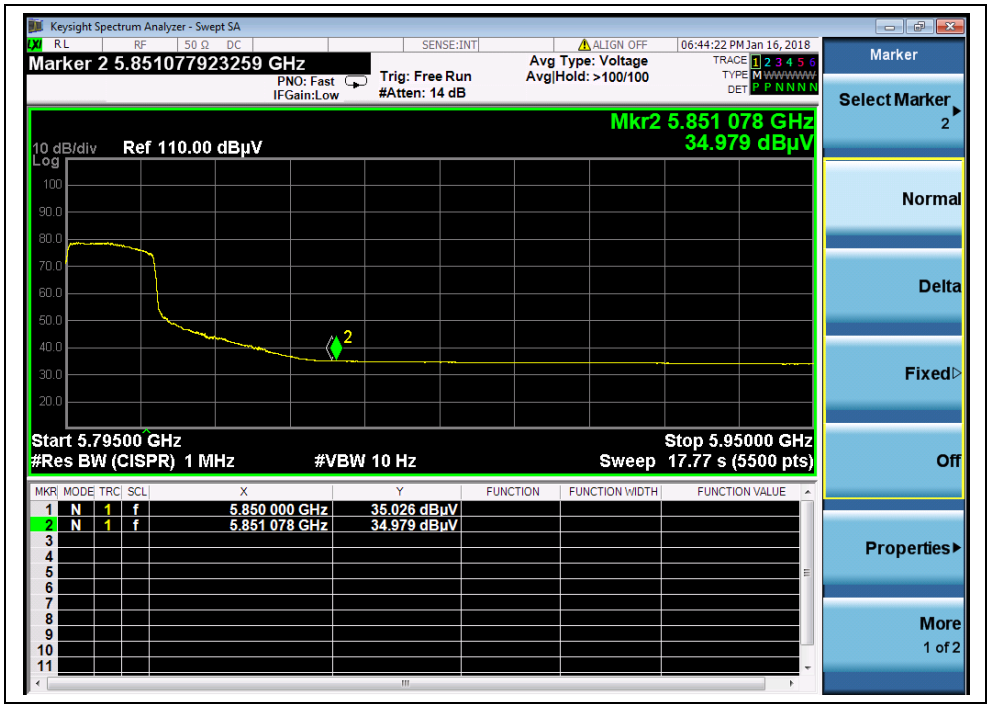


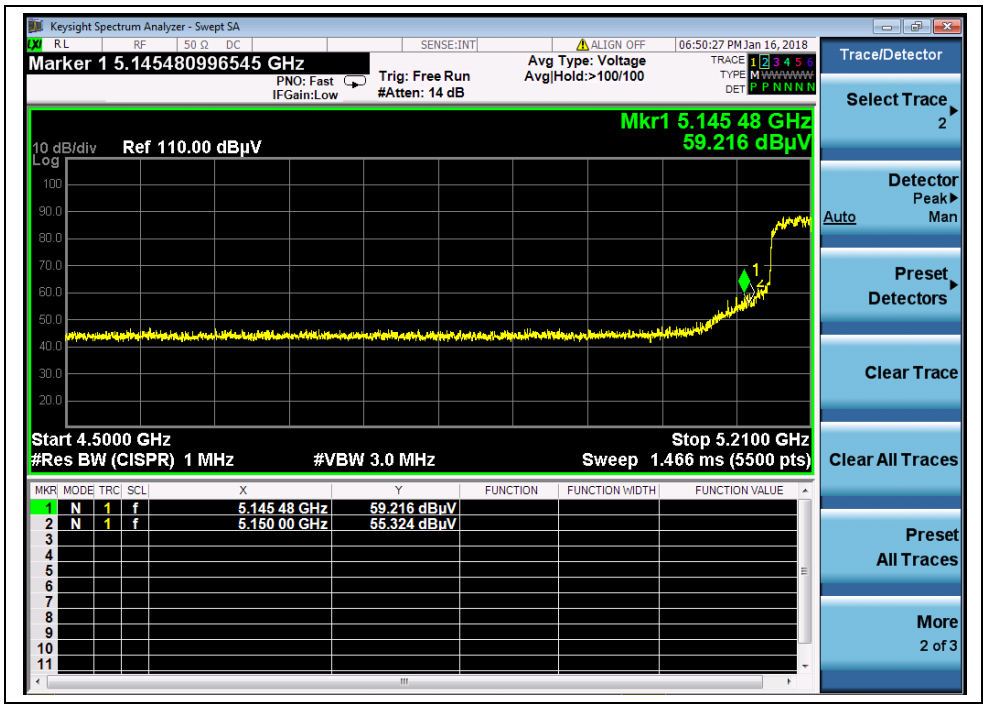
(Channel 159, AVG, 802.11 ac (VHT40))

802.11ac (VHT80) Test mode

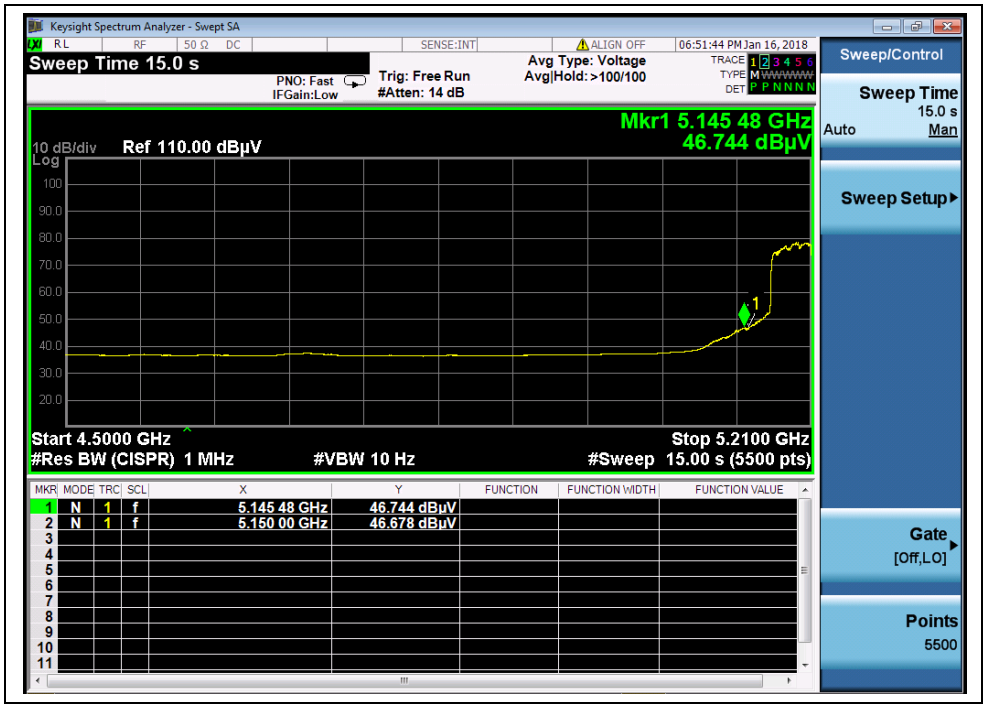
A. Test Verdict:

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						
42	5145.48	PK	59.22	-42.95	32.20	48.47	68.2	PASS
42	5145.48	AV	46.74	-42.95	32.20	35.99	54	PASS
42	5385.66	PK	45.68	-42.95	32.20	34.93	68.2	PASS
42	5352.80	AV	34.98	-42.95	32.20	24.23	54	PASS
155	5715.59	PK	56.28	-42.95	32.20	45.53	109.59	PASS
155	5723.53	AV	46.03	-42.95	32.20	35.28	54	PASS
155	5851.17	PK	49.02	-42.95	32.20	38.27	119.56	PASS
155	5850.61	AV	36.98	-42.95	32.20	26.23	54	PASS

B. Test Plots:



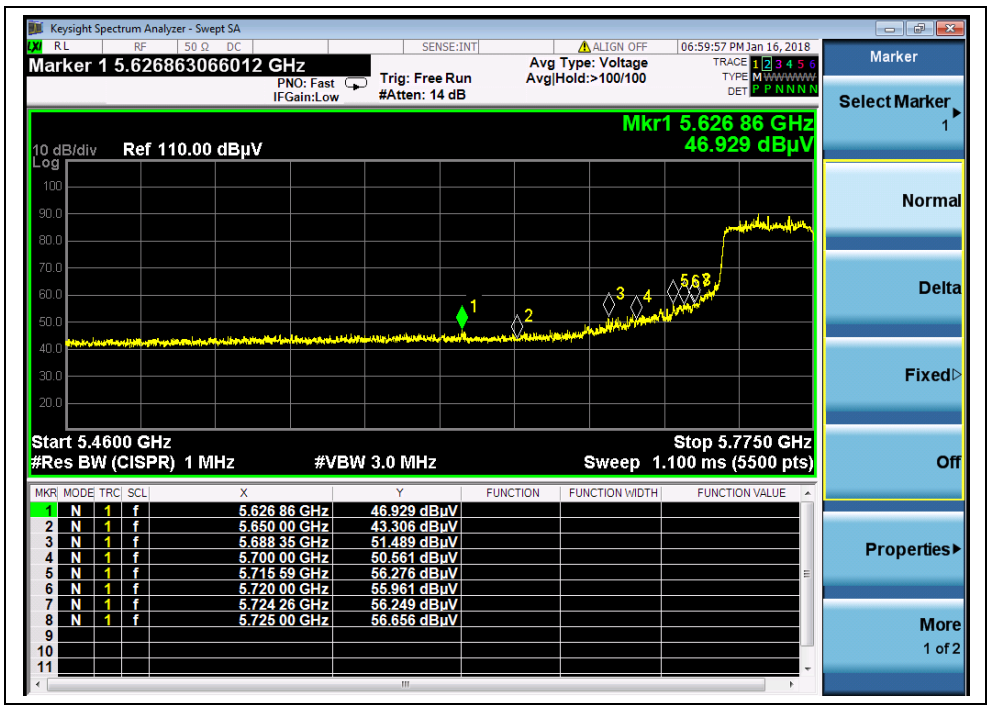
(Channel 42, PEAK, 802.11ac (VHT80))



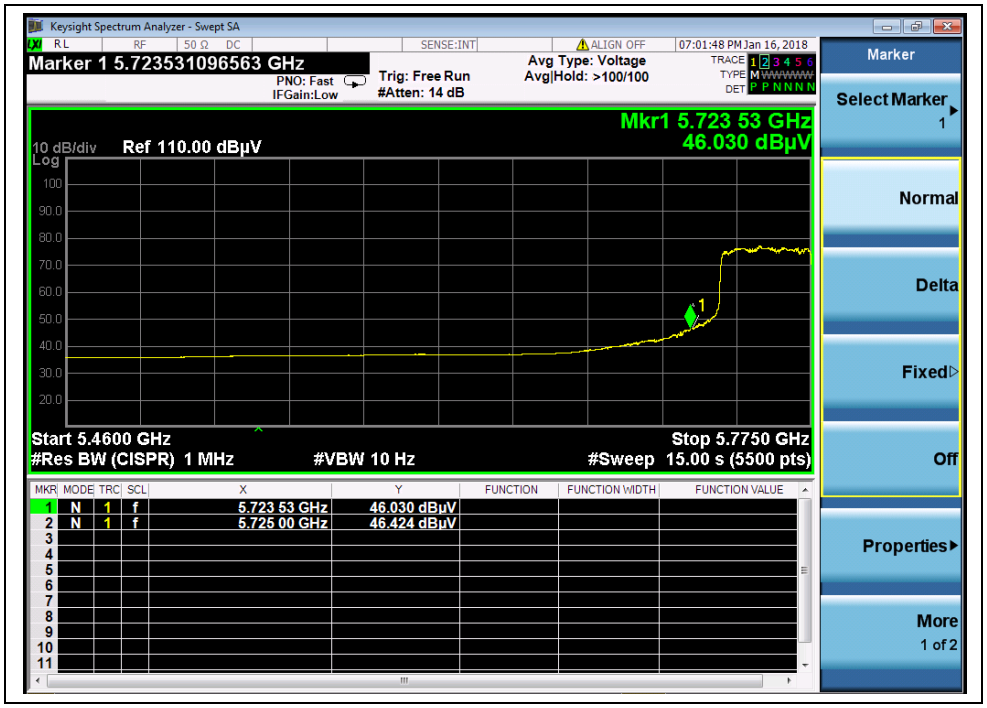
(Channel 42, AVG, 802.11ac (VHT80))

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

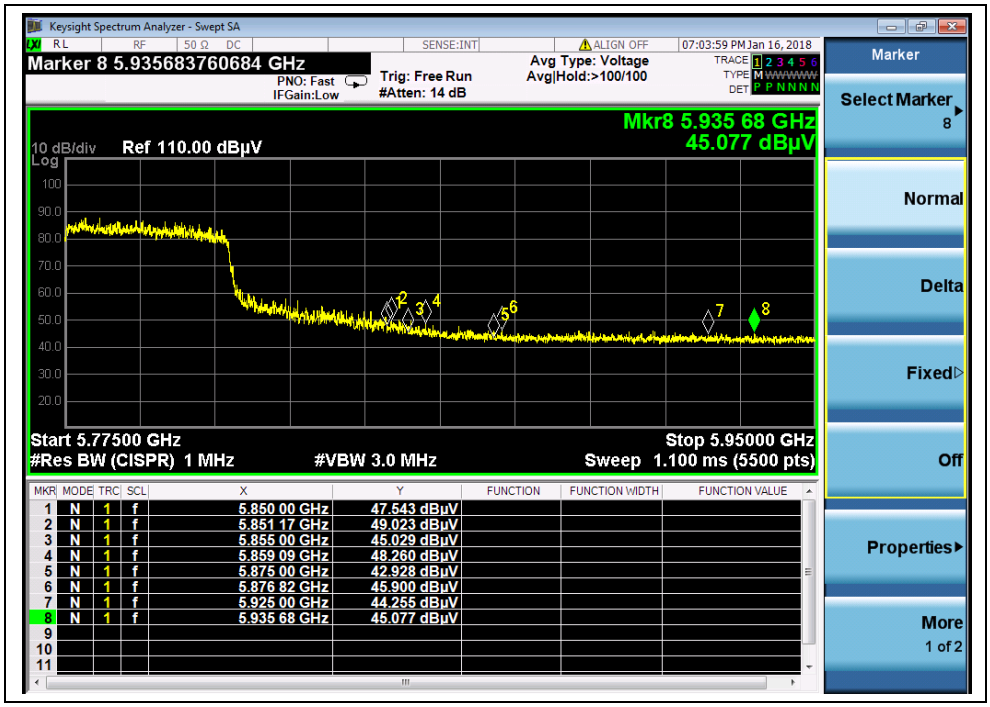
(Channel 42, AVG, 802.11ac (VHT80))



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



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



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

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

2.6. Conducted Emission

2.6.1. 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

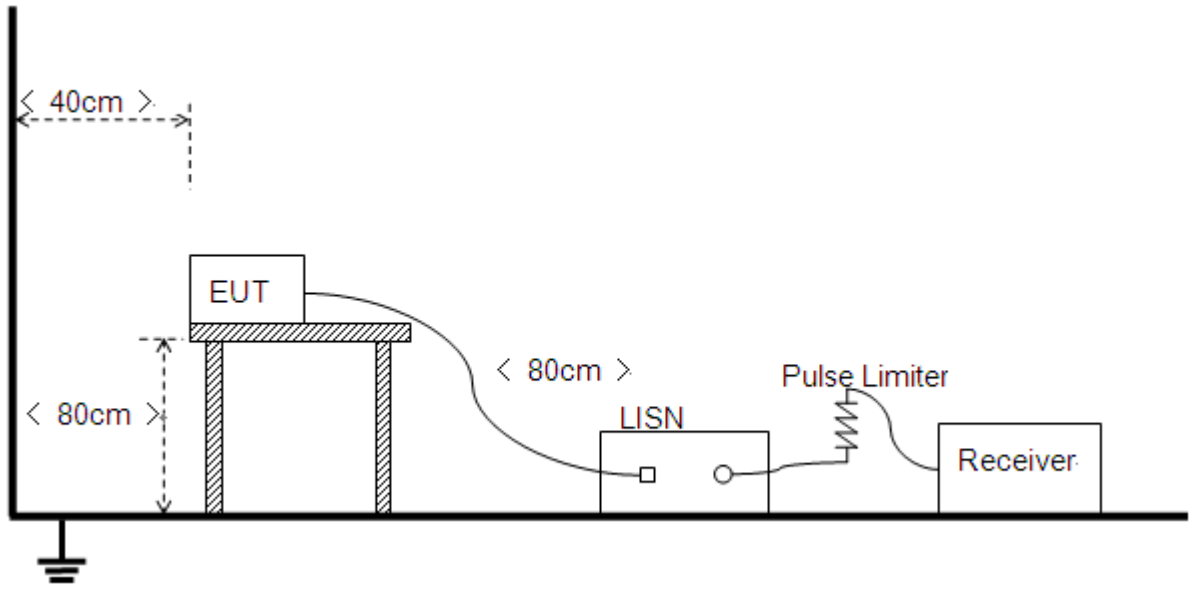
NOTE:

(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.

2.6.2. 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.

2.6.3. 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.

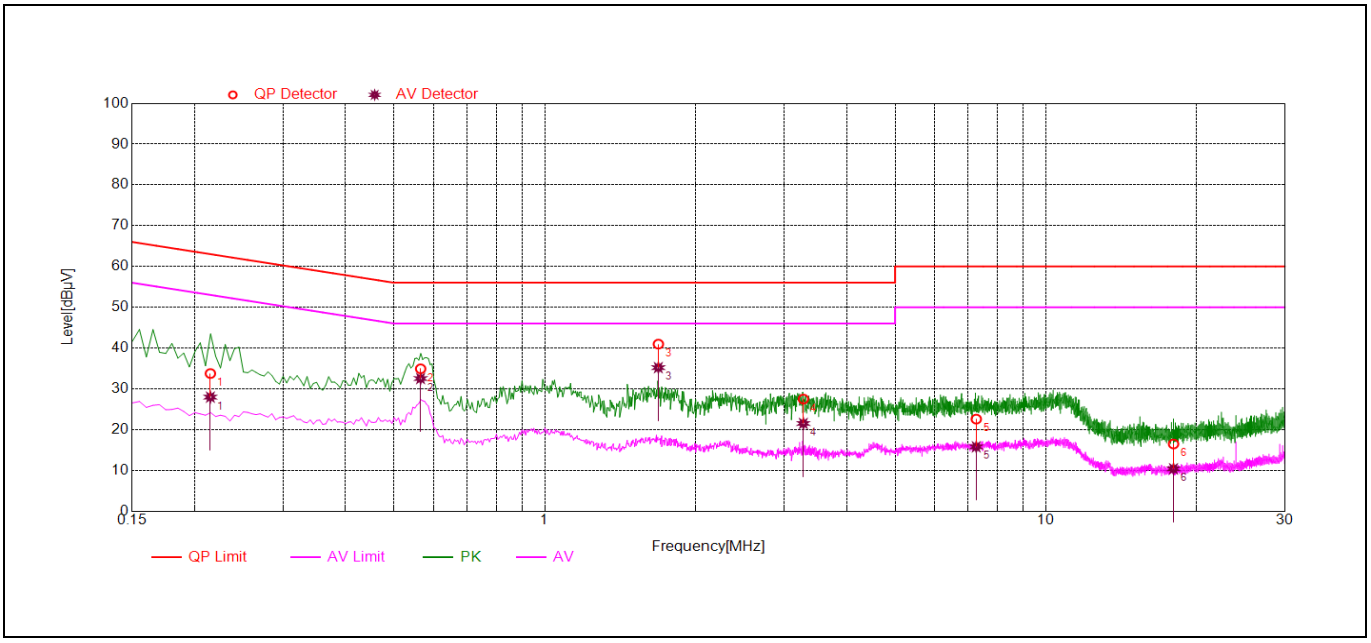
Note: All test modes are performed, only the worst case is recorded in this report.

A. Test setup:

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

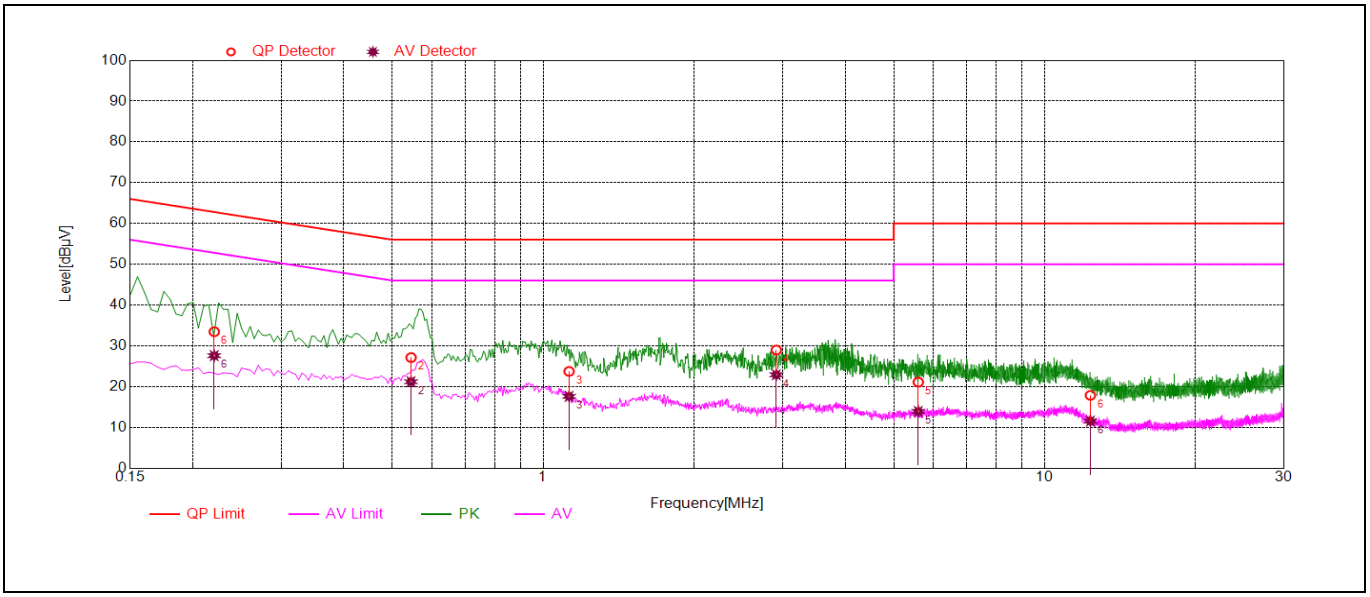
Note: The test voltage is AC 120V/60Hz.

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	0.21	33.75	27.95	63.02	53.02	Line	PASS
2	0.56	34.90	32.51	56.00	46.00		PASS
3	1.68	40.96	35.19	56.00	46.00		PASS
4	3.28	27.48	21.50	56.00	46.00		PASS
5	7.26	22.56	15.76	60.00	50.00		PASS
6	17.98	16.47	10.37	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	0.22	33.44	27.58	62.80	52.80	Neutral	PASS
2	0.54	27.12	21.19	56.00	46.00		PASS
3	1.23	23.72	17.59	56.00	46.00		PASS
4	2.92	28.96	22.89	56.00	46.00		PASS
5	5.60	21.08	13.90	60.00	50.00		PASS
6	12.34	17.85	11.53	60.00	50.00		PASS

2.7. Radiated Emission

2.7.1. 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 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(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 (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:

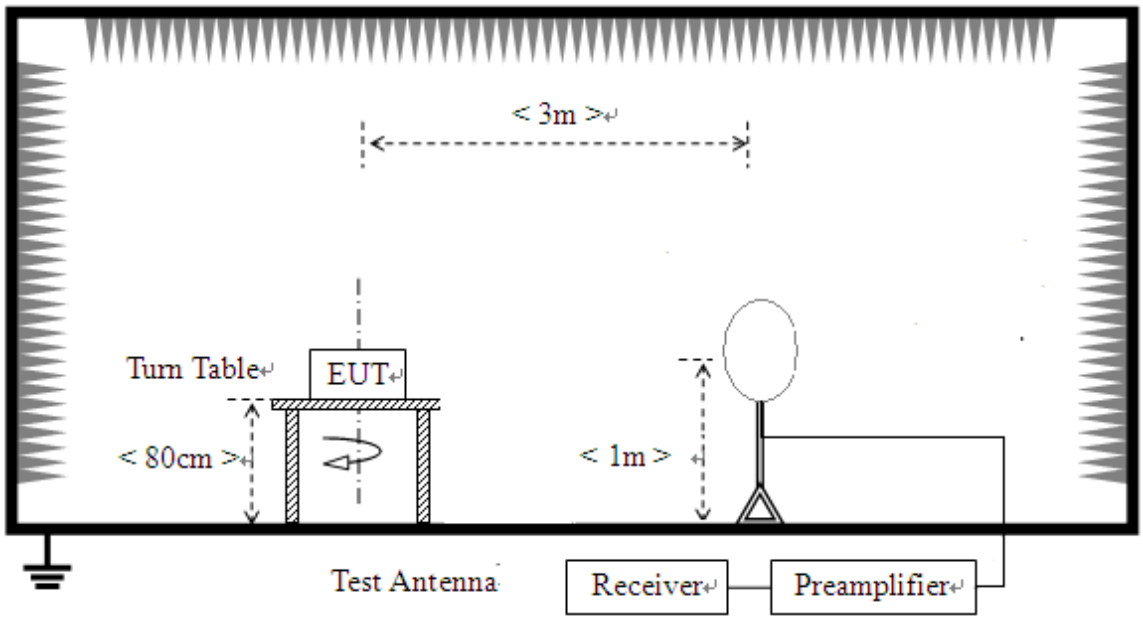
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

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)

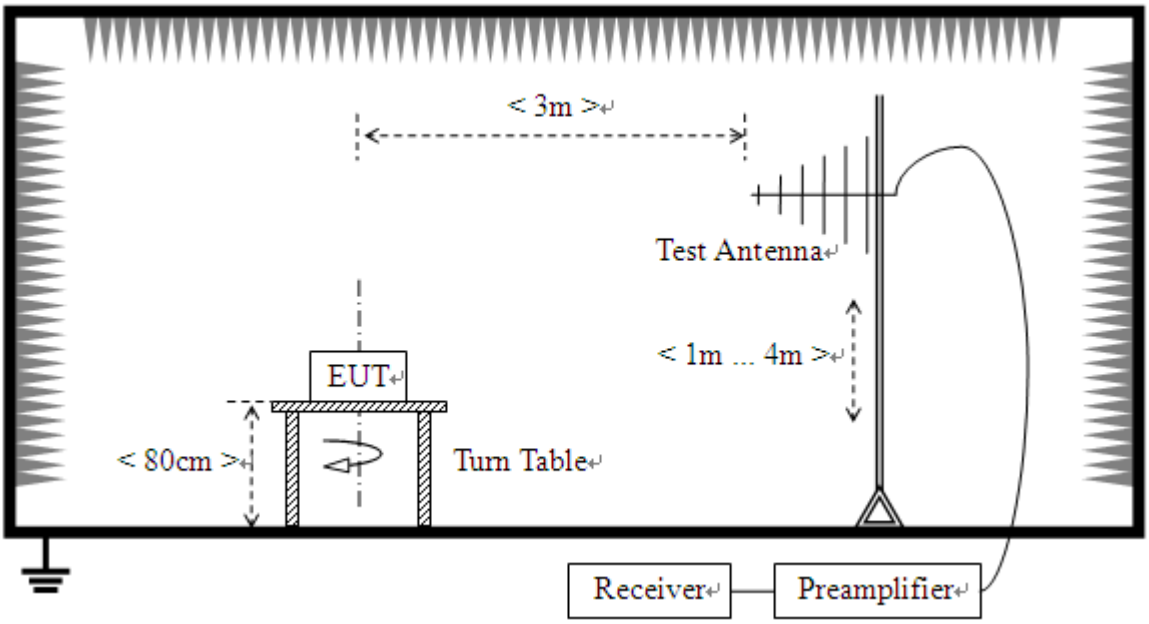
2.7.2. Test Description

A. Test Setup:

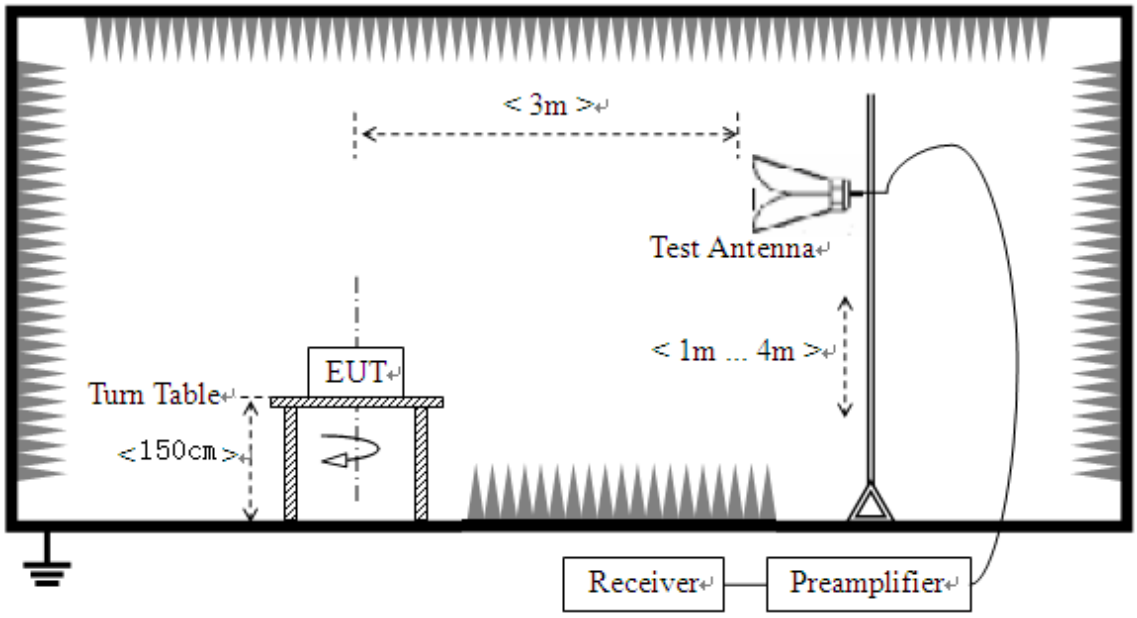
1) For radiated emissions from 9kHz to 30MHz



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.

2.7.3. 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.

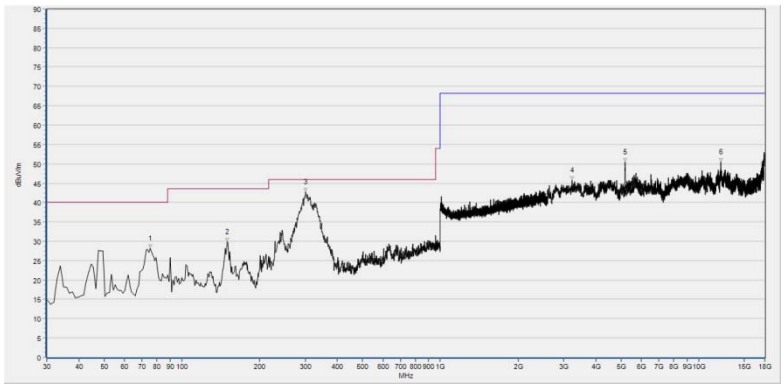
Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

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 18GHz to 40GHz, was pre-scanned and the result which was 10dB lower than the limit was not recorded.

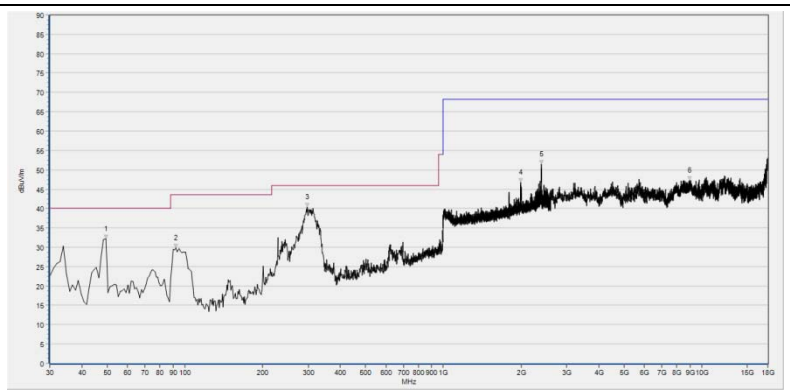
802.11a Test mode

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
75.636	28.19	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
149.429	29.91	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
300.901	42.69	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3237.688	45.69	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5184.637	50.46	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12156.071	50.45	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

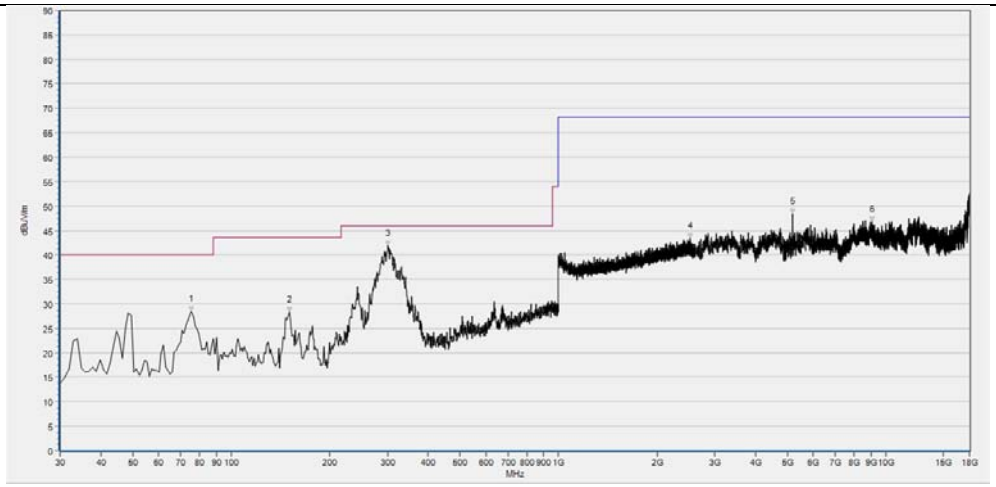
(Antenna Horizontal, 30MHz to 18GHz)



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	32.16	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	29.76	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
297.988	40.34	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1990.730	46.78	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2389.797	51.46	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8970.714	47.25	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

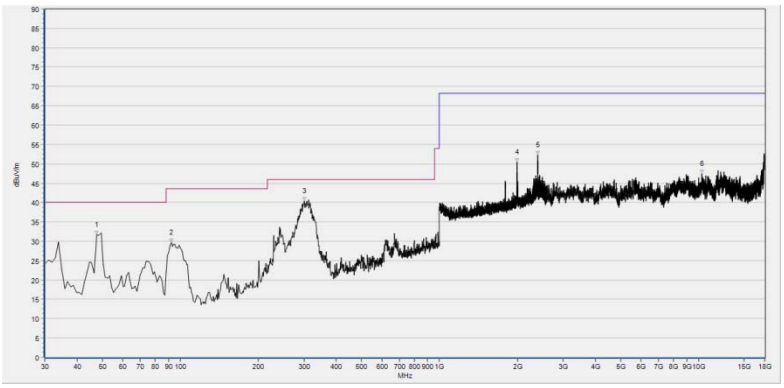
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	28.42	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
150.400	28.38	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
300.901	41.93	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2516.239	43.35	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5184.637	48.41	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9047.730	46.80	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

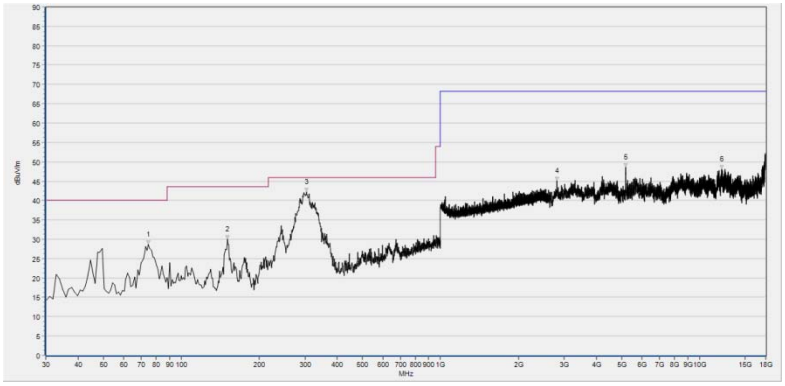
(Antenna Horizontal, 30MHz to 18GHz)



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	31.67	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	29.69	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	40.36	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1994.998	50.39	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2391.397	52.34	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10273.815	47.49	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

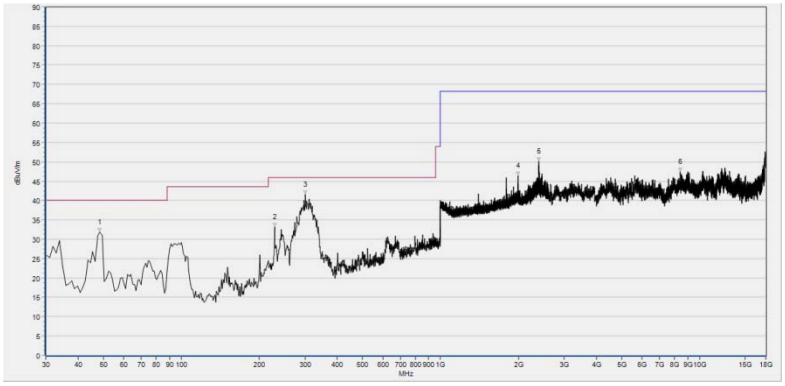
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel = 48



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
74.665	28.70	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
150.400	30.00	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
303.814	42.19	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2818.724	45.12	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5175.395	48.63	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12159.152	48.12	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

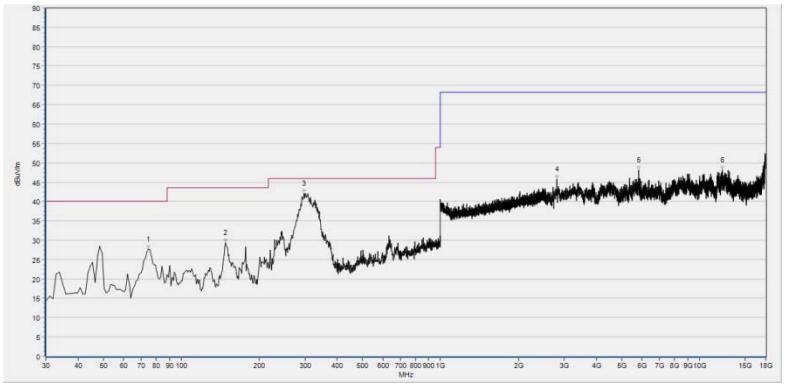
(Antenna Horizontal, 30MHz to 18GHz)



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	31.87	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
229.049	33.25	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
300.901	41.50	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1993.398	46.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2397.799	50.15	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8434.687	47.47	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

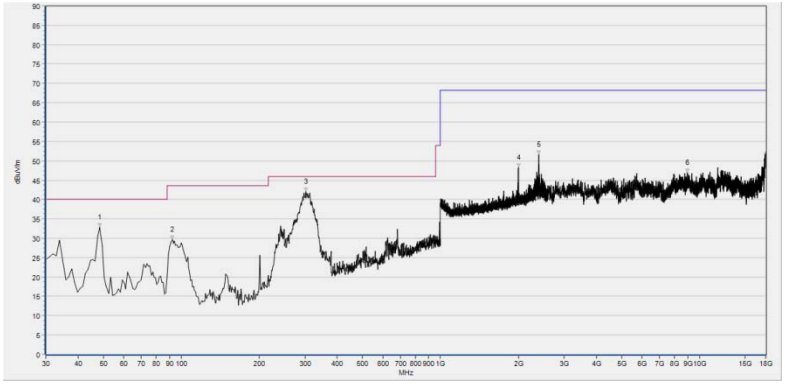
(Antenna Vertical, 30MHz to 18GHz)

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
74.665	27.58	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
148.458	29.37	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
297.988	42.11	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2806.401	45.79	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5822.324	48.04	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12254.651	48.13	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

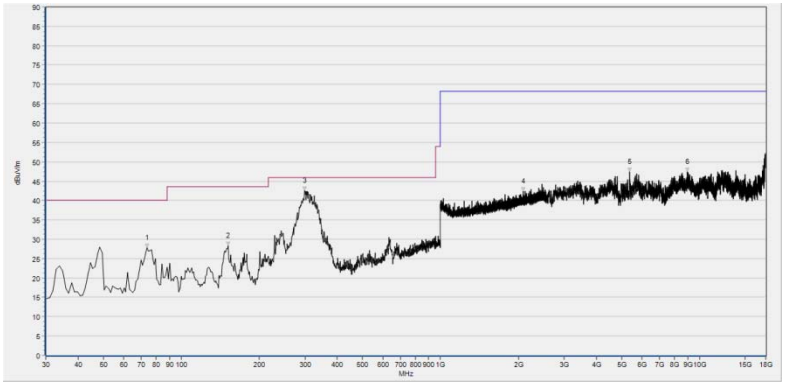
(Antenna Horizontal, 30MHz to 18GHz)



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	32.79	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	29.66	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
301.872	42.03	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1997.666	48.27	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2390.864	51.68	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8949.150	46.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

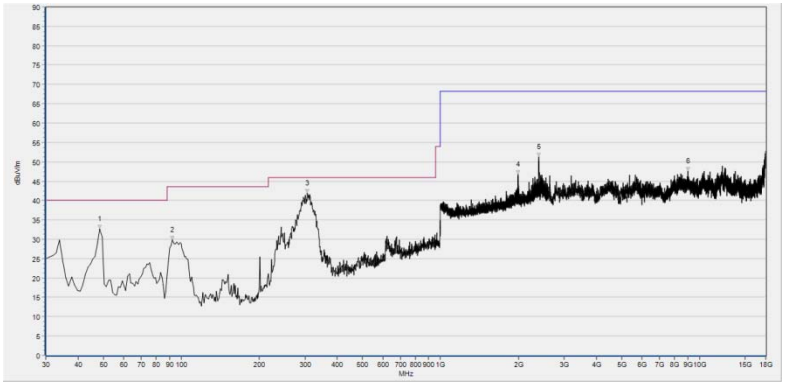
(Antenna Vertical, 30MHz to 18GHz)

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
73.694	27.81	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
151.371	28.31	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
298.959	42.51	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2090.497	42.46	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5381.796	47.48	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8949.150	47.38	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

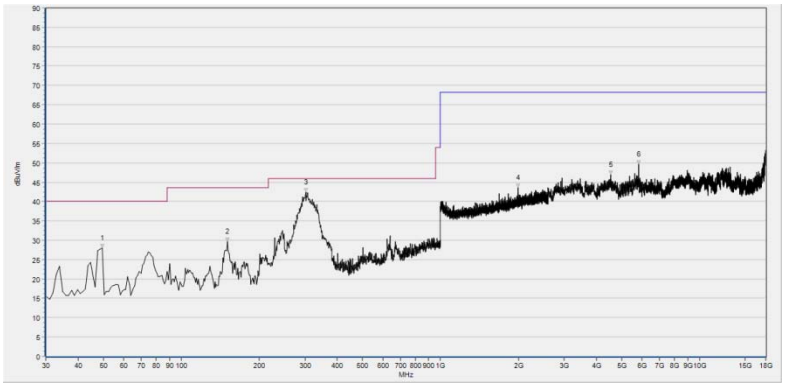
(Antenna Horizontal, 30MHz to 18GHz)



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	32.72	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	29.85	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
306.727	41.90	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1993.931	46.78	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2391.931	51.31	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8992.278	47.63	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

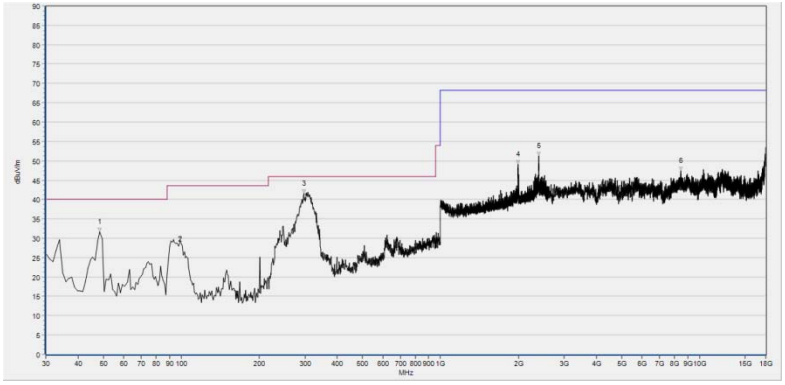
(Antenna Vertical, 30MHz to 18GHz)

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
49.419	27.91	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
150.400	29.69	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
301.872	42.33	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1995.532	43.64	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4528.466	46.98	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5819.244	49.58	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

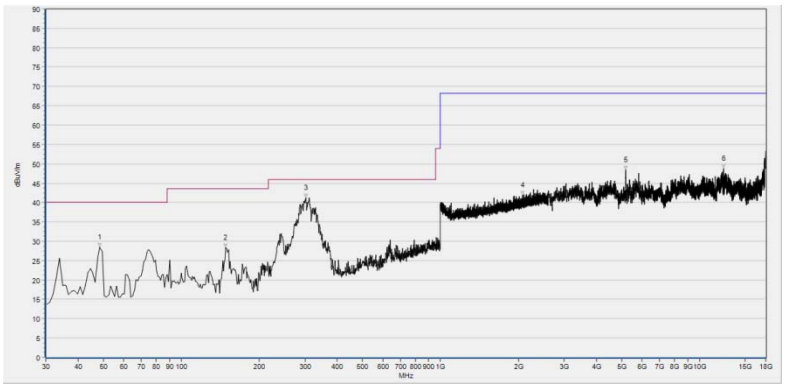


Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
48.448	31.71	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
98.939	29.56	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
297.017	41.49	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1996.065	49.12	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2397.799	51.20	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8447.009	47.37	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

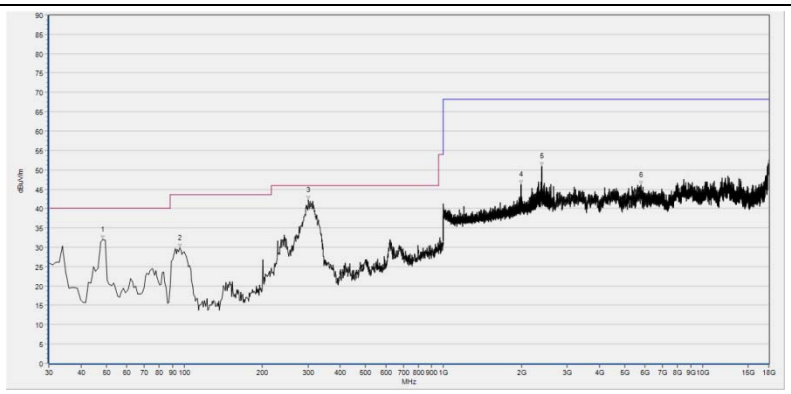
802.11n (HT20) Test mode

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
48.448	28.41	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
148.458	28.30	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
301.872	41.17	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2071.824	41.92	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5181.556	48.51	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12347.069	48.73	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

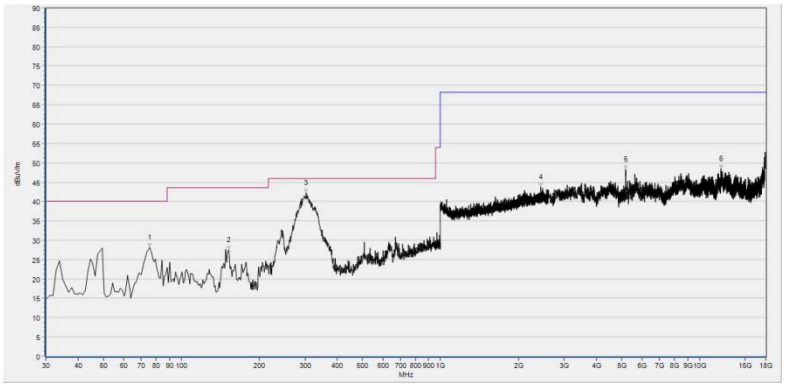
(Antenna Horizontal, 30MHz to 18GHz)



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	31.99	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
96.026	29.83	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	42.28	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1992.331	46.34	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2392.464	50.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5791.518	46.07	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

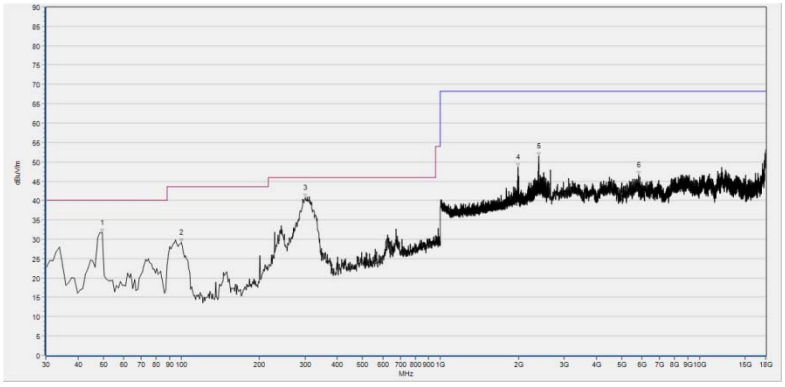
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	28.17	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
152.342	27.48	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
302.843	42.28	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2442.614	43.73	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5181.556	48.20	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12097.540	48.45	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

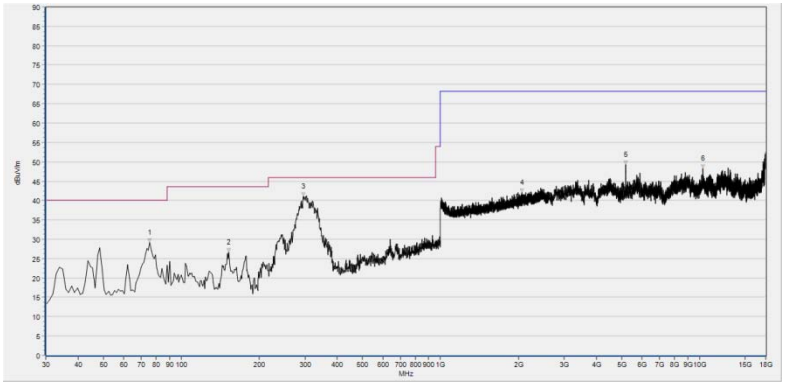
(Antenna Horizontal, 30MHz to 18GHz)



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	31.75	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
99.910	29.16	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
299.930	40.78	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1996.065	48.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2393.531	51.49	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5800.760	46.58	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

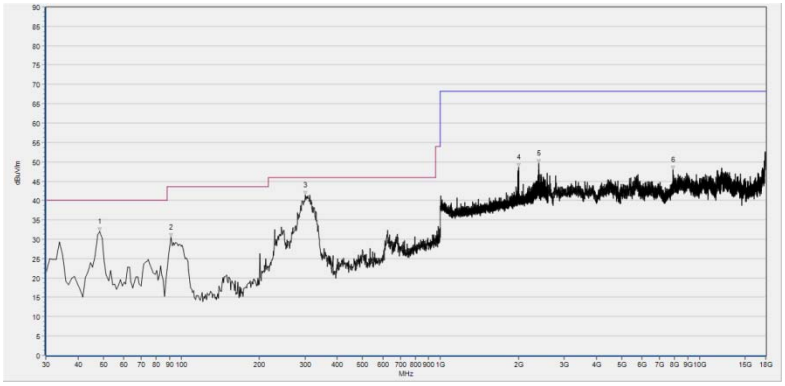
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel = 48



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
75.636	29.21	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
152.342	26.71	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
295.075	41.05	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2062.754	42.10	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5184.637	49.25	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10316.943	48.34	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

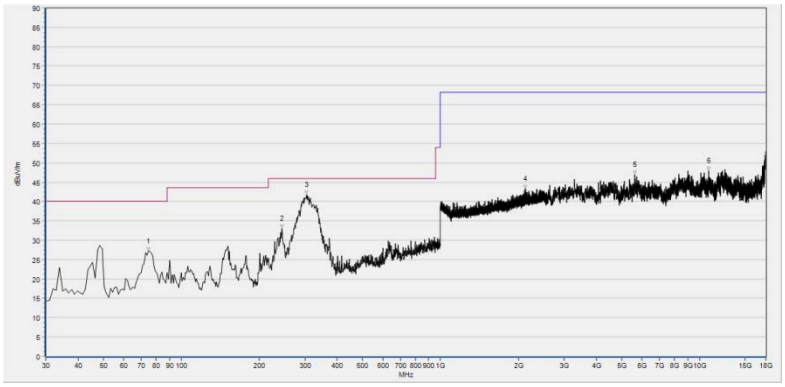
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
48.448	32.05	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
91.171	30.45	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	41.44	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1999.266	48.53	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2392.464	49.67	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
7877.095	47.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

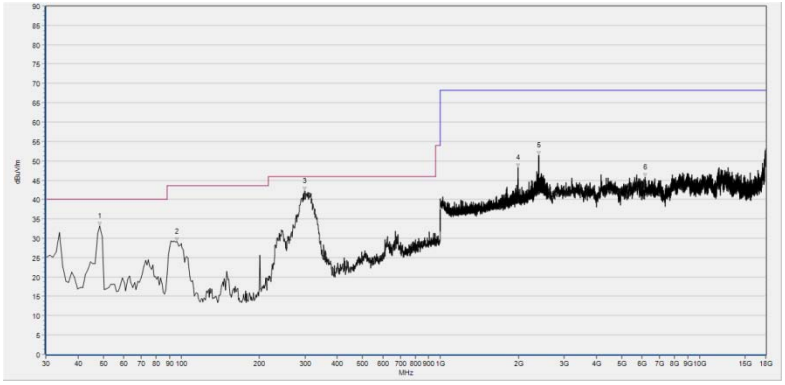
(Antenna Vertical, 30MHz to 18GHz)

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
74.665	27.07	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
244.585	32.95	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
304.785	41.70	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2127.843	43.21	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5615.923	46.93	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10843.729	47.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

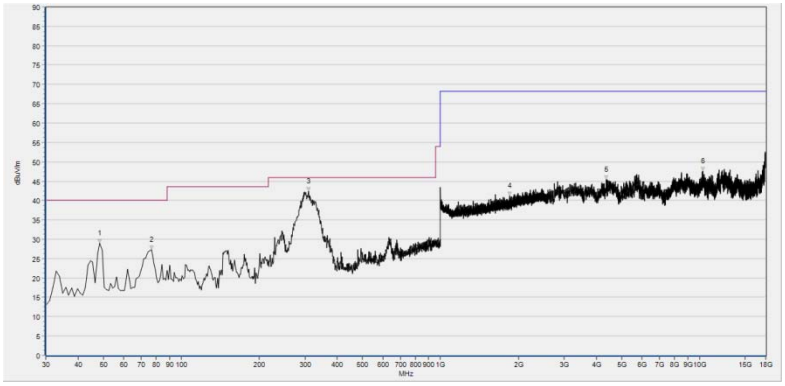
(Antenna Horizontal, 30MHz to 18GHz)



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	33.26	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
96.026	29.23	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
298.959	42.18	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1994.998	48.23	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2394.598	51.39	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
6164.273	45.71	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

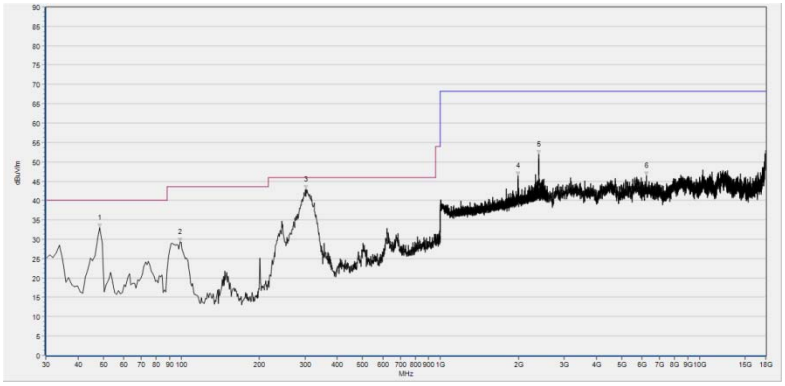
(Antenna Vertical, 30MHz to 18GHz)

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
48.448	28.97	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
76.607	27.31	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
309.640	42.46	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1849.883	41.22	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4359.032	45.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10289.218	47.59	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

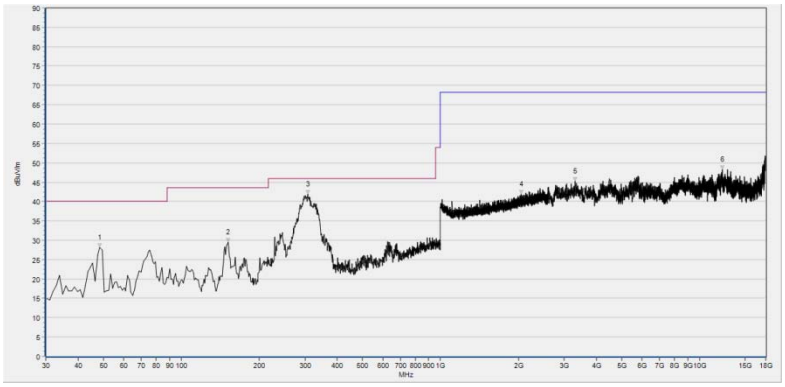
(Antenna Horizontal, 30MHz to 18GHz)



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	32.98	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
98.939	29.28	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
302.843	42.85	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1994.998	46.45	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2399.400	51.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
6222.805	46.47	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

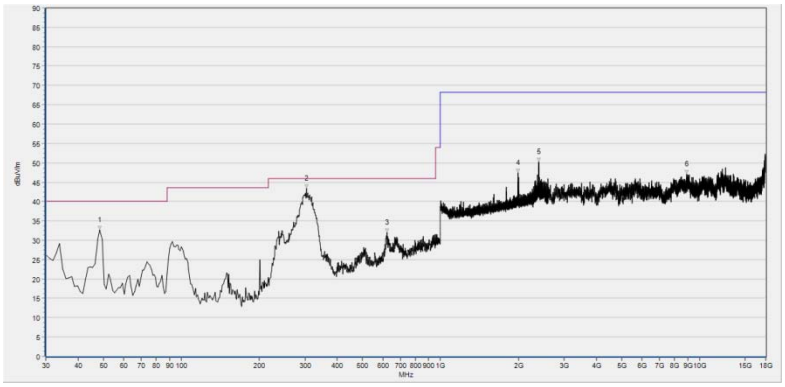
(Antenna Vertical, 30MHz to 18GHz)

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	28.13	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
151.371	29.46	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
307.698	41.89	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2055.285	41.88	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
3311.622	45.22	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12236.167	48.31	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

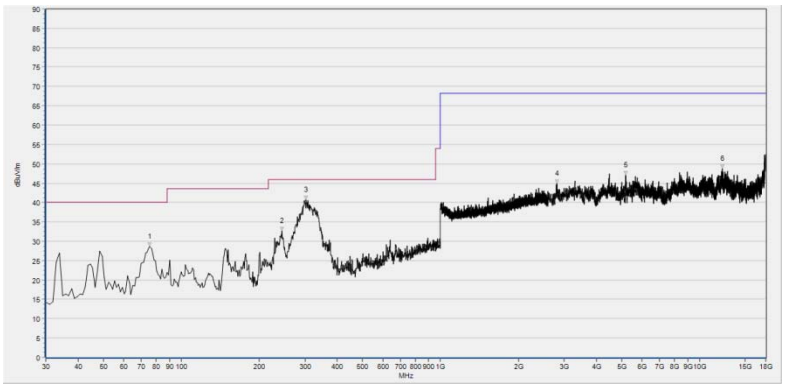


Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
48.448	32.70	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
303.814	43.42	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
621.321	32.01	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1991.264	47.39	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2392.464	50.26	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8896.779	47.07	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

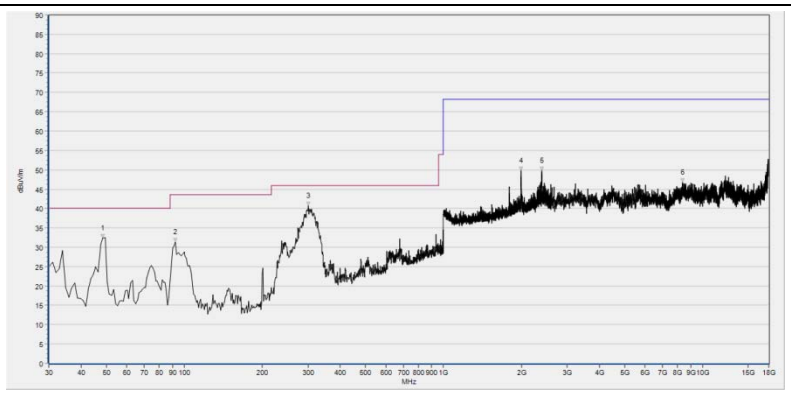
802.11n (HT40) Test mode

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
75.636	28.67	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
244.585	32.65	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
302.843	40.65	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2806.401	44.93	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5193.879	47.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12230.006	48.78	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

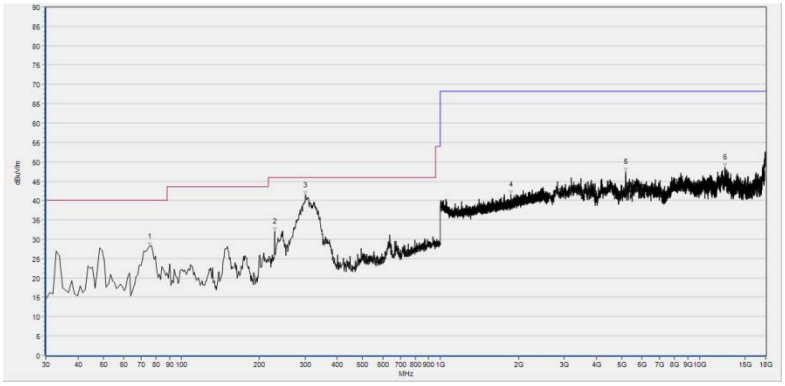
(Antenna Horizontal, 30MHz to 18GHz)



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	32.36	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	31.32	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	40.76	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1992.331	49.75	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2397.799	49.85	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8369.994	46.68	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

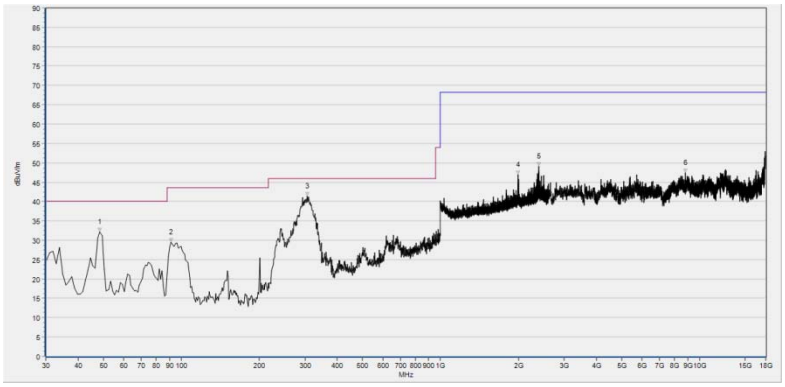
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	28.23	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
229.049	31.99	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
300.901	41.34	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1865.355	41.56	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5187.718	47.39	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12519.584	48.63	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

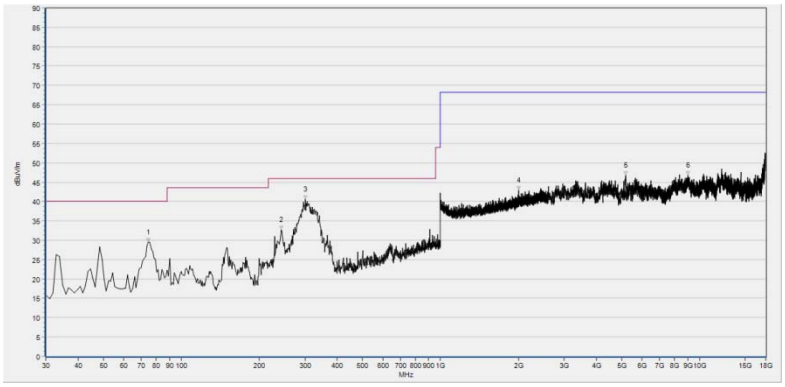
(Antenna Horizontal, 30MHz to 18GHz)



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	32.20	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
91.171	29.47	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
306.727	41.34	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1994.998	47.00	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2389.797	49.18	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8795.119	47.43	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

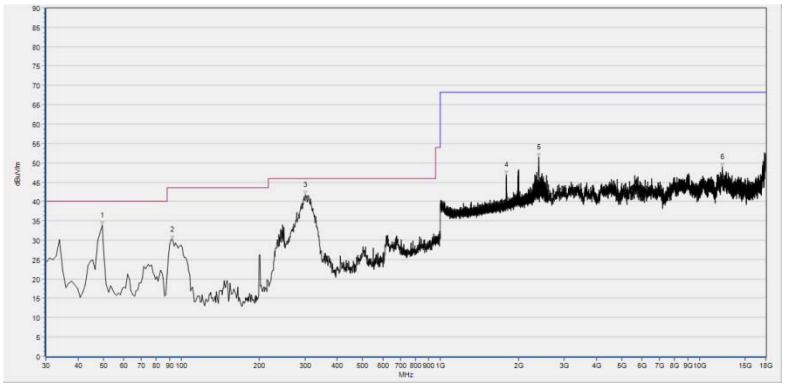
(Antenna Vertical, 30MHz to 18GHz)

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
74.665	29.55	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
242.643	32.60	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
300.901	40.57	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2004.068	42.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5181.556	46.84	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9001.520	46.71	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

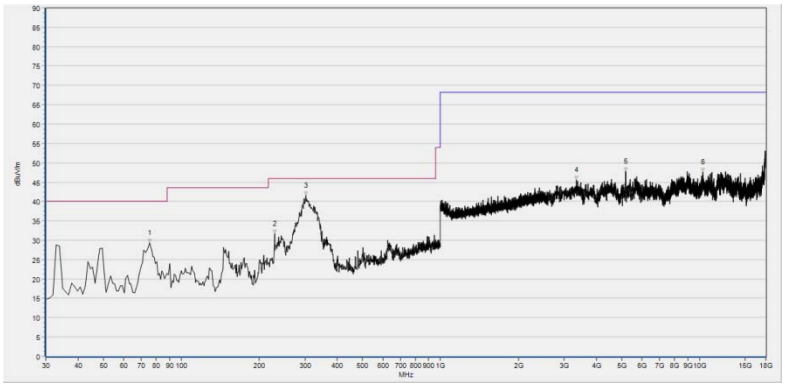
(Antenna Horizontal, 30MHz to 18GHz)



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
49.419	33.89	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	30.12	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	41.65	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1795.465	46.95	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2393.531	51.48	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12217.684	49.01	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

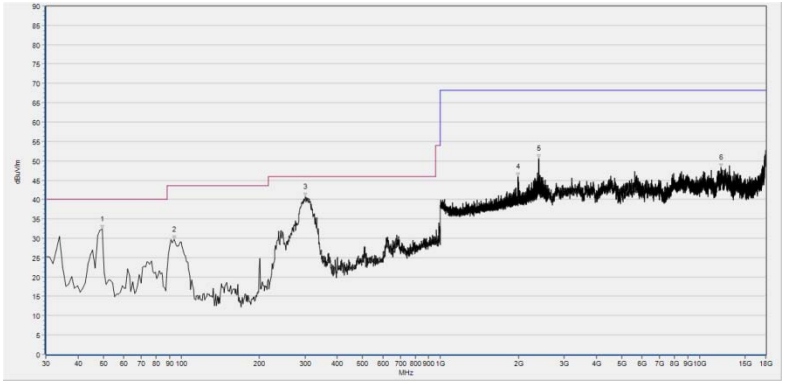
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	29.35	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
229.049	31.62	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
301.872	41.57	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3339.348	45.59	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5181.556	47.77	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10283.057	47.67	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

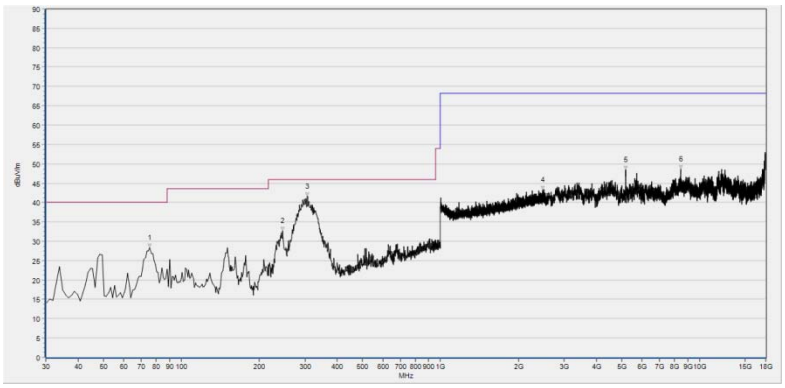


Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
49.419	32.27	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
94.084	29.68	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	40.65	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1992.331	45.94	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2391.931	50.61	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12069.814	48.24	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

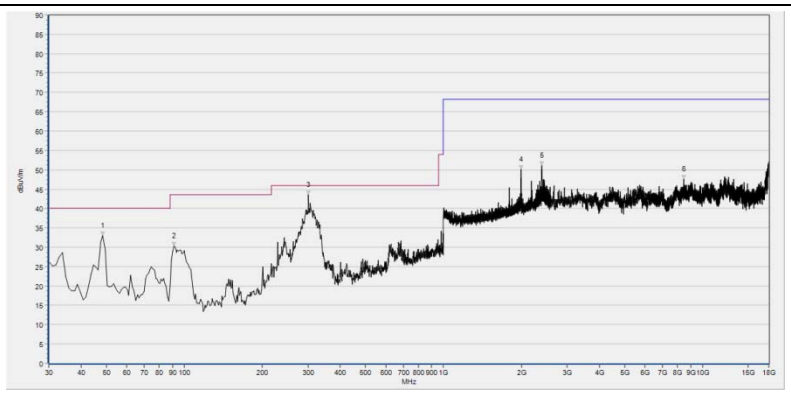
802.11ac (VHT20) Test mode

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
75.636	28.36	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
246.527	32.60	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
306.727	41.52	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2481.561	43.22	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5175.395	48.46	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
8437.768	48.61	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

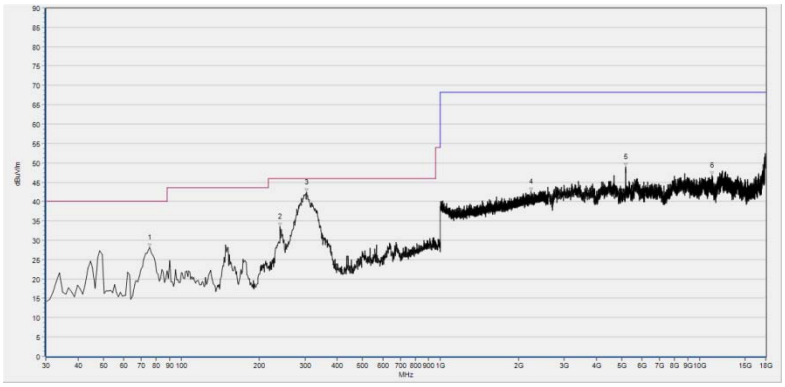
(Antenna Horizontal, 30MHz to 18GHz)



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	33.02	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
91.171	30.34	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	43.59	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1993.931	50.13	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2395.132	51.09	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8468.574	47.53	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

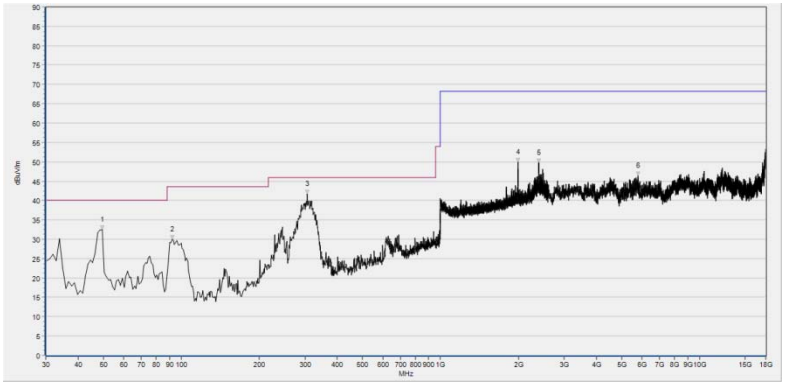
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	28.08	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
240.701	33.55	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
304.785	42.35	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2230.810	42.58	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5184.637	48.95	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11161.032	46.83	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

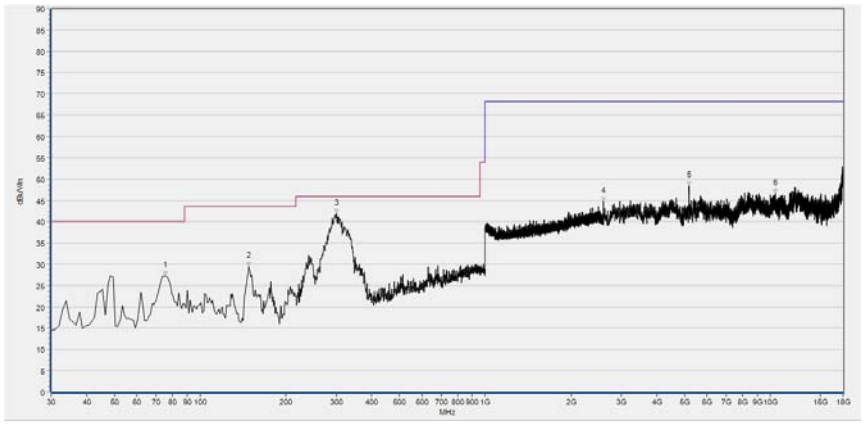
(Antenna Horizontal, 30MHz to 18GHz)



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
49.419	32.49	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	29.96	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
306.727	41.77	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1992.864	50.00	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2389.263	49.84	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5791.518	46.47	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

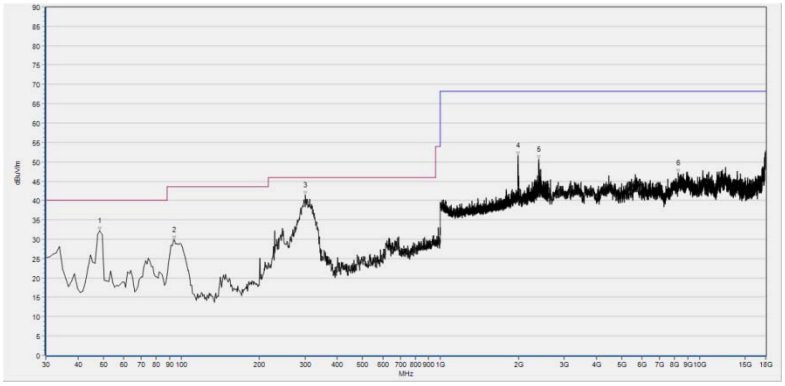
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel = 48



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
75.636	27.31	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
148.458	29.50	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
299.930	41.82	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2600.000	44.81	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5175.395	48.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10409.362	46.64	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

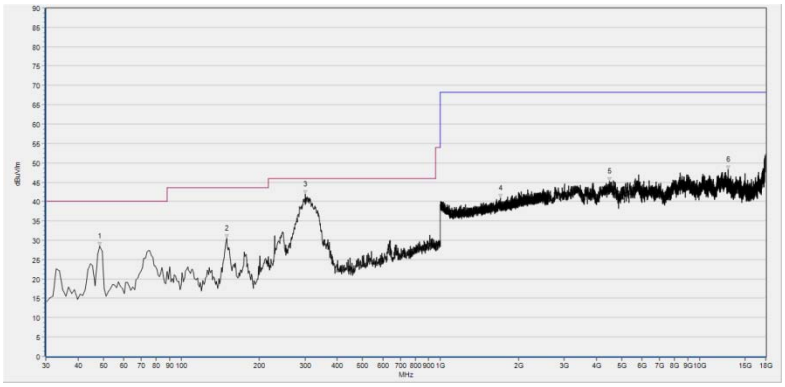
(Antenna Horizontal, 30MHz to 18GHz)



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	32.11	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
94.084	29.77	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	41.33	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1994.465	51.59	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2394.598	50.54	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8274.495	47.05	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

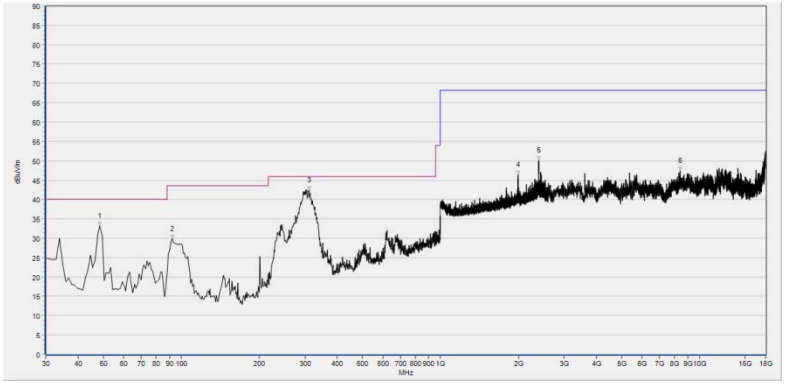
(Antenna Vertical, 30MHz to 18GHz)

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
48.448	28.48	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
149.429	30.49	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
300.901	41.89	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1705.835	40.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4500.740	45.33	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12913.903	48.29	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

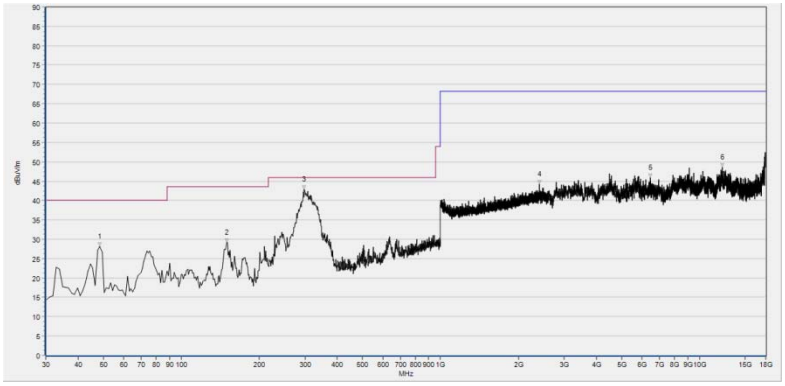
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
48.448	33.13	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
92.142	29.77	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
310.611	42.43	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1993.931	46.38	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2391.397	50.13	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
8394.639	47.47	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

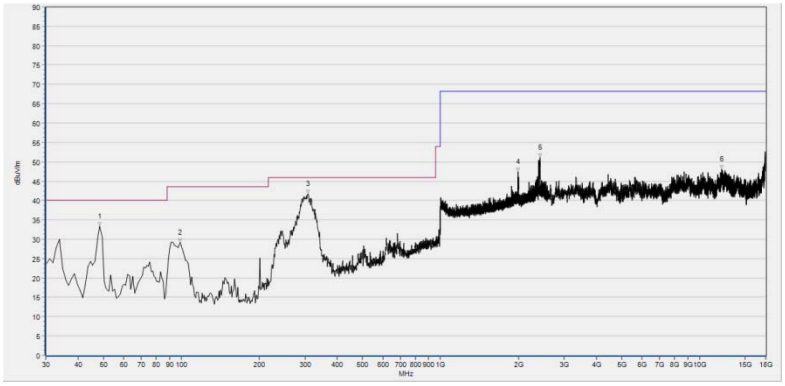
(Antenna Vertical, 30MHz to 18GHz)

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
48.448	28.18	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
149.429	29.20	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
297.988	42.98	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2411.671	44.19	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
6469.254	45.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12245.409	48.53	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

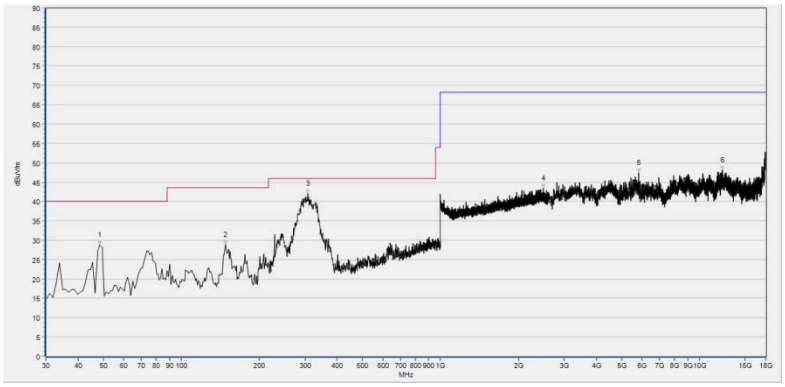
(Antenna Horizontal, 30MHz to 18GHz)



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	33.43	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
98.939	29.12	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
308.669	41.71	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1996.065	47.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2419.140	51.06	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12152.991	48.03	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

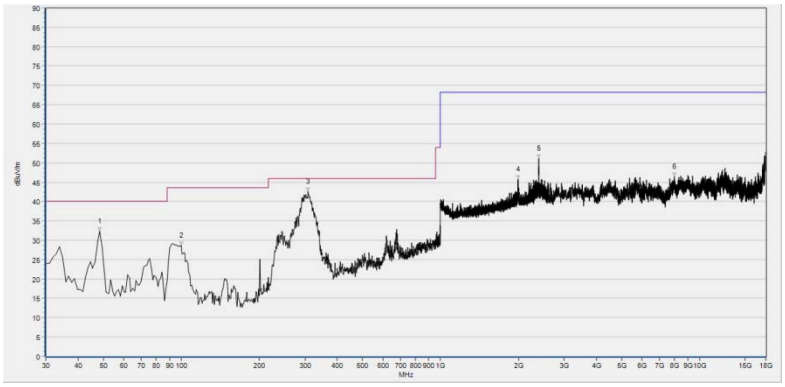
(Antenna Vertical, 30MHz to 18GHz)

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	28.78	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
148.458	28.89	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
307.698	42.12	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2486.896	43.39	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5822.324	47.36	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12217.684	48.10	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

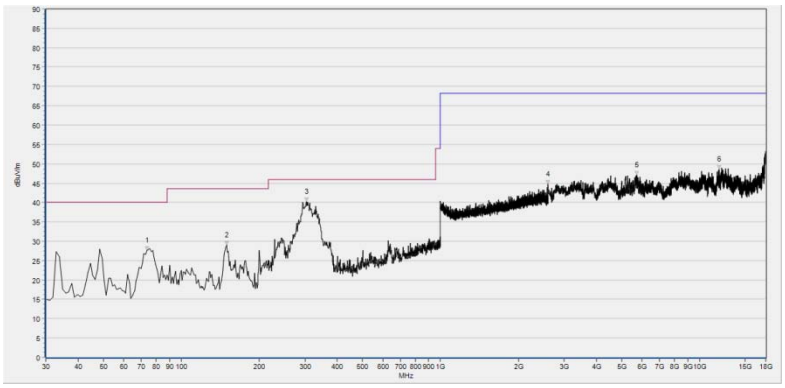


Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
48.448	32.29	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
99.910	28.68	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
308.669	42.51	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1992.864	45.79	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2389.797	51.08	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
7981.836	46.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

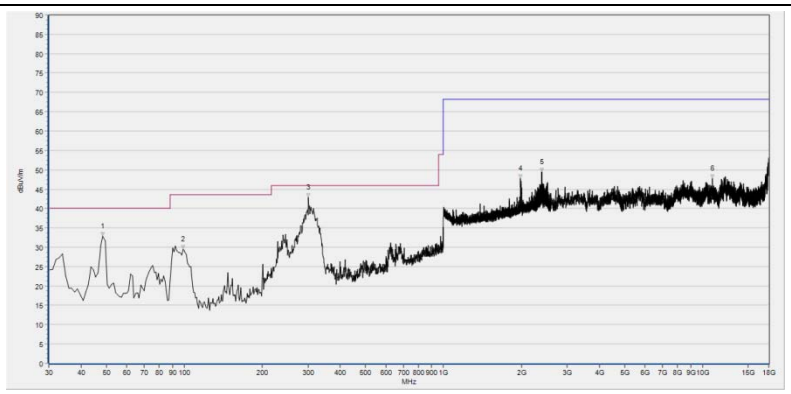
802.11ac (VHT40) Test mode

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
73.694	27.62	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
149.429	28.92	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
303.814	40.14	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2603.081	44.73	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5723.745	47.09	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11888.058	48.60	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

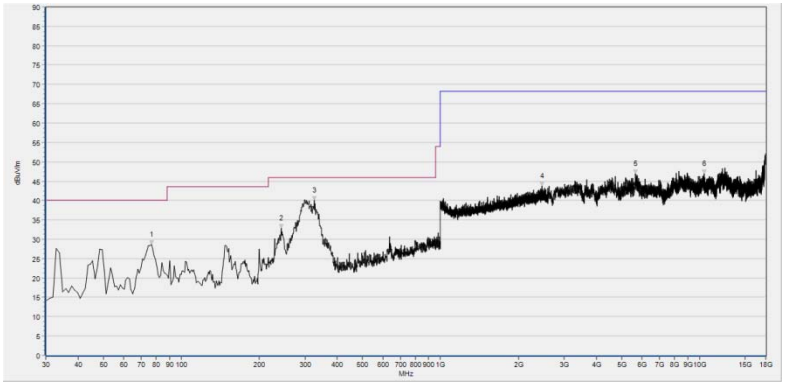
(Antenna Horizontal, 30MHz to 18GHz)



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	32.79	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
98.939	29.46	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	42.91	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1983.795	47.76	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2393.531	49.37	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10908.422	47.73	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

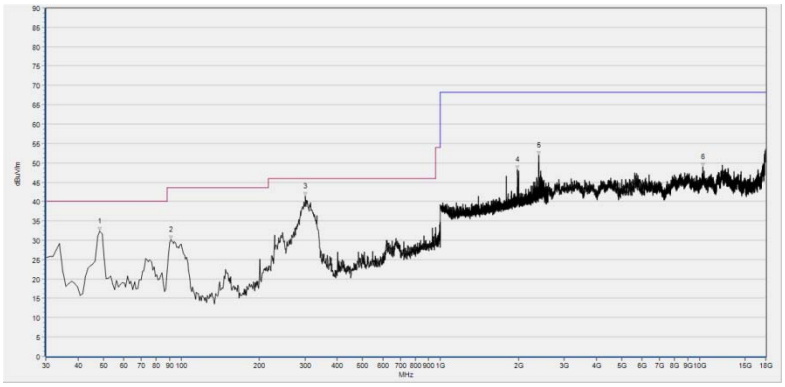
(Antenna Vertical, 30MHz to 18GHz)

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
76.607	28.67	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
242.643	32.93	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
325.175	40.13	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2470.357	43.70	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5640.568	46.88	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10406.281	46.95	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

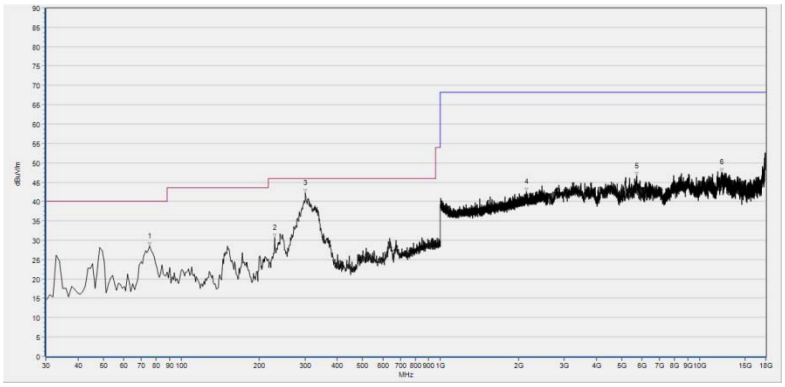
(Antenna Horizontal, 30MHz to 18GHz)



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	32.27	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
91.171	30.15	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	41.46	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1984.862	48.35	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2390.864	51.91	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10270.734	48.91	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

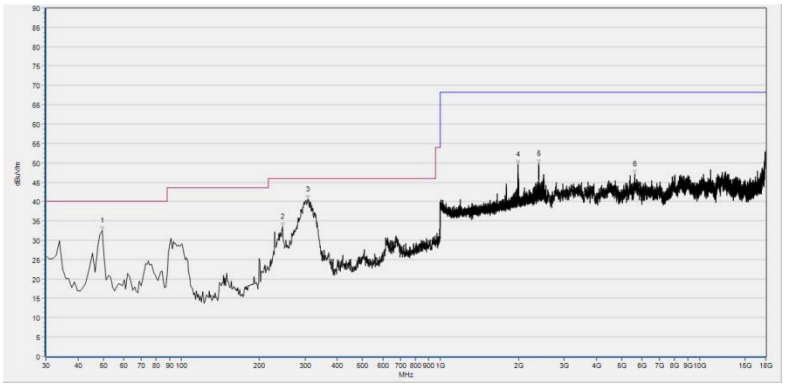
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	28.49	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
229.049	30.61	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
300.901	42.25	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2140.647	42.51	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5714.503	46.54	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12162.232	47.51	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

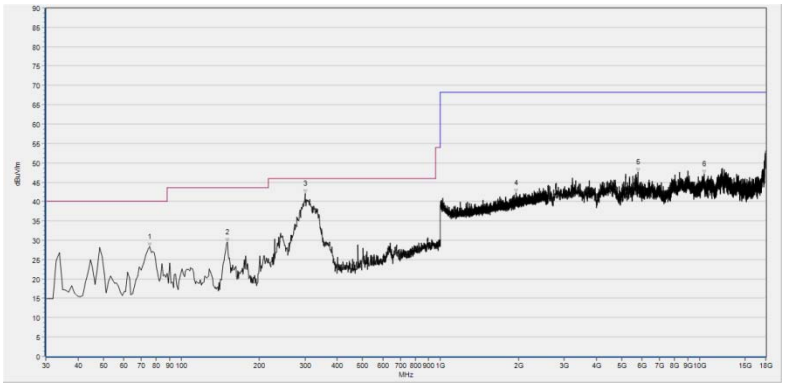
(Antenna Horizontal, 30MHz to 18GHz)



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	32.44	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
246.527	33.47	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
307.698	40.55	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1990.730	49.61	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2392.464	49.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5625.165	47.14	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

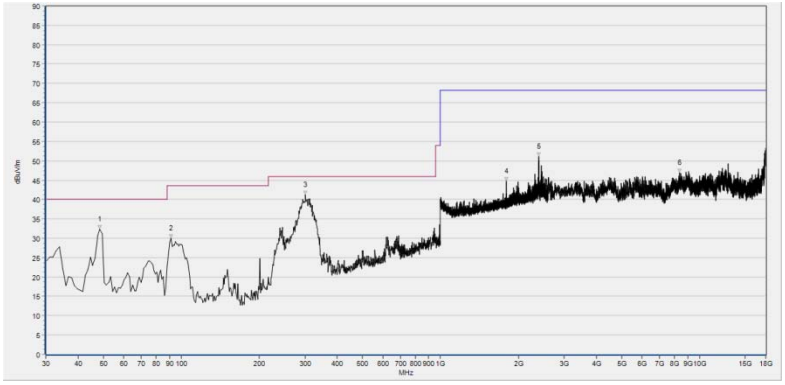
(Antenna Vertical, 30MHz to 18GHz)

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
75.636	28.38	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
150.400	29.56	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
299.930	42.15	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1960.320	42.24	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5785.357	47.67	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10418.604	47.02	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

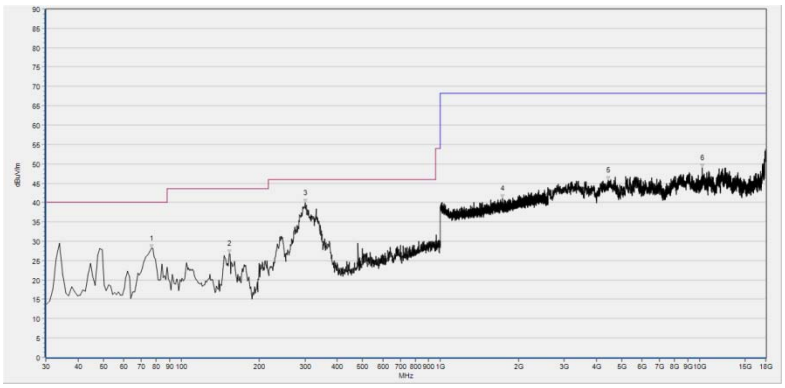


Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
48.448	32.40	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
91.171	29.95	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	41.25	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1796.532	44.69	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2394.065	51.16	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
48.448	32.40	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

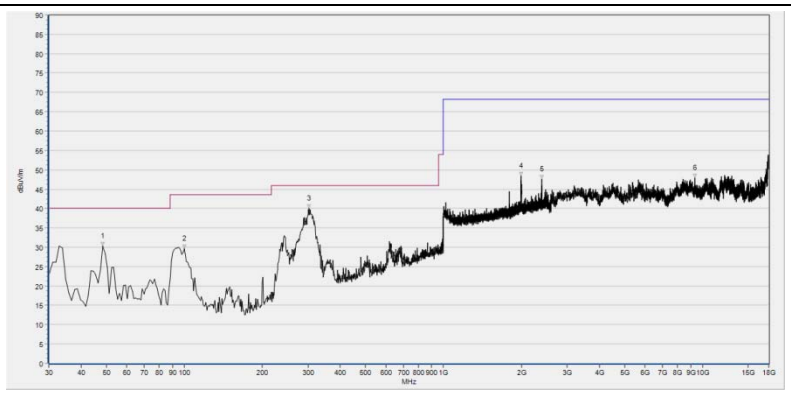
802.11ac (VHT80) Test mode

Plots 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
76.607	28.19	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
153.313	26.83	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
299.930	39.88	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1736.779	41.11	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4436.047	45.77	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10258.412	49.01	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

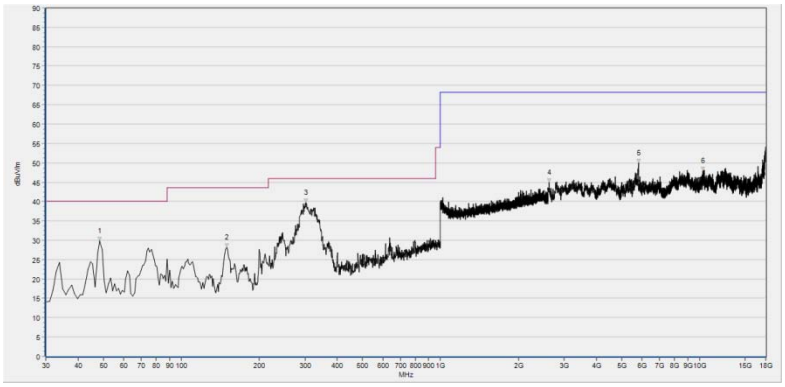
(Antenna Horizontal, 30MHz to 18GHz)



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	30.38	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
99.910	29.66	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
302.843	40.04	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1993.931	48.52	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2389.797	47.63	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9318.824	47.91	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

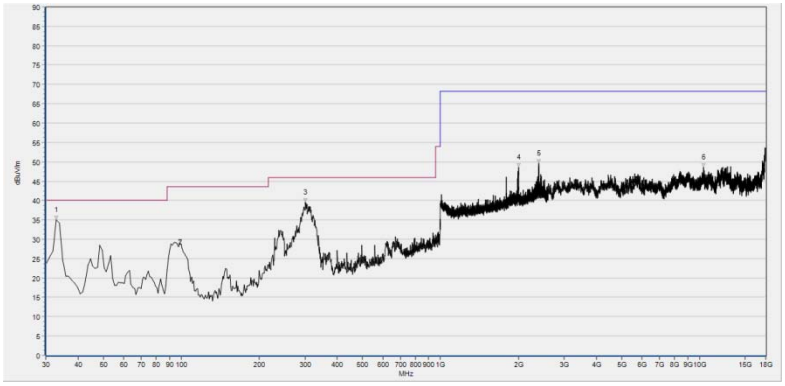
(Antenna Vertical, 30MHz to 18GHz)

Plots 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
48.448	29.75	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
149.429	28.11	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
302.843	39.80	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2627.726	44.83	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5800.760	49.96	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10283.057	47.98	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
32.913	35.05	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
98.939	28.97	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
300.901	39.61	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1998.199	48.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
2390.330	49.68	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10353.911	48.53	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

2.8. Automatically discontinue transmission requirement

2.8.1. 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

2.8.2. 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 (10Hz-44GHz)	MY54130016	N9038A	Agilent	2017.05.17	2018.05.16
Test Antenna - Bi-Log (30MHz-3GHz)	9163-519	VULB 9163	Schwarzbeck	2017.05.14	2018.05.13
Test Antenna – Horn (1G-18GHz)	01774	BBHA 9120D	Schwarzbeck	2017.09.13	2018.09.12
Test Antenna – Horn (18G-40GHz)	9170C-531	BBHA9170	Schwarzbeck	2017.09.13	2018.09.12
Test Antenna – Loop (9 kHz-30MHz)	1519-022	FMZB1519	Schwarzbeck	2017.03.07	2018.03.06
Coaxial cable (N male) (9KHz-30MHz)	CB04	EMC04	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-40GHz)	CB02	EMC02	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
18-40GHz pre-Amplifier	C00990	NSP4000-SP2	Miteq	2017.05.17	2018.05.16
Anechoic Chamber	N/A	9m*6m*6m	CRT	2017.11.19	2020.11.18

END OF REPORT