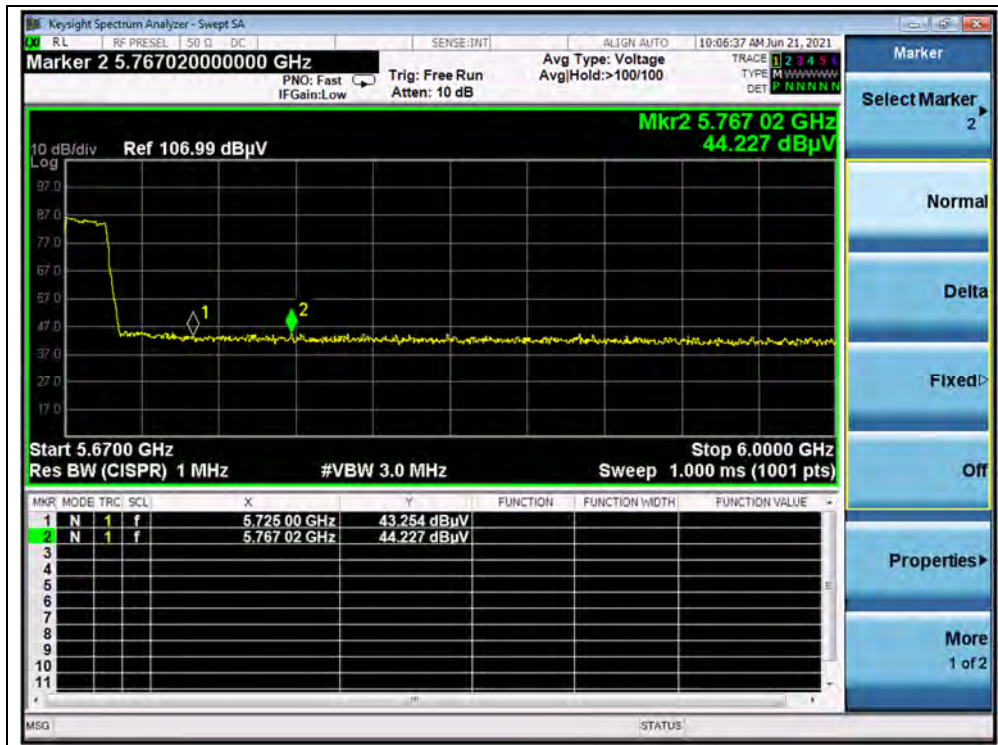
(AVERAGE, Channel 62, 802.11n (HT40))



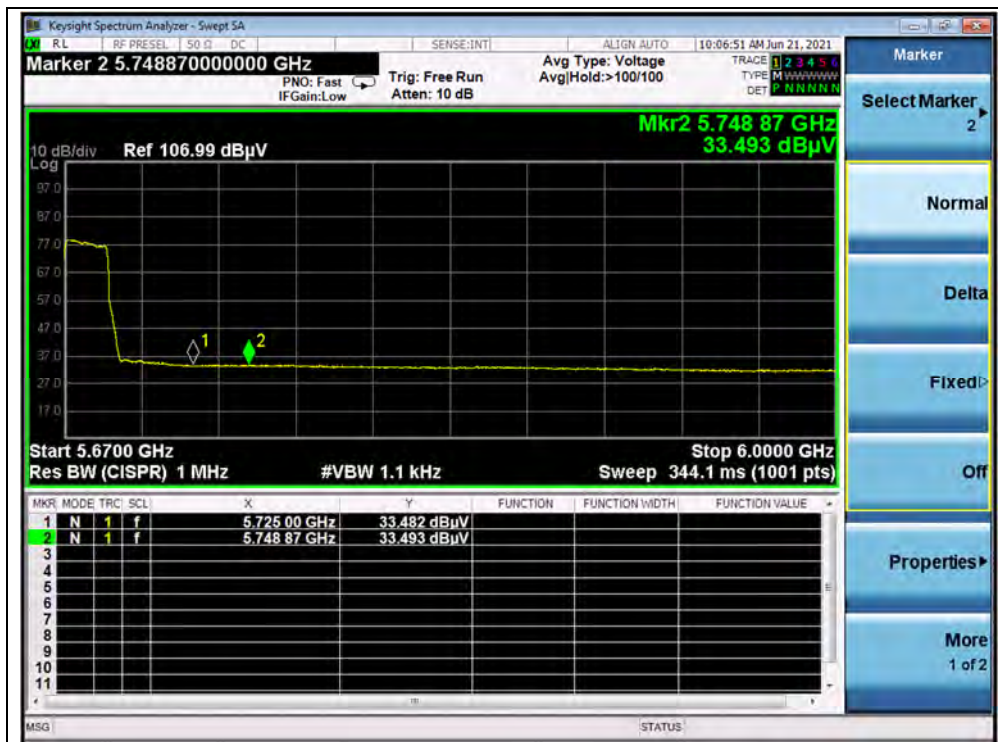
(PEAK, Channel 102, 802.11n (HT40))



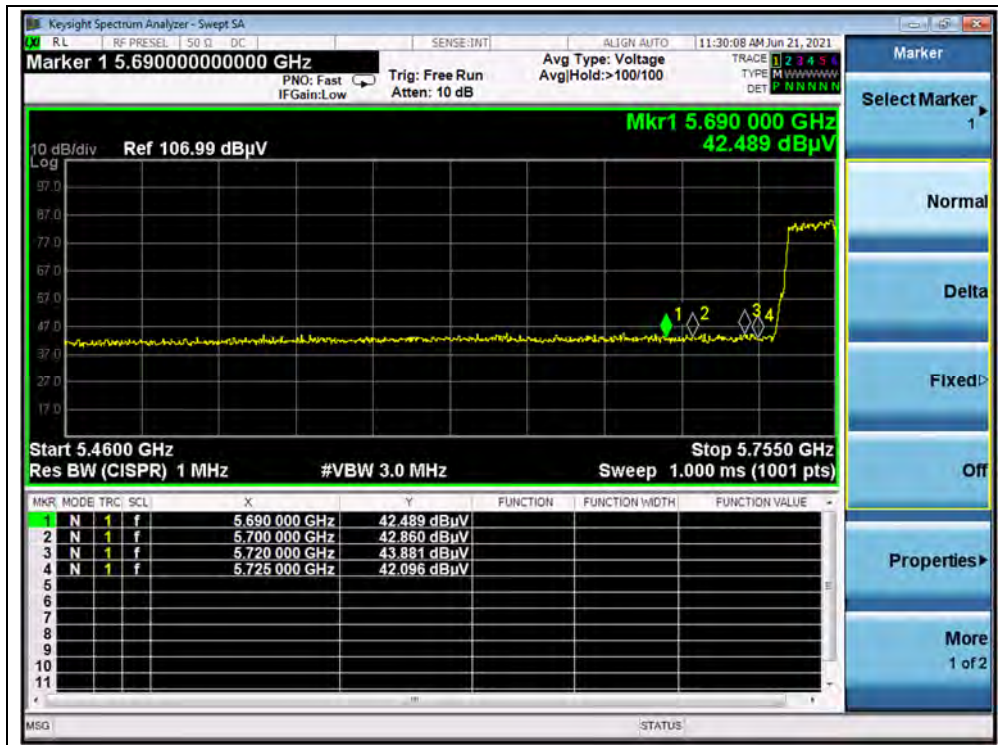
(AVERAGE, Channel 102, 802.11n (HT40))



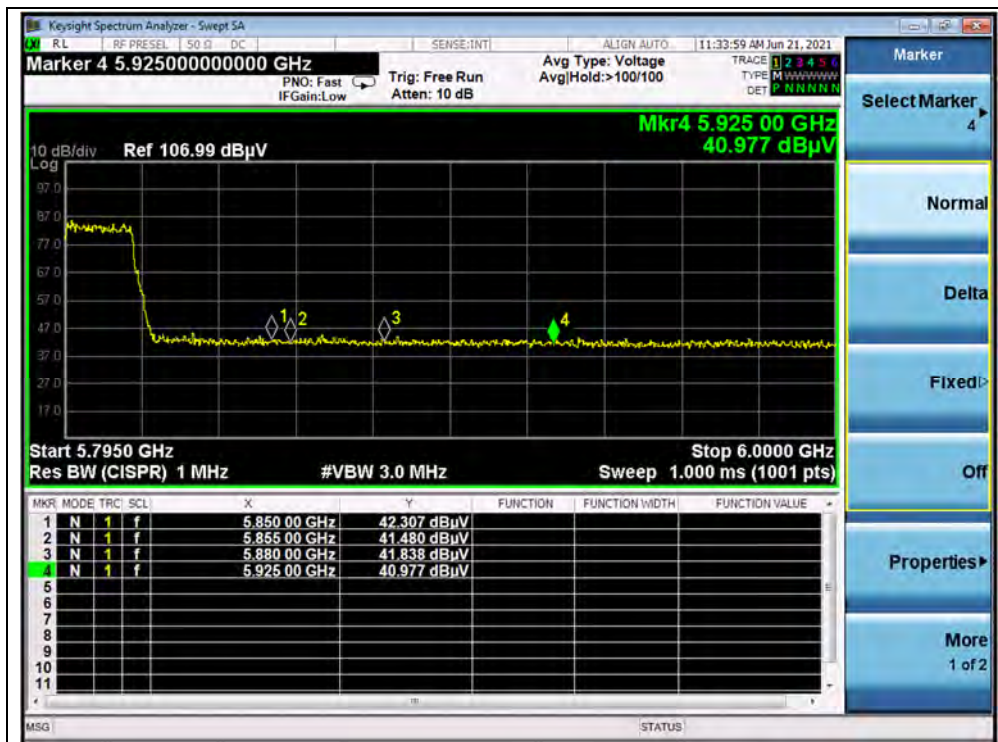
(PEAK, Channel 142, 802.11n (HT40))



(AVERAGE, Channel 142, 802.11n (HT40))



(PEAK, Channel 151, 802.11n (HT40))

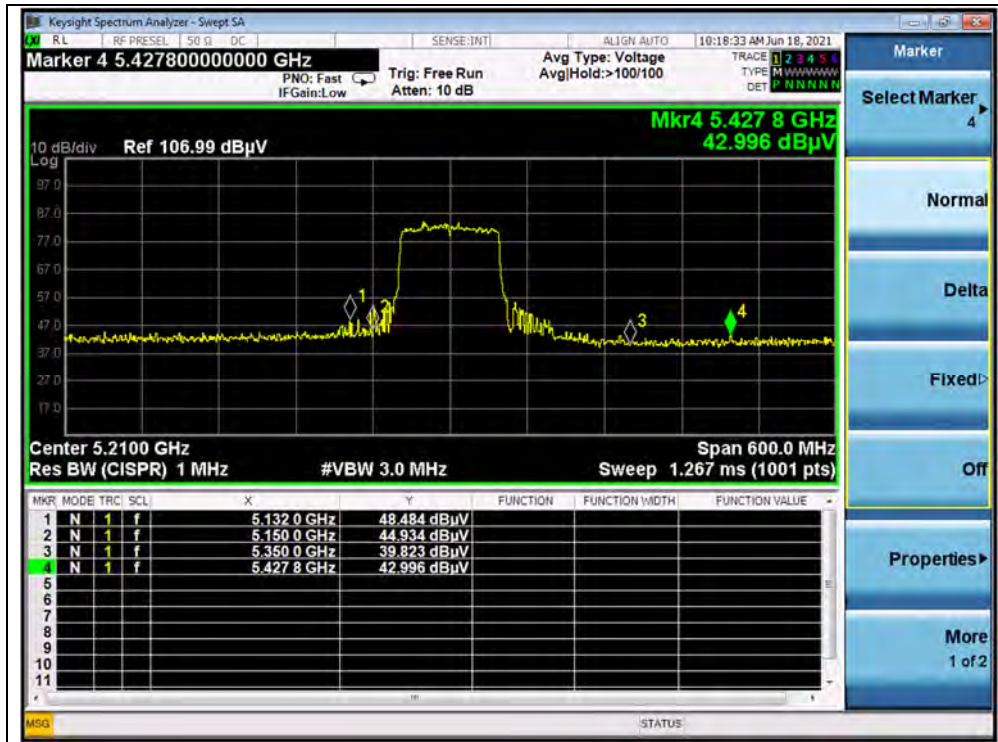


(PEAK, Channel 159, 802.11n (HT40))

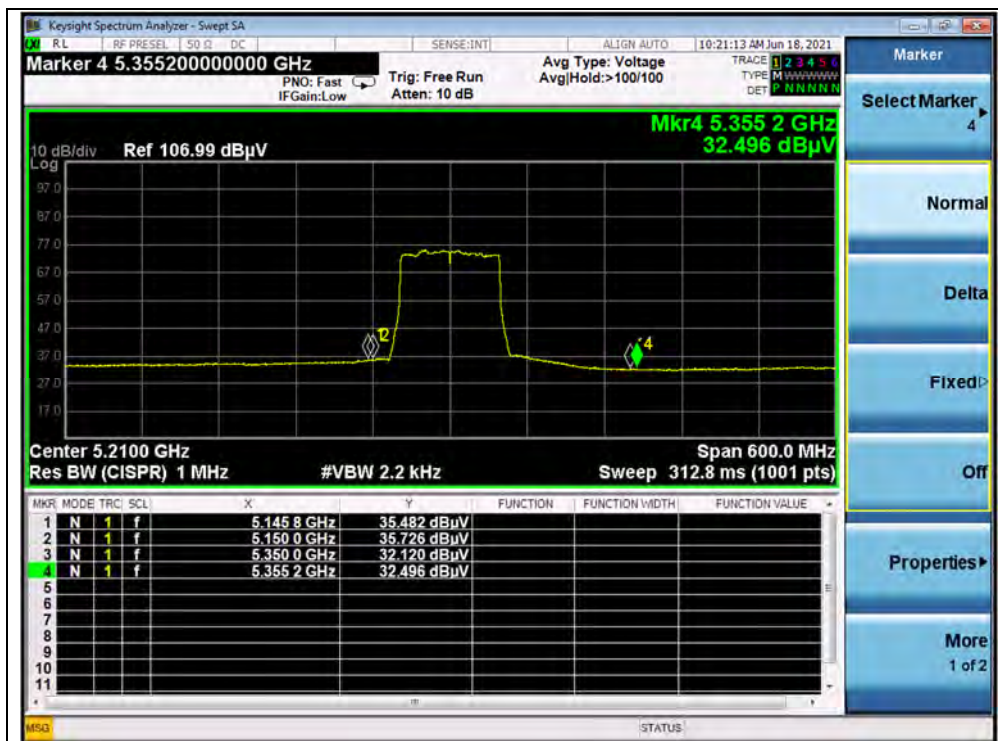
**802.11ac (VHT80) Mode****A.Test Verdict:**

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
42	5132.00	PK	48.48	-19.54	32.20	61.14	74	PASS
42	5150.00	AV	35.73	-19.54	32.20	48.39	54	PASS
58	5089.00	PK	44.87	-18.80	32.20	58.27	74	PASS
58	5350.00	AV	34.85	-18.80	32.20	48.25	54	PASS
106	5362.48	PK	43.73	-19.20	32.20	56.73	74	PASS
106	5470.00	AV	33.43	-19.20	32.20	46.43	54	PASS
138	5770.68	PK	43.19	-19.20	32.20	56.19	68.23	PASS
138	5760.15	AV	34.51	-19.20	32.20	47.51	54	PASS
155	5720.00	PK	43.59	-19.01	32.20	56.78	110.83	PASS
155	5850.00	PK	44.16	-19.01	32.20	57.35	122.23	PASS

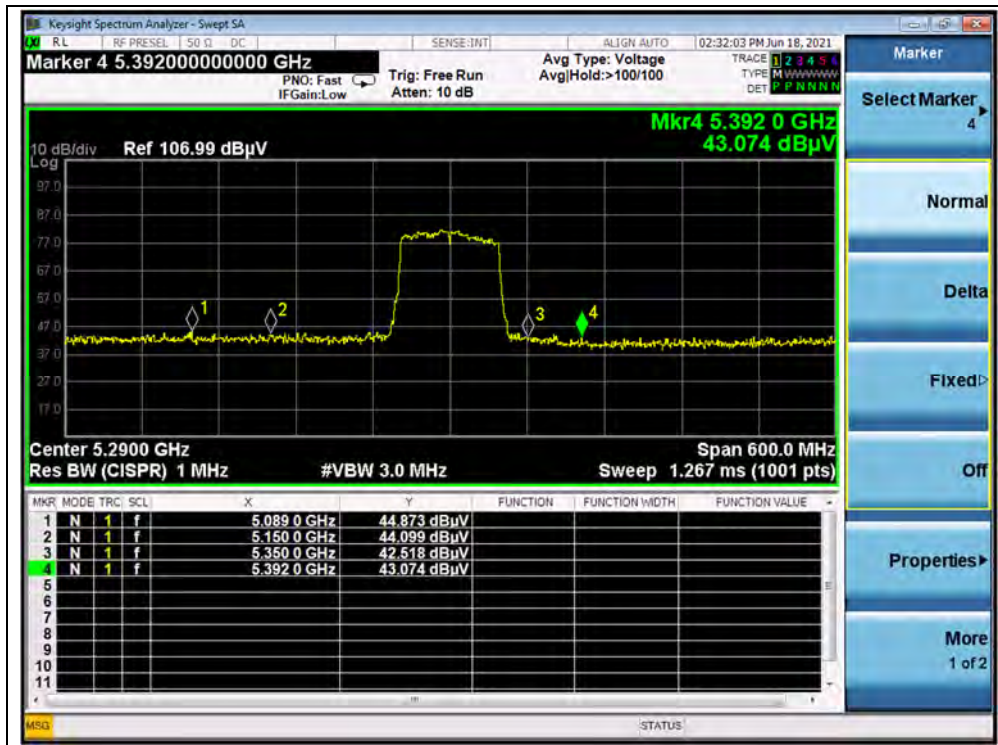
B.Test Plot:



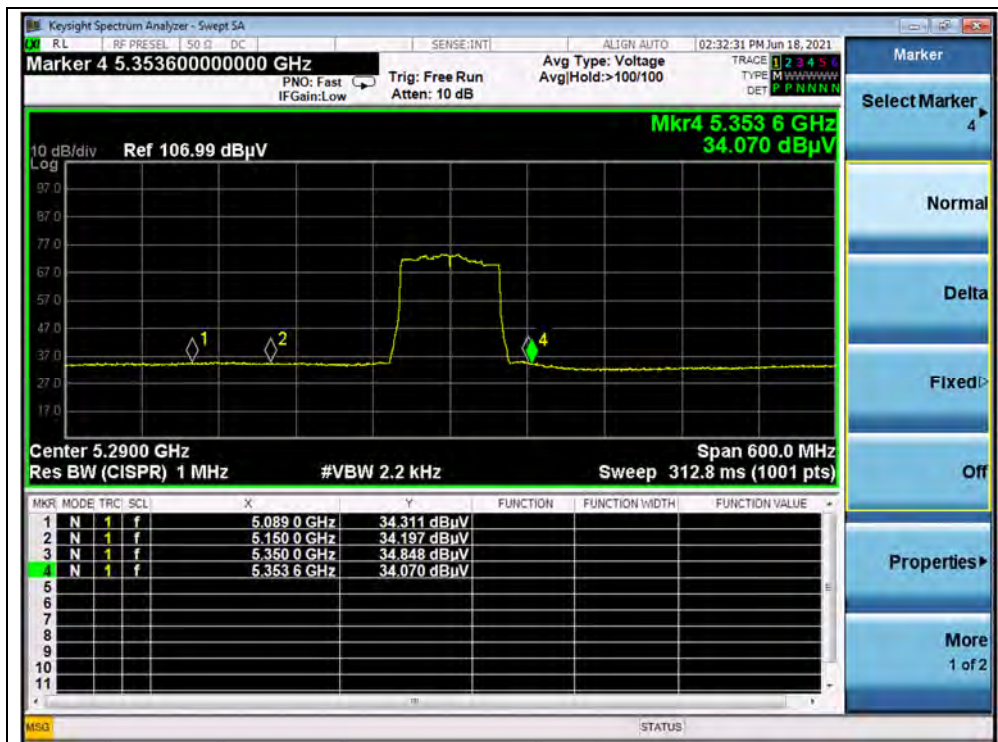
(PEAK, Channel 42, 802.11ac (VHT80))



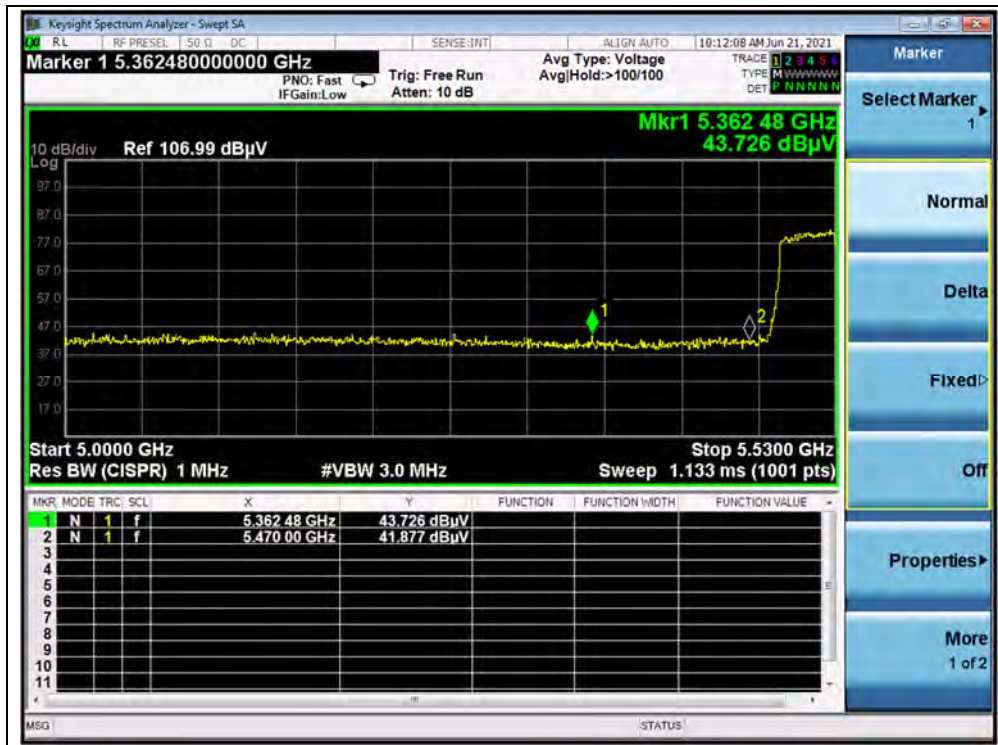
(AVERAGE, Channel 42, 802.11ac (VHT80))



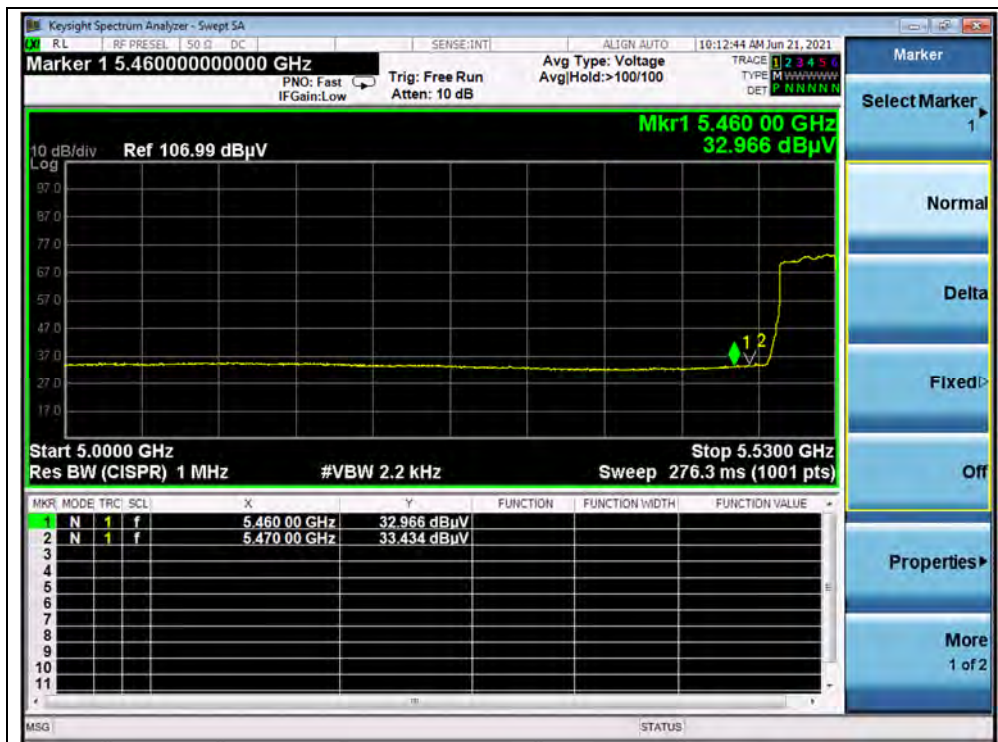
(PEAK, Channel 58, 802.11ac (VHT80))



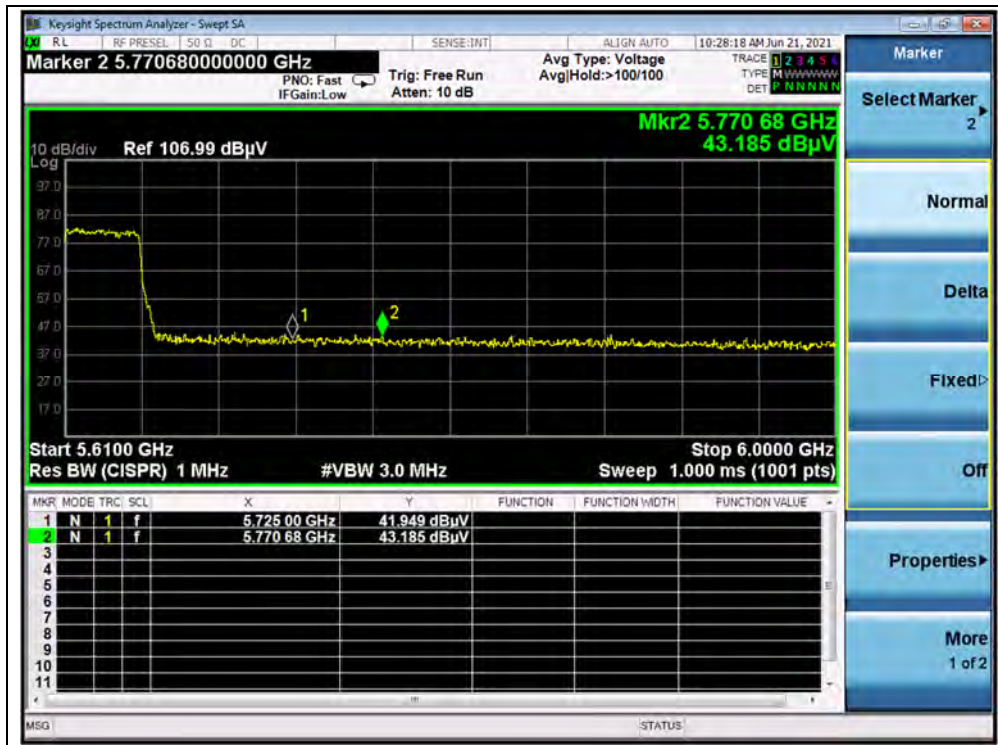
(AVERAGE, Channel 58, 802.11ac (VHT80))



(PEAK, Channel 106, 802.11ac (VHT80))



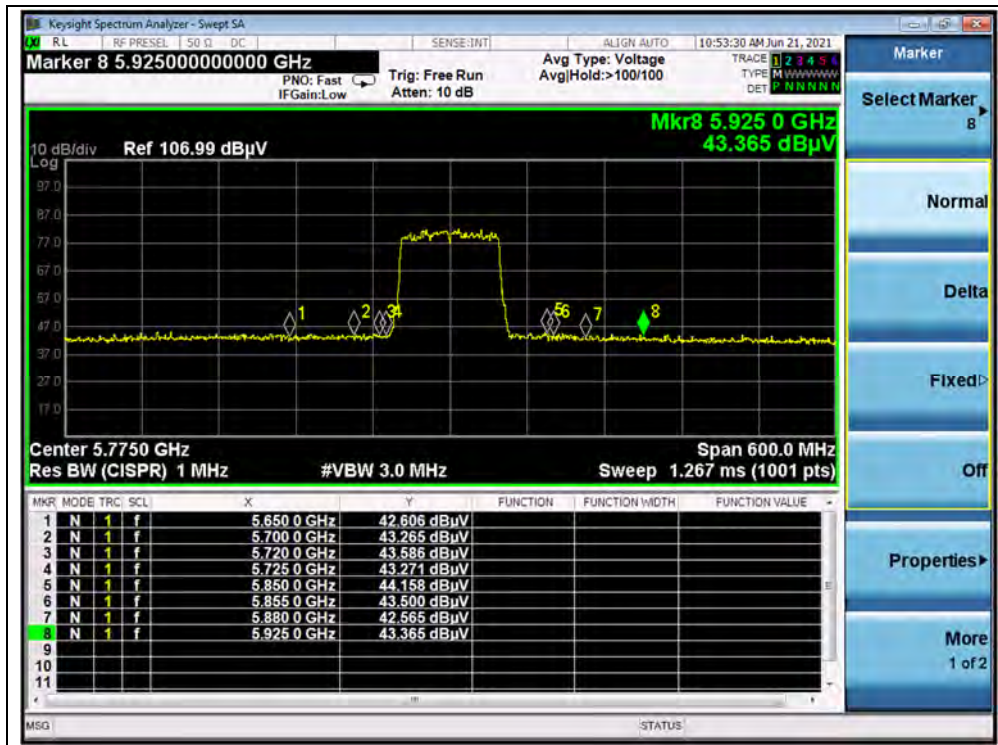
(AVERAGE, Channel 106, 802.11ac (VHT80))



(PEAK, Channel 138, 802.11ac (VHT80))



(AVERAGE, Channel 138, 802.11ac (VHT80))



(PEAK, Channel 155, 802.11ac (VHT80))



2.9. Radiated Emission

2.9.1. 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 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (4) 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(e.i.r.p.) 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:

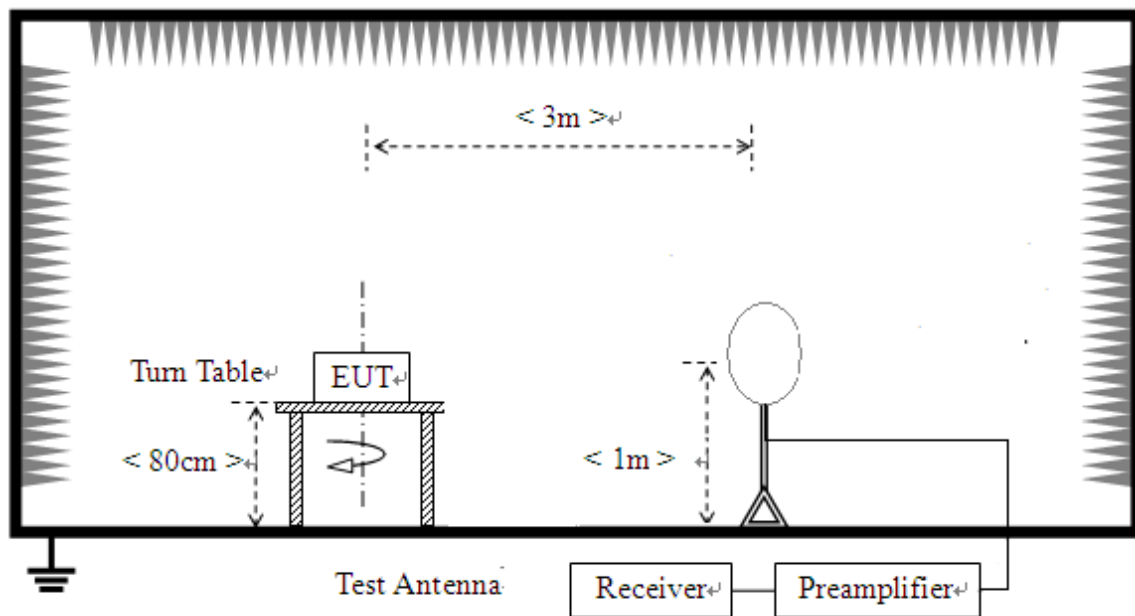
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

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).

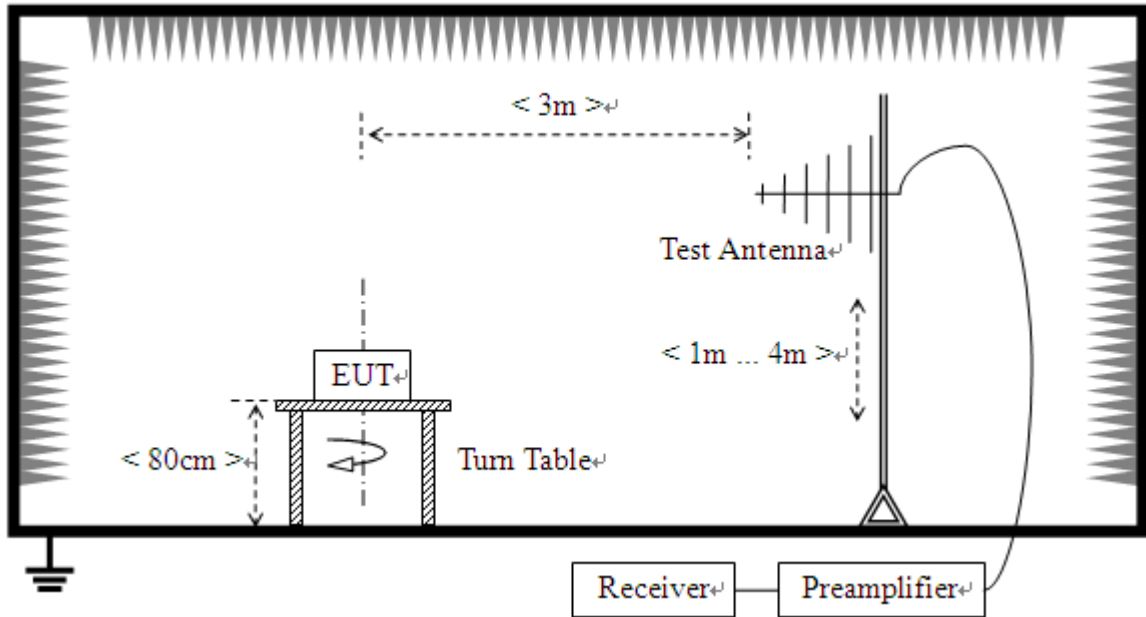
2.9.2. Test Description

Test Setup:

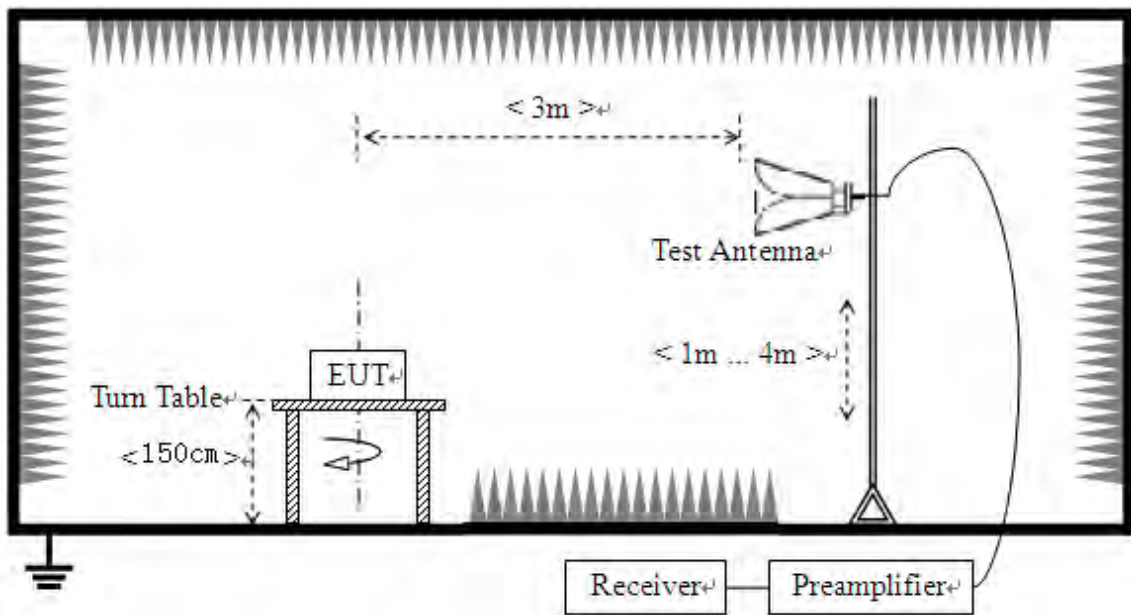
- 1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.



For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

2.9.3. Test Result

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform a quasi-peak measurement (or average).

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note 1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

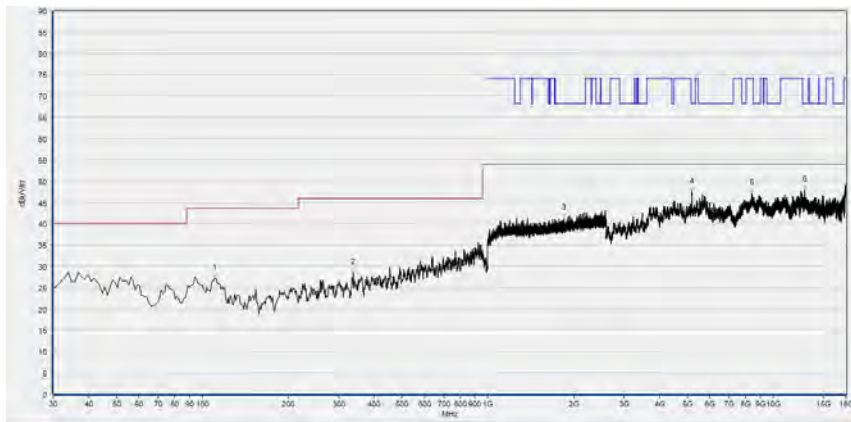
Note 2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note 3: 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.

Note 4: All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

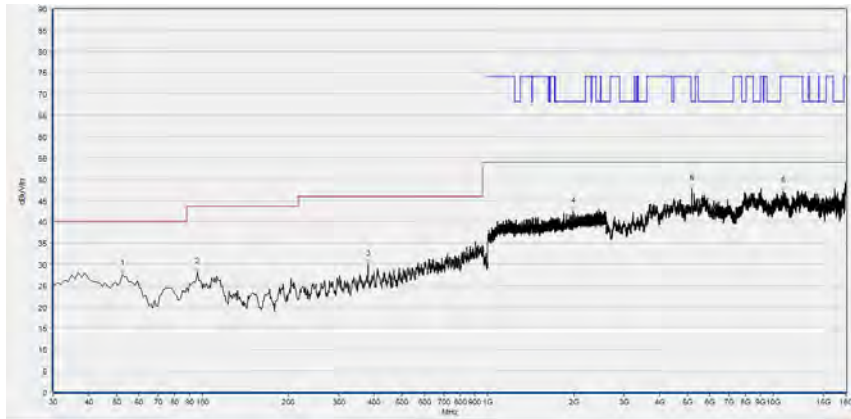
802.11a Mode

Plot for Channel 36



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.591	27.14	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
337.798	28.42	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1844.548	41.19	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5178.476	47.49	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8391.558	47.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12883.097	47.97	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

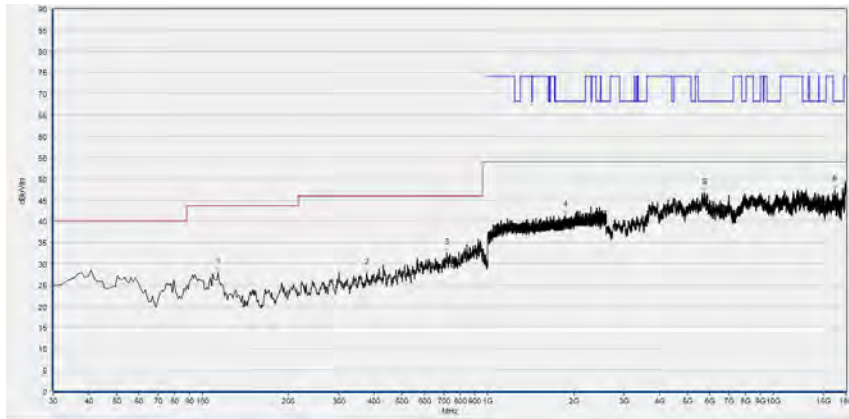
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
52.332	27.70	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
96.026	28.15	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
380.521	30.07	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1996.599	42.35	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5178.476	47.79	N/A	N/A	68.23	N/A	54.00	Vertical	PASS
10828.326	47.17	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

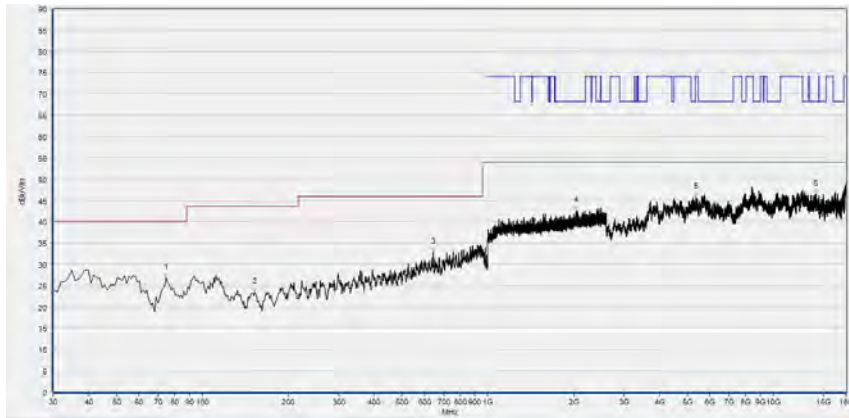
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 44



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
113.504	27.98	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
377.608	27.77	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
717.447	32.56	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1866.956	41.47	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5748.390	46.74	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
16419.644	47.47	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

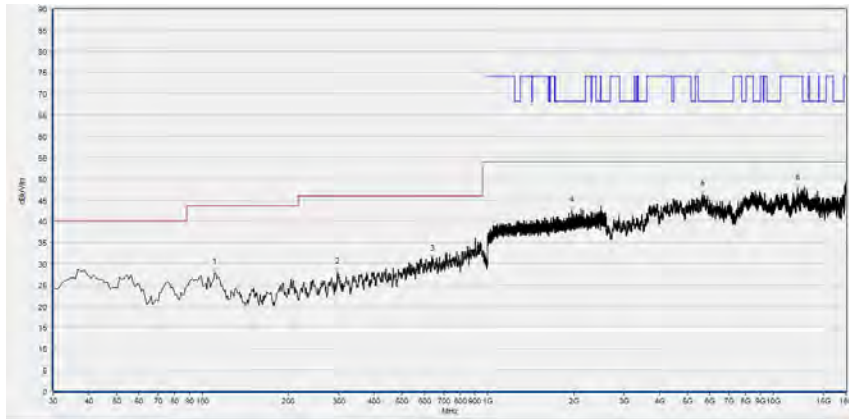
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
74.665	26.82	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
152.342	23.42	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
643.654	32.79	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2038.746	42.61	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5357.151	45.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14078.376	46.37	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

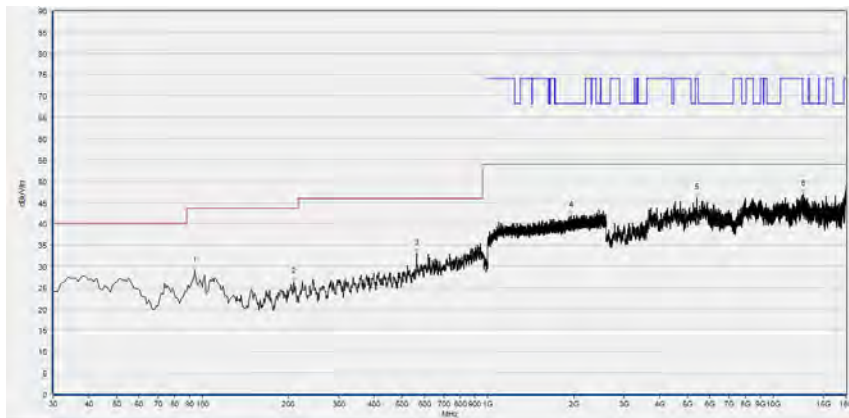
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 48



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.591	27.88	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
297.017	27.96	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
639.770	31.00	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1972.057	42.62	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5643.649	46.22	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12140.668	47.83	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

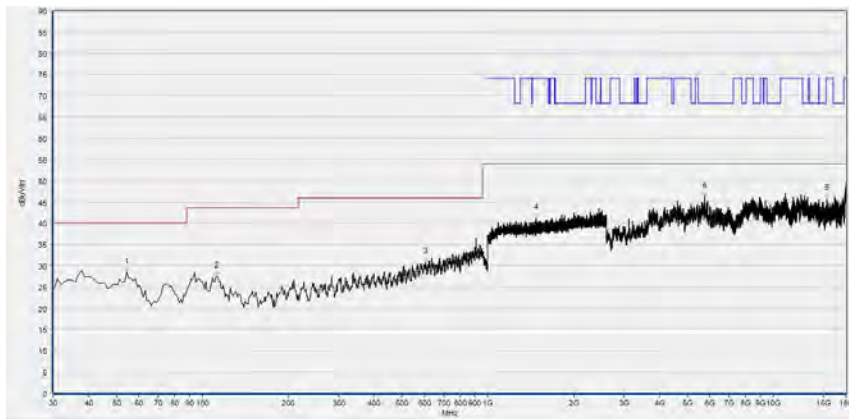
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
94.084	29.00	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
208.659	26.31	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
563.063	32.94	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1956.586	41.86	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5406.441	46.09	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12735.227	46.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

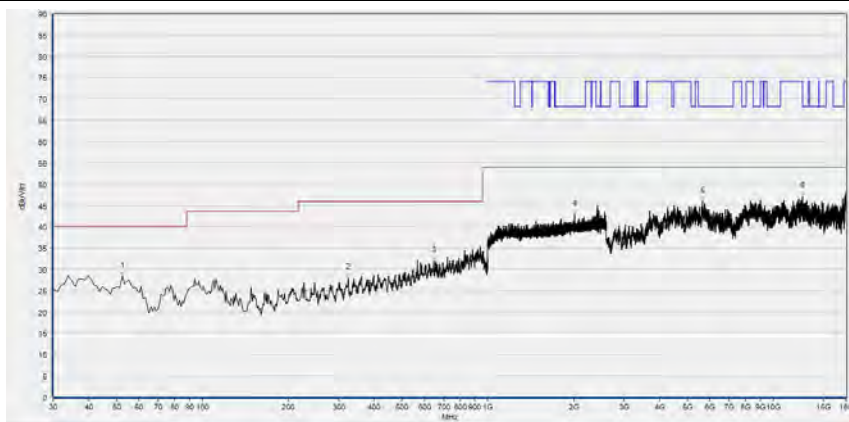
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 52



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
54.274	28.54	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
112.533	27.46	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
604.815	30.81	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1479.093	41.22	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5745.309	46.34	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
15446.169	45.79	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

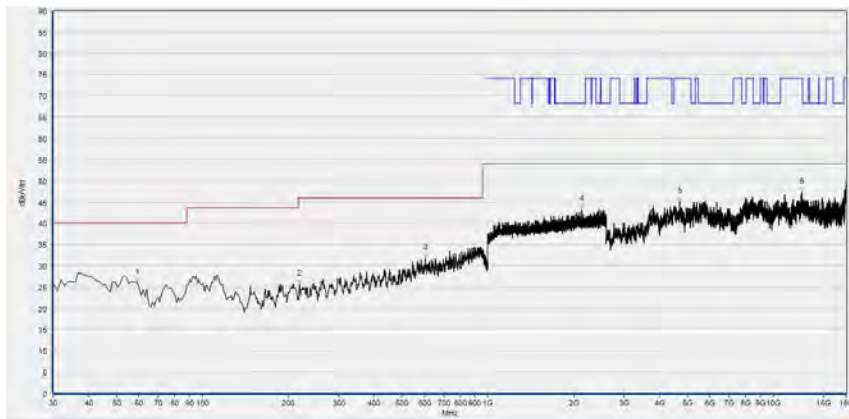
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
52.332	28.36	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
324.204	27.98	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
645.596	32.05	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2019.006	42.85	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5643.649	45.85	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12679.776	47.16	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

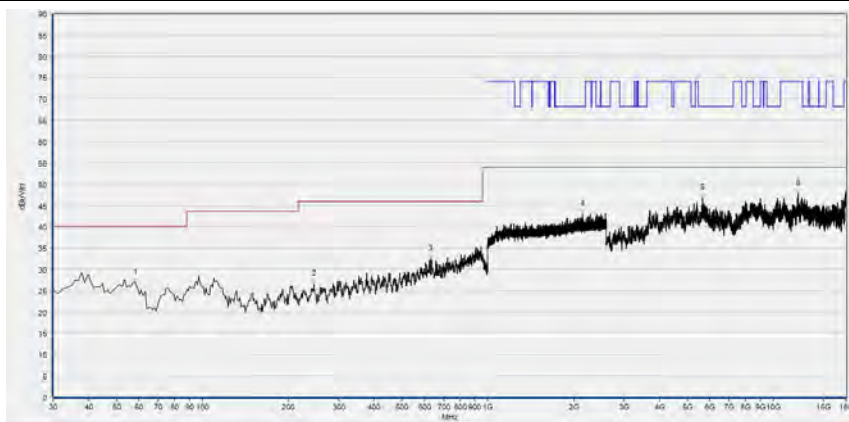
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 60



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
59.129	26.06	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
219.339	25.59	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
603.844	31.90	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2134.778	43.27	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4704.061	45.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12599.680	47.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

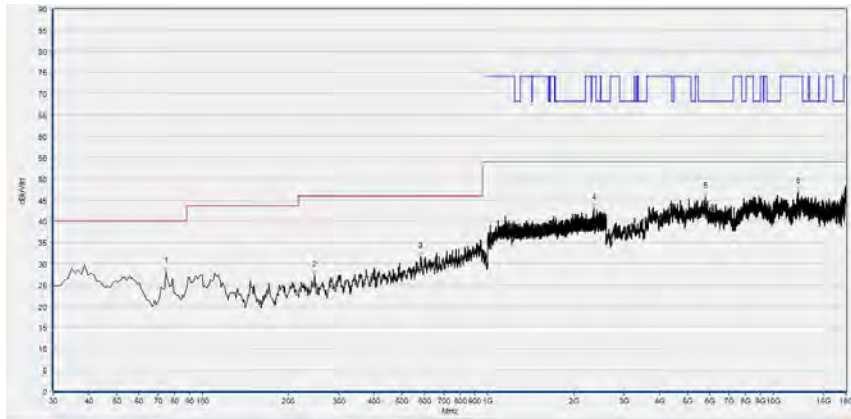
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
58.158	26.85	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
246.527	26.55	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
628.118	32.28	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2144.381	42.87	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5640.568	46.70	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12202.280	47.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

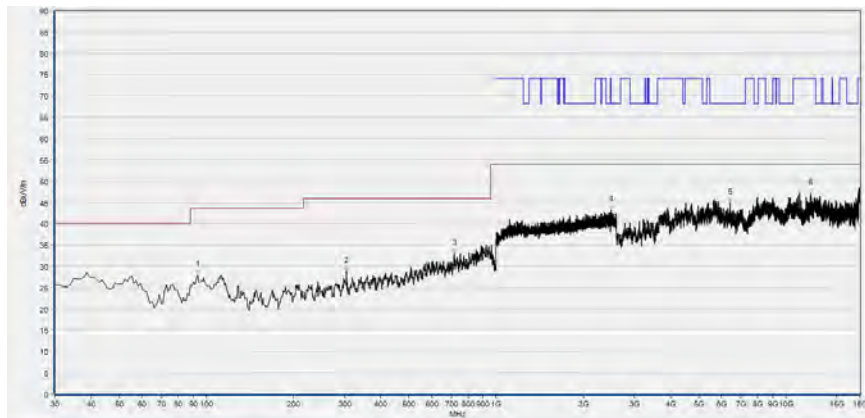
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 64



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
74.665	28.10	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
247.497	27.25	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
581.512	31.63	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2355.118	43.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5773.035	45.78	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12199.200	46.87	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

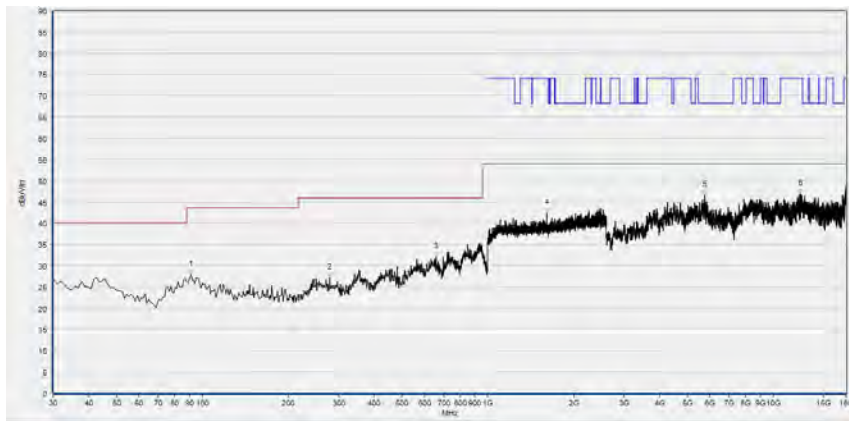
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
93.113	27.92	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
304.785	28.81	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
716.476	33.08	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2489.030	43.26	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6432.286	44.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12165.313	47.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

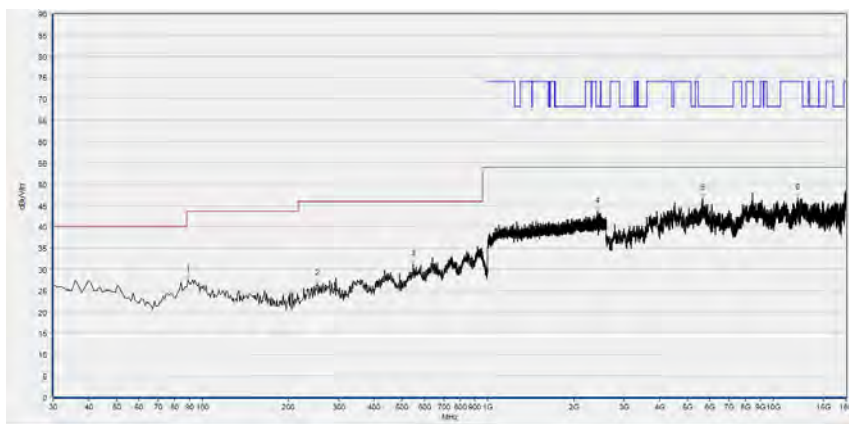
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 100



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
91.171	27.76	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
279.540	27.20	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
660.160	32.01	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1607.136	42.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5766.873	46.67	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12476.455	46.98	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

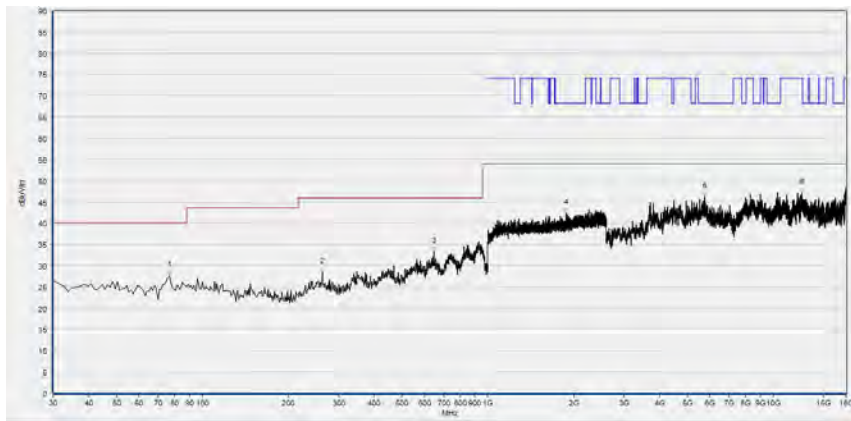
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
89.229	27.40	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
252.352	26.73	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
547.528	31.17	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2415.939	43.58	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5655.971	46.59	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12171.474	46.80	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

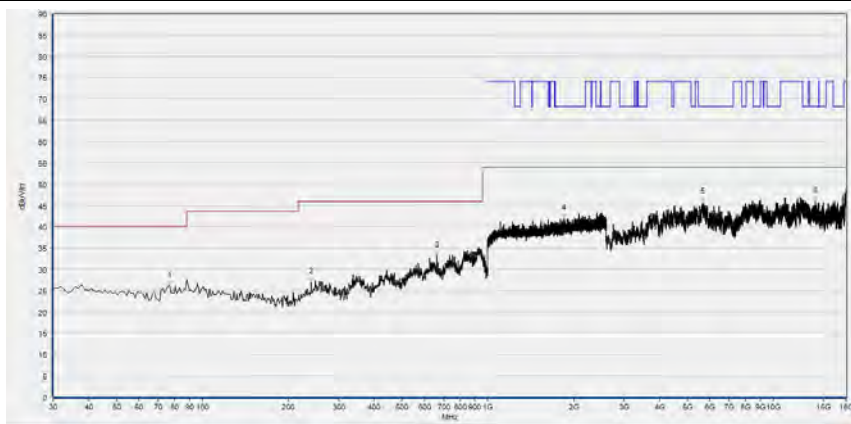
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 120



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
76.607	27.68	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
263.033	28.43	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
647.538	33.37	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1875.492	42.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5757.632	46.25	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12596.599	47.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

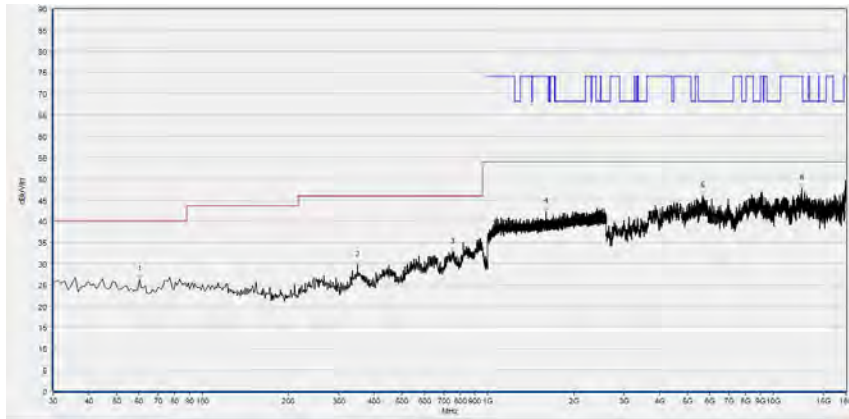
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
76.607	26.09	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
240.701	26.99	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
663.073	33.14	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1843.481	41.97	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5662.132	45.71	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
14078.376	45.85	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

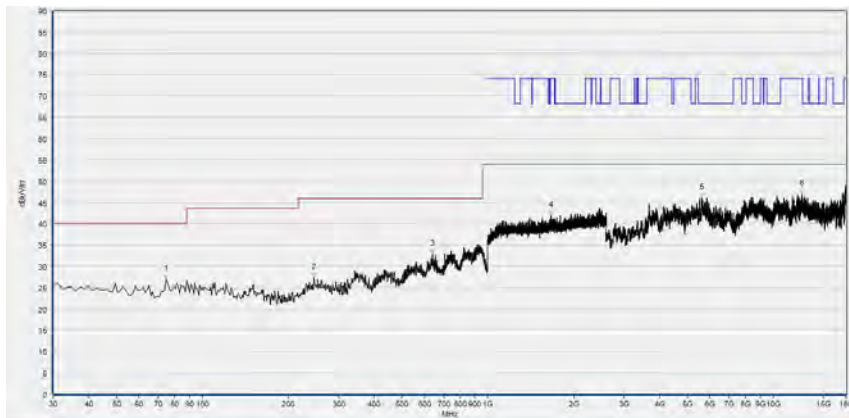
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 144



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
60.100	26.35	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
349.449	29.73	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
750.460	32.69	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1598.600	42.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5640.568	45.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12593.519	47.74	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

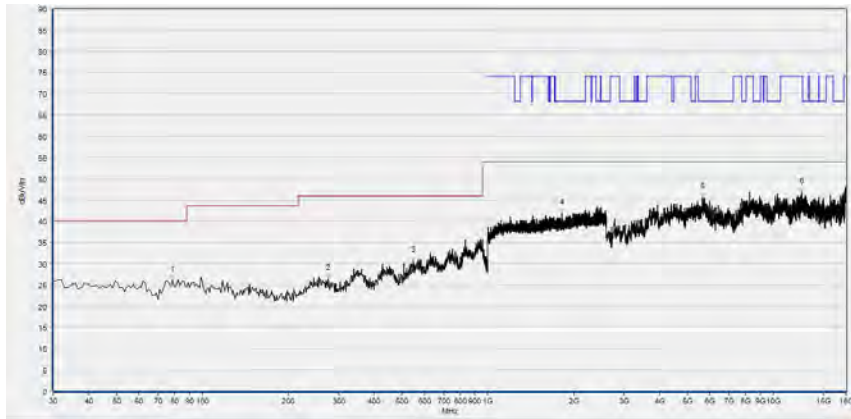
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
74.665	27.01	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
246.527	27.26	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
638.799	32.92	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1665.288	41.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5619.004	46.12	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12578.116	46.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

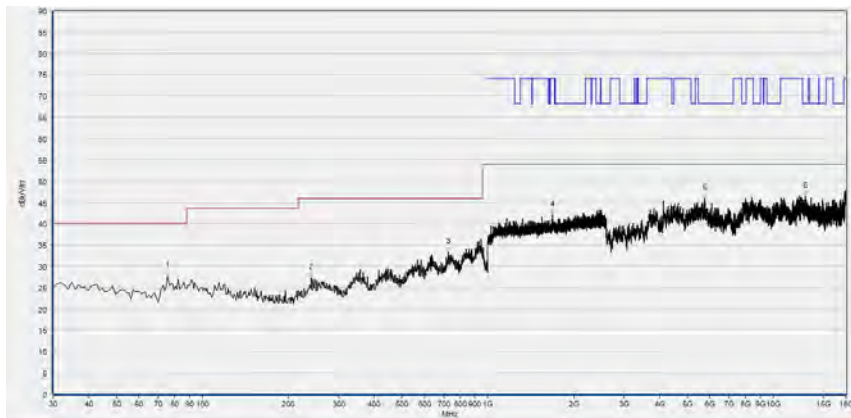
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 149



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
78.549	26.20	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
276.627	26.40	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
548.498	30.68	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1813.071	41.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5649.810	45.66	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12612.002	46.99	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

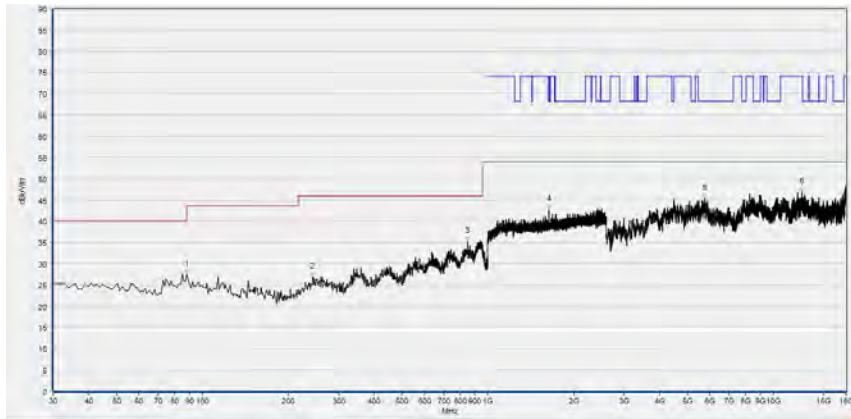
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
75.636	27.62	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
240.701	27.25	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
726.186	33.30	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1689.830	42.09	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5760.712	45.85	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12932.386	46.46	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

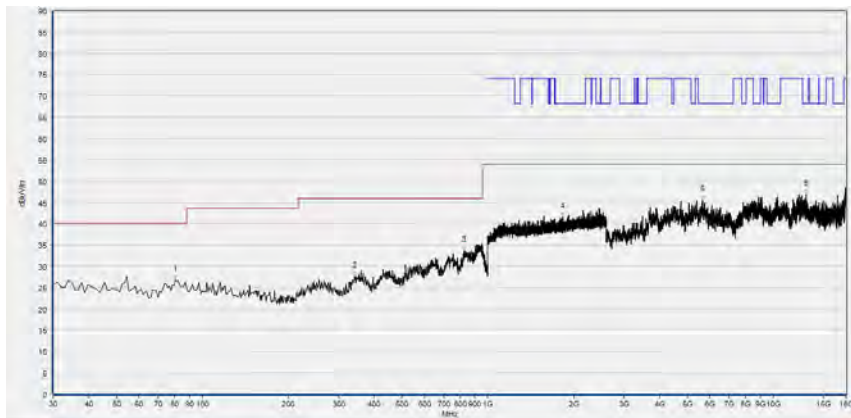
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 157



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
88.258	27.47	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
243.614	26.87	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
850.470	35.13	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1640.213	42.74	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5766.873	45.35	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12565.793	46.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

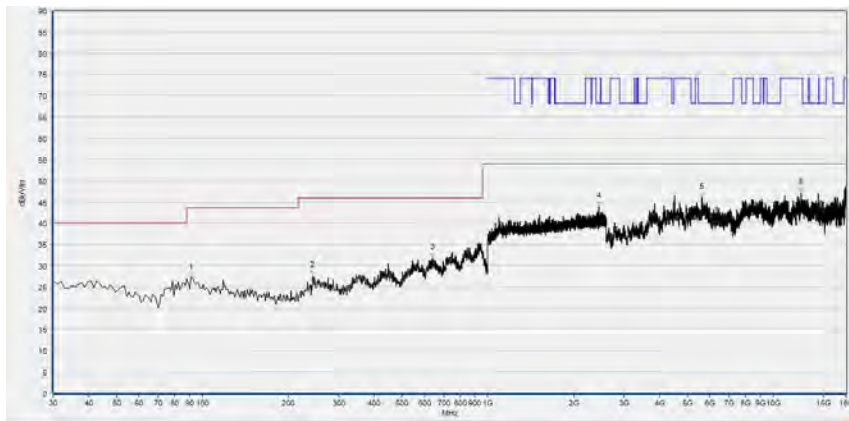
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
80.490	26.83	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
341.682	27.67	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
825.225	33.62	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1831.210	41.61	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5655.971	45.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
13049.450	46.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

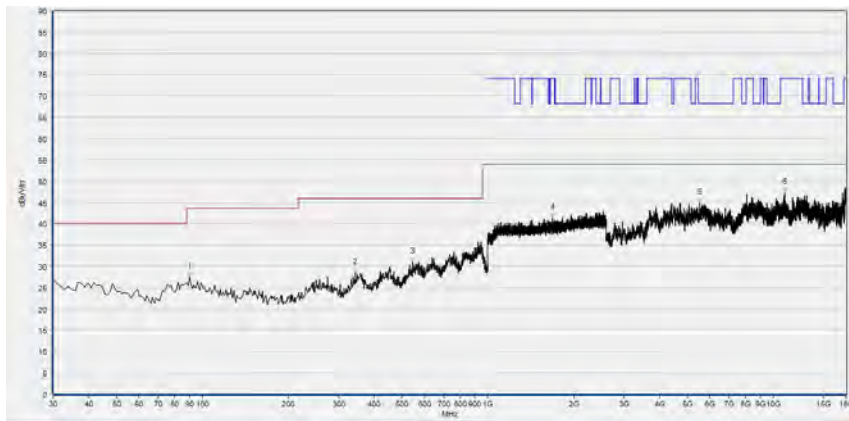
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 165



Fre. (MHz)	PK (dB μ V/m)	QP (dB μ V/m)	AV (dB μ V/m)	Limit-PK (dB μ V/m)	Limit-QP (dB μ V/m)	Limit-AV (dB μ V/m)	Antenna	Verdict
91.171	27.17	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
243.614	27.68	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
641.712	31.78	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2451.684	43.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5625.165	46.01	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12553.471	47.15	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

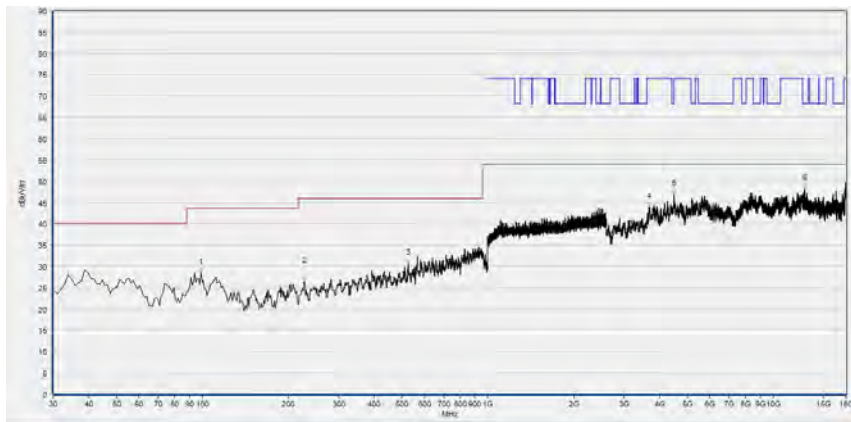


Fre. (MHz)	PK (dB μ V/m)	QP (dB μ V/m)	AV (dB μ V/m)	Limit-PK (dB μ V/m)	Limit-QP (dB μ V/m)	Limit-AV (dB μ V/m)	Antenna	Verdict
90.200	27.43	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
343.624	28.46	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
545.586	30.93	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1682.894	41.43	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5514.263	44.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10985.437	47.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

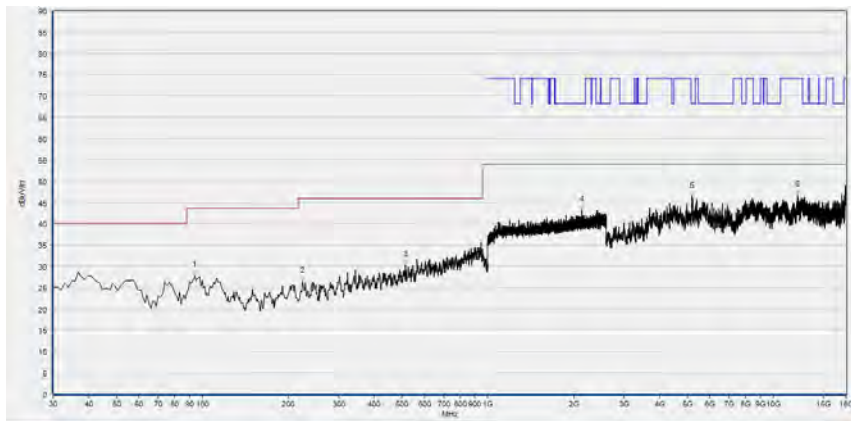
802.11n (HT40) mode

Plot for Channel 38



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
98.939	28.42	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
228.078	26.52	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
527.137	30.64	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3665.893	43.85	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4500.740	46.98	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12892.338	48.32	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

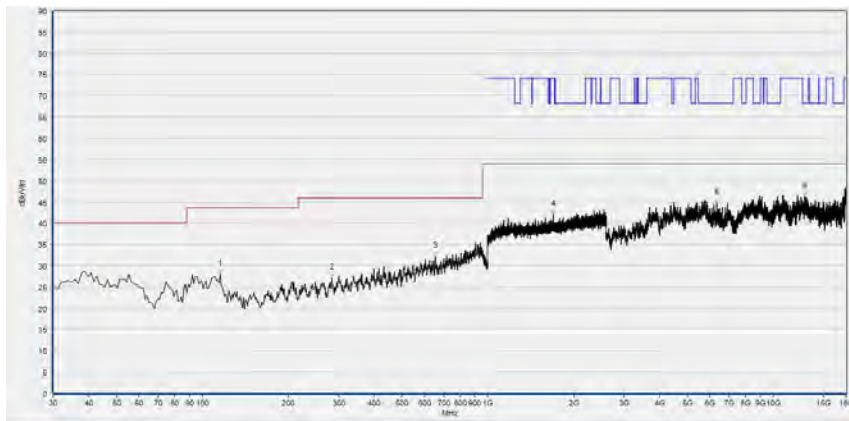
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
94.084	27.75	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
224.194	26.49	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
515.485	30.36	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2138.513	43.32	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5193.879	46.38	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12186.877	46.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

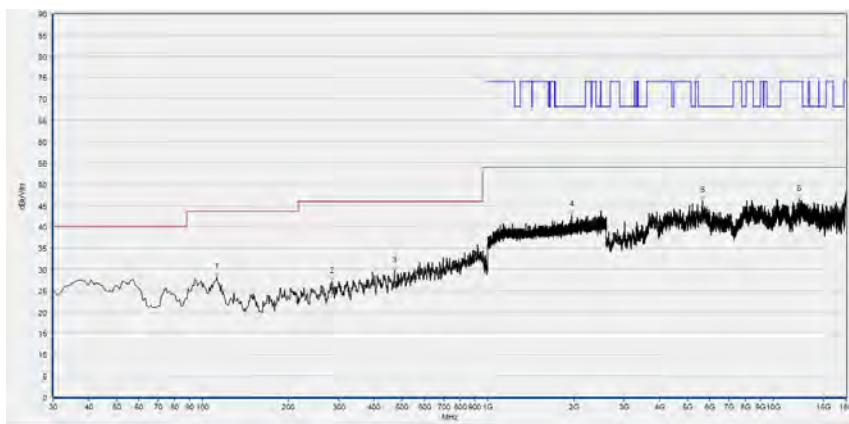
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 46



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
115.445	27.94	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
284.394	27.08	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
655.305	32.23	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1691.964	42.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6339.868	44.76	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12904.661	46.34	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

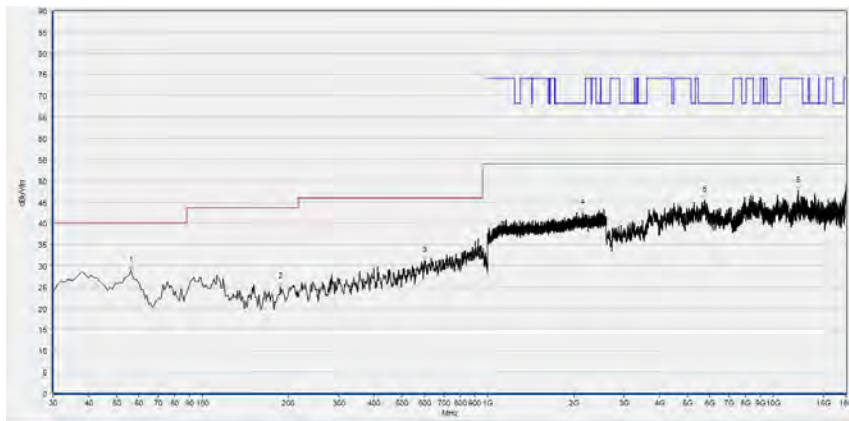
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
112.533	28.23	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
284.394	27.08	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
470.821	29.58	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1965.655	42.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5649.810	46.02	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12285.457	46.46	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

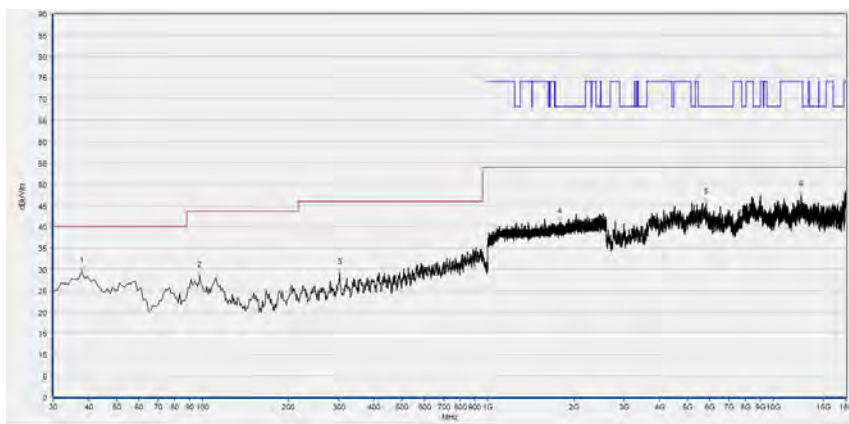
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 54



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
56.216	28.88	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
187.297	25.05	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
598.989	31.17	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2152.384	42.38	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5763.793	45.44	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12202.280	47.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

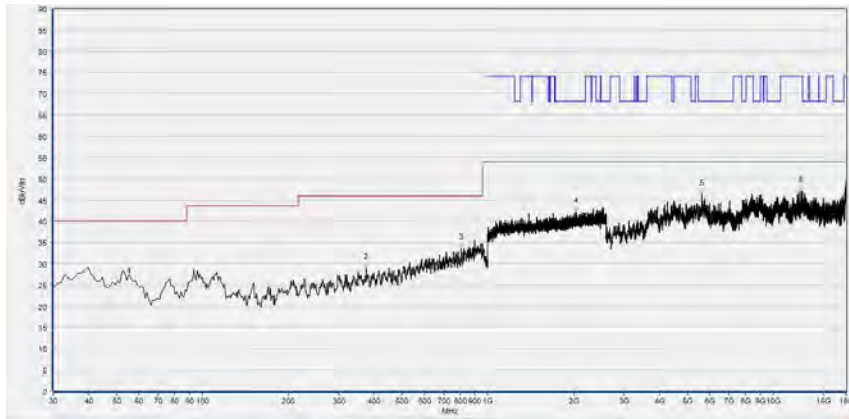
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
37.768	29.45	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
97.968	28.45	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
302.843	29.16	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1781.594	41.04	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5822.324	45.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12541.148	47.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

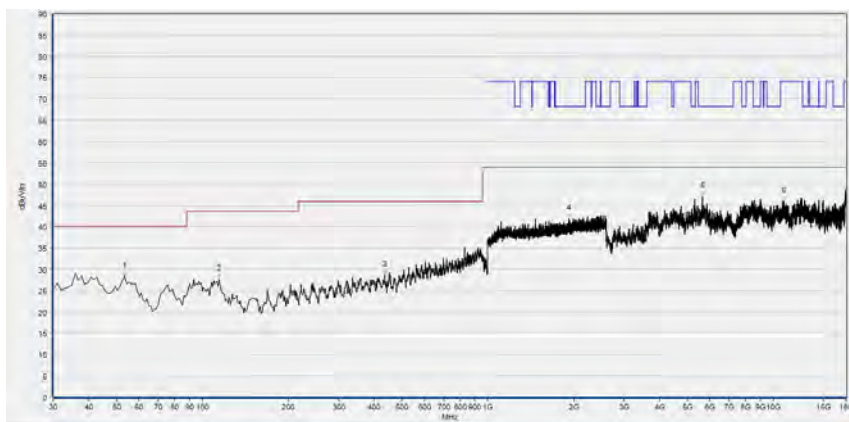
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 62



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
55.245	27.48	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
374.695	28.94	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
807.748	33.62	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2033.945	42.18	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5615.923	46.40	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12528.826	47.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

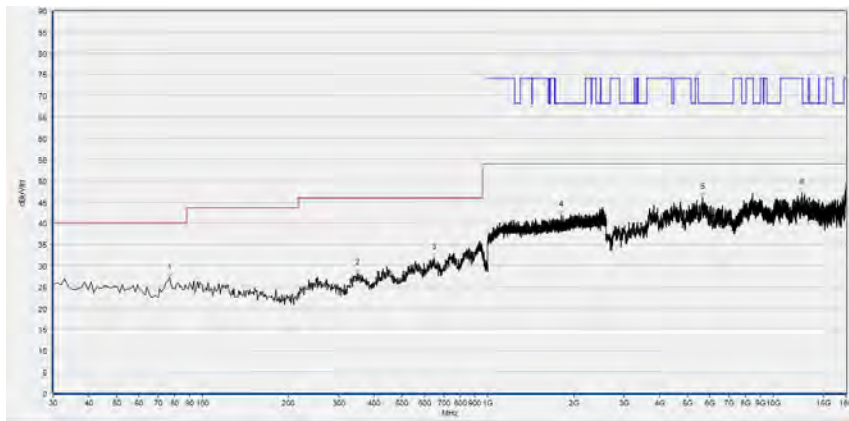
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
53.303	28.29	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
114.474	27.69	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
435.866	28.68	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1920.307	41.94	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5637.487	47.02	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10871.454	45.94	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

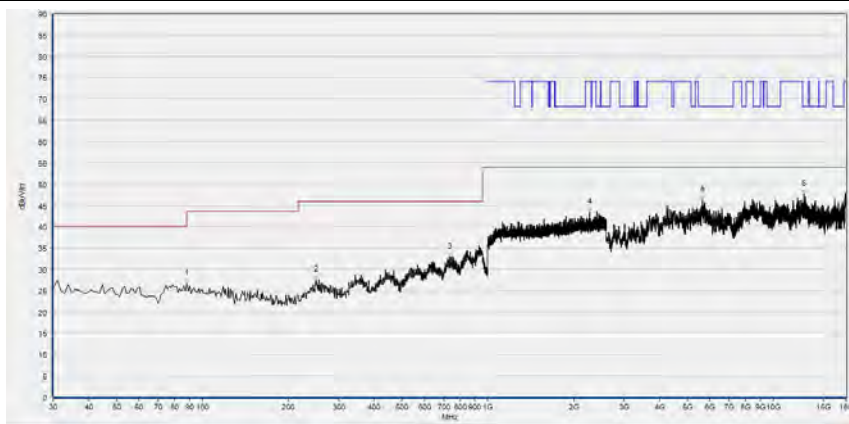
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 102



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
76.607	27.15	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
348.478	28.22	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
645.596	31.78	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1810.403	41.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5655.971	46.04	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12612.002	47.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

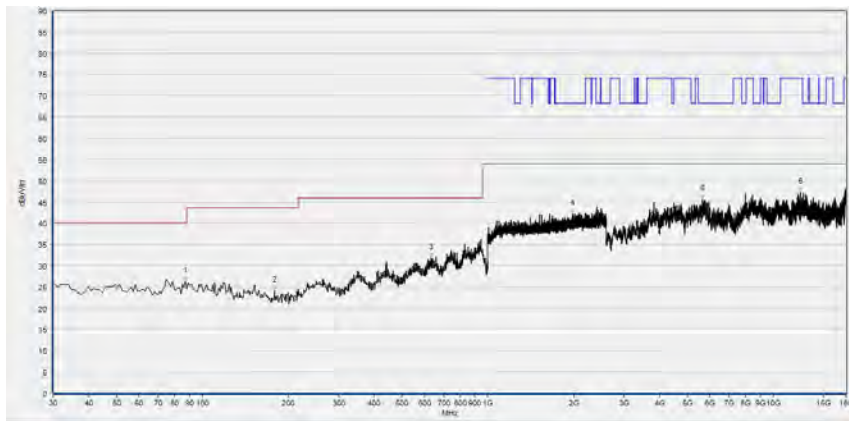
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
88.258	26.72	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
250.410	27.47	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
736.867	32.78	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2270.824	43.47	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5652.891	46.30	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12836.887	47.68	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

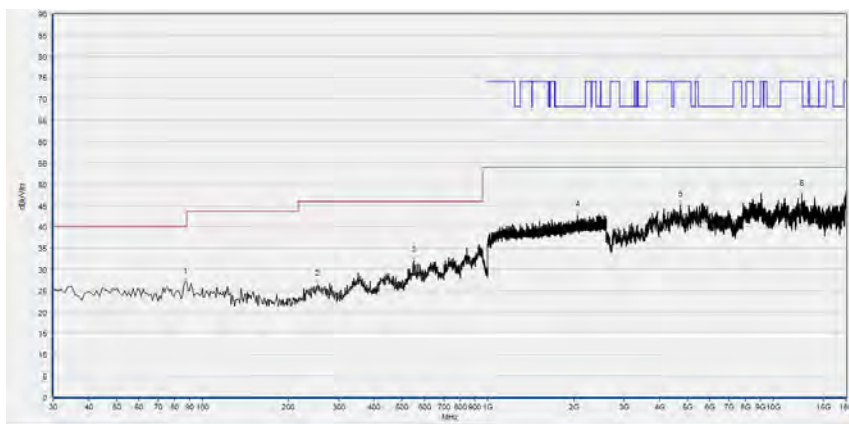
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 126



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
87.287	26.30	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
178.559	24.20	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
632.002	31.81	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1984.862	42.22	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5652.891	45.53	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12482.617	47.24	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

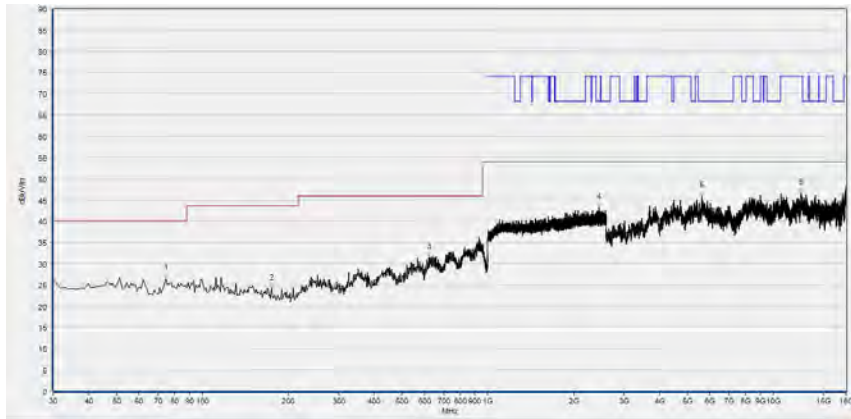
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
87.287	26.95	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
253.323	26.41	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
549.469	32.08	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2058.486	42.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4731.786	45.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12612.002	47.55	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

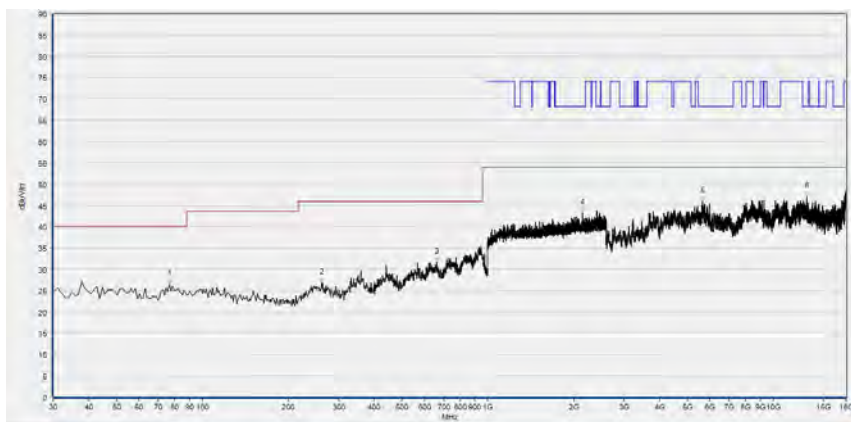
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 142



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
74.665	26.54	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
174.675	24.08	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
622.292	31.45	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2455.418	43.19	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5634.407	45.99	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12501.100	46.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

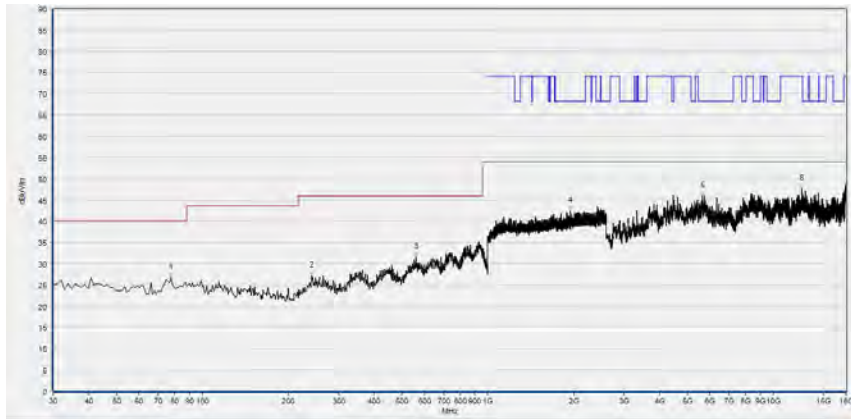
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
76.607	26.47	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
262.062	26.76	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
663.073	31.75	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2149.717	43.31	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5652.891	45.97	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
13074.095	47.06	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

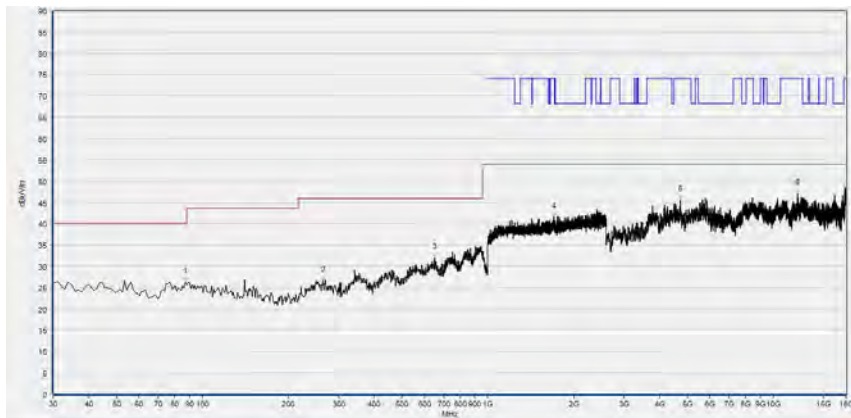
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 151



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
77.578	26.57	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
241.672	27.07	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
560.150	31.48	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1940.580	42.34	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5640.568	45.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12599.680	47.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

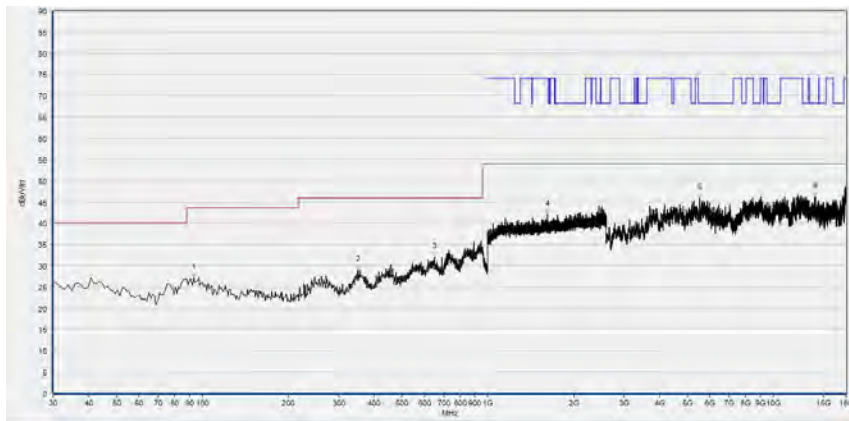
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
87.287	26.25	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
264.975	26.67	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
650.450	32.03	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1700.500	41.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4728.706	45.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12174.555	47.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

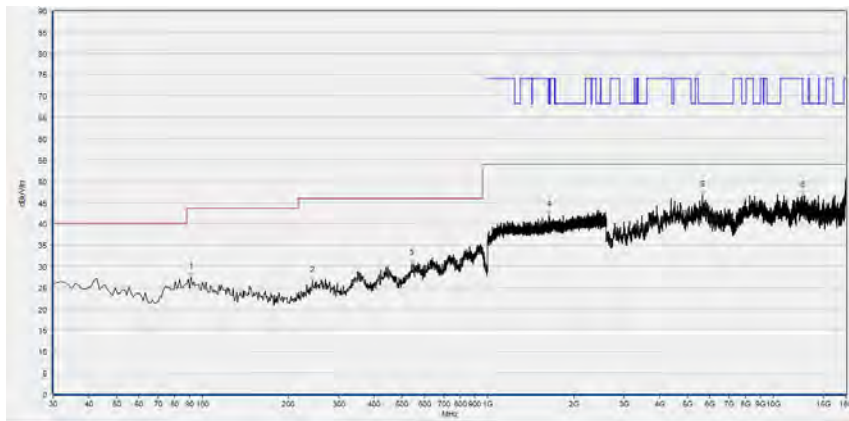
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 159



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
93.113	27.17	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
352.362	28.95	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
649.479	32.07	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1619.940	42.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5529.666	45.94	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
14084.537	46.20	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



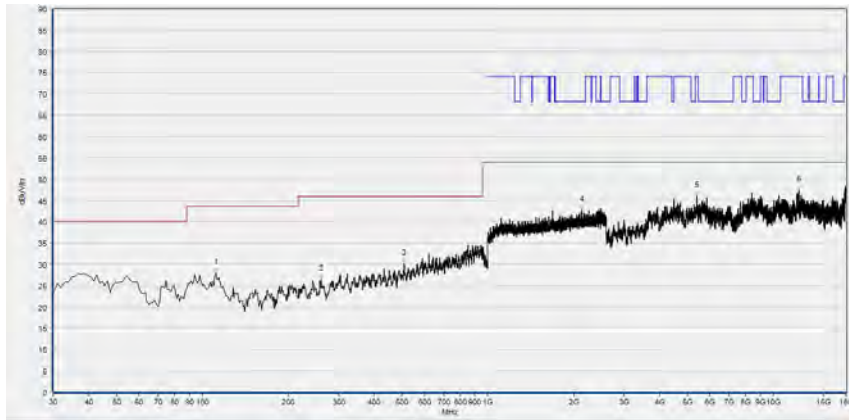
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
91.171	27.52	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
242.643	26.58	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
540.731	30.55	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1641.280	42.07	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5655.971	46.79	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12673.615	46.56	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)



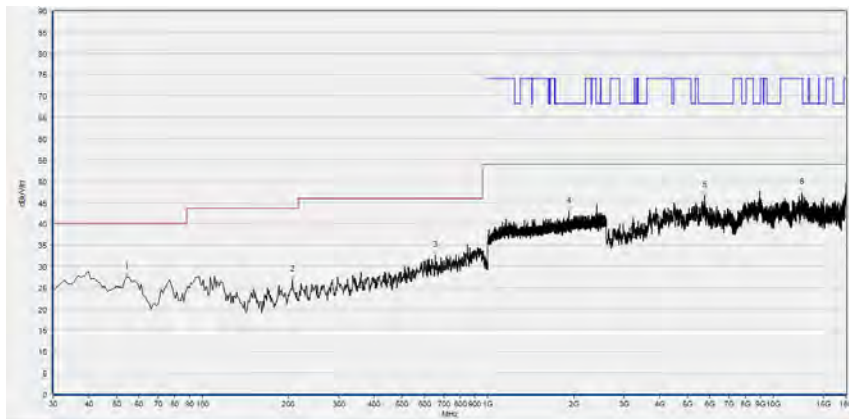
802.11ac (VHT80) Mode

Plot for Channel 42



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.562	27.99	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
261.091	26.46	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
508.689	30.11	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2128.376	42.67	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5409.522	46.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12303.941	47.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

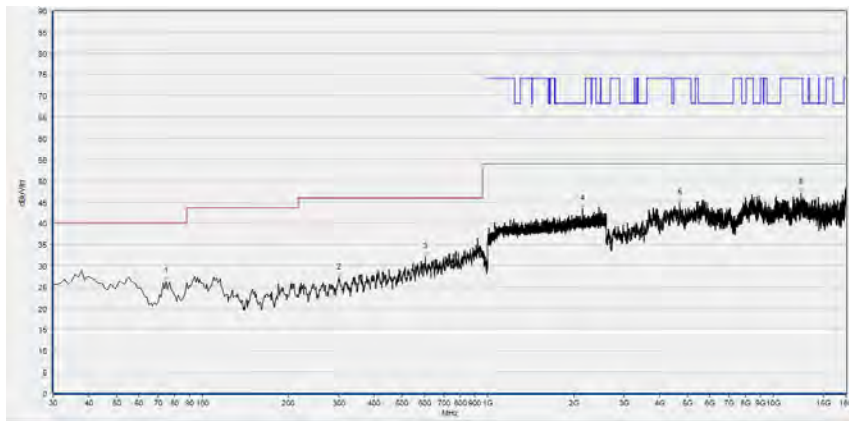
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
54.274	27.45	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
206.717	26.84	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
653.363	32.52	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1928.843	42.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5745.309	46.54	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12605.841	47.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

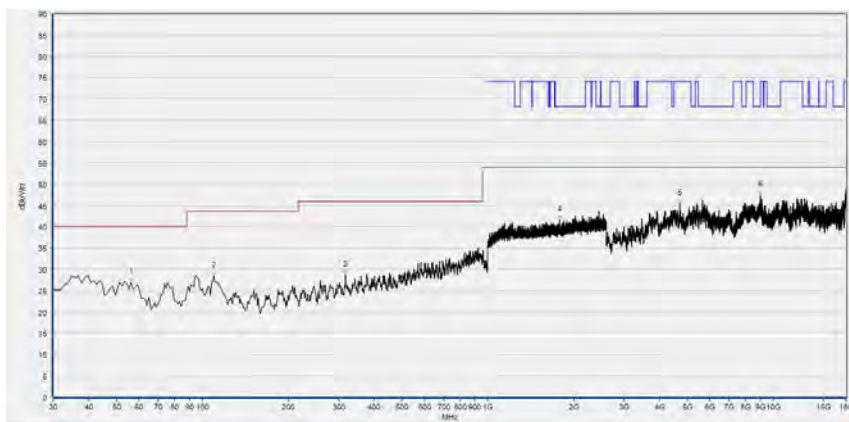
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 58



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
74.665	26.26	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
299.930	27.12	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
605.786	31.95	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2145.982	43.39	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4710.222	44.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12513.423	47.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

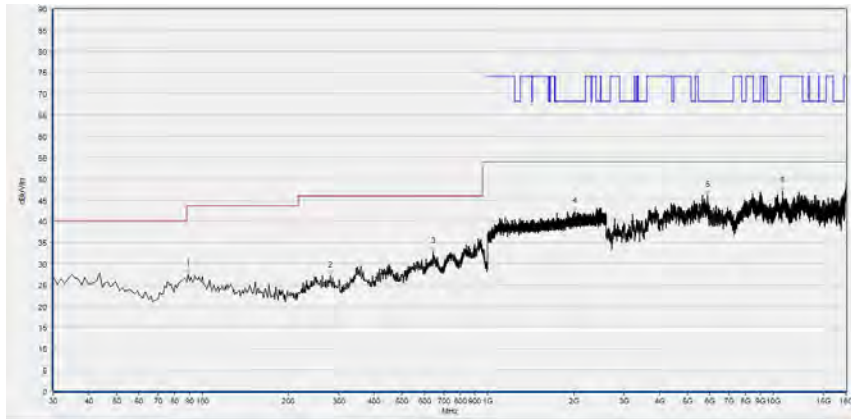
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
56.216	27.06	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
109.620	28.57	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
317.407	28.64	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1787.996	41.48	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4713.303	45.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8995.359	47.36	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

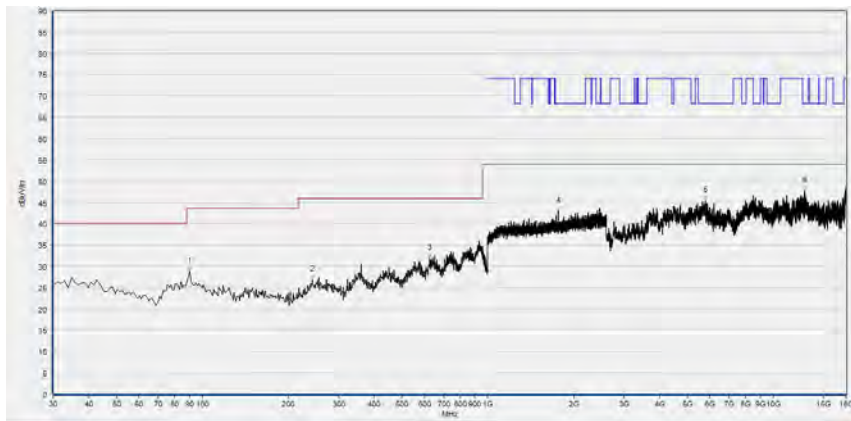
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 106



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
89.229	27.49	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
280.511	27.14	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
642.683	32.81	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2011.537	42.25	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5874.695	46.01	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10797.520	47.12	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

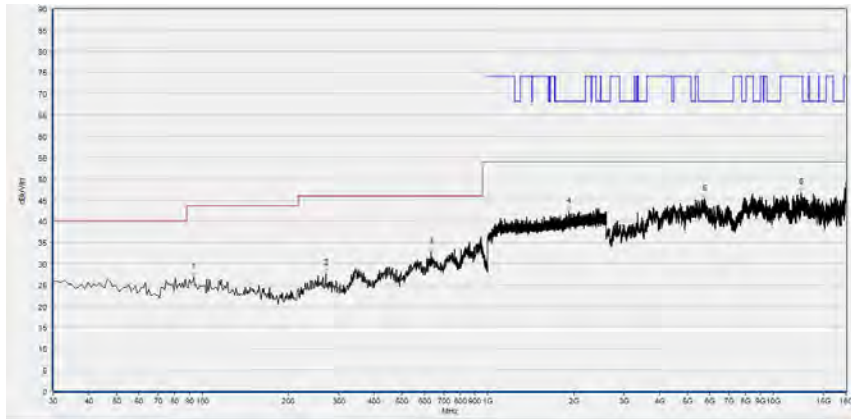
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
90.200	28.78	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
242.643	26.85	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
626.176	31.88	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1766.122	42.94	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5788.438	45.40	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12889.258	47.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

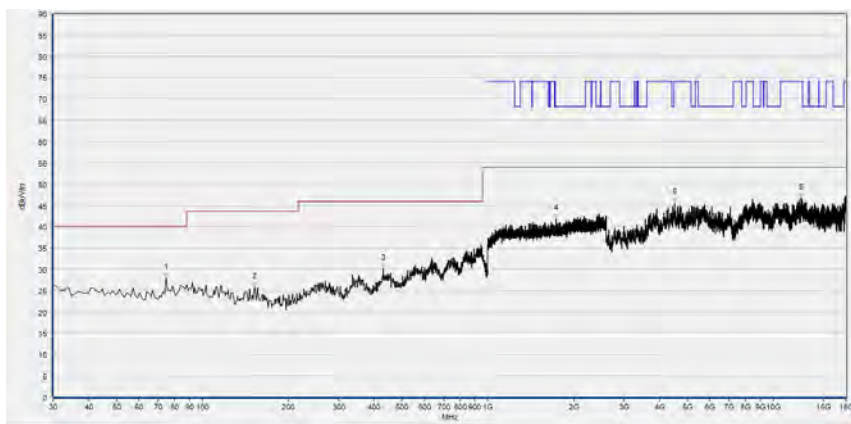
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 122



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
93.113	26.76	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
270.801	27.69	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
632.973	32.75	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1921.907	42.30	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5757.632	45.25	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12550.390	46.68	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

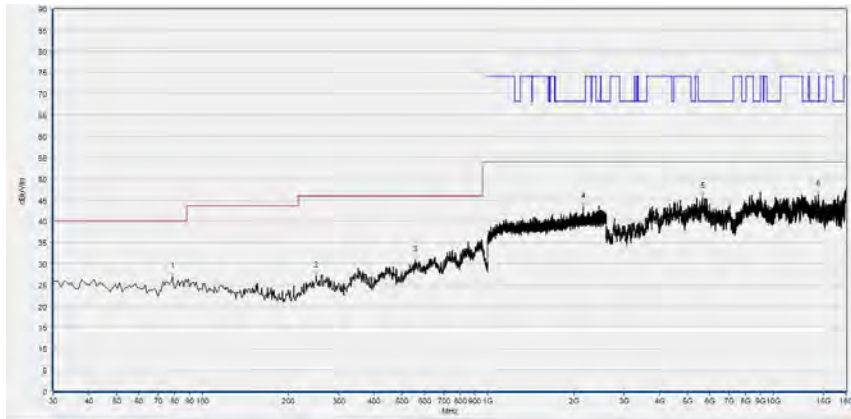
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
74.665	27.96	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
152.342	25.80	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
431.011	30.14	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1733.044	41.91	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4503.821	45.57	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12485.697	46.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

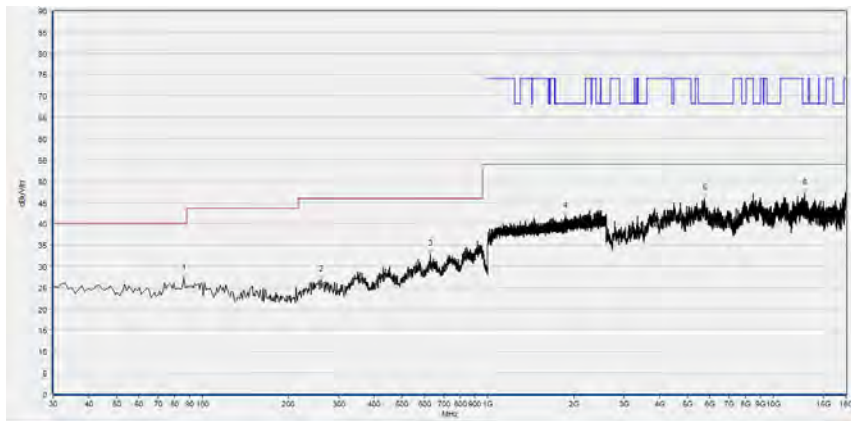
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 138



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
78.549	26.96	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
250.410	27.21	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
557.237	30.82	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2156.652	43.48	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5652.891	45.80	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
14383.357	46.29	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

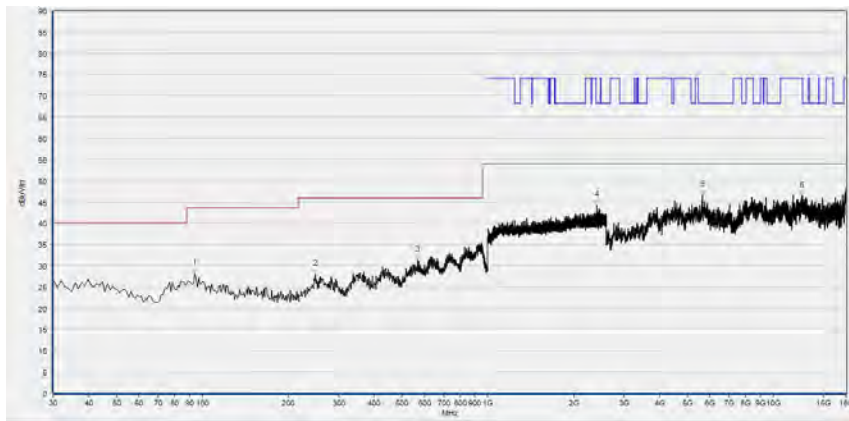
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
86.316	27.08	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
260.120	26.75	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
629.089	32.81	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1870.690	41.72	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5748.390	45.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12886.177	47.12	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

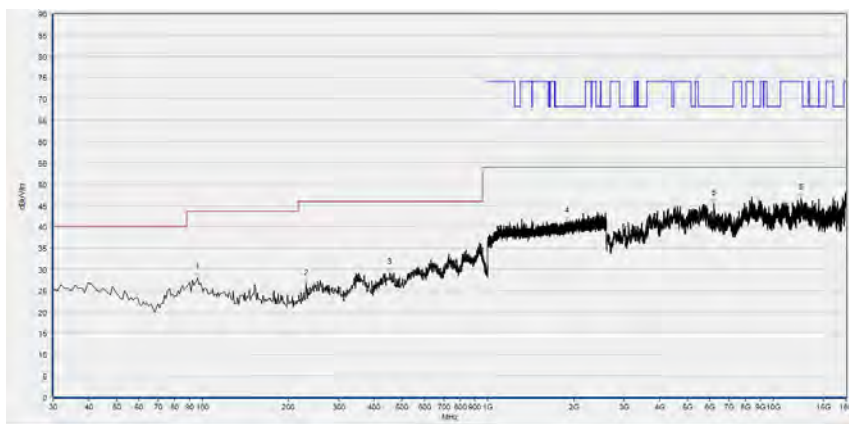
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 155



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
94.084	28.14	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
248.468	28.06	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
567.918	31.38	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2404.201	44.28	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5637.487	46.55	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12559.632	46.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
96.026	27.94	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
230.991	26.64	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
453.343	29.20	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1887.763	41.19	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
6207.401	45.42	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12522.665	46.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test Items	Uncertainty
Peak Output Power	±2.22dB
Power Spectral Density	±2.22dB
Bandwidth	±5%
Restricted Frequency Bands	±5%
Radiated Emission	±2.95dB
Conducted Emission	±2.44dB

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.



4. Test Equipments Utilized

4.1 Conducted Test Equipments

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Attenuator 1	N/A	10dB	Resnet	N/A	N/A
EXA Signal Analyzer	MY53470836	N9010A	Agilent	2021.03.25	2022.03.24
USB Wideband Power Sensor	MY54210011	U2021XA	Agilent	2021.03.25	2022.03.24
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial Cable	CB02	RF02	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A
Temperature Chamber	12108015	DTL-003S101	YOMA	2020.10.26	2021.10.25

4.2 Conducted Emission Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY56400093	N9038A	KEYSIGHT	2021.03.09	2022.03.08
LISN	812744	NSLK 8127	Schwarzbeck	2021.03.09	2022.03.08
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	2020.07.24	2021.07.23
				2021.07.21	2022.07.20
Coaxial Cable(BNC) (30MHz-26GHz)	CB01	EMC01	Morlab	N/A	N/A

4.3 List of Software Used

Description	Manufacturer	Software Version
Test System	Tonscend	V2.6
Power Panel	Agilent	V3.8
MORLAB EMCR V1.2	MORLAB	V1.0
TS+ -[JS32-CE]	Tonscend	V2.5.0.0



4.4 Radiated Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY54130016	N9038A	Agilent	2020.07.21	2021.07.20
				2021.07.16	2022.07.15
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2019.05.24	2022.05.23
Test Antenna - Horn	BBHA9170 #774	BBHA 9170	Schwarzbeck	2019.07.26	2022.07.25
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2019.02.14	2022.02.13
Test Antenna - Horn	01774	BBHA 9120D	Schwarzbeck	2019.07.26	2022.07.25
Coaxial Cable (N male) (9KHz-30MHz)	CB04	EMC04	Morlab	N/A	N/A
Coaxial Cable (N male) (30MHz-26GHz)	CB02	EMC02	Morlab	N/A	N/A
Coaxial Cable (N male) (30MHz-26GHz)	CB03	EMC03	Morlab	N/A	N/A
Coaxial Cable (N male) (30MHz-40GHz)	CB05	EMC05	Morlab	N/A	N/A
1-18GHz pre-Amplifier	61171/61172	S020180L32 03	Tonscend	2020.07.21	2021.07.20
				2021.07.16	2022.07.15
18-26.5GHz pre-Amplifier	46732	S10M100L38 02	Tonscend	2020.07.21	2021.07.20
				2021.07.16	2022.07.15
26-40GHz pre-Amplifier	56774	S40M400L40 02	Tonscend	2020.07.21	2021.07.20
				2021.07.16	2022.07.15
Notch Filter	N/A	WRCG-5150-5350	Wainwright	2020.07.21	2021.07.20
				2021.07.16	2022.07.15
Notch Filter	N/A	WRCG-5470-5725	Wainwright	2020.07.21	2021.07.20
				2021.07.16	2022.07.15
Notch Filter	N/A	WRCG-5725-5850	Wainwright	2020.07.21	2021.07.20
				2021.07.16	2022.07.15



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Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Anechoic Chamber	N/A	9m*6m*6m	CRT	2020.01.06	2023.01.05

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