



(Channel 151, 5755MHz, 802.11ax (HEW40), ANT0)



(Channel 159, 5795MHz, 802.11ax (HEW40), ANT0)



802.11ax (HEW80) Mode

A.Test Verdict:

Frequency (MHz)	Measured PPSD (dBm/MHz)		Duty Factor	Total PPSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
	ANT0	ANT1				
5210	-2.16	-2.45	0.05	0.80	11	PASS
5290	-1.72	-2.10		1.19		
5530	-2.17	-2.62		0.71		
5610	-2.68	-3.17		0.18		
5690	-2.08	-2.55		0.79		
Frequency (MHz)	Measured PPSD (dBm/500KHz)		Duty Factor	Total PPSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
	ANT0	ANT1				
5690	-5.08	-5.45	0.05	-2.16	30	PASS
5775	-5.05	-5.39		-2.12		

Note: Directional gain = $1.34\text{dBi} + 10\log(2) = 4.35\text{dBi} < 6\text{dBi}$, so the limit shall be 11dBm/MHz for 5.18-5.24GHz, 5.260-5.320GHz, 5.500-5.720GHz band and 30dBm/500KHz for 5.745-5.825GHz band.

B.Test Plot:



(Channel 42, 5210MHz, 802.11ax (HEW80), ANT0)



(Channel 58, 5290MHz, 802.11ax (HEW80), ANT0)



(Channel 106, 5530MHz, 802.11ax (HEW80), ANT0)



(Channel 122, 5610MHz, 802.11ax (HEW80), ANT0)



(Channel 138, 5690MHz, 802.11ax (HEW80), ANT0)



(Channel 138, 5690MHz, 802.11ax (HEW80), ANT0)



(Channel 155, 5775MHz, 802.11ax (HEW80), ANT0)

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)	23	4.440
100%		-30	31	5.985
100%		-20	29	5.598
100%		-10	25	4.826
100%		0	24	4.633
100%		+10	22	4.247
100%		+20	21	4.054
100%		+30	23	4.440
100%		+40	26	5.019
100%		+50	26	5.019
115%		5.75	+20	27
85%	4.25	+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)	18	3.422
100%		-30	22	4.183
100%		-20	23	4.373
100%		-10	27	5.133
100%		0	19	3.612
100%		+10	18	3.422
100%		+20	21	3.992
100%		+30	26	4.943
100%		+40	29	5.513
100%		+50	25	4.753
115%	5.75	+20	19	3.612
85%	4.25	+20	21	3.992

U-NII-2C (Ch. 100)				
5500MHz				
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	Fre. Dev. (kHz)	Deviation (ppm)
100%	5.00	+20(Ref)	21	3.818
100%		-30	25	4.545
100%		-20	30	5.455
100%		-10	29	5.273
100%		0	24	4.364
100%		+10	20	3.636
100%		+20	23	4.182
100%		+30	32	5.818
100%		+40	34	6.182
100%		+50	25	4.545
115%	5.75	+20	27	4.909
85%	4.25	+20	30	5.455



U-NII-3 (Ch. 149)				
5745MHz				
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	Fre. Dev. (kHz)	Deviation (ppm)
100%	5.00	+20(Ref)	22	3.829
100%		-30	26	4.526
100%		-20	23	4.003
100%		-10	21	3.655
100%		0	30	5.222
100%		+10	25	4.352
100%		+20	26	4.526
100%		+30	25	4.352
100%		+40	28	4.874
100%		+50	27	4.700
115%	5.75	+20	31	5.396
85%	4.25	+20	29	5.048

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).

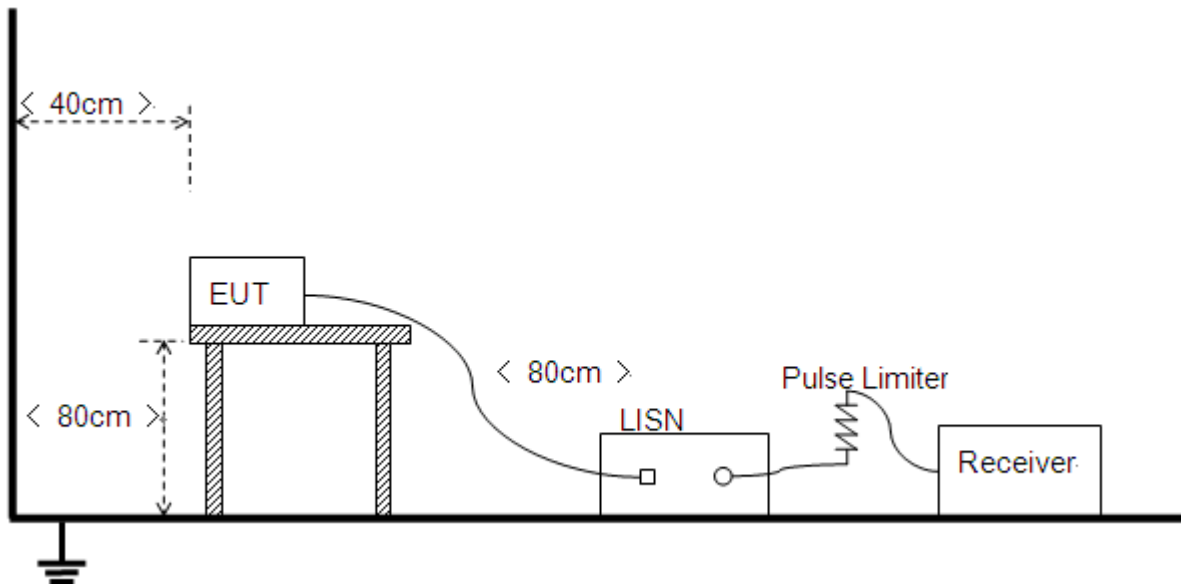
Frequency Range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

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

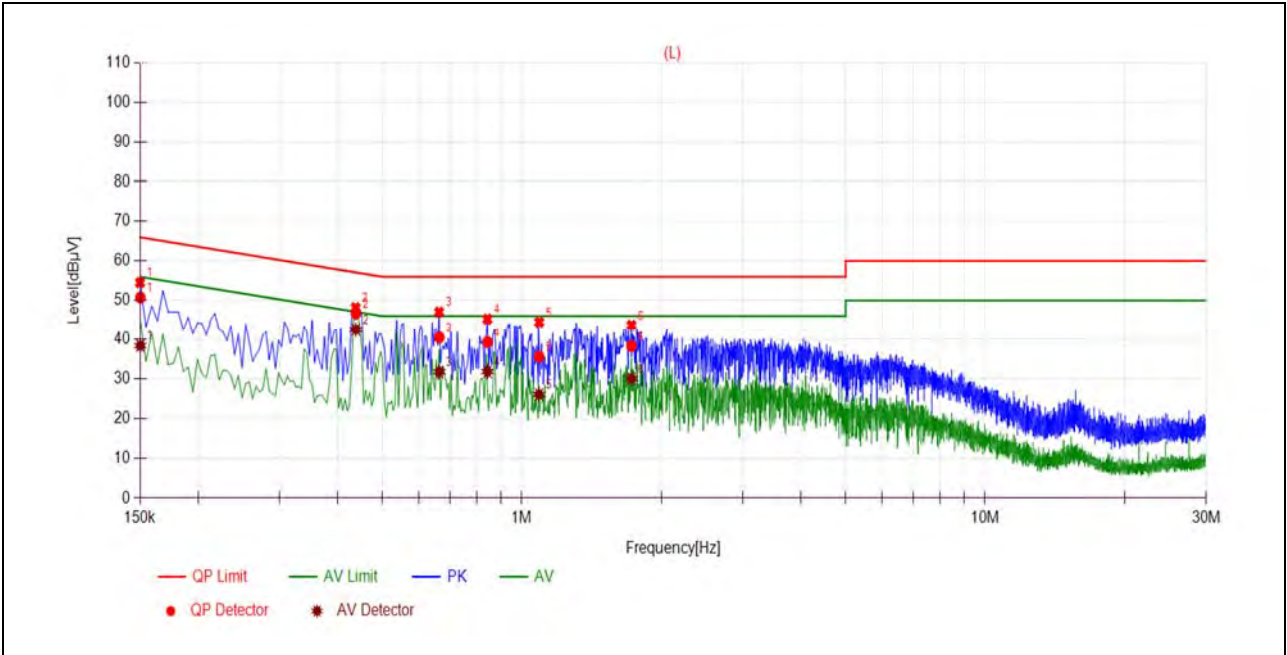
The measurement results are obtained as below:

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

U_R : Receiver Reading

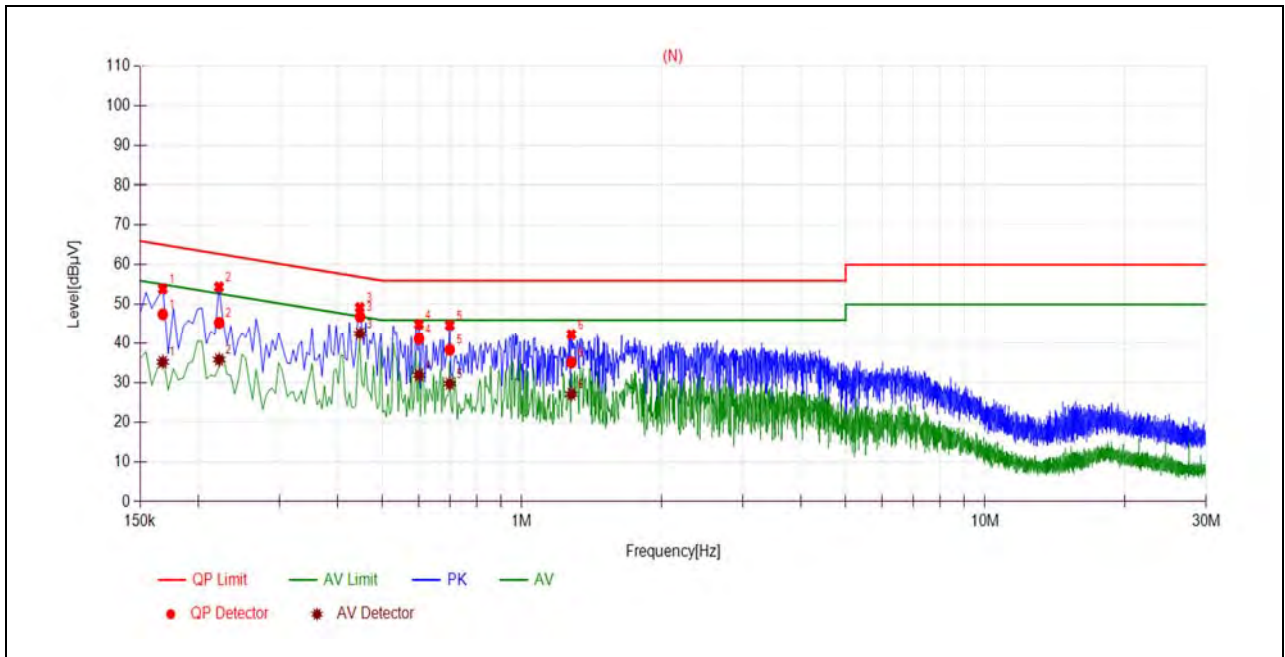
A_{Factor} : Voltage division factor of LISN

B.Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1502	50.76	38.36	65.99	55.99	Line	PASS
2	0.4384	46.70	42.52	57.09	47.09		PASS
3	0.6635	40.46	31.73	56.00	46.00		PASS
4	0.8433	39.27	31.78	56.00	46.00		PASS
5	1.0896	35.58	26.02	56.00	46.00		PASS
6	1.7247	38.27	30.03	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	0.1679	47.50	35.23	65.06	55.06	Neutral	PASS
2	0.2222	45.34	35.82	62.74	52.74		PASS
3	0.4474	46.91	42.49	56.92	46.92		PASS
4	0.5999	41.14	31.90	56.00	46.00		PASS
5	0.6988	38.36	29.74	56.00	46.00		PASS
6	1.2801	35.12	27.06	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

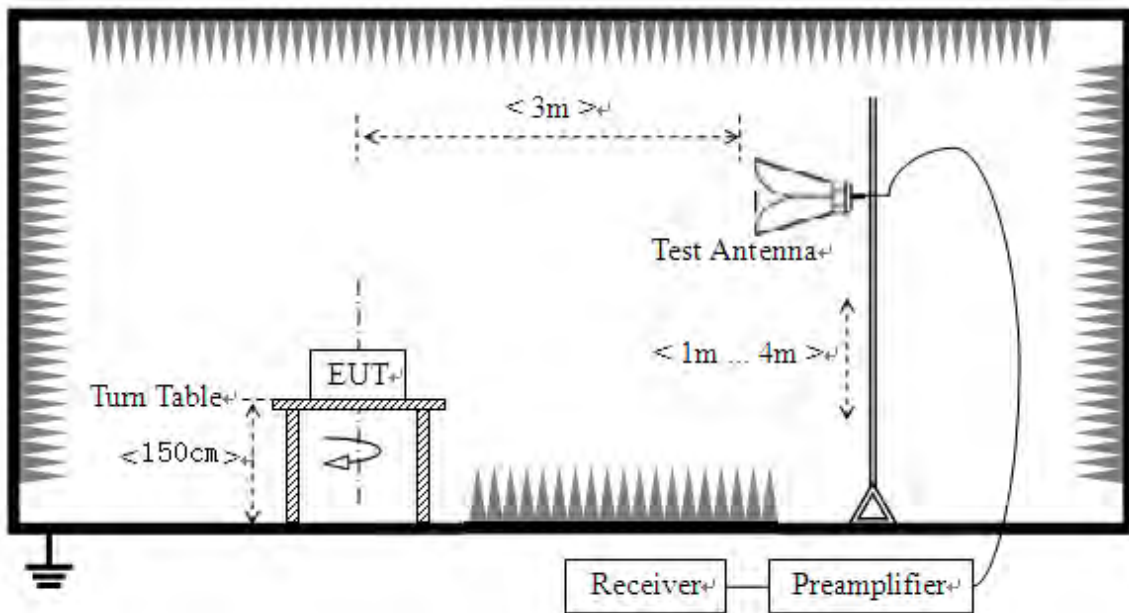
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following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

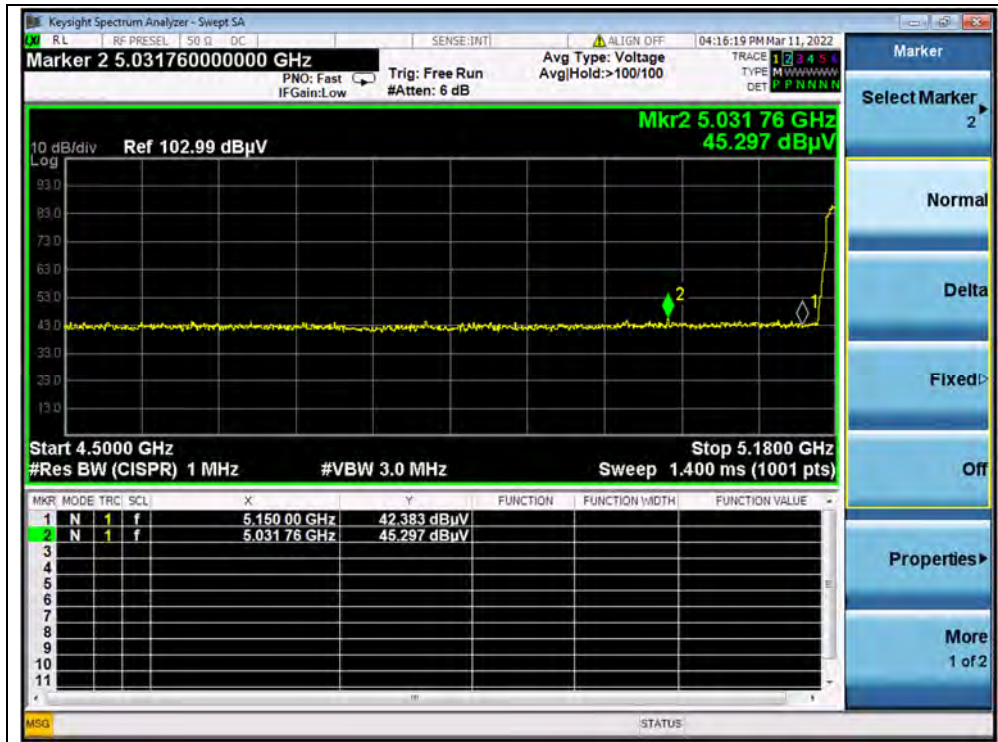
Note 2 All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

802.11a Mode

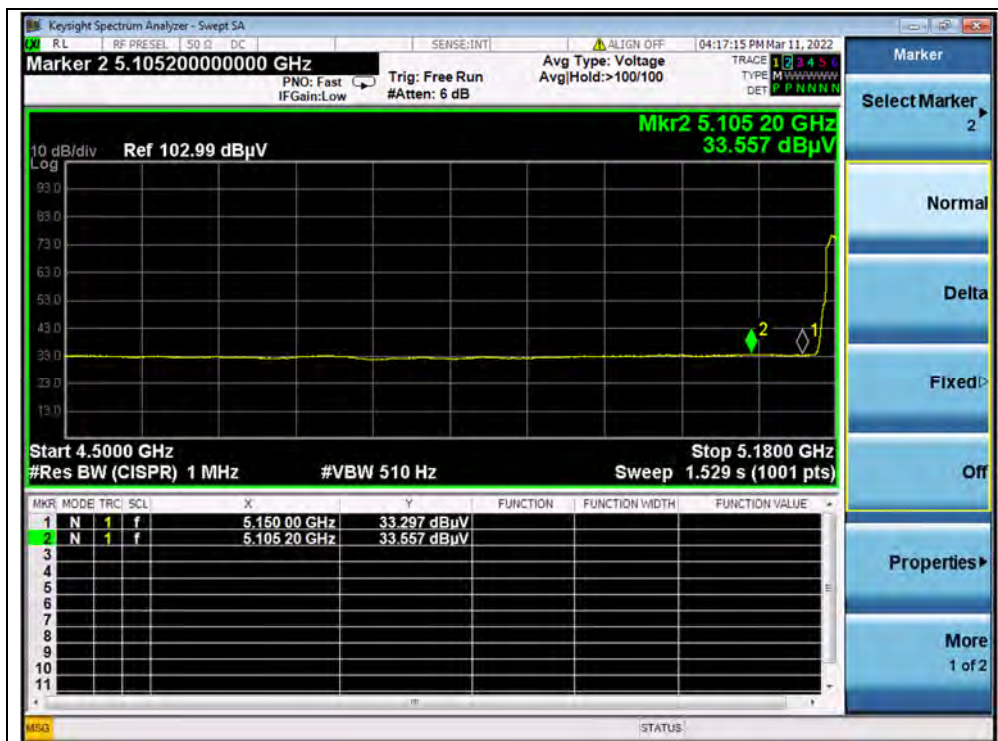
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV	U_R (dBμV)					
36	5031.76	PK	45.30	-19.54	32.20	57.96	74	PASS
36	5105.20	AV	33.56	-19.54	32.20	46.22	54	PASS
64	5357.38	PK	43.31	-18.80	32.20	56.71	74	PASS
64	5350.52	AV	31.57	-18.80	32.20	44.97	54	PASS
100	5194.31	PK	44.45	-19.20	32.20	57.45	74	PASS
100	5154.51	AV	33.24	-19.20	32.20	46.24	54	PASS
144	5725.80	PK	49.05	-19.20	32.20	62.05	68.23	PASS
149	5725.00	PK	48.84	-19.01	32.20	62.03	122.23	PASS
165	5850.00	PK	41.46	-19.01	32.20	54.65	122.23	PASS

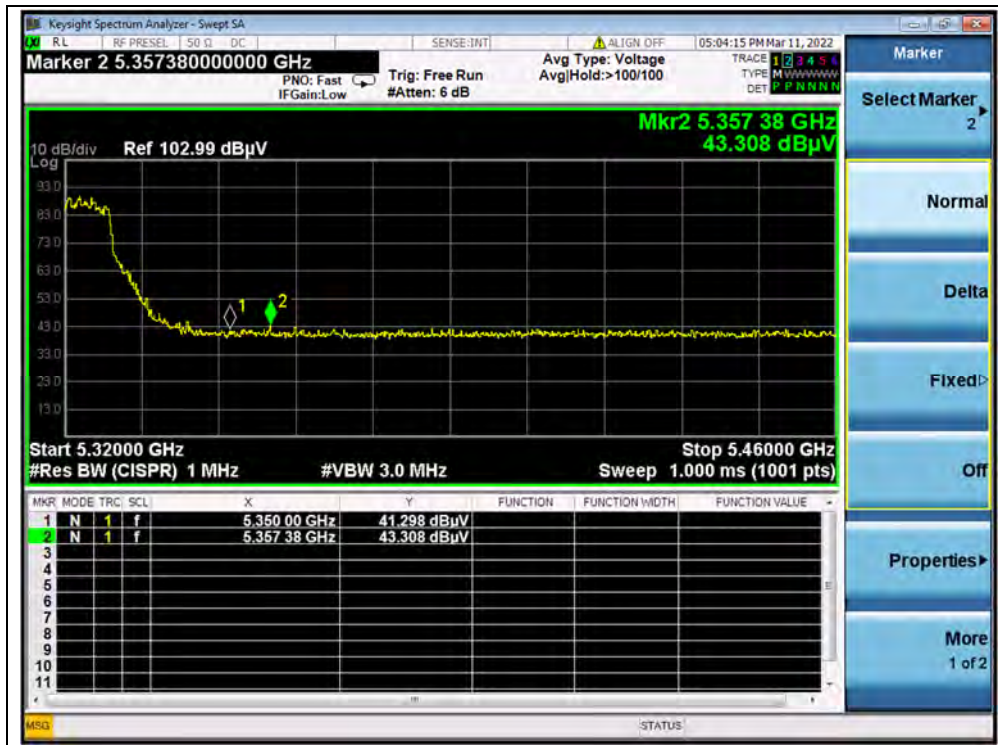
B.Test Plot:



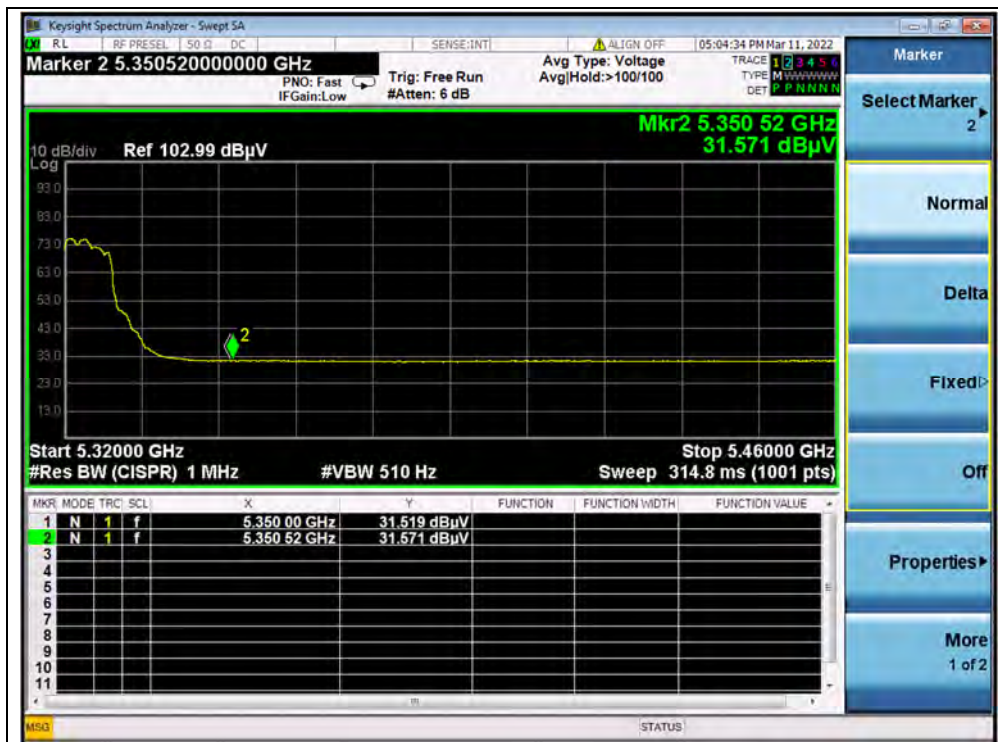
(PEAK, Channel 36, 802.11a)



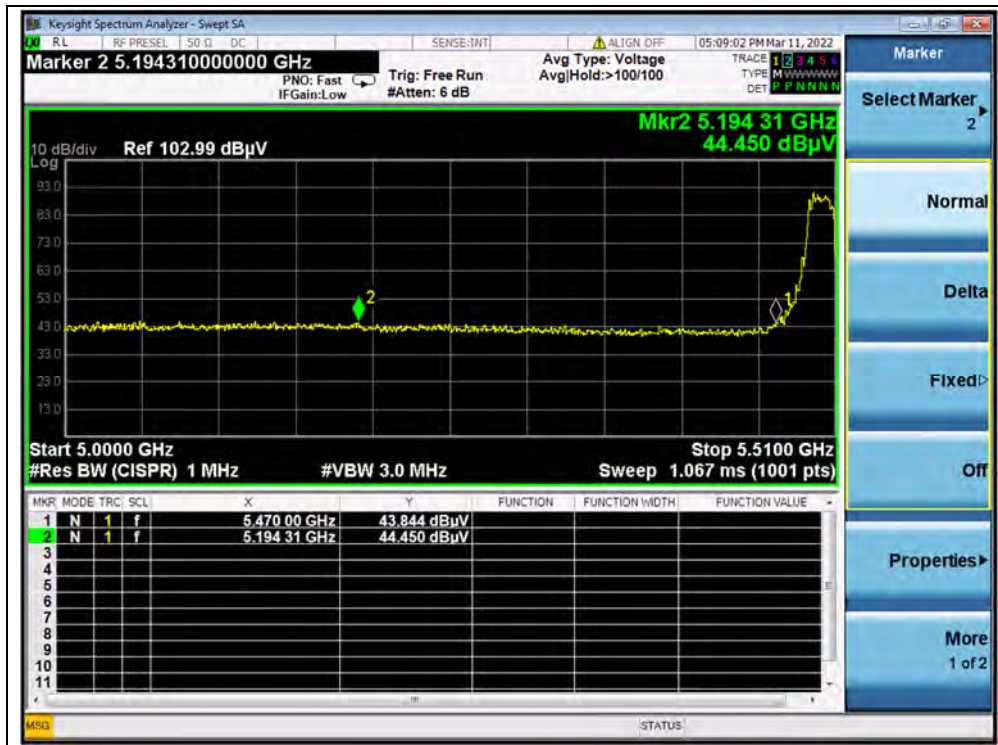
(AVERAGE, Channel 36, 802.11a)



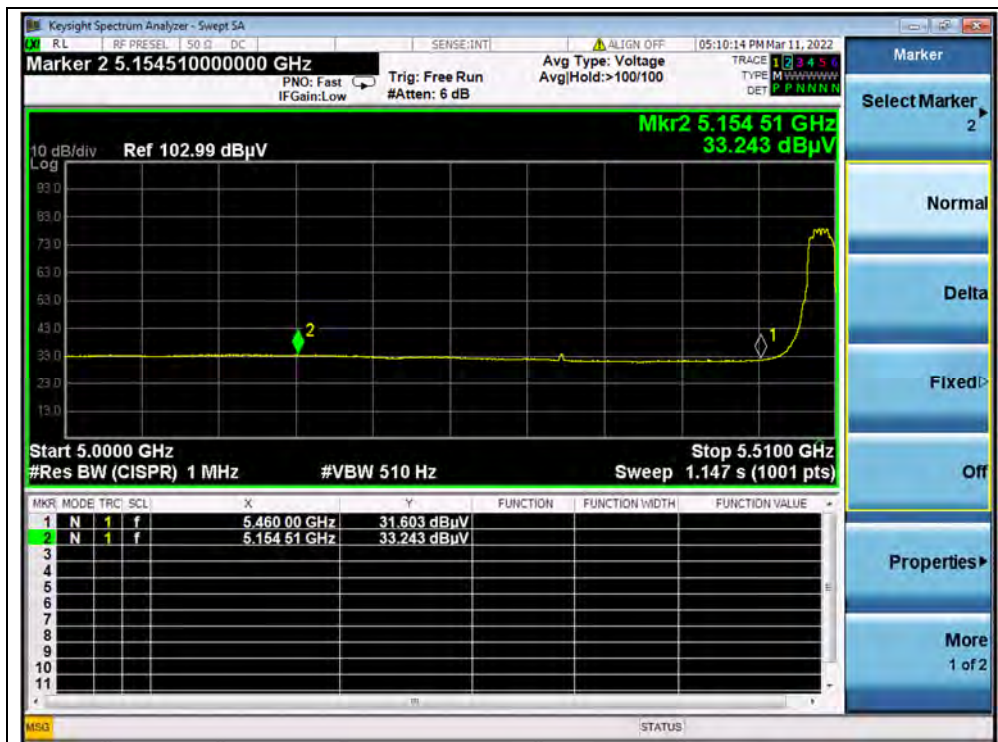
(PEAK, Channel 64, 802.11a)



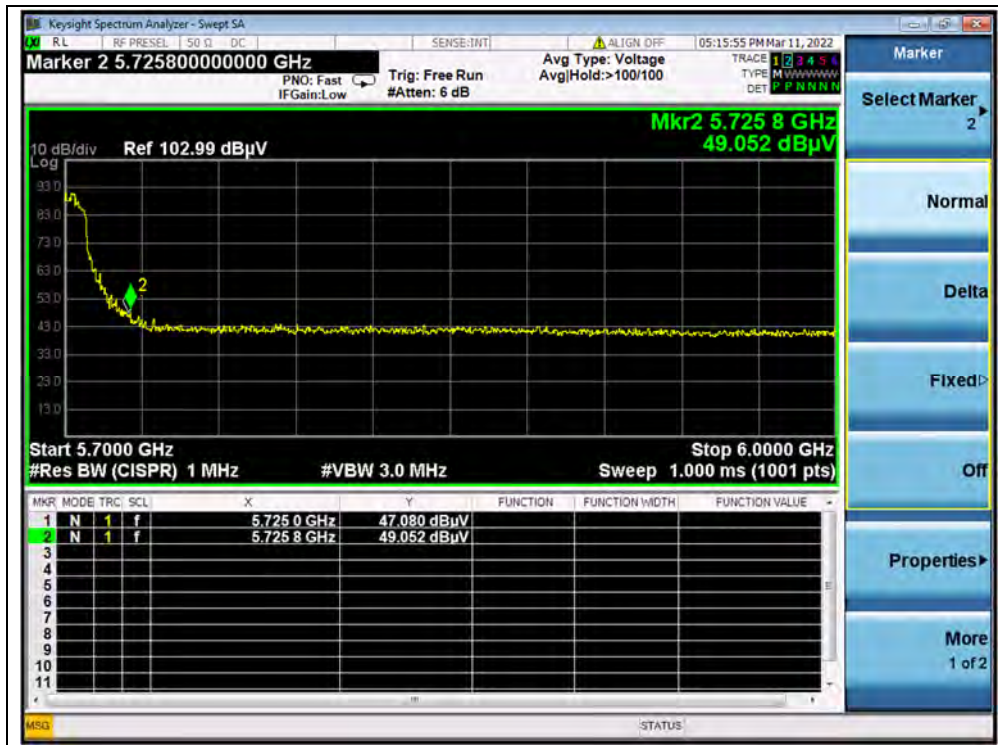
(AVERAGE, Channel 64, 802.11a)



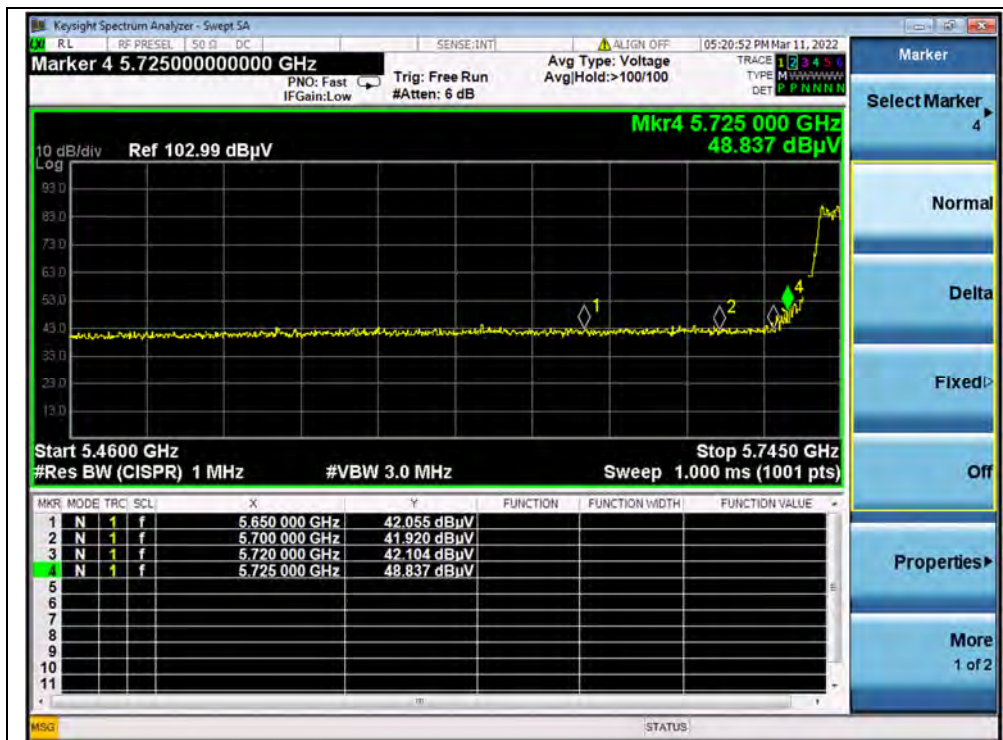
(PEAK, Channel100, 802.11a)



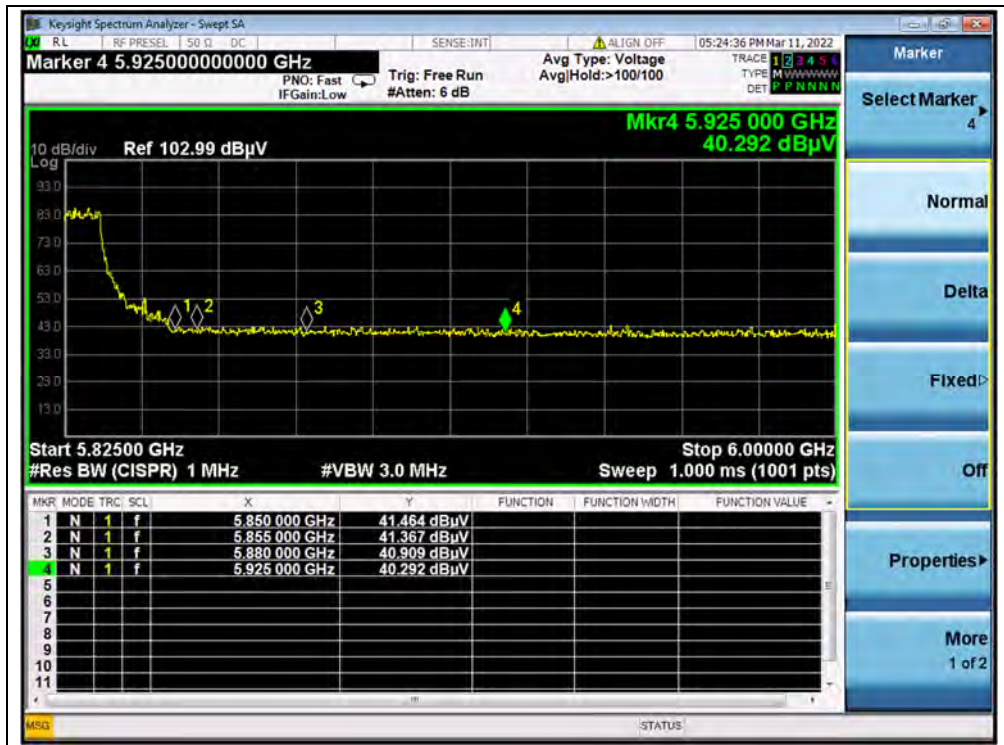
(AVERAGE, Channel 100, 802.11a)



(PEAK, Channel 144, 802.11a)



(PEAK, Channel 149, 802.11a)



(PEAK, Channel 165, 802.11a)

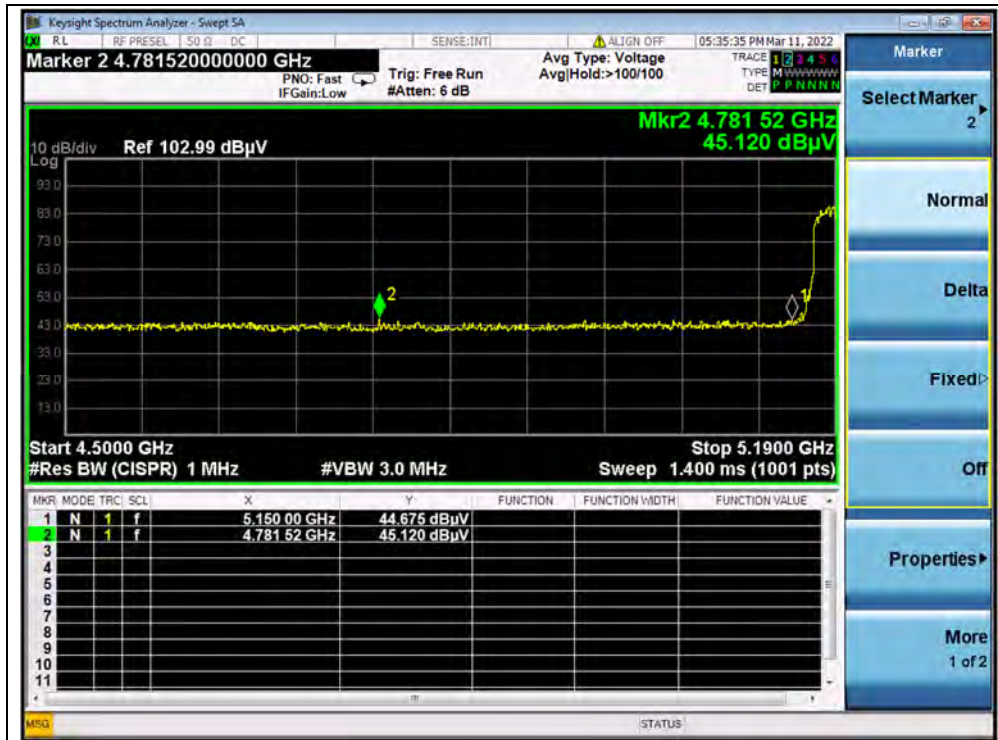


802.11n (HT40) Mode

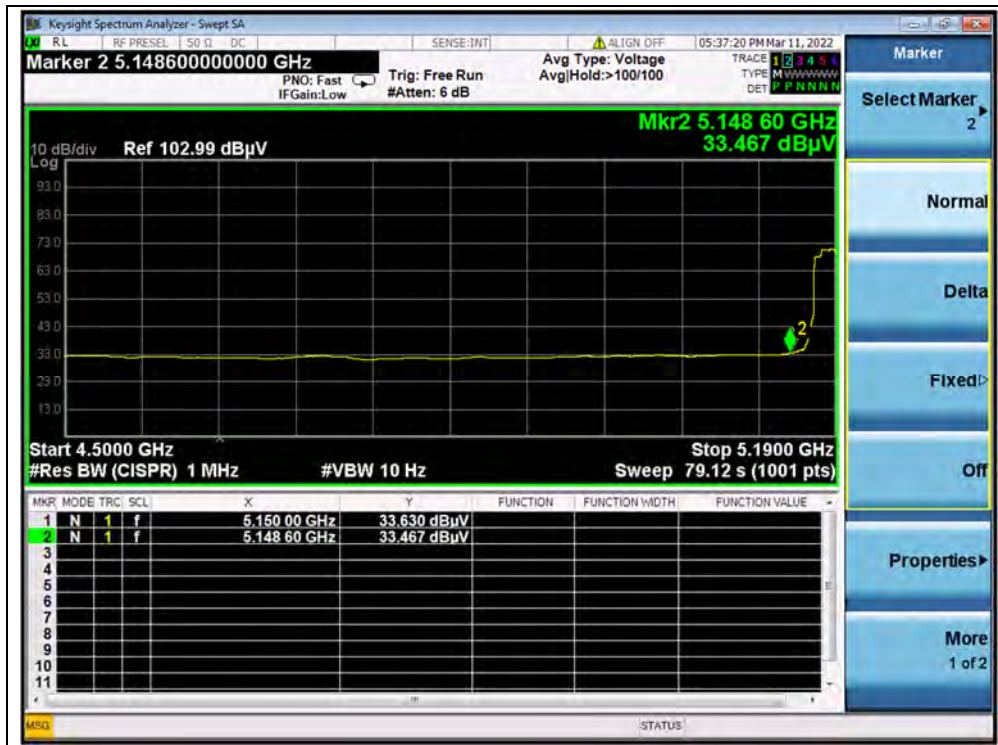
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)		
38	4781.52	PK	45.12	-19.54	32.20	57.78	74	PASS
38	5150.00	AV	33.63	-19.54	32.20	46.29	54	PASS
62	5350.94	PK	44.43	-18.80	32.20	57.83	74	PASS
62	5352.76	AV	31.02	-18.80	32.20	44.42	54	PASS
102	5176.97	PK	44.64	-19.20	32.20	57.64	68.23	PASS
102	5109.63	AV	32.90	-19.20	32.20	45.90	54	PASS
142	5726.43	PK	44.97	-19.20	32.20	57.97	68.23	PASS
151	5708.39	PK	53.67	-19.01	32.20	66.86	107.73	PASS
159	5850.00	PK	46.31	-19.01	32.20	59.50	122.23	PASS

B.Test Plot:



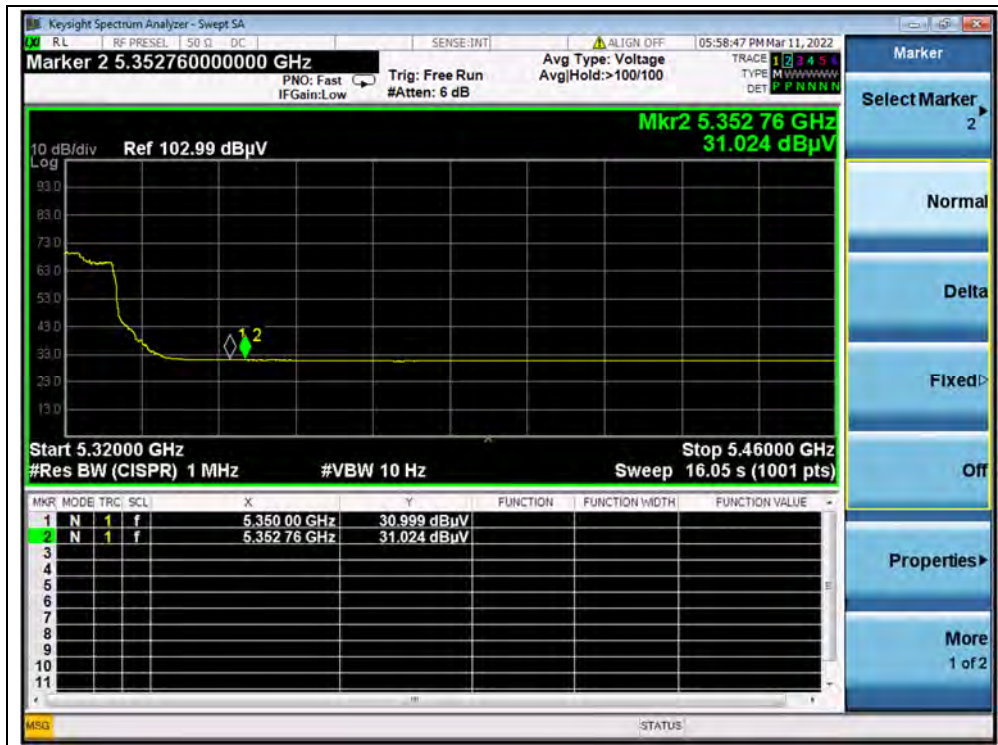
(PEAK, Channel 38, 802.11n (HT40))



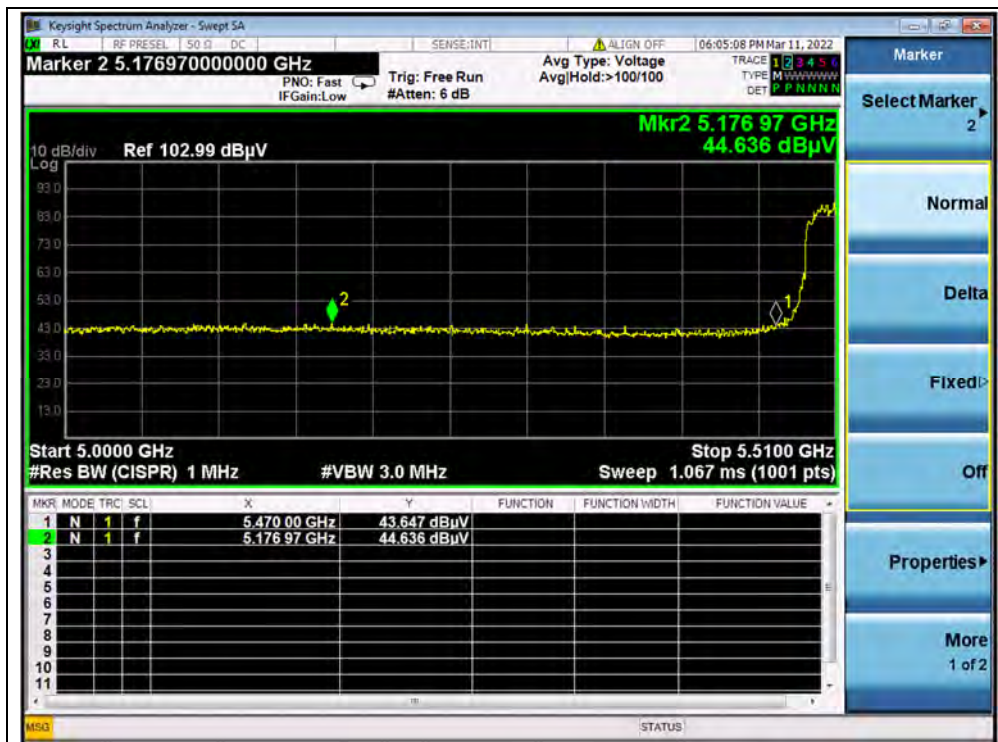
(AVERAGE, Channel 38, 802.11n (HT40))



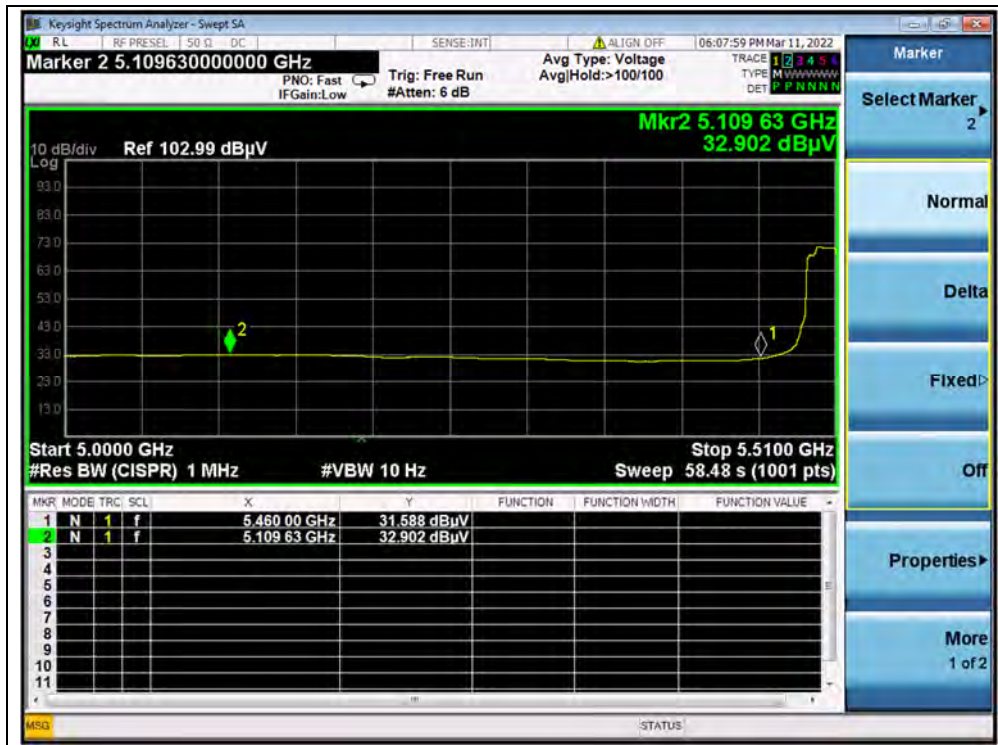
(PEAK, Channel 62, 802.11n (HT40))



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



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



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



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



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



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

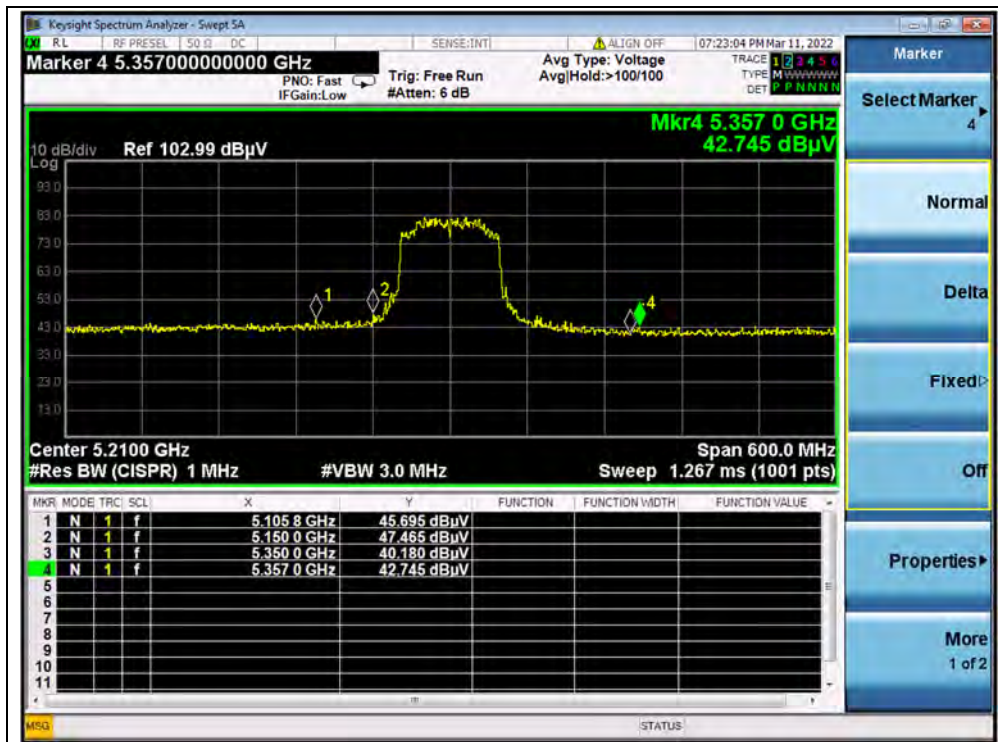


802.11ac (VHT80) Mode

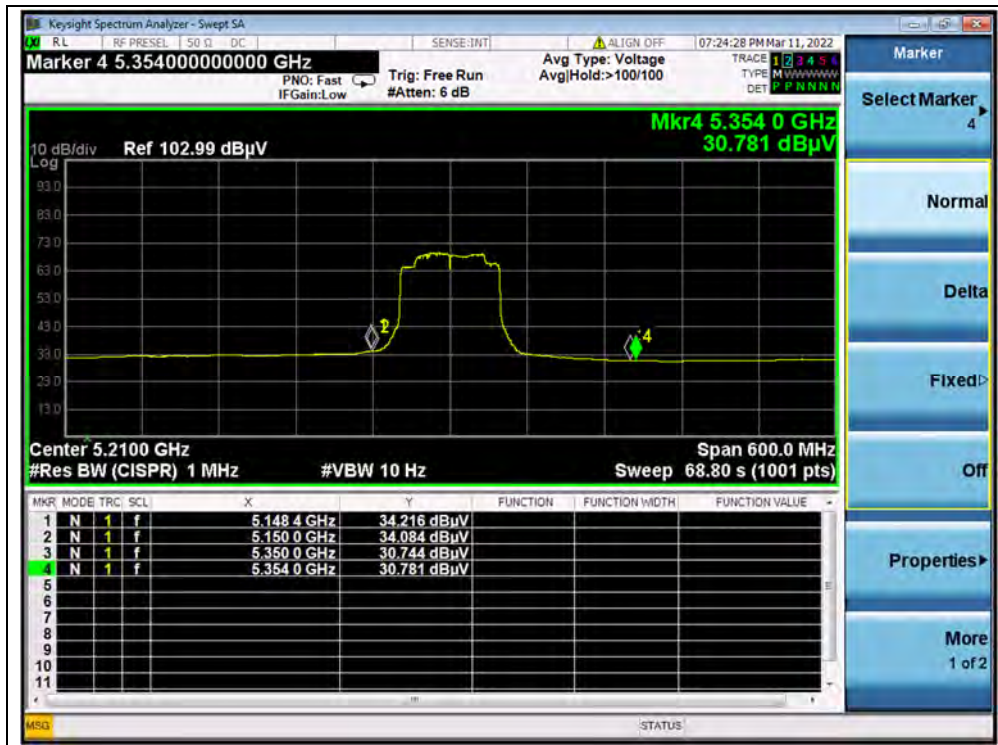
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)	(dB μ V/m)	
42	5150.00	PK	47.47	-19.54	32.20	60.13	74	PASS
42	5148.40	AV	34.22	-19.54	32.20	46.88	54	PASS
58	5352.20	PK	46.66	-18.80	32.20	60.06	74	PASS
58	5128.60	AV	32.83	-18.80	32.20	46.23	54	PASS
106	5470.00	PK	51.46	-19.20	32.20	64.46	68.23	PASS
106	5455.23	AV	33.42	-19.20	32.20	46.42	54	PASS
138	5734.02	PK	46.80	-19.20	32.20	59.80	68.23	PASS
155	5720.00	PK	50.42	-19.01	32.20	63.61	110.83	PASS
155	5850.00	PK	50.54	-19.01	32.20	63.73	122.23	PASS

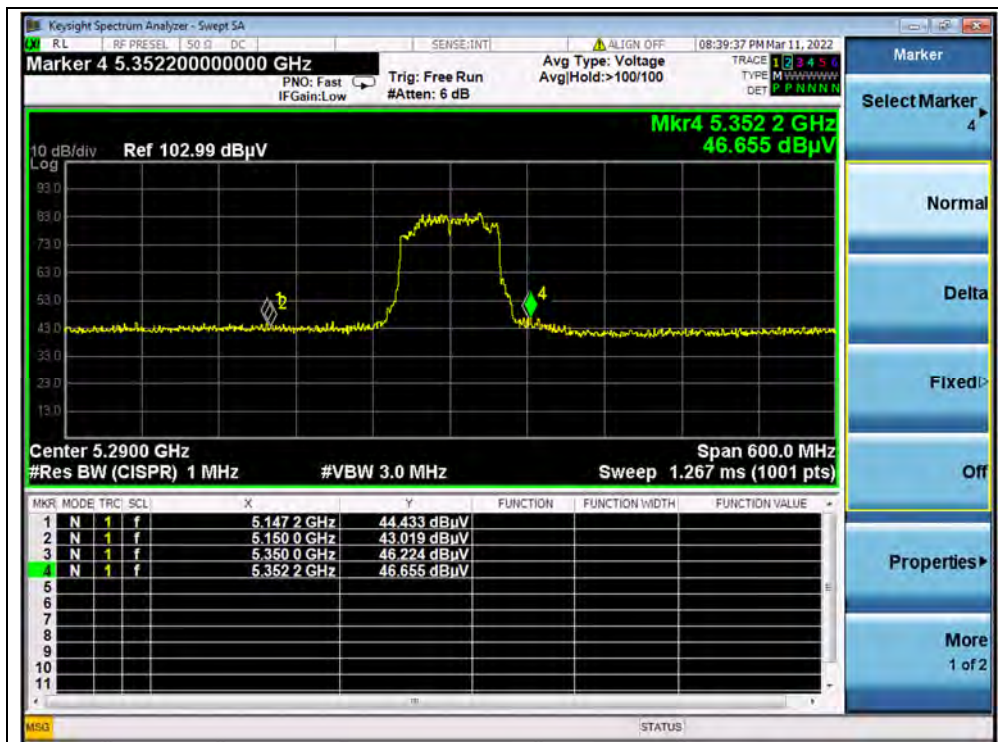
B. Test Plot:



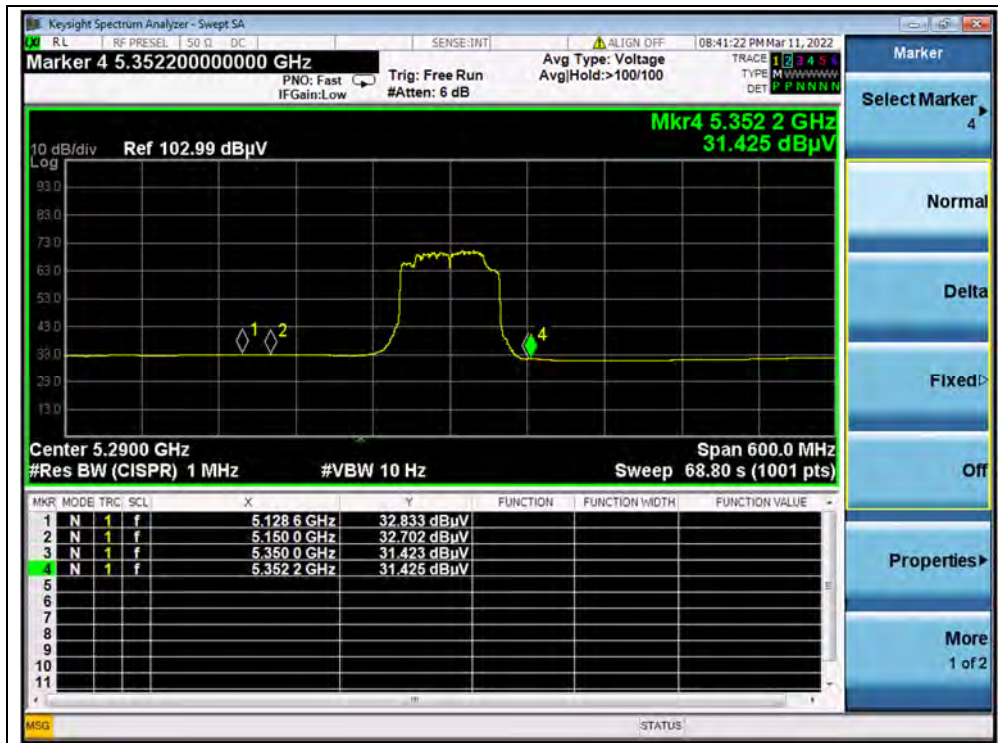
(PEAK, Channel 42, 802.11ac (VHT80))



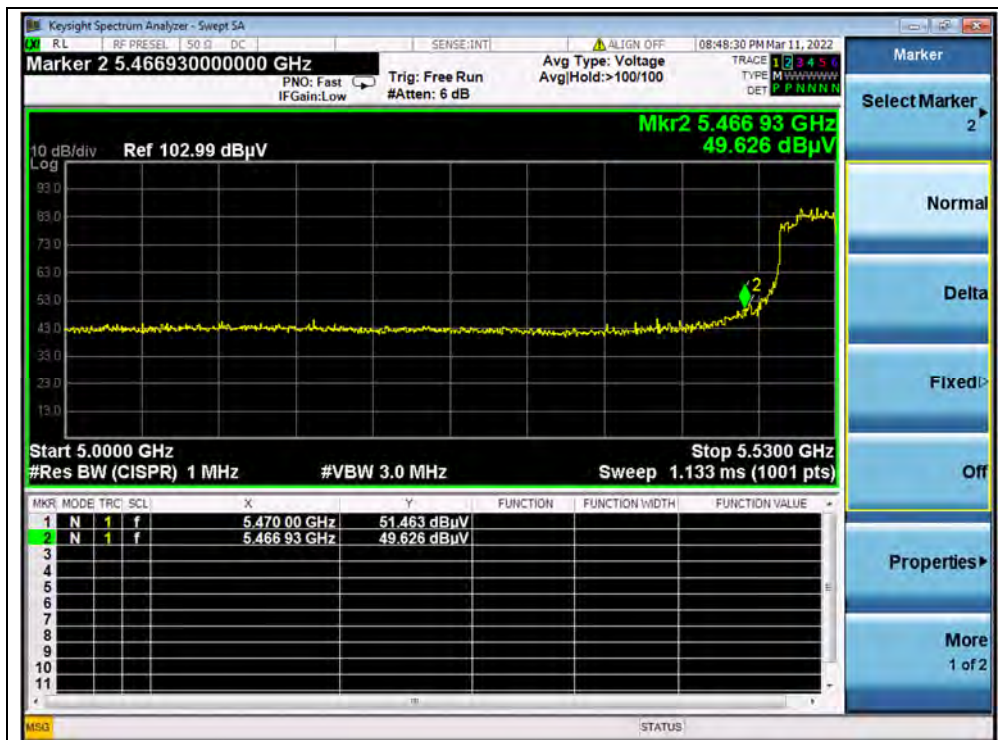
(AVERAGE, Channel 42, 802.11ac (VHT80))



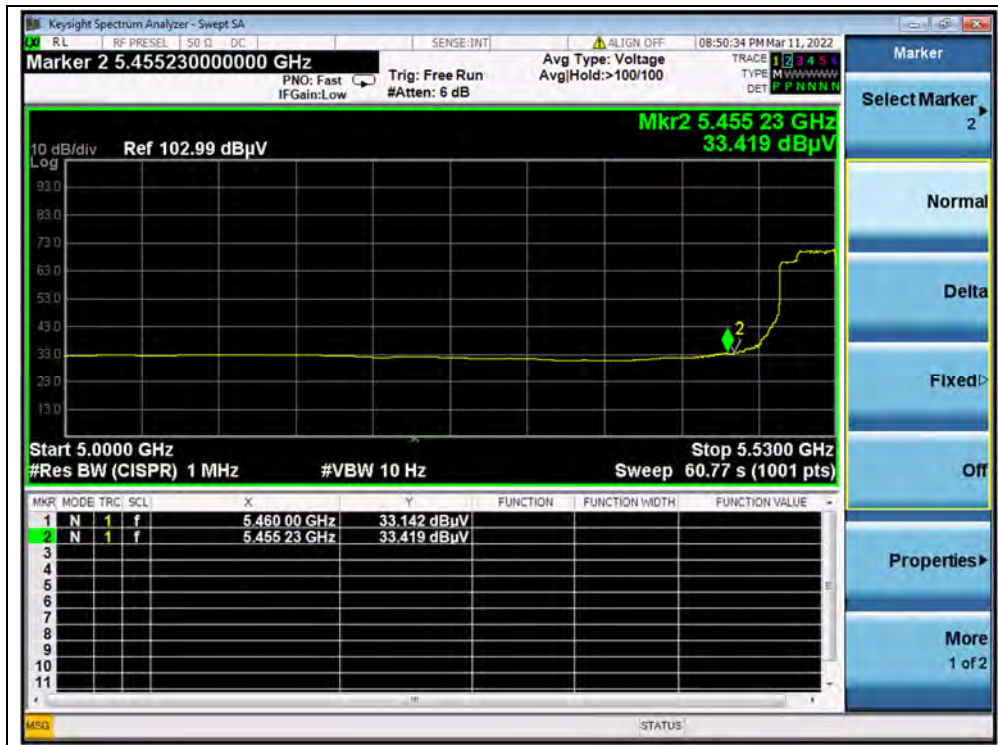
(PEAK, Channel 58, 802.11ac (VHT80))



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



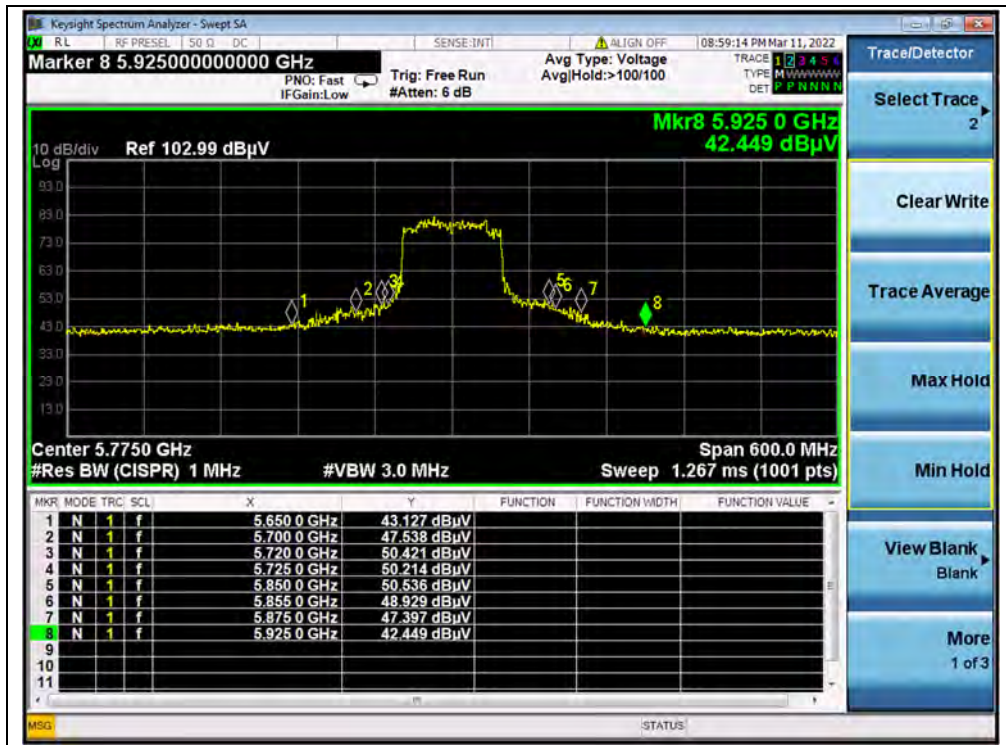
(PEAK, Channel 106, 802.11ac (VHT80))



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



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



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

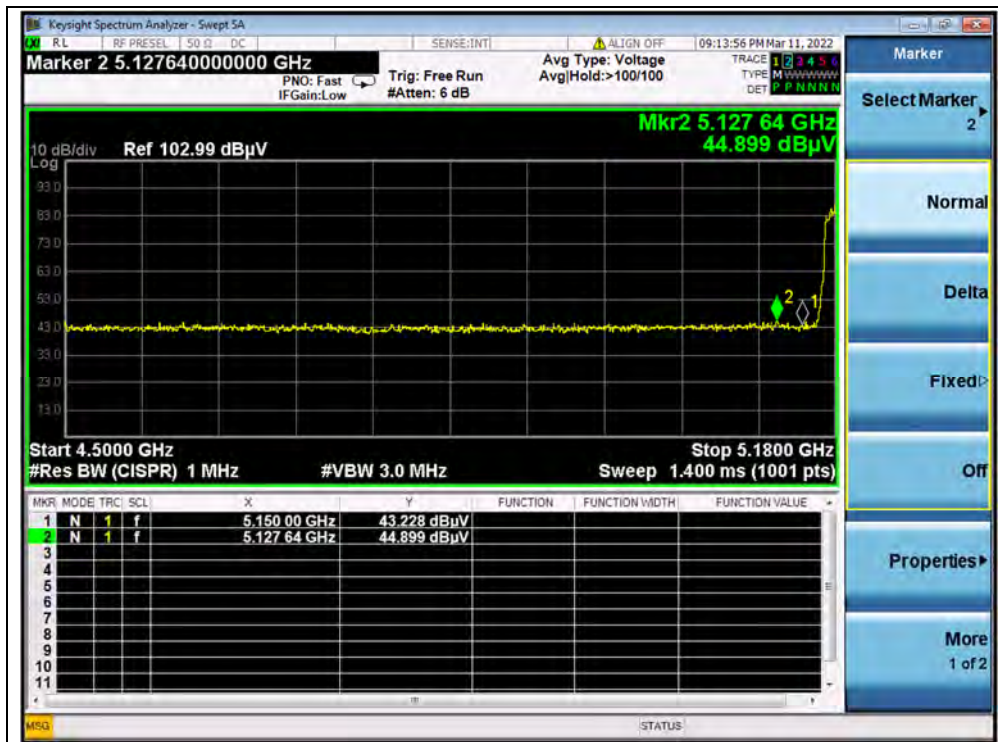


802.11ax (HEW20) Mode

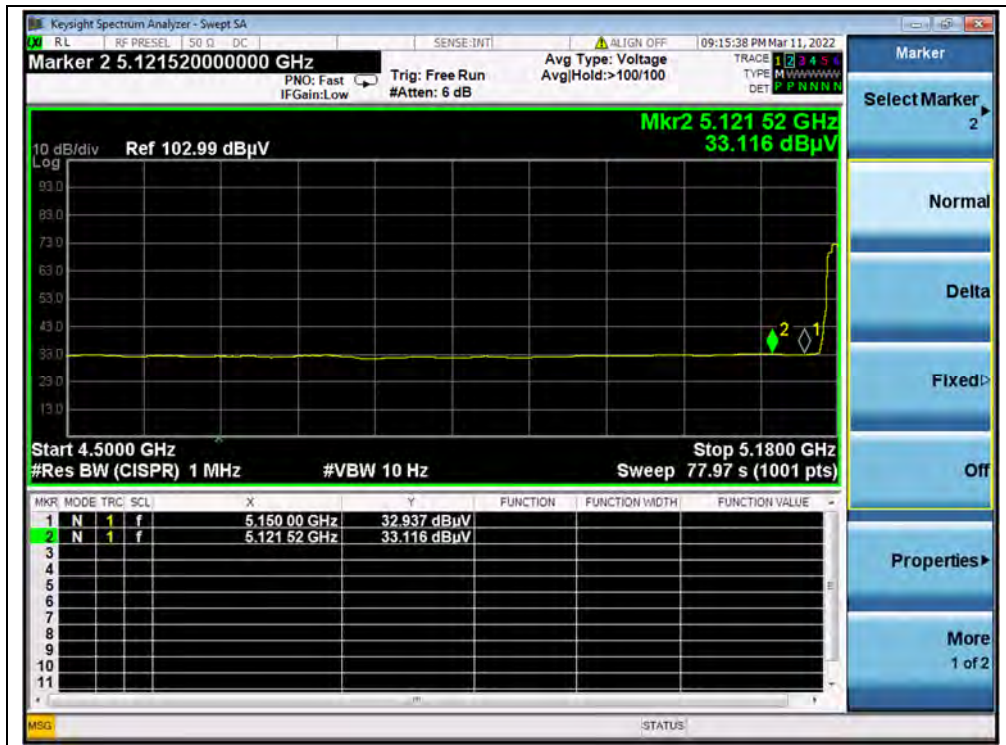
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)	(dB μ V/m)	
36	5127.64	PK	44.90	-19.54	32.20	57.56	74	PASS
36	5121.52	AV	33.12	-19.54	32.20	45.78	54	PASS
64	5428.22	PK	42.90	-18.80	32.20	56.30	74	PASS
64	5352.76	AV	31.23	-18.80	32.20	44.63	54	PASS
100	5119.34	PK	45.41	-19.20	32.20	58.41	74	PASS
100	5166.75	AV	33.09	-19.20	32.20	46.09	54	PASS
144	5725.00	PK	48.06	-19.20	32.20	61.06	68.23	PASS
149	5725.00	PK	48.53	-19.01	32.20	61.72	122.23	PASS
165	5850.00	PK	43.80	-19.01	32.20	56.99	122.23	PASS

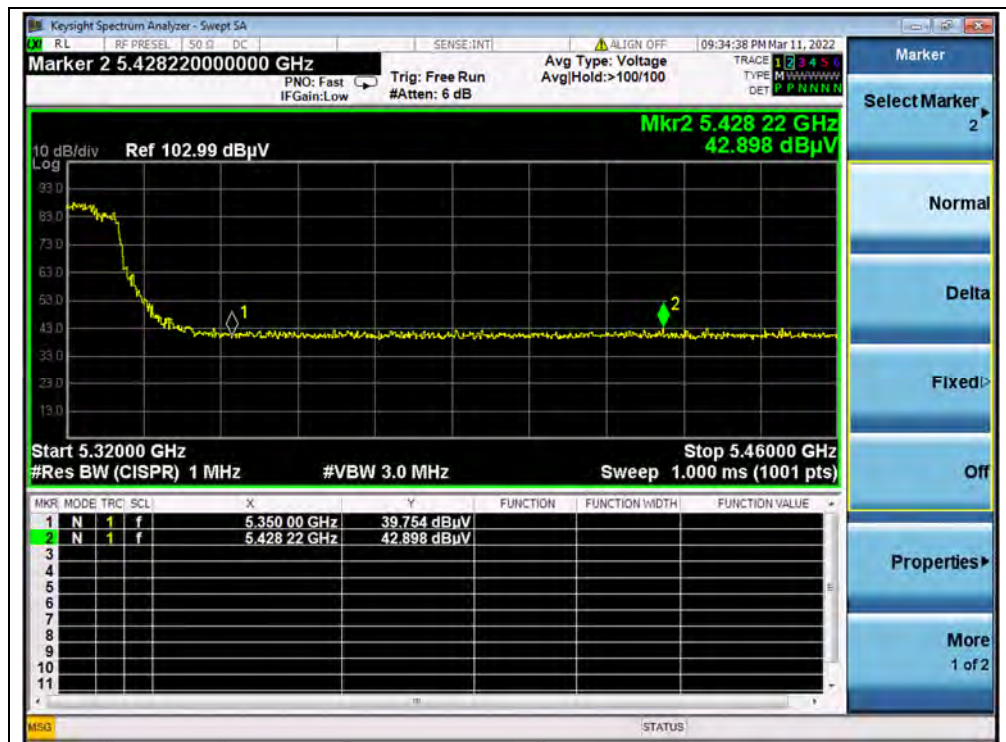
B. Test Plot:



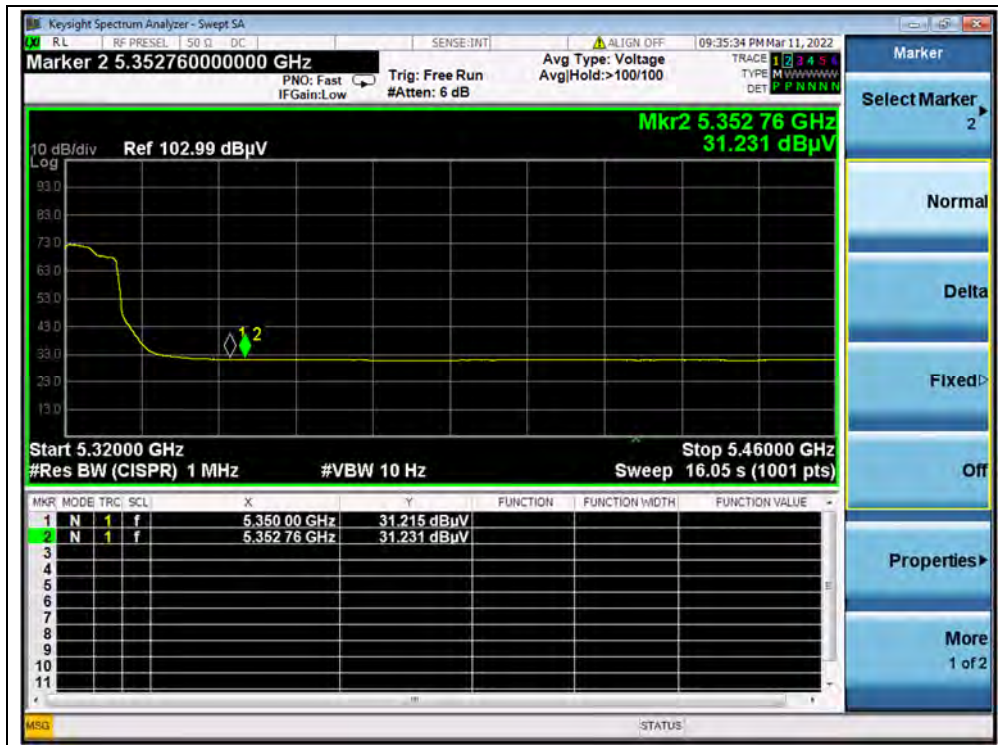
(PEAK, Channel 36, 802.11ax (HEW20))



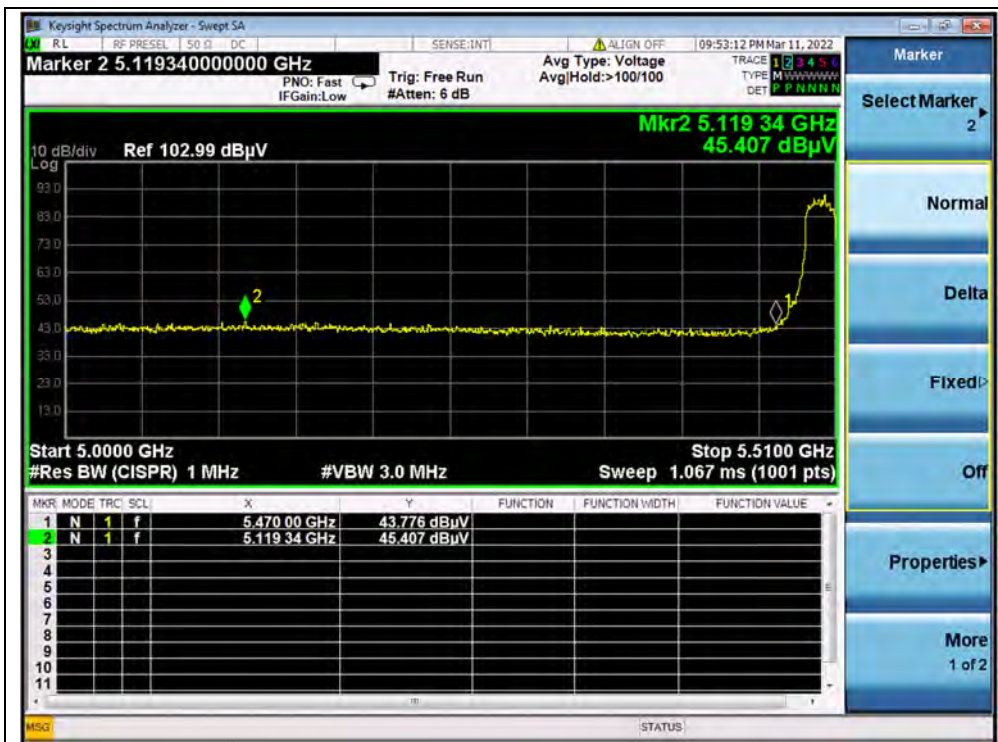
(AVERAGE, Channel 36, 802.11ax (HEW20))



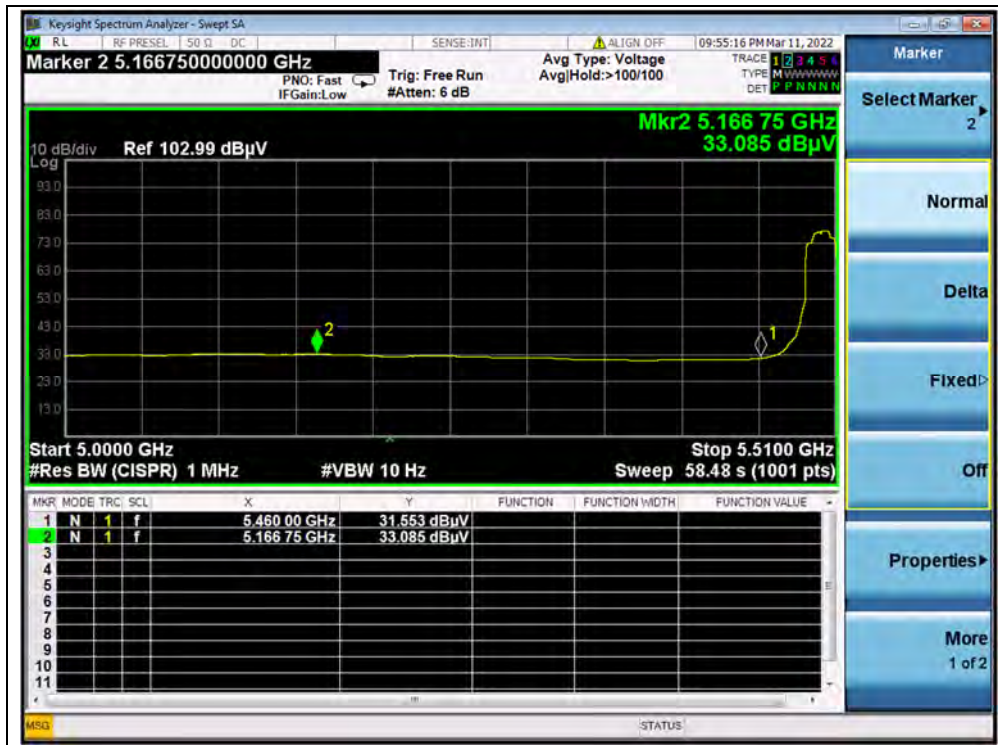
(PEAK, Channel 64, 802.11ax (HEW20))



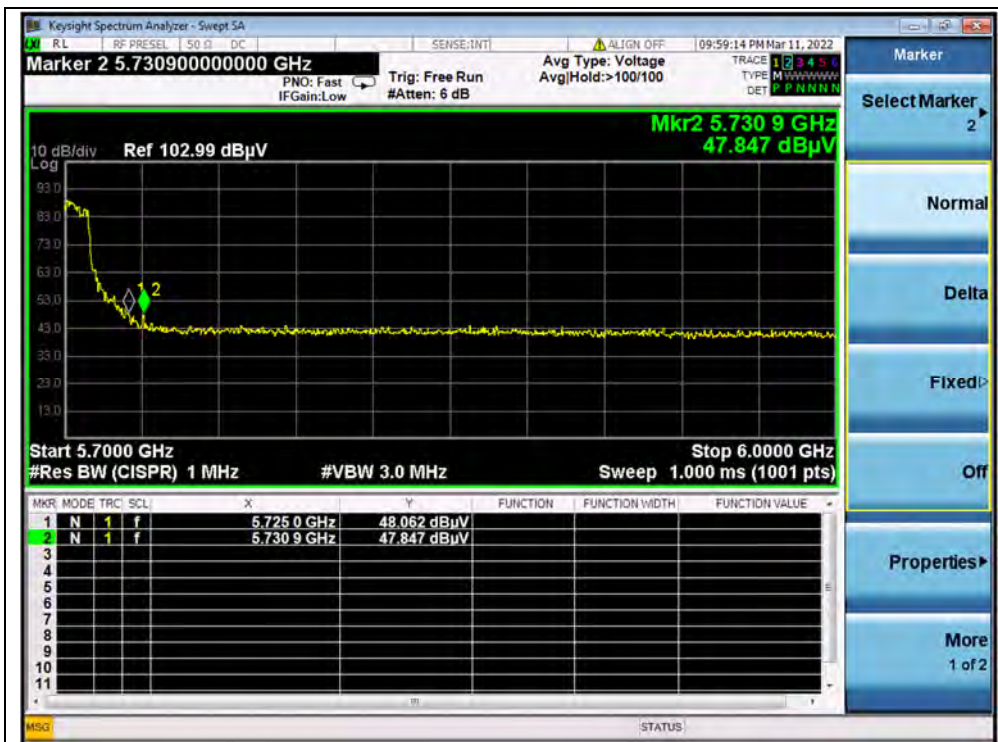
(AVERAGE, Channel 64, 802.11ax (HEW20))



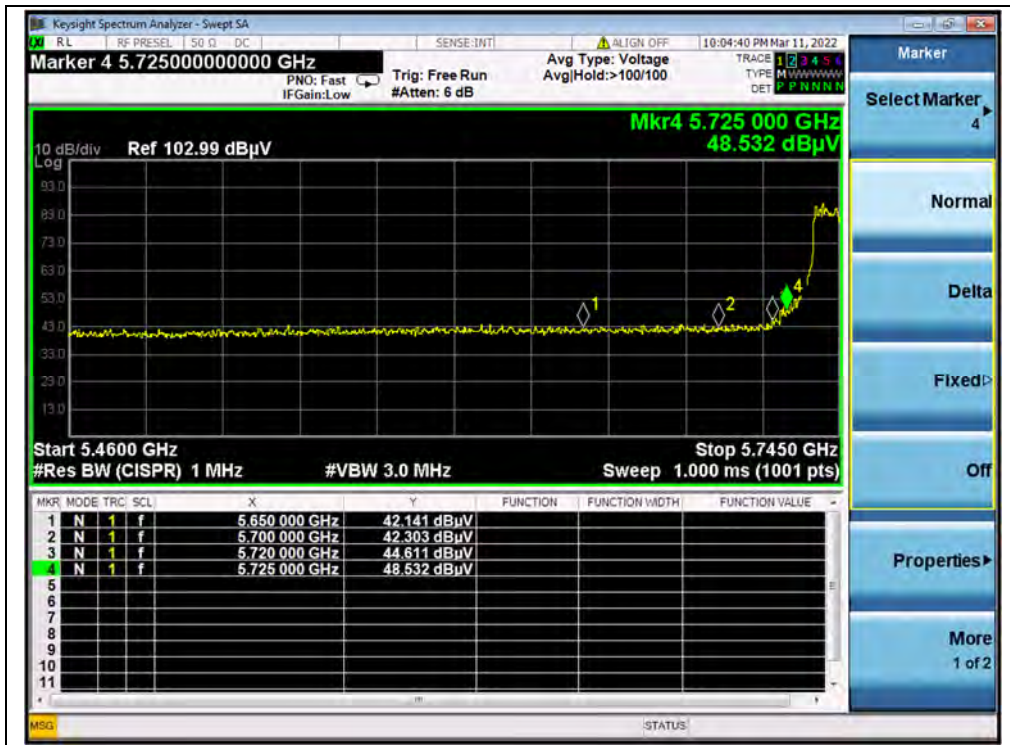
(PEAK, Channel100, 802.11ax (HEW20))



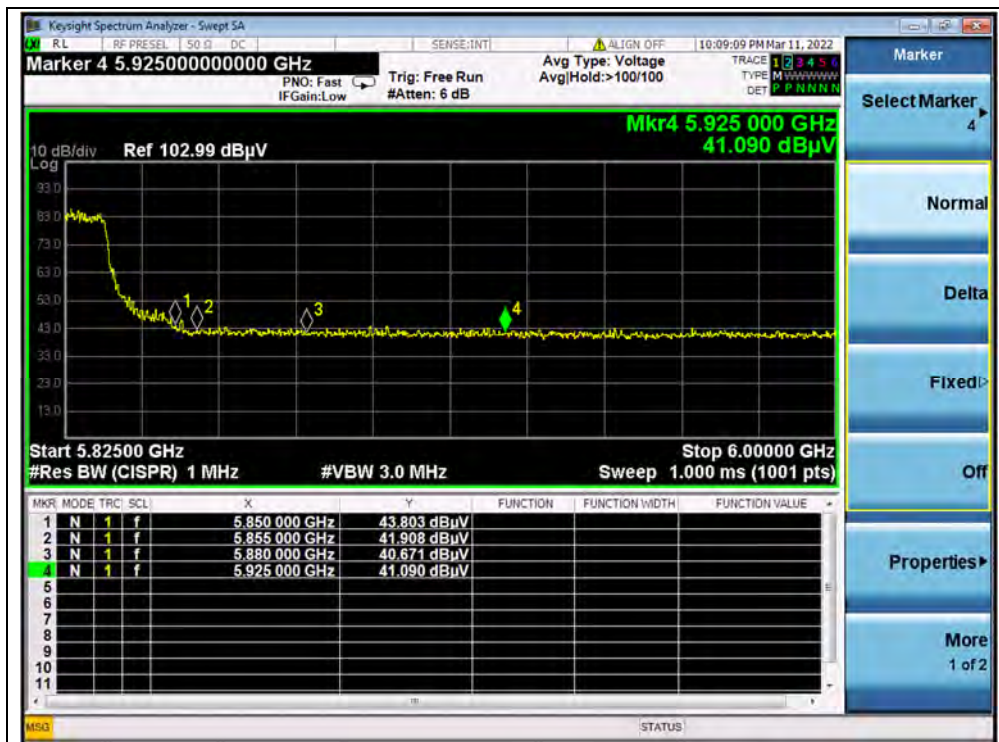
(AVERAGE, Channel 100, 802.11ax (HEW20))



(PEAK, Channel 144, 802.11ax (HEW20))



(PEAK, Channel 149, 802.11ax (HEW20))



(PEAK, Channel 165, 802.11ax (HEW20))

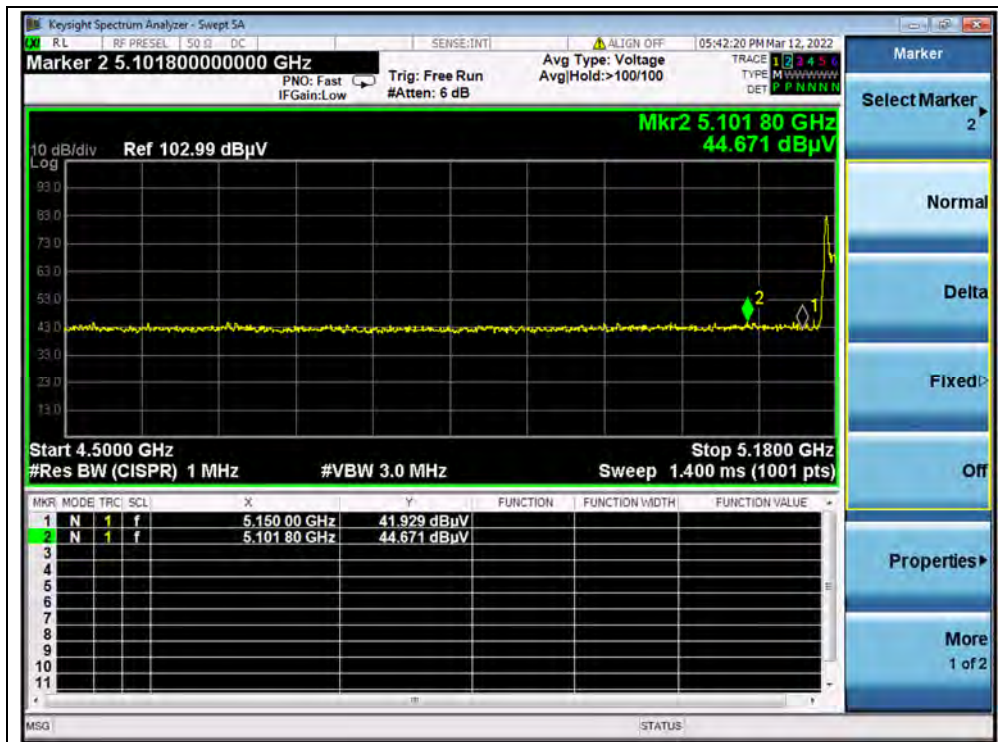


802.11ax (HEW20)(RU26) Mode

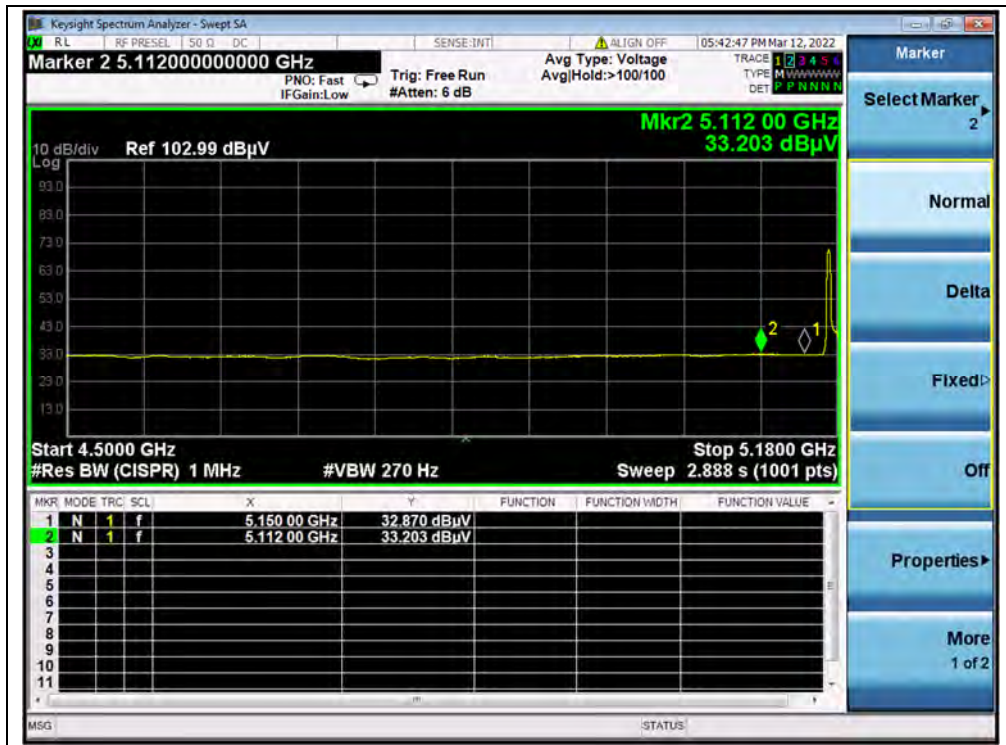
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)		
36	5101.80	PK	44.67	-19.54	32.20	57.33	74	PASS
36	5112.00	AV	33.20	-19.54	32.20	45.86	54	PASS
64	5359.48	PK	42.00	-18.80	32.20	55.40	74	PASS
64	5350.52	AV	31.15	-18.80	32.20	44.55	54	PASS
100	5172.36	PK	44.52	-19.20	32.20	57.52	68.23	PASS
100	5108.61	AV	33.03	-19.20	32.20	46.03	54	PASS
144	5749.20	PK	43.87	-19.20	32.20	56.87	68.23	PASS
149	5720.00	PK	42.07	-19.01	32.20	55.26	110.83	PASS
165	5850.00	PK	41.36	-19.01	32.20	54.55	122.23	PASS

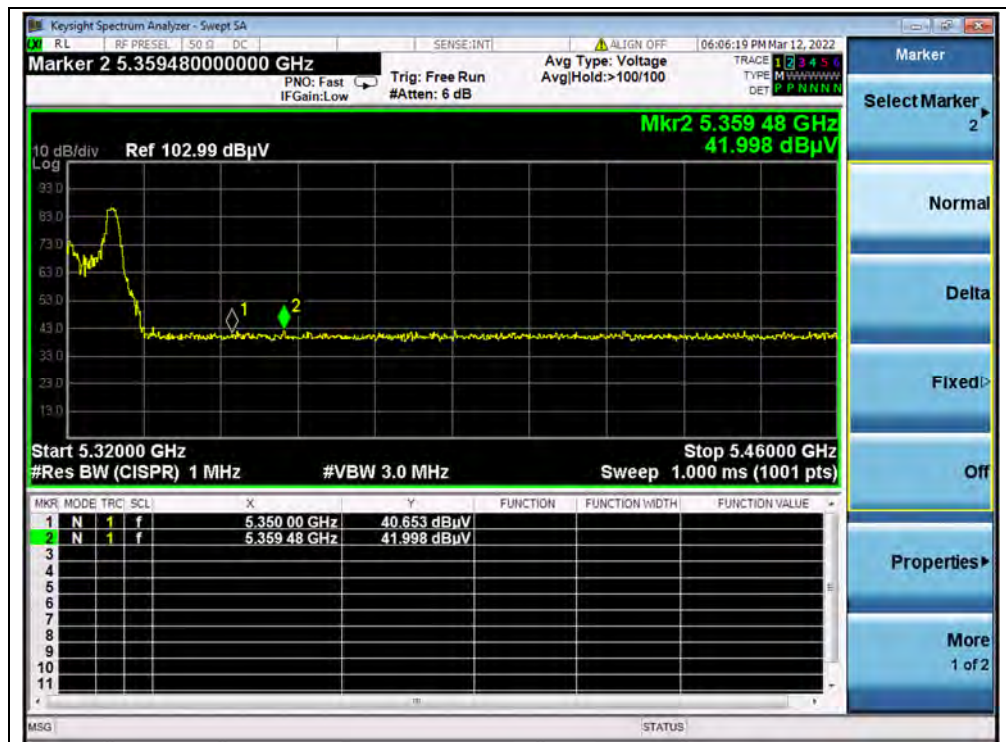
B. Test Plot:



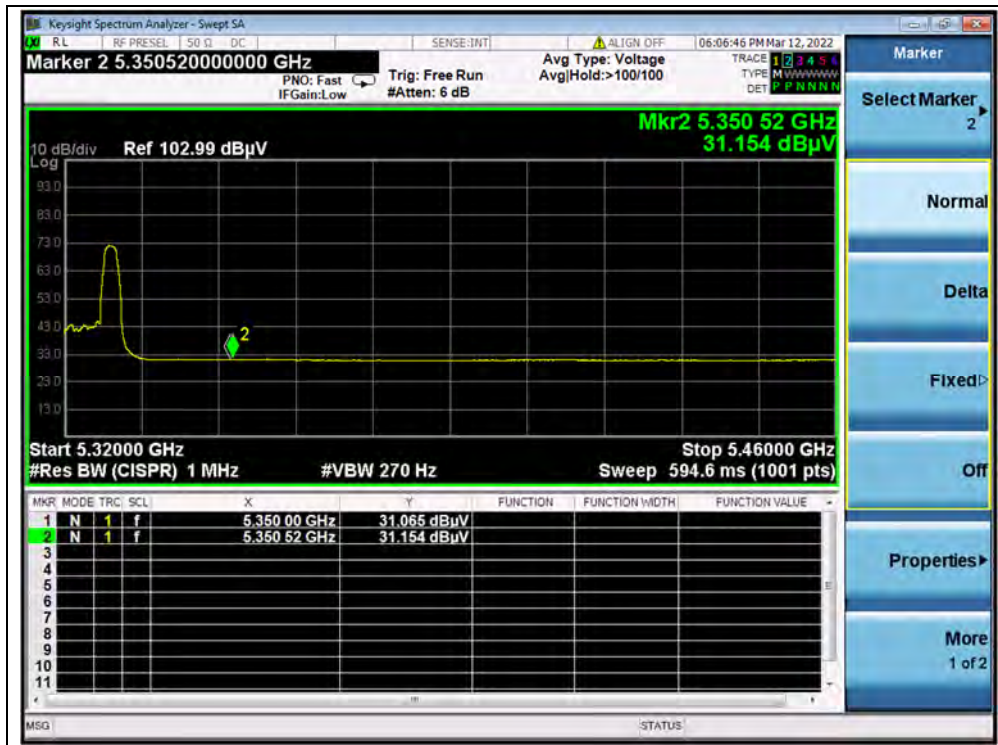
(PEAK, Channel 36, 802.11ax (HEW20)(RU26))



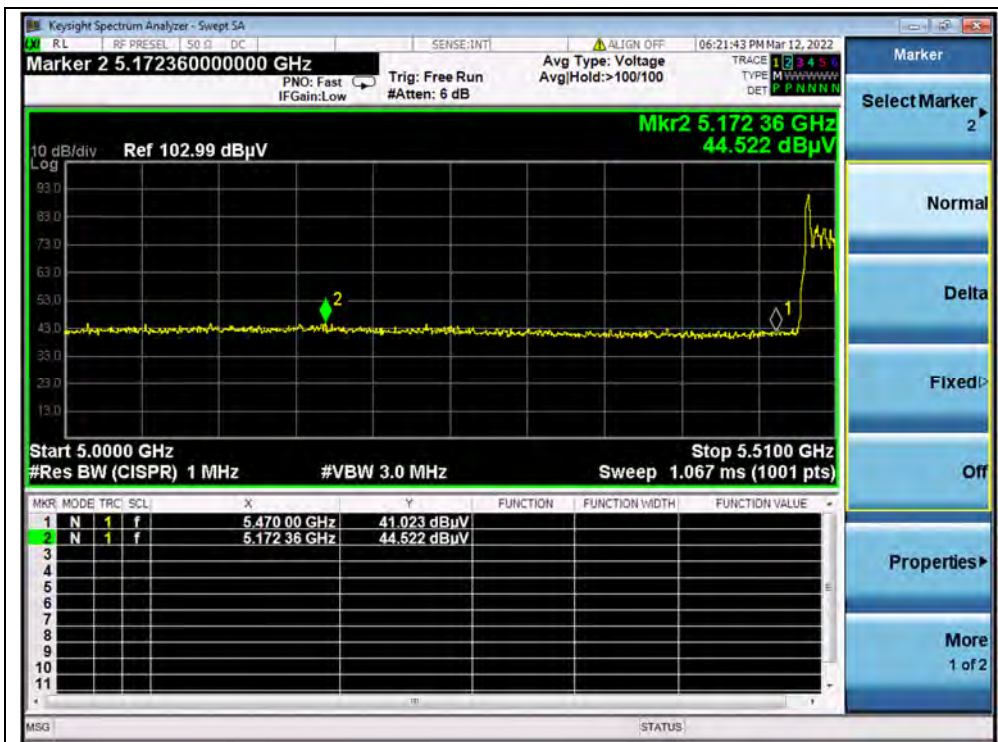
(AVERAGE, Channel 36, 802.11ax (HEW20)(RU26))



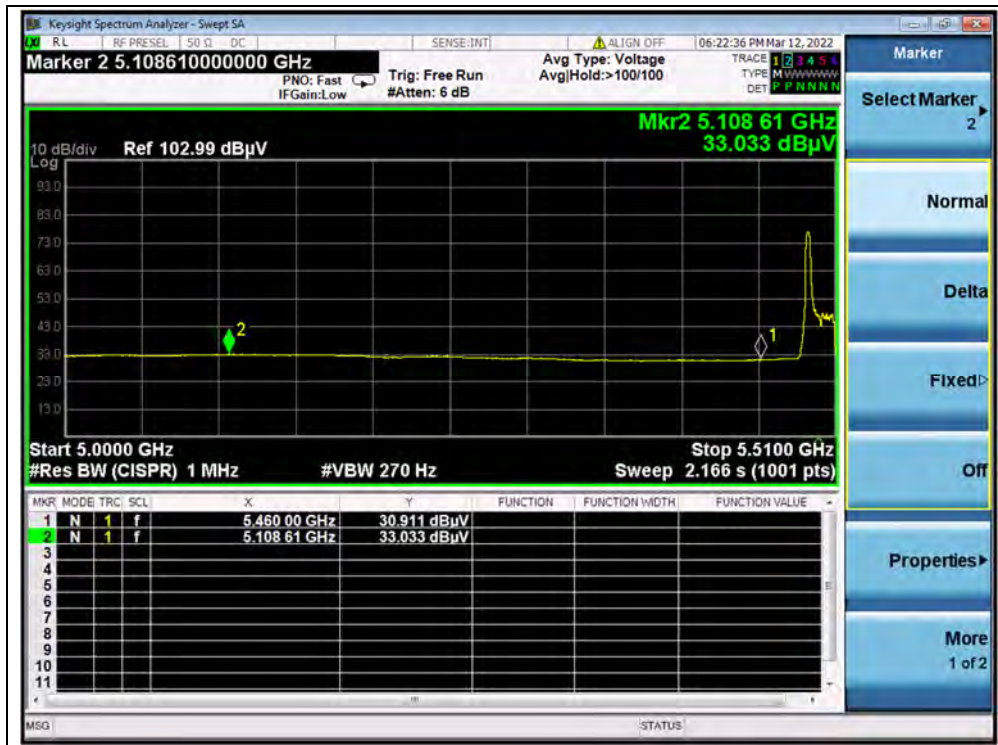
(PEAK, Channel 64, 802.11ax (HEW20)(RU26))



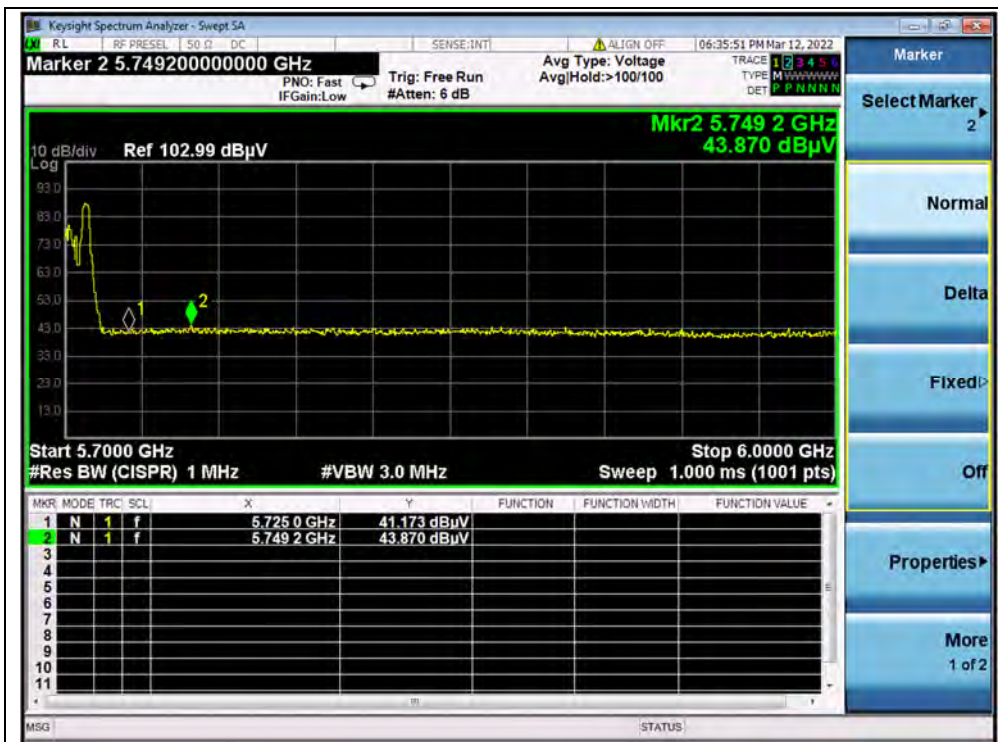
(AVERAGE, Channel 64, 802.11ax (HEW20)(RU26))



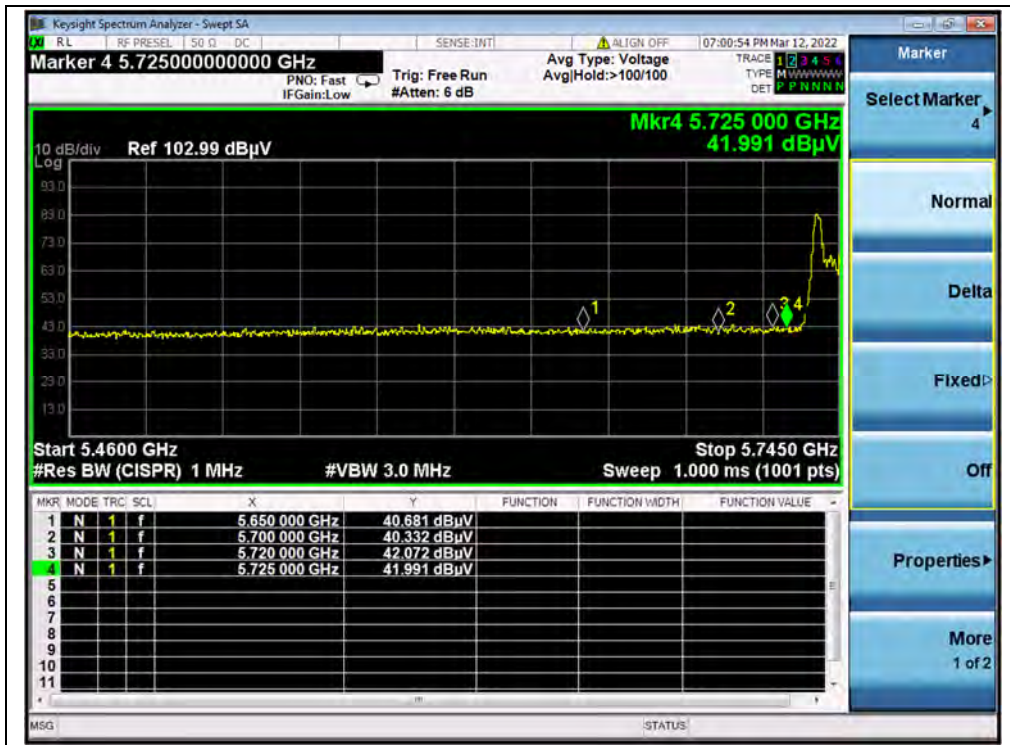
(PEAK, Channel100, 802.11ax (HEW20)(RU26))



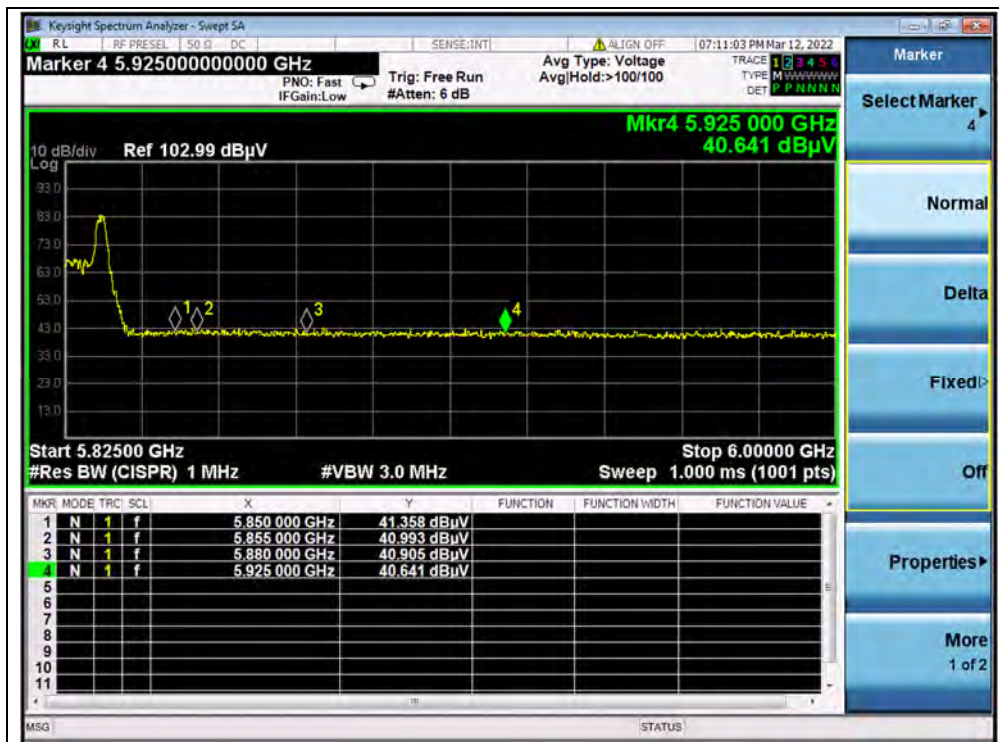
(AVERAGE, Channel 100, 802.11ax (HEW20)(RU26))



(PEAK, Channel 144, 802.11ax (HEW20)(RU26))



(PEAK, Channel 149, 802.11ax (HEW20)(RU26))



(PEAK, Channel 165, 802.11ax (HEW20)(RU26))

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:

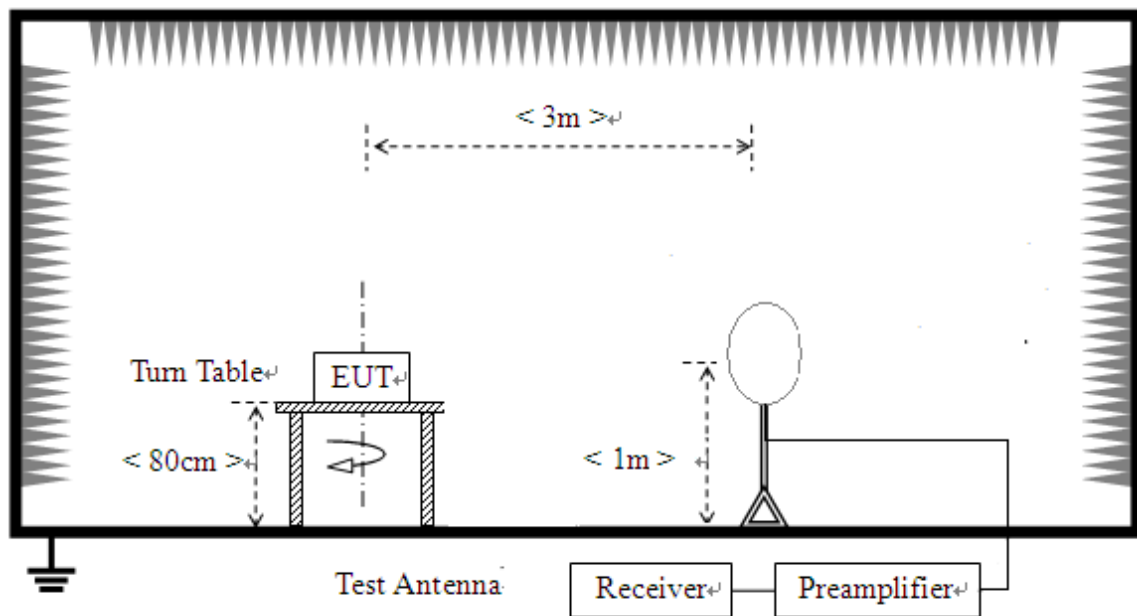
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

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).

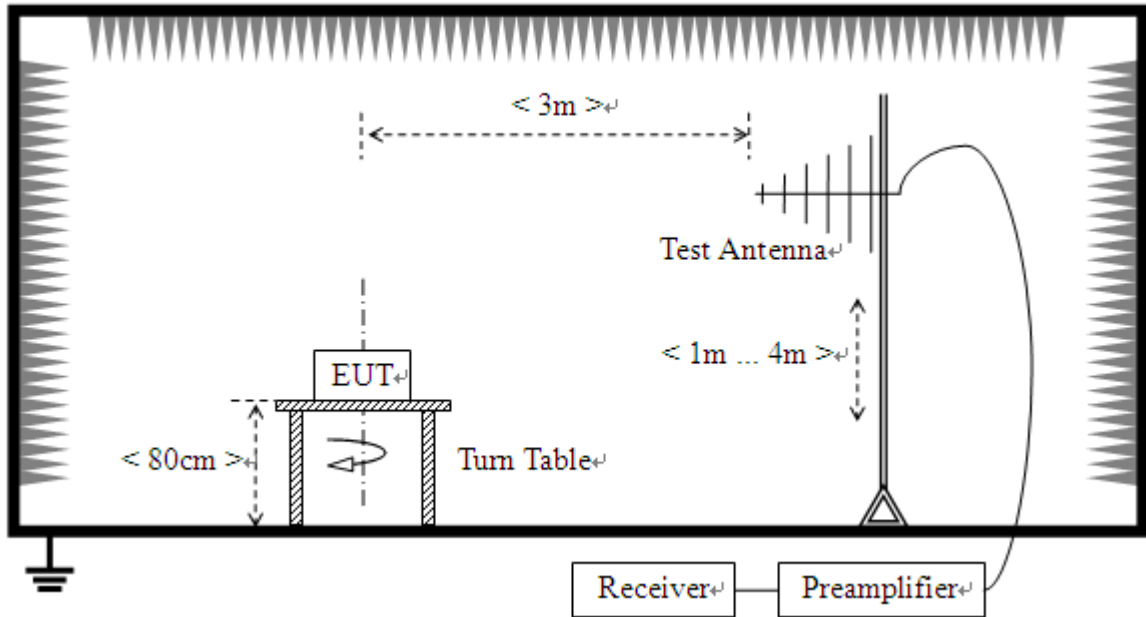
2.9.2. Test Description

Test Setup:

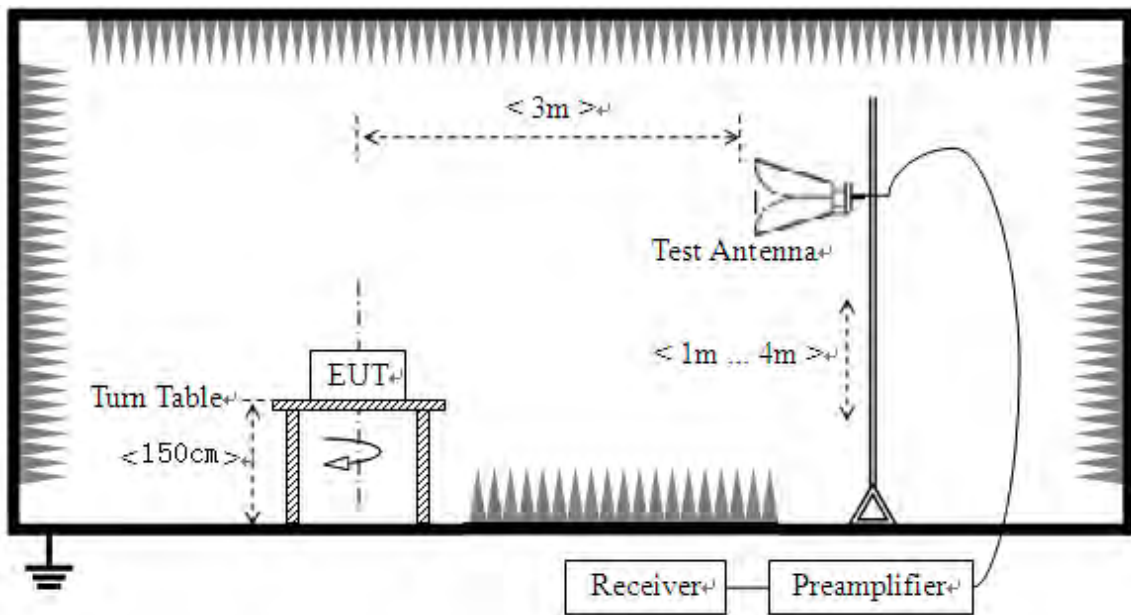
- 1) For radiated emissions from 9kHz to 30MHz



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.

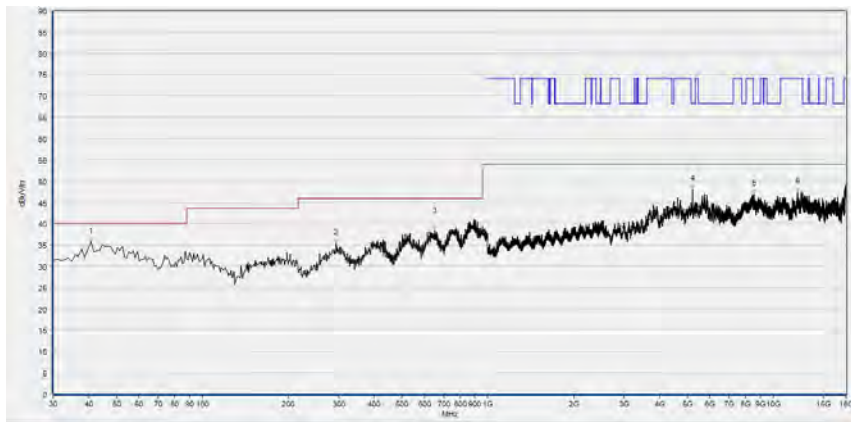
Note 3: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

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.



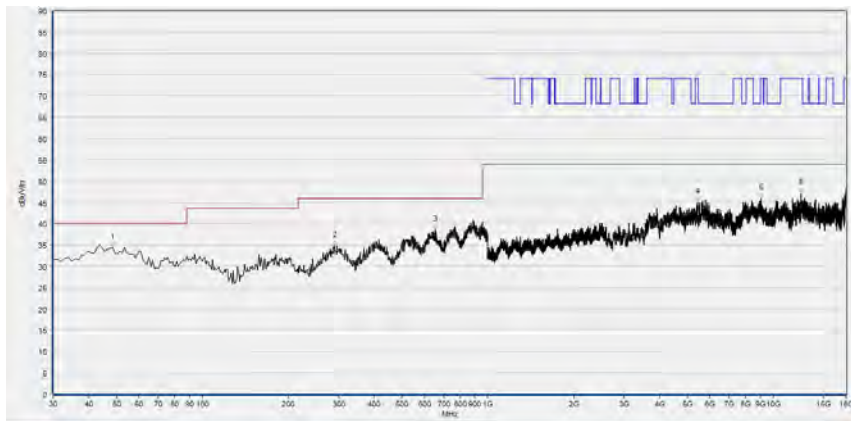
802.11a Mode

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
40.681	35.77	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
294.104	35.42	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
652.392	38.35	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5221.604	48.10	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8576.395	46.88	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12165.313	47.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

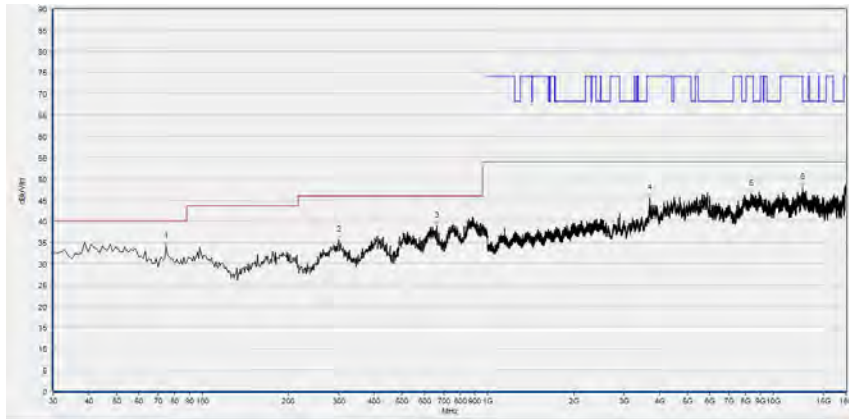
(Antenna Horizontal, 30MHz to 18GHz)



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
48.448	34.44	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
290.220	34.88	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
653.363	38.49	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5424.925	45.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9060.052	45.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12510.342	47.17	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

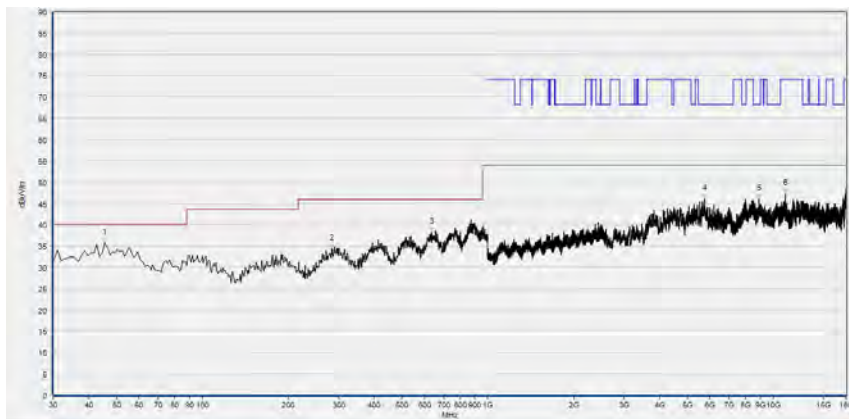
(Antenna Vertical, 30MHz to 18GHz)

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
74.665	34.10	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
299.930	35.51	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
664.044	38.94	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3699.780	45.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8360.752	46.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12682.857	48.00	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

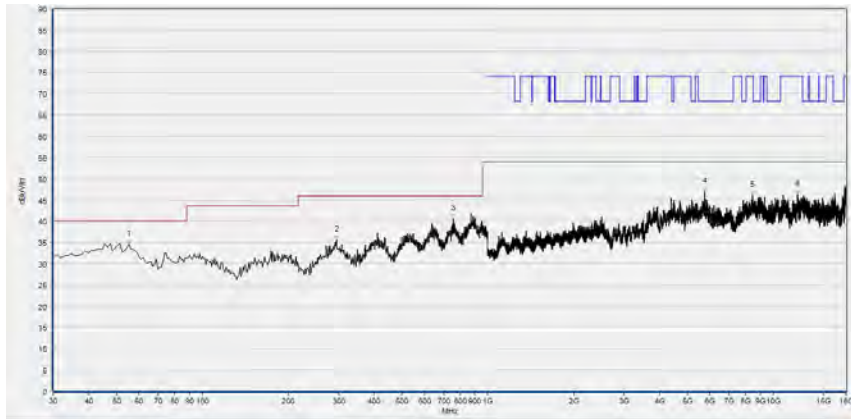
(Antenna Horizontal, 30MHz to 18GHz)



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
45.536	35.66	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
283.423	34.29	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
634.915	38.23	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5760.712	46.07	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8902.941	46.15	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11003.921	47.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

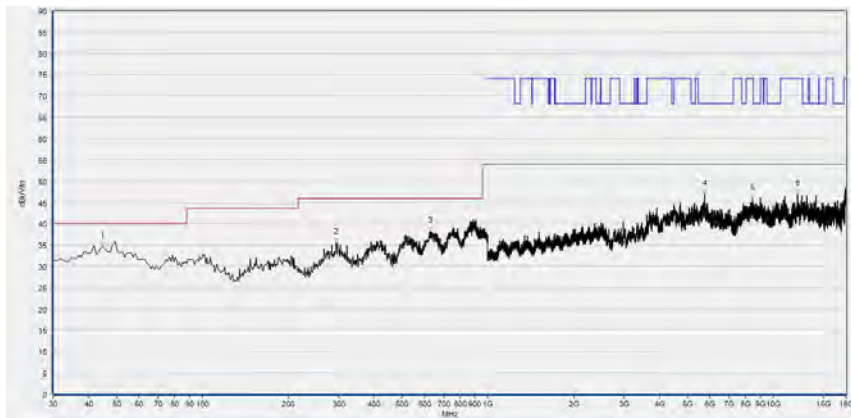
(Antenna Vertical, 30MHz to 18GHz)

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
55.245	34.47	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
295.075	35.50	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
758.228	40.56	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5748.390	46.88	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8456.251	46.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12137.588	46.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

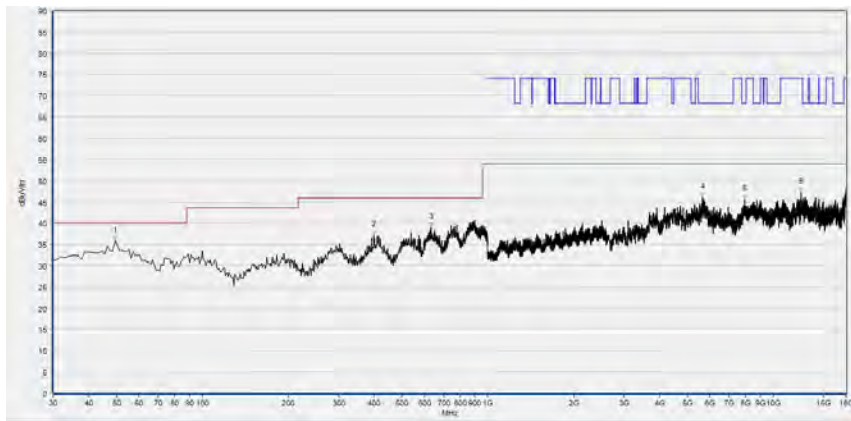
(Antenna Horizontal, 30MHz to 18GHz)



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
44.565	34.62	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
294.104	35.46	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
627.147	38.23	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5763.793	46.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8471.654	45.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12134.507	46.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

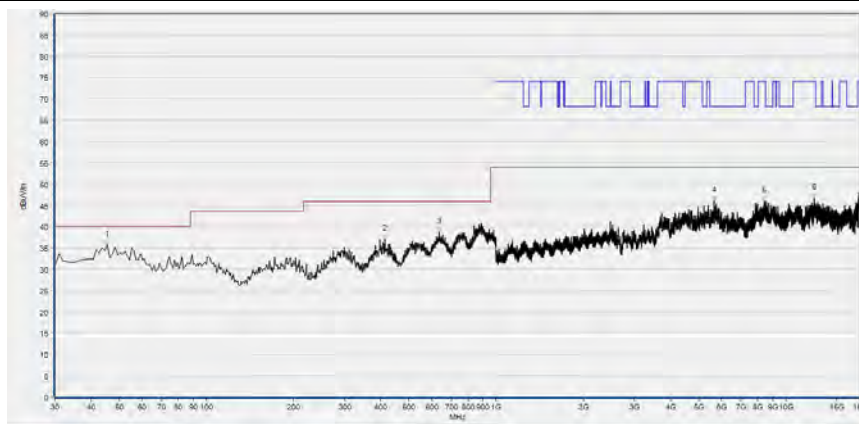
(Antenna Vertical, 30MHz to 18GHz)

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
49.419	35.89	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
397.998	37.26	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
632.973	39.00	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5662.132	46.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
7957.191	45.64	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12516.503	47.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

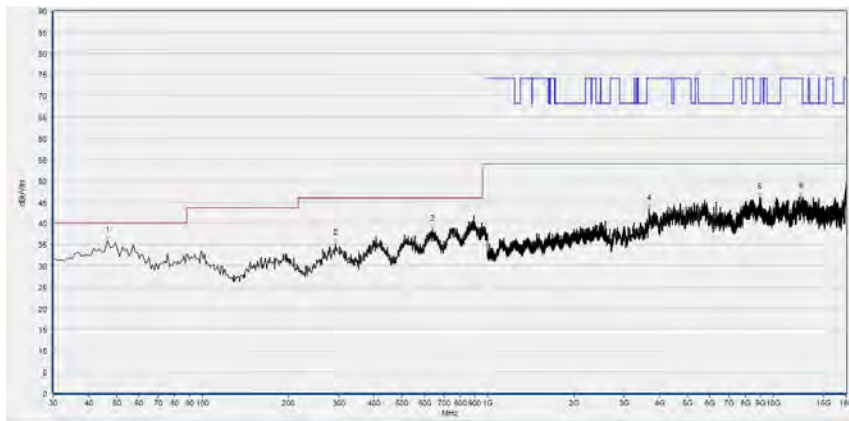
(Antenna Horizontal, 30MHz to 18GHz)



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
45.536	35.75	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
413.534	37.00	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
634.915	38.76	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5649.810	46.05	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8425.445	45.90	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12519.584	46.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

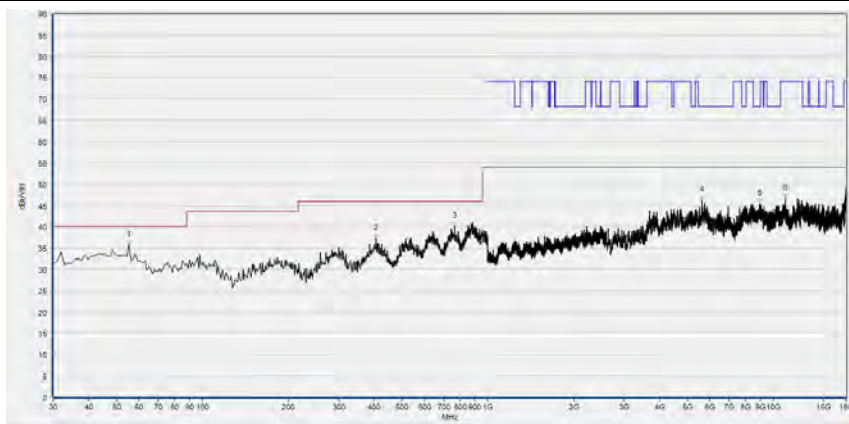
(Antenna Vertical, 30MHz to 18GHz)

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
46.507	35.84	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
292.162	35.14	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
641.712	38.57	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3672.054	43.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8970.714	46.02	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12519.584	46.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

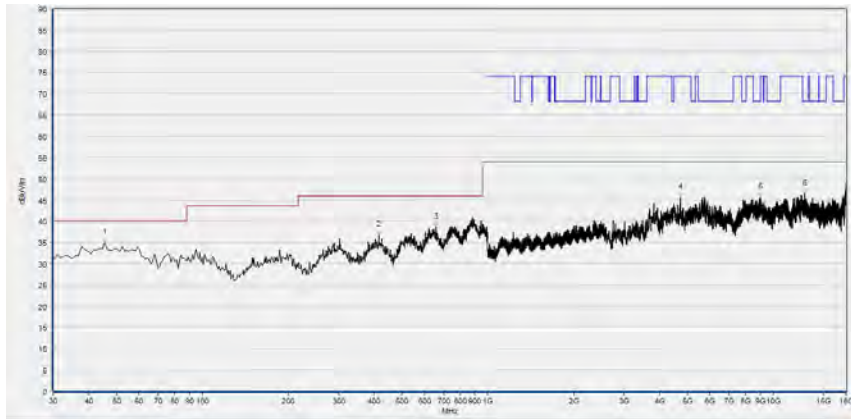
(Antenna Horizontal, 30MHz to 18GHz)



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
55.245	35.69	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
405.766	37.14	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
765.025	39.98	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5634.407	46.31	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8961.472	45.39	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11003.921	46.62	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

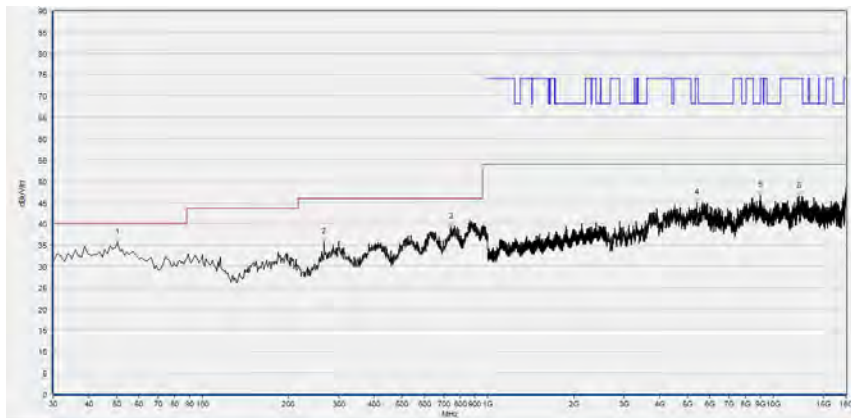
(Antenna Vertical, 30MHz to 18GHz)

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
45.536	34.86	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
414.505	36.64	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
659.189	38.58	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4719.464	45.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8992.278	45.65	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12892.338	46.47	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

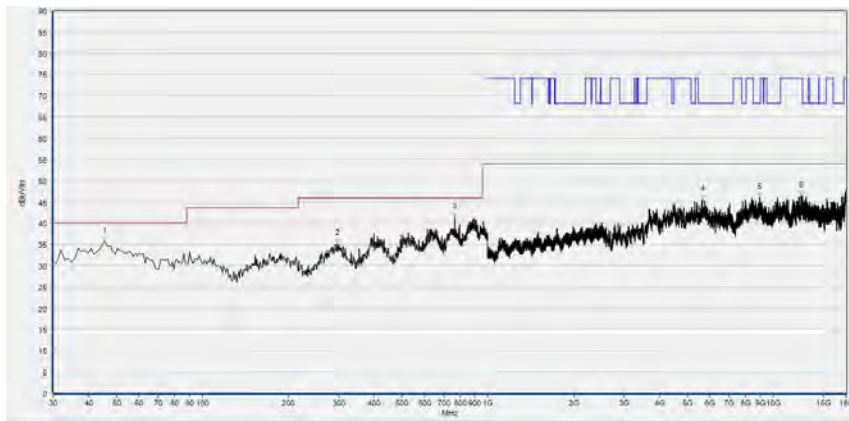
(Antenna Horizontal, 30MHz to 18GHz)



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
50.390	35.57	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
266.917	35.63	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
741.722	39.26	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5394.119	44.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8995.359	46.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12273.135	46.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

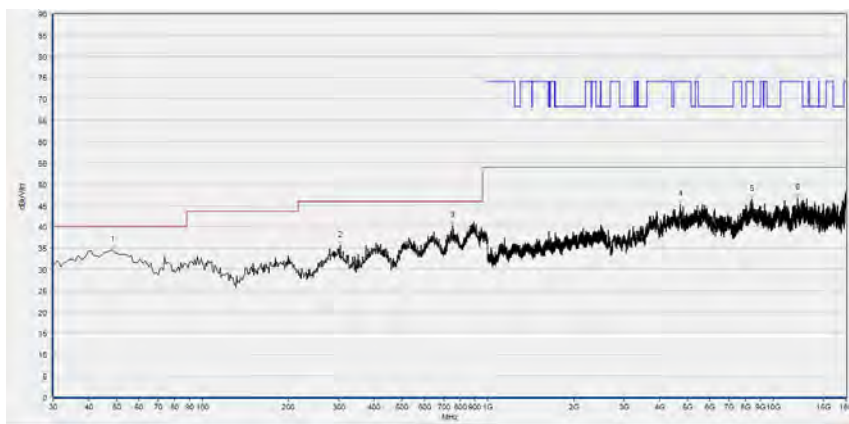
(Antenna Vertical, 30MHz to 18GHz)

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
45.536	35.71	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
297.017	35.14	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
766.967	41.38	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5637.487	45.55	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8983.037	46.02	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12519.584	46.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

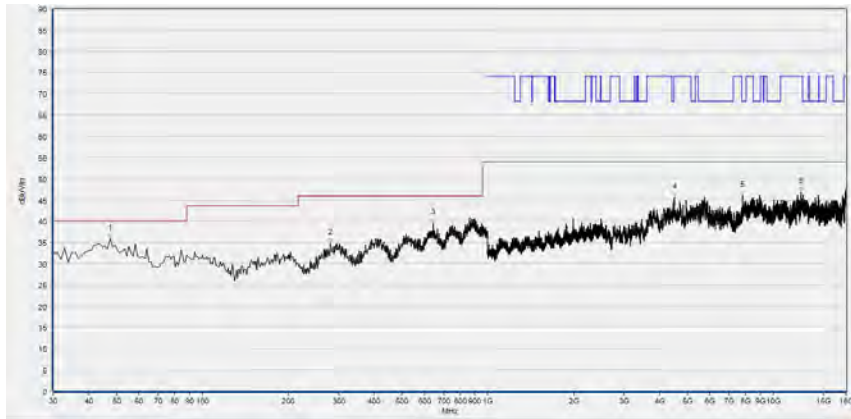
(Antenna Horizontal, 30MHz to 18GHz)



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
48.448	34.45	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
304.785	35.59	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
753.373	40.16	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4728.706	45.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8434.687	46.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12189.958	46.80	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

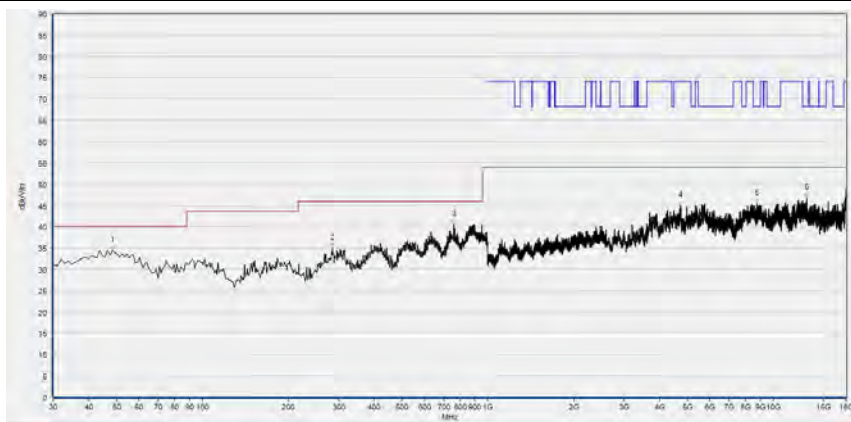
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	35.88	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
280.511	34.91	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
644.625	39.51	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4503.821	45.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7815.483	46.01	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12516.503	46.95	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

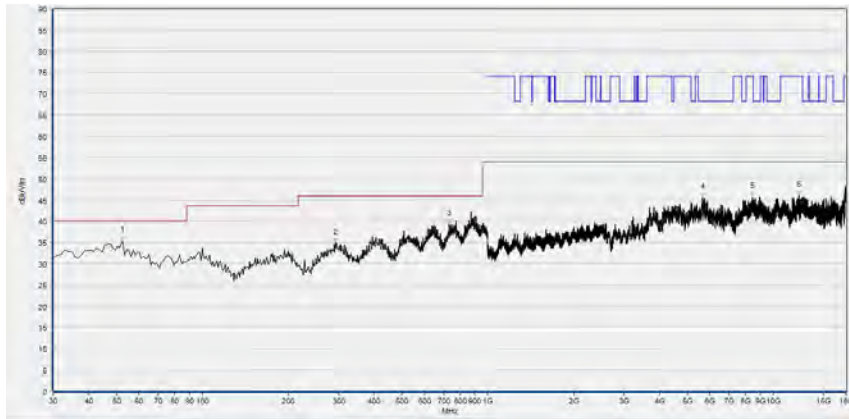
(Antenna Horizontal, 30MHz to 18GHz)



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
48.448	34.34	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
285.365	34.94	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
759.199	40.50	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4728.706	44.89	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8764.313	45.48	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
13083.337	46.81	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

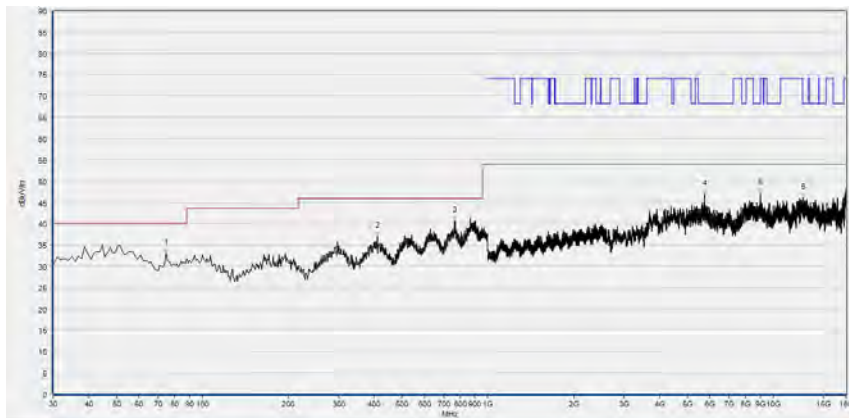
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 144



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
52.332	35.30	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
292.162	34.89	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
731.041	39.41	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5649.810	45.62	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8443.929	45.68	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12331.666	46.09	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

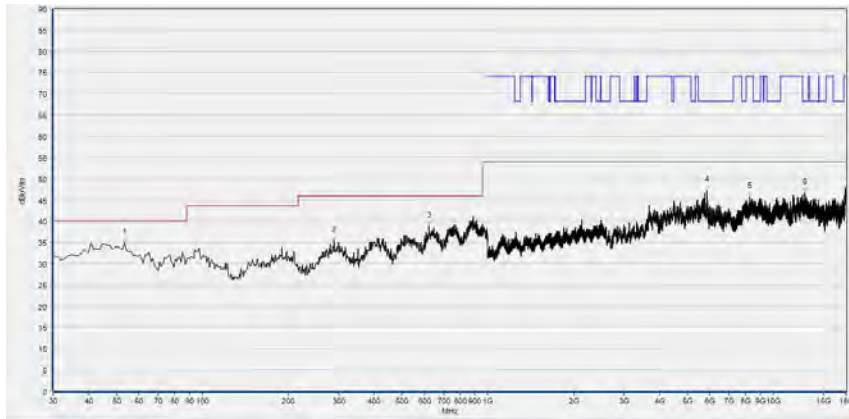
(Antenna Horizontal, 30MHz to 18GHz)



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
74.665	32.98	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
410.621	36.97	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
763.083	40.68	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5748.390	46.96	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8995.359	47.15	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12750.630	46.13	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

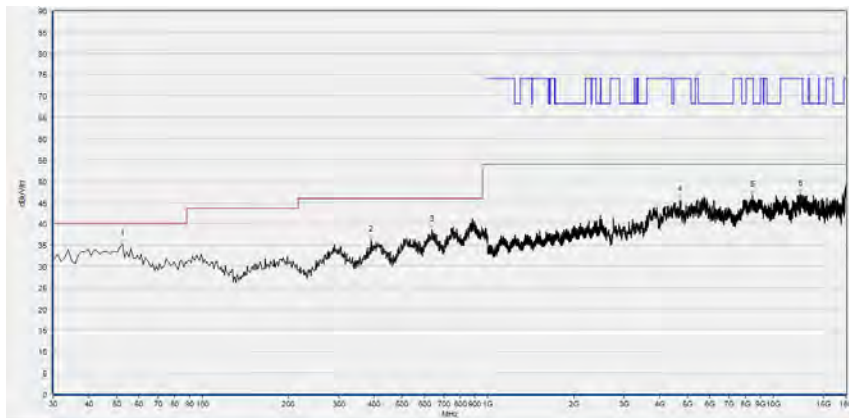
(Antenna Vertical, 30MHz to 18GHz)

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
53.303	34.92	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
289.249	35.42	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
622.292	38.83	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5862.372	47.31	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8249.850	45.79	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12898.500	46.72	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

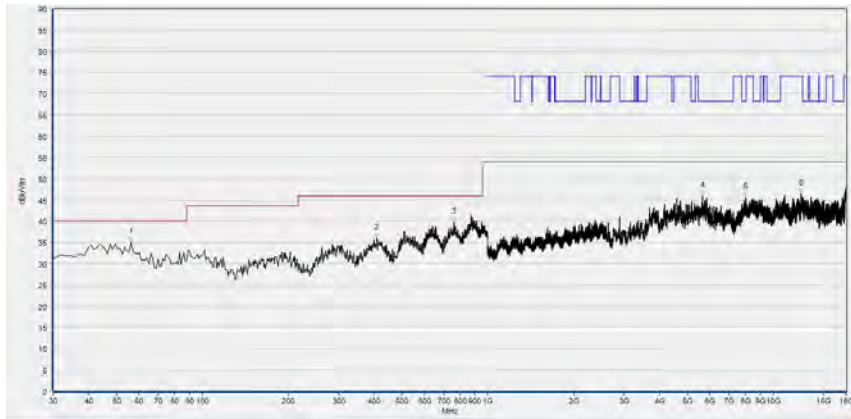
(Antenna Horizontal, 30MHz to 18GHz)



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	35.23	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
389.259	36.25	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
637.828	38.55	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4713.303	45.66	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8440.848	46.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12479.536	46.90	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

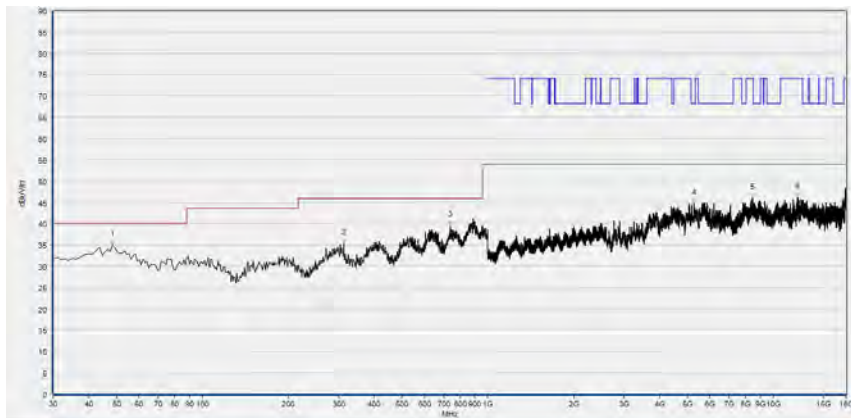
(Antenna Vertical, 30MHz to 18GHz)

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
56.216	35.02	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
408.679	35.98	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
762.112	39.69	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5637.487	45.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8009.562	45.52	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12525.745	46.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

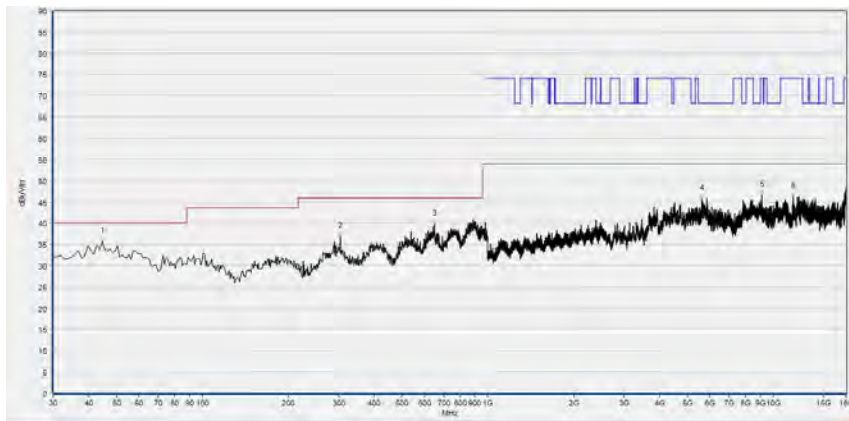
(Antenna Horizontal, 30MHz to 18GHz)



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
48.448	35.03	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
312.553	35.40	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
739.780	39.62	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5289.378	44.70	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8459.332	46.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12180.716	46.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

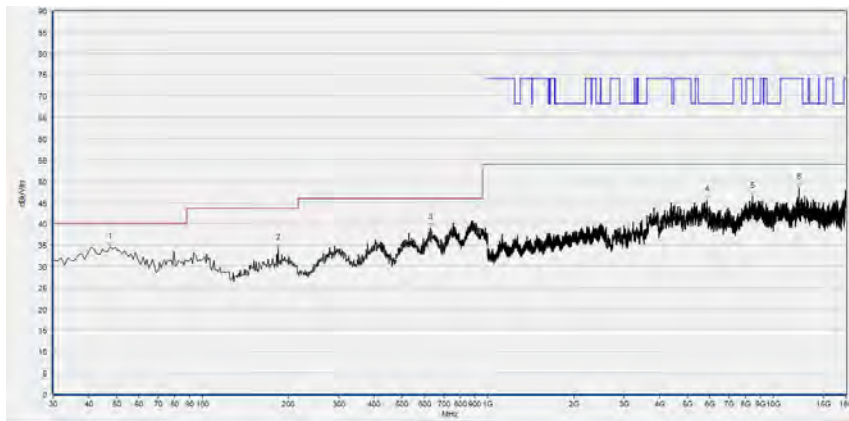
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 165



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
44.565	35.62	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
304.785	36.80	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
649.479	39.75	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5628.246	45.79	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9121.664	46.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11724.785	46.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

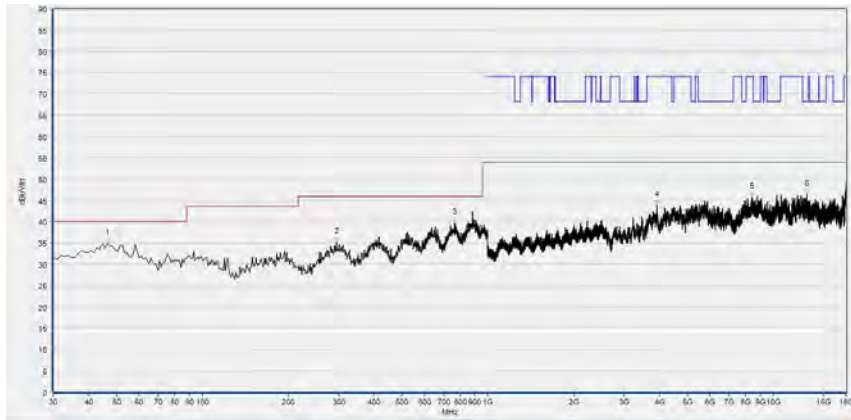


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
47.477	34.45	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
184.384	34.16	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
628.118	39.01	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5865.453	45.52	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8443.929	46.47	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12282.376	48.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

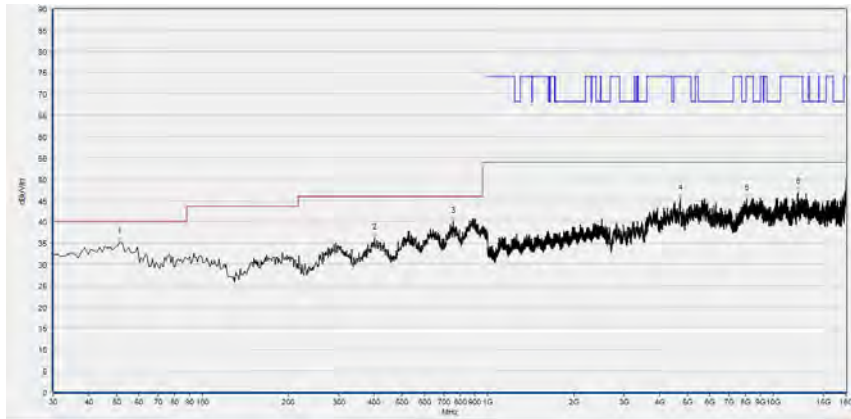
802.11n (HT40) mode

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
46.507	34.85	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
295.075	35.16	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
764.054	39.80	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3918.504	43.87	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8410.042	45.68	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13117.223	46.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

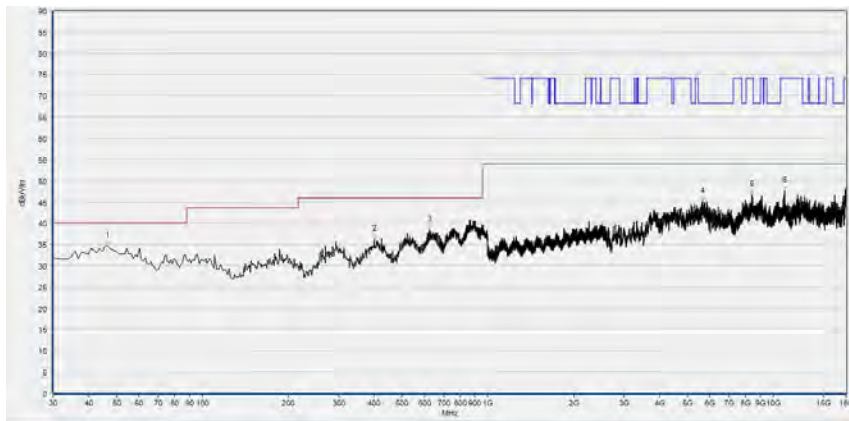
(Antenna Horizontal, 30MHz to 18GHz)



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
51.361	35.12	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
400.911	36.28	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
754.344	40.01	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4728.706	45.36	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8071.174	45.43	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12199.200	46.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

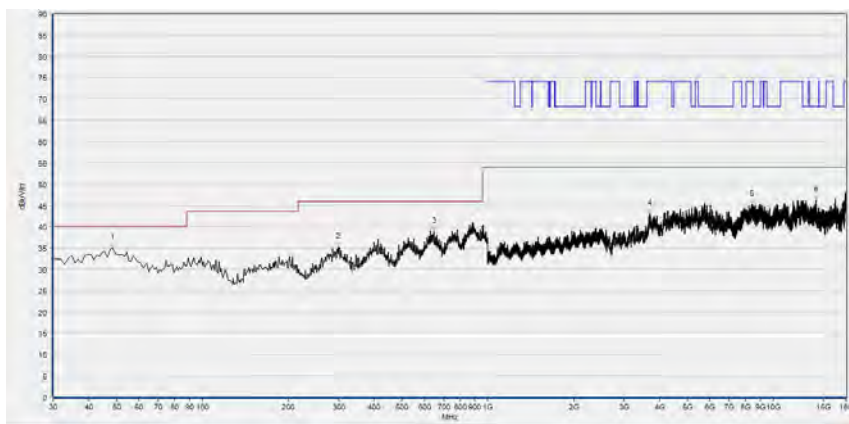
(Antenna Vertical, 30MHz to 18GHz)

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
46.507	34.62	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
400.911	36.28	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
625.205	38.33	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5643.649	45.11	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8431.606	46.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10942.308	47.52	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

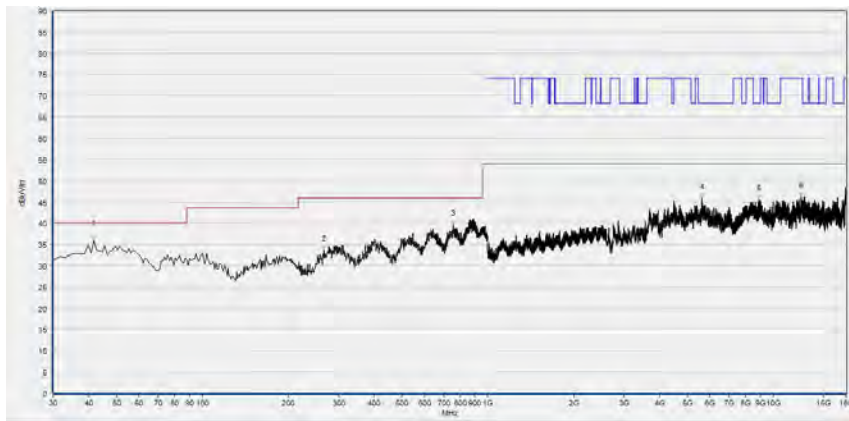
(Antenna Horizontal, 30MHz to 18GHz)



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
48.448	35.09	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
298.959	35.25	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
646.567	38.93	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
3693.619	43.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8422.364	45.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14103.021	46.33	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

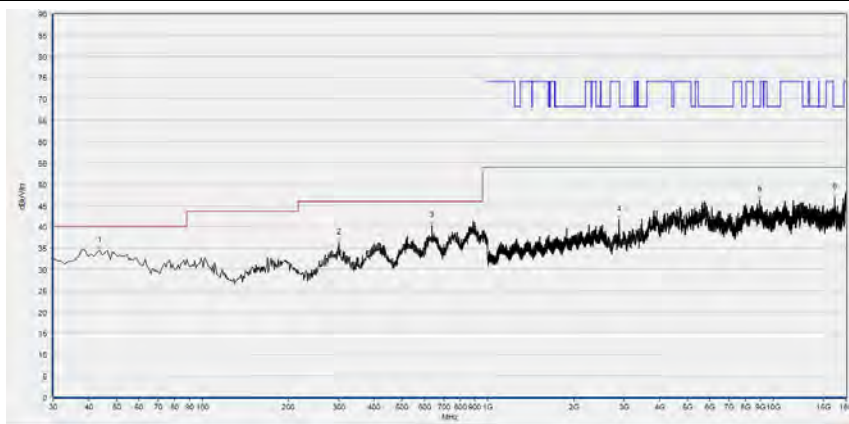
(Antenna Vertical, 30MHz to 18GHz)

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
41.652	35.83	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
266.917	33.66	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
755.315	39.74	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5628.246	45.99	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8918.344	45.54	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12513.423	46.22	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

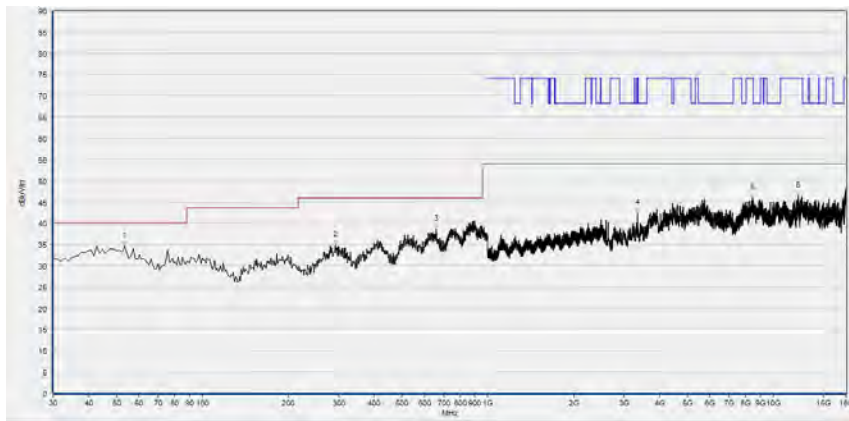
(Antenna Horizontal, 30MHz to 18GHz)



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
43.594	34.41	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
300.901	36.12	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
637.828	40.31	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2886.497	41.51	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8986.117	46.23	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
16413.483	46.95	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

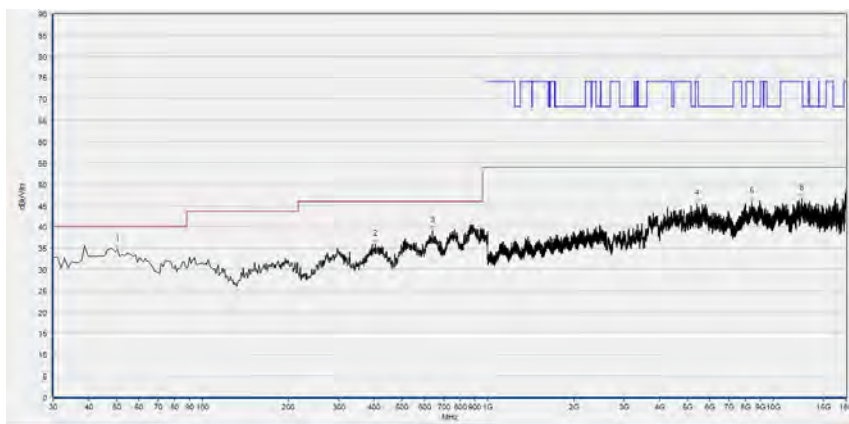
(Antenna Vertical, 30MHz to 18GHz)

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
53.303	34.45	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
292.162	34.94	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
660.160	38.61	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3345.509	42.38	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8480.896	45.99	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12202.280	46.49	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

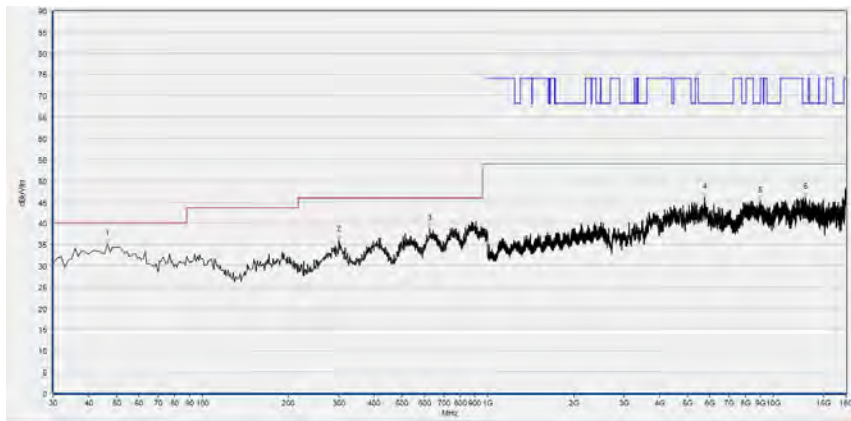
(Antenna Horizontal, 30MHz to 18GHz)



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
50.390	34.66	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
403.824	35.85	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
640.741	39.04	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5412.603	45.50	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8403.881	45.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12615.083	46.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

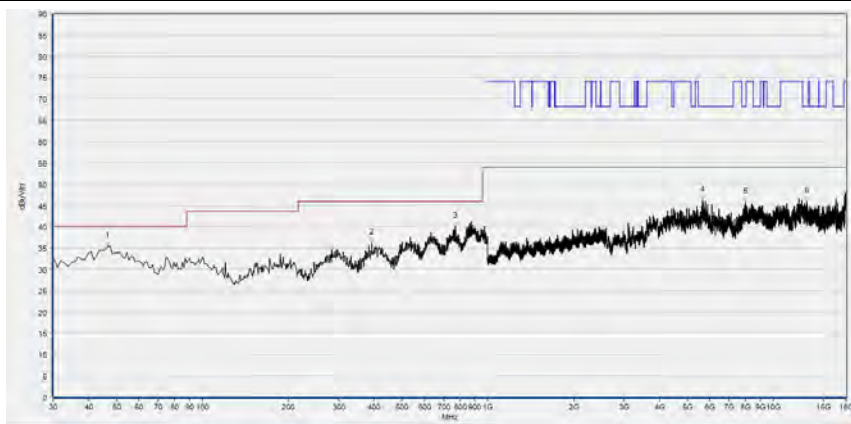
(Antenna Vertical, 30MHz to 18GHz)

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
46.507	35.05	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
299.930	35.99	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
626.176	38.71	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5751.470	46.03	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9004.601	45.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12944.709	46.06	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

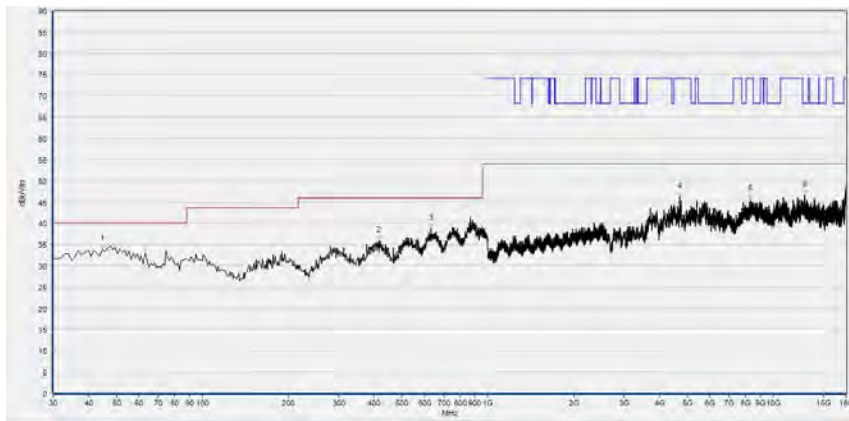
(Antenna Horizontal, 30MHz to 18GHz)



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
46.507	35.36	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
393.143	36.22	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
770.851	40.13	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5646.729	46.18	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
7978.756	45.79	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
13089.498	46.00	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

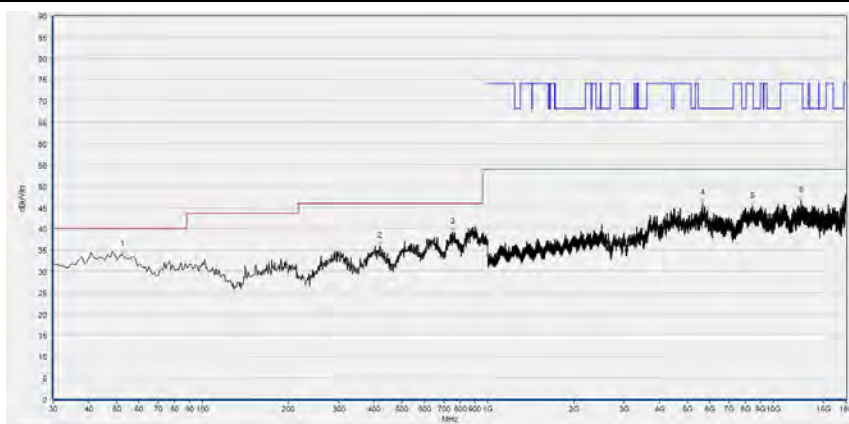
(Antenna Vertical, 30MHz to 18GHz)

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
44.565	33.83	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
416.446	35.89	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
632.973	38.75	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4707.141	46.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8323.785	45.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12910.822	46.57	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

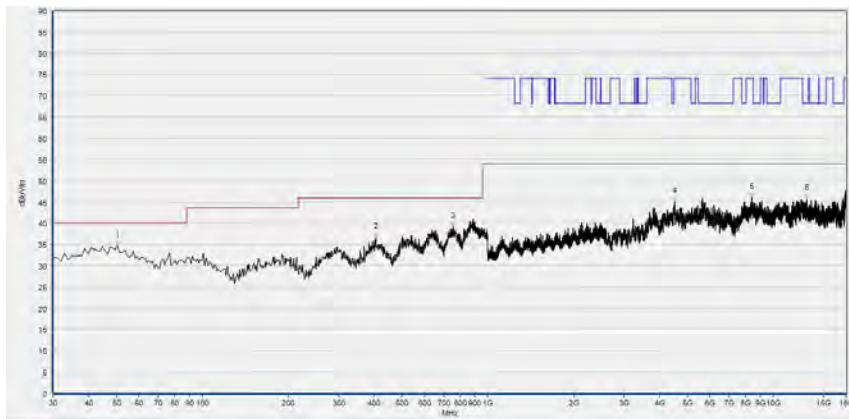
(Antenna Horizontal, 30MHz to 18GHz)



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	33.87	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
417.417	35.85	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
752.402	39.14	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5643.649	45.96	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8468.574	45.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12544.229	46.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

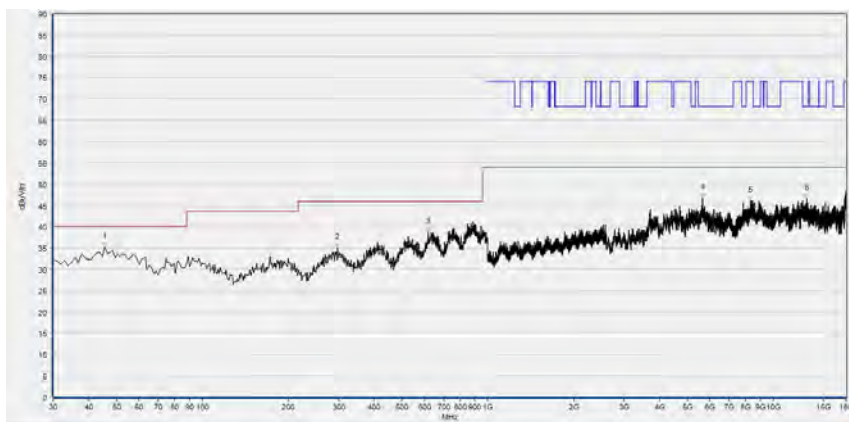
(Antenna Vertical, 30MHz to 18GHz)

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
50.390	34.66	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
404.795	36.63	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
754.344	39.25	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4506.901	45.16	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8425.445	46.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13095.659	45.83	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

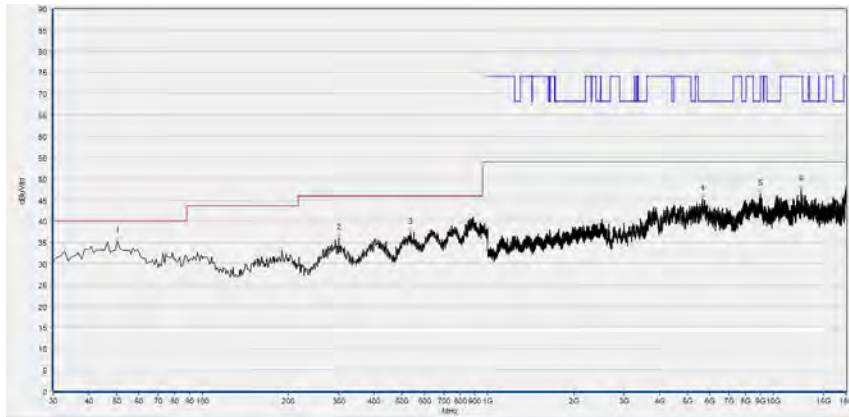
(Antenna Horizontal, 30MHz to 18GHz)



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
45.536	35.27	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
297.988	34.96	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
619.379	38.73	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5655.971	46.72	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8308.382	46.01	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13083.337	46.52	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

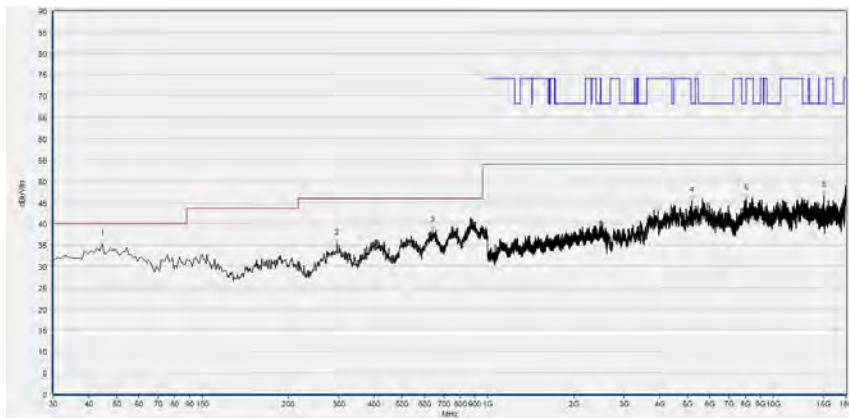
(Antenna Vertical, 30MHz to 18GHz)

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
50.390	35.23	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
299.930	35.98	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
535.876	37.32	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5637.487	45.26	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9007.682	46.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12507.261	47.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

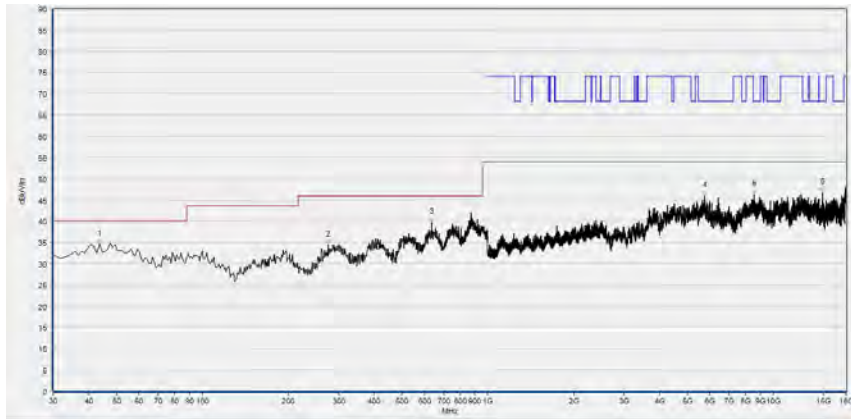
(Antenna Horizontal, 30MHz to 18GHz)



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
44.565	35.23	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
296.046	35.34	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
640.741	38.45	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5187.718	45.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8055.771	45.89	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
15014.883	46.62	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

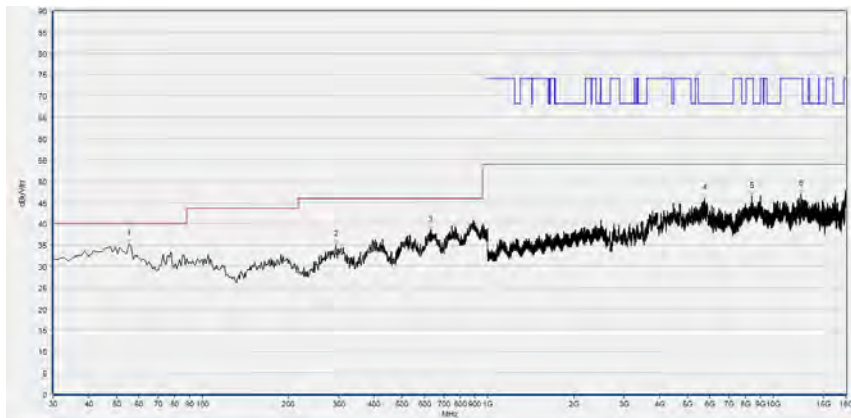
(Antenna Vertical, 30MHz to 18GHz)

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
43.594	34.49	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
276.627	34.30	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
636.857	39.68	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5760.712	45.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8582.557	46.24	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
14897.820	46.84	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



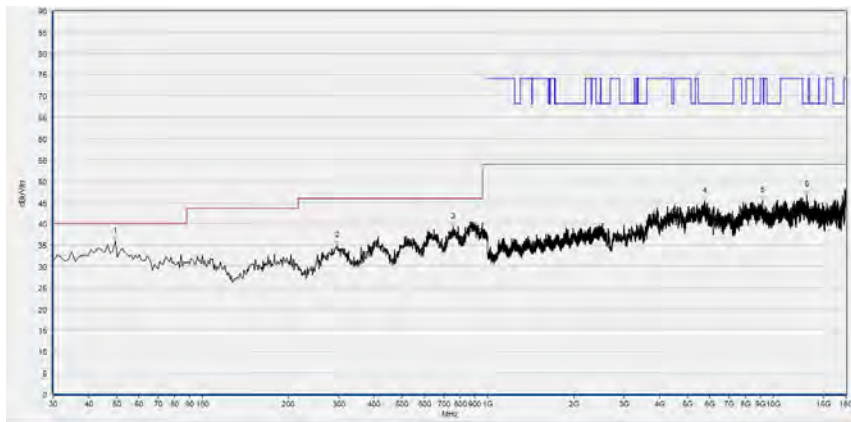
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
55.245	35.13	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
293.133	35.05	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
630.060	38.39	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5763.793	45.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8413.123	46.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12516.503	46.95	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)



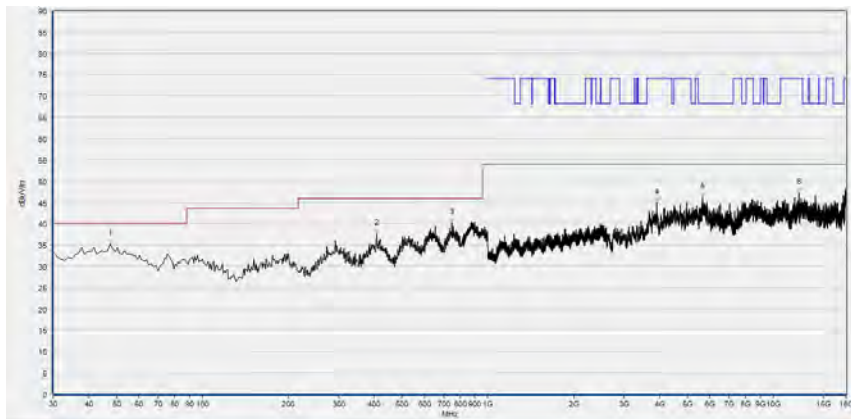
802.11ac (VHT80) Mode

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
49.419	35.83	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
297.017	34.83	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
754.344	39.16	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5766.873	45.26	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9161.712	45.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13077.175	46.71	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

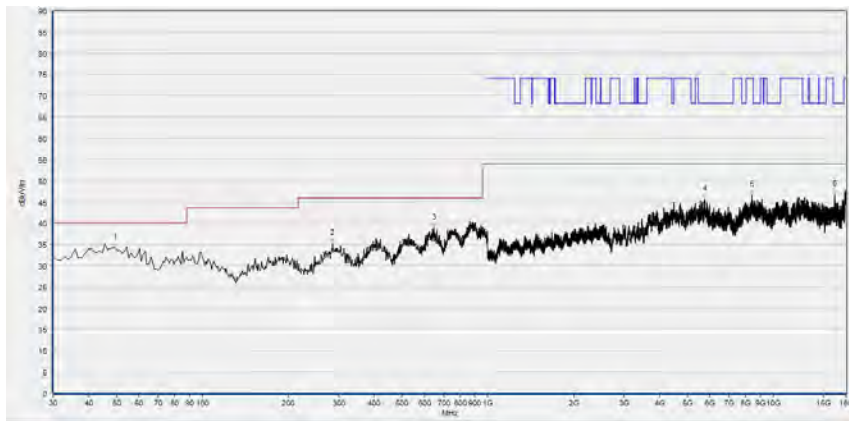
(Antenna Horizontal, 30MHz to 18GHz)



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
47.477	35.18	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
407.708	37.75	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
748.519	40.18	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
3912.342	44.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5652.891	46.20	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12300.860	47.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

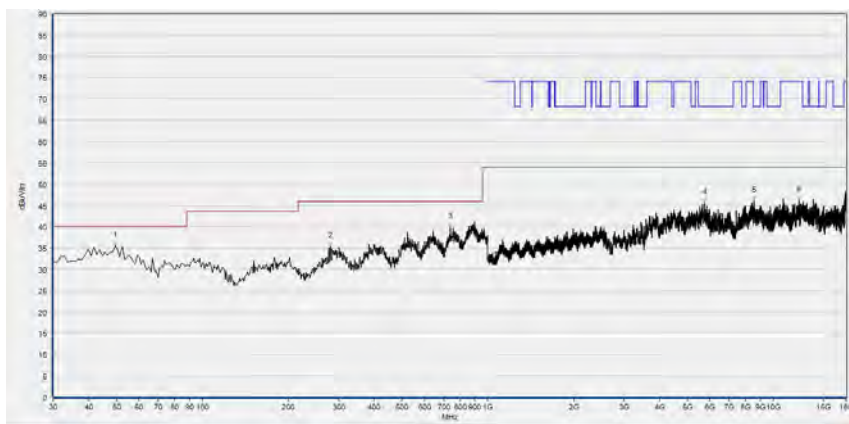
(Antenna Vertical, 30MHz to 18GHz)

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
49.419	34.22	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
286.336	35.19	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
647.538	38.81	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5742.228	45.66	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8394.639	46.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
16438.128	46.75	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

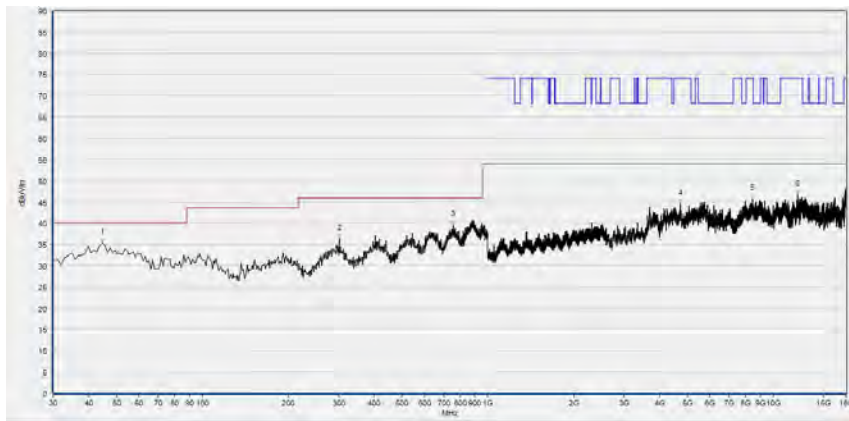
(Antenna Horizontal, 30MHz to 18GHz)



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
49.419	35.48	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
281.481	35.36	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
738.809	39.91	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5757.632	45.54	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8567.153	46.02	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12307.021	46.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

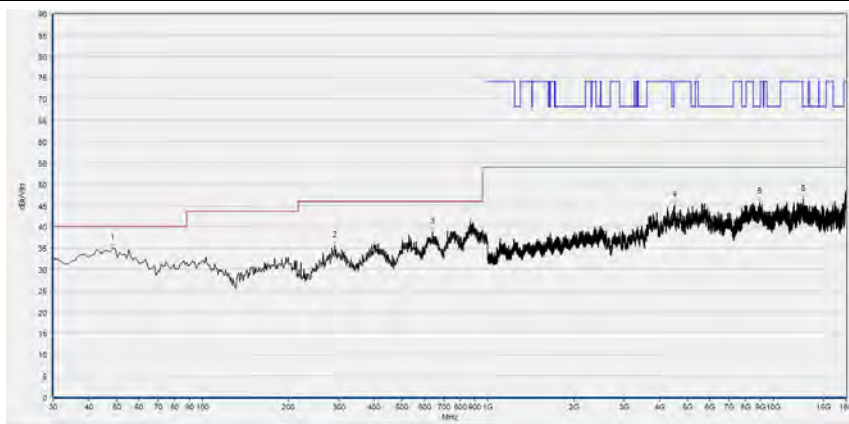
(Antenna Vertical, 30MHz to 18GHz)

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
44.565	35.32	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
301.872	36.35	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
758.228	39.63	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4722.545	44.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8440.848	45.68	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12171.474	46.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

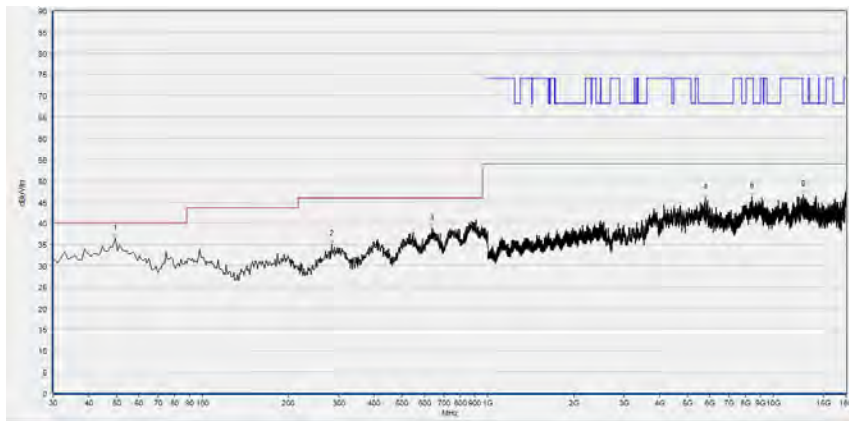
(Antenna Horizontal, 30MHz to 18GHz)



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
48.448	34.91	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
291.191	35.61	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
640.741	38.77	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4503.821	45.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8936.827	45.76	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12753.711	46.36	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

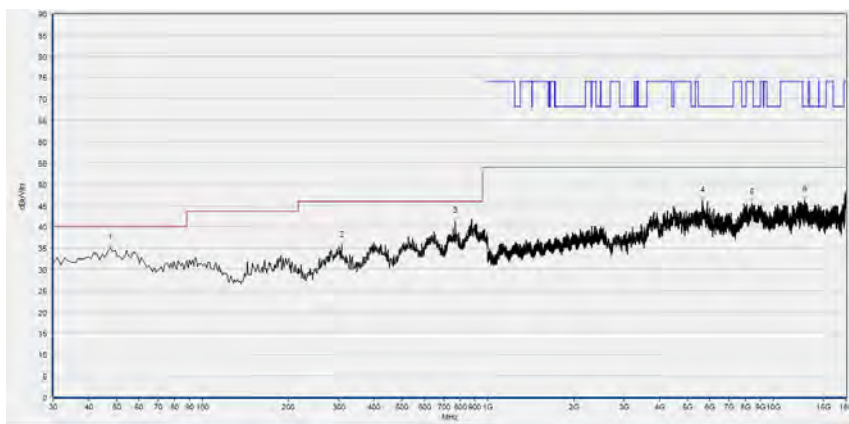
(Antenna Vertical, 30MHz to 18GHz)

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
49.419	36.34	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
283.423	34.98	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
635.886	38.74	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5769.954	45.97	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8403.881	46.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12725.985	46.79	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

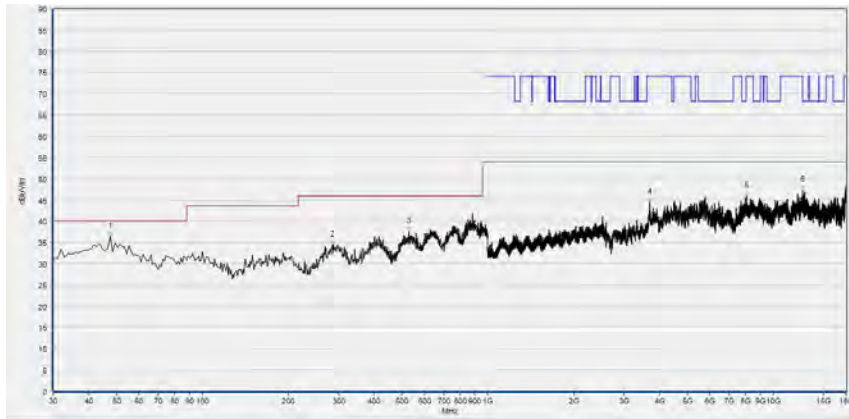
(Antenna Horizontal, 30MHz to 18GHz)



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
47.477	35.00	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
307.698	35.61	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
768.909	41.17	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5655.971	46.01	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8413.123	45.54	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12880.016	46.33	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

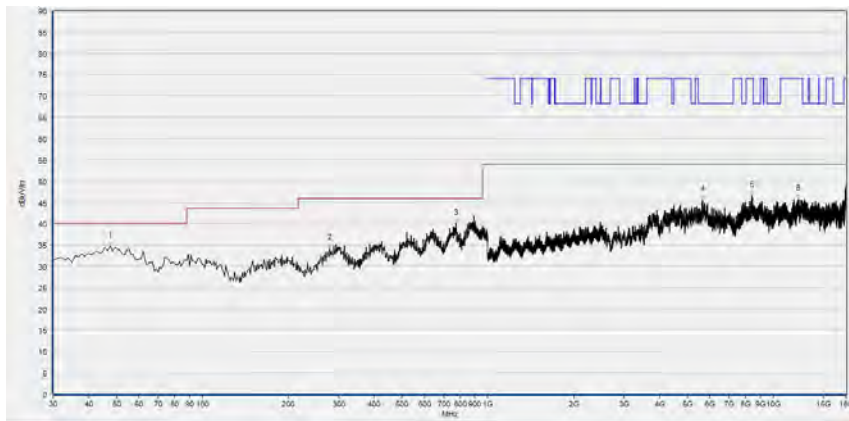
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	36.41	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
285.365	34.32	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
528.108	37.62	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3699.780	44.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8061.932	45.89	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12636.647	47.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

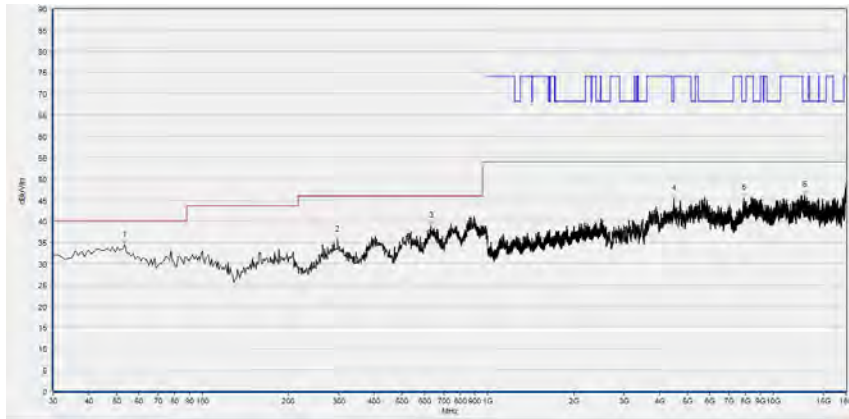
(Antenna Horizontal, 30MHz to 18GHz)



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
47.477	34.77	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
279.540	34.23	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
772.793	40.03	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5668.294	45.58	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8403.881	46.66	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12199.200	45.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

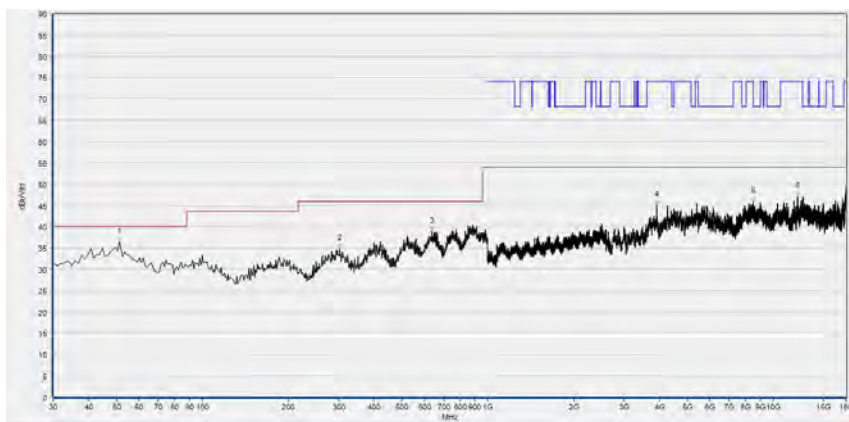
(Antenna Vertical, 30MHz to 18GHz)

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
53.303	34.42	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
297.988	35.50	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
631.031	38.91	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4488.418	45.31	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
7874.015	45.50	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12886.177	46.14	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



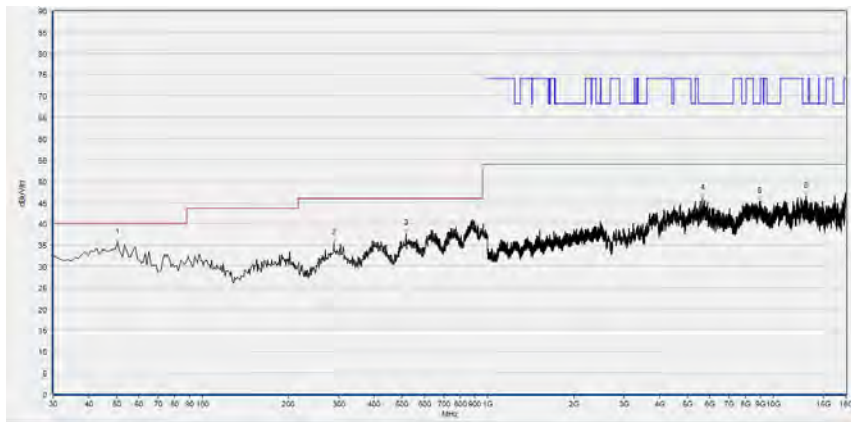
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
51.361	36.32	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
302.843	34.87	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
636.857	38.86	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
3915.423	45.09	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8530.186	45.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12193.039	47.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)



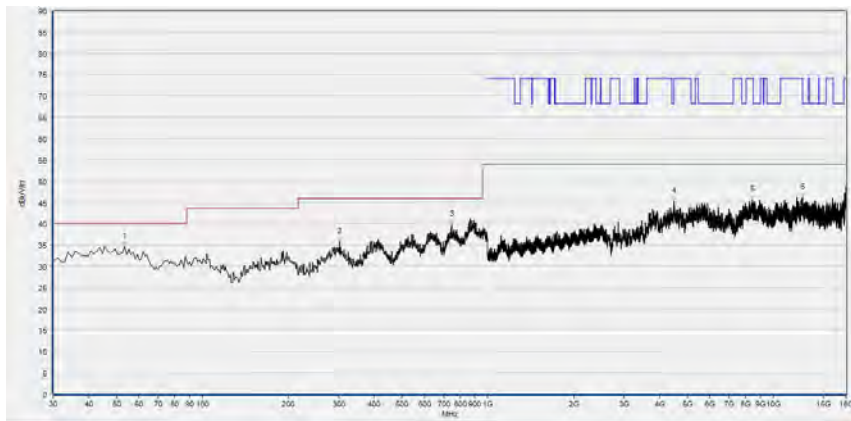
802.11ax (HEW20) Mode

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
50.390	35.51	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
288.278	35.31	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
516.456	37.71	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5652.891	45.97	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8955.311	45.23	N/A	N/A <td 68.23	N/A	N/A	Horizontal	PASS	
13037.127	46.42	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

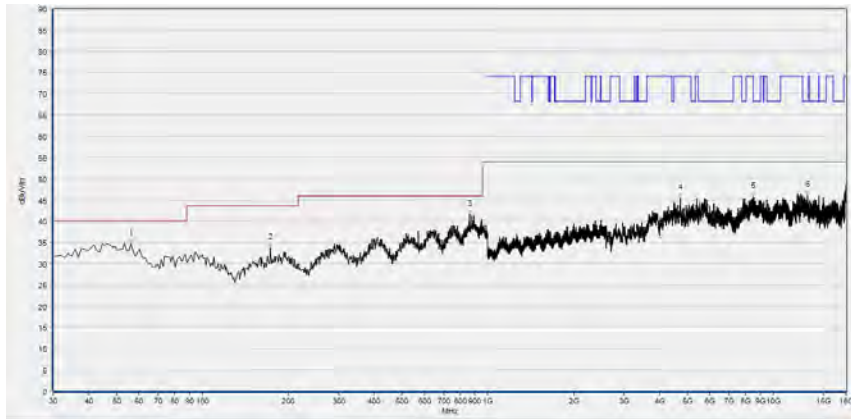
(Antenna Horizontal, 30MHz to 18GHz)



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
53.303	34.55	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
302.843	35.69	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
747.548	39.75	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4491.498	45.24	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8453.171	45.62	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12682.857	46.12	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

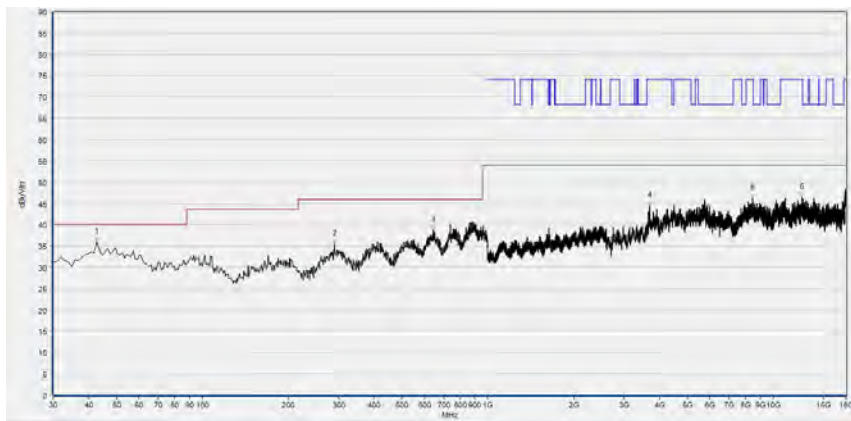
(Antenna Vertical, 30MHz to 18GHz)

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
56.216	34.71	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
172.733	33.62	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
864.064	41.55	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4731.786	45.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8520.944	45.78	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13172.675	46.06	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

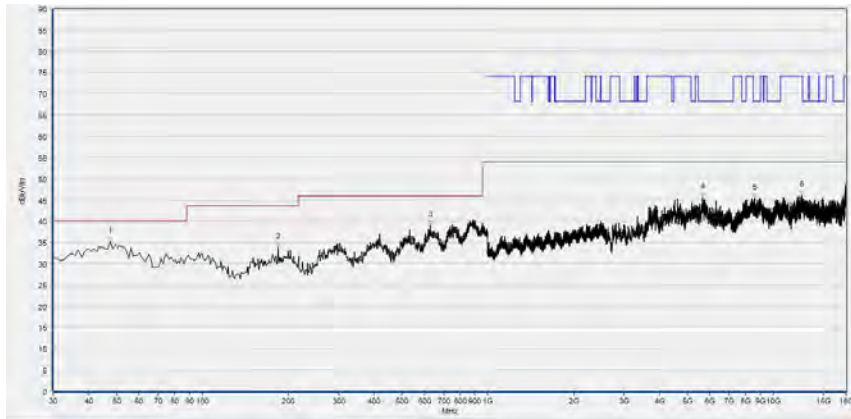
(Antenna Horizontal, 30MHz to 18GHz)



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
42.623	35.84	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
290.220	35.28	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
644.625	38.73	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
3690.538	44.48	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8465.493	46.33	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12602.761	46.44	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

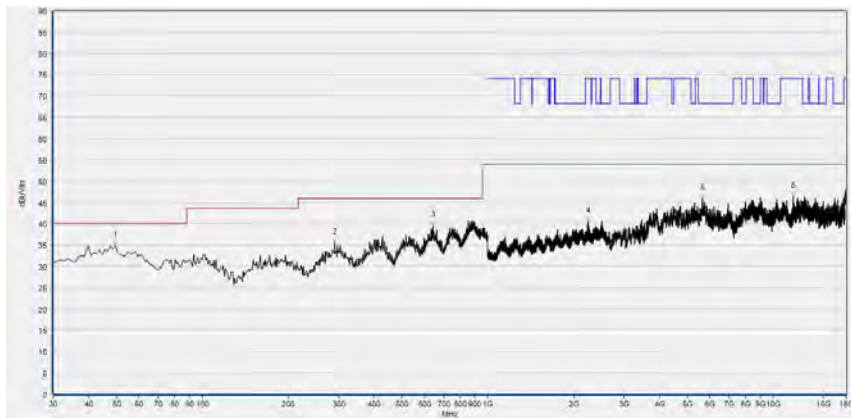
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	35.25	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
184.384	33.84	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
627.147	39.07	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5640.568	45.67	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8591.798	45.40	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12590.438	46.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

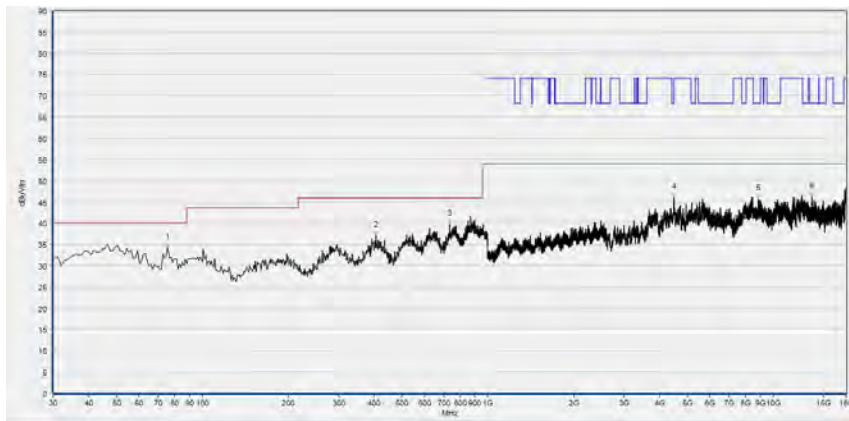
(Antenna Horizontal, 30MHz to 18GHz)



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
49.419	34.91	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
291.191	35.45	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
642.683	39.47	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2251.617	40.49	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5643.649	45.91	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11740.188	46.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

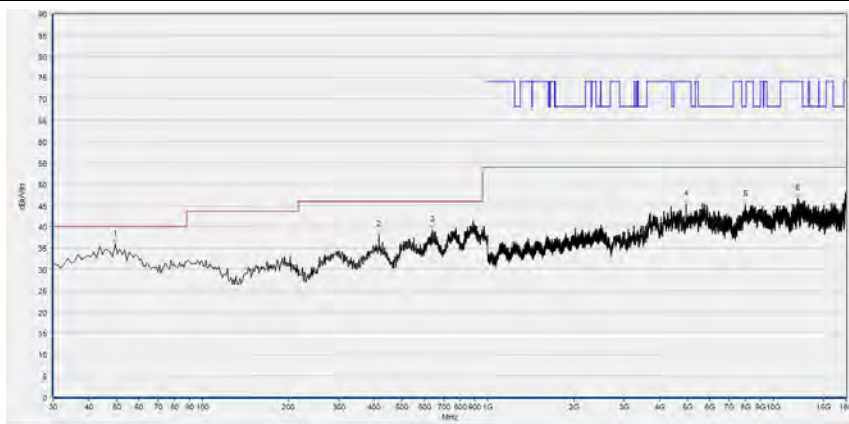
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	34.20	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
404.795	37.01	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
732.983	39.77	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4485.337	46.15	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8856.731	45.79	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13687.137	46.24	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

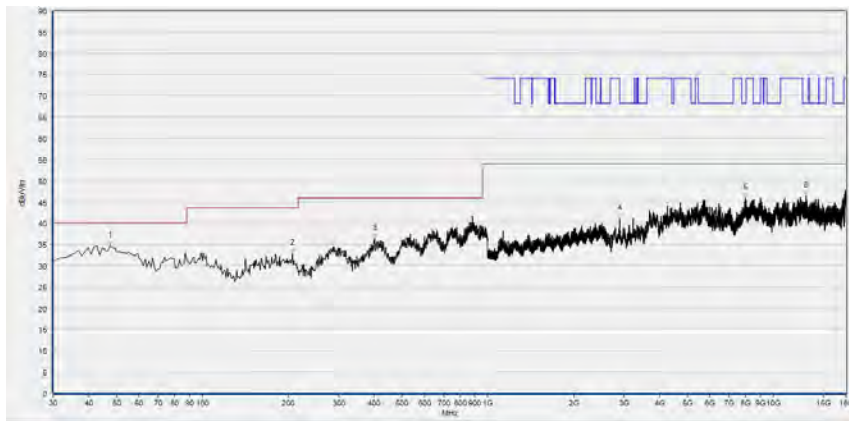
(Antenna Horizontal, 30MHz to 18GHz)



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
49.419	35.93	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
415.475	38.04	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
638.799	39.26	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4959.752	45.22	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7978.756	45.27	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12180.716	46.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

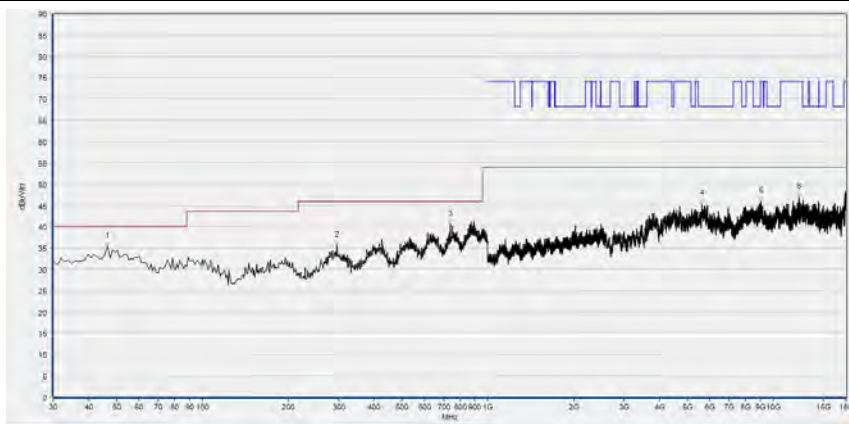
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	34.62	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
206.717	32.83	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
401.882	36.30	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2892.659	41.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7975.675	45.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13049.450	46.47	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

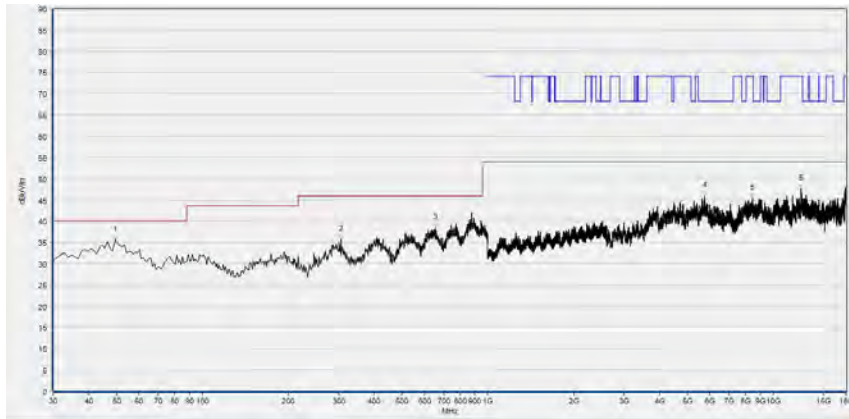
(Antenna Horizontal, 30MHz to 18GHz)



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
46.507	35.29	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
296.046	35.46	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
738.809	40.54	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5628.246	45.44	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9075.455	45.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12313.183	46.94	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

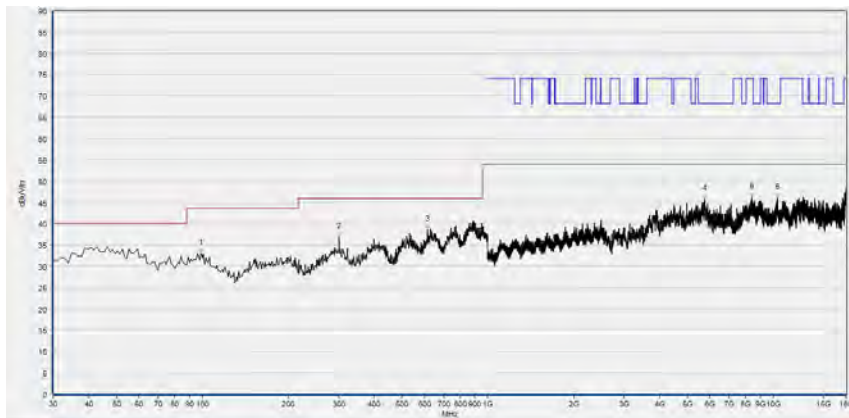
(Antenna Vertical, 30MHz to 18GHz)

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
49.419	35.50	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
306.727	35.65	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
653.363	38.44	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5748.390	45.89	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8468.574	45.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12531.906	47.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

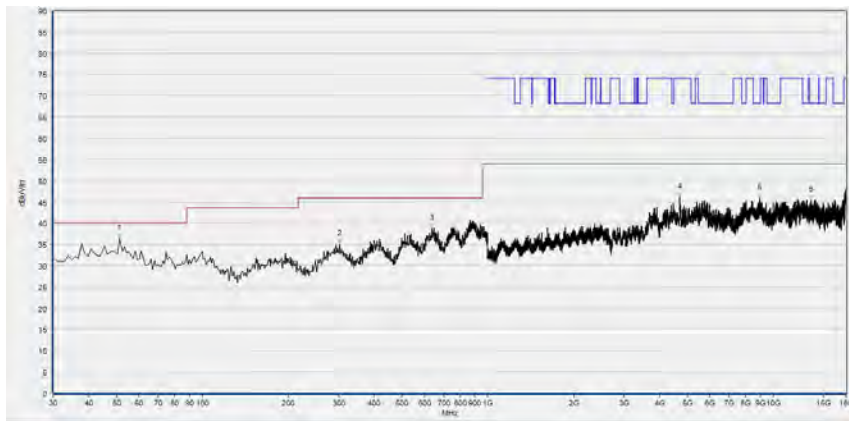
(Antenna Horizontal, 30MHz to 18GHz)



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
98.939	33.09	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	36.89	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
615.495	38.56	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5754.551	45.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8431.606	46.31	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10332.346	46.17	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

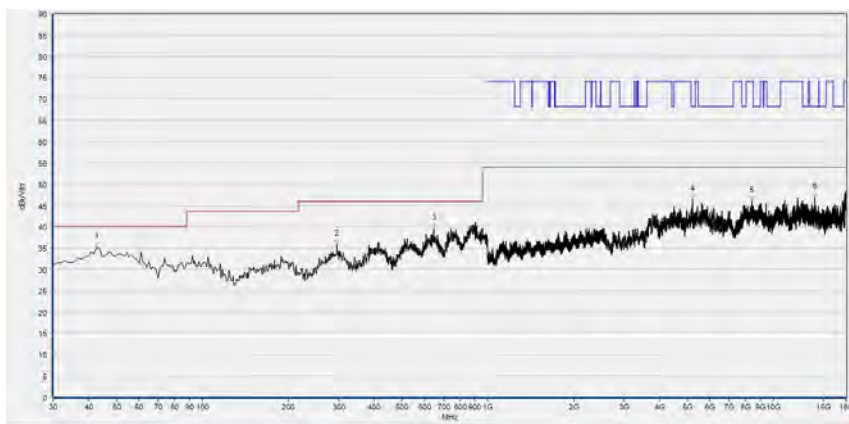
(Antenna Vertical, 30MHz to 18GHz)

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
51.361	36.38	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
301.872	35.05	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
636.857	38.65	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4710.222	46.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8986.117	45.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13597.800	45.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

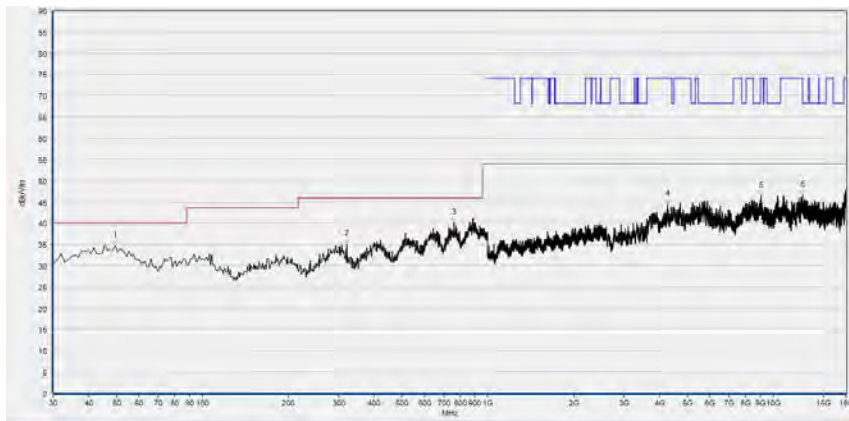
(Antenna Horizontal, 30MHz to 18GHz)



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
42.623	35.13	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
296.046	35.82	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
646.567	39.50	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5212.362	46.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8388.478	46.12	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
14001.360	46.91	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

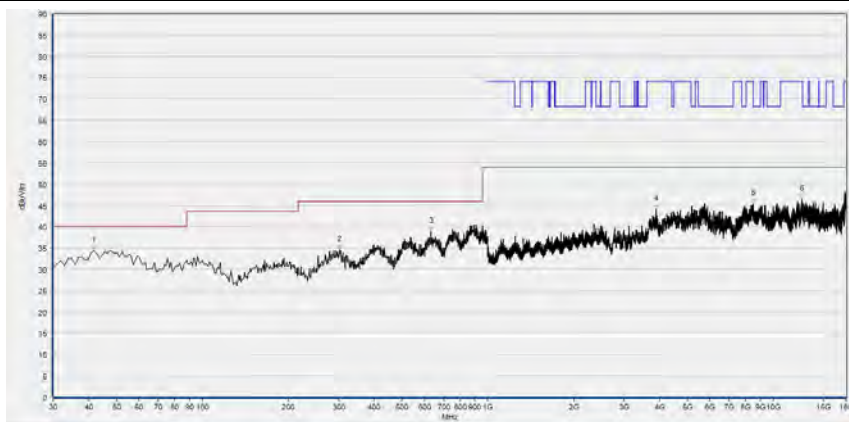
(Antenna Vertical, 30MHz to 18GHz)

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
49.419	34.71	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
321.291	35.05	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
762.112	40.12	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4251.210	44.36	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9069.294	46.36	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12630.486	46.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

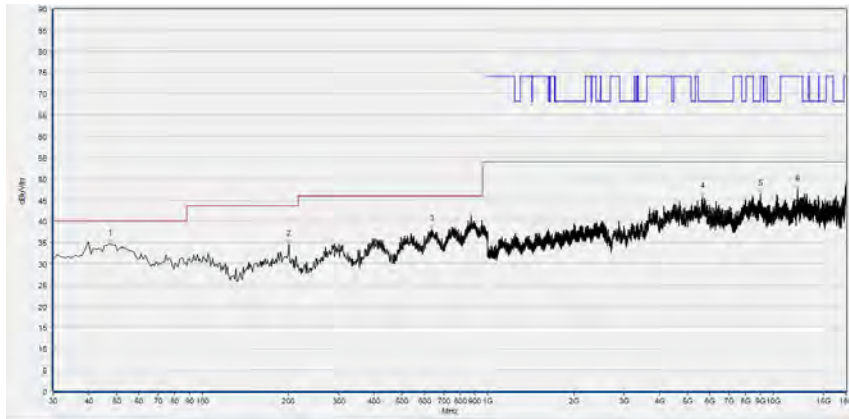
(Antenna Horizontal, 30MHz to 18GHz)



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
41.652	34.34	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
301.872	34.61	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
631.031	38.93	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
3893.859	44.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8493.219	45.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12599.680	46.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

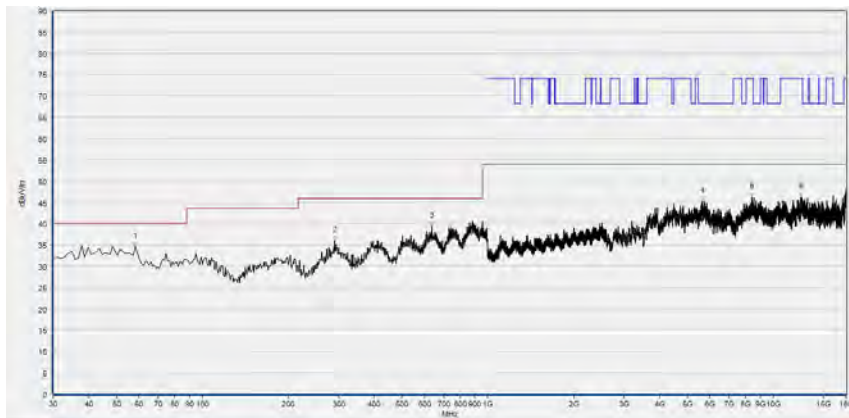
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	34.75	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
200.891	34.45	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
637.828	38.03	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5640.568	45.76	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8995.359	46.39	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12159.152	47.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

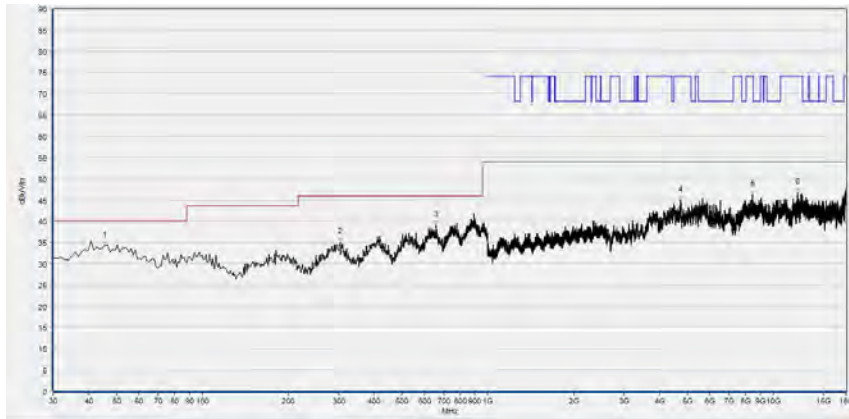
(Antenna Horizontal, 30MHz to 18GHz)



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	34.58	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
290.220	36.00	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
635.886	39.34	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5637.487	45.33	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8422.364	46.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12534.987	46.30	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

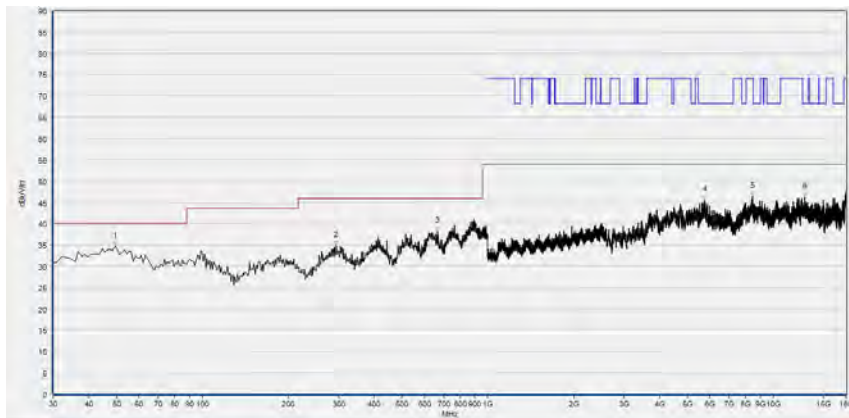
(Antenna Vertical, 30MHz to 18GHz)

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
45.536	34.12	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
303.814	35.08	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
658.218	39.06	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4722.545	44.85	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8450.090	46.28	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12162.232	46.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

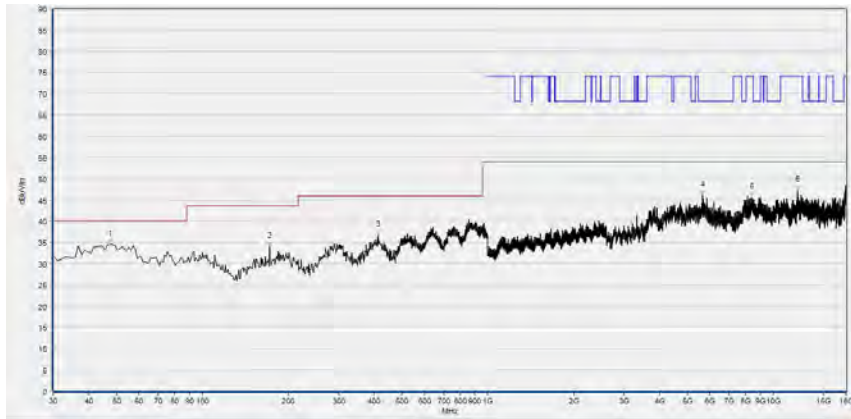
(Antenna Horizontal, 30MHz to 18GHz)



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
49.419	34.72	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
294.104	34.84	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
667.928	38.22	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5760.712	45.53	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8437.768	46.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12876.935	46.21	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

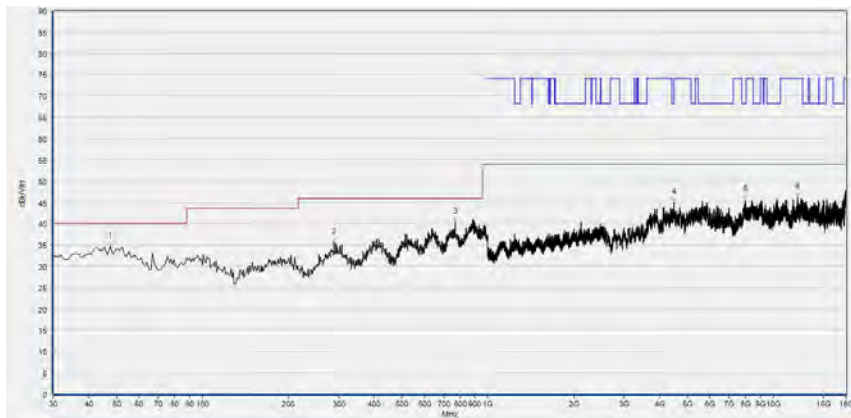
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	34.50	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
171.762	34.07	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
412.563	36.64	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5662.132	46.14	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8406.961	45.54	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12156.071	47.22	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

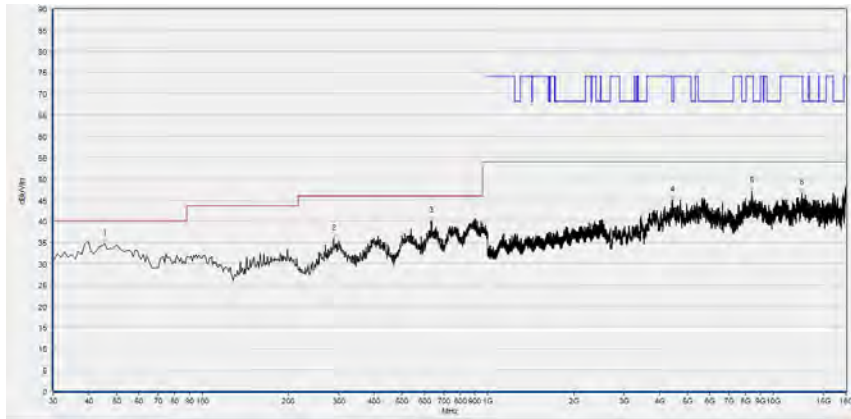
(Antenna Horizontal, 30MHz to 18GHz)



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
47.477	34.66	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
289.249	35.77	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
767.938	40.40	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4494.579	45.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7997.239	45.51	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12156.071	46.33	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

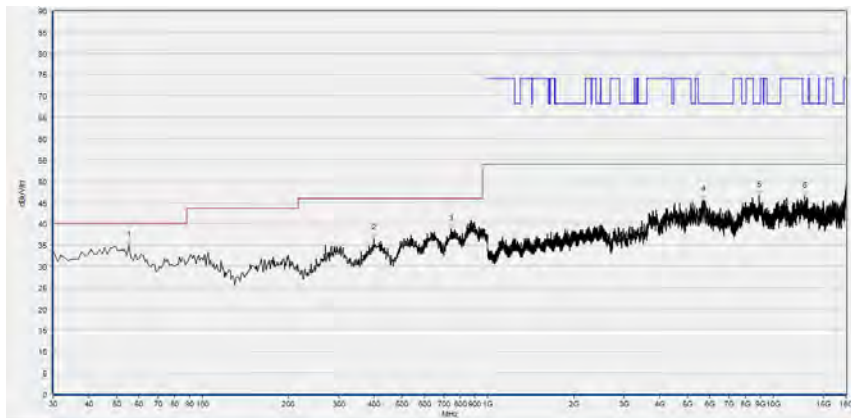
(Antenna Vertical, 30MHz to 18GHz)

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
45.536	34.62	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
288.278	35.95	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
632.973	40.00	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4432.967	44.87	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8410.042	47.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12615.083	46.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



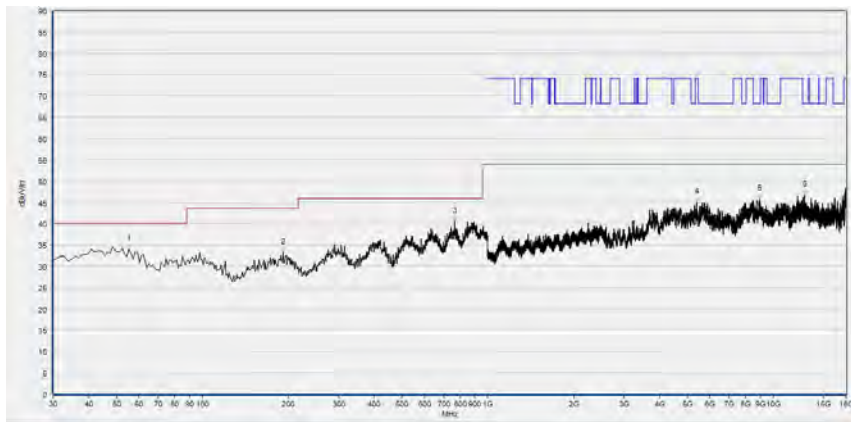
Fre. (MHz)	PK (dB μ V/m)	QP (dB μ V/m)	AV (dB μ V/m)	Limit-PK (dB μ V/m)	Limit-QP (dB μ V/m)	Limit-AV (dB μ V/m)	Antenna	Verdict
55.245	34.91	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
397.998	36.46	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
741.722	38.71	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5686.777	45.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8930.666	46.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12883.097	46.34	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)



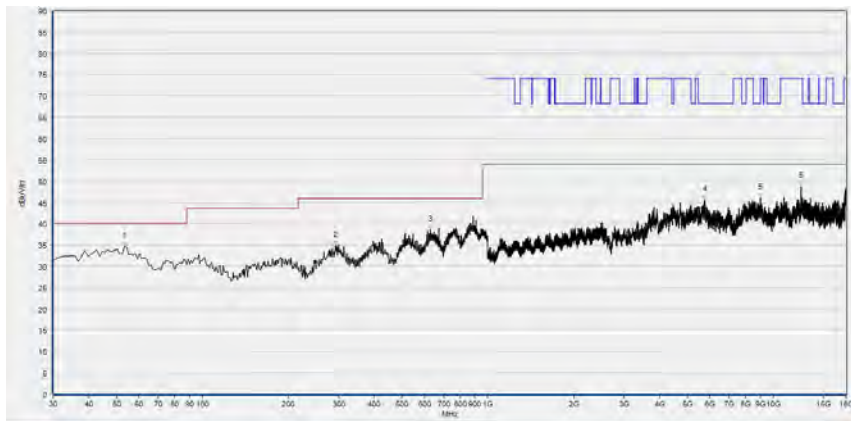
802.11ax (HEW20)(RU26) Mode

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
55.245	34.05	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
192.152	33.24	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
763.083	40.52	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5409.522	45.04	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8970.714	45.81	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12895.419	46.81	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

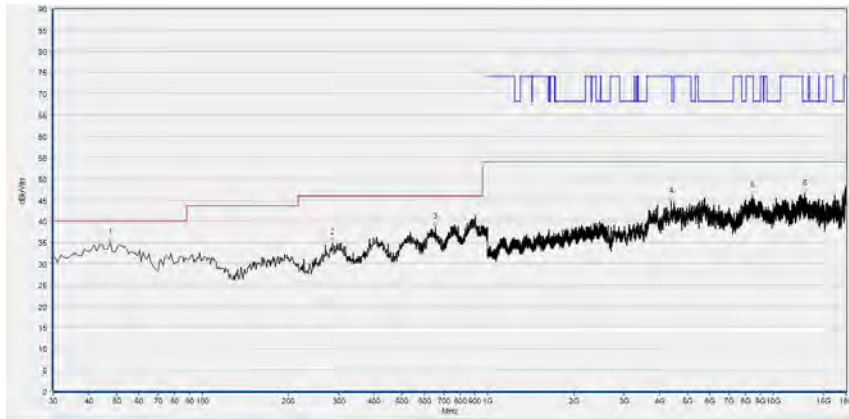
(Antenna Horizontal, 30MHz to 18GHz)



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
53.303	34.67	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
292.162	34.89	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
627.147	38.58	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5754.551	45.61	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8992.278	46.14	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12501.100	48.80	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

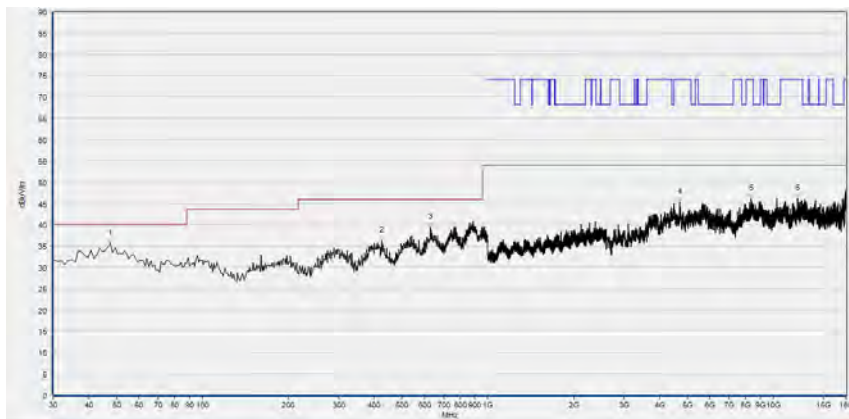
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	34.94	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
286.336	34.93	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
656.276	38.55	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4380.596	44.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8459.332	45.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12901.580	46.41	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

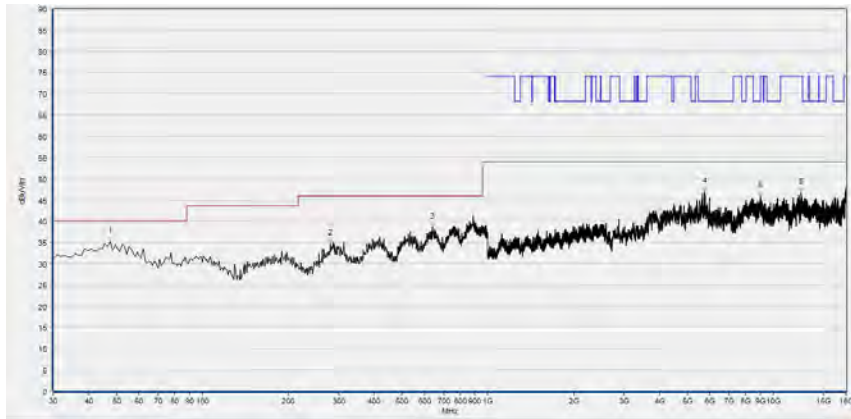
(Antenna Horizontal, 30MHz to 18GHz)



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
47.477	35.54	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
424.214	36.15	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
629.089	39.38	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4704.061	45.30	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8366.913	46.11	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12137.588	46.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

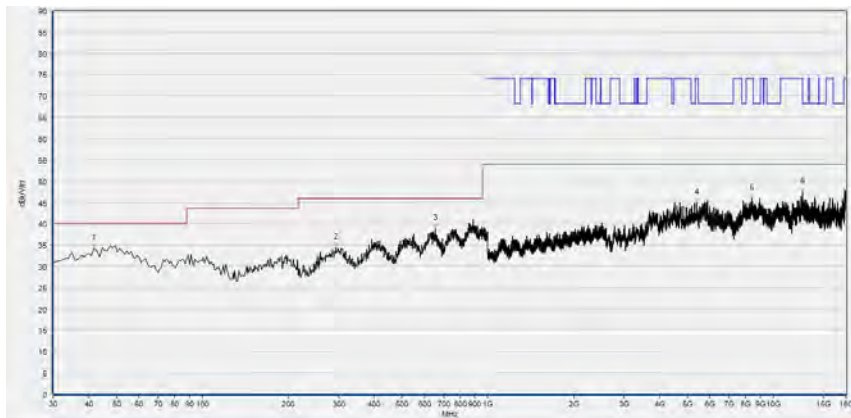
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	35.19	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
280.511	34.74	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
640.741	38.62	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5751.470	46.89	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9016.923	45.89	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12498.020	46.84	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

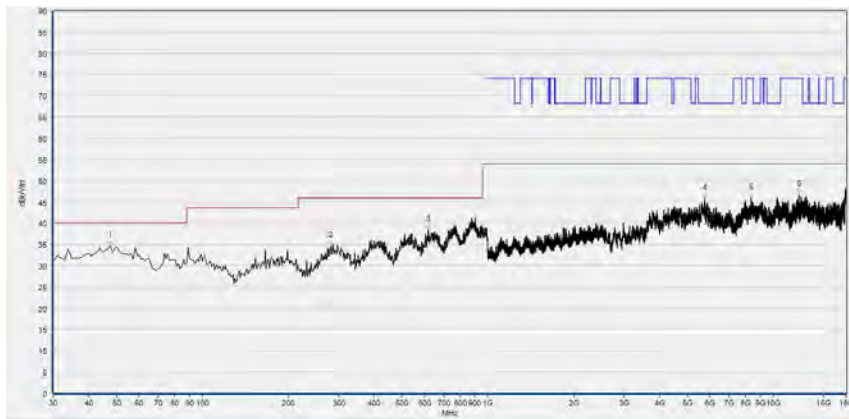
(Antenna Horizontal, 30MHz to 18GHz)



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
41.652	34.22	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
293.133	34.31	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
653.363	38.91	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5406.441	44.94	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8419.284	45.87	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12633.567	47.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

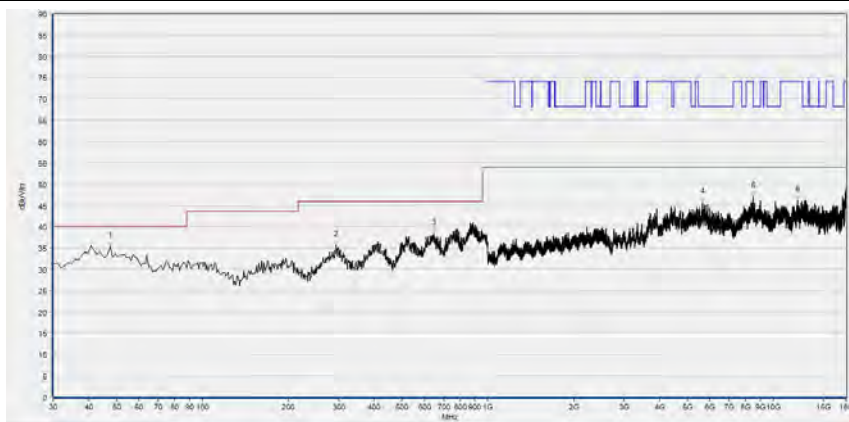
(Antenna Vertical, 30MHz to 18GHz)

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
47.477	34.75	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
282.452	34.72	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
619.379	38.30	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5751.470	45.81	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8379.236	45.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12297.780	46.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

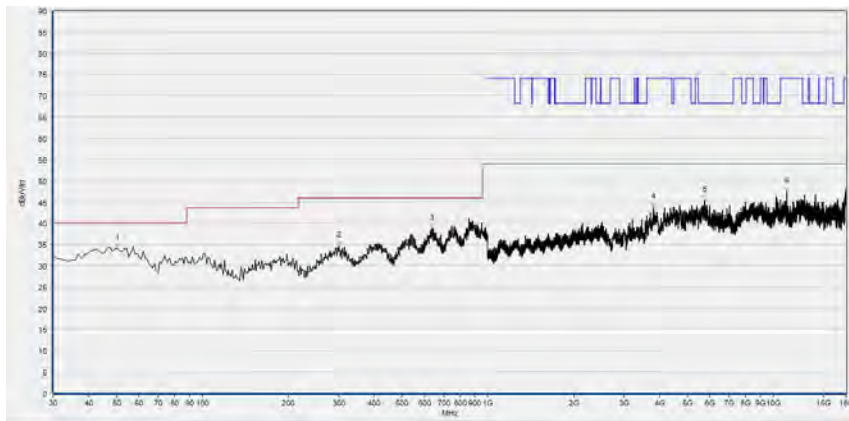
(Antenna Horizontal, 30MHz to 18GHz)



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
47.477	35.32	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
294.104	35.67	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
645.596	38.36	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5640.568	45.75	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8496.299	47.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12156.071	46.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

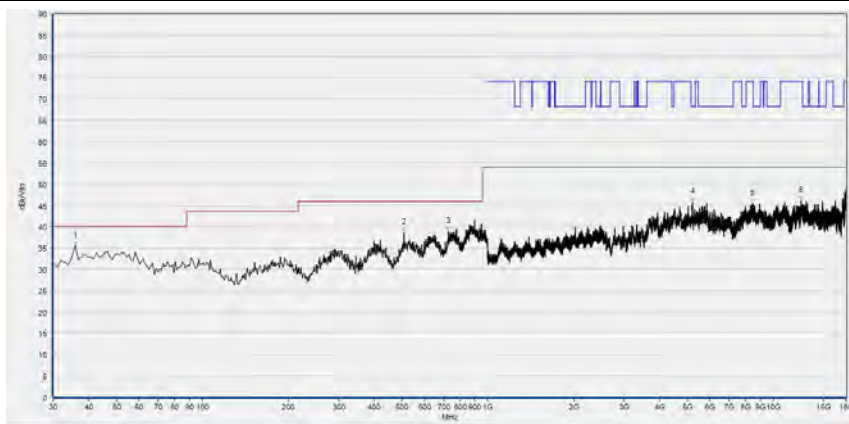
(Antenna Vertical, 30MHz to 18GHz)

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
50.390	33.99	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
299.930	34.74	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
634.915	38.74	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3807.602	43.74	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5748.390	45.37	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11145.629	47.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

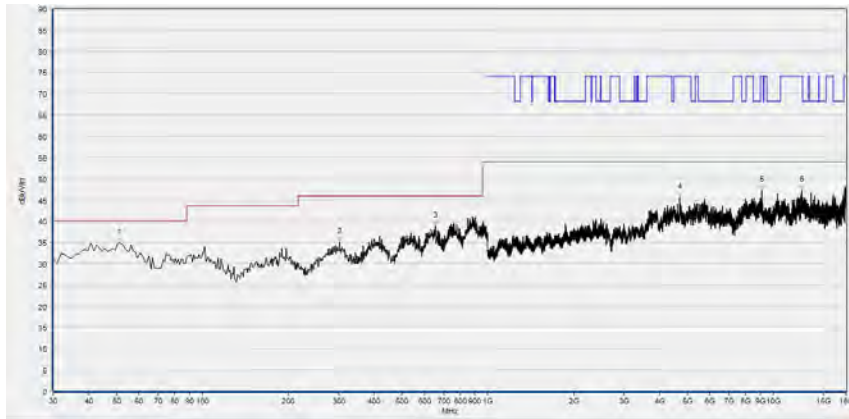
(Antenna Horizontal, 30MHz to 18GHz)



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
35.826	35.61	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
508.689	38.57	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
728.128	38.93	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5221.604	45.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8447.009	45.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12534.987	46.09	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

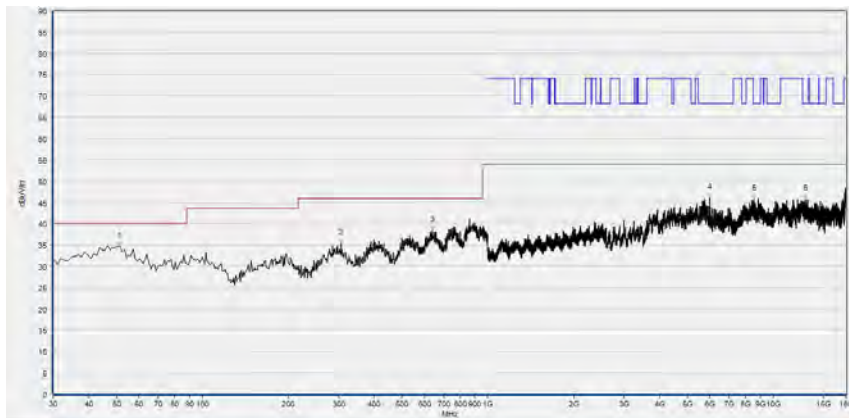
(Antenna Vertical, 30MHz to 18GHz)

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
51.361	34.93	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
301.872	35.06	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
656.276	38.87	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4707.141	45.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9115.503	47.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12605.841	47.28	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

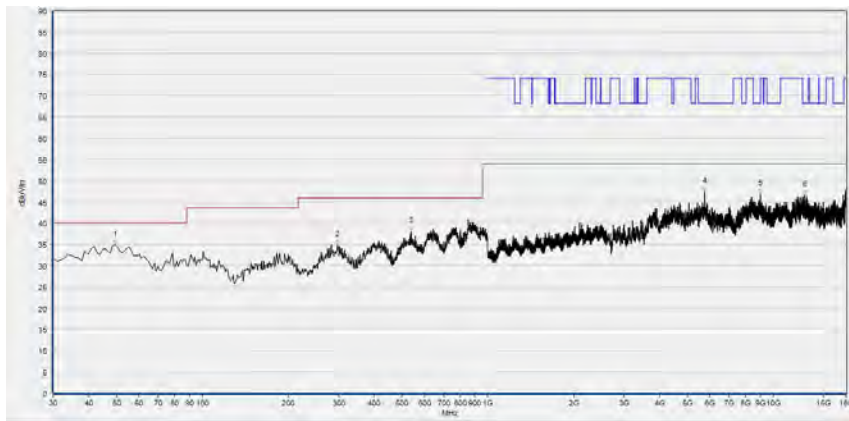
(Antenna Horizontal, 30MHz to 18GHz)



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
51.361	34.72	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
306.727	35.39	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
640.741	38.36	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5976.355	46.03	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8579.476	45.84	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12941.628	45.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

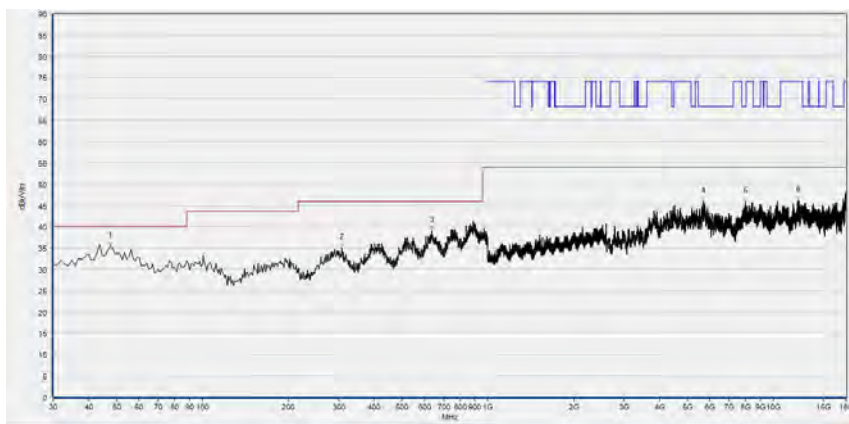
(Antenna Vertical, 30MHz to 18GHz)

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
49.419	34.83	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
297.017	34.78	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
539.760	38.03	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5748.390	47.44	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8998.440	46.89	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12907.742	46.57	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

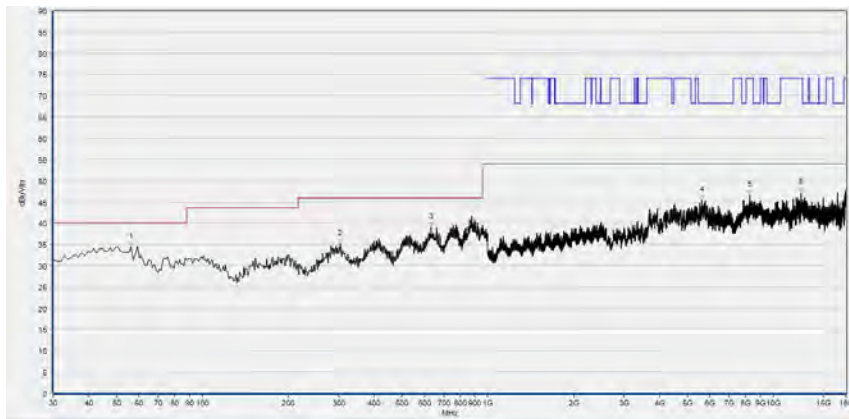
(Antenna Horizontal, 30MHz to 18GHz)



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
47.477	35.38	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
308.669	35.01	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
637.828	39.04	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5674.455	45.97	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
7972.595	45.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12199.200	46.26	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

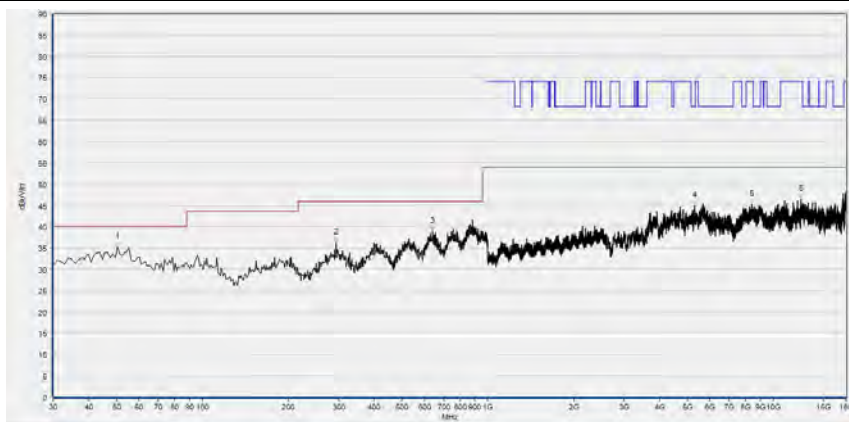
(Antenna Vertical, 30MHz to 18GHz)

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
56.216	34.29	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
304.785	34.95	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
632.002	39.09	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5628.246	45.34	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8252.931	46.57	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12507.261	47.07	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

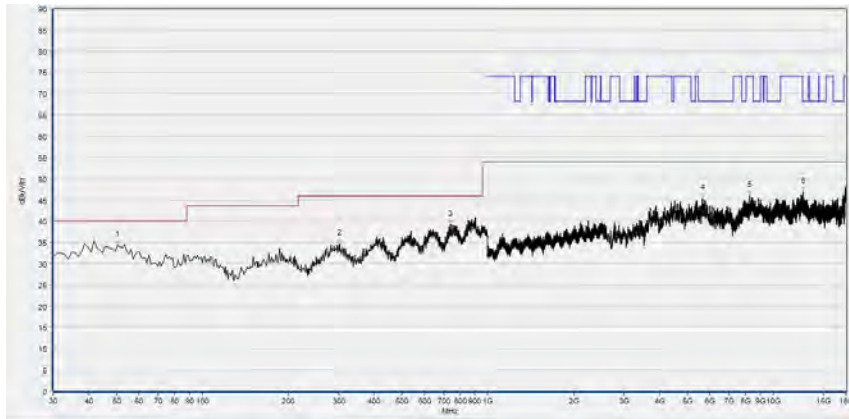
(Antenna Horizontal, 30MHz to 18GHz)



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
50.390	35.27	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
294.104	36.12	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
641.712	38.81	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5314.023	44.91	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8410.042	45.29	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12513.423	46.48	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

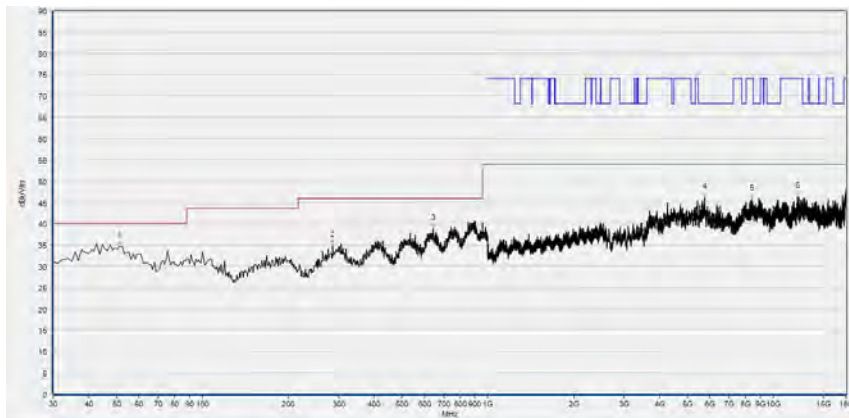
(Antenna Vertical, 30MHz to 18GHz)

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
50.390	34.37	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
302.843	34.65	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
737.838	39.22	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5637.487	45.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8283.737	46.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12741.388	46.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

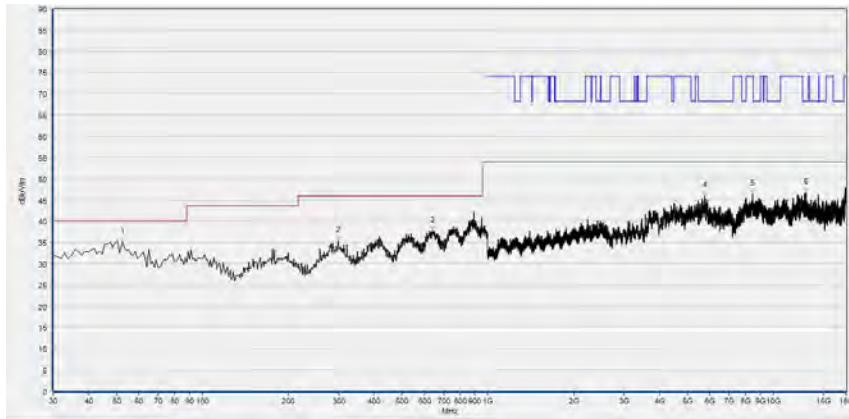
(Antenna Horizontal, 30MHz to 18GHz)



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
51.361	34.65	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
286.336	34.86	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
644.625	38.89	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5748.390	46.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8406.961	45.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12146.829	46.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

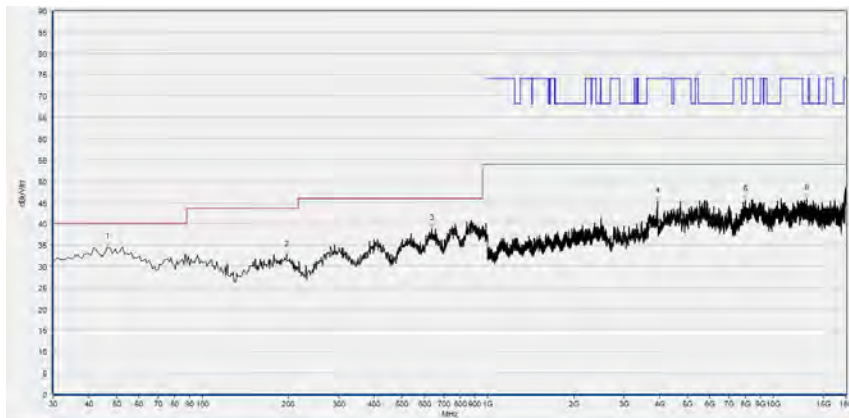
(Antenna Vertical, 30MHz to 18GHz)

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
52.332	35.05	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
298.959	35.44	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
639.770	37.66	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5766.873	45.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8440.848	46.40	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13024.805	46.77	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

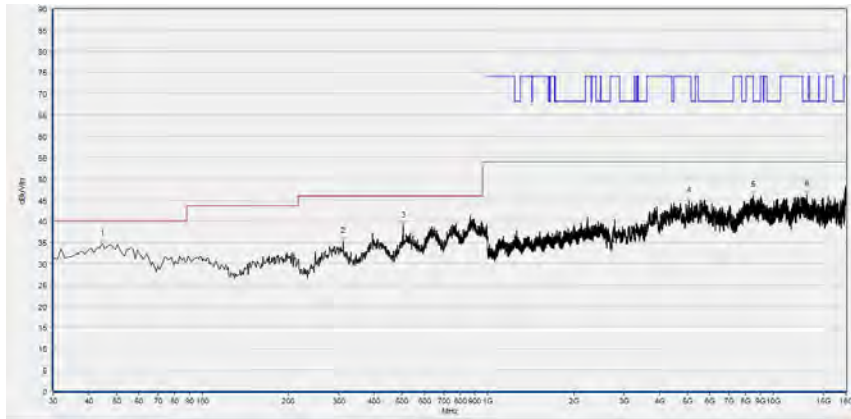
(Antenna Horizontal, 30MHz to 18GHz)



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
46.507	34.45	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
197.007	32.72	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
637.828	38.92	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
3924.665	45.28	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7978.756	45.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
46.507	34.45	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

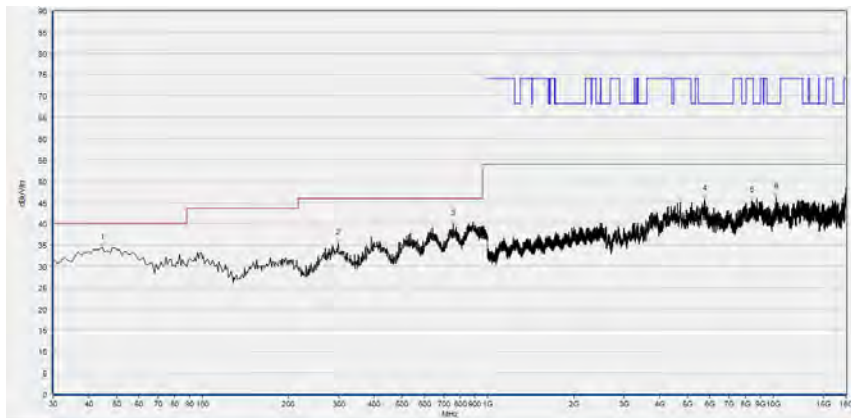
(Antenna Vertical, 30MHz to 18GHz)

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
44.565	34.62	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
311.582	35.23	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
504.805	38.93	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5058.332	44.83	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8508.622	46.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13104.901	46.31	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

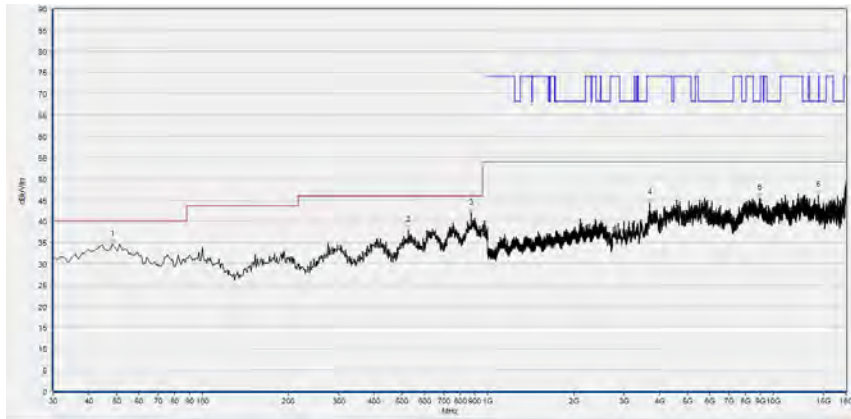
(Antenna Horizontal, 30MHz to 18GHz)



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
44.565	34.37	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
298.959	35.44	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
758.228	39.97	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5754.551	45.82	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8422.364	45.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10221.444	46.29	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

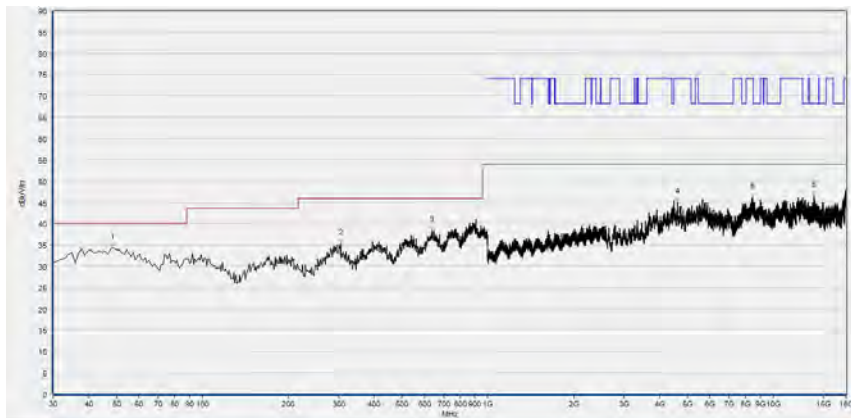
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 165



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
48.448	34.45	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
527.137	37.92	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
872.803	41.93	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3687.457	44.19	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8976.875	45.42	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
14411.082	46.12	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
48.448	34.31	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
305.756	35.29	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
637.828	38.30	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4623.965	45.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8447.009	46.22	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13850.410	46.54	N/A	N/A	68.23	N/A	N/A	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
				2022.03.01	2023.02.28
USB Wideband Power Sensor	MY54210011	U2021XA	Agilent	2021.03.25	2022.03.24
				2022.03.01	2023.02.28
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	2021.10.20	2022.10.19

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
				2022.03.03	2023.03.02
LISN	8127449	NSLK 8127	Schwarzbeck	2021.03.09	2022.03.08
				2022.03.03	2023.03.02
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	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	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	2022.02.11	2025.02.10
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	2021.07.16	2022.07.15
18-26.5GHz pre-Amplifier	46732	S10M100L38 02	Tonscend	2021.07.16	2022.07.15
26-40GHz pre-Amplifier	56774	S40M400L40 02	Tonscend	2021.07.16	2022.07.15
Notch Filter	N/A	WRCG-5150-5350	Wainwright	2021.07.16	2022.07.15
Notch Filter	N/A	WRCG-5470-5725	Wainwright	2021.07.16	2022.07.15
Notch Filter	N/A	WRCG-5725-5850	Wainwright	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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