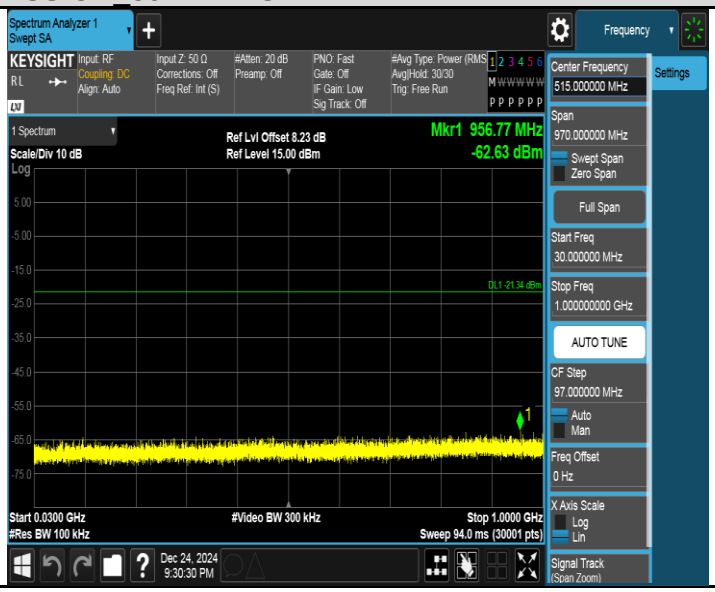
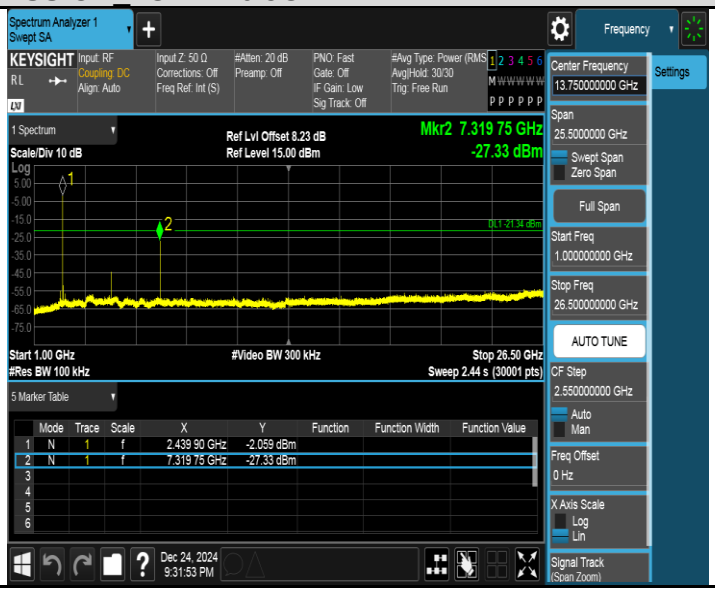
Test Mode	Channel	Verdict
BLE 2M	MCH	PASS

MCH SPURIOUS EMISSION_30MHz~1GHz

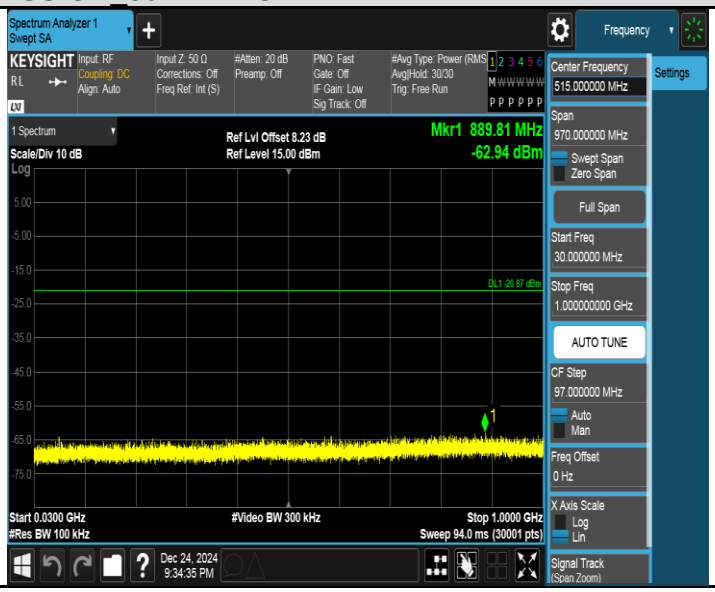


MCH SPURIOUS EMISSION_1GHz~26.5GHz

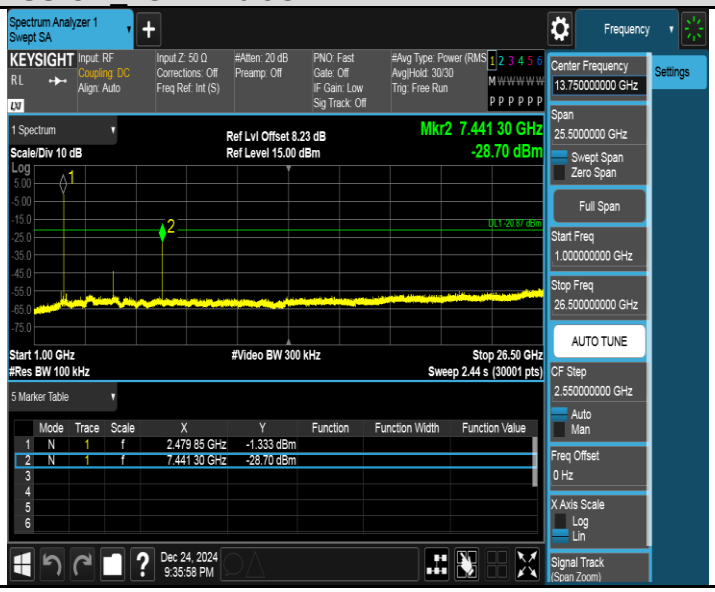


Test Mode	Channel	Verdict
BLE 2M	HCH	PASS

HCH SPURIOUS EMISSION_30MHz~1GHz



HCH SPURIOUS EMISSION_1GHz~26.5GHz



8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

Please refer to FCC KDB 558074

Radiation Disturbance Test Limit for FCC (Class B) (9kHz-1GHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.

Radiation Disturbance Test Limit for FCC (Above 1G)

Frequency (MHz)	dB(uV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

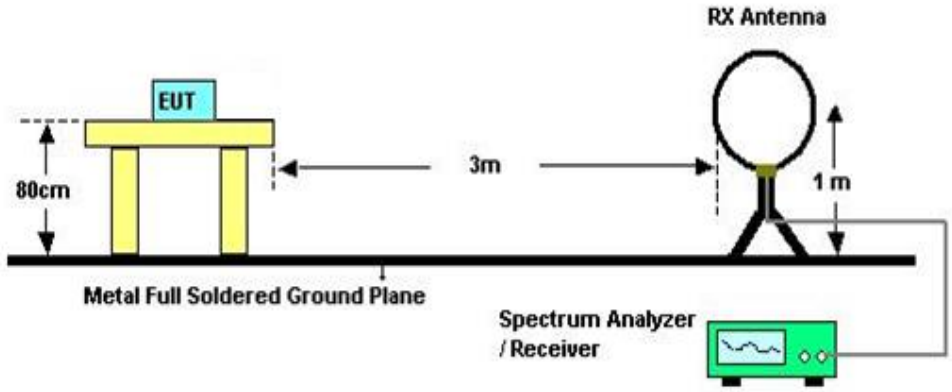
Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

Note: [1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

TEST SETUP AND PROCEDURE

Below 30MHz



The setting of the spectrum analyser

RBW	200 Hz (From 9kHz to 0.15MHz) / 9kHz (From 0.15MHz to 30MHz)
VBW	200 Hz (From 9kHz to 0.15MHz) / 9kHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 0.8 meter above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector

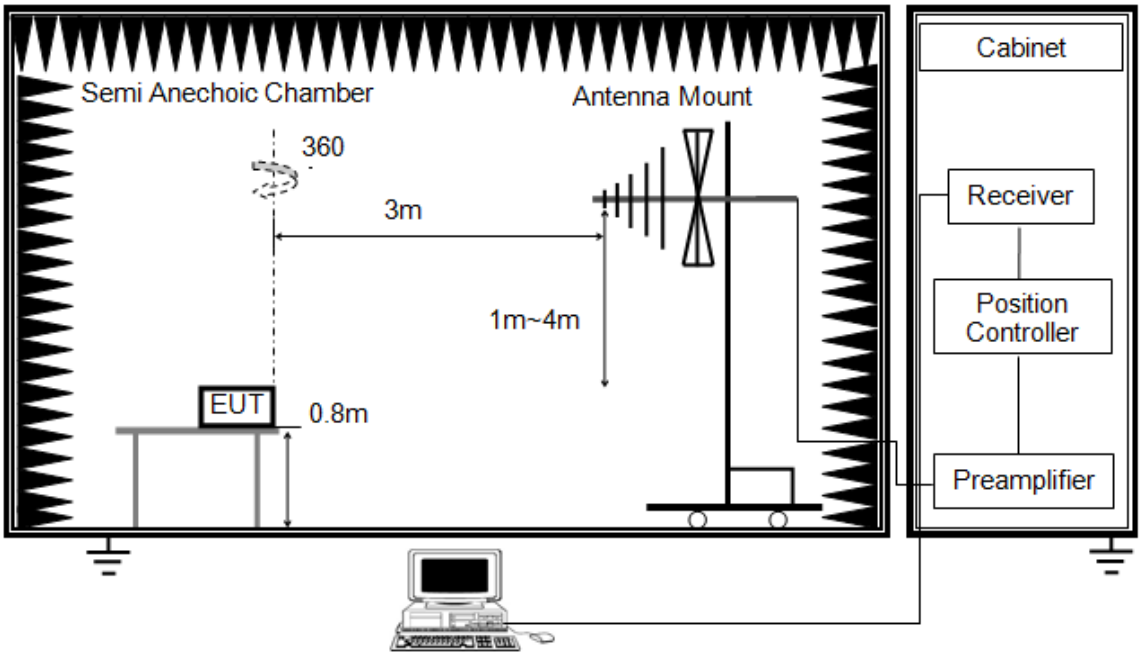
6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

7. For the actual test configuration, please refer to the related item in this test report

(Photographs of the Test Configuration)

8. The limits in FCC 47 CFR, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 Ω. For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1G



The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

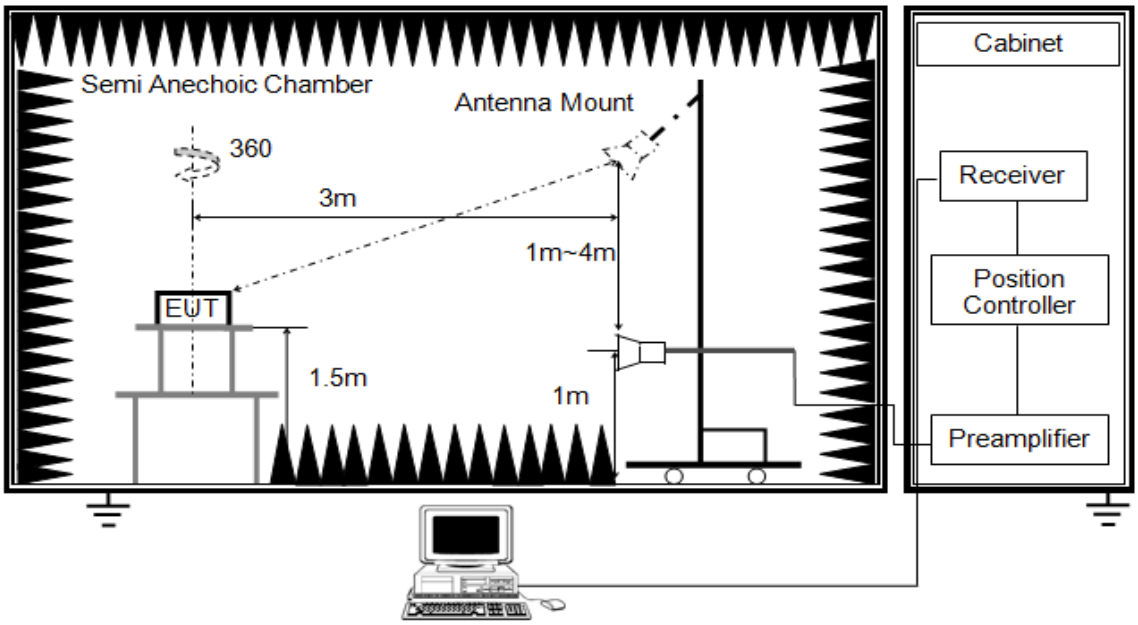
3. The EUT was placed on a turntable with 12 mm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

Above 1G



The setting of the spectrum analyser

RBW	1 MHz
VBW	PEAK:3 MHz AVG: See note6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 12mm above ground.

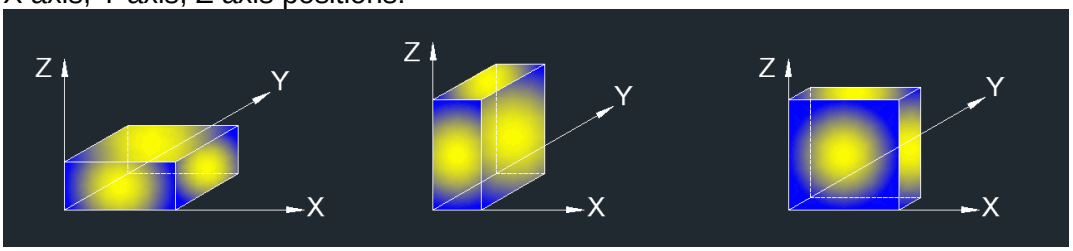
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz, the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements; and 1 MHz resolution bandwidth with video bandwidth ≥1/T but not less than the setting list in section 7.1 when use peak detector, max hold to be run for at least [50*(1/Duty Cycle)] traces for average measurements. For the Duty Cycle need to refer the results in section 7.1.

7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

X axis, Y axis, Z axis positions:



Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (Z axis) data recorded in the report.

8.2. TEST ENVIRONMENT

Temperature	20°C	Relative Humidity	47%
Atmosphere Pressure	102kPa	Test Voltage	DC 7.6V

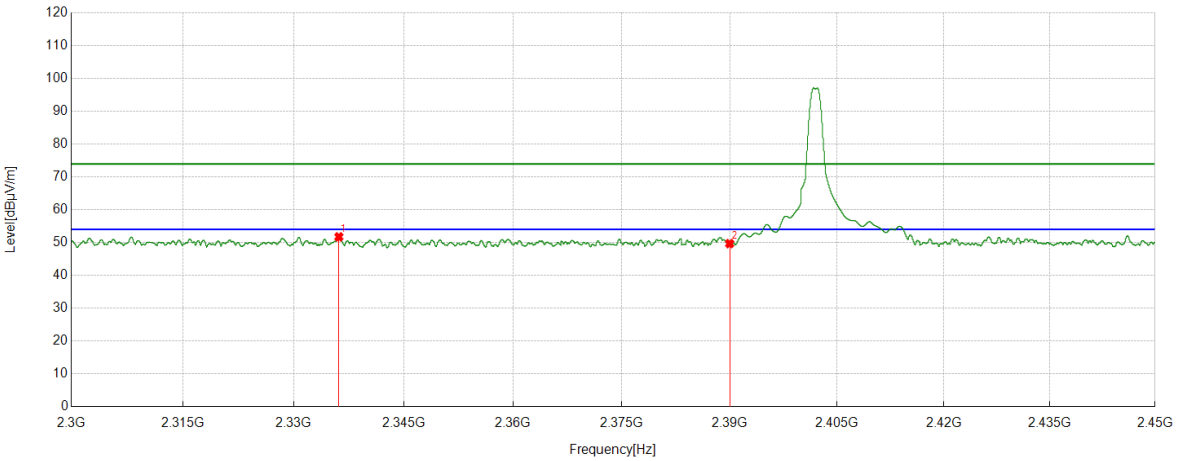
8.3. RESTRICTED BANDEDGE

TEST RESULT TABLE

Test Mode	Channel	Puw(dBm)	Verdict
BLE 1M	LCH	<Limit	PASS
	HCH	<Limit	PASS
BLE 2M	LCH	<Limit	PASS
	HCH	<Limit	PASS

TEST GRAPHS

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Horizontal	PASS

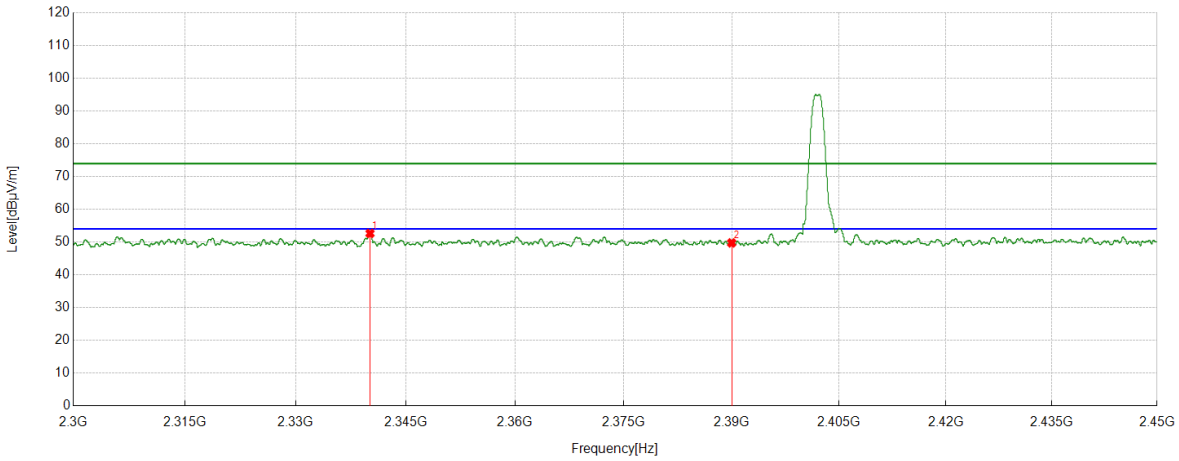


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2336.1733	38.30	13.44	51.74	74.00	-22.26	Horizontal
2	2390.0000	36.20	13.48	49.68	74.00	-24.32	Horizontal

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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
BLE 1M	LCH	Vertical	PASS

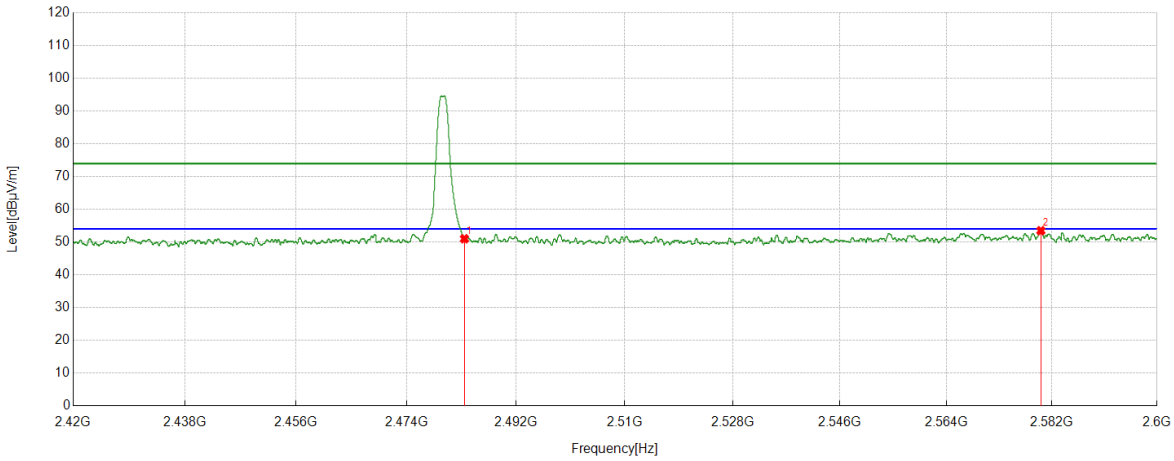


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2340.1488	39.20	13.44	52.64	74.00	-21.36	Vertical
2	2390.0000	36.26	13.48	49.74	74.00	-24.26	Vertical

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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
BLE 1M	HCH	Horizontal	PASS

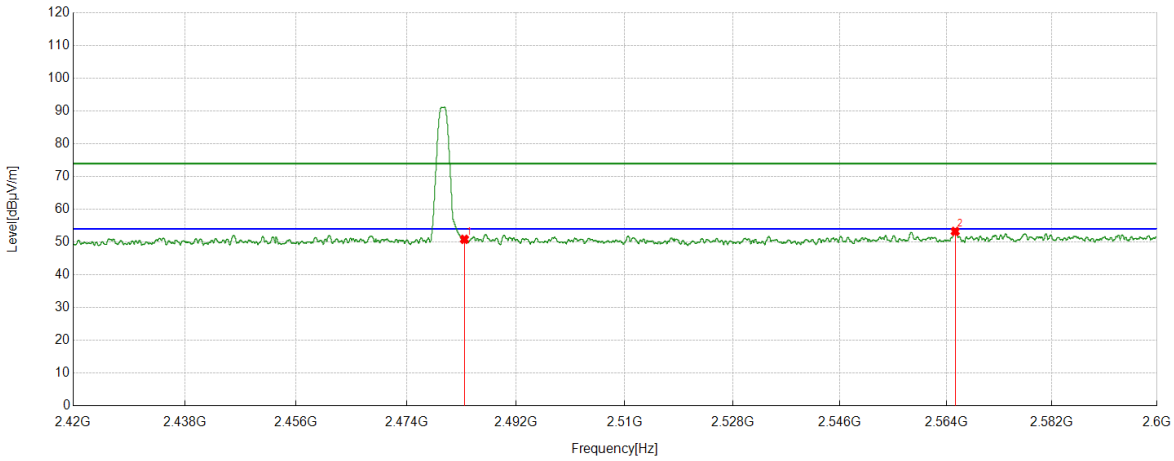


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	36.75	14.25	51.00	74.00	-23.00	Horizontal
2	2580.0850	38.71	14.76	53.47	74.00	-20.53	Horizontal

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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
BLE 1M	HCH	Vertical	PASS

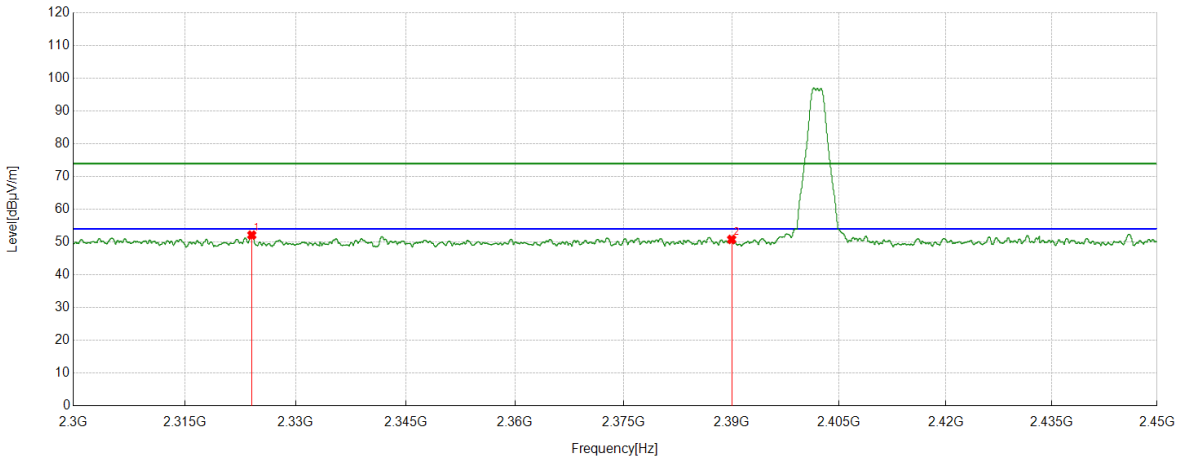


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	36.59	14.25	50.84	74.00	-23.16	Vertical
2	2565.5032	38.66	14.60	53.26	74.00	-20.74	Vertical

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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
BLE 2M	LCH	Horizontal	PASS

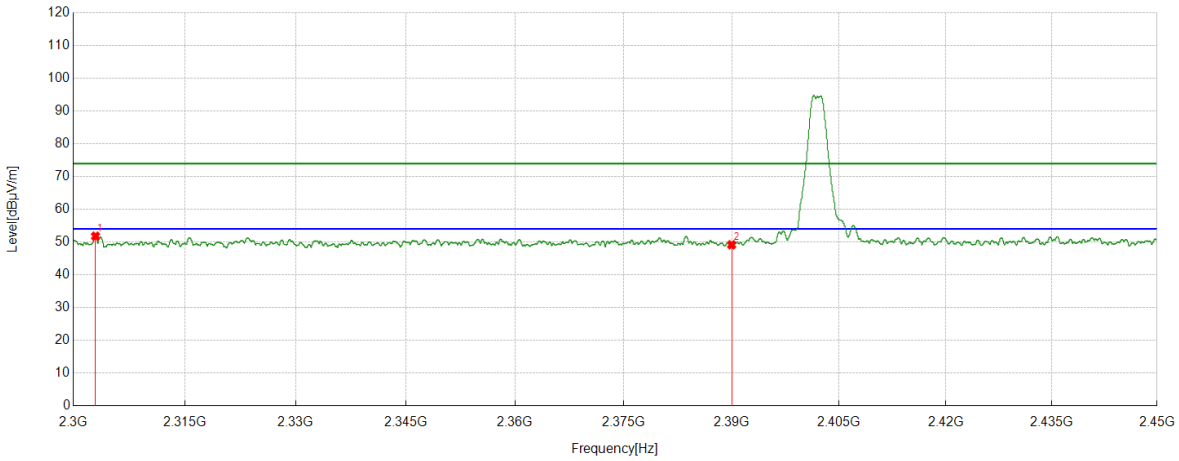


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2324.0780	38.62	13.51	52.13	74.00	-21.87	Horizontal
2	2390.0000	37.32	13.48	50.80	74.00	-23.20	Horizontal

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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
BLE 2M	LCH	Vertical	PASS

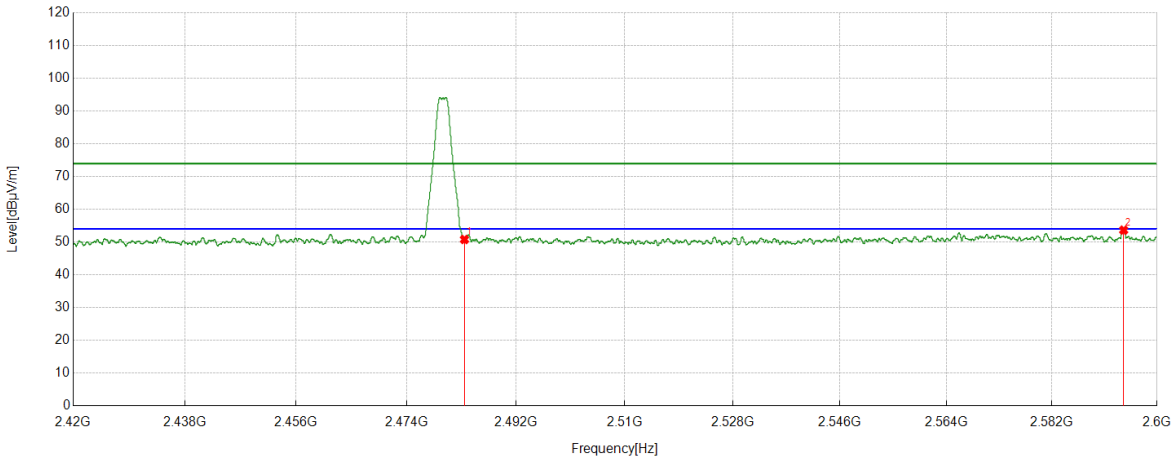


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2303.0004	38.26	13.52	51.78	74.00	-22.22	Vertical
2	2390.0000	35.69	13.48	49.17	74.00	-24.83	Vertical

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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
BLE 2M	HCH	Horizontal	PASS

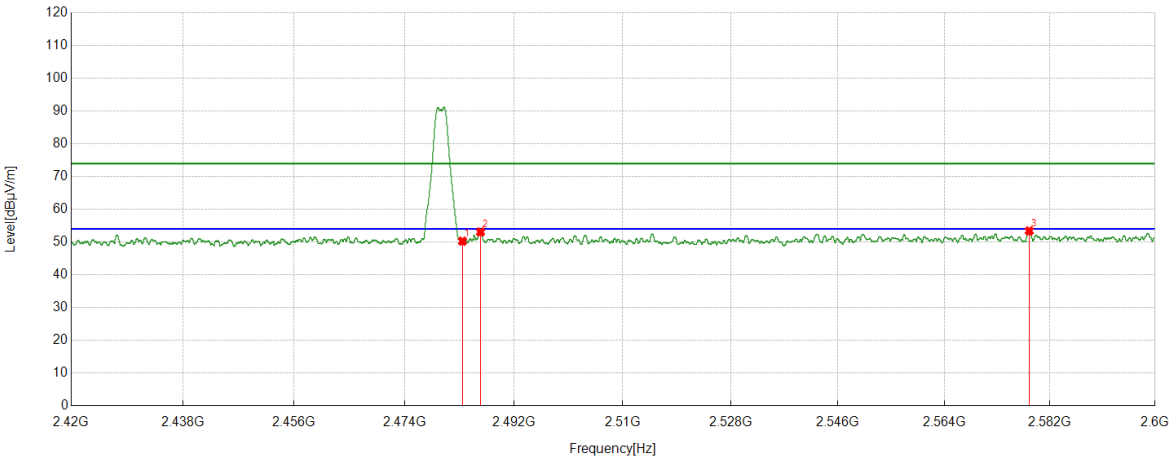


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	36.53	14.25	50.78	74.00	-23.22	Horizontal
2	2594.2618	38.70	14.94	53.64	74.00	-20.36	Horizontal

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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
BLE 2M	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	2483.5000	36.02	14.25	50.27	74.00	-23.73	Vertical
2	2486.4733	38.78	14.31	53.09	74.00	-20.91	Vertical
3	2578.4423	38.65	14.75	53.40	74.00	-20.60	

Note: 1. Peak result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
2. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz (refer to clause 7.1.).
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.

8.4. SPURIOUS EMISSIONS

TEST RESULTS TABLE

1) For 1GHz~18GHz

Test Mode	Channel	Puw(dBm)	Verdict
BLE 1M	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
BLE 2M	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

Note:
Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

2) For 9kHz~30MHz

Test Mode	Channel	Puw(dBm)	Verdict
BLE	MCH	<Limit	PASS

Note:
Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

3) For 30MHz~1GHz

Test Mode	Channel	Puw(dBm)	Verdict
BLE	MCH	<Limit	PASS

Note:
Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

4) For 18GHz~26.5GHz

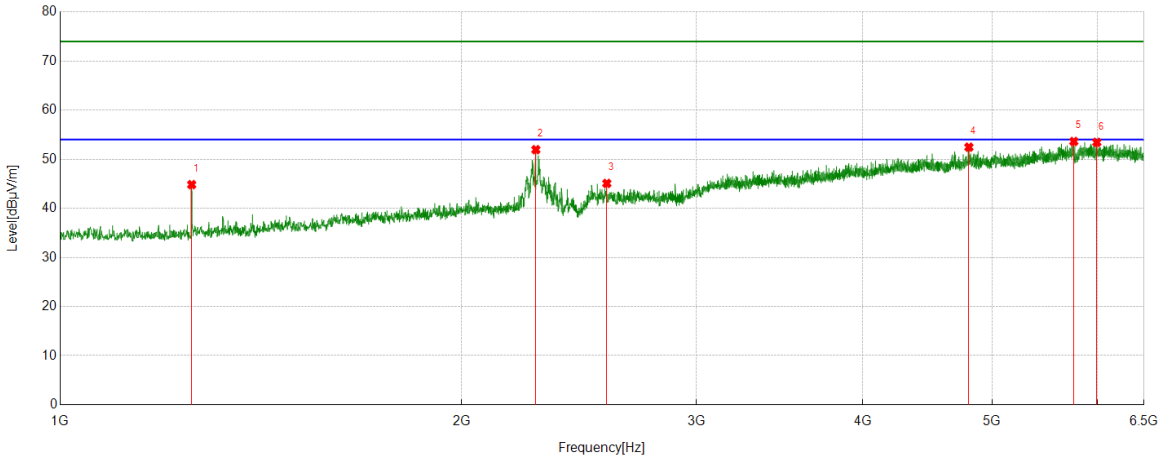
Test Mode	Channel	Puw(dBm)	Verdict
BLE	MCH	<Limit	PASS

Note:
Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

Part 1: 1GHz~6.5GHz

HARMONICS AND SPURIOUS EMISSIONS

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Horizontal	PASS

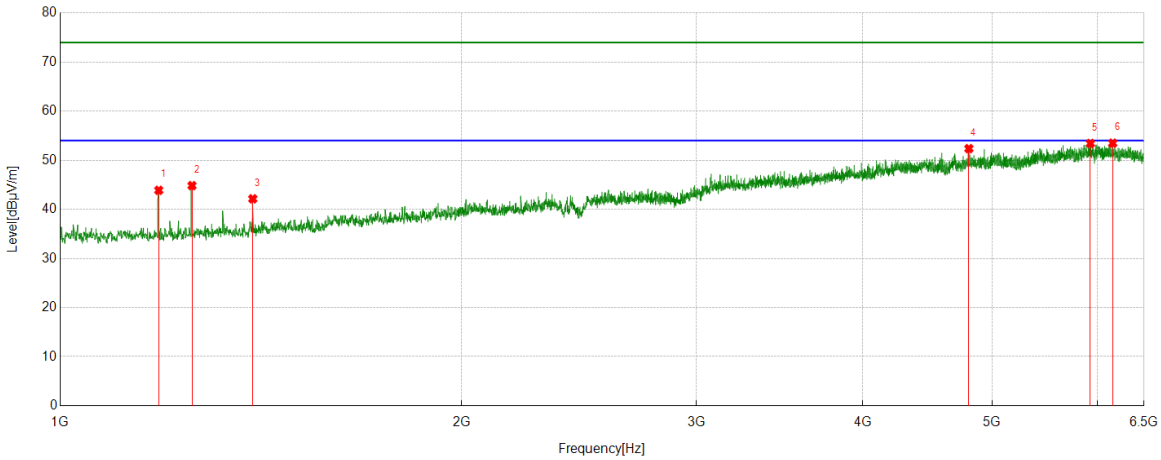


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	46.40	-1.57	44.83	74.00	-29.17	Horizontal
2	2274.0968	47.78	4.17	51.95	74.00	-22.05	Horizontal
3	2570.4463	39.41	5.67	45.08	74.00	-28.92	Horizontal
4	4803.7255	36.97	15.49	52.46	74.00	-21.54	Horizontal
5	5758.0948	35.67	17.95	53.62	74.00	-20.38	Horizontal
6	5991.1864	35.14	18.30	53.44	74.00	-20.56	Horizontal

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 1M	LCH	Vertical	PASS

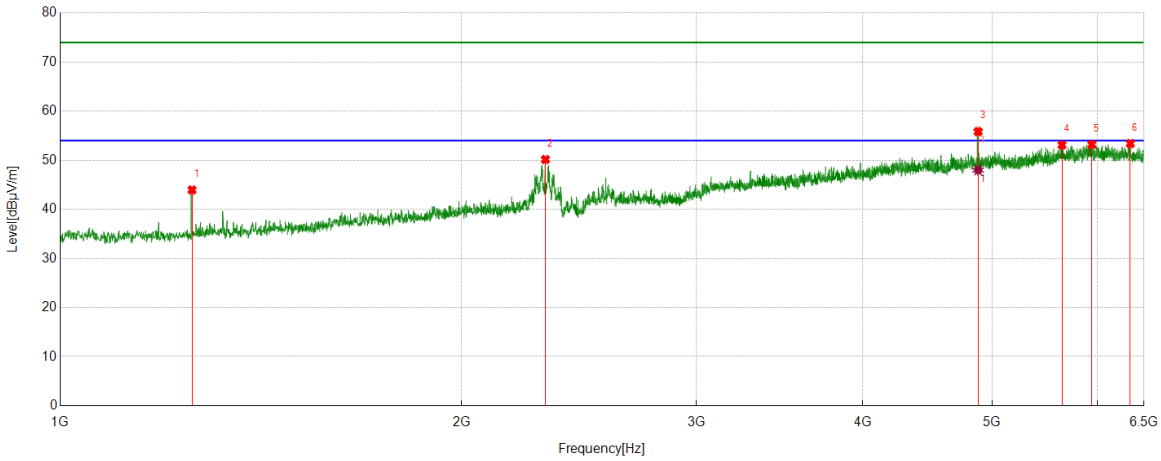


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.88	-2.00	43.88	74.00	-30.12	Vertical
2	1255.7820	46.40	-1.57	44.83	74.00	-29.17	Vertical
3	1394.6743	43.49	-1.35	42.14	74.00	-31.86	Vertical
4	4803.7255	36.88	15.49	52.37	74.00	-21.63	Vertical
5	5925.1781	34.60	18.81	53.41	74.00	-20.59	Vertical
6	6158.2698	34.90	18.58	53.48	74.00	-20.52	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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 1M	MCH	Horizontal	PASS



PK Result:

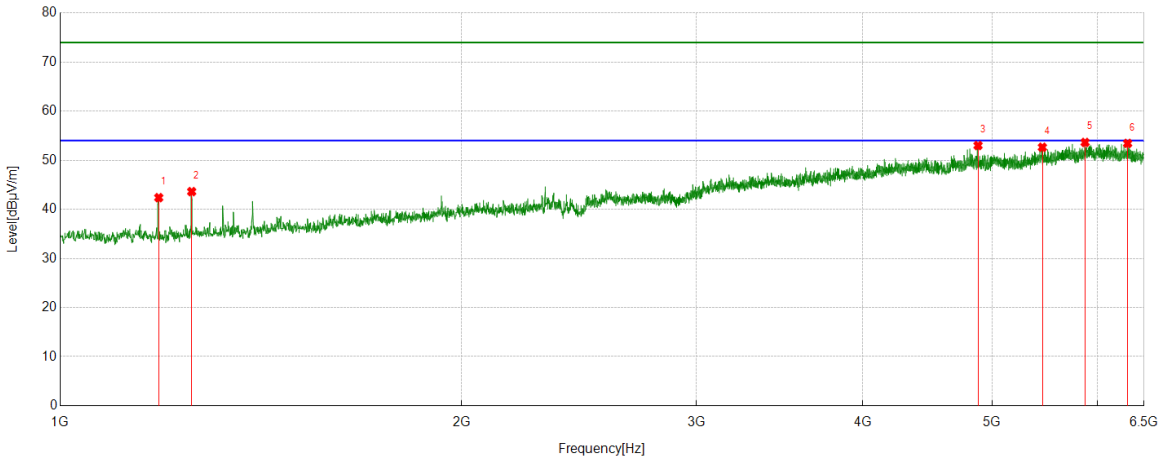
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.7820	45.52	-1.57	43.95	74.00	-30.05	Horizontal
2	2311.9140	45.77	4.38	50.15	74.00	-23.85	Horizontal
3	4880.7351	40.65	15.19	55.84	74.00	-18.16	Horizontal
4	5641.2052	35.52	17.59	53.11	74.00	-20.89	Horizontal
5	5939.6175	34.76	18.45	53.21	74.00	-20.79	Horizontal
6	6348.0435	34.25	19.14	53.39	74.00	-20.61	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4880.7351	32.79	15.19	47.98	54.00	-6.02	Horizontal

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 1M	MCH	Vertical	PASS

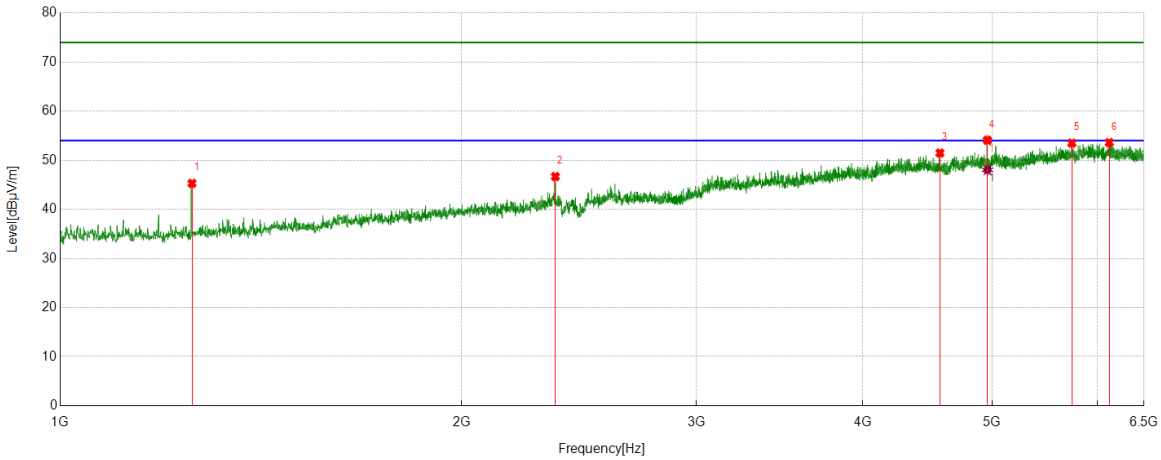


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	44.38	-2.00	42.38	74.00	-31.62	Vertical
2	1255.0944	45.18	-1.57	43.61	74.00	-30.39	Vertical
3	4880.0475	37.80	15.20	53.00	74.00	-21.00	Vertical
4	5453.4942	35.18	17.46	52.64	74.00	-21.36	Vertical
5	5870.8589	35.73	17.90	53.63	74.00	-20.37	Vertical
6	6318.4773	34.59	18.84	53.43	74.00	-20.57	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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 1M	HCH	Horizontal	PASS



PK Result:

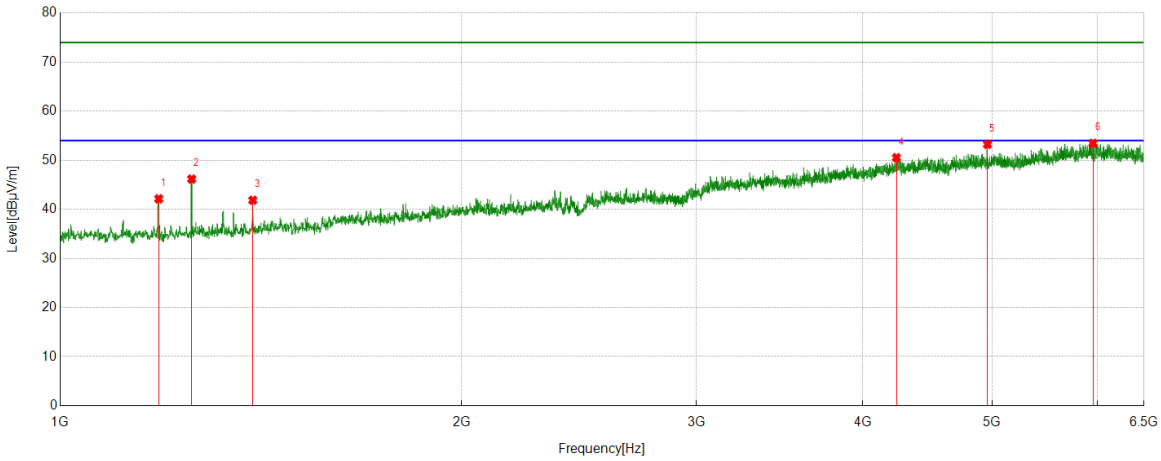
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.7820	46.87	-1.57	45.30	74.00	-28.70	Horizontal
2	2351.7940	41.90	4.78	46.68	74.00	-27.32	Horizontal
3	4569.2587	37.53	13.95	51.48	74.00	-22.52	Horizontal
4	4959.8075	38.57	15.51	54.08	74.00	-19.92	Horizontal
5	5738.8424	35.69	17.79	53.48	74.00	-20.52	Horizontal
6	6121.8277	35.34	18.26	53.60	74.00	-20.40	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4959.8075	32.53	15.51	48.04	54.00	-5.96	Horizontal

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 1M	HCH	Vertical	PASS

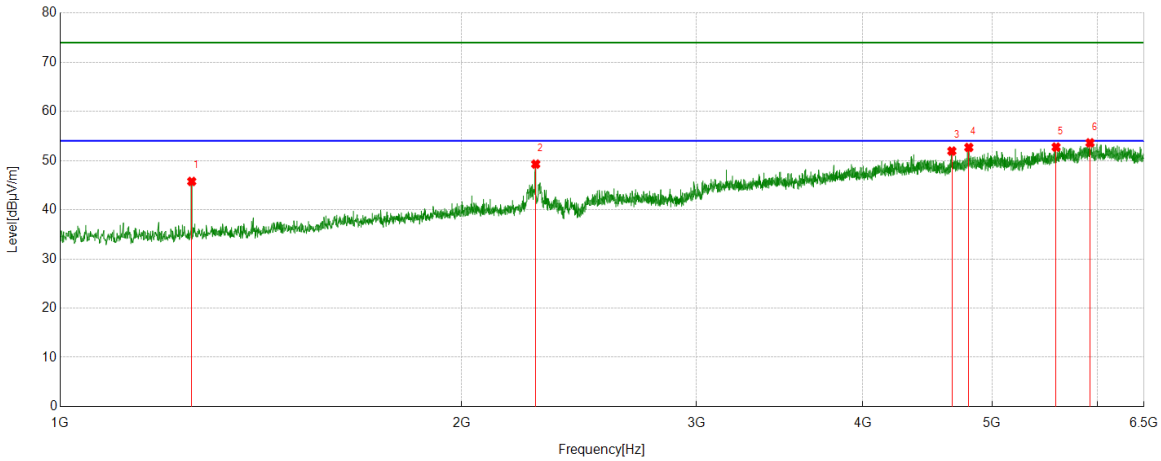


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	44.14	-2.00	42.14	74.00	-31.86	Vertical
2	1255.0944	47.73	-1.57	46.16	74.00	-27.84	Vertical
3	1394.6743	43.21	-1.35	41.86	74.00	-32.14	Vertical
4	4238.5298	36.59	13.94	50.53	74.00	-23.47	Vertical
5	4959.8075	37.73	15.51	53.24	74.00	-20.76	Vertical
6	5951.9940	34.97	18.48	53.45	74.00	-20.55	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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 2M	LCH	Horizontal	PASS

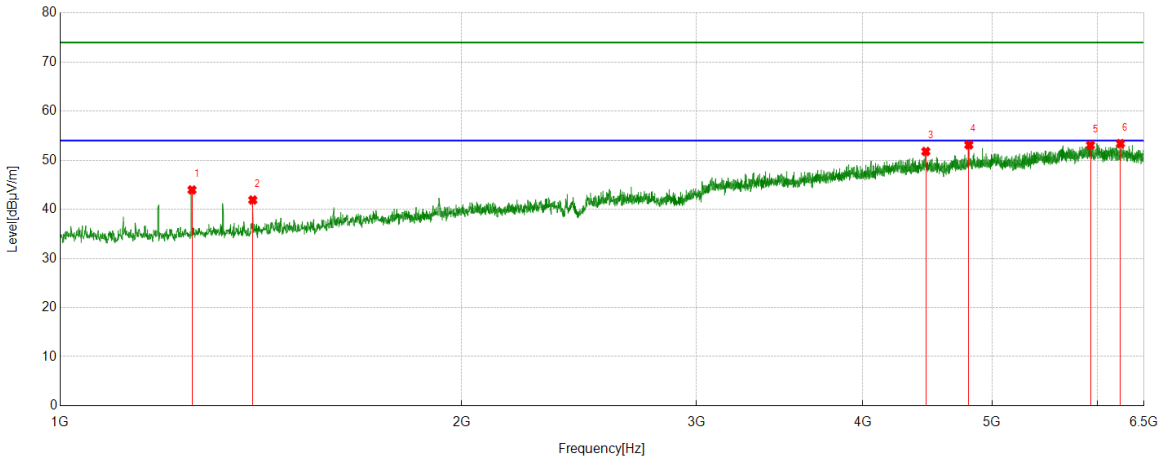


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	47.33	-1.57	45.76	74.00	-28.24	Horizontal
2	2273.4092	45.09	4.19	49.28	74.00	-24.72	Horizontal
3	4664.1455	37.17	14.76	51.93	74.00	-22.07	Horizontal
4	4803.0379	37.15	15.52	52.67	74.00	-21.33	Horizontal
5	5584.1355	35.38	17.36	52.74	74.00	-21.26	Horizontal
6	5921.0526	34.90	18.71	53.61	74.00	-20.39	Horizontal

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 2M	LCH	Vertical	PASS

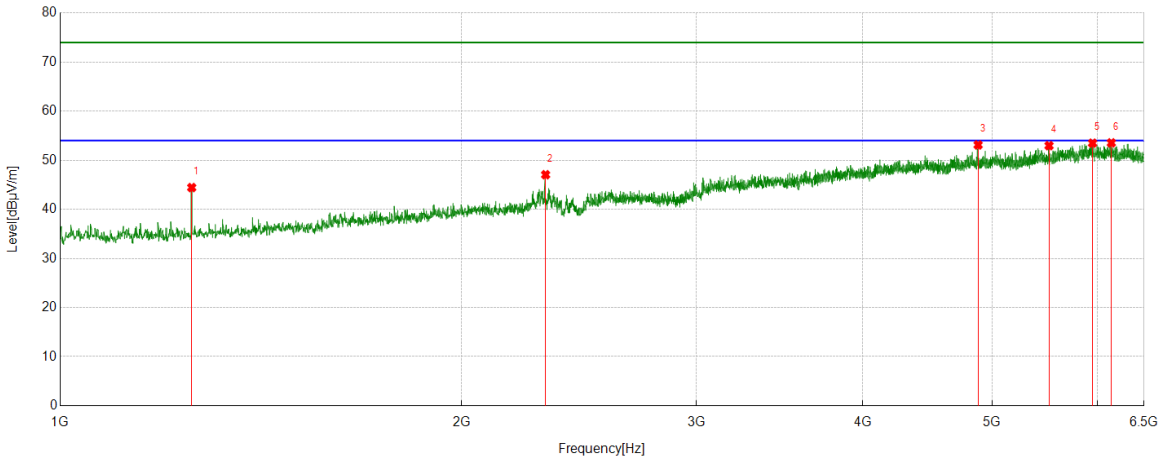


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.7820	45.52	-1.57	43.95	74.00	-30.05	Vertical
2	1394.6743	43.25	-1.35	41.90	74.00	-32.10	Vertical
3	4459.2449	36.90	14.89	51.79	74.00	-22.21	Vertical
4	4803.0379	37.61	15.52	53.13	74.00	-20.87	Vertical
5	5925.8657	34.25	18.82	53.07	74.00	-20.93	Vertical
6	6240.7801	35.06	18.33	53.39	74.00	-20.61	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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 2M	MCH	Horizontal	PASS

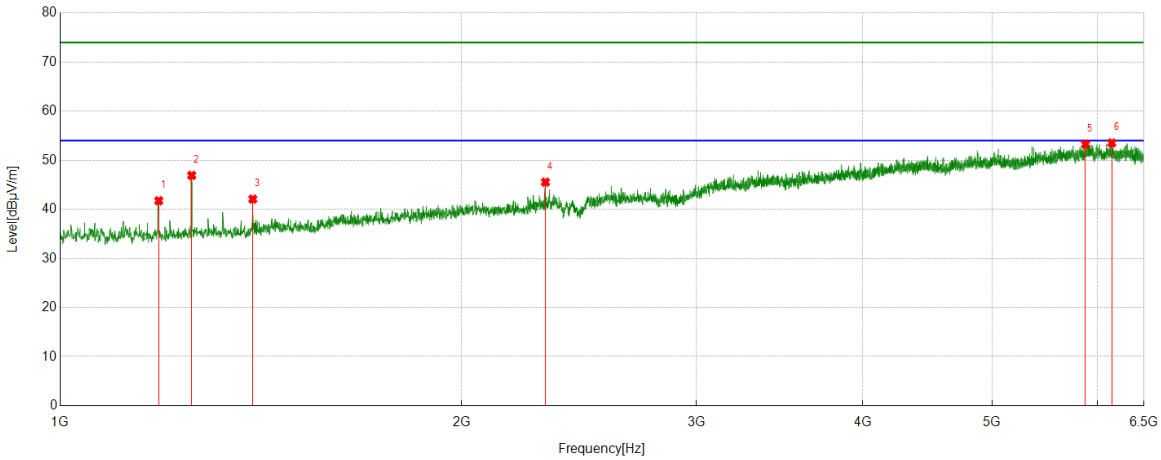


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	46.01	-1.57	44.44	74.00	-29.56	Horizontal
2	2312.6016	42.62	4.43	47.05	74.00	-26.95	Horizontal
3	4880.7351	37.93	15.19	53.12	74.00	-20.88	Horizontal
4	5516.7521	36.28	16.69	52.97	74.00	-21.03	Horizontal
5	5947.1809	35.03	18.45	53.48	74.00	-20.52	Horizontal
6	6143.1429	35.15	18.39	53.54	74.00	-20.46	Horizontal

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 2M	MCH	Vertical	PASS

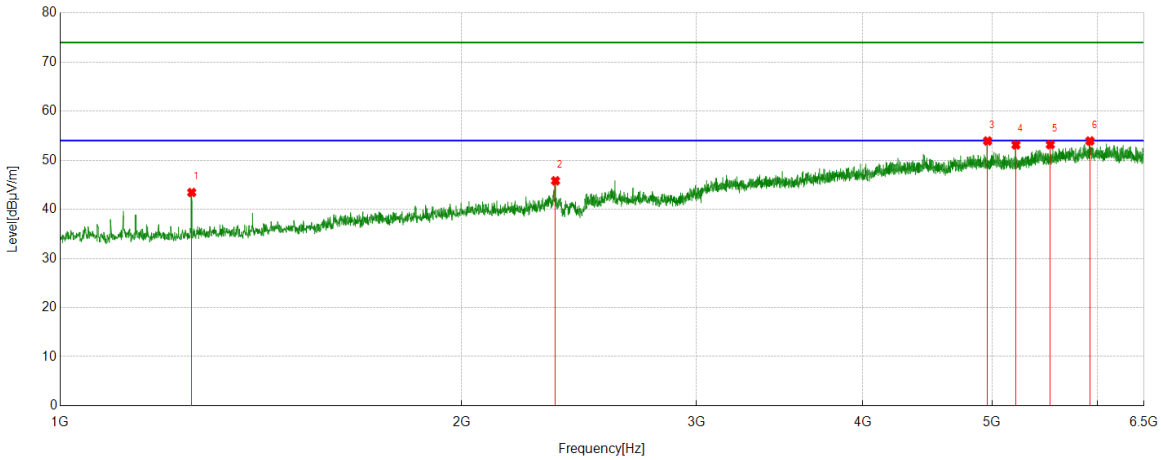


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	43.75	-2.00	41.75	74.00	-32.25	Vertical
2	1255.0944	48.48	-1.57	46.91	74.00	-27.09	Vertical
3	1394.6743	43.43	-1.35	42.08	74.00	-31.92	Vertical
4	2311.9140	41.16	4.38	45.54	74.00	-28.46	Vertical
5	5875.6720	35.49	17.77	53.26	74.00	-20.74	Vertical
6	6147.9560	35.03	18.49	53.52	74.00	-20.48	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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 2M	HCH	Horizontal	PASS

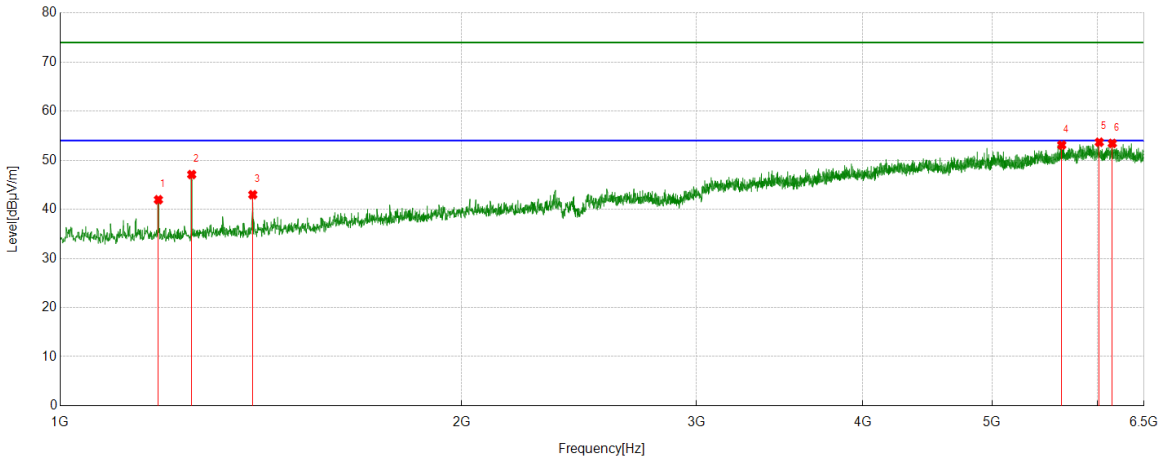


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	45.00	-1.57	43.43	74.00	-30.57	Horizontal
2	2352.4816	41.03	4.78	45.81	74.00	-28.19	Horizontal
3	4961.1826	38.46	15.47	53.93	74.00	-20.07	Horizontal
4	5210.0888	37.74	15.39	53.13	74.00	-20.87	Horizontal
5	5529.1286	36.42	16.75	53.17	74.00	-20.83	Horizontal
6	5920.3650	35.22	18.70	53.92	74.00	-20.08	Horizontal

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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
BLE 2M	HCH	Vertical	PASS



PK Result:

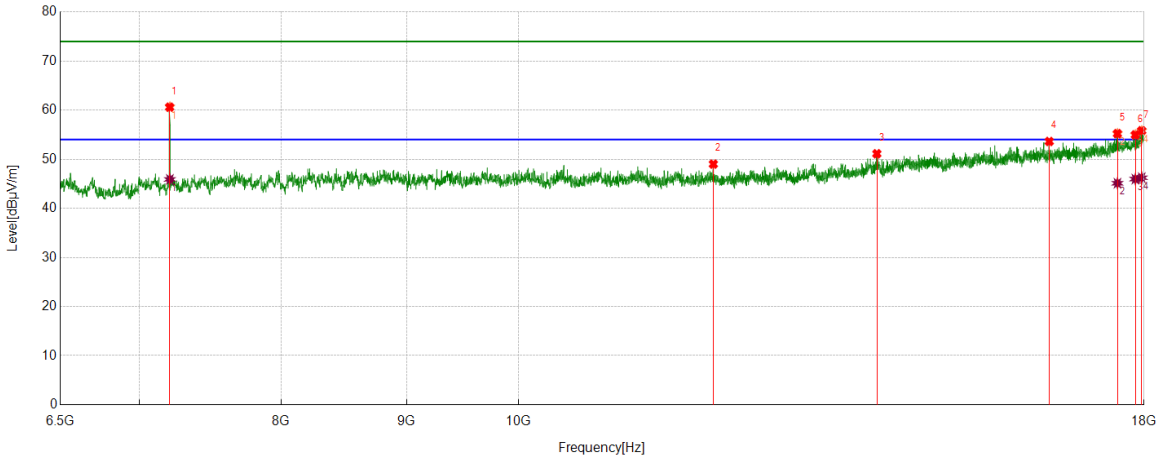
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1184.9606	43.93	-1.97	41.96	74.00	-32.04	Vertical
2	1255.0944	48.66	-1.57	47.09	74.00	-26.91	Vertical
3	1394.6743	44.33	-1.35	42.98	74.00	-31.02	Vertical
4	5639.1424	35.49	17.61	53.10	74.00	-20.90	Vertical
5	6016.6271	35.65	18.02	53.67	74.00	-20.33	Vertical
6	6153.4567	34.88	18.55	53.43	74.00	-20.57	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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter 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 2: 6.5GHz~18GHz

HARMONICS AND SPURIOUS EMISSIONS

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Horizontal	PASS



PK Result:

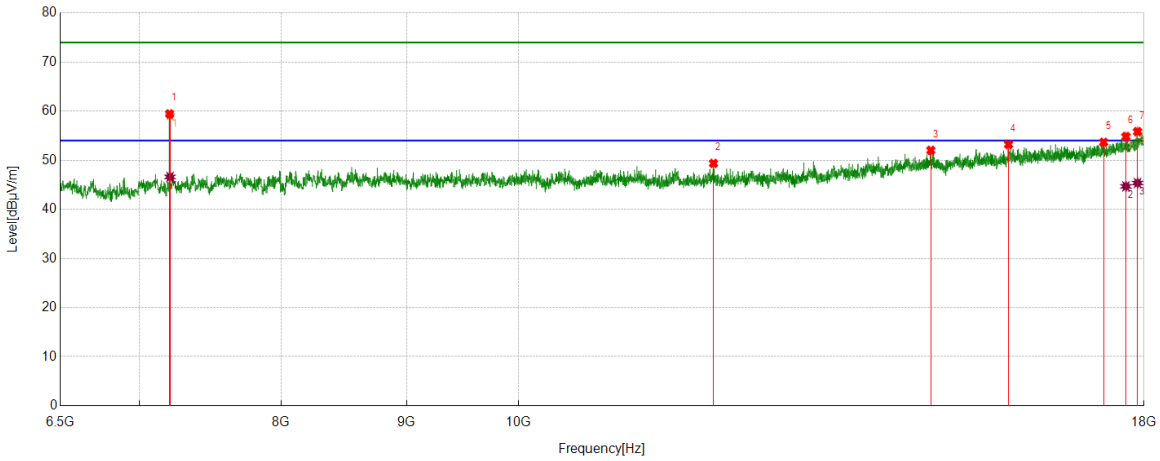
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7204.4631	56.87	3.74	60.61	74.00	-13.39	Horizontal
2	12009.1886	40.88	8.13	49.01	74.00	-24.99	Horizontal
3	14003.2504	39.35	11.77	51.12	74.00	-22.88	Horizontal
4	16465.9957	37.86	15.76	53.62	74.00	-20.38	Horizontal
5	17555.7570	37.45	17.77	55.22	74.00	-18.78	Horizontal
6	17853.3567	35.79	19.18	54.97	74.00	-19.03	Horizontal
7	17961.1826	36.18	19.63	55.81	74.00	-18.19	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7206.0622	42.15	3.74	45.89	54.00	-8.11	Horizontal
2	17555.7570	27.34	17.77	45.11	54.00	-8.89	Horizontal
3	17853.3567	26.78	19.18	45.96	54.00	-8.04	Horizontal
4	17961.1826	26.60	19.63	46.23	54.00	-7.77	Horizontal

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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 1M	LCH	Vertical	PASS



PK Result:

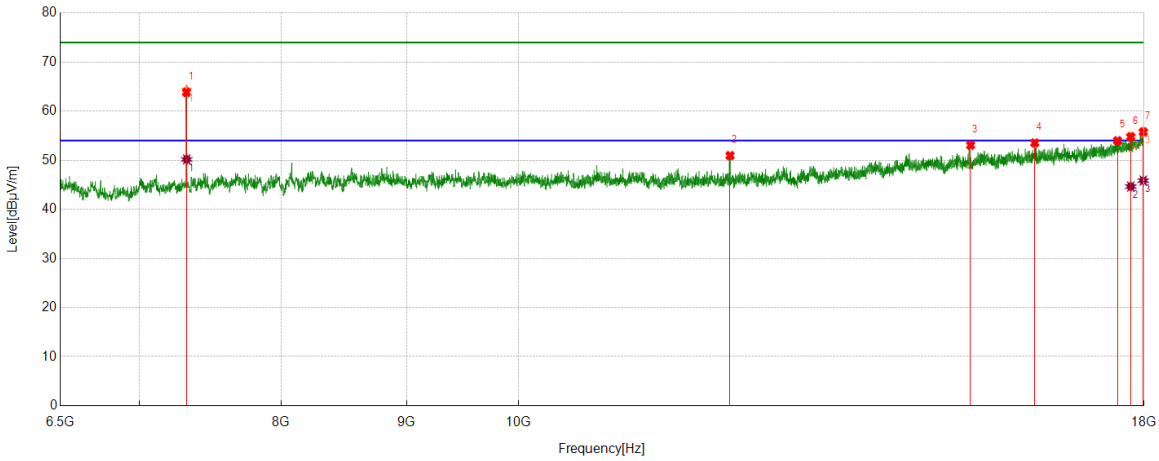
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7204.4631	55.71	3.74	59.45	74.00	-14.55	Vertical
2	12010.6263	41.24	8.12	49.36	74.00	-24.64	Vertical
3	14732.1540	39.21	12.81	52.02	74.00	-21.98	Vertical
4	15847.7935	38.45	14.78	53.23	74.00	-20.77	Vertical
5	17330.0413	36.56	17.10	53.66	74.00	-20.34	Vertical
6	17696.6496	36.59	18.24	54.83	74.00	-19.17	Vertical
7	17890.7363	36.53	19.30	55.83	74.00	-18.17	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7206.8509	42.87	3.74	46.61	54.00	-7.39	Vertical
2	17696.6496	26.44	18.24	44.68	54.00	-9.32	Vertical
3	17890.7363	26.06	19.30	45.36	54.00	-8.64	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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 1M	MCH	Horizontal	PASS



PK Result:

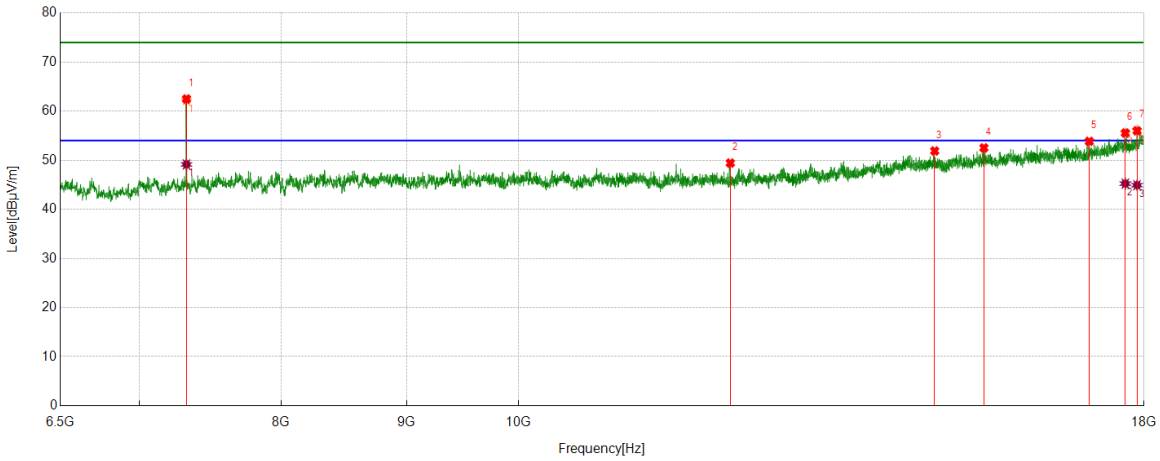
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7319.4774	60.01	3.81	63.82	74.00	-10.18	Horizontal
2	12198.9624	42.52	8.43	50.95	74.00	-23.05	Horizontal
3	15292.8491	39.57	13.50	53.07	74.00	-20.93	Horizontal
4	16243.1554	38.27	15.25	53.52	74.00	-20.48	Horizontal
5	17557.1946	36.20	17.77	53.97	74.00	-20.03	Horizontal
6	17777.1596	36.04	18.75	54.79	74.00	-19.21	Horizontal
7	17987.0609	35.98	19.80	55.78	74.00	-18.22	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7320.8667	46.37	3.81	50.18	54.00	-3.82	Horizontal
2	17777.1596	25.89	18.75	44.64	54.00	-9.36	Horizontal
3	17987.0609	26.05	19.80	45.85	54.00	-8.15	Horizontal

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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 1M	MCH	Vertical	PASS



PK Result:

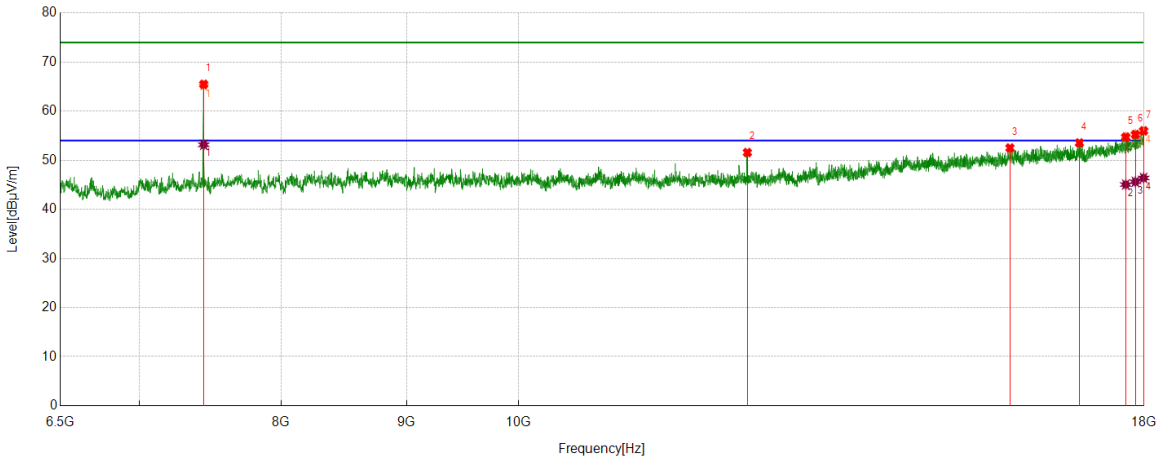
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7319.4774	58.67	3.81	62.48	74.00	-11.52	Vertical
2	12201.8377	40.98	8.45	49.43	74.00	-24.57	Vertical
3	14785.3482	39.03	12.86	51.89	74.00	-22.11	Vertical
4	15485.4982	38.55	13.97	52.52	74.00	-21.48	Vertical
5	17097.1371	37.36	16.49	53.85	74.00	-20.15	Vertical
6	17686.5858	37.39	18.16	55.55	74.00	-18.45	Vertical
7	17882.1103	36.80	19.21	56.01	74.00	-17.99	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7319.3689	45.34	3.81	49.15	54.00	-4.85	Vertical
2	17686.5858	27.08	18.16	45.24	54.00	-8.76	Vertical
3	17882.1103	25.71	19.21	44.92	54.00	-9.08	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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 1M	HCH	Horizontal	PASS



PK Result:

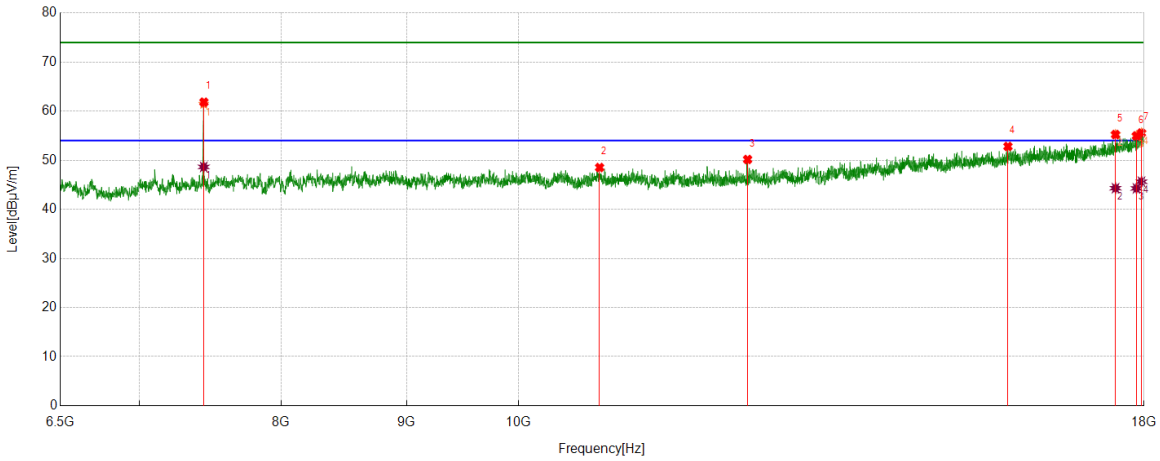
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7438.8049	61.26	4.21	65.47	74.00	-8.53	Horizontal
2	12398.7998	43.26	8.31	51.57	74.00	-22.43	Horizontal
3	15869.3587	37.82	14.68	52.50	74.00	-21.50	Horizontal
4	16938.9924	37.47	16.06	53.53	74.00	-20.47	Horizontal
5	17693.7742	36.51	18.21	54.72	74.00	-19.28	Horizontal
6	17854.7943	36.04	19.20	55.24	74.00	-18.76	Horizontal
7	17992.8116	36.21	19.78	55.99	74.00	-18.01	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7439.1088	48.94	4.21	53.15	54.00	-0.85	Horizontal
2	17693.7742	26.84	18.21	45.05	54.00	-8.95	Horizontal
3	17854.7943	26.41	19.20	45.61	54.00	-8.39	Horizontal
4	17992.8116	26.61	19.78	46.39	54.00	-7.61	Horizontal

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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 1M	HCH	Vertical	PASS



PK Result:

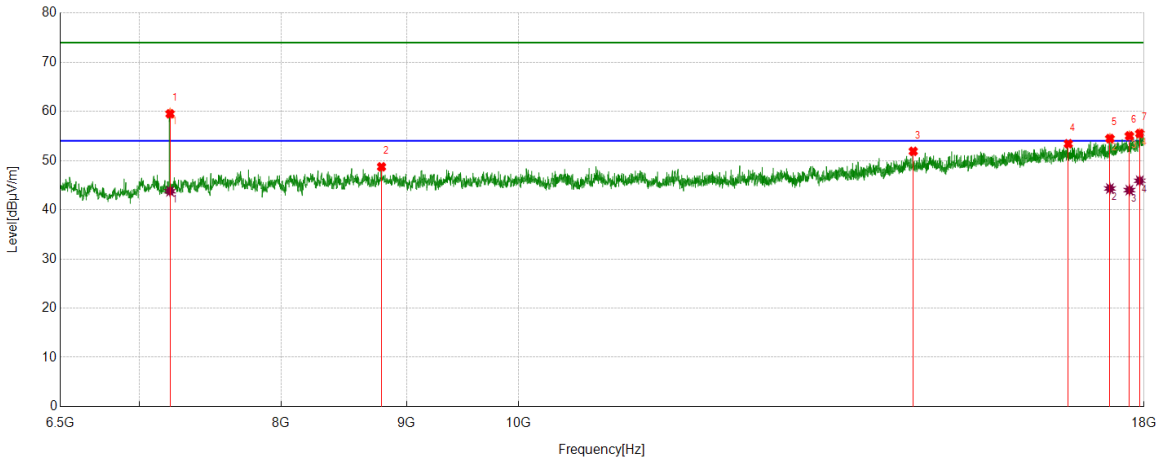
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7440.2425	57.63	4.20	61.83	74.00	-12.17	Vertical
2	10791.4739	41.59	6.93	48.52	74.00	-25.48	Vertical
3	12401.6752	41.86	8.30	50.16	74.00	-23.84	Vertical
4	15839.1674	38.29	14.52	52.81	74.00	-21.19	Vertical
5	17524.1280	37.64	17.60	55.24	74.00	-18.76	Vertical
6	17872.0465	35.77	19.20	54.97	74.00	-19.03	Vertical
7	17956.8696	35.97	19.59	55.56	74.00	-18.44	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7439.0124	44.44	4.20	48.64	54.00	-5.36	Vertical
2	17524.1280	26.71	17.60	44.31	54.00	-9.69	Vertical
3	17872.0465	25.07	19.20	44.27	54.00	-9.73	Vertical
4	17956.8696	26.04	19.59	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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 2M	LCH	Horizontal	PASS



PK Result:

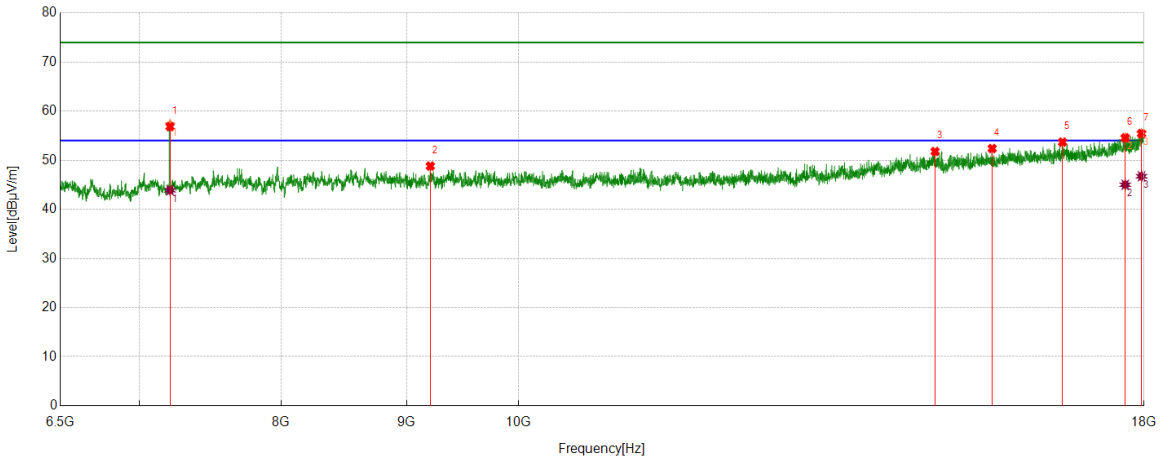
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7207.3384	55.80	3.71	59.51	74.00	-14.49	Horizontal
2	8791.6615	42.50	6.23	48.73	74.00	-25.27	Horizontal
3	14490.6238	39.05	12.83	51.88	74.00	-22.12	Horizontal
4	16763.5954	37.38	16.04	53.42	74.00	-20.58	Horizontal
5	17432.1165	36.92	17.56	54.48	74.00	-19.52	Horizontal
6	17754.1568	36.46	18.56	55.02	74.00	-18.98	Horizontal
7	17928.1160	36.14	19.36	55.50	74.00	-18.50	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7207.2374	40.06	3.71	43.77	54.00	-10.23	Horizontal
2	17432.1165	26.76	17.56	44.32	54.00	-9.68	Horizontal
3	17754.1568	25.43	18.56	43.99	54.00	-10.01	Horizontal
4	17928.1160	26.54	19.36	45.90	54.00	-8.10	Horizontal

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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 2M	LCH	Vertical	PASS



PK Result:

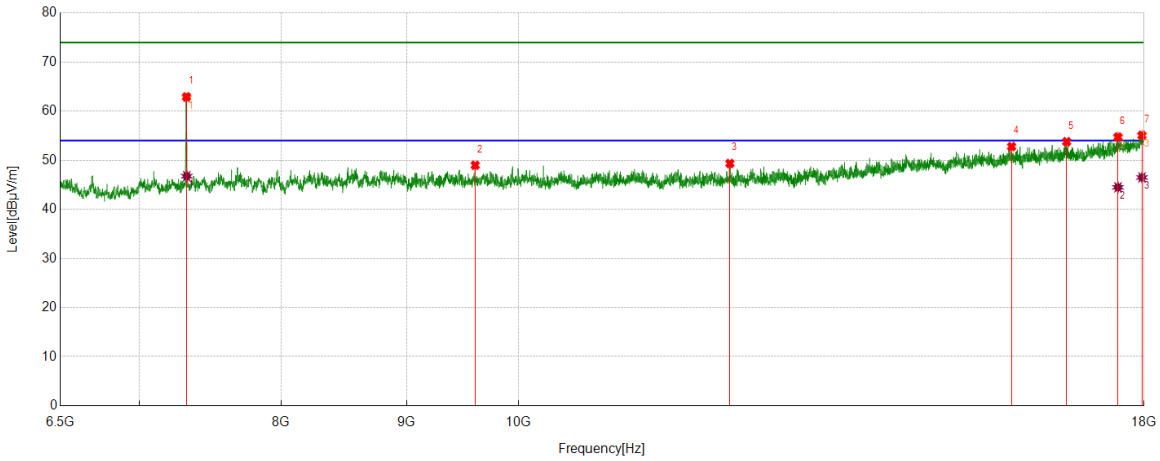
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7207.3384	53.14	3.71	56.85	74.00	-17.15	Vertical
2	9204.2755	42.78	6.03	48.81	74.00	-25.19	Vertical
3	14791.0989	38.91	12.87	51.78	74.00	-22.22	Vertical
4	15606.2633	38.75	13.64	52.39	74.00	-21.61	Vertical
5	16673.0216	37.95	15.75	53.70	74.00	-20.30	Vertical
6	17685.1481	36.42	18.15	54.57	74.00	-19.43	Vertical
7	17958.3073	35.84	19.60	55.44	74.00	-18.56	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7207.3456	40.17	3.71	43.88	54.00	-10.12	Vertical
2	17685.1481	26.86	18.15	45.01	54.00	-8.99	Vertical
3	17958.3073	27.14	19.60	46.74	54.00	-7.26	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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 2M	MCH	Horizontal	PASS



PK Result:

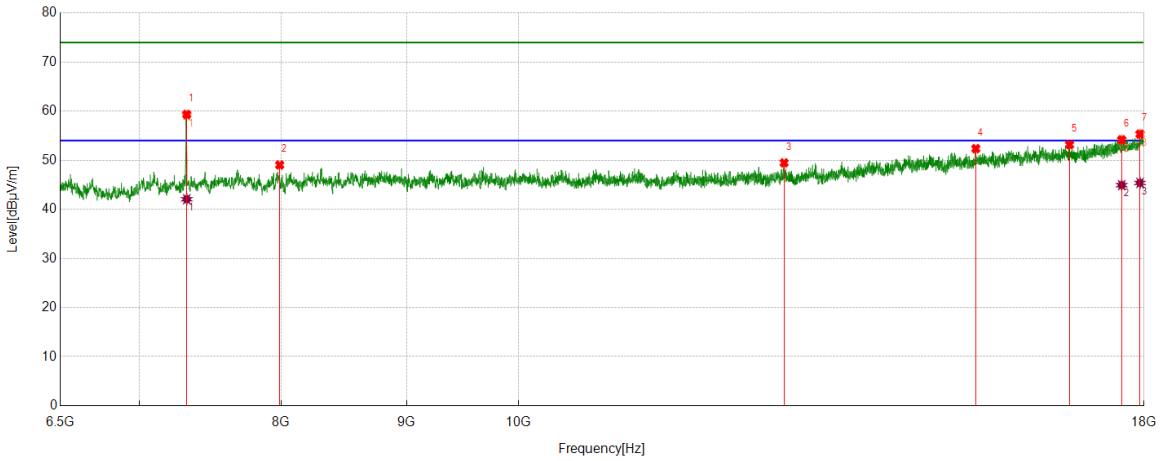
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7319.4774	59.10	3.81	62.91	74.00	-11.09	Horizontal
2	9601.0751	42.76	6.22	48.98	74.00	-25.02	Horizontal
3	12197.5247	40.91	8.43	49.34	74.00	-24.66	Horizontal
4	15893.7992	38.21	14.58	52.79	74.00	-21.21	Horizontal
5	16737.7172	37.82	15.96	53.78	74.00	-20.22	Horizontal
6	17564.3830	36.90	17.83	54.73	74.00	-19.27	Horizontal
7	17965.4957	35.44	19.63	55.07	74.00	-18.93	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7321.3298	42.95	3.81	46.76	54.00	-7.24	Horizontal
2	17564.3830	26.65	17.83	44.48	54.00	-9.52	Horizontal
3	17965.4957	26.86	19.63	46.49	54.00	-7.51	Horizontal

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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 2M	MCH	Vertical	PASS



PK Result:

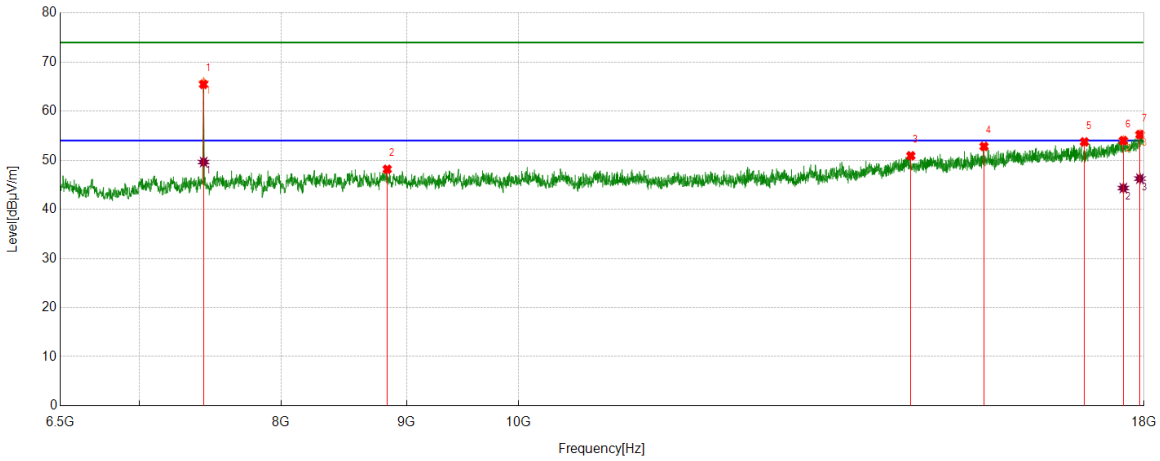
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7320.9151	55.53	3.80	59.33	74.00	-14.67	Vertical
2	7989.4362	43.43	5.60	49.03	74.00	-24.97	Vertical
3	12834.4168	40.39	9.08	49.47	74.00	-24.53	Vertical
4	15367.6085	38.76	13.60	52.36	74.00	-21.64	Vertical
5	16783.7230	36.95	16.21	53.16	74.00	-20.84	Vertical
6	17626.2033	36.10	18.06	54.16	74.00	-19.84	Vertical
7	17932.4291	35.94	19.39	55.33	74.00	-18.67	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7321.2769	38.26	3.80	42.06	54.00	-11.94	Vertical
2	17626.2033	26.87	18.06	44.93	54.00	-9.07	Vertical
3	17932.4291	25.99	19.39	45.38	54.00	-8.62	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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 2M	HCH	Horizontal	PASS



PK Result:

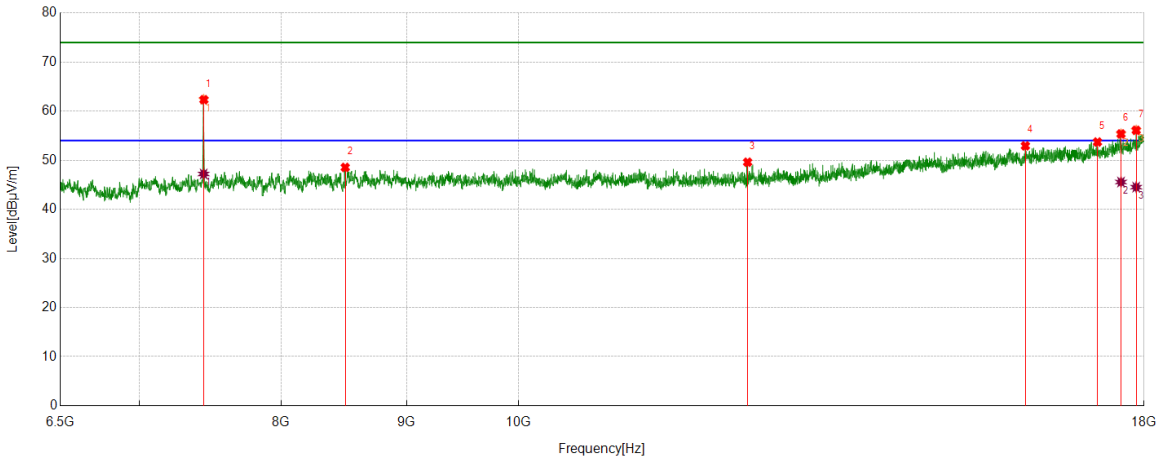
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7437.3672	61.24	4.21	65.45	74.00	-8.55	Horizontal
2	8839.1049	41.79	6.37	48.16	74.00	-25.84	Horizontal
3	14457.5572	38.06	12.85	50.91	74.00	-23.09	Horizontal
4	15486.9359	38.84	13.97	52.81	74.00	-21.19	Horizontal
5	17019.5024	37.52	16.22	53.74	74.00	-20.26	Horizontal
6	17653.5192	35.96	18.04	54.00	74.00	-20.00	Horizontal
7	17930.9914	35.87	19.37	55.24	74.00	-18.76	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7438.3875	45.42	4.21	49.63	54.00	-4.37	Horizontal
2	17653.5192	26.29	18.04	44.33	54.00	-9.67	Horizontal
3	17930.9914	26.89	19.37	46.26	54.00	-7.74	Horizontal

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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 2M	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	7440.2425	58.13	4.20	62.33	74.00	-11.67	Vertical
2	8496.9371	42.46	6.08	48.54	74.00	-25.46	Vertical
3	12401.6752	41.30	8.30	49.60	74.00	-24.40	Vertical
4	16100.8251	38.26	14.67	52.93	74.00	-21.07	Vertical
5	17229.4037	36.99	16.72	53.71	74.00	-20.29	Vertical
6	17614.7018	37.30	18.06	55.36	74.00	-18.64	Vertical
7	17867.7335	36.89	19.21	56.10	74.00	-17.90	Vertical

AV Result:

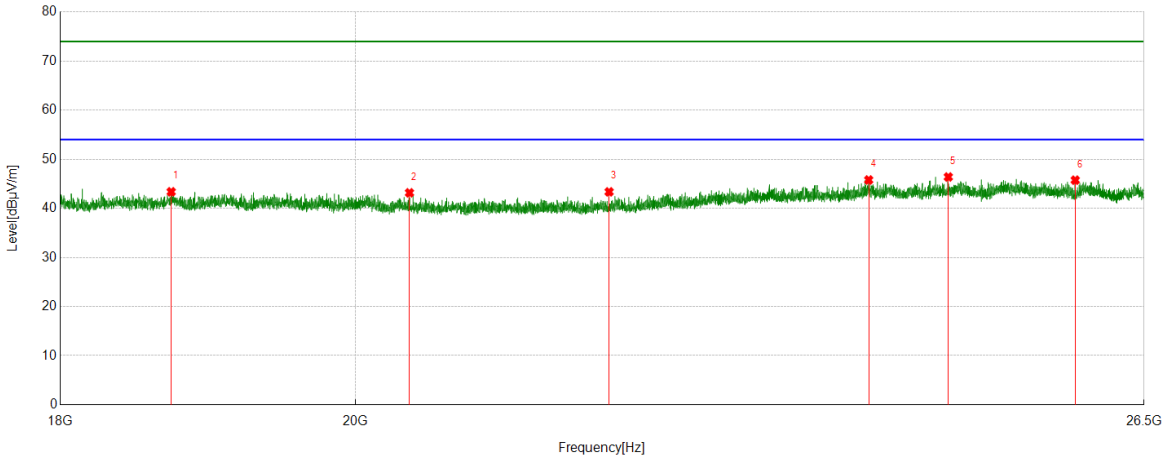
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7438.3901	43.01	4.20	47.21	54.00	-6.79	Vertical
2	17614.7018	27.50	18.06	45.56	54.00	-8.44	Vertical
3	17867.7335	25.31	19.21	44.52	54.00	-9.48	Vertical

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 result: Peak detector, RBW: 1 MHz, VBW: 3 MHz.
4. Average result: Peak detector, RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 6.5GHz 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
BLE 1M	MCH	Horizontal	PASS

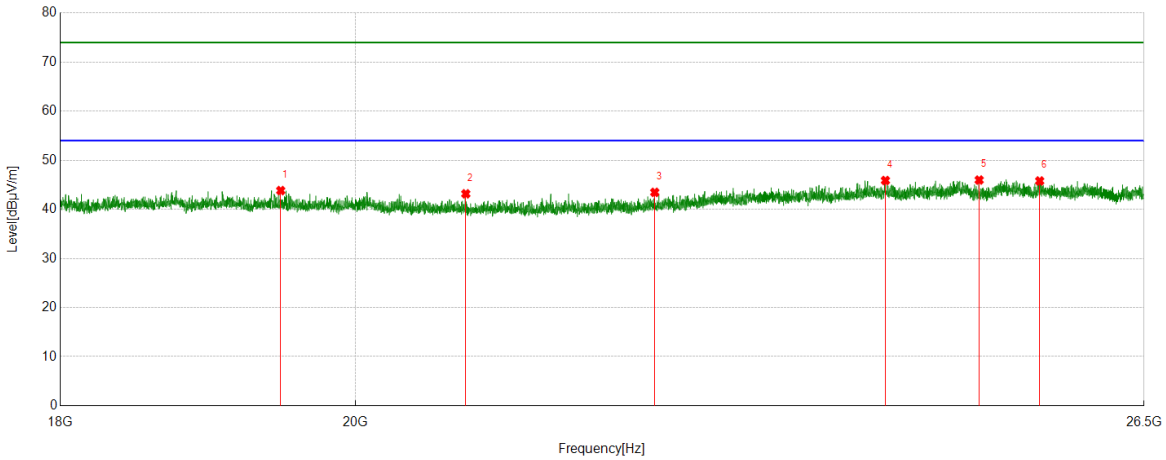


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	18727.6728	49.61	-6.24	43.37	74.00	-30.63	Horizontal
2	20389.5890	48.69	-5.53	43.16	74.00	-30.84	Horizontal
3	21895.0895	49.11	-5.75	43.36	74.00	-30.64	Horizontal
4	24020.3020	48.41	-2.63	45.78	74.00	-28.22	Horizontal
5	24712.2712	49.60	-3.21	46.39	74.00	-27.61	Horizontal
6	25857.3357	48.56	-2.82	45.74	74.00	-28.26	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
BLE 1M	MCH	Vertical	PASS



PK Result:

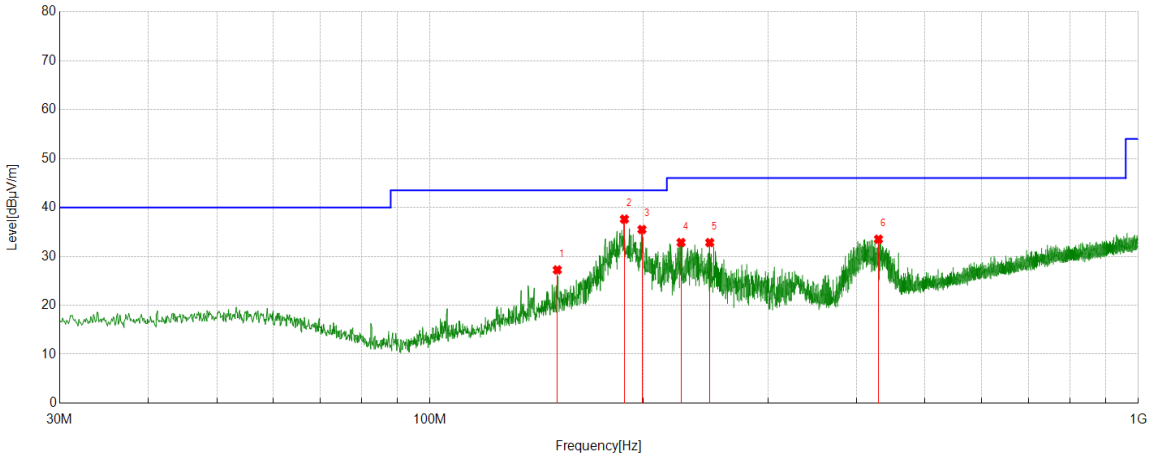
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	19474.0474	49.30	-5.48	43.82	74.00	-30.18	Vertical
2	20803.5804	49.09	-5.93	43.16	74.00	-30.84	Vertical
3	22254.6755	48.73	-5.27	43.46	74.00	-30.54	Vertical
4	24163.9664	48.63	-2.76	45.87	74.00	-28.13	Vertical
5	24985.9986	49.56	-3.59	45.97	74.00	-28.03	Vertical
6	25531.7532	48.93	-3.15	45.78	74.00	-28.22	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 4: 30MHz~1GHz

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

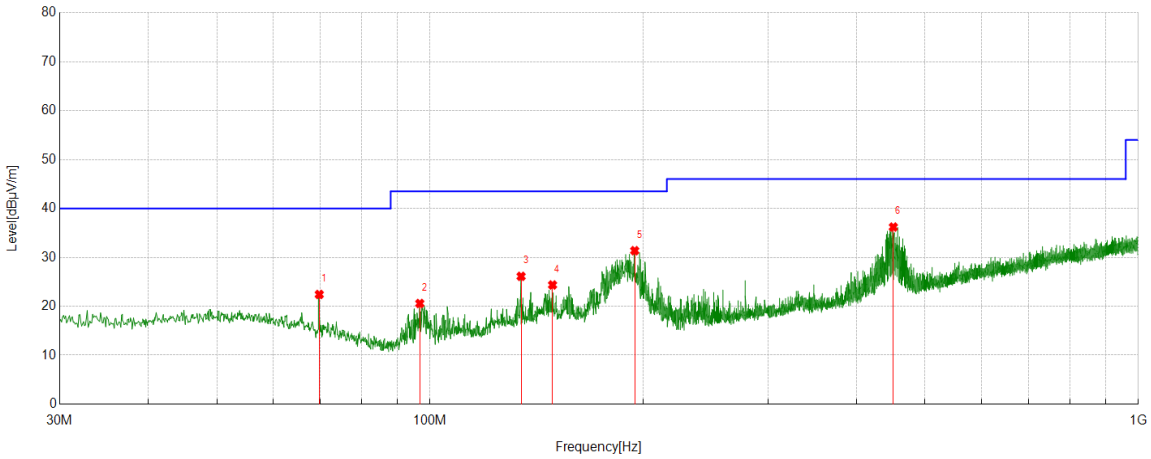
Test Mode	Channel	Polarization	Verdict
BLE 1M	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	151.2621	6.73	20.50	27.23	43.50	-16.27	Peak
2	188.1258	19.75	17.86	37.61	43.50	-5.89	Peak
3	199.1849	18.37	17.12	35.49	43.50	-8.01	Peak
4	226.1536	15.43	17.40	32.83	46.00	-13.17	Peak
5	248.2718	13.65	19.17	32.82	46.00	-13.18	Peak
6	429.6800	8.93	24.58	33.51	46.00	-12.49	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
BLE 1M	MCH	Vertical	PASS



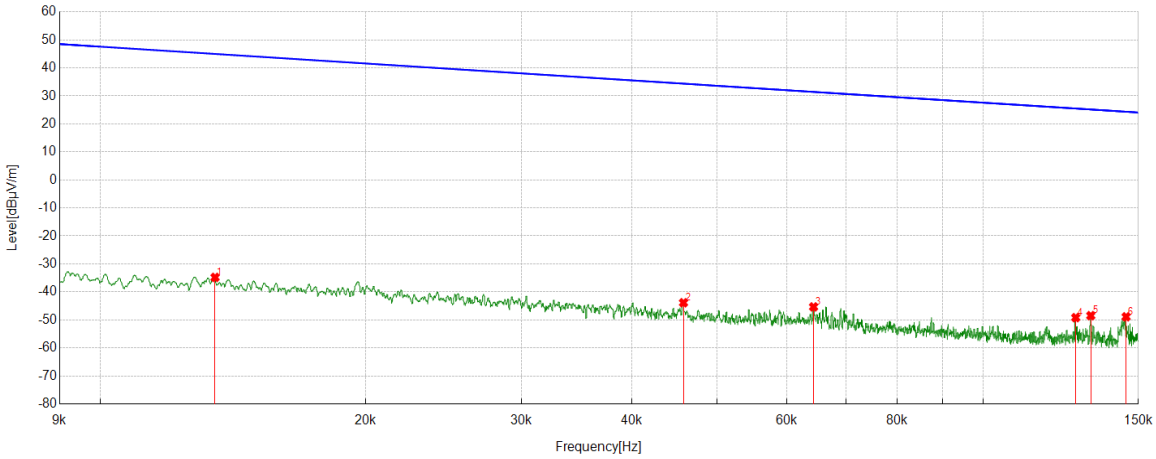
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	69.7740	4.42	18.00	22.42	40.00	-17.58	Peak
2	96.7427	5.42	15.15	20.57	43.50	-22.93	Peak
3	134.4794	6.70	19.42	26.12	43.50	-17.38	Peak
4	148.9339	3.93	20.43	24.36	43.50	-19.14	Peak
5	194.5285	14.02	17.35	31.37	43.50	-12.13	Peak
6	450.9251	11.14	25.06	36.20	46.00	-9.80	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 5: 9kHz~30MHz

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

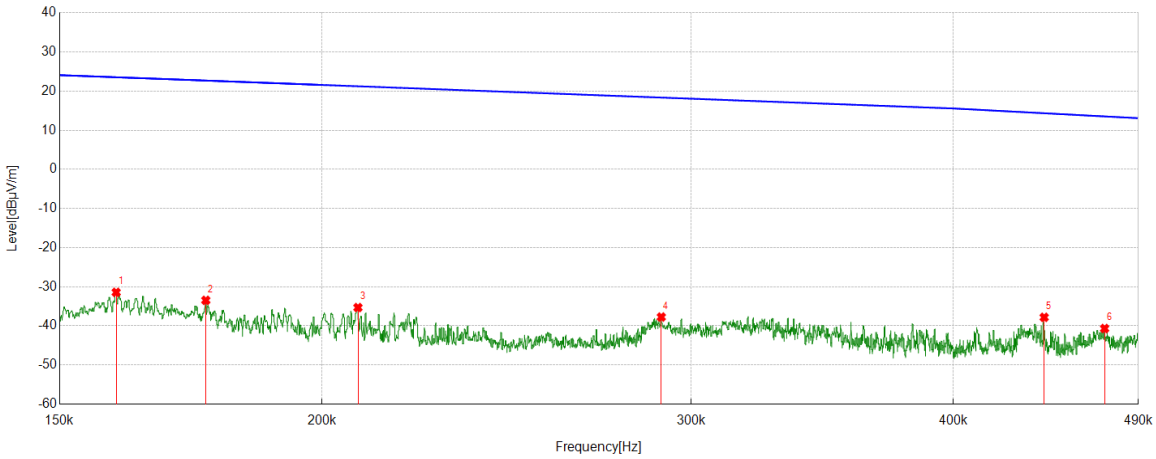
Test Mode	Channel	Frequency Range	Verdict
BLE 1M	MCH	9kHz~150kHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.0135	27.03	-61.85	-34.82	45.02	-79.84	Peak
2	0.0458	17.72	-61.60	-43.88	34.39	-78.27	Peak
3	0.0643	16.25	-61.61	-45.36	31.43	-76.79	Peak
4	0.1274	12.52	-61.72	-49.20	25.50	-74.70	Peak
5	0.1325	13.24	-61.73	-48.49	25.16	-73.65	Peak
6	0.1453	12.83	-61.73	-48.90	24.36	-73.26	Peak

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.

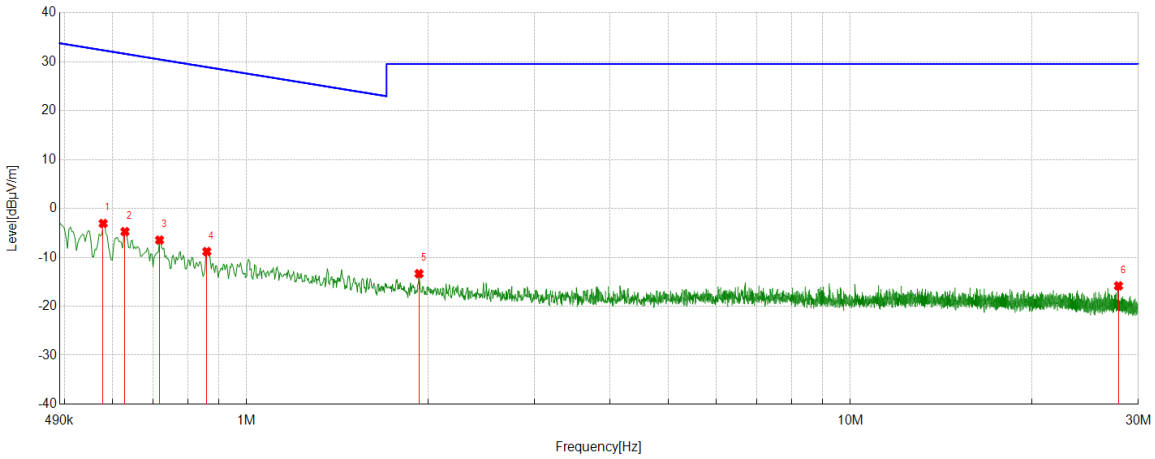
Test Mode	Channel	Frequency Range	Verdict
BLE 1M	MCH	150kHz~490kHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.1596	30.31	-61.75	-31.44	23.54	-54.98	Peak
2	0.1761	28.28	-61.76	-33.48	22.69	-56.17	Peak
3	0.2081	26.44	-61.77	-35.33	21.24	-56.57	Peak
4	0.2903	24.07	-61.82	-37.75	18.35	-56.10	Peak
5	0.4419	24.03	-61.86	-37.83	14.34	-52.17	Peak
6	0.4722	21.18	-61.87	-40.69	13.53	-54.22	Peak

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
BLE 1M	MCH	490kHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.5785	18.82	-21.89	-3.07	32.36	-35.43	Peak
2	0.6287	17.15	-21.89	-4.74	31.63	-36.37	Peak
3	0.7173	15.41	-21.87	-6.46	30.49	-36.95	Peak
4	0.8589	13.06	-21.87	-8.81	28.92	-37.73	Peak
5	1.9302	8.48	-21.82	-13.34	29.54	-42.88	Peak
6	27.8131	5.85	-21.68	-15.83	29.54	-45.37	Peak

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.

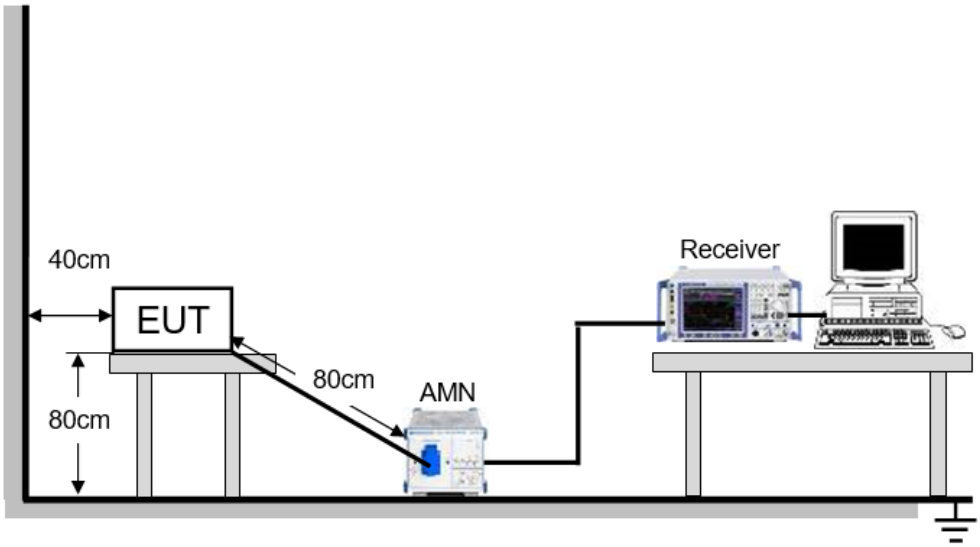
9. AC POWER LINE CONDUCTED EMISSIONS

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



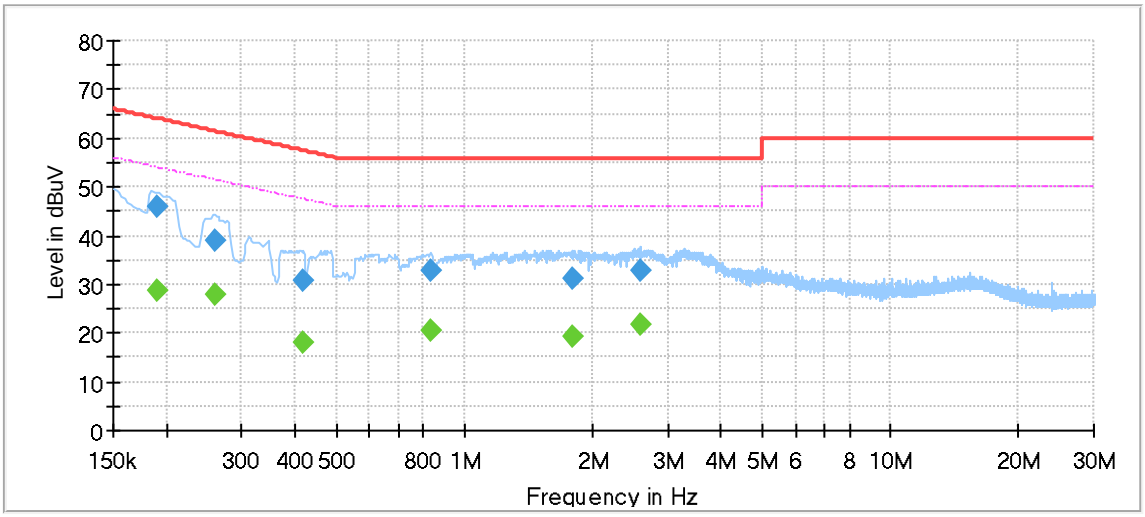
The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver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

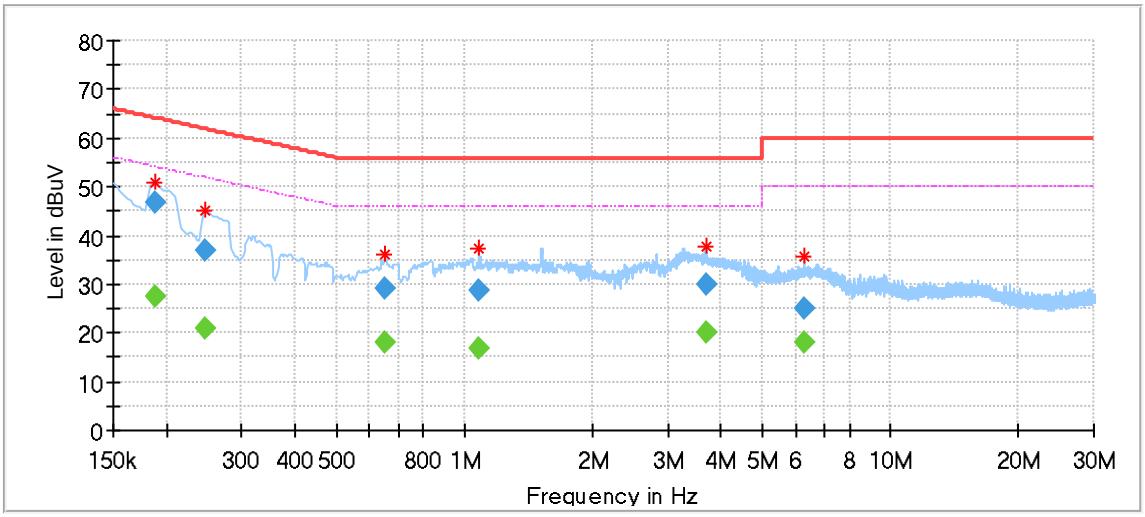


Final_Result

Frequency [MHz]	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.189800	---	28.76	54.05	25.29	1000.0	9.000	L1	OFF	9.6
0.189800	45.77	---	64.05	18.28	1000.0	9.000	L1	OFF	9.6
0.259450	---	27.96	51.45	23.48	1000.0	9.000	L1	OFF	9.6
0.259450	38.96	---	61.45	22.49	1000.0	9.000	L1	OFF	9.6
0.418650	---	18.21	47.48	29.26	1000.0	9.000	L1	OFF	9.6
0.418650	30.74	---	57.48	26.73	1000.0	9.000	L1	OFF	9.6
0.831575	---	20.36	46.00	25.64	1000.0	9.000	L1	OFF	9.6
0.831575	32.82	---	56.00	23.18	1000.0	9.000	L1	OFF	9.6
1.801700	---	19.12	46.00	26.88	1000.0	9.000	L1	OFF	9.6
1.801700	31.24	---	56.00	24.76	1000.0	9.000	L1	OFF	9.6
2.582775	---	21.72	46.00	24.28	1000.0	9.000	L1	OFF	9.6
2.582775	32.64	---	56.00	23.36	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 MCH of 11B which is the worst case, so only the worst case is included in this test report.
6. Two models of docker will be collocated to the EUT, both of them have been test, only the worse case is recorded 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]
0.187313	---	27.68	54.16	26.48	1000.0	9.000	N	OFF	9.5
0.187313	46.67	---	64.16	17.49	1000.0	9.000	N	OFF	9.5
0.247013	---	20.92	51.86	30.93	1000.0	9.000	N	OFF	9.5
0.247013	36.75	---	61.86	25.11	1000.0	9.000	N	OFF	9.5
0.649988	---	17.97	46.00	28.03	1000.0	9.000	N	OFF	9.6
0.649988	29.26	---	56.00	26.74	1000.0	9.000	N	OFF	9.6
1.080325	---	16.77	46.00	29.23	1000.0	9.000	N	OFF	9.6
1.080325	28.80	---	56.00	27.20	1000.0	9.000	N	OFF	9.6
3.679763	---	20.01	46.00	25.99	1000.0	9.000	N	OFF	9.6
3.679763	30.06	---	56.00	25.94	1000.0	9.000	N	OFF	9.6
6.291638	---	18.24	50.00	31.76	1000.0	9.000	N	OFF	9.7
6.291638	24.97	---	60.00	35.03	1000.0	9.000	N	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 MCH of 11B which is the worst case, so only the worst case is included in this test report.
6. Two models of docker will be collocated to the EUT, both of them have been test, only the worse case is recorded 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