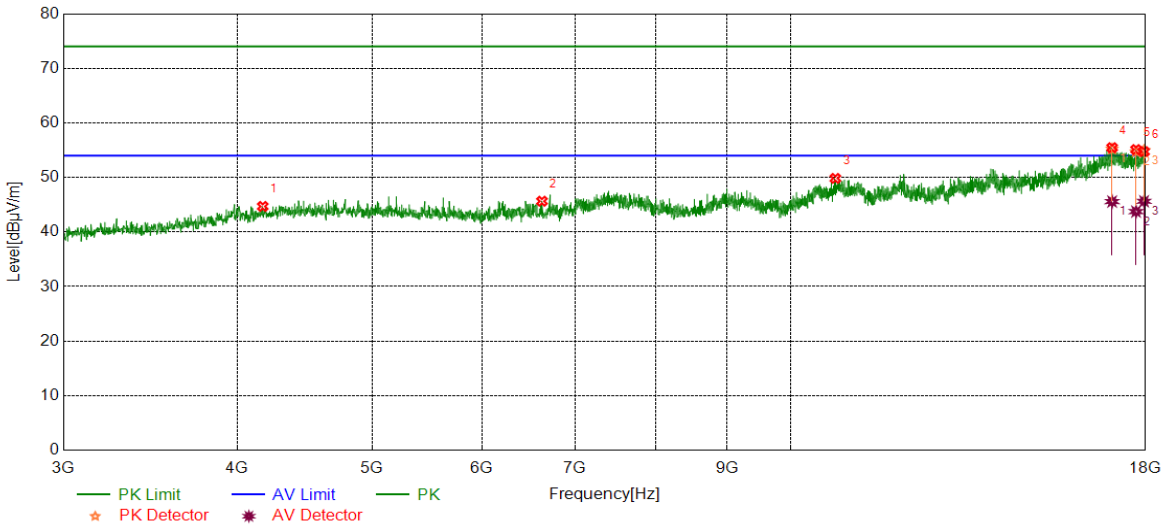
Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4173.8967	40.12	4.57	44.69	74.00	-29.31	Vertical
2	6626.7033	38.14	7.50	45.64	74.00	-28.36	Vertical
3	10770.9714	37.55	12.28	49.83	74.00	-24.17	Vertical
4	17030.5038	36.43	19.03	55.46	74.00	-18.54	Vertical
5	17718.7148	37.68	17.43	55.11	74.00	-18.89	Vertical
6	17954.9944	36.22	18.52	54.74	74.00	-19.26	Vertical

AV Result:

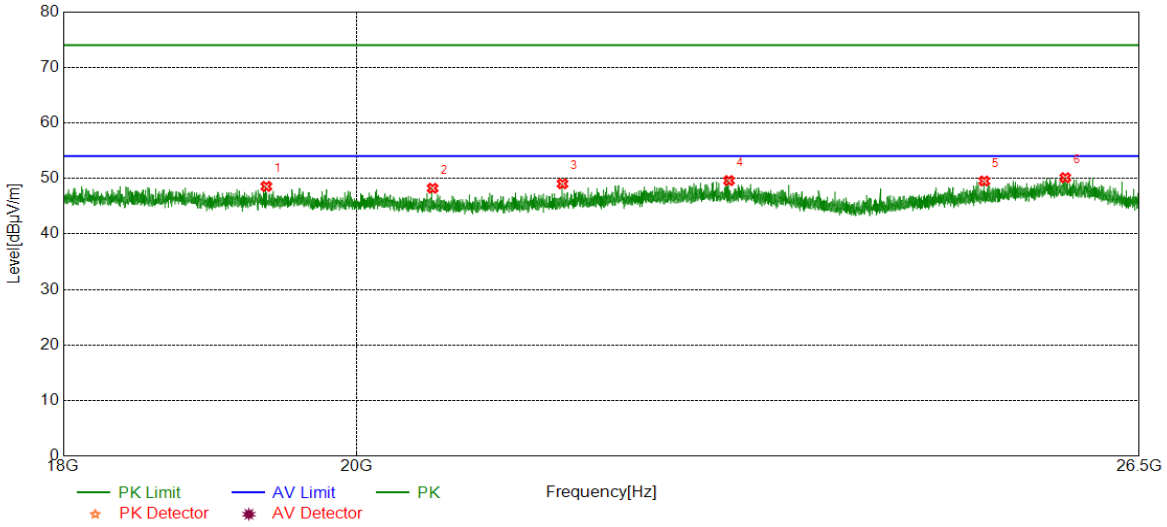
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	17030.5038	26.55	19.03	45.58	54.00	-8.42	Vertical
2	17718.7148	26.31	17.43	43.74	54.00	-10.26	Vertical
3	17954.9944	27.11	18.52	45.63	54.00	-8.37	Vertical

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Part III: 18GHz~26.5GHz

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

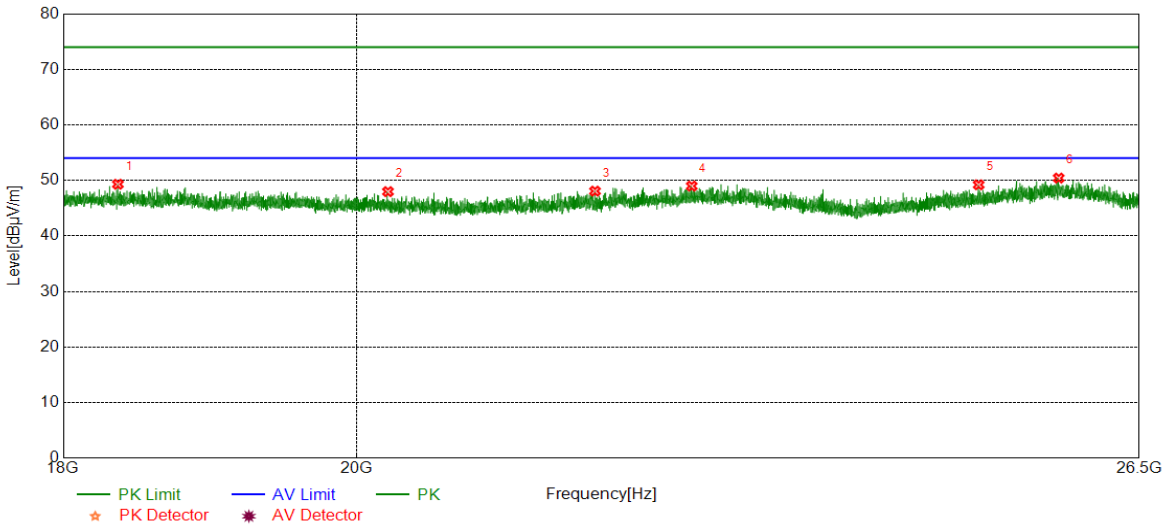
Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	19363.5364	49.39	-0.83	48.56	74.00	-25.44	Horizontal
2	20556.2056	48.97	-0.74	48.23	74.00	-25.77	Horizontal
3	21538.9039	49.50	-0.46	49.04	74.00	-24.96	Horizontal
4	22867.5868	48.48	1.13	49.61	74.00	-24.39	Horizontal
5	25065.9066	49.39	0.13	49.52	74.00	-24.48	Horizontal
6	25807.1807	48.78	1.35	50.13	74.00	-23.87	Horizontal

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



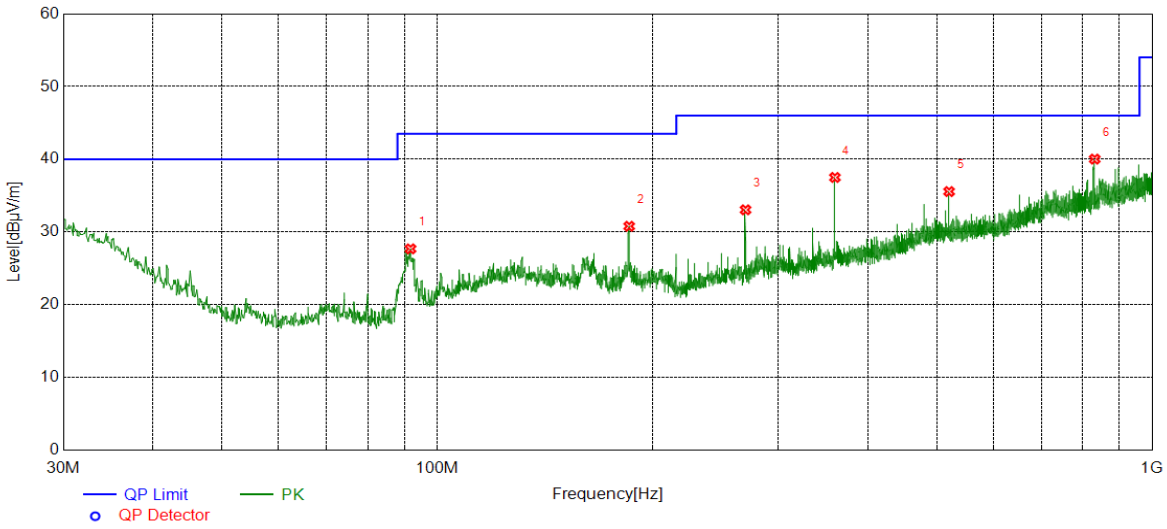
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	18357.0357	50.30	-0.99	49.31	74.00	-24.69	Vertical
2	20228.9229	48.60	-0.62	47.98	74.00	-26.02	Vertical
3	21792.2292	48.18	-0.11	48.07	74.00	-25.93	Vertical
4	22563.2563	48.11	0.87	48.98	74.00	-25.02	Vertical
5	25015.7516	49.16	0.05	49.21	74.00	-24.79	Vertical
6	25745.9746	49.16	1.26	50.42	74.00	-23.58	Vertical

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Part IV: 30MHz~1GHz

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

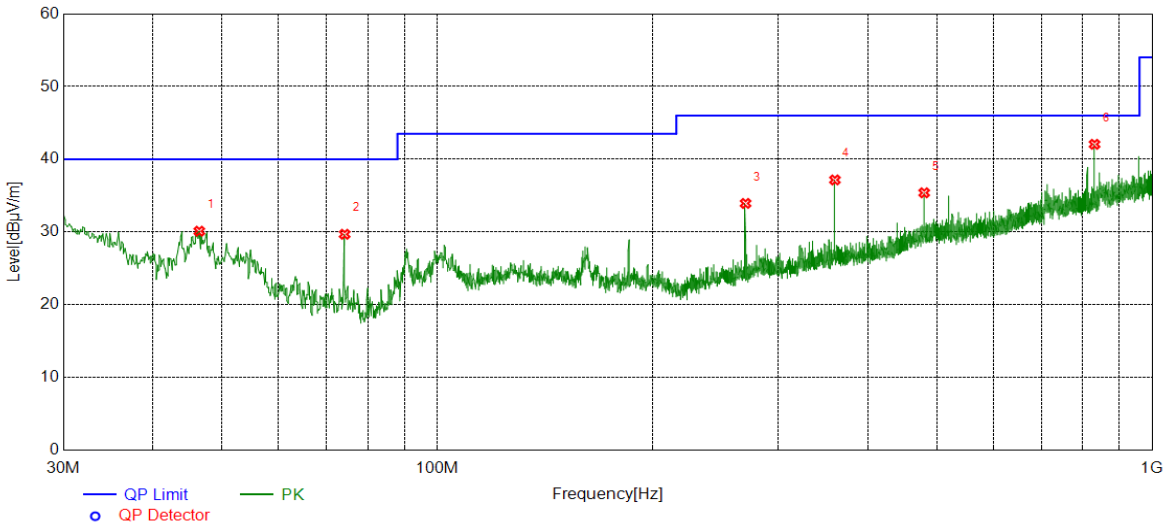
Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	91.7952	12.81	14.87	27.68	43.50	-15.82	Horizontal
2	185.6036	12.55	18.24	30.79	43.50	-12.71	Horizontal
3	270.0020	13.25	19.80	33.05	46.00	-12.95	Horizontal
4	360.0270	15.54	21.96	37.50	46.00	-8.50	Horizontal
5	519.9960	9.64	25.92	35.56	46.00	-10.44	Horizontal
6	831.2031	9.81	30.21	40.02	46.00	-5.98	Horizontal

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



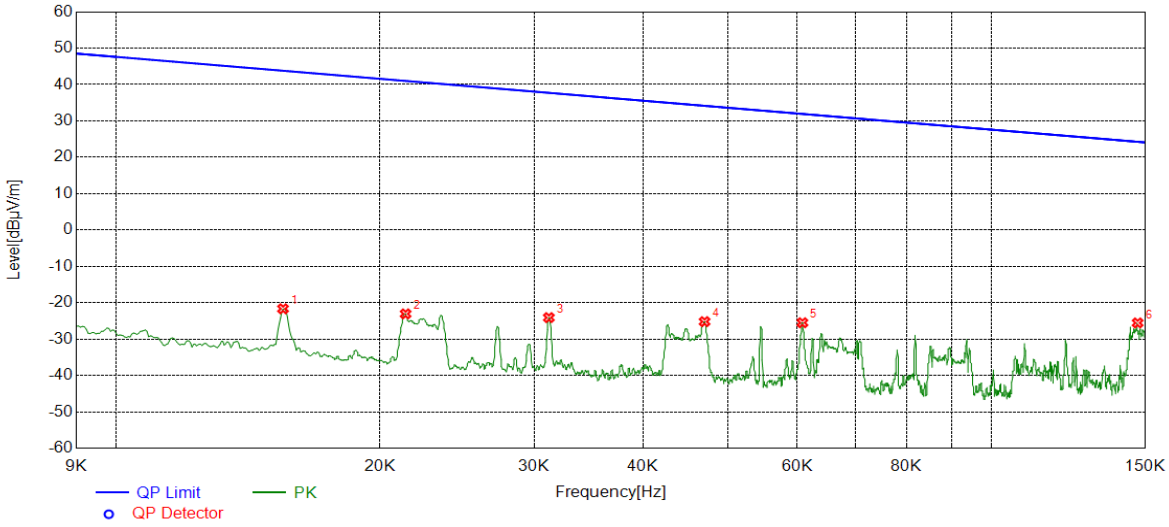
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	46.4916	13.40	16.71	30.11	40.00	-9.89	Vertical
2	74.2364	15.08	14.61	29.69	40.00	-10.31	Vertical
3	270.0020	14.13	19.80	33.93	46.00	-12.07	Vertical
4	360.0270	15.20	21.96	37.16	46.00	-8.84	Vertical
5	479.9310	10.21	25.18	35.39	46.00	-10.61	Vertical
6	830.6211	11.85	30.21	42.06	46.00	-3.94	Vertical

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)

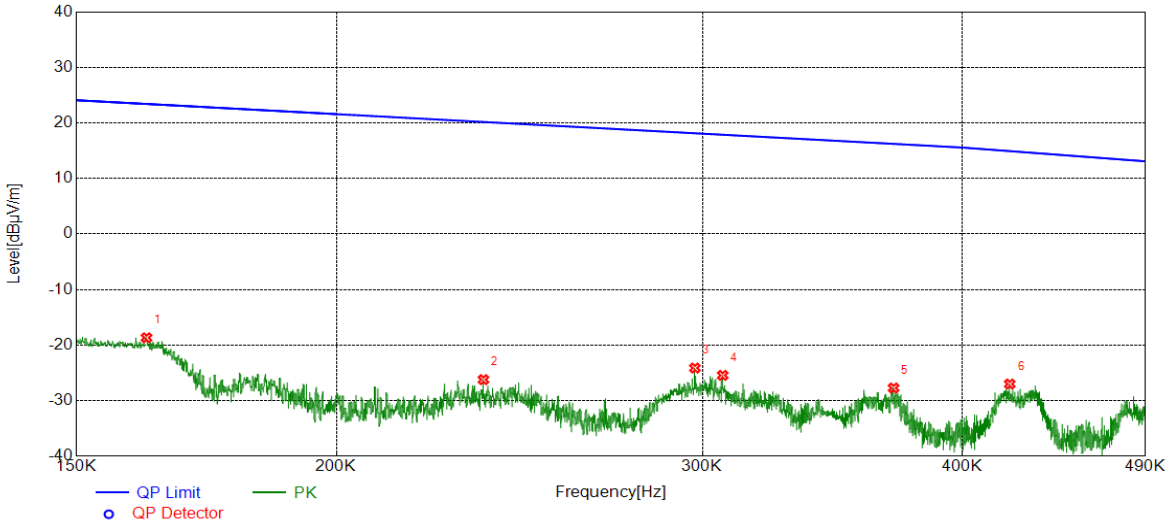
Test Mode	Channel	Frequency Range	Verdict
11B	LCH	9kHz~150kHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.0155	40.23	-61.89	-21.66	43.77	-65.43	Vertical
2	0.0214	38.77	-61.83	-23.06	41.01	-64.07	Vertical
3	0.0312	37.65	-61.74	-24.09	37.71	-61.80	Vertical
4	0.0470	36.54	-61.74	-25.20	34.15	-59.35	Vertical
5	0.0608	36.27	-61.77	-25.50	31.92	-57.42	Vertical
6	0.1469	36.29	-61.84	-25.55	24.26	-49.81	Vertical

Note: 1. Measurement = Reading Level + Correct Factor.
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.

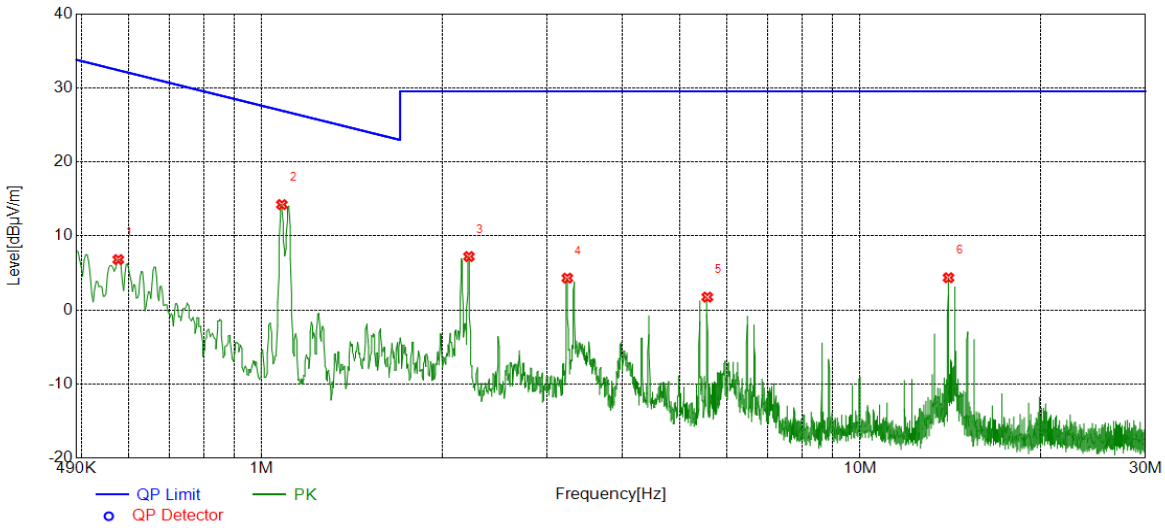
Test Mode	Channel	Frequency Range	Verdict
11B	LCH	150kHz~490kHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.1621	43.16	-61.85	-18.69	23.41	-42.10	Vertical
2	0.2354	35.65	-61.88	-26.23	20.16	-46.39	Vertical
3	0.2975	37.76	-61.90	-24.14	18.13	-42.27	Vertical
4	0.3068	36.44	-61.90	-25.46	17.87	-43.33	Vertical
5	0.3707	34.16	-61.90	-27.74	16.22	-43.96	Vertical
6	0.4216	34.88	-61.90	-27.02	14.92	-41.94	Vertical

Note: 1. Measurement = Reading Level + Correct Factor.
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.

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	0.5756	28.70	-21.89	6.81	32.40	-25.59	Vertical
2	1.0803	36.09	-21.85	14.24	26.94	-12.70	Vertical
3	2.2195	29.02	-21.80	7.22	29.54	-22.32	Vertical
4	3.2406	26.07	-21.76	4.31	29.54	-25.23	Vertical
5	5.5544	23.45	-21.71	1.74	29.54	-27.80	Vertical
6	14.0542	25.96	-21.60	4.36	29.54	-25.18	Vertical

Note: 1. Measurement = Reading Level + Correct Factor.
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.

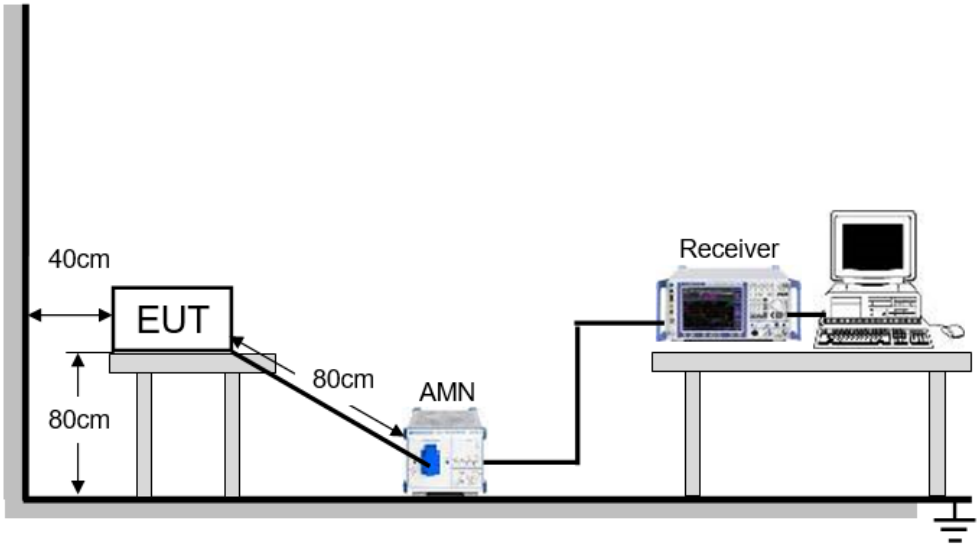
8. AC POWER LINE CONDUCTED EMISSIONS

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

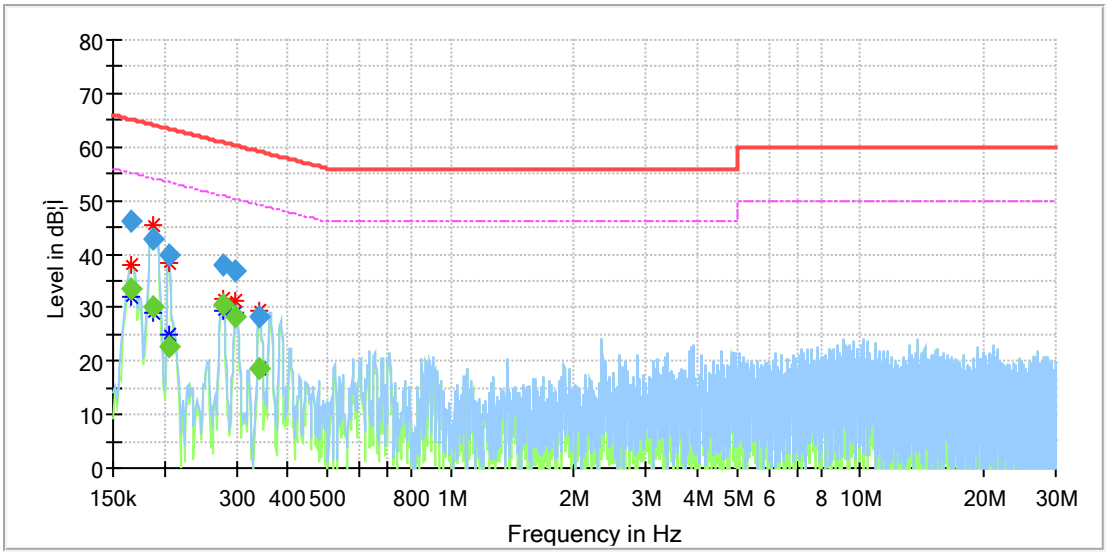
TEST SETUP AND PROCEDURE



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 an 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.

LINE L RESULTS (WORST-CASE CONFIGURATION)

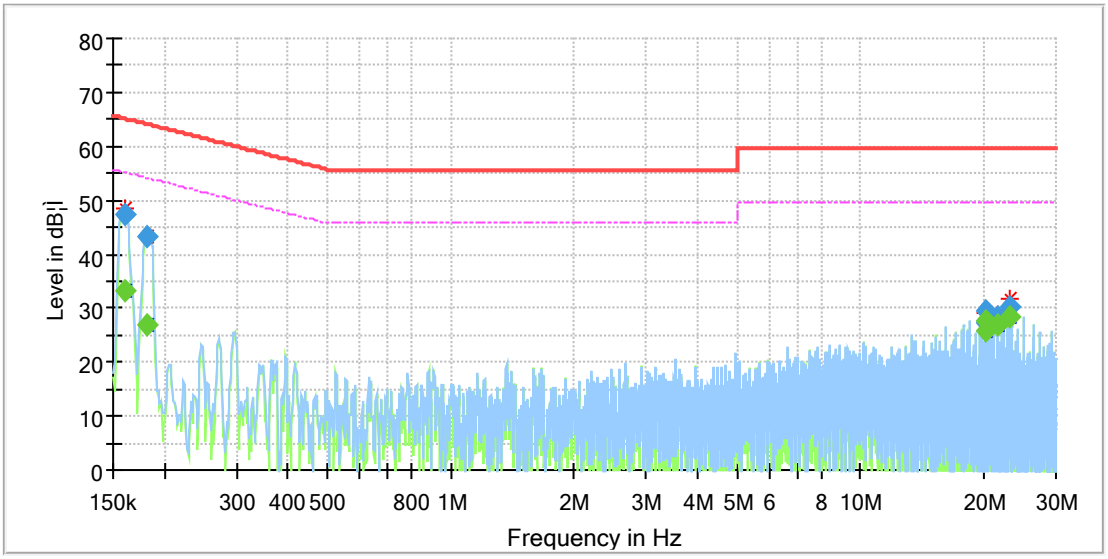


Final_Result

Frequency [MHz]	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.166418	---	33.50	55.14	21.63	1000.0	9.000	L1	OFF	9.5
0.166418	46.32	---	65.14	18.81	1000.0	9.000	L1	OFF	9.5
0.188805	---	30.14	54.09	23.95	1000.0	9.000	L1	OFF	9.5
0.188805	42.82	---	64.09	21.27	1000.0	9.000	L1	OFF	9.5
0.205223	---	22.77	53.40	30.62	1000.0	9.000	L1	OFF	9.5
0.205223	39.71	---	63.40	23.69	1000.0	9.000	L1	OFF	9.5
0.278355	37.84	---	60.87	23.02	1000.0	9.000	L1	OFF	9.5
0.278355	---	30.48	50.87	20.38	1000.0	9.000	L1	OFF	9.5
0.299250	36.71	---	60.26	23.56	1000.0	9.000	L1	OFF	9.5
0.299250	---	28.37	50.26	21.89	1000.0	9.000	L1	OFF	9.5
0.341040	---	18.77	49.18	30.41	1000.0	9.000	L1	OFF	9.5
0.341040	28.40	---	59.18	30.78	1000.0	9.000	L1	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 LCH of 11B which is the worst case, so only the worst case is included in this test report.

LINE N RESULTS (WORST-CASE CONFIGURATION)



Final_Result

Frequency [MHz]	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.160448	---	33.49	55.44	21.95	1000.0	9.000	N	OFF	9.5
0.160448	47.66	---	65.44	17.78	1000.0	9.000	N	OFF	9.5
0.181343	---	27.15	54.42	27.28	1000.0	9.000	N	OFF	9.5
0.181343	43.40	---	64.42	21.02	1000.0	9.000	N	OFF	9.5
20.258453	---	27.90	50.00	22.10	1000.0	9.000	N	OFF	10.1
20.258453	29.60	---	60.00	30.40	1000.0	9.000	N	OFF	10.1
20.319645	27.71	---	60.00	32.29	1000.0	9.000	N	OFF	10.1
20.319645	---	25.95	50.00	24.05	1000.0	9.000	N	OFF	10.1
21.664388	28.83	---	60.00	31.17	1000.0	9.000	N	OFF	10.0
21.664388	---	27.10	50.00	22.90	1000.0	9.000	N	OFF	10.0
23.130023	---	28.76	50.00	21.24	1000.0	9.000	N	OFF	10.0
23.130023	30.48	---	60.00	29.52	1000.0	9.000	N	OFF	10.0

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 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 GAIN

The antenna gain of EUT is less than 6 dBi

END OF REPORT