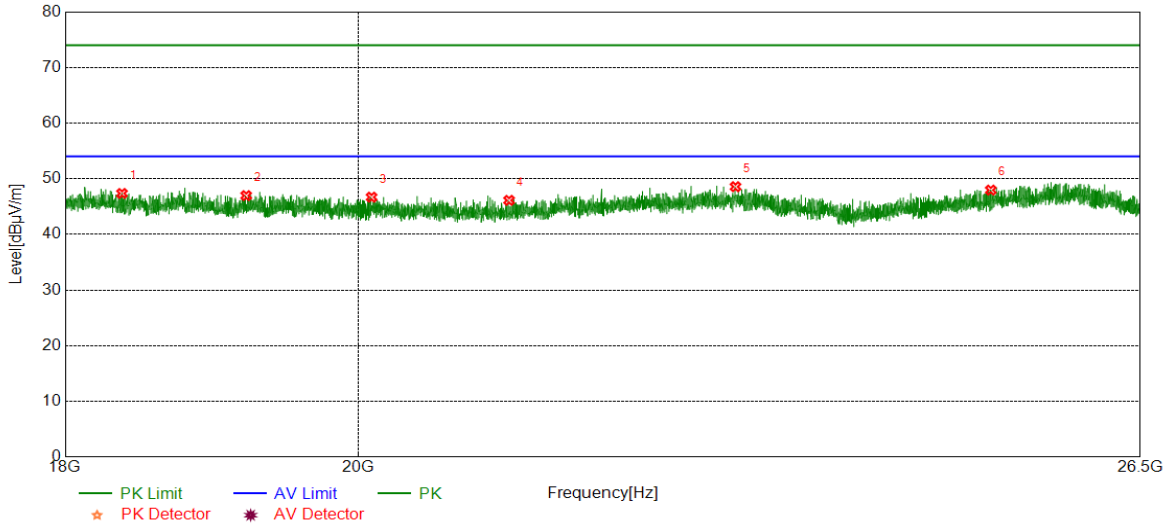




Part III: 18GHz~26.5GHz

SPURIOUS EMISSIONS 18GHz TO 26.5GHz (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS

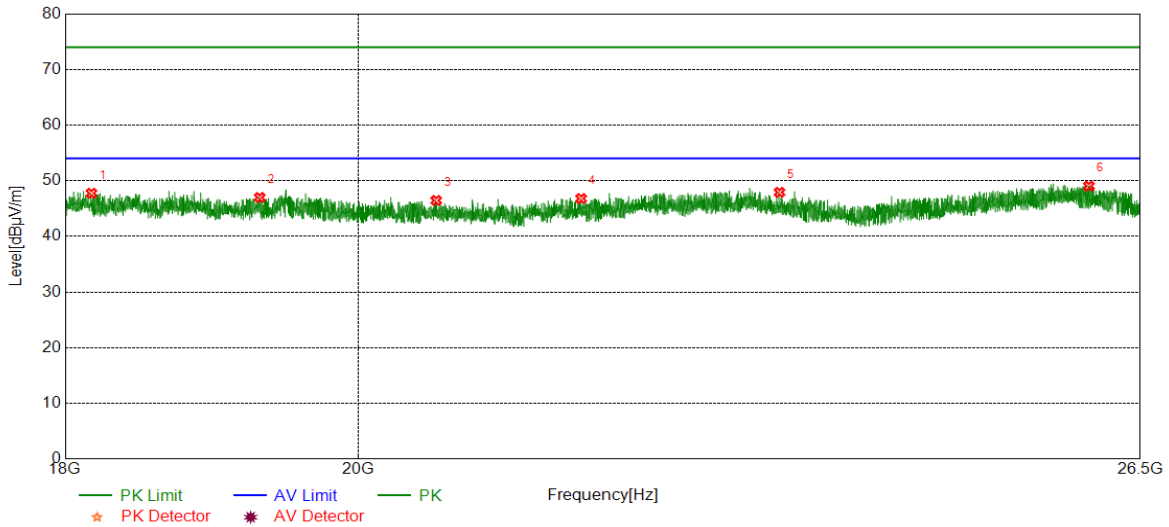


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18371.4871	48.34	-0.98	47.36	74.00	-26.64	peak
2	19211.3711	47.92	-0.95	46.97	74.00	-27.03	peak
3	20098.0098	47.23	-0.54	46.69	74.00	-27.31	peak
4	21117.2617	47.02	-0.90	46.12	74.00	-27.88	peak
5	22910.0910	47.41	1.16	48.57	74.00	-25.43	peak
6	25114.3614	47.75	0.21	47.96	74.00	-26.04	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.



Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18170.8671	48.82	-1.07	47.75	74.00	-26.25	peak
2	19304.8805	47.87	-0.88	46.99	74.00	-27.01	peak
3	20570.6571	47.21	-0.75	46.46	74.00	-27.54	peak
4	21672.3672	47.07	-0.27	46.80	74.00	-27.20	peak
5	23275.6276	47.41	0.51	47.92	74.00	-26.08	peak
6	26017.1517	47.41	1.63	49.04	74.00	-24.96	peak

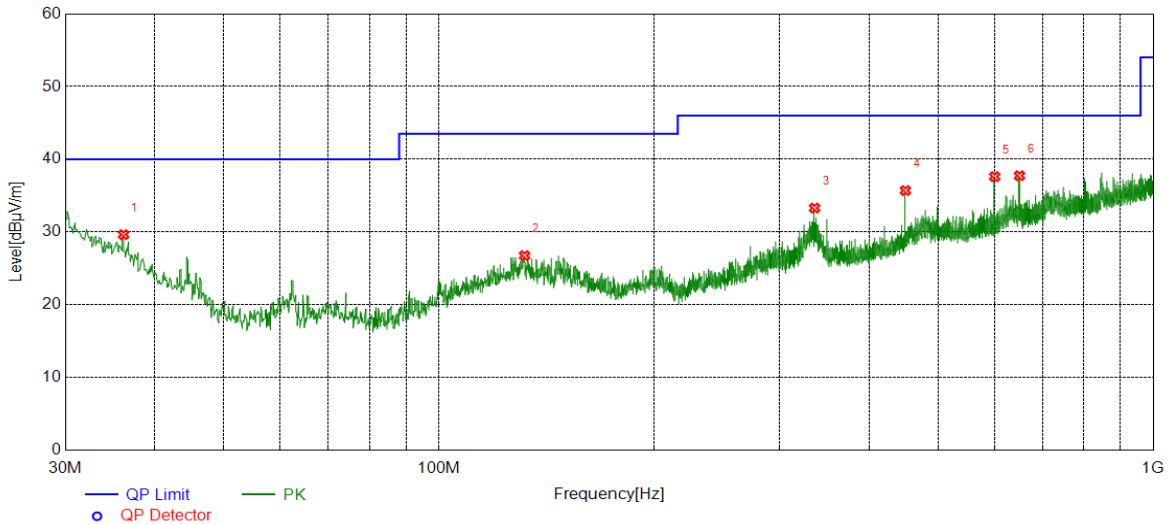
Note: 1.If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
 3. Measurement = Reading Level + Correct Factor.



Part IV: 30MHz~1GHz

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

Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS

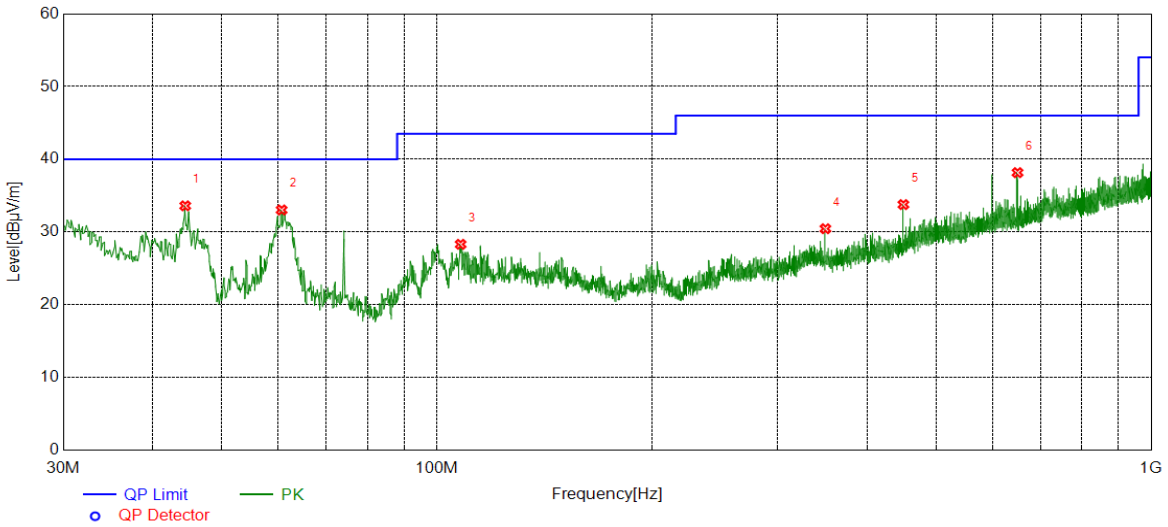


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	36.2086	6.54	23.10	29.64	40.00	-10.36	peak
2	131.8602	6.59	20.16	26.75	43.50	-16.75	peak
3	335.7746	11.95	21.34	33.29	46.00	-12.71	peak
4	449.9550	11.36	24.34	35.70	46.00	-10.30	peak
5	600.0290	11.02	26.59	37.61	46.00	-8.39	peak
6	649.9890	10.20	27.54	37.74	46.00	-8.26	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	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	44.4544	15.66	17.94	33.60	40.00	-6.40	peak
2	60.6551	18.96	14.07	33.03	40.00	-6.97	peak
3	107.9958	10.03	18.28	28.31	43.50	-15.19	peak
4	349.9380	8.75	21.70	30.45	46.00	-15.55	peak
5	449.9550	9.43	24.34	33.77	46.00	-12.23	peak
6	649.9890	10.62	27.54	38.16	46.00	-7.84	peak

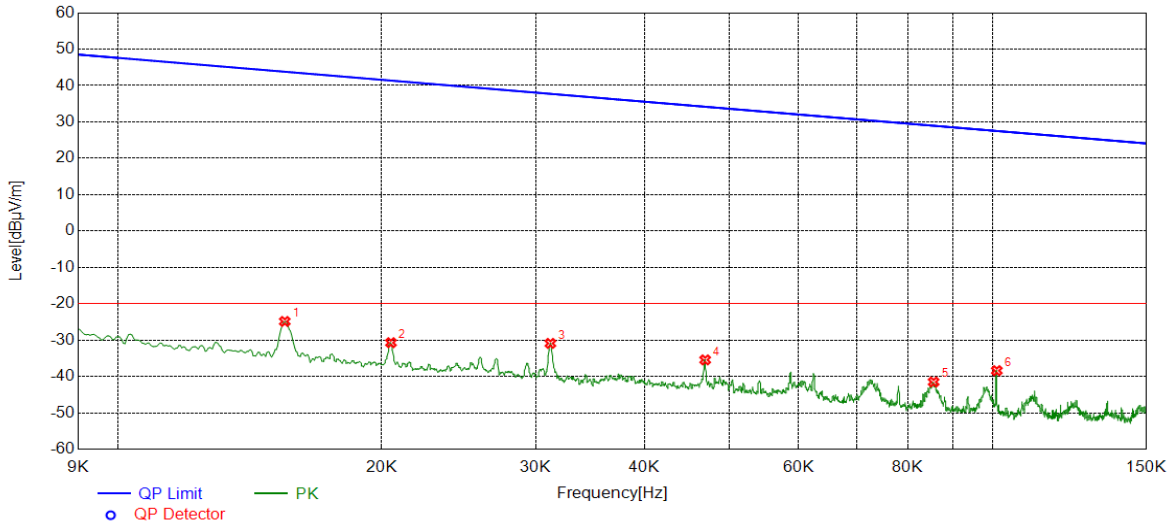
Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
 2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
 3. Measurement = Reading Level + Correct Factor.



Part V: 9KHz~30MHz

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

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

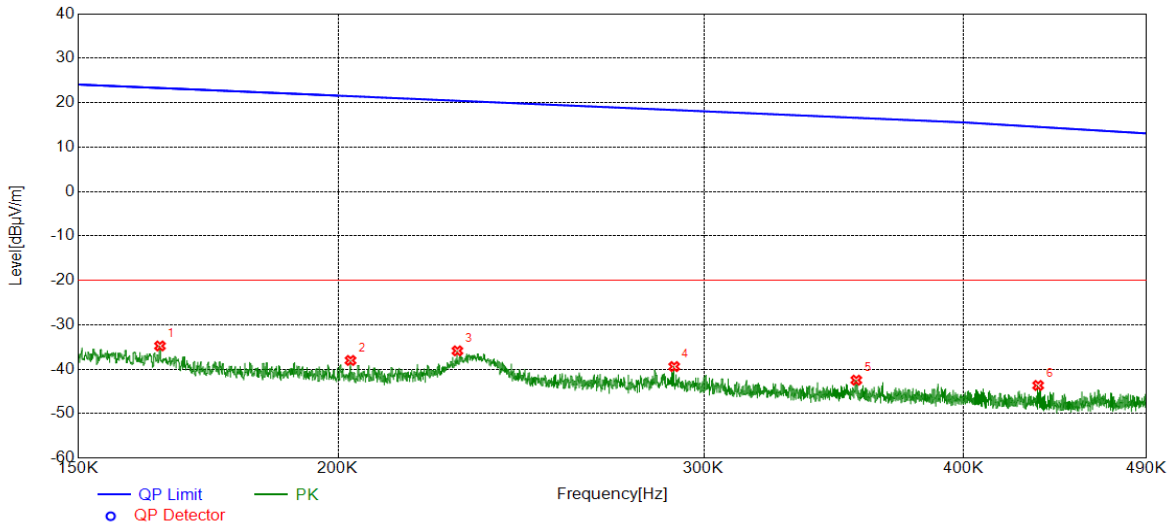


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0155	37.02	-61.89	-24.87	43.77	-68.64	peak
2	0.0205	31.12	-61.84	-30.72	41.38	-72.10	peak
3	0.0312	30.84	-61.74	-30.90	37.71	-68.61	peak
4	0.0469	26.30	-61.74	-35.44	34.18	-69.62	peak
5	0.0856	20.31	-61.83	-41.52	28.95	-70.47	peak
6	0.1011	23.42	-61.82	-38.40	27.51	-65.91	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	HCH	150KHz~490Hz	PASS

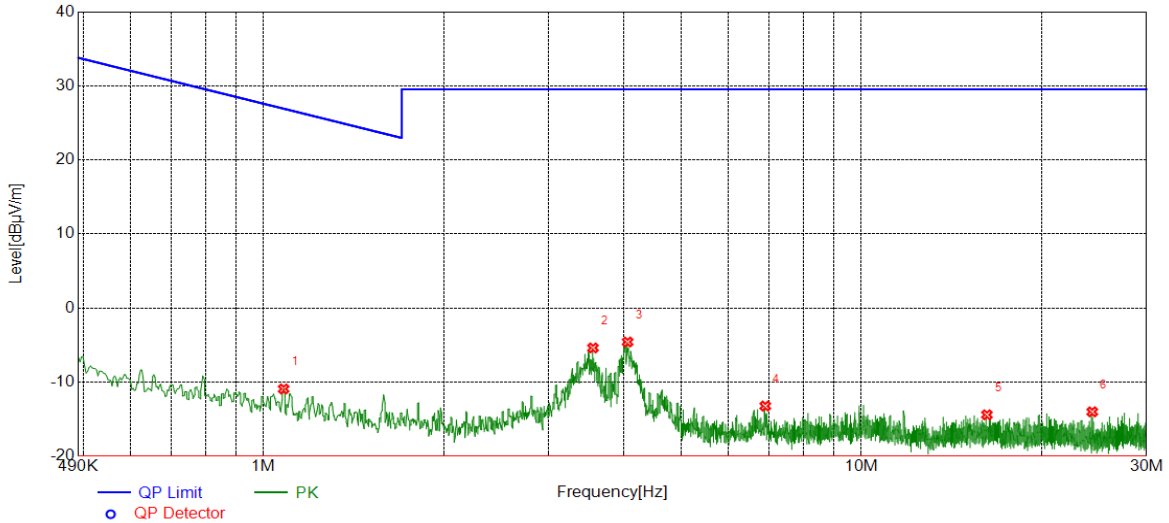


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1642	27.09	-61.85	-34.76	23.30	-58.06	peak
2	0.2028	23.84	-61.86	-38.02	21.46	-59.48	peak
3	0.2283	26.01	-61.87	-35.86	20.43	-56.29	peak
4	0.2903	22.50	-61.90	-39.40	18.35	-57.75	peak
5	0.3552	19.45	-61.90	-42.45	16.59	-59.04	peak
6	0.4345	18.25	-61.90	-43.65	14.55	-58.20	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	HCH	490KHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1.0803	10.92	-21.85	-10.93	26.94	-37.87	peak
2	3.5564	16.36	-21.75	-5.39	29.54	-34.93	peak
3	4.0640	17.15	-21.74	-4.59	29.54	-34.13	peak
4	6.9061	8.46	-21.70	-13.24	29.54	-42.78	peak
5	16.2175	7.14	-21.56	-14.42	29.54	-43.96	peak
6	24.3306	7.56	-21.58	-14.02	29.54	-43.56	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

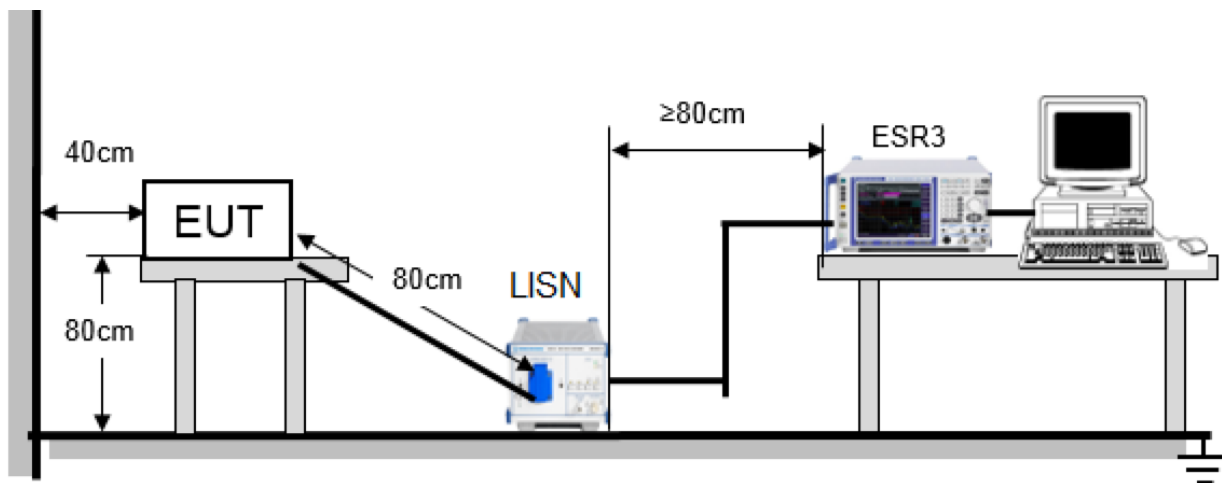
8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to FCC §15.207 (a), ISED RSS-Gen Clause 8.8

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



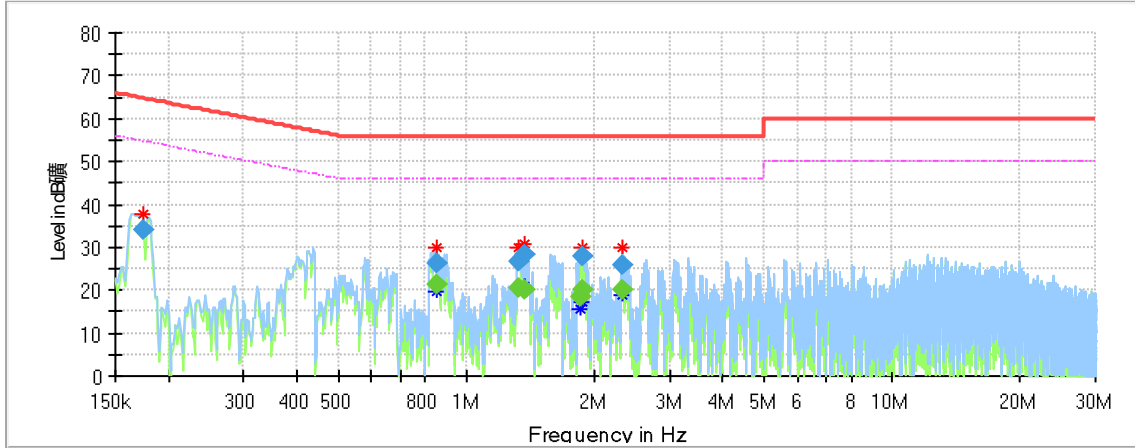
The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) 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:



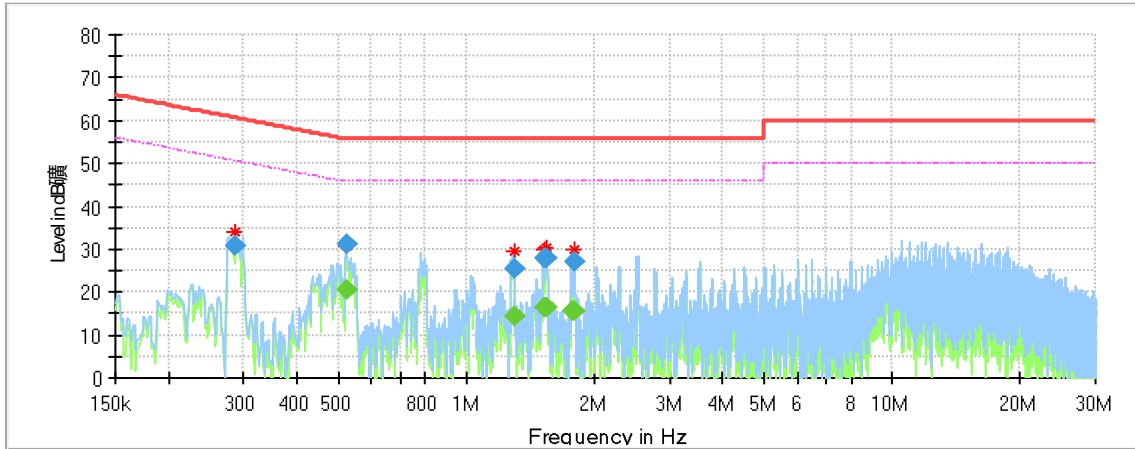
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.173880	33.99	---	64.77	30.79	1000.0	9.000	L1	OFF	9.5
0.851475	---	21.46	46.00	24.54	1000.0	9.000	L1	OFF	9.6
0.851475	26.22	---	56.00	29.78	1000.0	9.000	L1	OFF	9.6
1.329075	---	20.57	46.00	25.43	1000.0	9.000	L1	OFF	9.7
1.329075	26.49	---	56.00	29.51	1000.0	9.000	L1	OFF	9.7
1.366388	---	20.02	46.00	25.98	1000.0	9.000	L1	OFF	9.7
1.366388	28.36	---	56.00	27.64	1000.0	9.000	L1	OFF	9.7
1.851450	---	18.65	46.00	27.35	1000.0	9.000	L1	OFF	9.6
1.876823	27.84	---	56.00	28.16	1000.0	9.000	L1	OFF	9.6
1.876823	---	19.95	46.00	26.05	1000.0	9.000	L1	OFF	9.6
2.315618	---	20.02	46.00	25.98	1000.0	9.000	L1	OFF	9.7
2.315618	25.84	---	56.00	30.16	1000.0	9.000	L1	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 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)
0.287310	30.64	---	60.60	29.96	1000.0	9.000	N	OFF	9.6
0.523125	---	20.36	46.00	25.64	1000.0	9.000	N	OFF	9.6
0.523125	31.26	---	56.00	24.74	1000.0	9.000	N	OFF	9.6
1.296240	---	14.34	46.00	31.66	1000.0	9.000	N	OFF	9.6
1.296240	25.23	---	56.00	30.77	1000.0	9.000	N	OFF	9.6
1.518623	---	16.42	46.00	29.58	1000.0	9.000	N	OFF	9.5
1.518623	28.05	---	56.00	27.95	1000.0	9.000	N	OFF	9.5
1.536533	---	16.23	46.00	29.77	1000.0	9.000	N	OFF	9.5
1.538025	28.00	---	56.00	28.00	1000.0	9.000	N	OFF	9.5
1.778318	---	15.46	46.00	30.54	1000.0	9.000	N	OFF	9.5
1.799213	---	15.71	46.00	30.29	1000.0	9.000	N	OFF	9.5
1.799213	27.01	---	56.00	28.99	1000.0	9.000	N	OFF	9.5

- 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 which 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 Monopole Antenna.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi

END OF REPORT