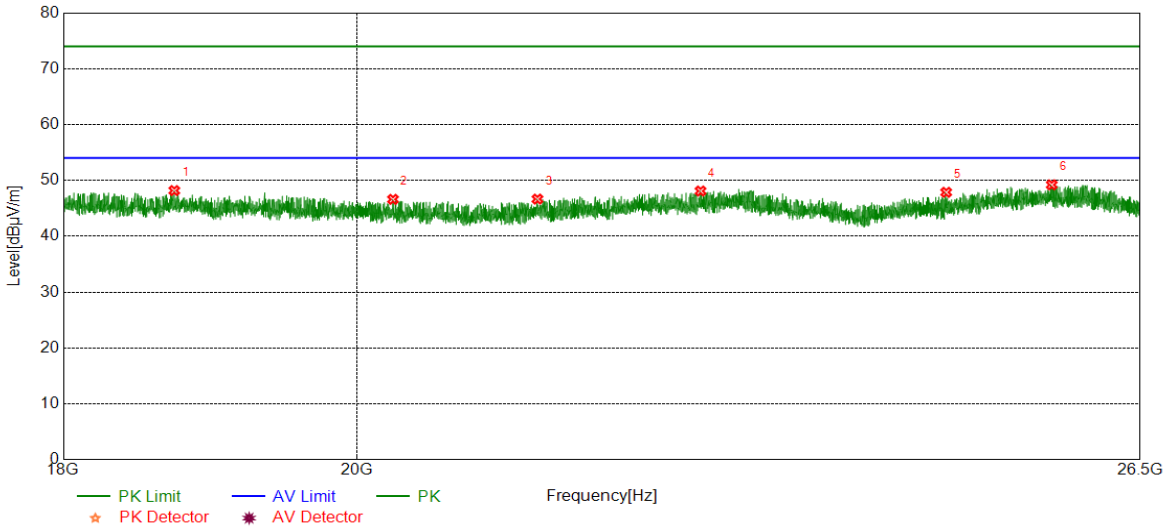
Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



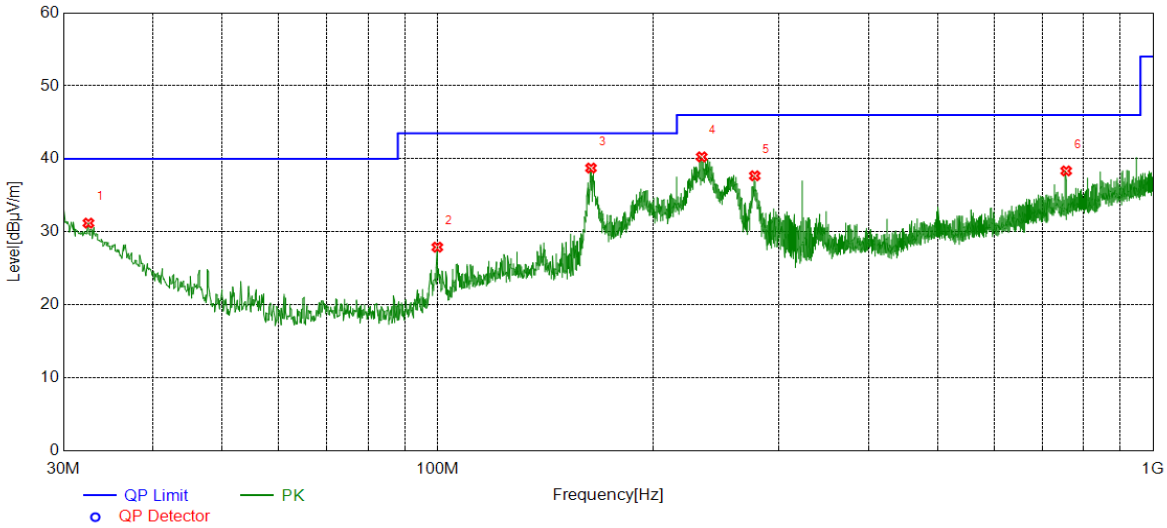
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18731.9232	49.19	-1.01	48.18	74.00	-25.82	peak
2	20262.9263	47.25	-0.64	46.61	74.00	-27.39	peak
3	21342.5343	47.32	-0.66	46.66	74.00	-27.34	peak
4	22630.4130	47.16	0.94	48.10	74.00	-25.90	peak
5	24718.2218	48.15	-0.28	47.87	74.00	-26.13	peak
6	25673.7174	48.07	1.14	49.21	74.00	-24.79	peak

Note: 1.If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.

Part IV: 30MHz~1GHz

SPURIOUS EMISSIONS 30M TO 1GHHz (WORST-CASE CONFIGURATION)

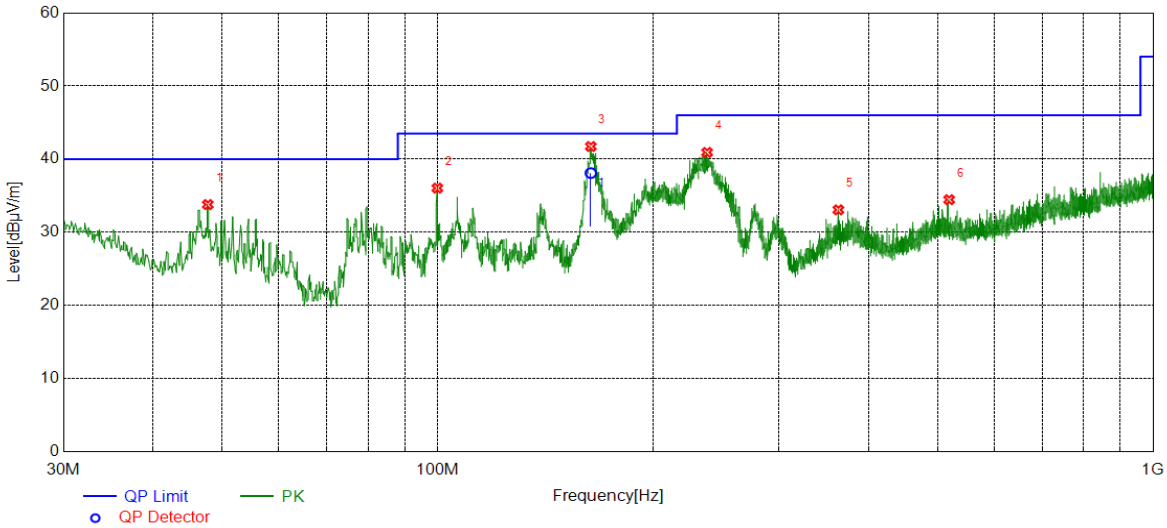
Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.5223	5.76	25.44	31.20	40.00	-8.80	peak
2	99.9440	11.02	16.88	27.90	43.50	-15.60	peak
3	163.8734	20.12	18.62	38.74	43.50	-4.76	peak
4	234.0114	21.82	18.45	40.27	46.00	-5.73	peak
5	277.5688	17.37	20.31	37.68	46.00	-8.32	peak
6	756.0206	9.08	29.27	38.35	46.00	-7.65	peak

Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.

Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



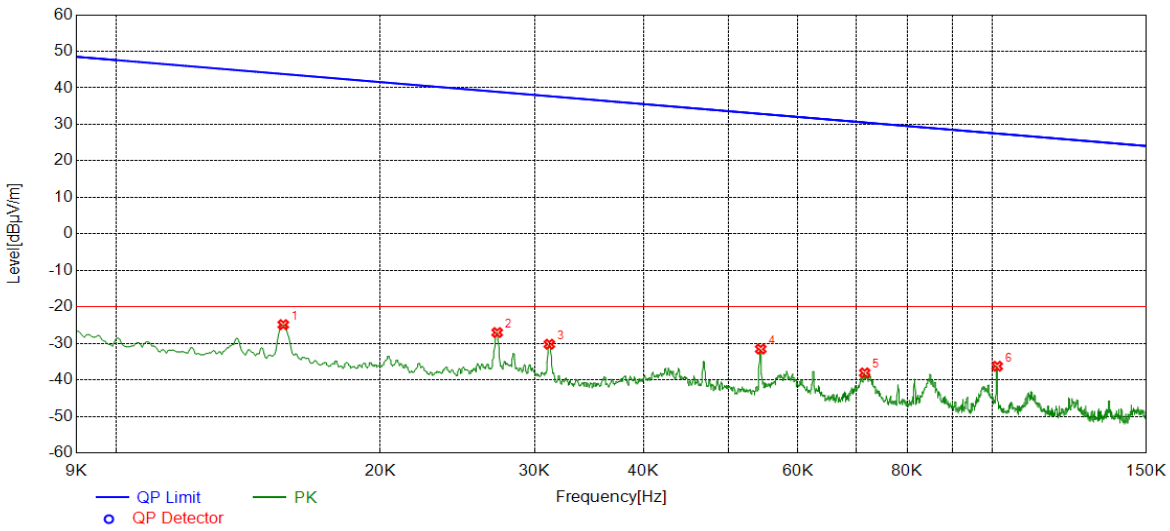
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	47.7528	17.86	15.93	33.79	40.00	-6.21	peak
2	99.9440	19.16	16.88	36.04	43.50	-7.46	peak
3	163.7764	23.11	18.62	41.73	43.50	-1.77	peak
		19.48	18.62	38.10	43.50	-5.40	QP
4	238.0858	22.20	18.72	40.92	46.00	-5.08	peak
5	363.2283	11.07	22.00	33.07	46.00	-12.93	peak
6	518.7349	8.55	25.91	34.46	46.00	-11.54	peak

Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.

Part V: 9KHz~30MHz

SPURIOUS EMISSIONS Below 30MHz (WORST CASE CONFIGURATION-FACE ON)

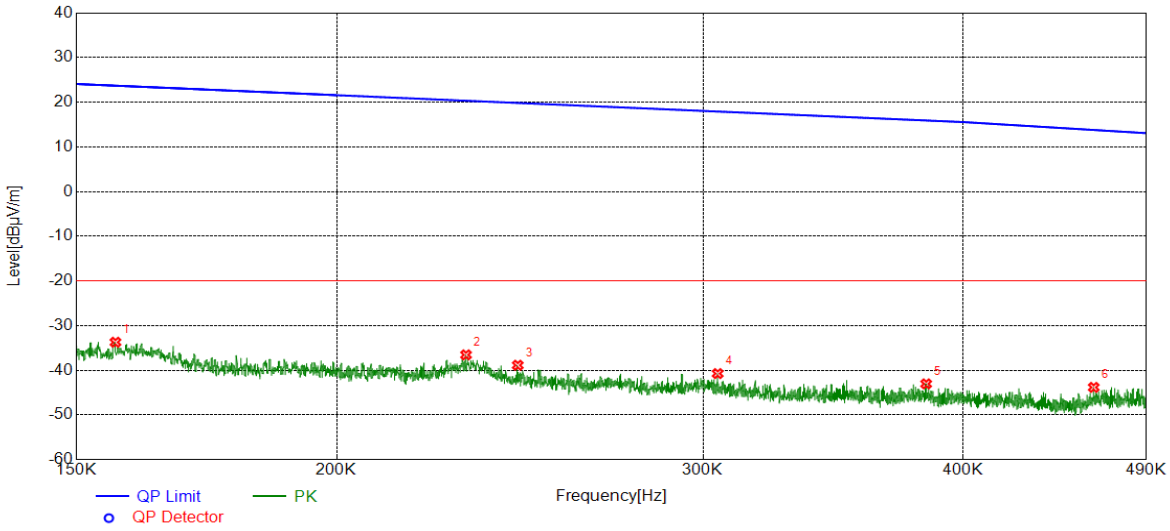
Test Mode	Channel	Frequency Range	Verdict
11B	LCH	9KHz~150KHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0155	37.01	-61.89	-24.88	43.80	-68.68	peak
2	0.0272	34.73	-61.77	-27.04	38.91	-65.95	peak
3	0.0312	31.50	-61.74	-30.24	37.71	-67.95	peak
4	0.0544	30.19	-61.75	-31.56	32.89	-64.45	peak
5	0.0715	23.71	-61.80	-38.09	30.52	-68.61	peak
6	0.1013	25.55	-61.82	-36.27	27.49	-63.76	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. Result 300m= Result 3m-80 dBuV/m
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
4. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report

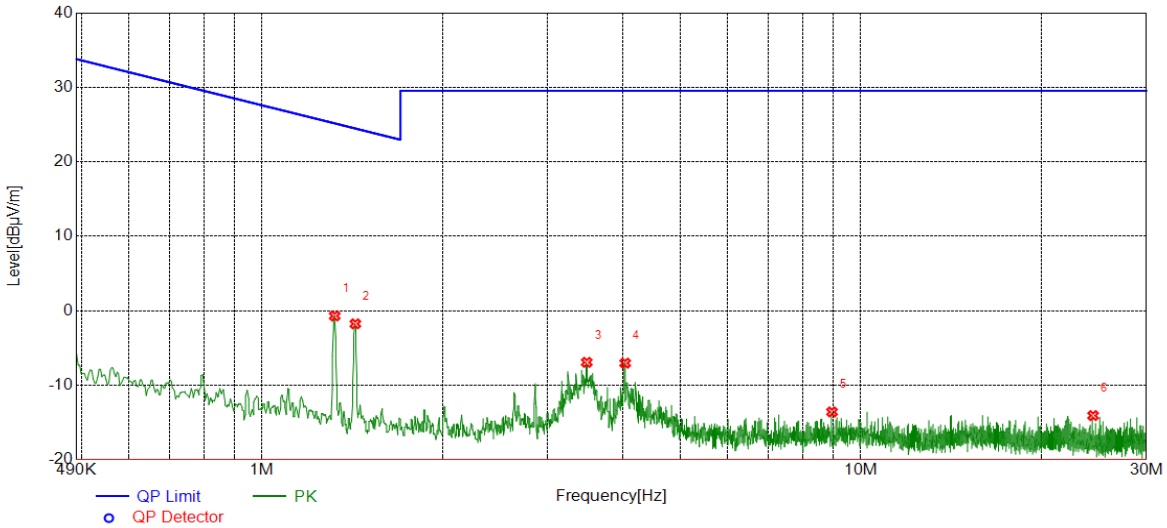
Test Mode	Channel	Frequency Range	Verdict
11B	LCH	150KHz~490Hz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1566	28.12	-61.84	-33.72	23.71	-57.43	peak
2	0.2308	25.33	-61.87	-36.54	20.34	-56.88	peak
3	0.2444	23.01	-61.88	-38.87	19.84	-58.71	peak
4	0.3049	21.17	-61.90	-40.73	17.92	-58.65	peak
5	0.3840	18.87	-61.90	-43.03	15.91	-58.94	peak
6	0.4622	18.07	-61.89	-43.82	13.79	-57.61	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. Result 300m= Result 3m-80 dBuV/m
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
4. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report

Test Mode	Channel	Frequency Range	Verdict
11B	LCH	490KHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1.3223	21.14	-21.84	-0.70	25.18	-25.88	peak
2	1.4315	20.08	-21.84	-1.76	24.49	-26.25	peak
3	3.4856	14.82	-21.75	-6.93	29.54	-36.47	peak
4	4.0404	14.70	-21.74	-7.04	29.54	-36.58	peak
5	8.9514	8.04	-21.63	-13.59	29.54	-43.13	peak
6	24.4309	7.50	-21.58	-14.08	29.54	-43.62	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. Result 30m= Result 3m-40 dBuV/m
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
4. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report

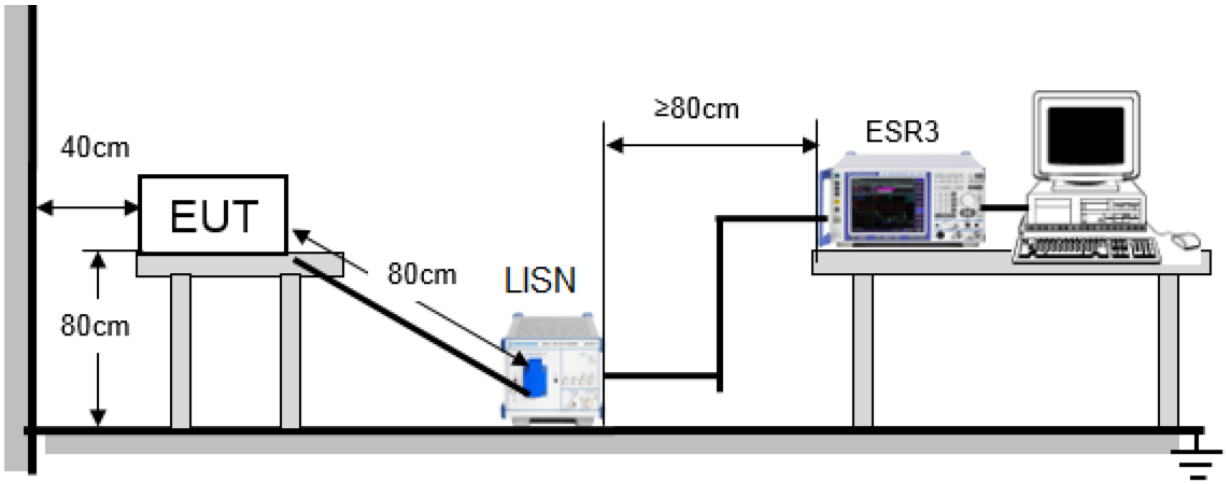
8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to FCC §15.207 (a)

FREQUENCY (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST SETUP AND PROCEDURE

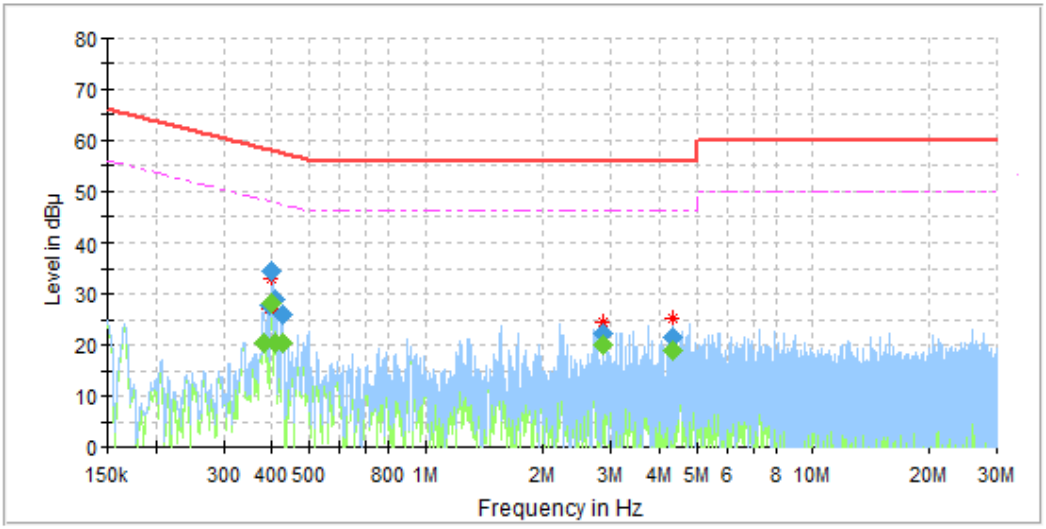


The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST RESULTS (WORST CASE CONFIGURATION)

For L Line:

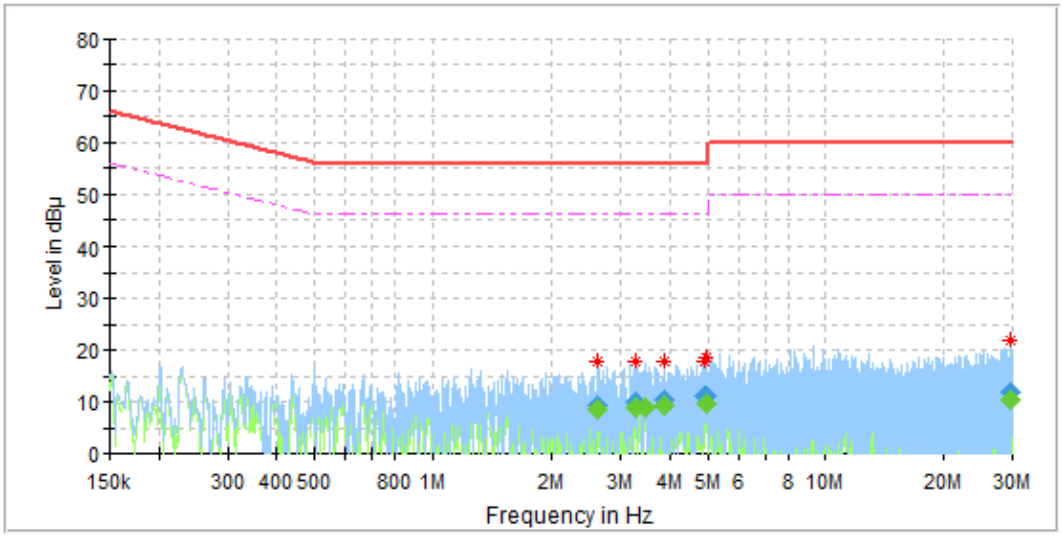


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.379845	---	20.39	48.28	27.89	1000.0	9.000	L1	OFF	9.6
0.393278	27.86	---	57.99	30.14	1000.0	9.000	L1	OFF	9.7
0.400740	---	28.27	47.84	19.57	1000.0	9.000	L1	OFF	9.8
0.400740	34.48	---	57.84	23.36	1000.0	9.000	L1	OFF	9.8
0.408203	---	20.45	47.69	27.24	1000.0	9.000	L1	OFF	9.8
0.408203	28.97	---	57.69	28.71	1000.0	9.000	L1	OFF	9.8
0.424620	---	20.55	47.36	26.81	1000.0	9.000	L1	OFF	9.8
0.426113	25.93	---	57.33	31.39	1000.0	9.000	L1	OFF	9.8
2.854410	22.35	---	56.00	33.65	1000.0	9.000	L1	OFF	9.7
2.854410	---	19.98	46.00	26.02	1000.0	9.000	L1	OFF	9.7
4.326015	---	19.00	46.00	27.00	1000.0	9.000	L1	OFF	9.8
4.326015	21.41	---	56.00	34.59	1000.0	9.000	L1	OFF	9.8

Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the LCH of 11B mode which is the worst case, so only the worst case is included in this test report.

For N Line:



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
2.615610	---	8.42	46.00	37.58	1000.0	9.000	N	OFF	9.6
2.615610	9.43	---	56.00	46.57	1000.0	9.000	N	OFF	9.6
3.284250	---	8.91	46.00	37.09	1000.0	9.000	N	OFF	9.6
3.284250	10.16	---	56.00	45.84	1000.0	9.000	N	OFF	9.6
3.458873	---	8.97	46.00	37.03	1000.0	9.000	N	OFF	9.6
3.867818	10.45	---	56.00	45.55	1000.0	9.000	N	OFF	9.5
3.867818	---	9.14	46.00	36.86	1000.0	9.000	N	OFF	9.5
4.915553	11.10	---	56.00	44.90	1000.0	9.000	N	OFF	9.7
4.933463	11.01	---	56.00	44.99	1000.0	9.000	N	OFF	9.7
4.933463	---	9.76	46.00	36.24	1000.0	9.000	N	OFF	9.7
29.653740	---	10.43	50.00	39.57	1000.0	9.000	N	OFF	9.7
29.653740	11.92	---	60.00	48.08	1000.0	9.000	N	OFF	9.7

Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the HCH of 11B mode swhich is the worst case, so only the worst case is included in this test report.

9. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §15.203
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

ANTENNA CONNECTOR

EUT has a EUT with one PCB antenna.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi

END OF REPORT