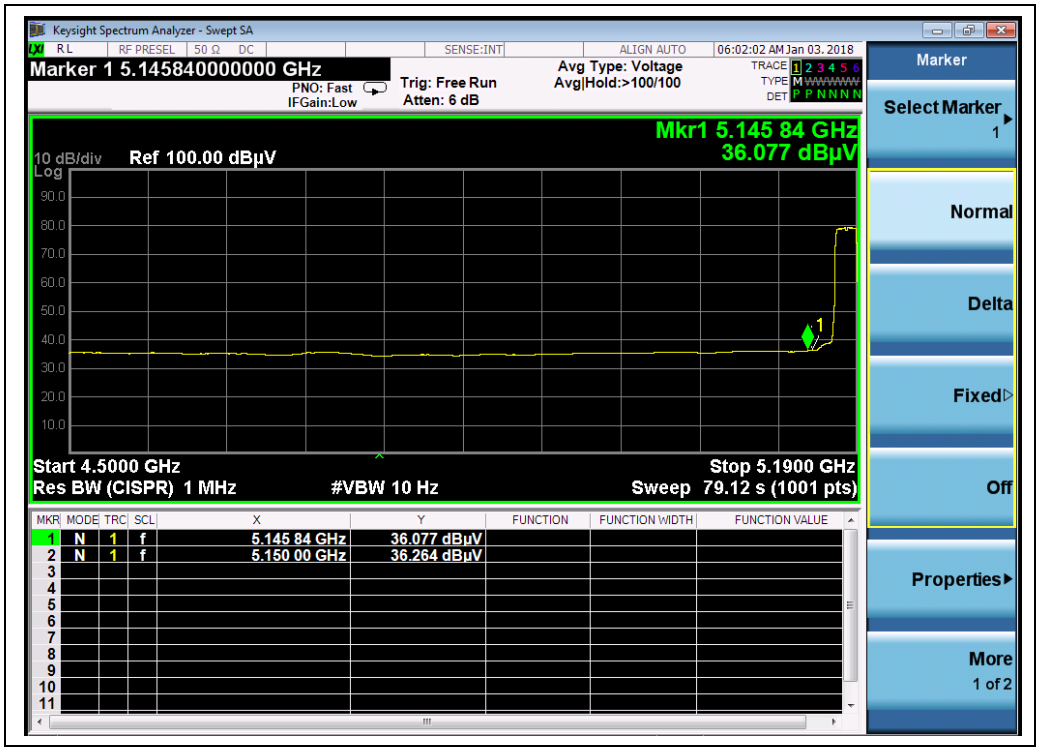
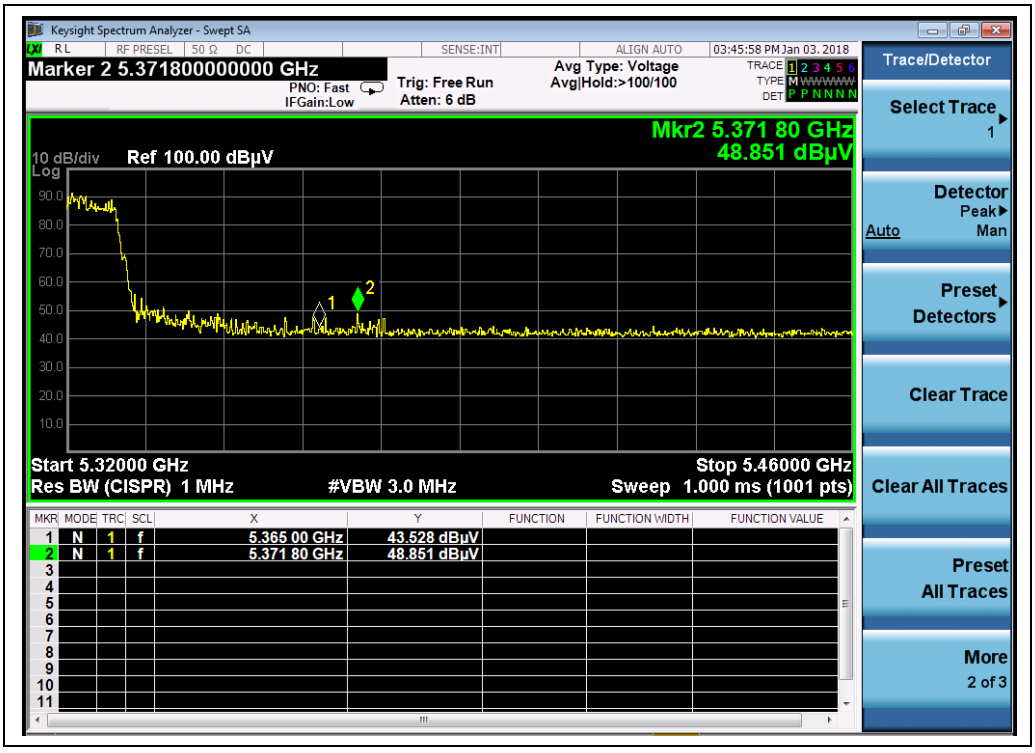
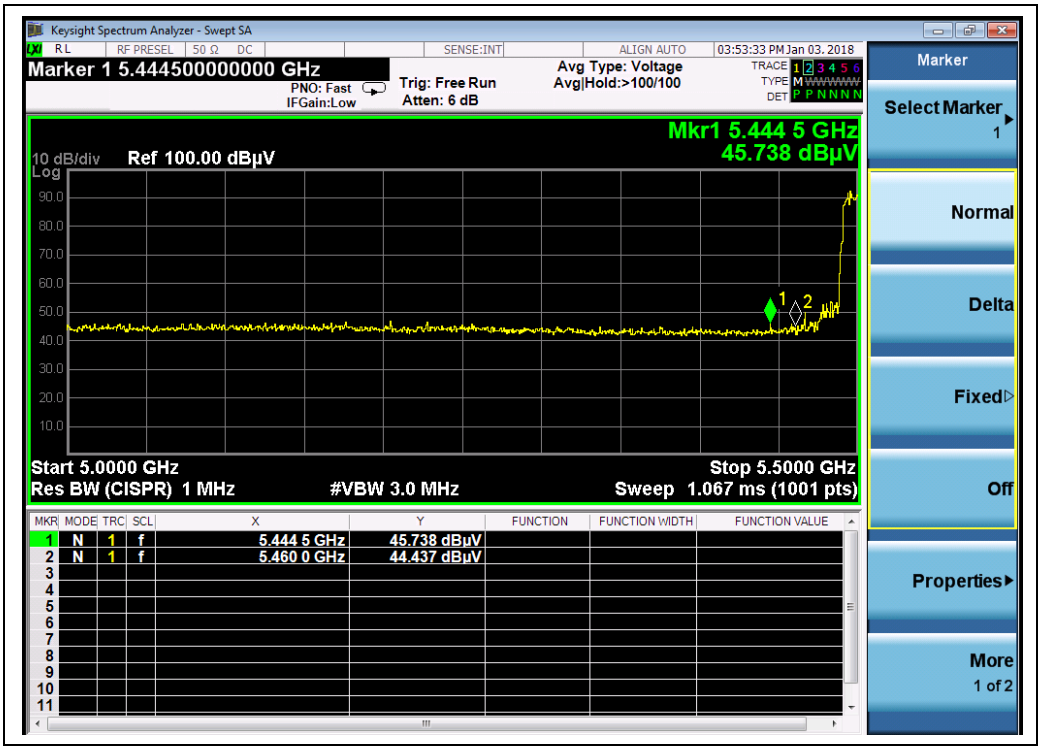


(Channel 36, AVG, 802.11 n (HT20))

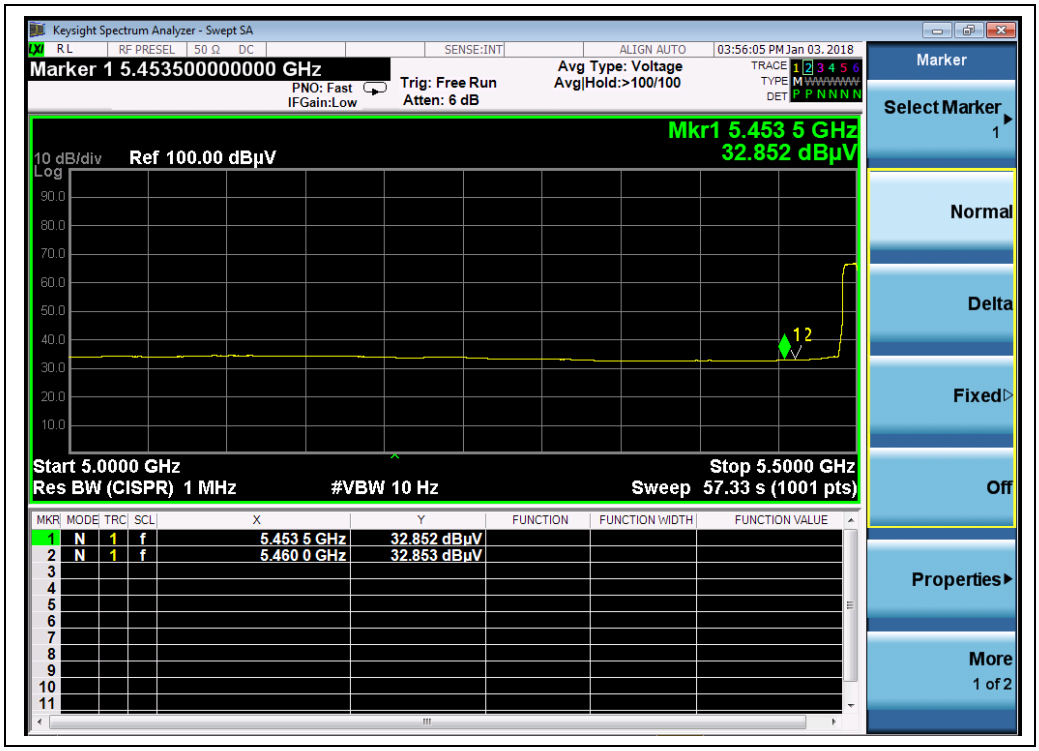


(Channel 64, PEAK, 802.11 n (HT20))

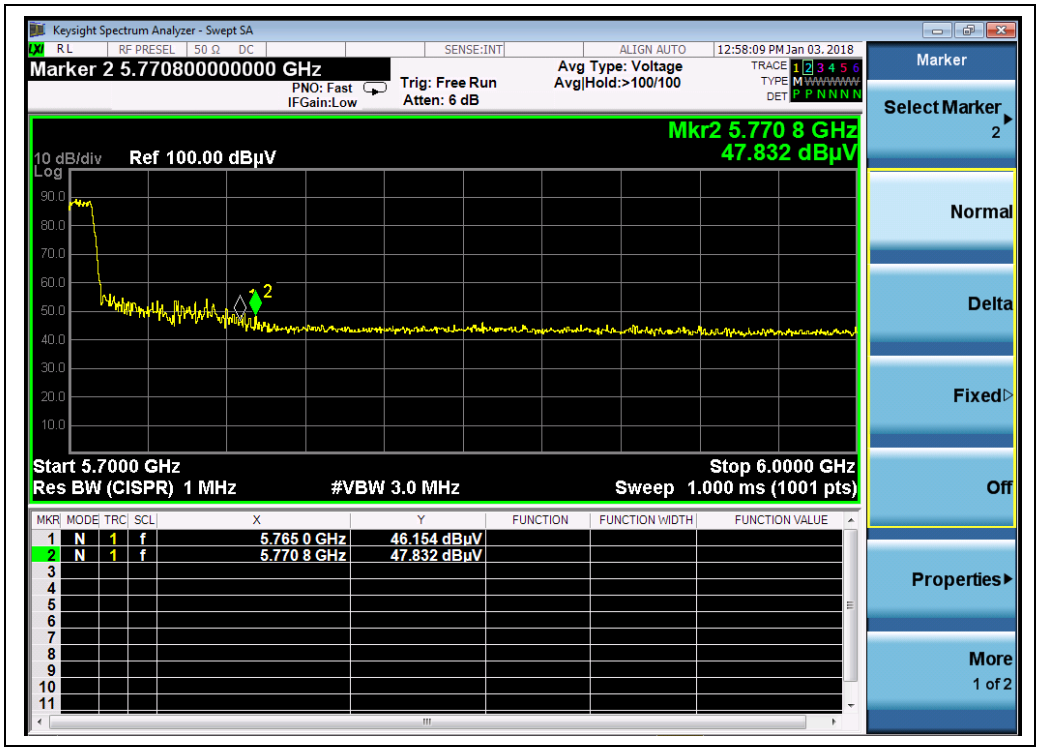
(Channel 64, AVG, 802.11n (HT20))



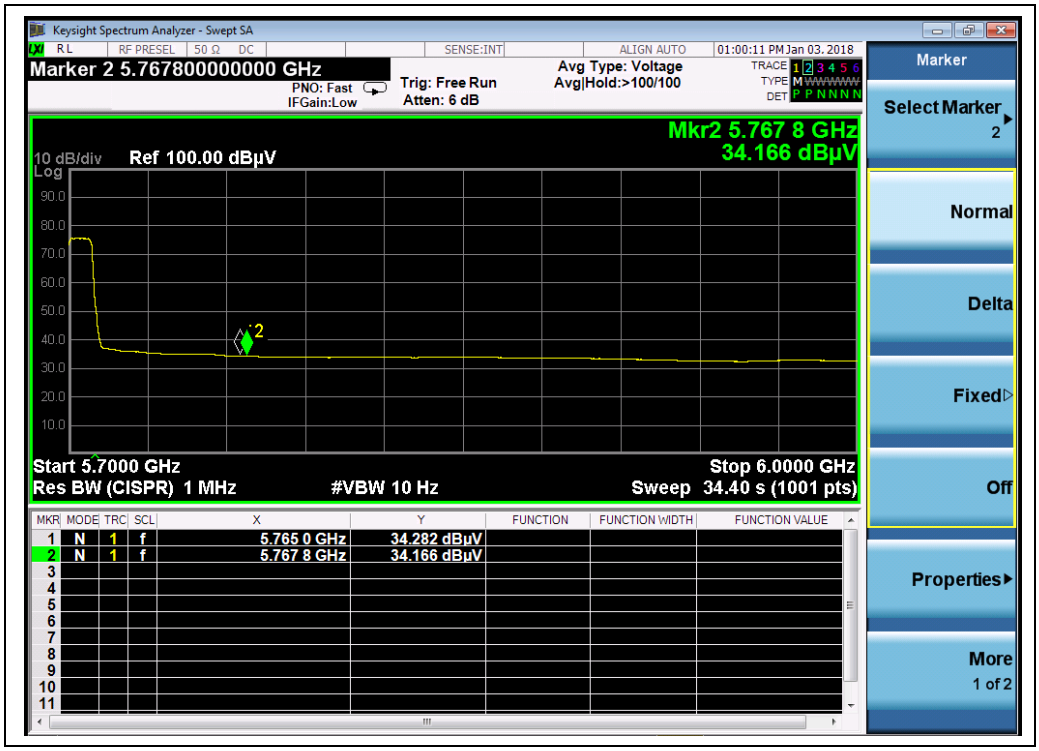
(Channel 100, PEAK, 802.11 n (HT20))



(Channel 100, AVG, 802.11n (HT20))



(Channel 140, PEAK, 802.11 n (HT20))



(Channel 140, AVG, 802.11n (HT20))

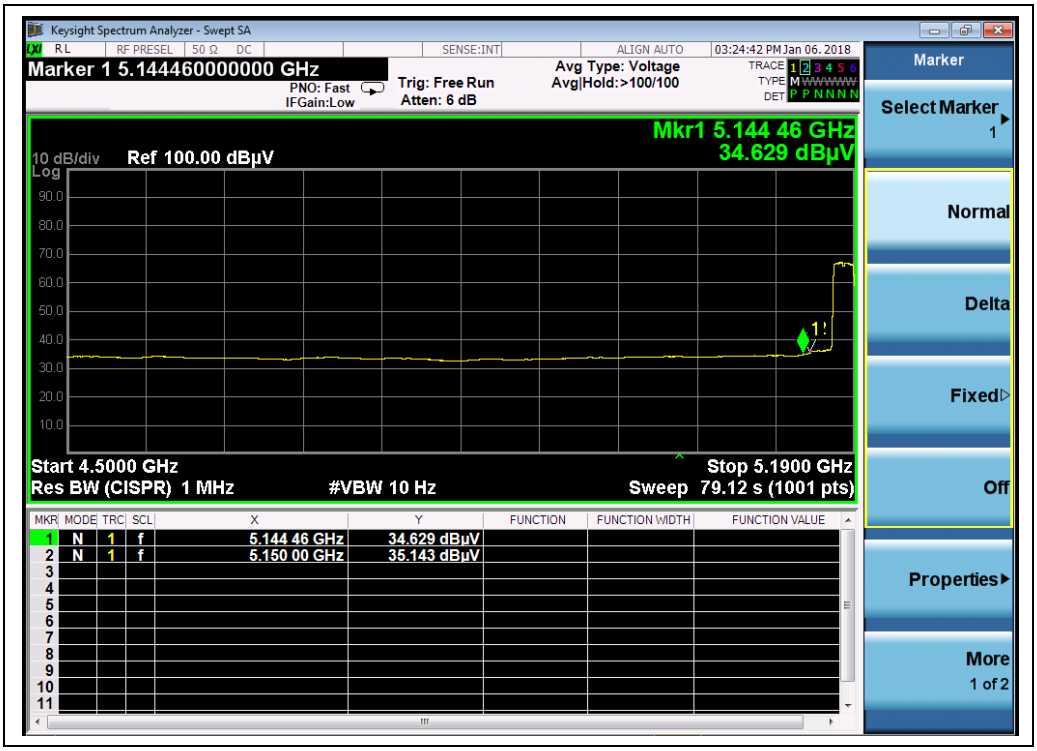
802.11n (HT40) Test mode

A. Test Verdict:

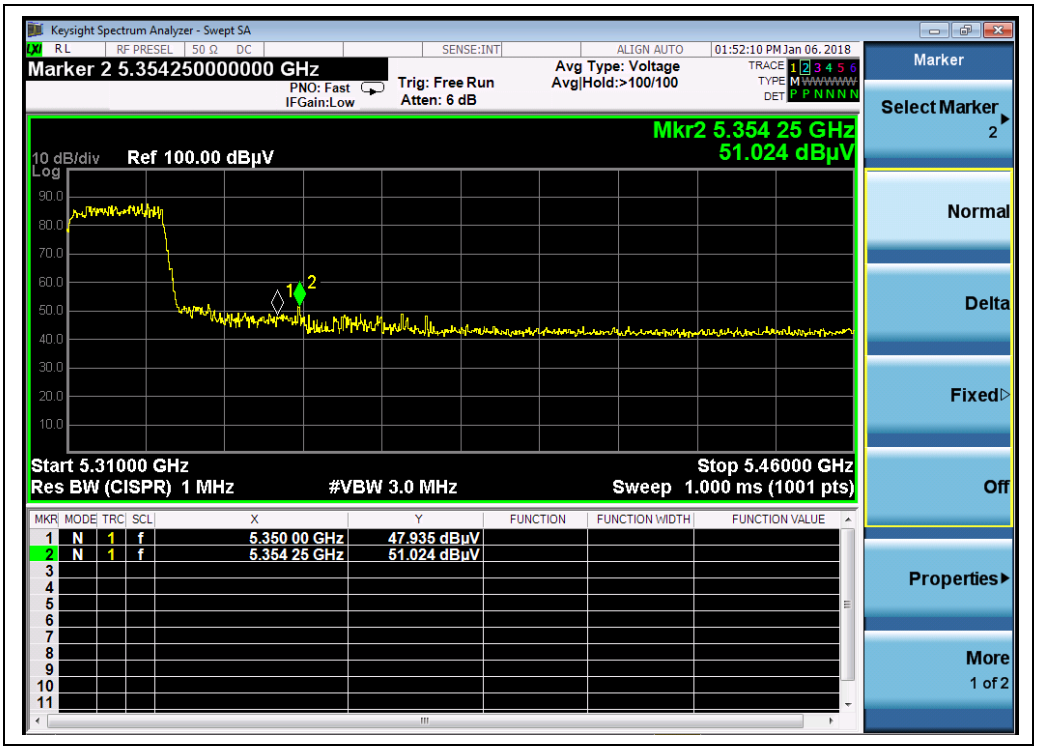
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBuV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
38	5128.59	PK	54.40	-50.65	32.11	35.86	74	Pass
38	5144.46	AV	34.63	-50.65	32.11	16.09	54	Pass
62	5354.25	PK	51.02	-50.65	32.11	32.48	74	Pass
62	5352.45	AV	33.52	-50.65	32.11	14.98	54	Pass
102	5406.47	PK	45.75	-50.65	32.11	27.21	74	Pass
102	5441.15	AV	32.78	-50.65	32.11	14.24	54	Pass
134	5748.90	PK	49.68	-50.65	32.11	31.14	74	Pass
134	5748.30	AV	34.38	-50.65	32.11	15.84	54	Pass

B. Test Plots:

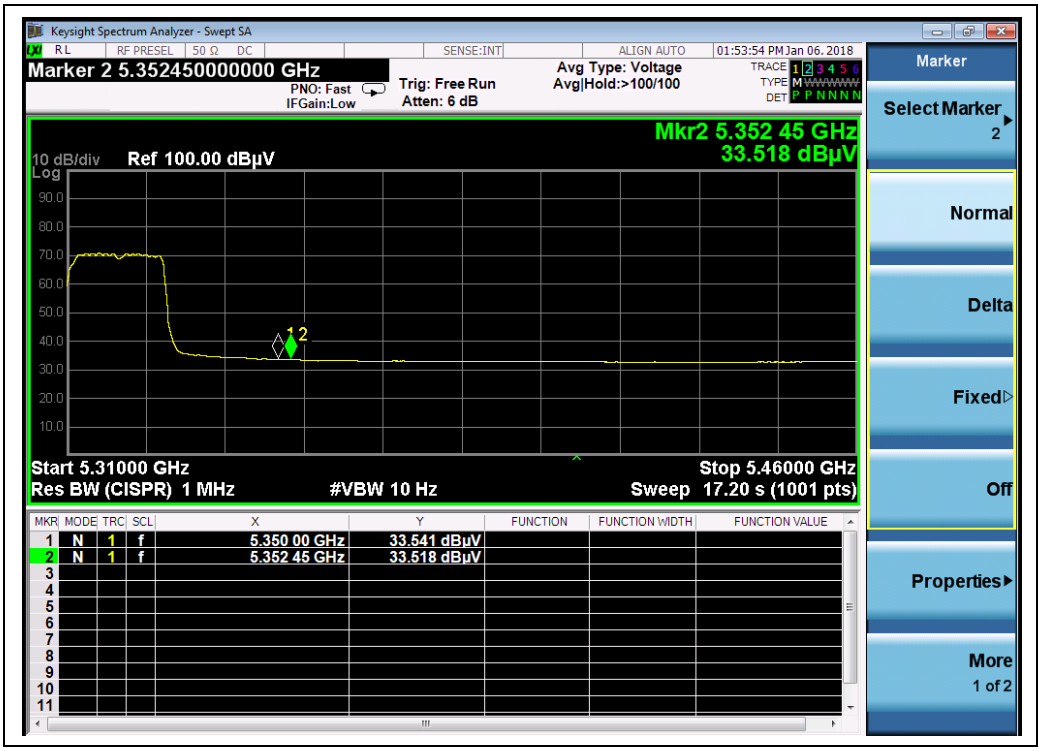
(Channel 38, PEAK, 802.11n (HT40))



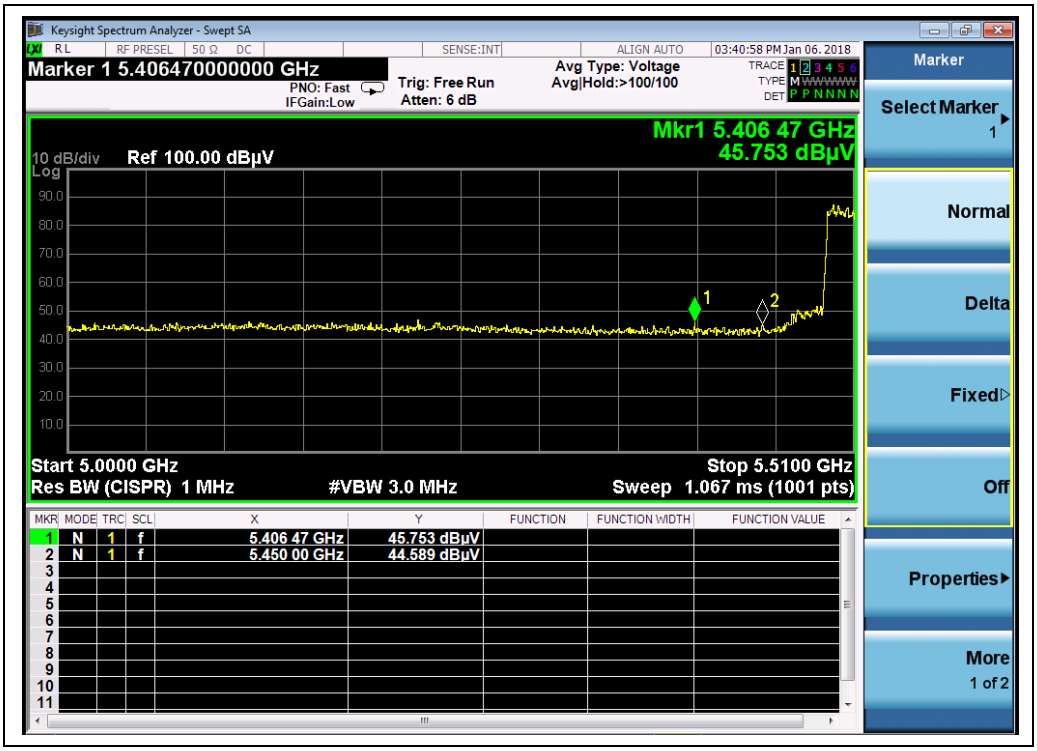
(Channel 38, AVG, 802.11n (HT40))



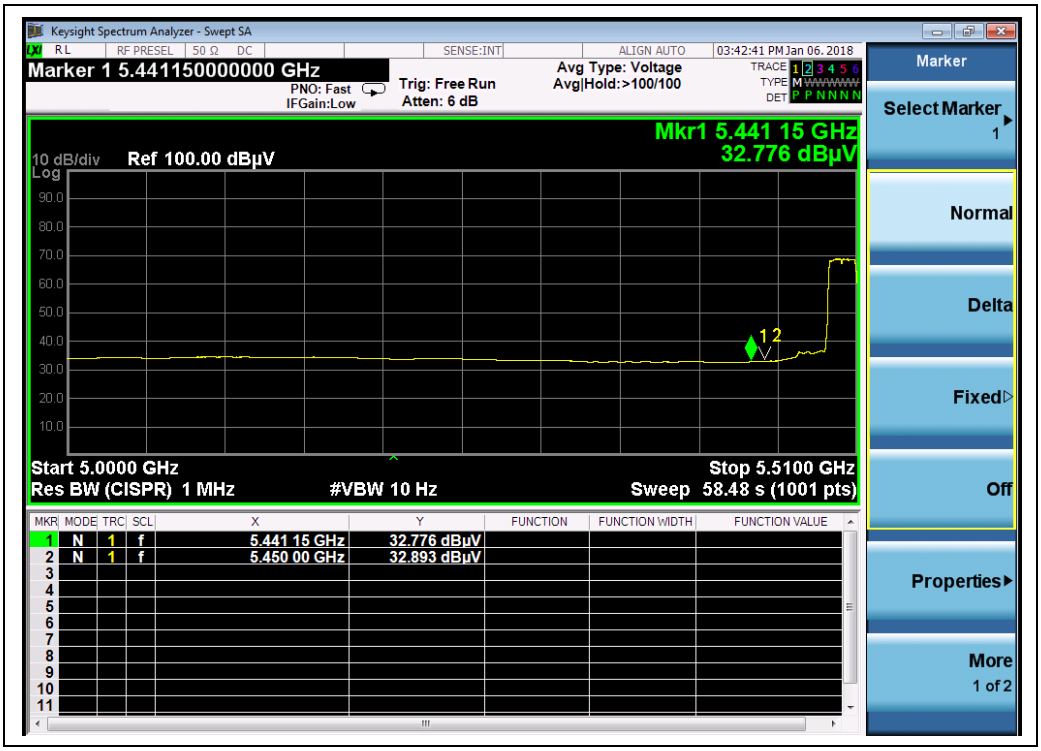
(Channel 62, PEAK, 802.11n (HT40))



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



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



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

(Channel 134, PEAK, 802.11n (HT40))

(Channel 134, AVG, 802.11n (HT40))

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^{o} intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

2.6.3. Test Result

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

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq Dev. (Hz)	Deviation (%)
100%	12	+20(Ref)	5,179,999,977	23	0.0000004
100%		-30	5,180,000,013	13	0.0000003
100%		-20	5,180,000,039	39	0.0000008
100%		-10	5,179,999,987	13	0.0000003
100%		0	5,180,000,015	15	0.0000003
100%		+10	5,180,000,031	31	0.0000006
100%		+20	5,179,999,972	28	0.0000005
100%		+30	5,179,999,985	15	0.0000003
100%		+40	5,180,000,010	10	0.0000002
100%		+50	5,180,000,012	12	0.0000002
85%	11.5	+20	5,179,999,989	11	0.0000002
115%	12.5	+20	5,179,999,981	19	0.0000004

Frequency Stability Measurements for UNII Band 2A (Ch. 52)

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq Dev. (Hz)	Deviation (%)
100%	12	+20(Ref)	5,259,999,986	14	0.0000003
100%		-30	5,260,000,025	25	0.0000005
100%		-20	5,260,000,021	21	0.0000004
100%		-10	5,259,999,998	2	0.0000000
100%		0	5,259,999,989	11	0.0000002
100%		+10	5,260,000,014	14	0.0000003
100%		+20	5,260,000,071	71	0.0000013
100%		+30	5,259,999,989	11	0.0000002
100%		+40	5,259,999,997	3	0.0000001
100%		+50	5,260,000,085	85	0.0000016
85%	11.5	+20	5,260,000,042	42	0.0000008
115%	12.5	+20	5,259,999,984	16	0.0000003

Frequency Stability Measurements for UNII Band 2C (Ch. 100)

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq Dev. (Hz)	Deviation (%)
100%	12	+20(Ref)	5,500,000,059	59	0.0000011
100%		-30	5,499,999,987	13	0.0000002
100%		-20	5,500,000,024	24	0.0000004
100%		-10	5,499,999,989	11	0.0000002
100%		0	5,500,000,010	10	0.0000002
100%		+10	5,499,999,996	4	0.0000001
100%		+20	5,500,000,021	21	0.0000004
100%		+30	5,500,000,018	18	0.0000003
100%		+40	5,500,000,016	16	0.0000003
100%		+50	5,499,999,982	18	0.0000003
85%	11.5	+20	5,500,000,025	25	0.0000005
115%	12.5	+20	5,499,999,976	24	0.0000004

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

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq Dev. (Hz)	Deviation (%)
100%	12	+20(Ref)	5,745,000,011	11	0.0000002
100%		-30	5,744,999,996	4	0.0000001
100%		-20	5,745,000,024	24	0.0000004
100%		-10	5,744,999,984	16	0.0000003
100%		0	5,745,000,011	11	0.0000002
100%		+10	5,744,999,987	13	0.0000002
100%		+20	5,745,000,012	12	0.0000002
100%		+30	5,745,000,022	22	0.0000004
100%		+40	5,744,999,991	9	0.0000002
100%		+50	5,745,000,022	22	0.0000004
85%	11.5	+20	5,745,000,025	25	0.0000004
115%	12.5	+20	5,745,000,027	27	0.0000005

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

2.7. Conducted Emission

2.7.1. Requirement

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

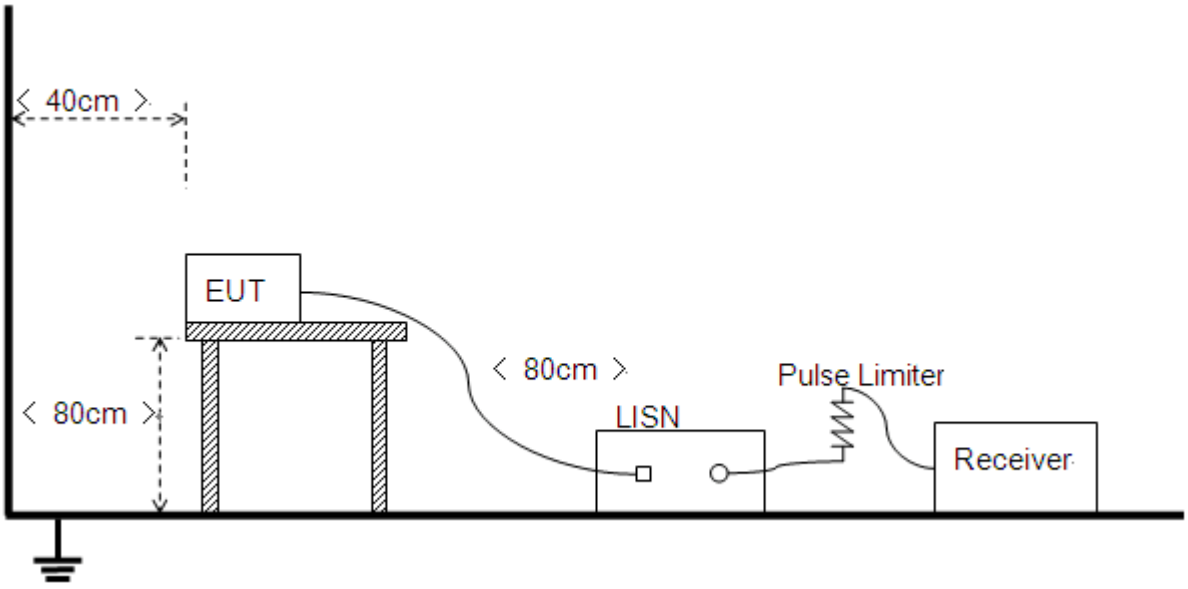
NOTE:

(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

A. Test Setup:



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

2.7.3. Test Result

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

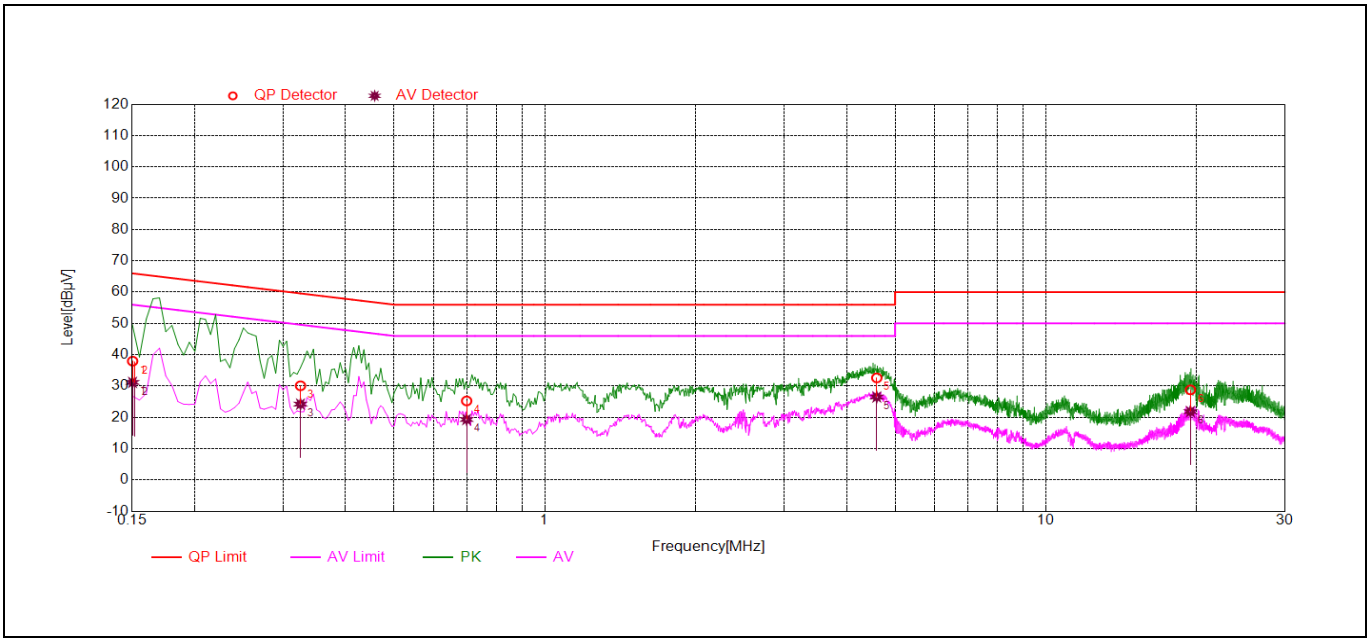
Note: All test modes are performed, only the worst case is recorded in this report.

A. Test setup:

The EUT configuration of the emission tests is EUT + Link.

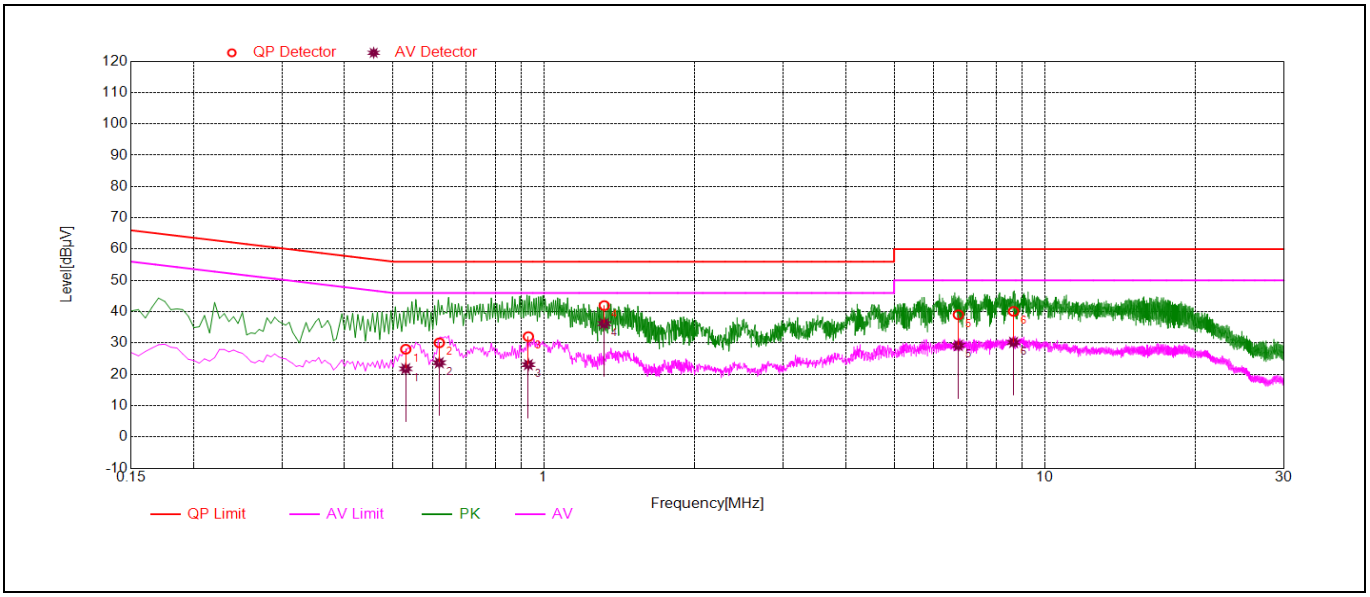
Note: The test voltage is AC 120V/60Hz.

B. Test Plots:



(Plot A: L Phase)

NO.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.15	37.95	31.17	65.99	55.99	Line	PASS
2	0.15	37.72	30.95	65.91	55.91		PASS
3	0.33	30.09	24.23	59.58	49.58		PASS
4	0.70	25.24	19.31	56.00	46.00		PASS
5	4.60	32.61	26.50	56.00	46.00		PASS
6	19.44	28.78	21.84	60.00	50.00		PASS



(Plot B: N Phase)

NO.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.536	28.03	21.78	56.00	46.00	Neutral	PASS
2	0.62	30.07	23.72	56.00	46.00		PASS
3	0.94	32.07	23.09	56.00	46.00		PASS
4	1.32	41.98	36.20	56.00	46.00		PASS
5	6.72	39.03	29.23	60.00	50.00		PASS
6	8.66	40.12	30.21	60.00	50.00		PASS

2.8. Radiated Emission

2.8.1. Requirement

The peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
(2) For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
(3) For transmitters operating in the 5.47–5.725 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(eirp) to field strength (dBμV/m);

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

where P is the EIRP in Watts

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

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

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

Note:

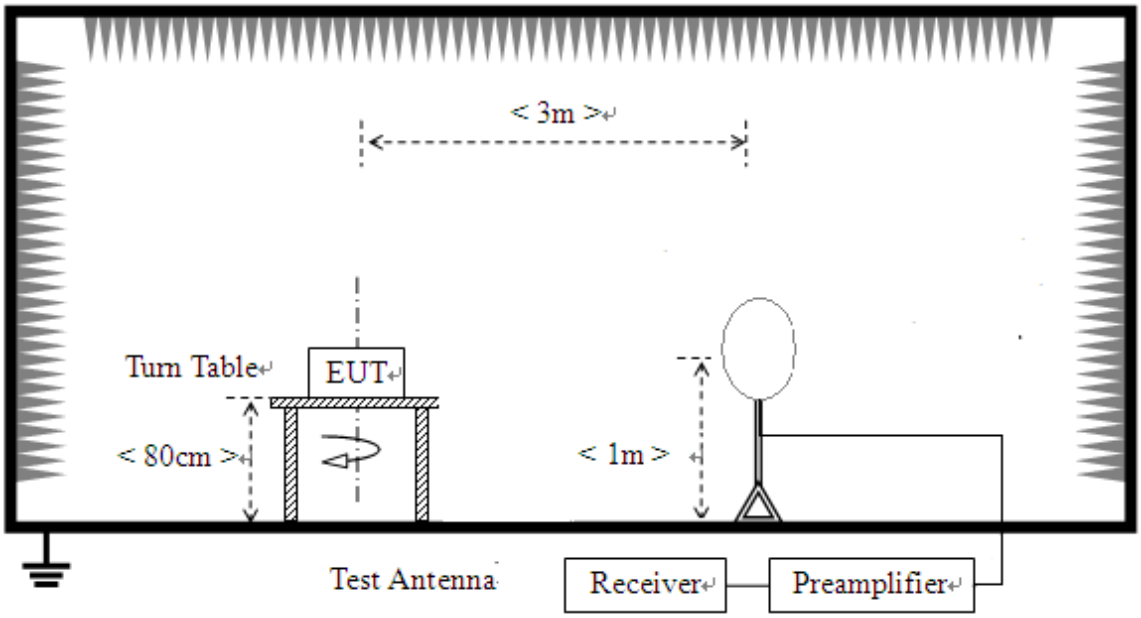
For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

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

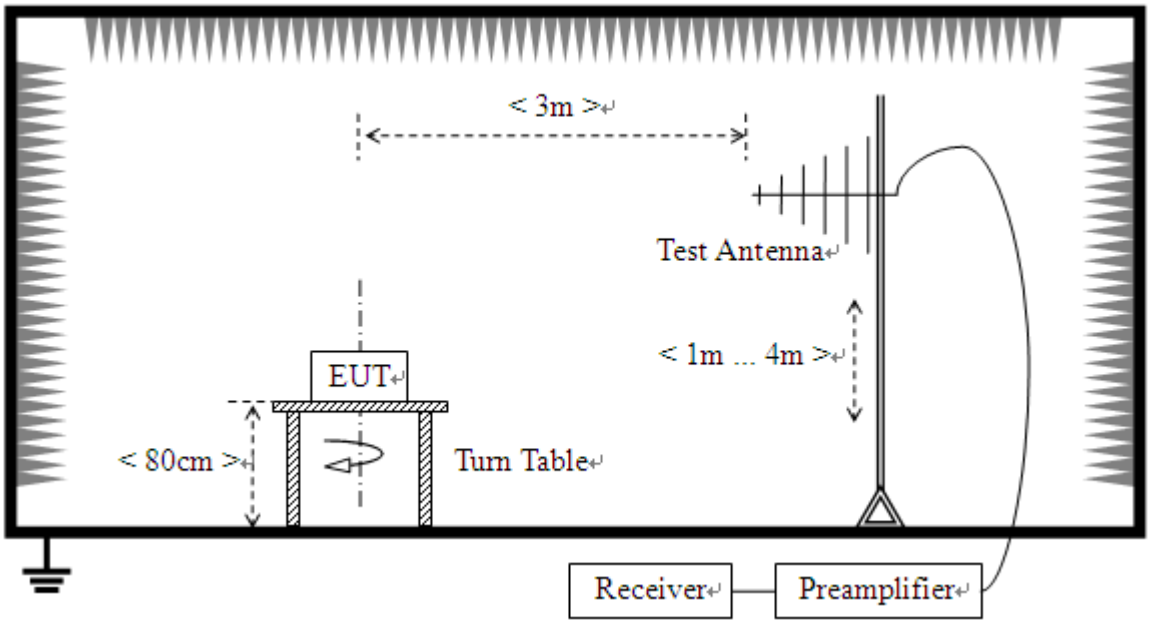
2.8.2. Test Description

A. Test Setup:

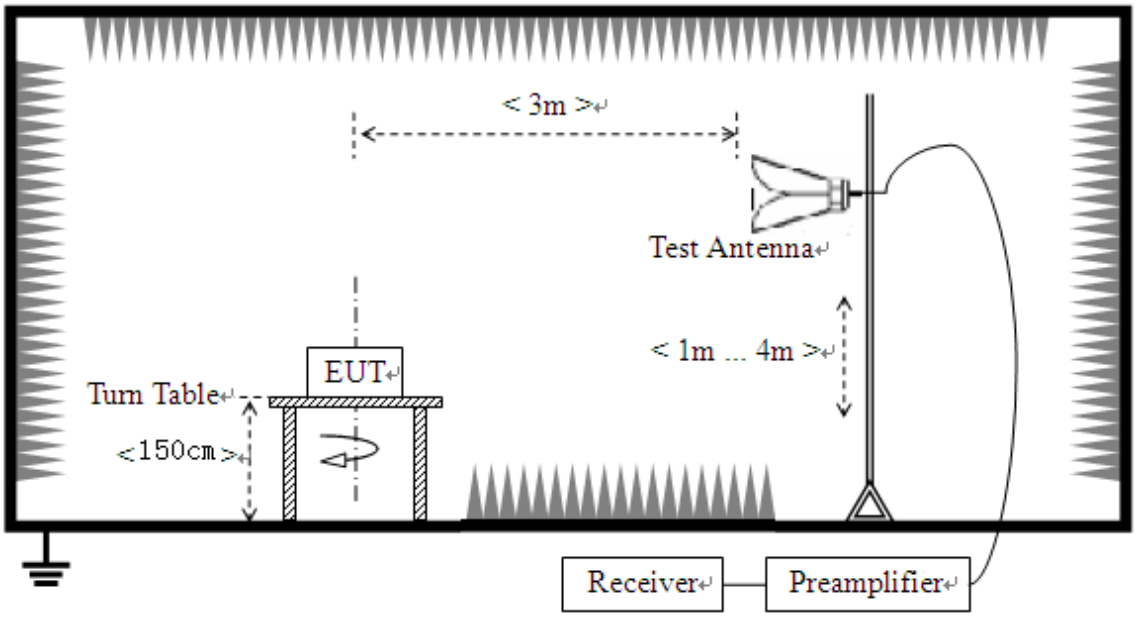
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



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

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

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

For the radiated emission test above 1GHz:

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

The 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

For the Test Antenna:

(a) In the frequency range of 9kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
(b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Place the test antenna at 3m away from area of the EUT, while keeping the test antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The test antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final test antenna elevation shall be that which maximizes the emissions. The test antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. The emission levels at both horizontal and vertical polarizations should be tested.

2.8.3. Test Result

According to ANSI C63.4 selection 4.2.2, 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 limit, it is unnecessary to perform an quasi-peak measurement.

The measurement results are obtained as below:

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

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.

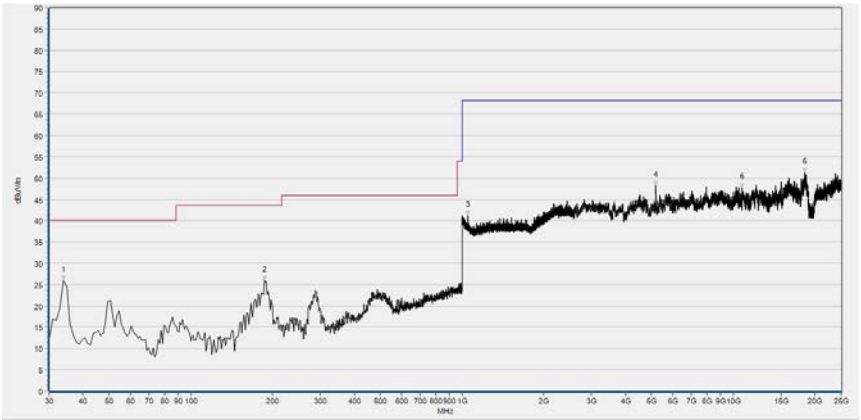
Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note2: For the frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not recorded.

Note3: For the frequency, which started from 25GHz to 40GHz, was pre-scanned and the result which was 10dB lower than the limit was not recorded.

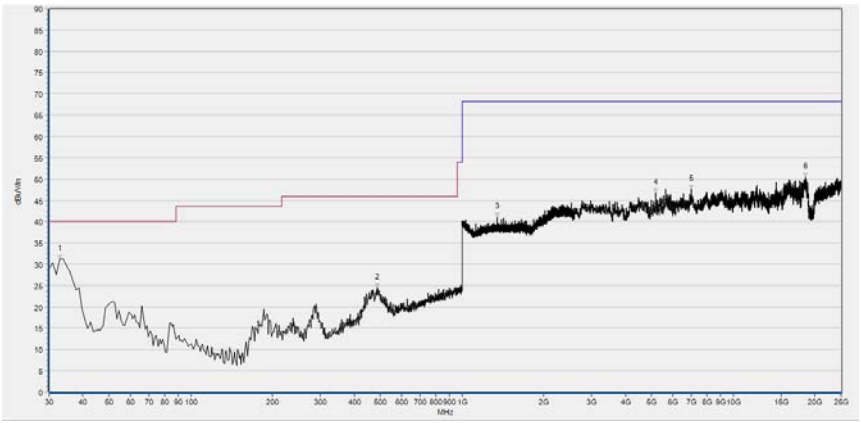
802.11a Test mode

Plots 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
33.884	25.93	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
187.297	26.05	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1049.617	41.25	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5176.515	48.23	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10800.040	47.81	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18377.235	51.24	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

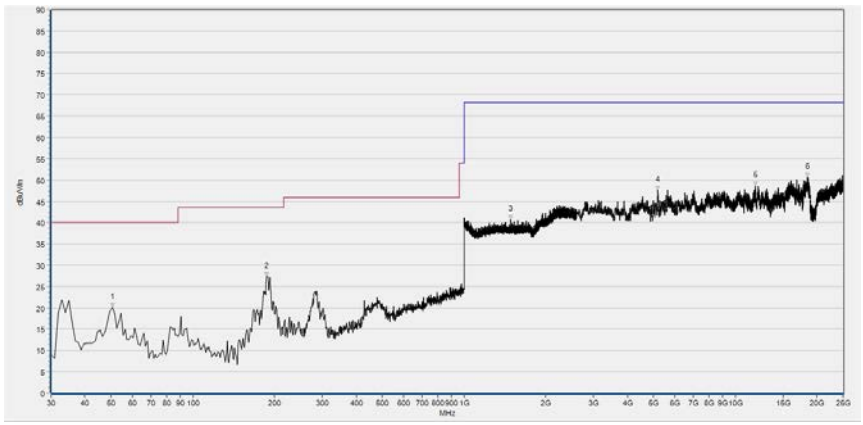
(Antenna Horizontal, 30MHz to 25GHz)



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
32.913	31.10	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
488.298	24.53	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1351.050	41.03	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5180.996	46.71	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
7009.202	47.52	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18489.258	50.48	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

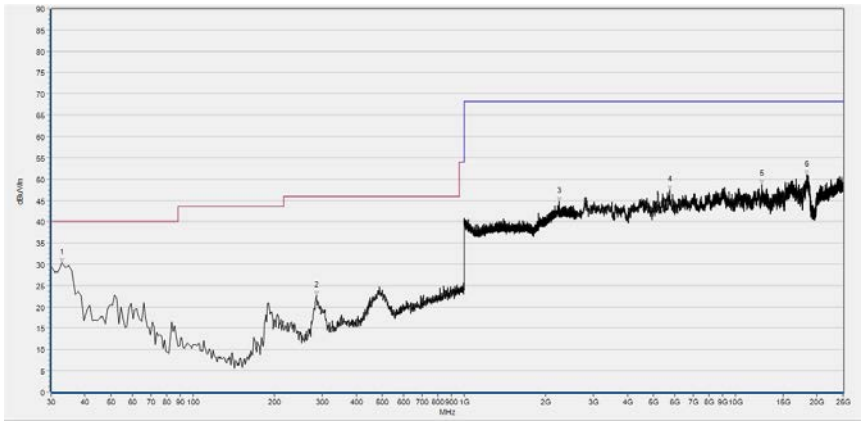
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
50.390	20.11	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
187.297	27.26	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1483.361	40.66	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5185.477	47.53	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11844.089	48.58	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18448.930	50.67	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

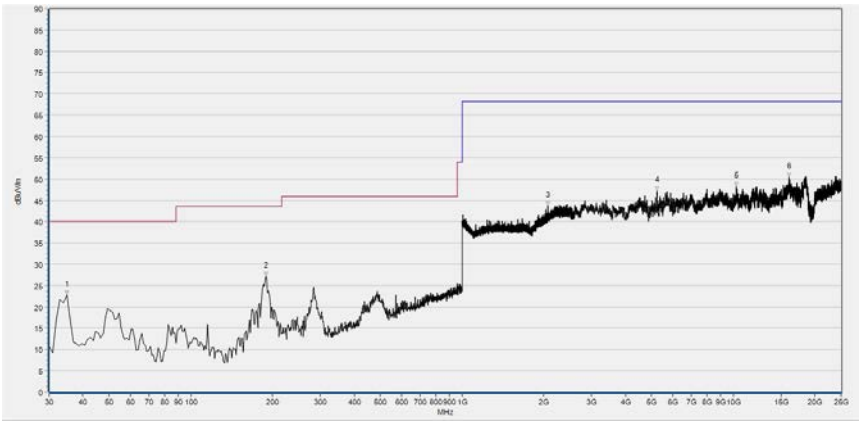
(Antenna Horizontal, 30MHz to 25GHz)



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
32.913	30.29	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
285.365	22.62	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2248.416	44.77	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5723.185	47.47	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12552.070	48.81	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18408.602	50.87	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

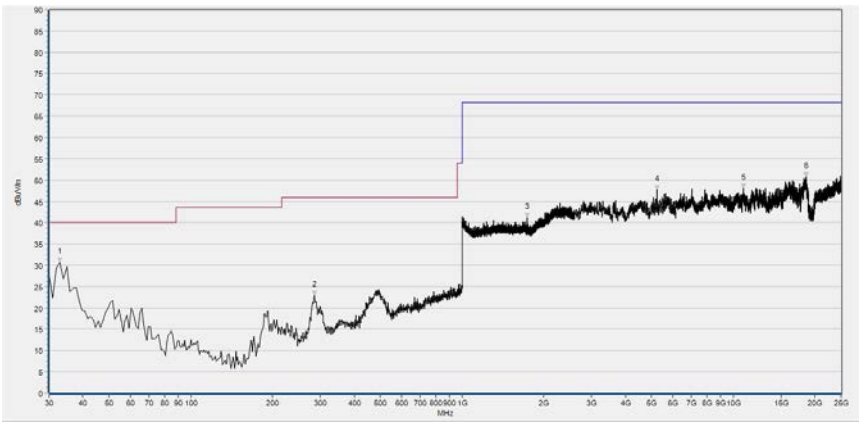
(Antenna Vertical, 30MHz to 25GHz)

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
34.855	22.87	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
189.239	27.14	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2077.159	43.71	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5243.729	47.18	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10266.813	48.19	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
16083.017	50.42	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

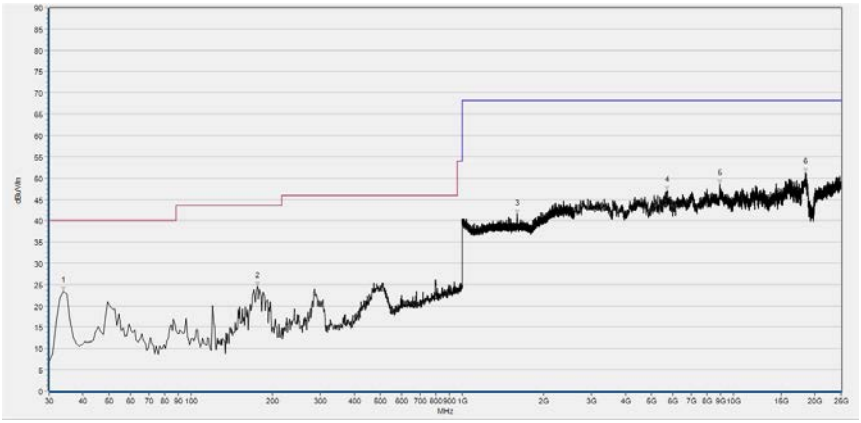
(Antenna Horizontal, 30MHz to 25GHz)



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
32.913	30.63	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
285.365	22.89	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1737.846	41.28	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5243.729	47.76	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10889.658	48.03	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18601.280	50.84	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

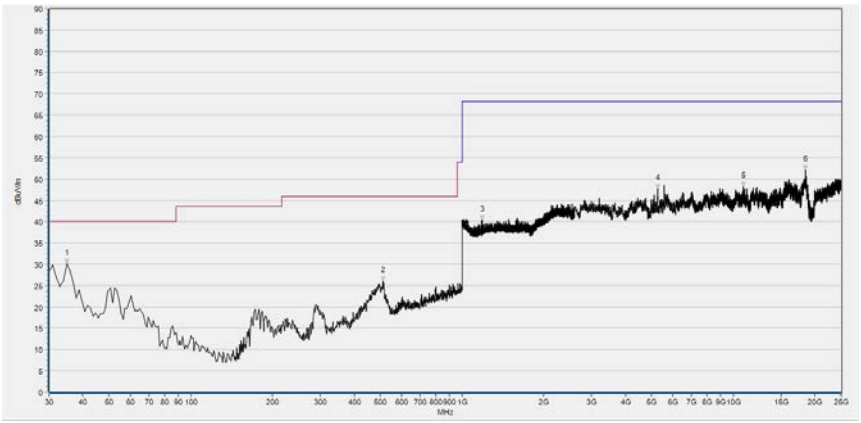
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
33.884	23.54	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
175.646	24.66	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1594.331	41.62	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5705.261	47.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8944.949	48.57	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18493.739	51.29	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

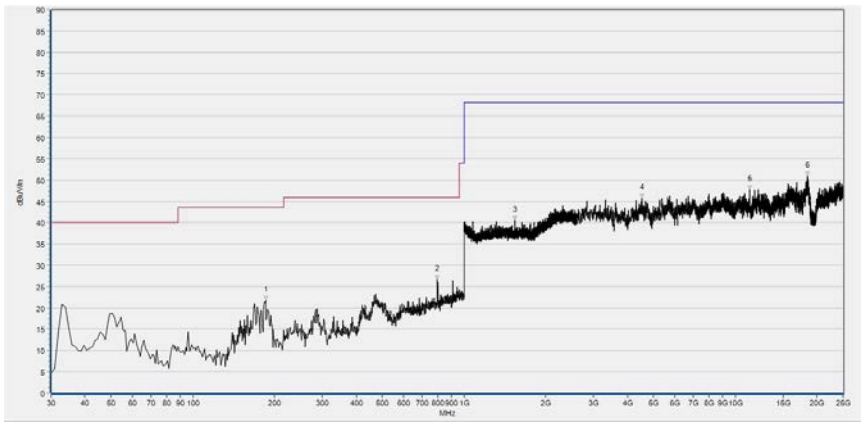
(Antenna Horizontal, 30MHz to 25GHz)



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
34.855	30.11	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
510.631	26.16	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1184.061	40.43	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5252.691	47.73	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10916.543	48.25	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18475.815	52.14	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

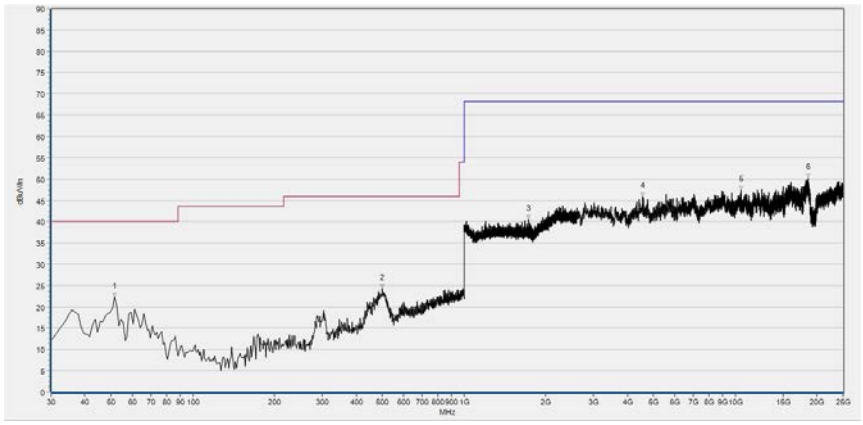
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
185.355	21.75	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
797.067	26.57	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1539.913	40.50	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4535.747	45.72	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11279.496	47.75	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18475.815	50.88	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

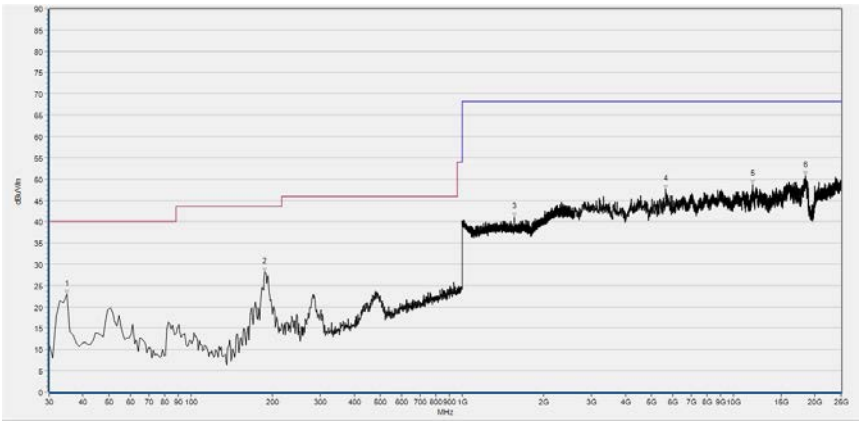
(Antenna Horizontal, 30MHz to 25GHz)



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	22.21	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
498.979	24.22	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1726.109	40.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4549.190	45.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10535.667	47.37	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18578.876	50.34	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

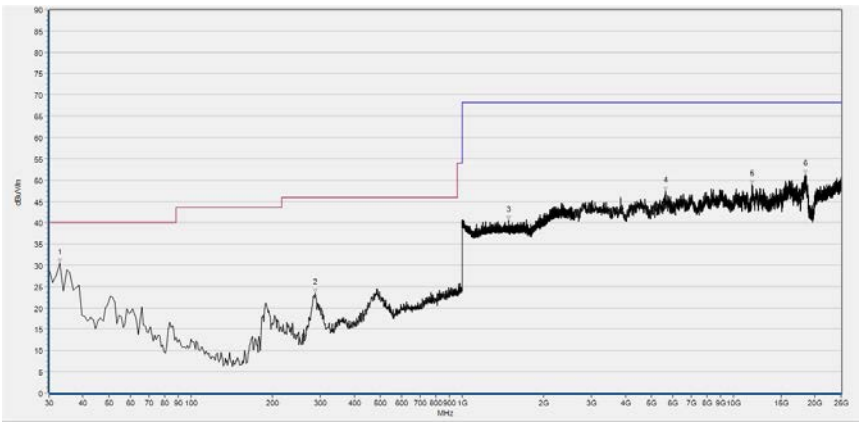
(Antenna Vertical, 30MHz to 25GHz)

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
34.855	23.00	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
187.297	28.11	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1556.986	41.00	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5638.048	47.65	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11767.914	48.75	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18498.220	50.75	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

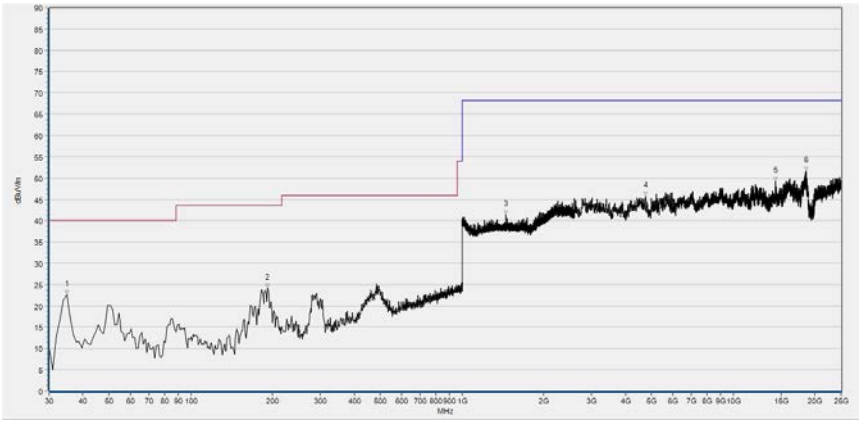
(Antenna Horizontal, 30MHz to 25GHz)



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
32.913	30.45	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
288.278	23.44	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1482.828	40.60	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5633.567	47.46	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11727.586	49.00	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18466.853	51.36	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

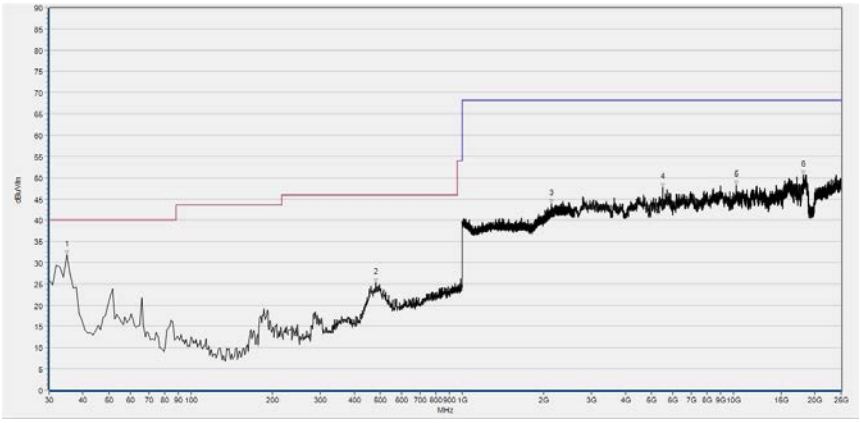
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
34.855	22.65	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
191.181	24.08	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1452.951	41.41	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4746.349	45.75	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
14335.467	49.24	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18574.395	51.67	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

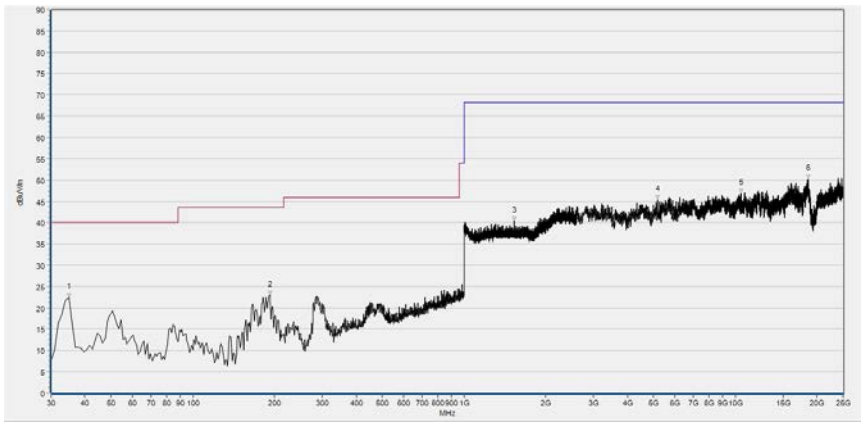
(Antenna Horizontal, 30MHz to 25GHz)



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
34.855	31.83	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
480.531	25.26	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2129.977	43.85	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5494.659	47.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10280.256	48.35	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18162.152	50.63	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

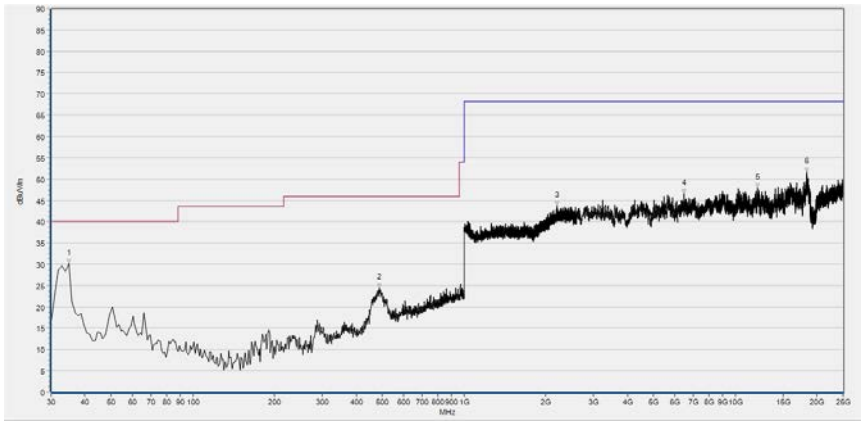
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
34.855	22.41	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
192.152	22.89	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1526.576	40.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5176.515	45.48	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10490.858	46.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18569.914	50.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

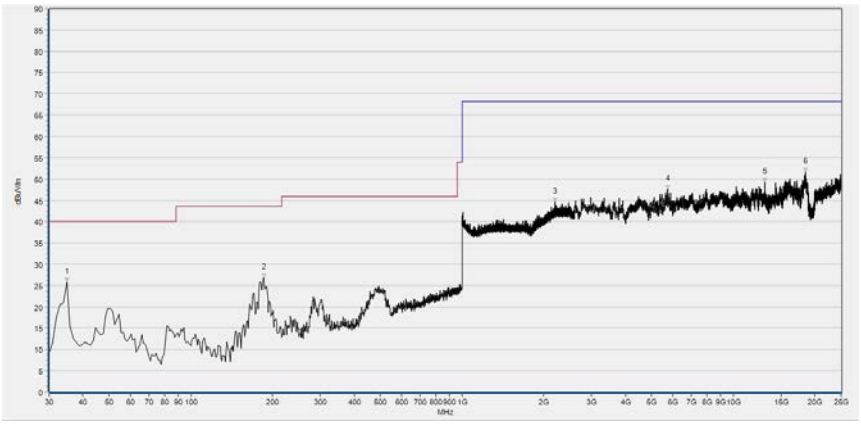
(Antenna Horizontal, 30MHz to 25GHz)



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
34.855	30.15	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
486.356	24.49	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2198.266	43.71	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
6480.456	46.59	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12081.576	47.86	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18399.640	51.69	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

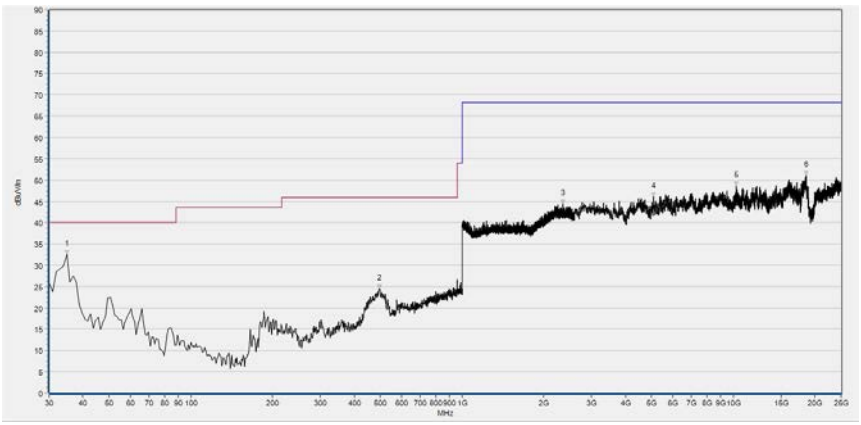
(Antenna Vertical, 30MHz to 25GHz)

Plot for Channel = 140



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
34.855	25.87	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
185.355	26.77	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2196.132	44.59	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5718.704	47.52	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13071.854	49.26	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18484.777	51.57	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

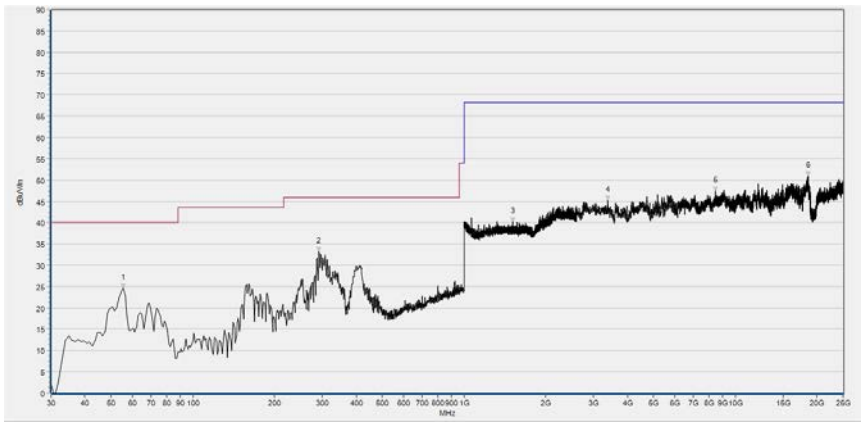
(Antenna Horizontal, 30MHz to 25GHz)



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
34.855	32.58	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
496.066	24.51	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2359.920	44.36	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5086.897	46.10	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10275.775	48.60	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18583.357	51.07	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

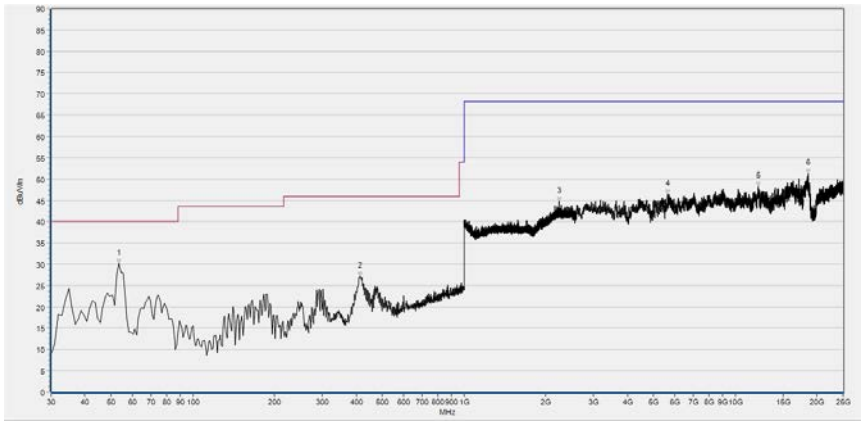
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
55.245	24.60	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
291.191	33.19	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1513.771	40.22	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
3393.119	45.18	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8452.050	47.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18587.838	50.88	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

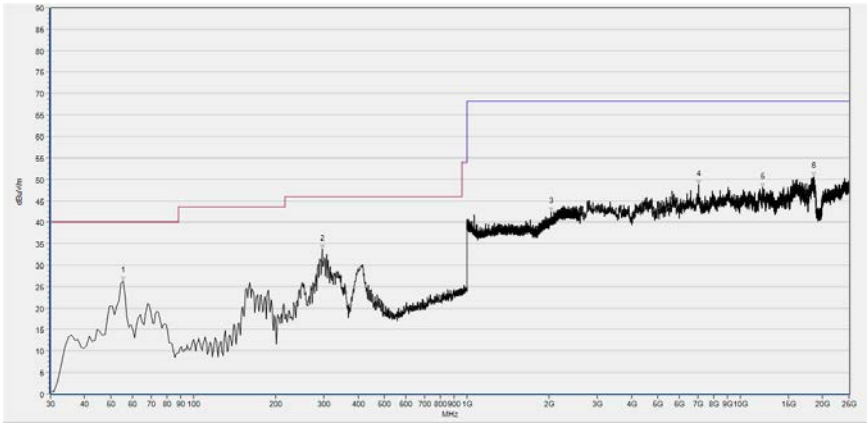
(Antenna Horizontal, 30MHz to 25GHz)



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	30.11	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
412.563	27.12	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2237.212	44.76	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5638.048	46.41	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12153.271	48.20	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18578.876	51.27	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

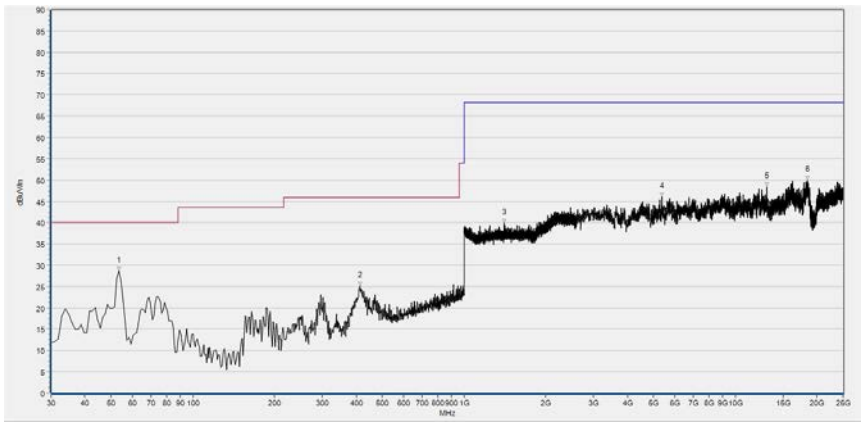
(Antenna Vertical, 30MHz to 25GHz)

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
55.245	26.31	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
296.046	33.68	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2038.746	42.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
7036.087	48.71	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12063.653	48.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18560.952	50.65	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

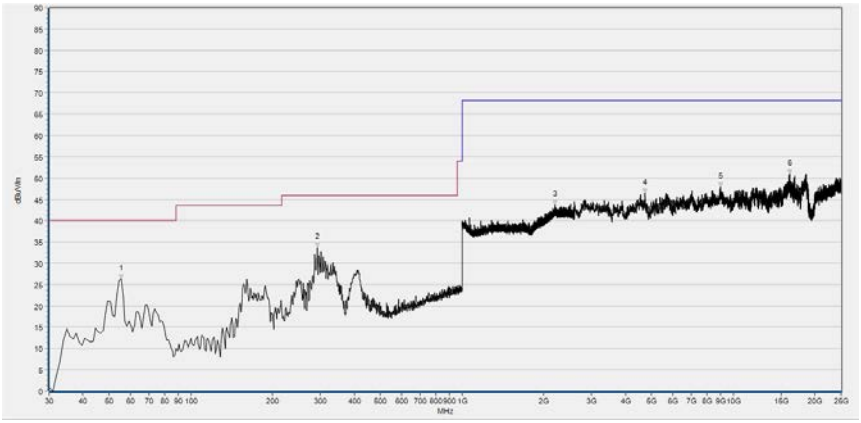
(Antenna Horizontal, 30MHz to 25GHz)



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
53.303	28.70	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
412.563	25.10	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1407.603	39.86	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5369.194	46.09	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
13089.778	48.39	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18466.853	50.01	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

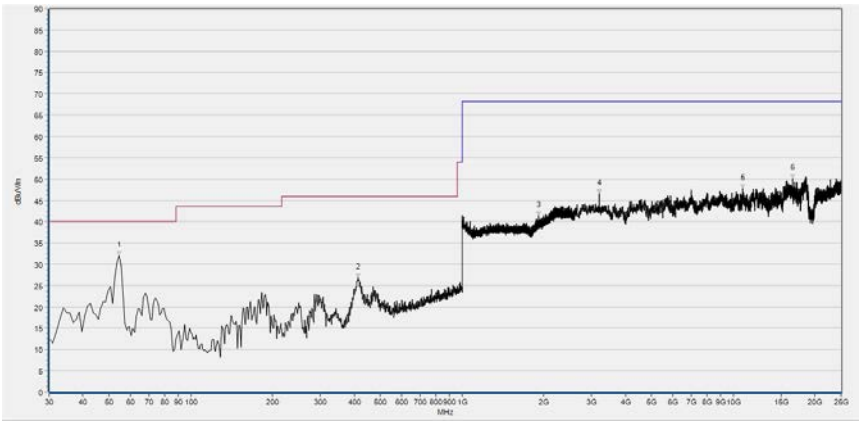
(Antenna Vertical, 30MHz to 25GHz)

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
55.245	26.30	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
292.162	33.62	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2206.802	43.72	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4737.387	46.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8962.873	47.87	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
16172.635	50.95	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 25GHz)



Fre. (MHz)	Pk (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
54.274	31.99	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
414.505	26.84	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1911.771	41.40	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
3200.440	46.64	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10822.444	47.75	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
16540.068	50.05	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

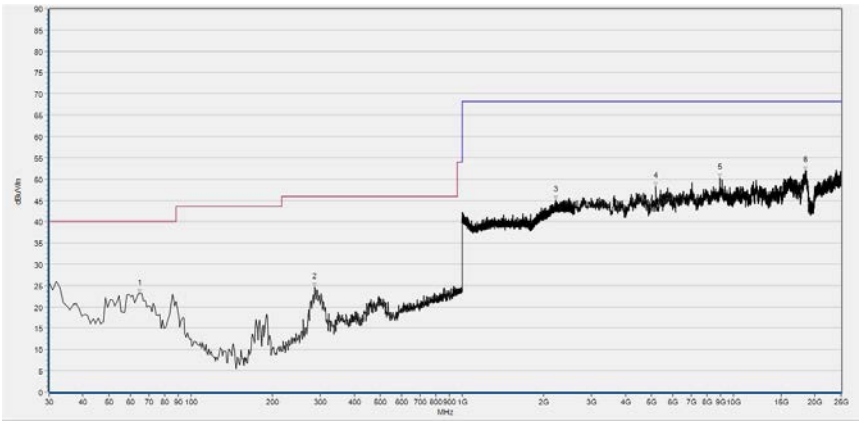
(Antenna Vertical, 30MHz to 25GHz)

802.11n (HT20) Test mode

Plots 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
34.855	24.11	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
175.646	26.39	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
3043.609	46.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5185.477	48.46	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12148.790	49.20	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18592.318	53.12	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

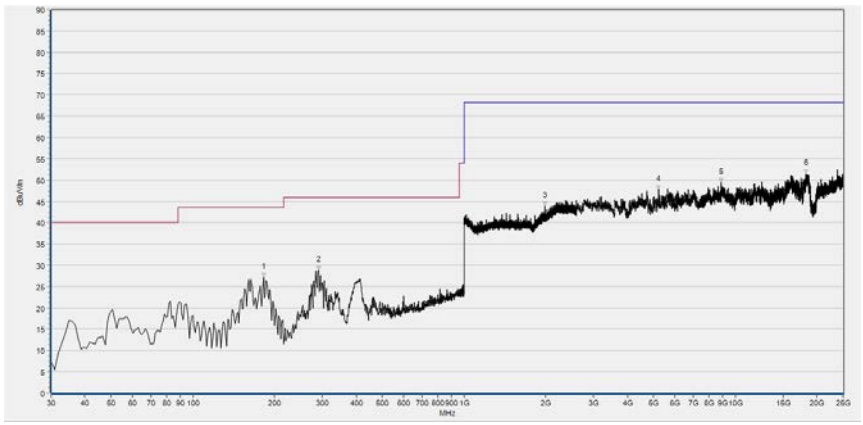
(Antenna Horizontal, 30MHz to 25GHz)



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
64.955	23.09	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
286.336	24.64	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2219.073	45.02	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5180.996	48.22	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8935.987	50.29	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18413.083	51.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

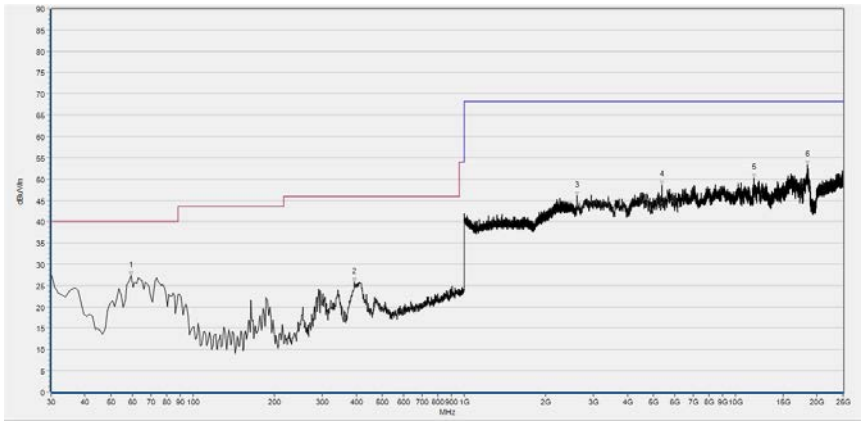
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
182.442	27.09	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
290.220	28.82	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1987.529	43.94	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5216.843	47.71	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8882.216	49.37	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18215.923	51.39	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

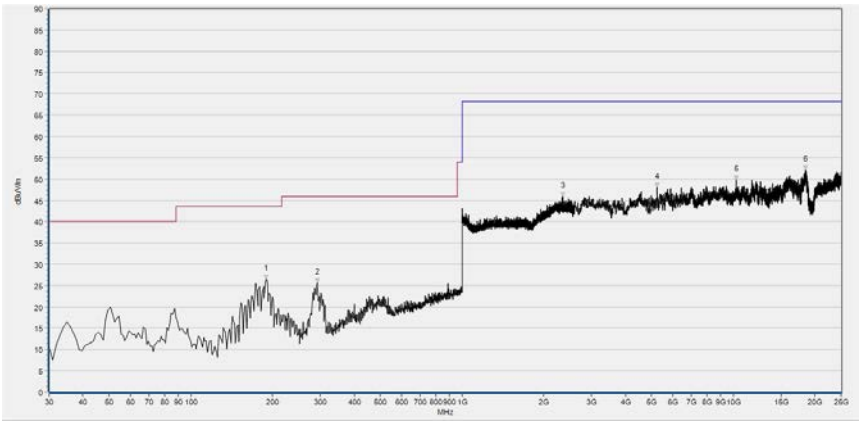
(Antenna Horizontal, 30MHz to 25GHz)



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
59.129	27.31	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
394.114	25.77	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2608.962	46.05	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5369.194	48.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11727.586	50.36	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18489.258	53.30	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

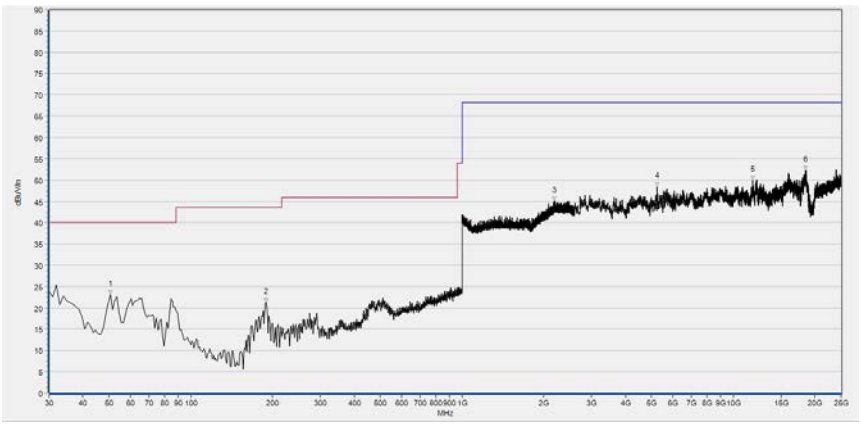
(Antenna Vertical, 30MHz to 25GHz)

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
189.239	26.43	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
292.162	25.59	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2351.384	45.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5239.248	48.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10284.737	49.75	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18417.564	52.17	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

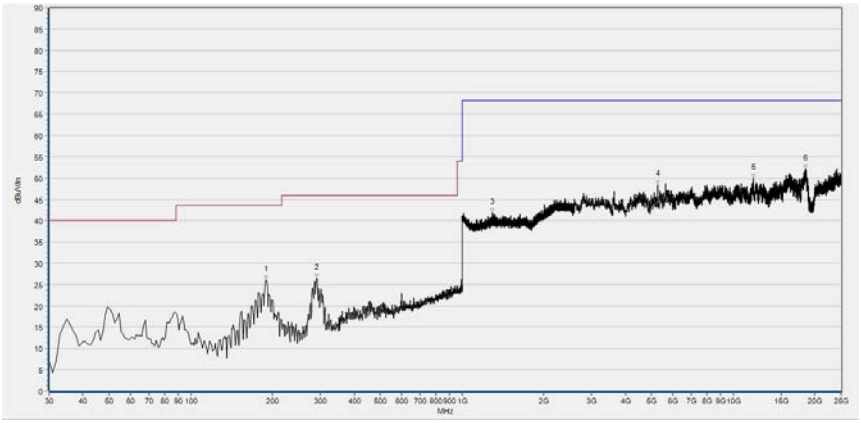
(Antenna Horizontal, 30MHz to 25GHz)



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	23.18	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
189.239	21.21	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2192.397	45.10	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5248.210	48.38	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11785.837	49.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18502.701	52.29	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

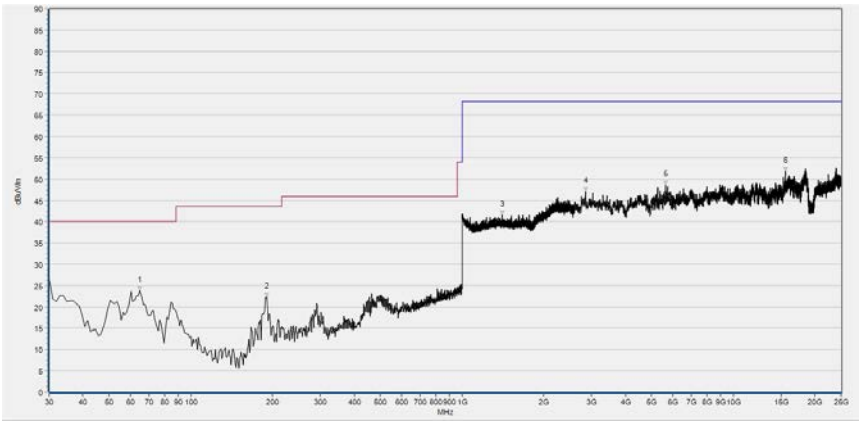
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
189.239	26.08	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
290.220	26.51	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1288.630	41.82	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5257.171	48.47	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11866.493	49.87	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18475.815	52.12	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

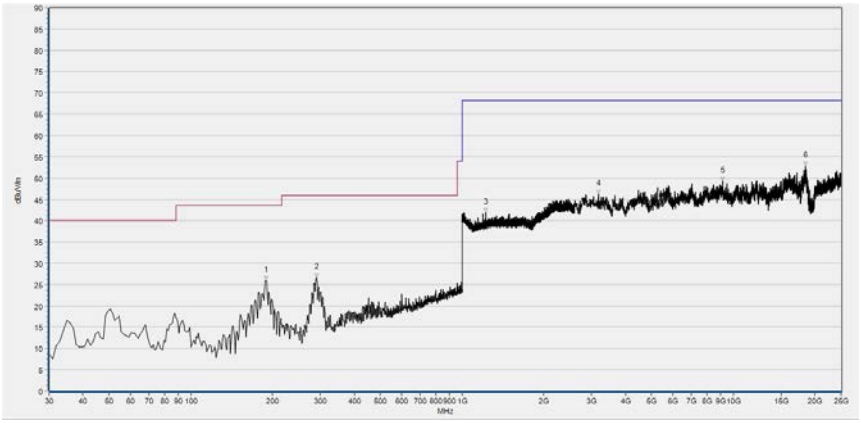
(Antenna Horizontal, 30MHz to 25GHz)



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
64.955	23.81	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
190.210	22.25	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1406.536	41.64	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2850.930	47.13	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5638.048	48.63	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
15617.003	51.70	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

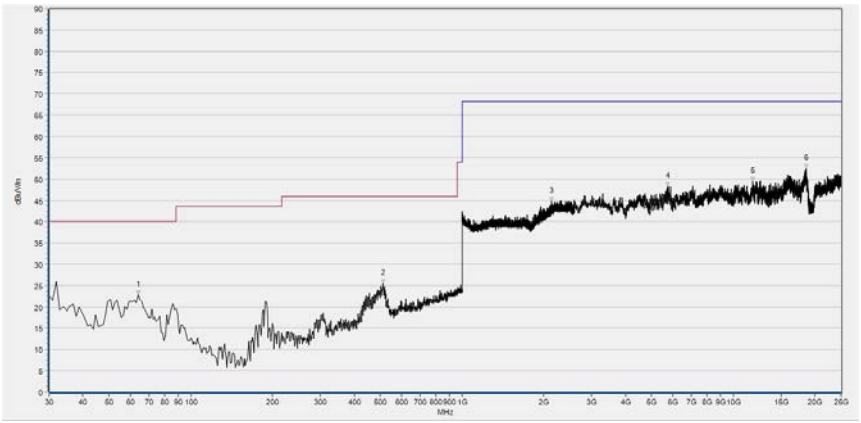
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
189.239	26.03	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
290.220	26.61	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1225.142	41.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
3191.478	46.26	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9142.108	49.27	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18489.258	52.82	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

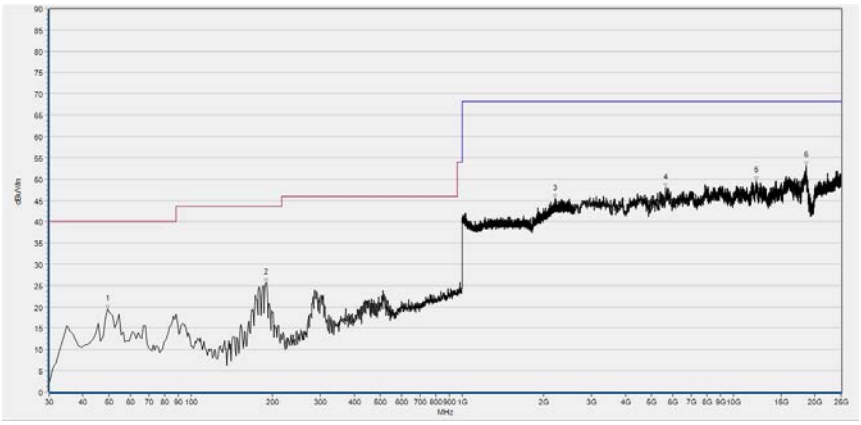
(Antenna Horizontal, 30MHz to 25GHz)



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
63.984	22.73	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
511.602	25.43	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2131.044	44.81	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5718.704	48.30	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11776.875	49.43	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18583.357	52.42	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

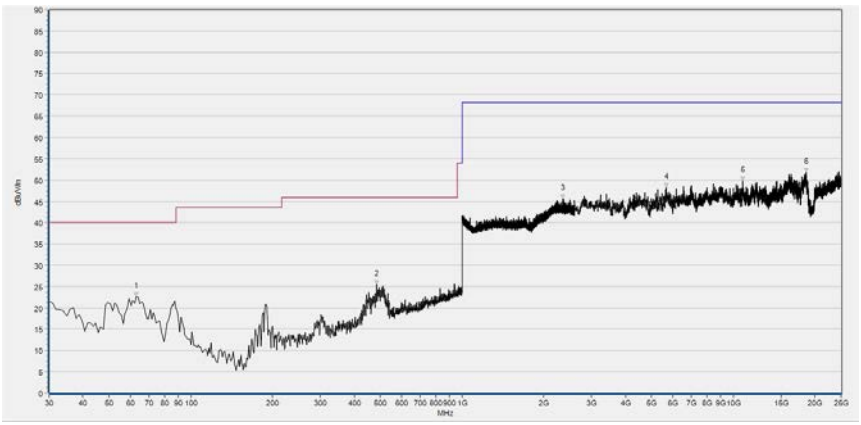
(Antenna Vertical, 30MHz to 25GHz)

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	19.42	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
189.239	25.64	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2200.934	45.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5638.048	47.99	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12139.828	49.54	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18574.395	53.08	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

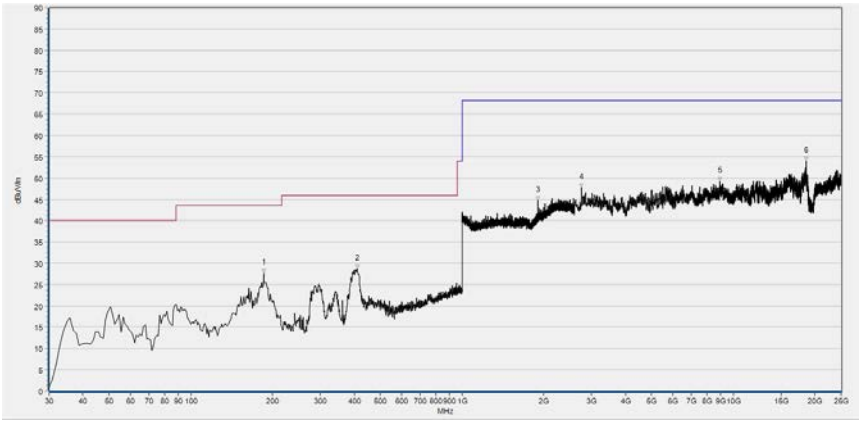
(Antenna Horizontal, 30MHz to 25GHz)



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
63.013	22.58	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
484.414	25.53	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2355.118	45.57	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5660.452	48.30	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10817.964	49.72	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18574.395	51.87	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

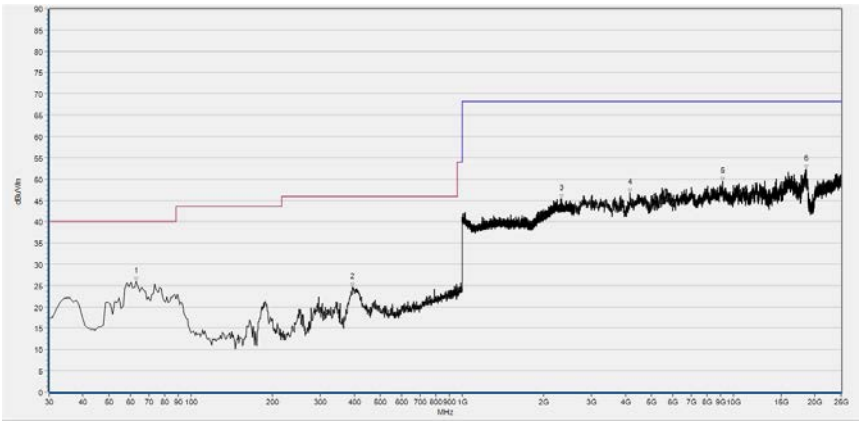
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
185.355	27.58	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
410.621	28.66	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1902.701	44.72	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
2761.312	47.69	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8931.506	49.28	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18583.357	54.00	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

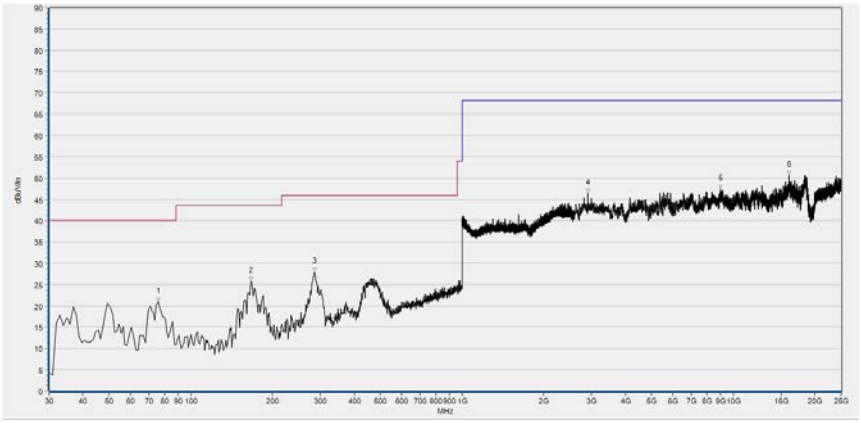
(Antenna Horizontal, 30MHz to 25GHz)



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
63.013	25.95	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
395.085	24.60	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2326.842	45.35	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4163.833	46.80	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9128.666	49.47	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18583.357	52.33	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

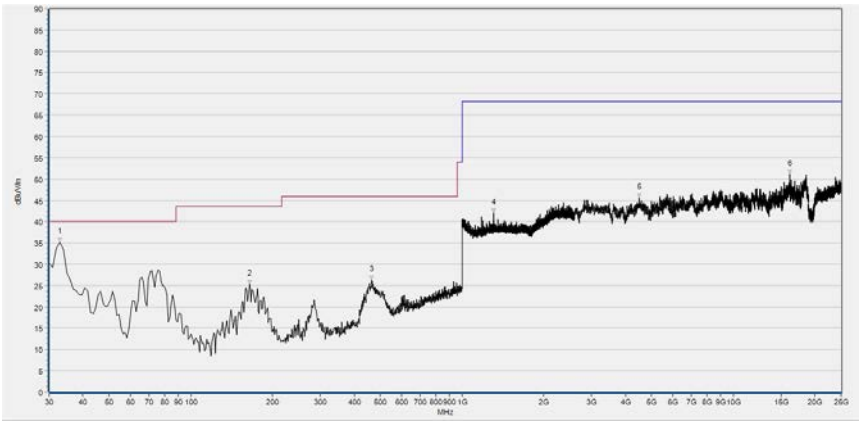
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
75.636	20.98	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
166.907	25.81	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
285.365	28.06	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2909.182	46.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8953.911	47.45	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
16100.940	50.64	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

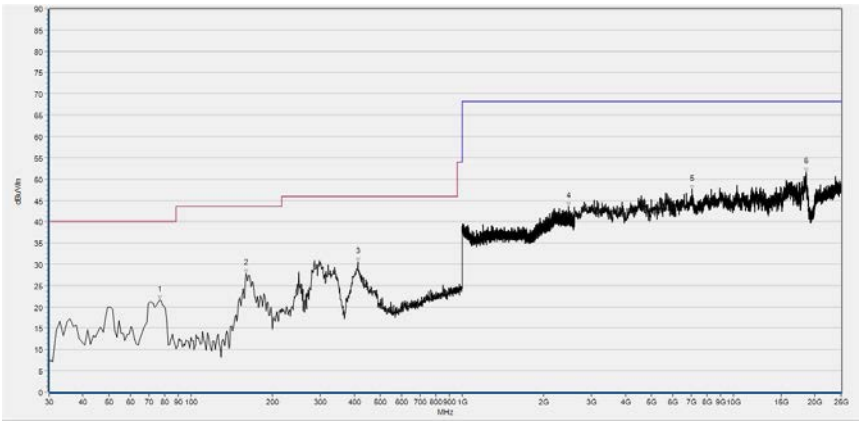
(Antenna Horizontal, 30MHz to 25GHz)



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
32.913	35.24	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
164.965	25.35	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
464.024	26.38	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1307.302	42.09	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4495.419	45.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
16199.520	51.18	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

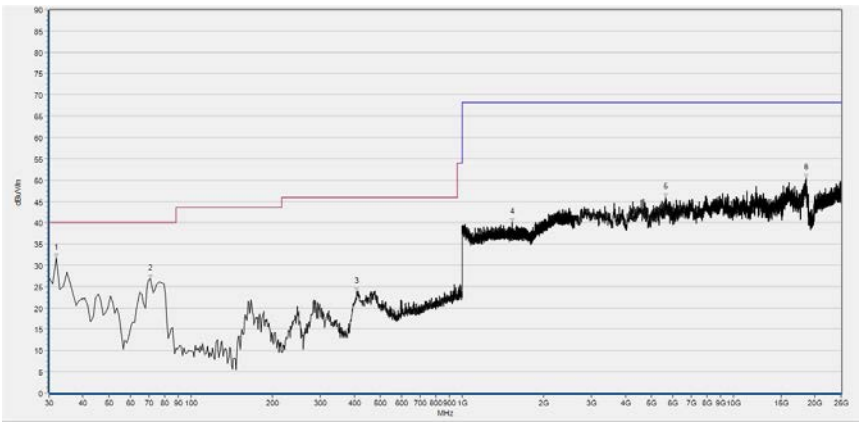
(Antenna Vertical, 30MHz to 25GHz)

Plot for Channel = 140



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
76.607	21.56	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
160.110	27.84	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
412.563	30.52	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2474.625	43.49	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
7036.087	47.63	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18596.799	51.60	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

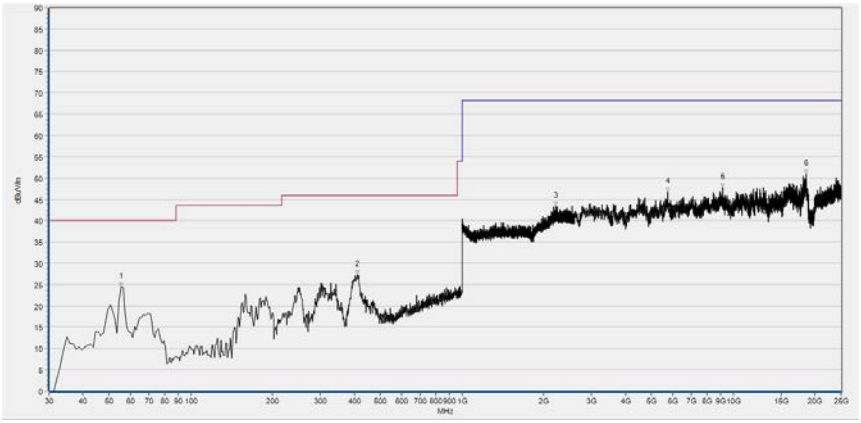
(Antenna Horizontal, 30MHz to 25GHz)



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
31.942	31.68	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
70.781	26.80	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
409.650	23.80	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1526.576	40.06	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5633.567	45.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18587.838	50.38	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

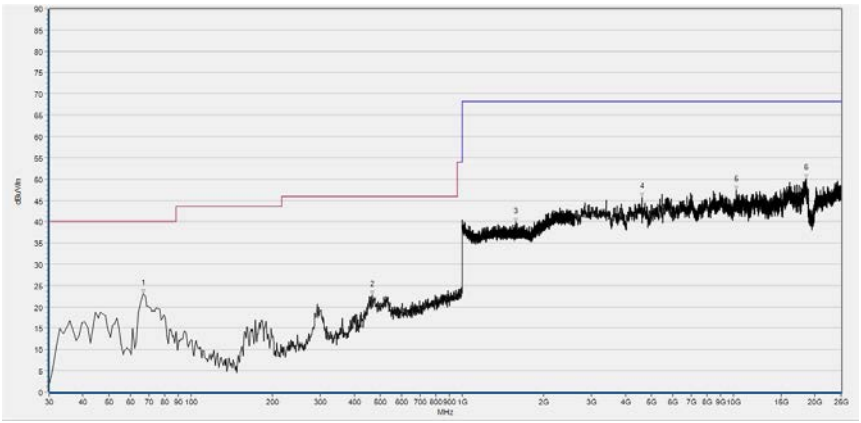
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
55.245	24.55	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
411.592	27.38	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2216.405	43.33	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5723.185	46.74	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9124.185	47.75	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18587.838	51.00	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

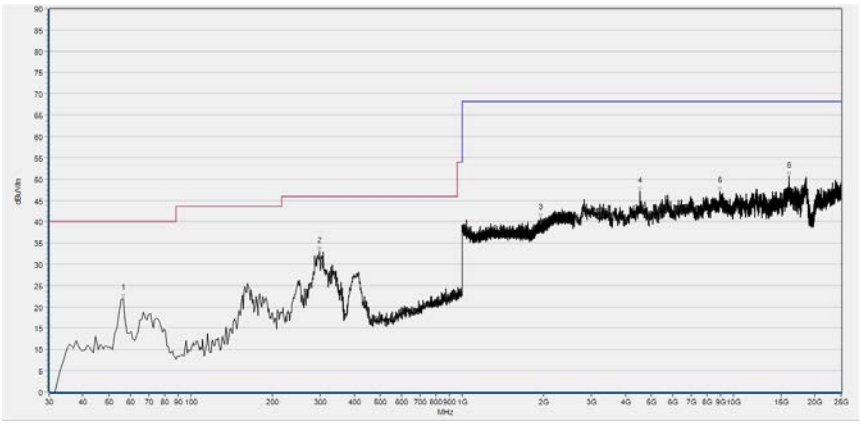
(Antenna Horizontal, 30MHz to 25GHz)



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
66.897	23.21	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
465.966	22.72	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1582.061	39.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4598.480	45.69	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10284.737	47.37	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18587.838	50.06	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

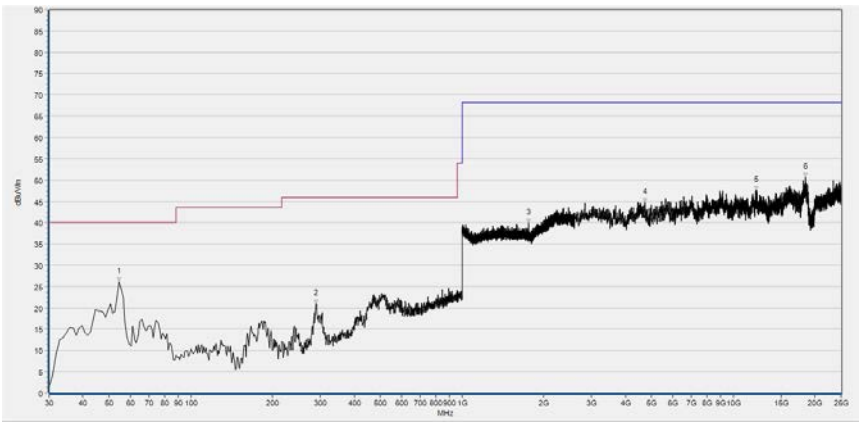
(Antenna Vertical, 30MHz to 25GHz)

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	22.04	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
298.959	32.99	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1944.848	40.84	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4535.747	47.13	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8940.468	47.03	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
16038.208	50.64	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

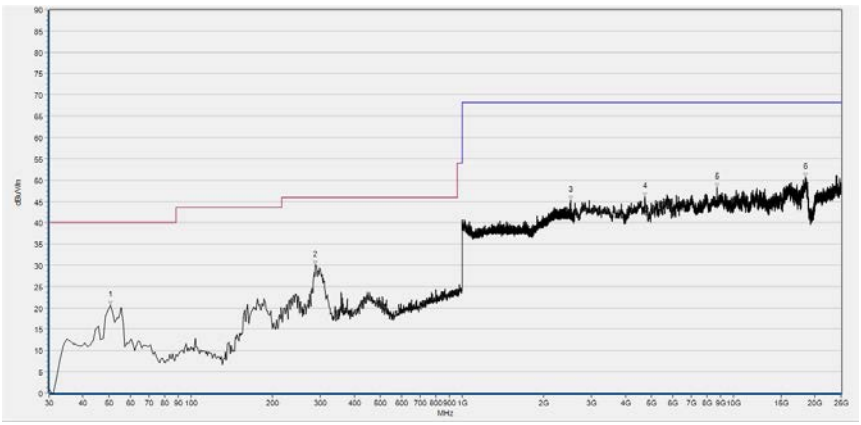
(Antenna Horizontal, 30MHz to 25GHz)



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
54.274	26.14	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
289.249	20.90	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1759.186	39.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4728.426	44.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12139.828	47.62	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18489.258	50.65	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

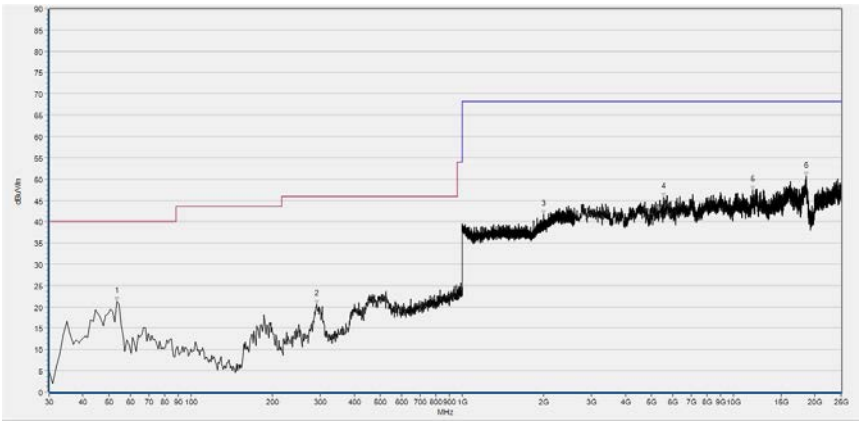
(Antenna Vertical, 30MHz to 25GHz)

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
50.390	20.62	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
288.278	29.98	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2513.038	45.23	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4732.907	46.13	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8698.500	48.22	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18484.777	50.56	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 25GHz)

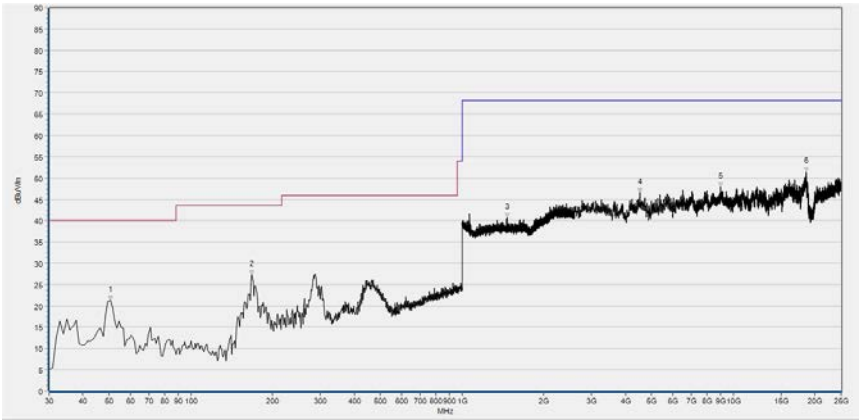


Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
53.303	21.21	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
290.220	20.57	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1999.266	41.78	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5543.949	45.68	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11781.356	47.38	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18578.876	50.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 25GHz)

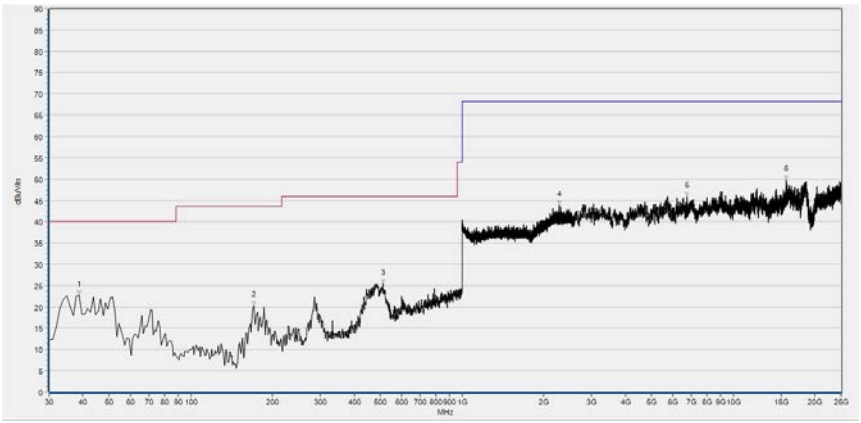
802.11n (HT40) Test mode

Plots 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
50.390	21.23	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
167.878	27.27	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1465.222	40.71	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4531.266	46.63	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8962.873	47.98	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18587.838	51.42	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

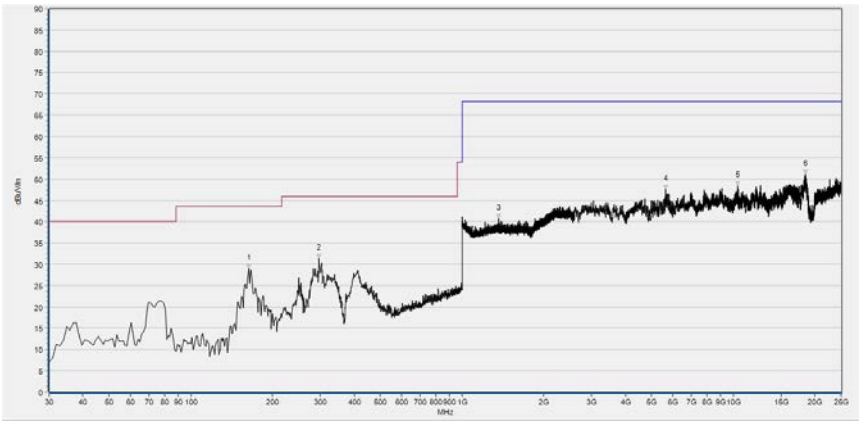
(Antenna Horizontal, 30MHz to 25GHz)



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
38.739	22.85	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
170.791	20.23	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
510.631	25.45	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2276.692	43.99	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
6762.753	45.95	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
15675.255	49.85	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

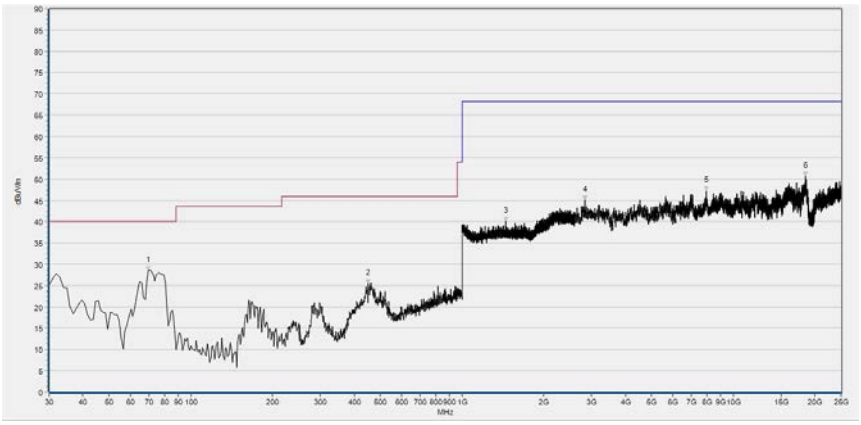
(Antenna Vertical, 30MHz to 25GHz)

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
163.994	29.06	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
297.017	31.35	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1366.522	40.78	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5638.048	47.57	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10410.202	48.42	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18484.777	51.08	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

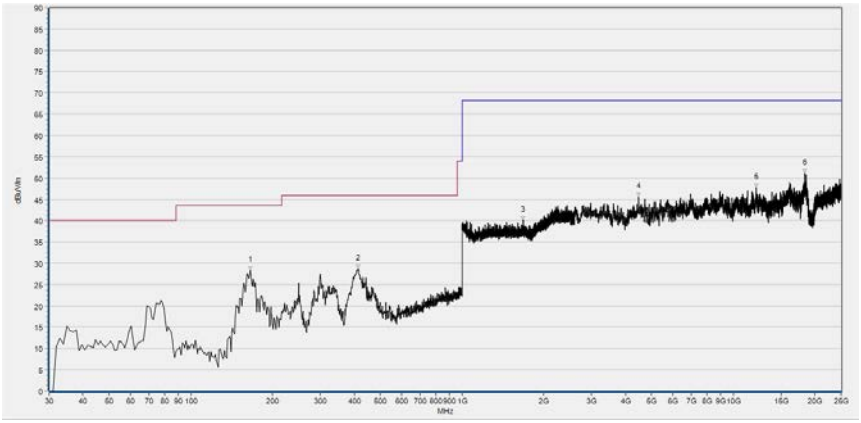
(Antenna Horizontal, 30MHz to 25GHz)



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
69.810	28.42	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
451.401	25.50	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1451.884	40.07	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2833.007	45.05	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
7963.633	47.20	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18493.739	50.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

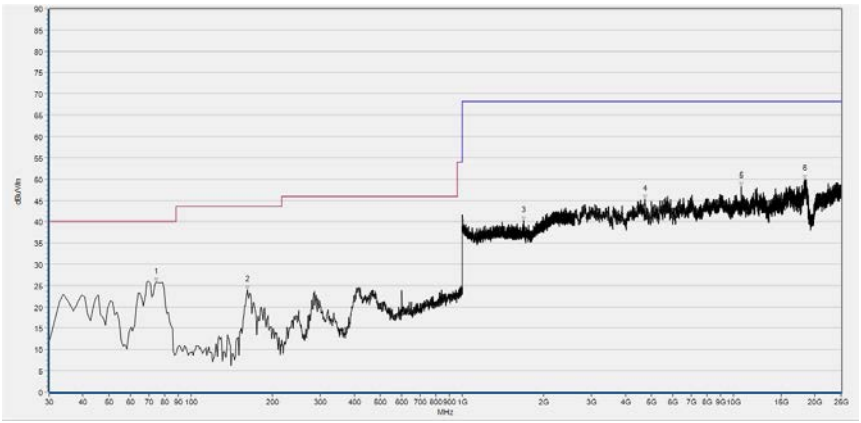
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
165.936	28.30	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
413.534	28.68	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1681.294	40.10	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4486.457	45.52	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12139.828	47.76	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18390.678	51.04	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

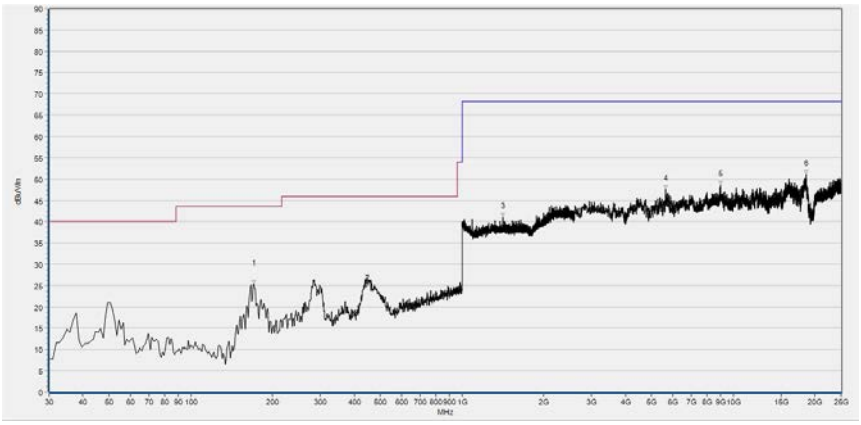
(Antenna Horizontal, 30MHz to 25GHz)



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	25.86	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
162.052	23.90	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1688.229	40.25	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4719.464	45.24	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10696.979	48.20	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18323.465	49.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

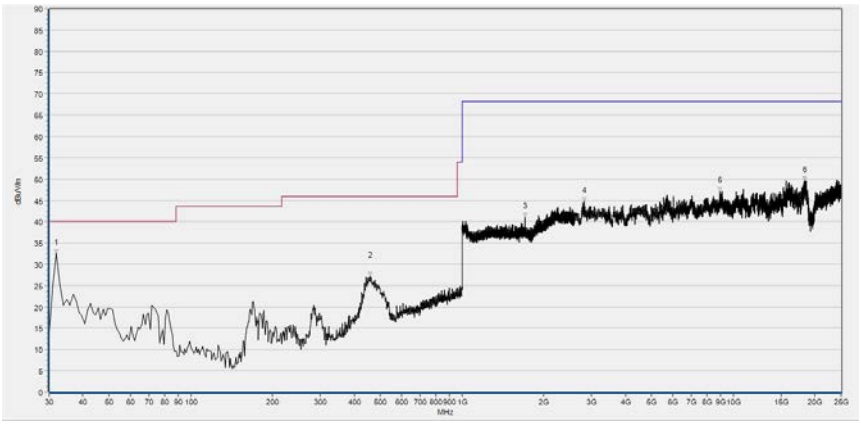
(Antenna Vertical, 30MHz to 25GHz)

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
170.791	25.23	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
448.488	26.64	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1414.538	40.99	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5633.567	47.57	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8958.392	48.55	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18556.471	51.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

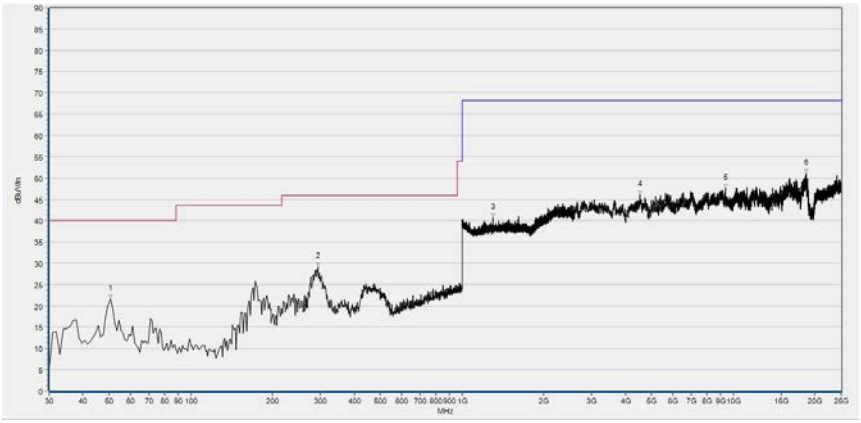
(Antenna Horizontal, 30MHz to 25GHz)



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
31.942	32.59	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
457.227	27.10	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1704.768	41.06	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2815.083	44.72	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8940.468	47.03	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18310.022	49.64	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

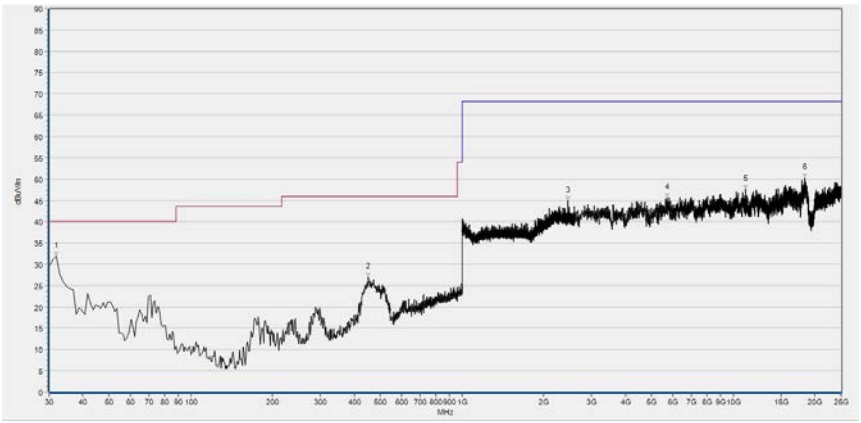
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
50.390	21.70	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
294.104	29.11	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1302.501	40.72	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
4522.304	46.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9343.749	47.53	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18587.838	51.08	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

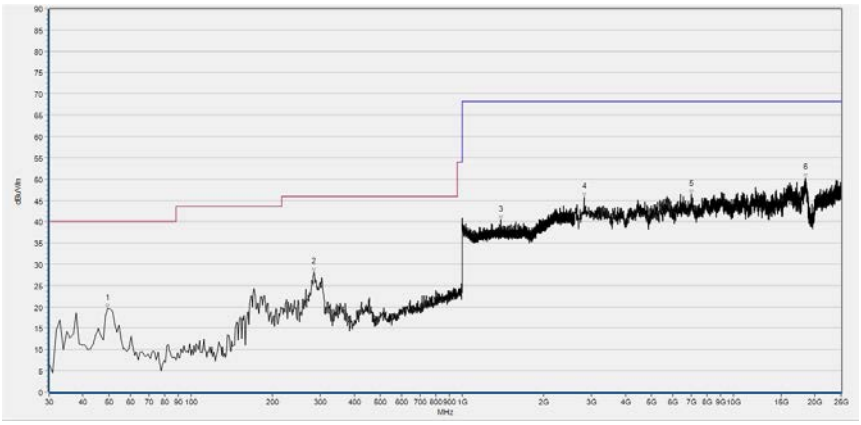
(Antenna Horizontal, 30MHz to 25GHz)



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
31.942	31.87	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
451.401	26.94	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2461.287	44.99	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5714.223	45.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11086.817	47.53	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18318.984	50.20	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

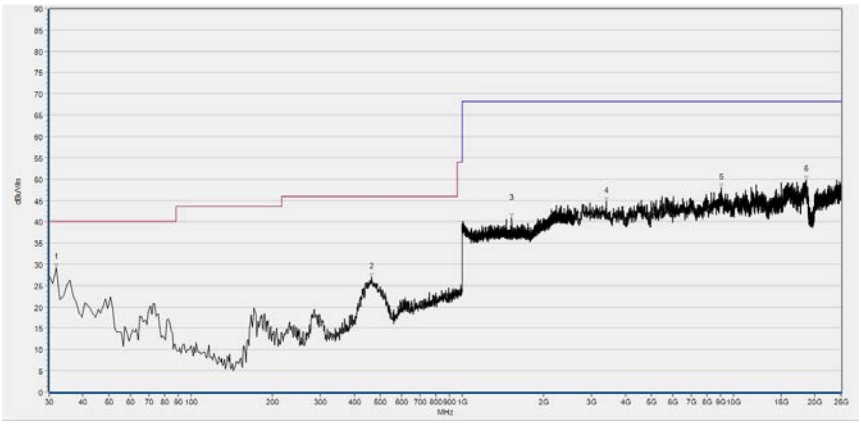
(Antenna Vertical, 30MHz to 25GHz)

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
49.419	19.58	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
284.394	28.14	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1389.997	40.38	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
2815.083	45.69	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
7009.202	46.44	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18475.815	50.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

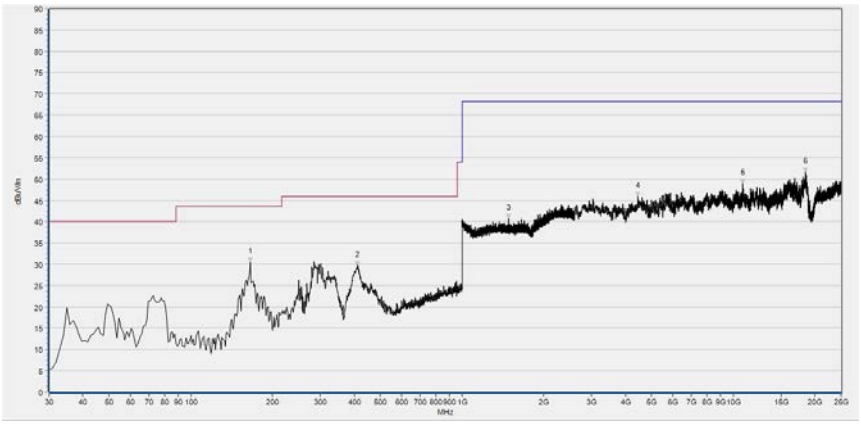
(Antenna Horizontal, 30MHz to 25GHz)



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
31.942	29.22	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
464.024	27.02	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1525.509	40.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
3411.042	44.79	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9056.971	47.95	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18592.318	49.79	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

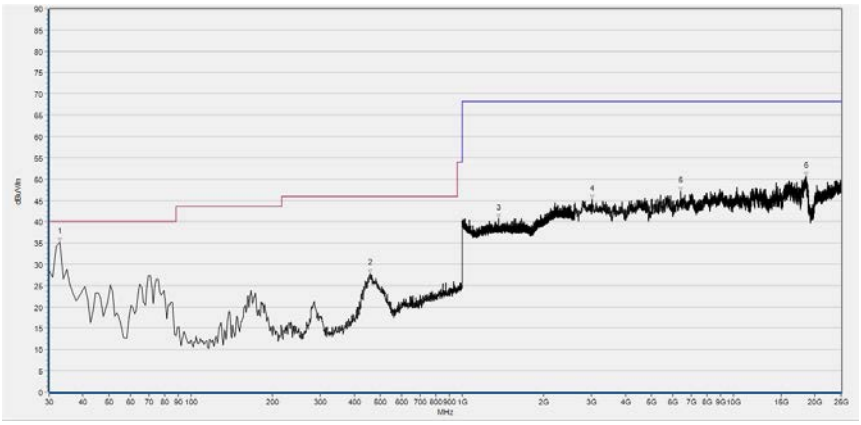
(Antenna Vertical, 30MHz to 25GHz)

Plot for Channel = 134



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
165.936	30.55	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
411.592	29.62	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1485.495	40.69	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4459.572	45.99	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10813.483	48.88	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18422.044	51.56	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

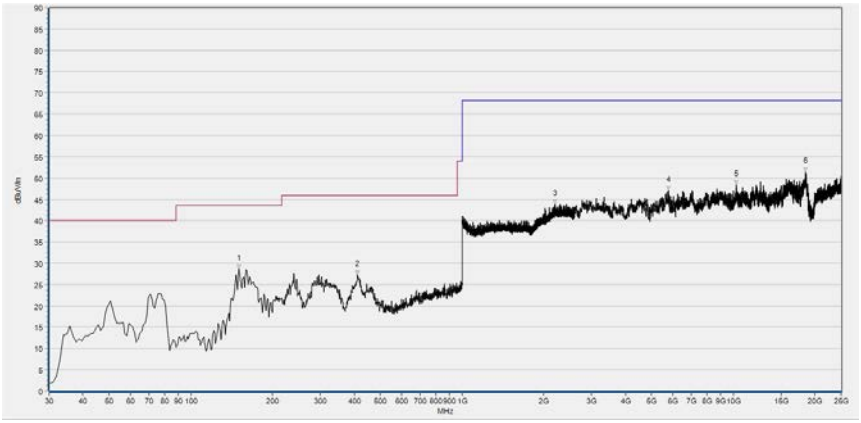
(Antenna Horizontal, 30MHz to 25GHz)



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
32.913	35.14	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
459.169	27.77	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1367.056	40.69	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
3012.242	45.22	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
6413.243	47.08	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18560.952	50.54	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

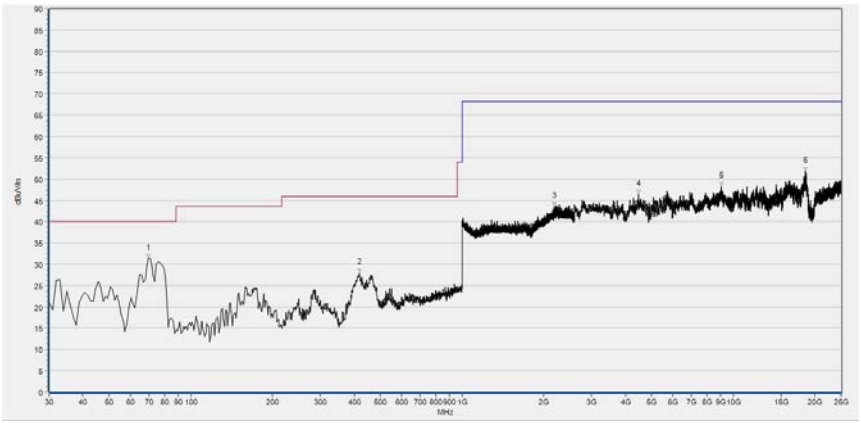
(Antenna Vertical, 30MHz to 25GHz)

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
150.400	28.60	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
411.592	27.28	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2201.467	43.93	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5781.436	47.06	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10289.218	48.47	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
18471.334	51.51	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

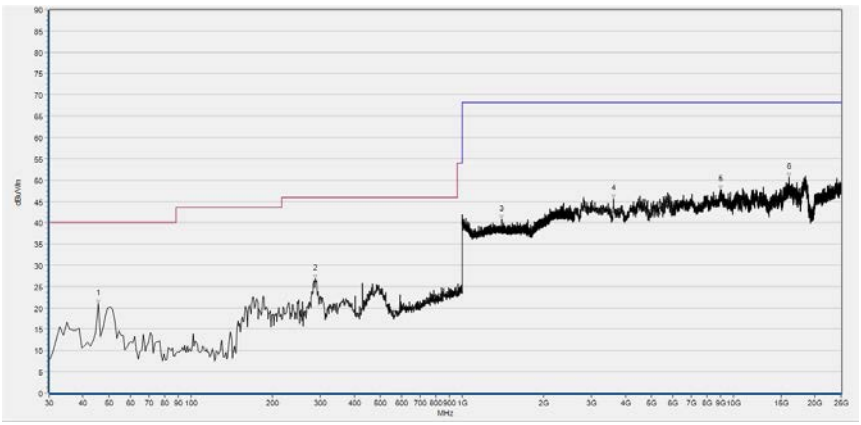
(Antenna Horizontal, 30MHz to 25GHz)



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
69.810	31.41	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
417.417	28.06	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2186.529	43.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4477.495	46.43	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9056.971	48.29	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18489.258	51.80	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

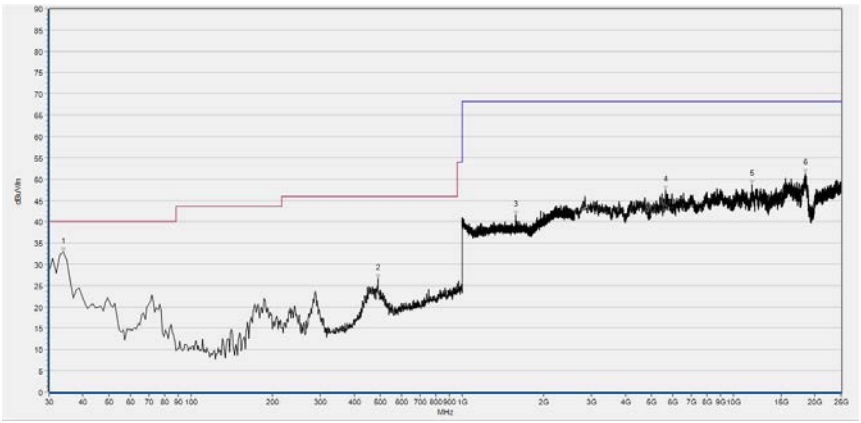
(Antenna Vertical, 30MHz to 25GHz)

Plots 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
45.536	20.98	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
288.278	26.82	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1401.734	40.65	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
3612.683	45.66	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8958.392	47.83	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
16105.421	50.55	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 25GHz)



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
33.884	32.78	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
489.269	26.66	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1575.125	41.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5633.567	47.36	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11718.624	48.78	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
18471.334	51.23	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 25GHz)

2.9. Automatically discontinue transmission requirement

2.9.1. Requirement

According to 15.407(c), the device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met

2.9.2. Result

The EUT will automatically discontinue transmission in case of either absence of information to transmit or operational failure.

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 (PSD)	±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

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

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
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.

4. Test Equipments Utilized

4.1 Conducted Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Power Splitter	NW521	1506A	Weinschel	2017.05.24	2018.05.23
Attenuator 1	(N/A.)	10dB	Resnet	2017.05.24	2018.05.23
Attenuator 2	(N/A.)	3dB	Resnet	2017.05.24	2018.05.23
EXA Signal Analzyer	MY53470836	N9010A	Agilent	2017.12.03	2018.12.02
USB Wideband Power Sensor	MY54210011	U2021XA	Agilent	2017.05.24	2018.05.23
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

4.2 Conducted Emission Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Receiver	MY56400093	N9038A	KEYSIGHT	2017.07.13	2018.07.12
LISN	812744	NSLK 8127	Schwarzbeck	2017.05.17	2018.05.16
Pulse Limiter (20dB)	9391	VTSD 9561-D	Schwarzbeck	2017.05.17	2018.05.16
Coaxial cable(BNC) (30MHz-26GHz)	CB01	EMC01	Morlab	N/A	N/A

4.3Auxiliary Test Equipment

Equipment Name	Model No.	Brand Name	Manufacturer	Cal.Date	Cal. Due
Computer	T430i	Think Pad	Lenovo	N/A	N/A

4.4 Radiated Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Receiver	MY54130016	N9038A	Agilent	2017.05.17	2018.05.16
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2017.05.14	2018.05.13
Test Antenna - Horn	9170C-531	BBHA9170	Schwarzbeck	2017.09.13	2018.09.12
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2017.03.07	2018.03.06
Test Antenna - Horn	01774	BBHA 9120D	Schwarzbeck	2017.09.13	2018.09.12
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
1-18GHz pre-Amplifier	MA02	TS-PR18	Rohde& Schwarz	2017.05.17	2018.05.16
18-26.5GHz pre-Amplifier	MA03	TS-PR18	Rohde& Schwarz	2017.05.17	2018.05.16
Anechoic Chamber	N/A	9m*6m*6m	CRT	2017.11.19	2020.11.18

END OF REPORT