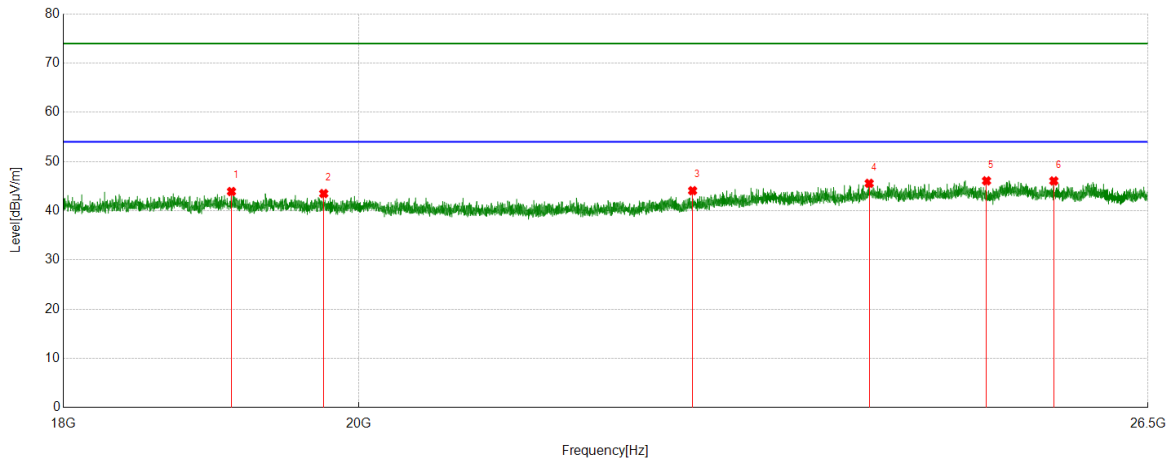


**Part 3: 18GHz~26.5GHz**

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

Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS

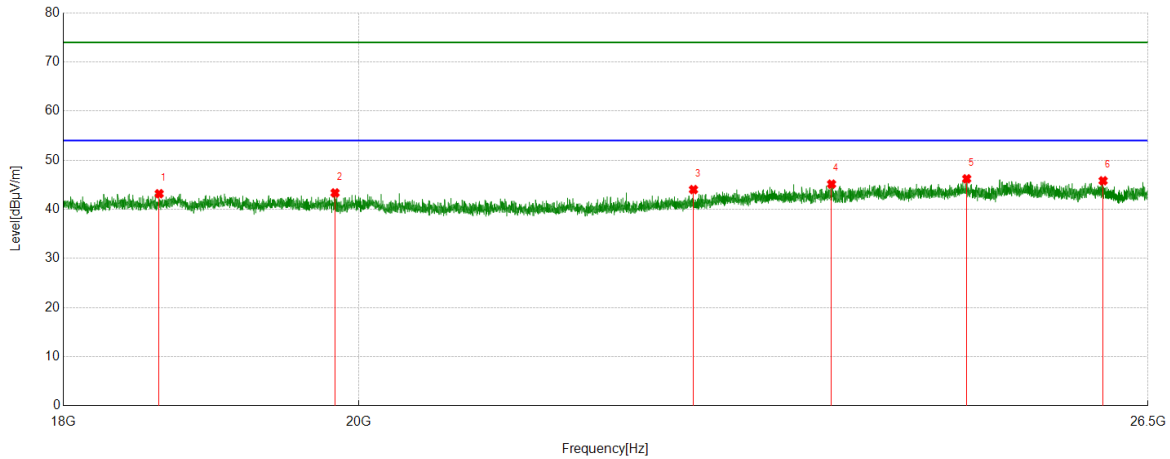


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	19112.7613	49.80	-5.89	43.91	74.00	-30.09	Horizontal
2	19752.0252	48.87	-5.38	43.49	74.00	-30.51	Horizontal
3	22528.4028	48.70	-4.62	44.08	74.00	-29.92	Horizontal
4	23992.2492	48.19	-2.62	45.57	74.00	-28.43	Horizontal
5	25017.4517	49.67	-3.59	46.08	74.00	-27.92	Horizontal
6	25625.2625	49.11	-3.05	46.06	74.00	-27.94	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,  
 Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.  
 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	MCH	Vertical	PASS



PK Result:

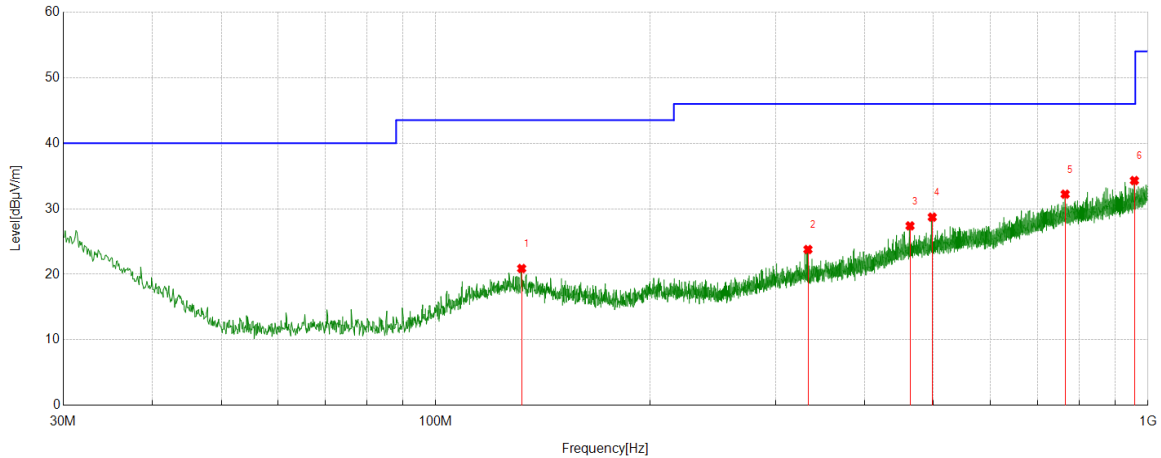
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	18626.5127	49.57	-6.39	43.18	74.00	-30.82	Vertical
2	19831.9332	48.63	-5.28	43.35	74.00	-30.65	Vertical
3	22535.2035	48.62	-4.60	44.02	74.00	-29.98	Vertical
4	23672.6173	48.18	-3.04	45.14	74.00	-28.86	Vertical
5	24841.4841	49.61	-3.39	46.22	74.00	-27.78	Vertical
6	26079.2079	48.40	-2.58	45.82	74.00	-28.18	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,  
 Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

**Part 4: 30MHz~1GHz**

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

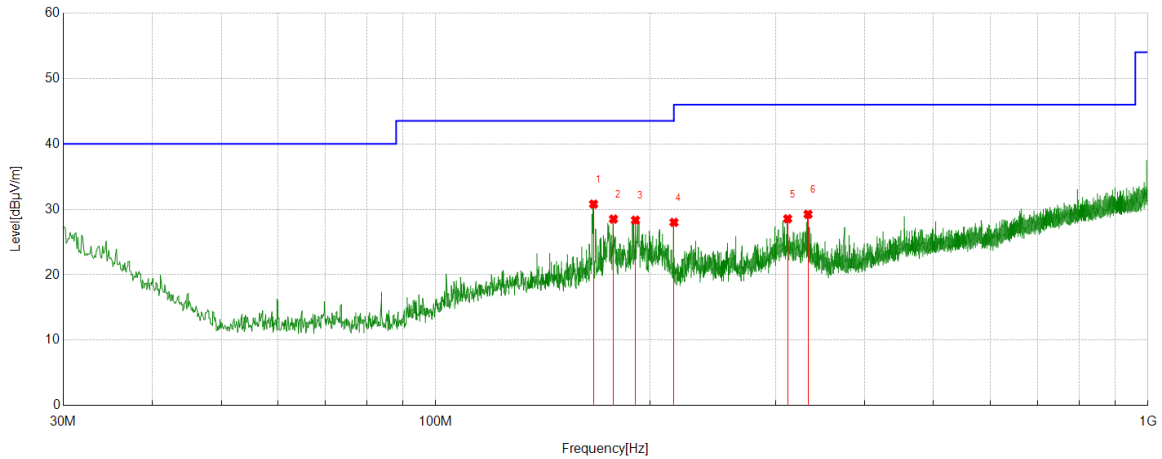
Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	132.0542	0.08	20.81	20.89	43.50	-22.61	Peak
2	333.1553	2.09	21.70	23.79	46.00	-22.21	Peak
3	463.4393	2.08	25.31	27.39	46.00	-18.61	Peak
4	497.9748	2.78	25.94	28.72	46.00	-17.28	Peak
5	765.2365	2.32	29.90	32.22	46.00	-13.78	Peak
6	957.0247	2.48	31.82	34.30	46.00	-11.70	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,  
 Correct Factor = Antenna Factor + Loss (Cable).

Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



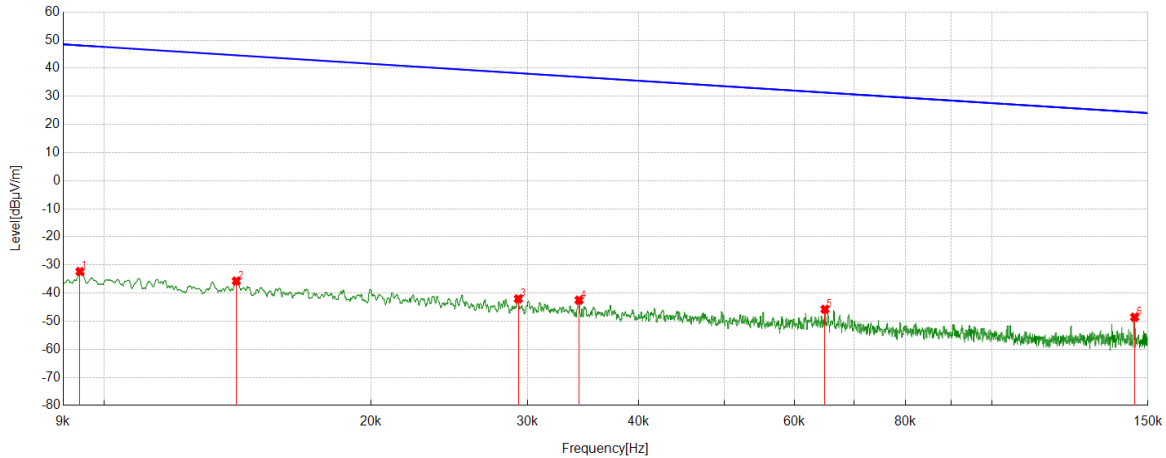
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	166.5897	12.04	18.76	30.80	43.50	-12.70	Peak
2	177.6488	10.25	18.26	28.51	43.50	-14.99	Peak
3	190.7451	9.85	18.49	28.34	43.50	-15.16	Peak
4	216.0646	8.49	19.52	28.01	46.00	-17.99	Peak
5	312.0072	7.32	21.24	28.56	46.00	-17.44	Peak
6	333.2523	7.54	21.70	29.24	46.00	-16.76	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,  
 Correct Factor = Antenna Factor + Loss (Cable).

**Part 5: 9kHz~30MHz**

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

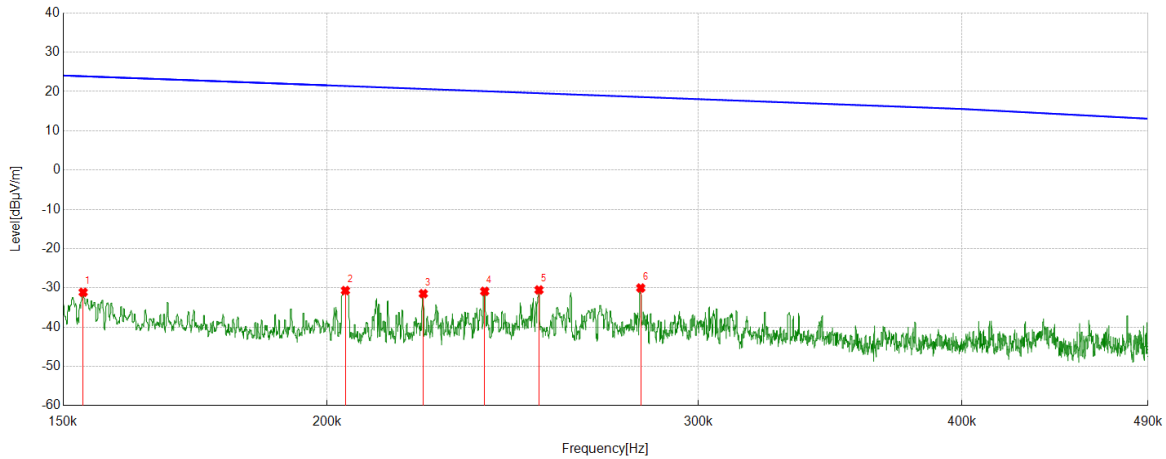
Test Mode	Channel	Frequency Range	Verdict
11B	MCH	9kHz~150kHz	PASS



No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dBuA/m]	[dBuA/m]	[dB]	
1	0.0094	29.66	-62.00	-32.34	48.10	-83.84	-3.40	-80.44	Peak
2	0.0141	26.23	-61.96	-35.73	44.60	-87.23	-6.90	-80.33	Peak
3	0.0293	19.75	-61.81	-42.06	38.27	-93.56	-13.23	-80.33	Peak
4	0.0343	19.29	-61.80	-42.51	36.90	-94.01	-14.60	-79.41	Peak
5	0.0649	16.10	-61.86	-45.76	31.36	-97.26	-20.14	-77.12	Peak
6	0.1449	13.35	-61.93	-48.58	24.38	-100.08	-27.12	-72.96	Peak

- Note: 1. Measurement = Reading Level + Correct Factor,  
Correct Factor = Antenna Factor + Loss (Cable) + Distance 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.

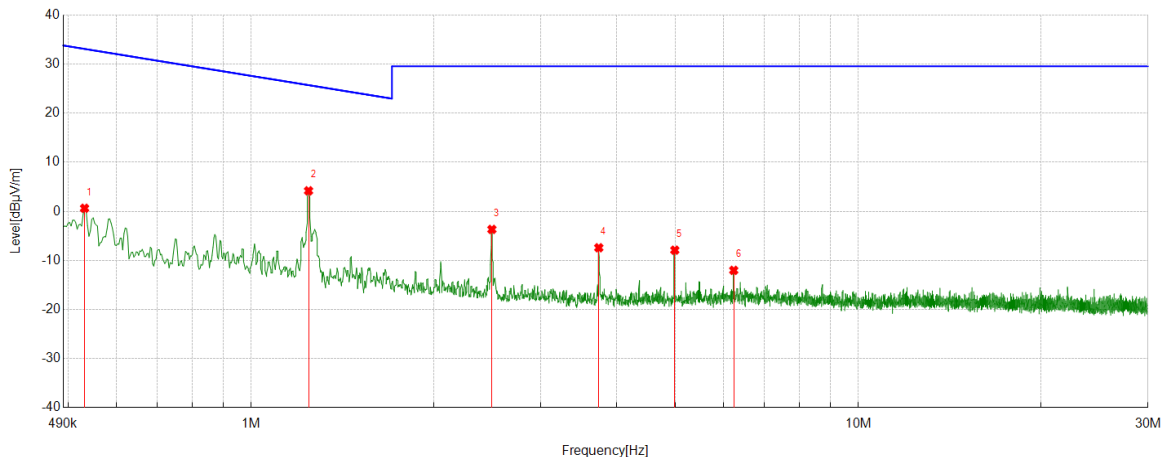
Test Mode	Channel	Frequency Range	Verdict
11B	MCH	150kHz~490kHz	PASS



No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dBuA/m]	[dBuA/m]	[dB]	
1	0.1533	30.81	-61.94	-31.13	23.89	-82.63	-27.61	-55.02	Peak
2	0.2041	31.29	-61.97	-30.68	21.40	-82.18	-30.10	-52.08	Peak
3	0.2222	30.50	-61.98	-31.48	20.67	-82.98	-30.83	-52.15	Peak
4	0.2376	31.11	-61.99	-30.88	20.09	-82.38	-31.41	-50.97	Peak
5	0.2521	31.48	-62.00	-30.52	19.57	-82.02	-31.93	-50.09	Peak
6	0.2817	31.98	-62.01	-30.03	18.61	-81.53	-32.89	-48.64	Peak

- Note: 1. Measurement = Reading Level + Correct Factor,  
Correct Factor = Antenna Factor + Loss (Cable) + Distance 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	MCH	490kHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dBuA/m]	[dBuA/m]	[dB]	
1	0.5313	22.71	-22.09	0.62	33.10	-50.88	-18.40	-32.48	Peak
2	1.2426	26.23	-22.05	4.18	25.72	-47.32	-25.78	-21.54	Peak
3	2.4910	18.33	-22.01	-3.68	29.54	-55.18	-21.96	-33.22	Peak
4	3.7364	14.54	-21.96	-7.42	29.54	-58.92	-21.96	-36.96	Peak
5	4.9848	14.05	-21.96	-7.91	29.54	-59.41	-21.96	-37.45	Peak
6	6.2332	9.92	-21.94	-12.02	29.54	-63.52	-21.96	-41.56	Peak

- Note: 1. Measurement = Reading Level + Correct Factor,  
Correct Factor = Antenna Factor + Loss (Cable) + Distance 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.

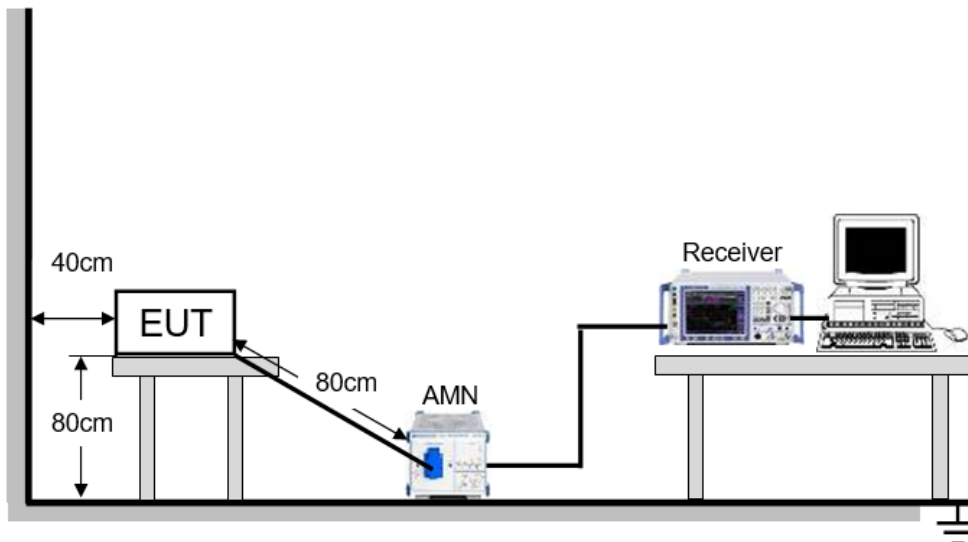
## 9. AC POWER LINE CONDUCTED EMISSIONS

### 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.

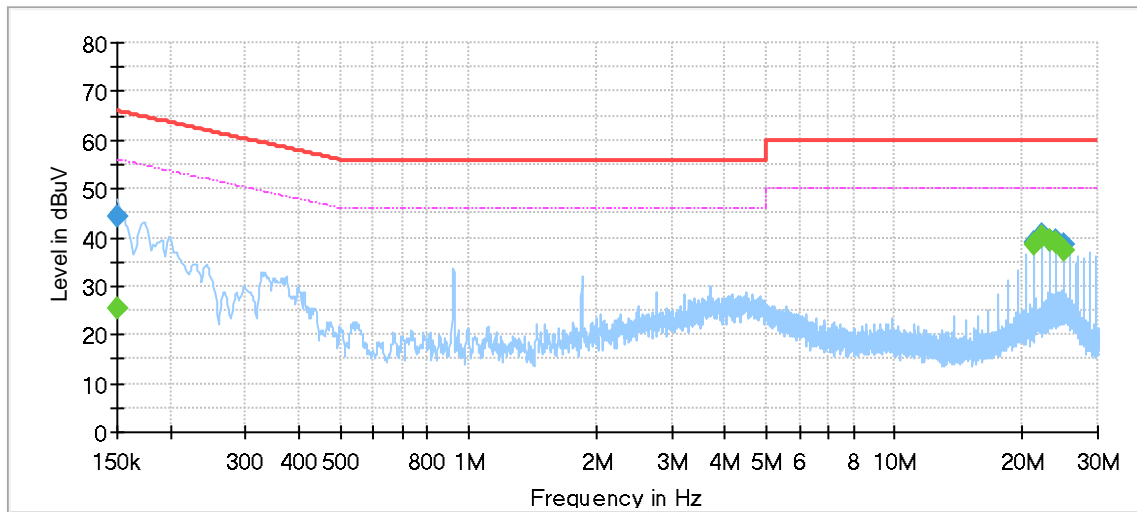
The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.



**TEST ENVIRONMENT**

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

**LINE L RESULTS (WORST-CASE CONFIGURATION)**

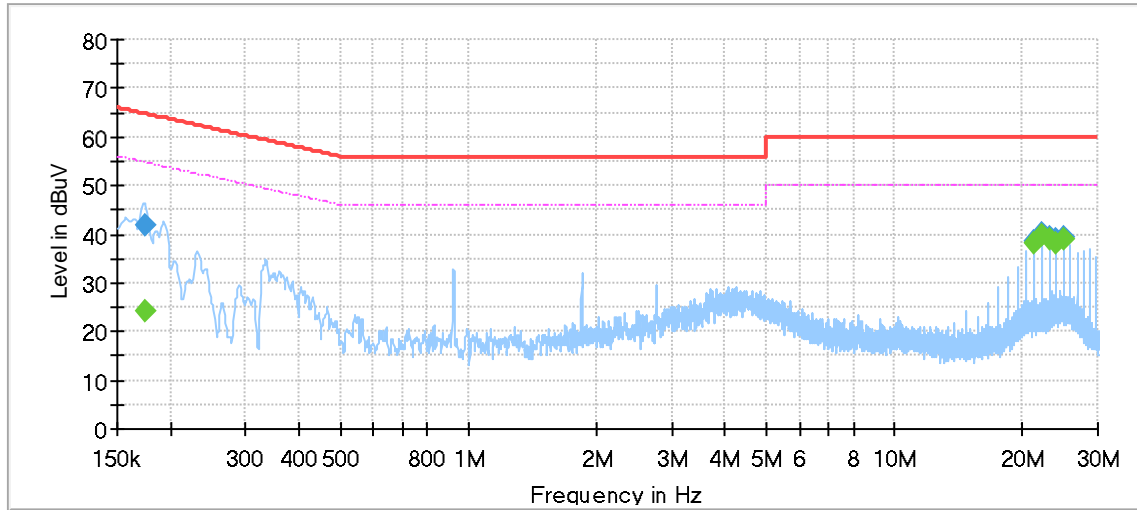


**Final\_Result**

Frequency [MHz]	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.150000	---	25.40	56.00	30.60	1000.0	9.000	L1	OFF	9.6
0.150000	44.15	---	66.00	21.85	1000.0	9.000	L1	OFF	9.6
21.246488	---	38.54	50.00	11.46	1000.0	9.000	L1	OFF	9.5
21.246488	38.81	---	60.00	21.19	1000.0	9.000	L1	OFF	9.5
22.170345	---	40.33	50.00	9.67	1000.0	9.000	L1	OFF	9.5
22.170345	40.47	---	60.00	19.53	1000.0	9.000	L1	OFF	9.5
23.094203	---	39.30	50.00	10.70	1000.0	9.000	L1	OFF	9.5
23.094203	39.53	---	60.00	20.47	1000.0	9.000	L1	OFF	9.5
24.018060	---	39.10	50.00	10.90	1000.0	9.000	L1	OFF	9.5
24.018060	39.39	---	60.00	20.61	1000.0	9.000	L1	OFF	9.5
24.940425	---	37.50	50.00	12.50	1000.0	9.000	L1	OFF	9.4
24.940425	38.42	---	60.00	21.58	1000.0	9.000	L1	OFF	9.4

- 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 MCH 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]
0.173880	---	24.06	54.77	30.71	1000.0	9.000	N	OFF	9.6
0.173880	41.88	---	64.77	22.89	1000.0	9.000	N	OFF	9.6
21.250965	---	38.34	50.00	11.66	1000.0	9.000	N	OFF	9.5
21.250965	38.71	---	60.00	21.29	1000.0	9.000	N	OFF	9.5
22.173330	---	39.96	50.00	10.04	1000.0	9.000	N	OFF	9.4
22.173330	40.09	---	60.00	19.91	1000.0	9.000	N	OFF	9.4
23.098680	---	38.98	50.00	11.02	1000.0	9.000	N	OFF	9.4
23.098680	39.41	---	60.00	20.59	1000.0	9.000	N	OFF	9.4
24.022538	---	38.17	50.00	11.83	1000.0	9.000	N	OFF	9.4
24.022538	39.01	---	60.00	20.99	1000.0	9.000	N	OFF	9.4
24.946395	---	38.94	50.00	11.06	1000.0	9.000	N	OFF	9.4
24.946395	39.28	---	60.00	20.72	1000.0	9.000	N	OFF	9.4

- 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 MCH of 11B which is the worst case, so only the worst case is included in this test report.

## 10. 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**