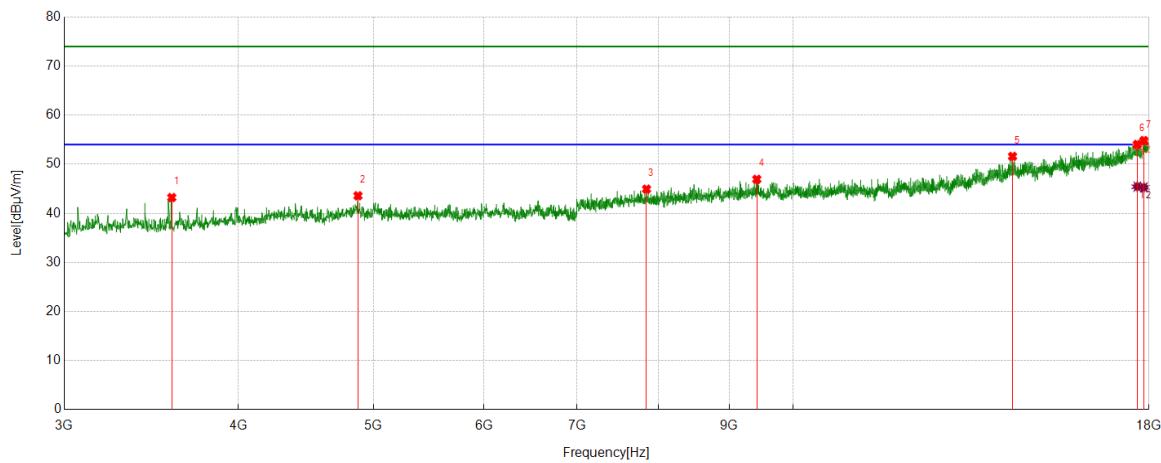


Test Mode	Channel	Polarization	Verdict
11N HT40	MCH	Vertical	PASS


**PK Result:**

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3583.1979	51.94	-8.72	43.22	74.00	-30.78	Vertical
2	4873.3592	47.20	-3.62	43.58	74.00	-30.42	Vertical
3	7849.3562	43.60	1.33	44.93	74.00	-29.07	Vertical
4	9417.0521	43.76	3.17	46.93	74.00	-27.07	Vertical
5	14367.671	40.77	10.83	51.60	74.00	-22.40	Vertical
6	17654.9569	36.29	17.74	54.03	74.00	-19.97	Vertical
7	17849.9812	36.14	18.67	54.81	74.00	-19.19	Vertical

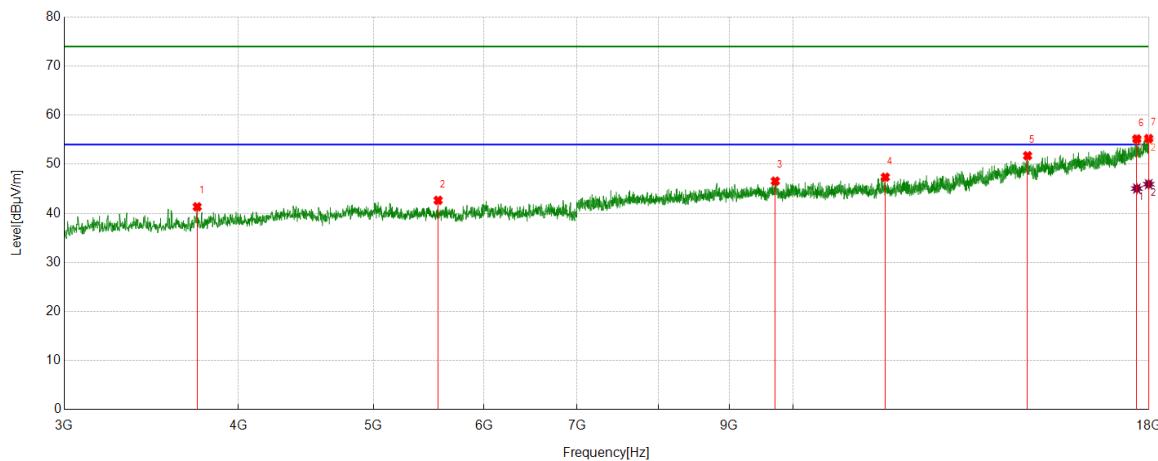
**AV Result:**

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17654.9569	27.69	17.74	45.43	54.00	-8.57	Vertical
2	17849.9812	26.62	18.67	45.29	54.00	-8.71	Vertical

Note:

1. Measurement = Reading Level + Correct Factor,  
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
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.

Test Mode	Channel	Polarization	Verdict
11N HT40	HCH	Horizontal	PASS


**PK Result:**

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3736.9671	49.38	-8.05	41.33	74.00	-32.67	Horizontal
2	5563.4454	45.86	-3.21	42.65	74.00	-31.35	Horizontal
3	9709.5887	42.94	3.62	46.56	74.00	-27.44	Horizontal
4	11644.8306	41.27	6.09	47.36	74.00	-26.64	Horizontal
5	14729.5912	40.31	11.42	51.73	74.00	-22.27	Horizontal
6	17641.8302	37.33	17.82	55.15	74.00	-18.85	Horizontal
7	17990.6238	36.65	18.59	55.24	74.00	-18.76	Horizontal

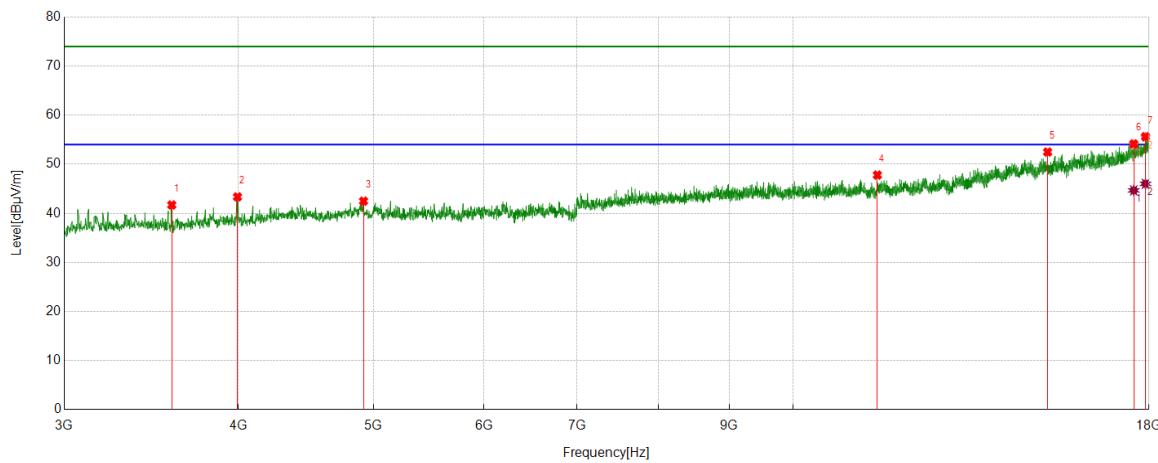
**AV Result:**

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17641.8302	27.23	17.82	45.05	54.00	-8.95	Horizontal
2	17990.6238	27.35	18.59	45.94	54.00	-8.06	Horizontal

Note:

1. Measurement = Reading Level + Correct Factor,  
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
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.

Test Mode	Channel	Polarization	Verdict
11N HT40	HCH	Vertical	PASS


**PK Result:**

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3583.1979	50.43	-8.72	41.71	74.00	-32.29	Vertical
2	3993.8742	50.39	-7.03	43.36	74.00	-30.64	Vertical
3	4918.3648	46.39	-3.90	42.49	74.00	-31.51	Vertical
4	11492.9366	41.86	5.94	47.80	74.00	-26.20	Vertical
5	15224.6531	39.80	12.69	52.49	74.00	-21.51	Vertical
6	17553.6942	37.30	16.84	54.14	74.00	-19.86	Vertical
7	17896.8621	36.34	19.28	55.62	74.00	-18.38	Vertical

**AV Result:**

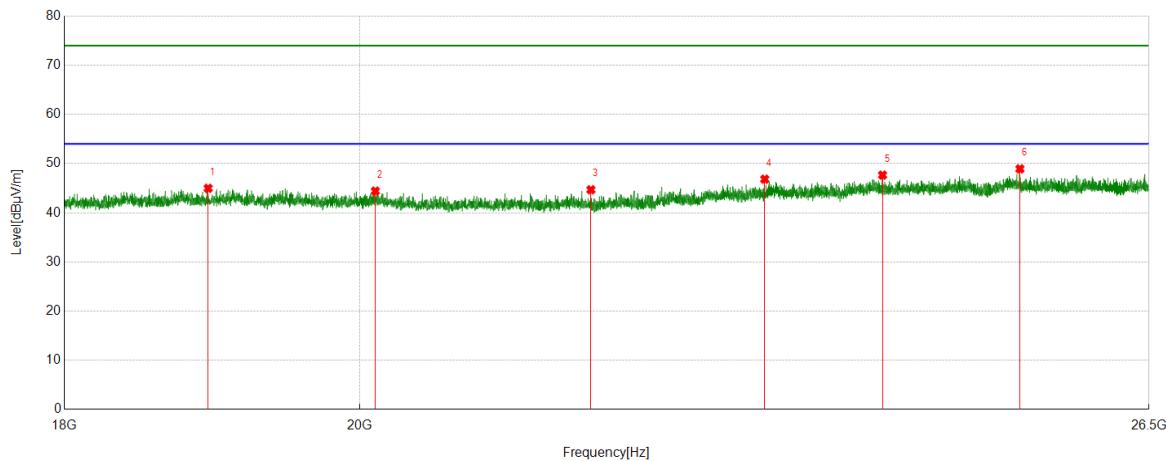
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17553.6942	27.83	16.84	44.67	54.00	-9.33	Vertical
2	17896.8621	26.74	19.28	46.02	54.00	-7.98	Vertical

Note:

1. Measurement = Reading Level + Correct Factor,  
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
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 3: 18GHz~26.5GHz
SPURIOUS EMISSIONS 18GHz TO 26.5GHz (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS

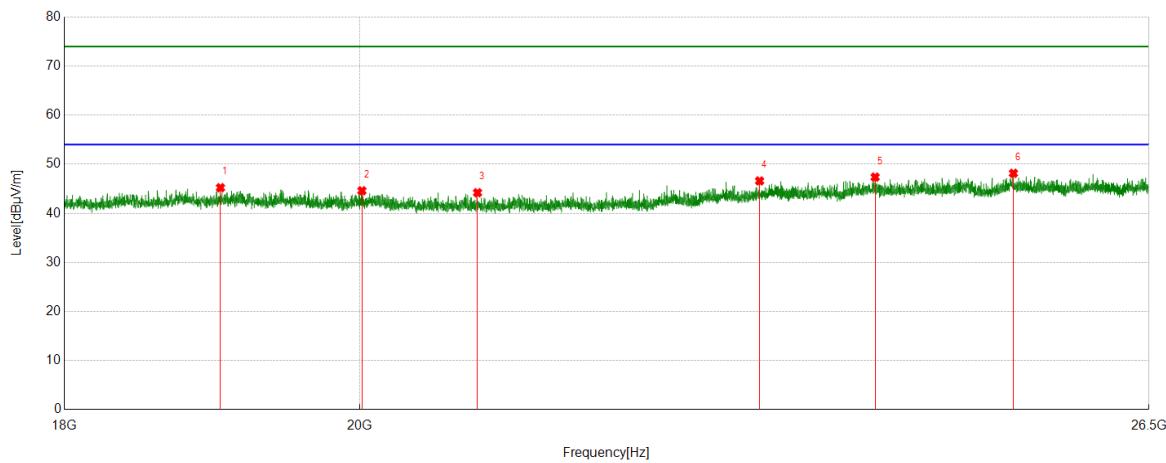

**PK Result:**

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	18947.8448	51.09	-6.12	44.97	74.00	-29.03	Horizontal
2	20111.6112	49.59	-5.18	44.41	74.00	-29.59	Horizontal
3	21718.2718	50.43	-5.75	44.68	74.00	-29.32	Horizontal
4	23107.3107	50.30	-3.47	46.83	74.00	-27.17	Horizontal
5	24098.5099	50.36	-2.70	47.66	74.00	-26.34	Horizontal
6	25308.1808	52.24	-3.31	48.93	74.00	-25.07	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

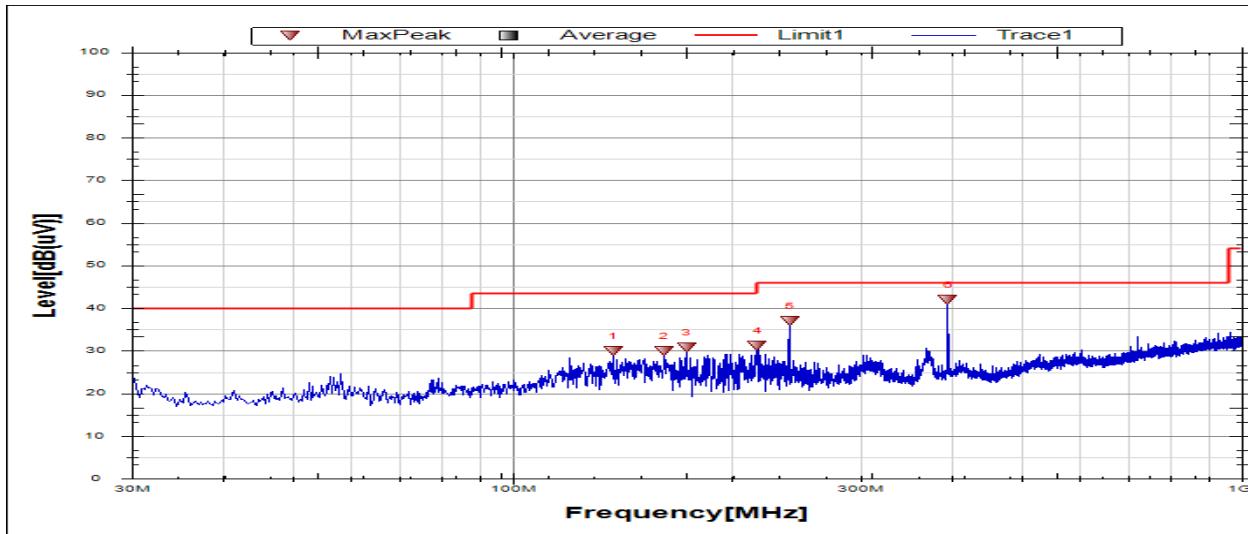

**PK Result:**

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	19031.1531	51.25	-6.03	45.22	74.00	-28.78	Vertical
2	20015.5516	49.66	-5.06	44.60	74.00	-29.40	Vertical
3	20857.9858	50.15	-5.95	44.20	74.00	-29.80	Vertical
4	23064.8065	50.10	-3.50	46.60	74.00	-27.40	Vertical
5	24034.7535	50.02	-2.64	47.38	74.00	-26.62	Vertical
6	25249.525	51.51	-3.35	48.16	74.00	-25.84	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)

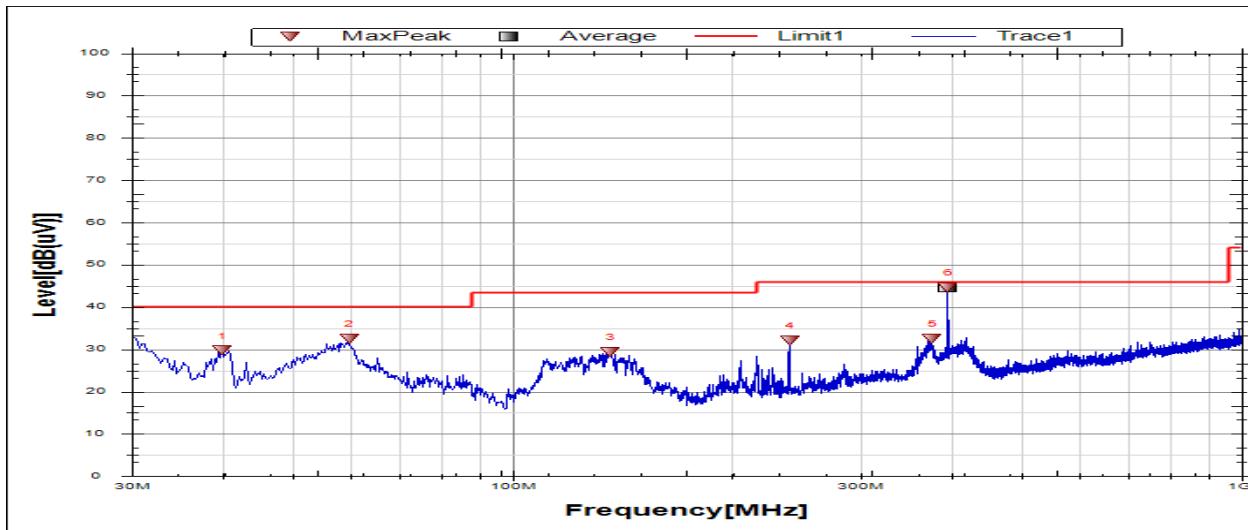
Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	137.2120	14.52	15.43	29.95	43.5	-13.55	Peak
2	161.2255	14.01	15.94	29.95	43.5	-13.55	Peak
3	173.1110	14.37	16.45	30.82	43.5	-12.68	Peak
4	216.7720	11.90	19.31	31.21	46.0	-14.79	Peak
5	240.0578	17.01	20.08	37.09	46.0	-8.91	Peak
6	396.0245	18.29	23.75	42.04	46.0	-3.96	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

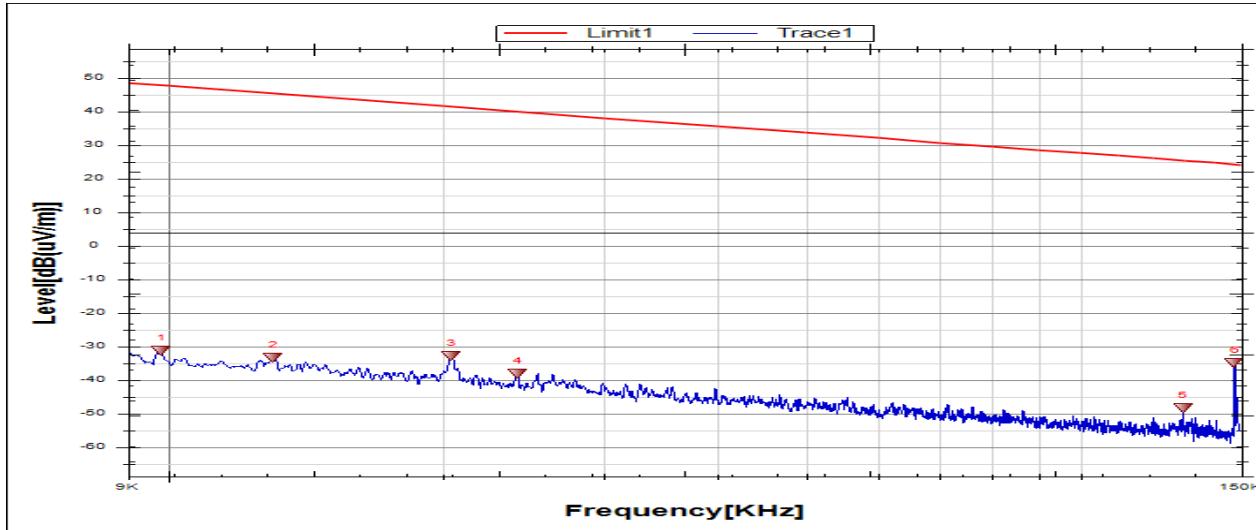


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	39.9450	9.8	19.94	29.74	40.0	-10.26	Peak
2	59.5924	12.88	19.69	32.57	40.0	-7.43	Peak
3	136.2417	13.91	15.47	29.38	43.5	-14.12	Peak
4	240.0578	12.01	20.08	32.09	46.0	-13.91	Peak
5	376.8622	9.08	23.46	32.54	46.0	-13.46	Peak
6	396.0152	20.83	23.75	44.58	46.0	-1.42	QP

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)

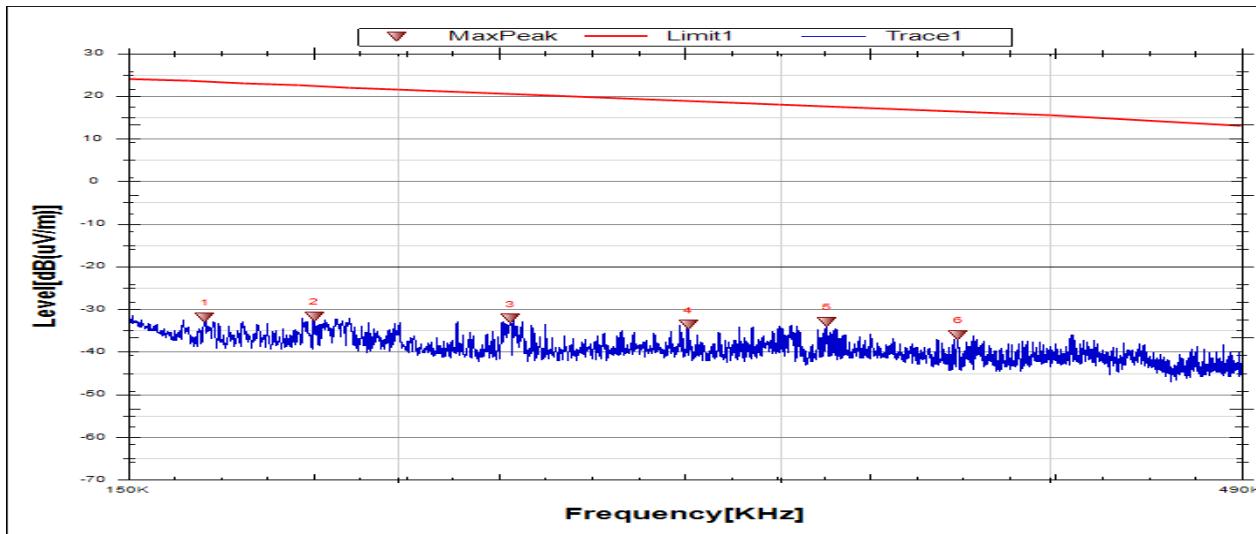
Test Mode	Channel	Frequency Range	Verdict
11B	MCH	9kHz~150kHz	PASS



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	0.0098	30.64	-61.91	-31.27	47.78	-82.77	-3.72	-79.05	Peak
2	0.013	28.57	-61.88	-33.31	45.79	-84.81	-5.71	-79.10	Peak
3	0.0204	29.03	-61.81	-32.78	41.44	-84.28	-10.06	-74.22	Peak
4	0.0241	23.62	-61.77	-38.15	40.14	-89.65	-11.36	-78.29	Peak
5	0.1294	13.48	-61.82	-48.34	25.37	-99.84	-26.13	-73.71	Peak
6	0.1476	26.99	-61.83	-34.84	24.22	-86.34	-27.28	-59.06	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.

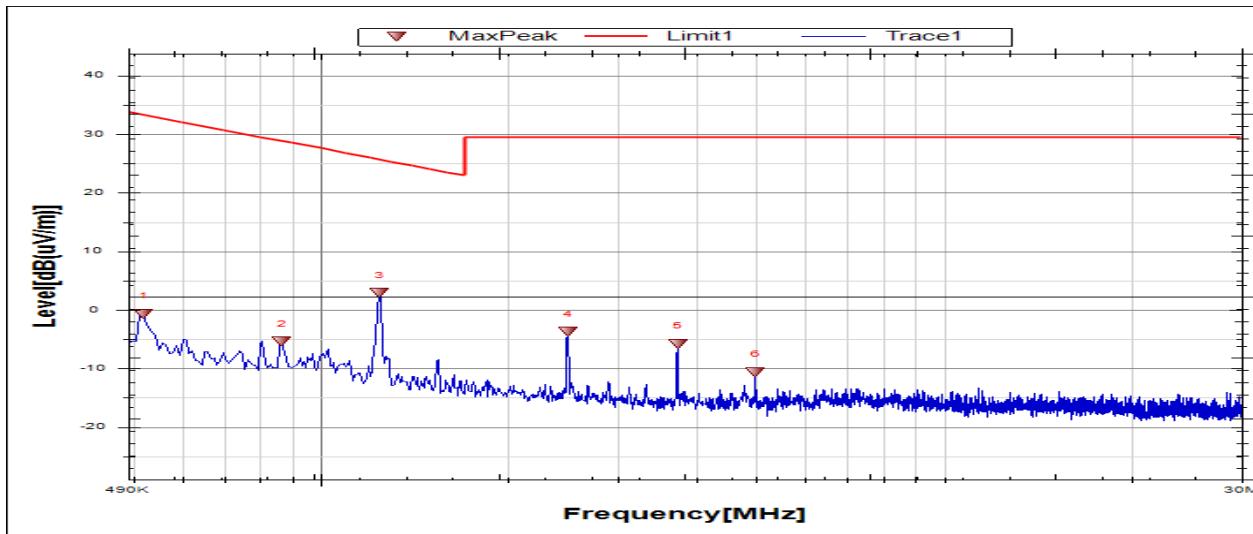
Test Mode	Channel	Frequency Range	Verdict
11B	MCH	150kHz~490kHz	PASS



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	0.1628	29.95	-61.84	-31.89	23.37	-83.39	-28.13	-55.26	Peak
2	0.1828	30.10	-61.85	-31.75	22.37	-83.25	-29.13	-54.12	Peak
3	0.2253	29.66	-61.87	-32.21	20.69	-83.71	-30.81	-52.90	Peak
4	0.2721	28.24	-61.90	-33.66	19.04	-85.16	-32.46	-52.70	Peak
5	0.3154	28.90	-61.91	-33.01	17.67	-84.51	-33.83	-50.68	Peak
6	0.3627	25.92	-61.89	-35.97	16.49	-87.47	-35.01	-52.46	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	0.5195	21.26	-21.87	-0.61	33.33	-52.11	-18.17	-33.94	Peak
2	0.8663	16.50	-21.85	-5.35	28.86	-56.85	-22.64	-34.21	Peak
3	1.24270	24.73	-21.84	2.89	25.73	-48.61	-25.77	-22.84	Peak
4	2.4897	18.10	-21.8	-3.70	29.54	-55.20	-21.96	-33.24	Peak
5	3.7368	16.01	-21.76	-5.75	29.54	-57.25	-21.96	-35.29	Peak
6	4.9838	11.19	-21.76	-10.57	29.54	-62.07	-21.96	-40.11	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.

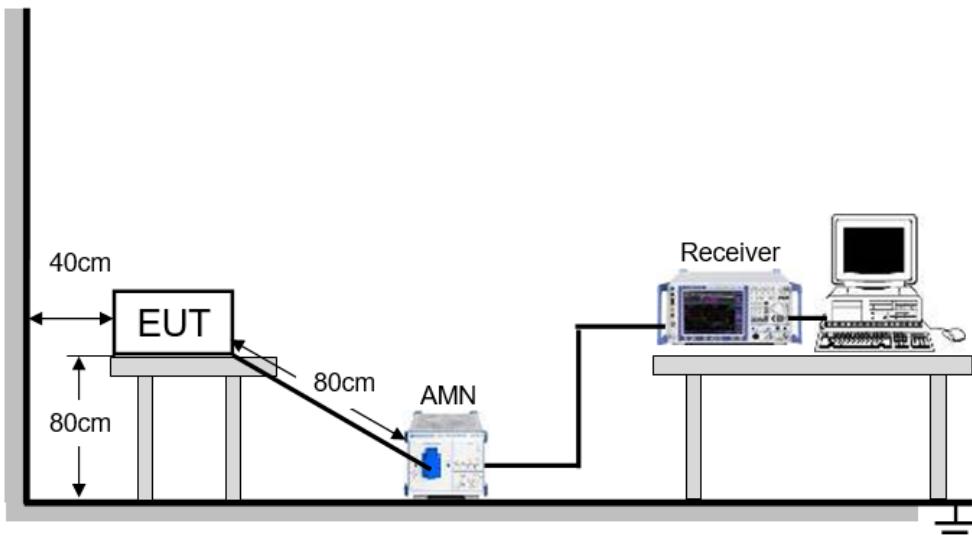
## 9. AC POWER LINE CONDUCTED EMISSIONS

### 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



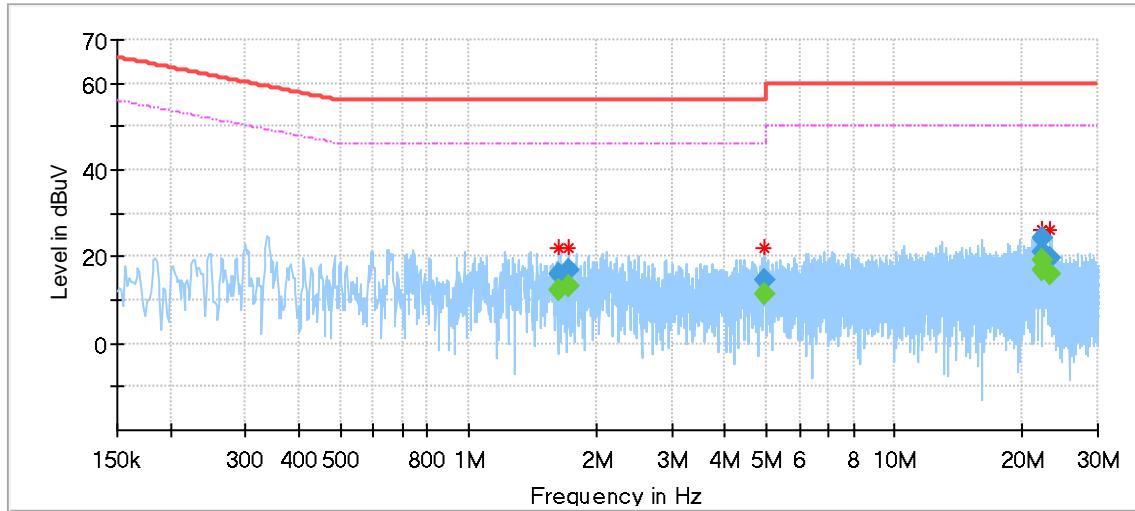
The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver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

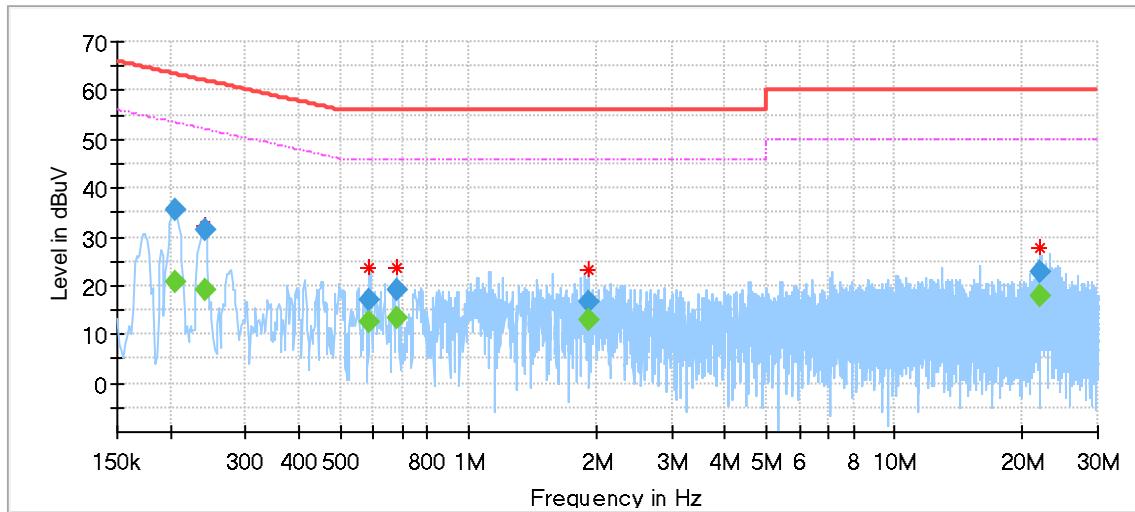


## Final Result

Frequency [MHz]	QuasiPeak [dB $\mu$ V]	Average [dB $\mu$ V]	Limit [dB $\mu$ V]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
1.636530	---	12.42	46.00	33.58	1000.0	9.000	L1	OFF	9.6
1.636530	15.83	---	56.00	40.17	1000.0	9.000	L1	OFF	9.6
1.712648	---	13.19	46.00	32.81	1000.0	9.000	L1	OFF	9.6
1.712648	16.93	---	56.00	39.07	1000.0	9.000	L1	OFF	9.6
4.949880	---	11.46	46.00	34.54	1000.0	9.000	L1	OFF	9.6
4.949880	14.47	---	56.00	41.53	1000.0	9.000	L1	OFF	9.6
22.136018	---	19.32	50.00	30.68	1000.0	9.000	L1	OFF	9.8
22.136018	24.39	---	60.00	35.61	1000.0	9.000	L1	OFF	9.8
22.164375	---	16.94	50.00	33.06	1000.0	9.000	L1	OFF	9.8
22.164375	21.14	---	60.00	38.86	1000.0	9.000	L1	OFF	9.8
23.071815	---	15.96	50.00	34.04	1000.0	9.000	L1	OFF	9.8
23.071815	19.78	---	60.00	40.22	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 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 [dB $\mu$ V]	Average [dB $\mu$ V]	Limit [dB $\mu$ V]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.205223	---	20.68	53.40	32.72	1000.0	9.000	N	OFF	9.6
0.205223	35.73	---	63.40	27.67	1000.0	9.000	N	OFF	9.6
0.241043	---	19.33	52.06	32.73	1000.0	9.000	N	OFF	9.6
0.241043	31.30	---	62.06	30.76	1000.0	9.000	N	OFF	9.6
0.587303	---	12.41	46.00	33.59	1000.0	9.000	N	OFF	9.6
0.587303	17.11	---	56.00	38.89	1000.0	9.000	N	OFF	9.6
0.681330	---	13.27	46.00	32.73	1000.0	9.000	N	OFF	9.6
0.681330	19.33	---	56.00	36.67	1000.0	9.000	N	OFF	9.6
1.912643	---	12.78	46.00	33.22	1000.0	9.000	N	OFF	9.6
1.912643	16.82	---	56.00	39.18	1000.0	9.000	N	OFF	9.6
22.043483	---	17.86	50.00	32.14	1000.0	9.000	N	OFF	9.8
22.043483	22.66	---	60.00	37.34	1000.0	9.000	N	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 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**