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



No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Result	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.1782	42.57	-61.31	-18.74	22.59	-70.24	-28.91	-41.33	peak
2	0.2061	39.99	-61.17	-21.18	21.32	-72.68	-30.18	-42.50	peak
3	0.2637	38.44	-60.93	-22.49	19.18	-73.99	-32.32	-41.67	peak
4	0.3325	35.18	-60.87	-25.69	17.17	-77.19	-34.33	-42.86	peak
5	0.3951	32.80	-60.82	-28.02	15.67	-79.52	-35.83	-43.69	peak
6	0.4425	32.17	-60.78	-28.61	14.33	-80.11	-37.17	-42.94	peak

- Note: 1. Measurement = Reading Level + Correct Factor(dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5).
 - 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
 - 3. 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





No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Result	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.6169	26.02	-20.76	5.26	31.80	-46.24	-19.70	-26.54	peak
2	1.5111	17.08	-20.41	-3.33	24.02	-54.83	-27.48	-27.35	peak
3	3.5653	12.03	-20.35	-8.32	29.54	-59.82	-21.96	-37.86	peak
4	13.8505	8.43	-19.31	-10.88	29.54	-62.38	-21.96	-40.42	peak
5	19.0005	8.58	-17.83	-9.25	29.54	-60.75	-21.96	-38.79	peak
6	22.7428	7.14	-17.83	-10.69	29.54	-62.19	-21.96	-40.23	peak

- Note: 1. Measurement = Reading Level + Correct Factor(dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5).
 - 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
 - 3. 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



7.7. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to FCC §15.207 (a) & RSS-GEN Clause 8.8

	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)
0.094005	20.49		60.60	24 54	(1115)	0.000	14	OFF	0.6
0.264325	29.10		00.09	31.51	1000.0	9.000	LI	UFF	9.0
0.672375		31.81	46.00	14.19	1000.0	9.000	L1	OFF	9.6
0.672375	35.60		56.00	20.40	1000.0	9.000	L1	OFF	9.6
2.023088		34.27	46.00	11.73	1000.0	9.000	L1	OFF	9.7
2.023088	38.15		56.00	17.85	1000.0	9.000	L1	OFF	9.7
3.366338		18.95	46.00	27.05	1000.0	9.000	L1	OFF	9.8
3.366338	26.62		56.00	29.38	1000.0	9.000	L1	OFF	9.8
4.717050		21.99	46.00	24.01	1000.0	9.000	L1	OFF	9.5
4.717050	32.25		56.00	23.75	1000.0	9.000	L1	OFF	9.5
7.418475		27.68	50.00	22.32	1000.0	9.000	L1	OFF	9.8
7.418475	36.47		60.00	23.53	1000.0	9.000	L1	OFF	9.8
10.119900		26.11	50.00	23.89	1000.0	9.000	L1	OFF	9.6

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 11G 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	Bandwidth (kHz)	Line	Filter	Corr. (dB)
					(ms)				
0.463425	33.60		56.63	23.03	1000.0	9.000	Ν	OFF	9.6
0.672375		27.66	46.00	18.34	1000.0	9.000	Ν	OFF	9.5
0.672375	30.80		56.00	25.20	1000.0	9.000	Ν	OFF	9.5
0.851475	26.87		56.00	29.13	1000.0	9.000	Ν	OFF	9.6
0.881325		13.01	46.00	32.99	1000.0	9.000	Ν	OFF	9.7
0.881325	27.69		56.00	28.31	1000.0	9.000	Ν	OFF	9.7
0.941025		13.79	46.00	32.21	1000.0	9.000	Ν	OFF	9.7
2.015625	23.87		56.00	32.13	1000.0	9.000	Ν	OFF	9.7
2.082788		10.78	46.00	35.22	1000.0	9.000	Ν	OFF	9.7
3.373800		30.41	46.00	15.59	1000.0	9.000	Ν	OFF	9.7
3.373800	33.97		56.00	22.03	1000.0	9.000	Ν	OFF	9.7
6.067763		19.78	50.00	30.22	1000.0	9.000	Ν	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 11G which is the worst case, so only the worst case is included in this test report.

8. 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 Meandered printed inverted-F antenna.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi.

END OF REPORT