FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

BLE module

MODEL NUMBER: SIF50-I1250/120-347/T/D1/F/APP

SERIES MODEL NUMBER: SIF50-I1250/120-277/T/D1/F/APP
SIF30-I0750/120-277/T/D1/APP, SIF50-I1250/120-277/T/D1/APP
SIF30-I0750/120-347/T/D1/F/APP, SIF30-I0750/120-277/T/D1/F/APP
SIF30-I0750/120-347/T/D1/APP, SIF50-I1250/120-347/T/D1/APP

PROJECT NUMBER: 4791781639

REPORT NUMBER: 4791781639-5

FCC ID: 2BB69-HTWT001

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Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	07/16/2025	Initial Issue	

Note: This report is based on BLA-EMC-202307-A7302 which is issued by BlueAsia of Technical Services (Shenzhen) Co., Ltd.. The EUT has already applied for the FCC ID, the customer wants to add the new antennas. The antennas type changes from FPC antenna to rod antenna. Therefore, based on the new antenna, radiated band edge and spurious are considered testing in this report. For the other data, please refer to the original report.

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS 4

2. TEST METHODOLOGY 6

3. FACILITIES AND ACCREDITATION 6

4. CALIBRATION AND UNCERTAINTY 7

4.1. MEASURING INSTRUMENT CALIBRATION 7

4.2. MEASUREMENT UNCERTAINTY 7

5. EQUIPMENT UNDER TEST 8

5.1. DESCRIPTION OF EUT 8

5.2. MAXIMUM OUTPUT POWER 9

5.3. CHANNEL LIST 9

5.4. TEST CHANNEL CONFIGURATION 9

5.5. THE WORSE CASE POWER SETTING PARAMETER 9

5.6. DESCRIPTION OF AVAILABLE ANTENNAS 10

5.7. THE WORSE CASE CONFIGURATIONS 10

5.8. TEST ENVIRONMENT 10

5.9. DESCRIPTION OF TEST SETUP 11

5.10. MEASURING INSTRUMENT AND SOFTWARE USED 13

6. MEASUREMENT METHODS 14

7. ANTENNA PORT TEST RESULTS 15

7.1. ON TIME AND DUTY CYCLE 15

7.2. 6 dB BANDWIDTH 16

7.3. CONDUCTED OUTPUT POWER 18

7.4. POWER SPECTRAL DENSITY 19

7.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS 20

8. RADIATED TEST RESULTS 22

8.1. LIMITS AND PROCEDURE 22

8.2. TEST ENVIRONMENT 28

8.3. RESTRICTED BANDEDGE 28

8.4. SPURIOUS EMISSIONS 37

9. AC POWER LINE CONDUCTED EMISSIONS 69

10. ANTENNA REQUIREMENTS 71

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	JIANGSU EVER-TIE LIGHTING INC
Address:	No 18, East Fuxing Rd, NETDA Nantong, Jiangsu 226015 China

EUT Description

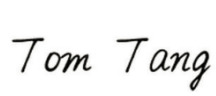
Product Name:	BLE module
Model Name:	SIF50-I1250/120-347/T/D1/F/APP
Series Model Name:	SIF50-I1250/120-277/T/D1/F/APP, SIF30-I0750/120-277/T/D1/APP, SIF50-I1250/120-277/T/D1/APP, SIF30-I0750/120-347/T/D1/F/APP, SIF30-I0750/120-277/T/D1/F/APP, SIF30-I0750/120-347/T/D1/APP, SIF50-I1250/120-347/T/D1/APP
Model Difference:	All the models are identical except the sampling resistors of the power supply.
Sample Number:	8485434-S004
Data of Receipt Sample:	May. 21, 2025
Test Date:	May. 21, 2025~ Jue. 26, 2025

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	PASS

Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6 dB Bandwidth and	FCC 15.247 (a) (2)	See Note 1
2	Conducted Power	FCC 15.247 (b) (3)	See Note 1
3	Power Spectral Density	FCC 15.247 (e)	See Note 1
4	Conducted Band edge And Spurious emission	FCC 15.247 (d)	See Note 1
5	Radiated Band edges and Spurious emission	FCC 15.247 (d) FCC 15.209 FCC 15.205	PASS
6	Conducted Emission Test for AC Power Port	FCC 15.207	See Note 1
7	Antenna Requirement	FCC 15.203	See Note 1

Note:
1. Please refer to the original report BLA-EMC-202307-A7302.
2. The measurement result for the sample received is < Pass > according to < ANSI C63.10-2013, FCC 47 CFR Part 2, FCC 47 CFR Part 15C > when < Simple Acceptance > decision rule is applied.

Prepared By:

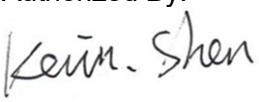


Tom Tang

Reviewed By:

Emily Wang

Authorized By:



Kevin Shen

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 558074 D01 15.247 Meas Guidance v05r02, 414788 D01 Radiated Test Site v01r01, FCC 47 CFR Part 2, FCC 47 CFR Part 15, ANSI C63.10-2013.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4829.01)** **UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA.** **FCC (FCC Designation No.: CN1247)** **UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.** **IC (IC Designation No.: 25056; CAB No.: CN0073)** **UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.**

Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OFS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.1dB
DTS Bandwidth	1.9%
Maximum Conducted Output Power	1.3dB
Maximum Power Spectral Density Level	1.5dB
Band-edge Compliance	1.9%
Unwanted Emissions in Non-restricted Freq Bands	9kHz-30MHz: ±0.90dB 30MHz-1GHz: ±1.5 dB 1GHz-12.75GHz: ±1.9dB 12.75GHz-26.5GHz: ±2.1dB
Radiation Emission test (include Fundamental emission) (9kHz-30MHz)	3.4dB
Radiation Emission test (include Fundamental emission) (30MHz-1GHz)	3.4dB
Radiation Emission test (1GHz to 26GHz) (include Fundamental emission)	3.5dB (1GHz-18GHz)
	3.9dB (18GHz-26.5GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Equipment:	BLE module	
Model Name:	SIF50-I1250/120-347/T/D1/F/APP	
Technology:	Bluetooth - Low Energy	
Transmit Frequency Range:	2402 MHz ~ 2480 MHz	
Modulation:	GFSK	
Data Rate:	LE 1M	1 Mbps
	LE 2M	2 Mbps
Test Software of EUT:	EMI_TEST (manufacturer declare)	
Antenna Type:	Rod Antenna	
Antenna Gain:	1.66 dBi	
	Note 1: The product has only one transmission chain and four antennas are provided. Note 2: This data is provided by customer and our lab isn't responsible for this data.	

5.2. MAXIMUM OUTPUT POWER

Bluetooth Mode	Frequency (MHz)	Channel Number	Max Output Power(dBm)
BLE 1M	2402-2480	0-39[40]	-0.364
BLE 2M	2402-2480	0-39[40]	-0.373

5.3. CHANNEL LIST

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	11	2424	22	2446	33	2468
1	2404	12	2426	23	2448	34	2470
2	2406	13	2428	24	2450	35	2472
3	2408	14	2430	25	2452	36	2474
4	2410	15	2432	26	2454	37	2476
5	2412	16	2434	27	2456	38	2478
6	2414	17	2436	28	2458	39	2480
7	2416	18	2438	29	2460	/	/
8	2418	19	2440	30	2462	/	/
9	2420	20	2442	31	2464	/	/
10	2422	21	2444	32	2468	/	/

5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel		Frequency
GFSK	Low Channel	CH 0	2402MHz
	Middle Channel	CH 19	2440MHz
	High Channel	CH 39	2480MHz

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band				
Test Software		EMI_TEST		
Modulation Type	Transmit Antenna Number	Test Channel		
		LCH	MCH	HCH
GFSK	1	default	default	default

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Model	Antenna Type	Antenna Gain (dBi)
1	2400-2483.5	IPEX-GB-P6N-370	Rod Antenna	1.66

Note: This data is provided by customer and our lab isn't responsible for this data.

Test Mode	Transmit and Receive Mode	Description
BLE 1M	☒1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.
BLE 2M	☒1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.

5.7. THE WORSE CASE CONFIGURATIONS

For BLE module, the product only supports 1 Mbps and 2 Mbps, both the two data rate were tested and the test result was recorded in this report.

5.8. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	55 ~ 65%	
Atmospheric Pressure:	101kPa	
Temperature	TN	23 ~ 28°C
Voltage:	VL	N/A
	VN	AC 120V
	VH	N/A

Note: VL= Lower Extreme Test Voltage
VN= Nominal Voltage
VH= Upper Extreme Test Voltage
TN= Normal Temperature

5.9. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Description
1	Laptop	ThinkPad	E590	/

I/O PORT

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	USB-TTL	USB	100cm Length	/

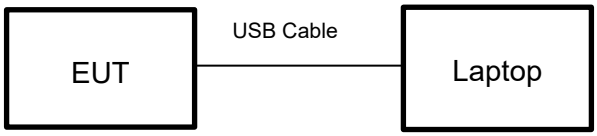
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	/	/	/	/

TEST SETUP

The EUT can work in an engineer mode with a software through a laptop.

SETUP DIAGRAM FOR TESTS



5.10. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions Test (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
☑	EMI Test Receiver	R&S	ESR3	126700	2023-11-25	2024-11-02	2025-11-01
☑	Two-Line V-Network	R&S	ENV216	126701	2023-11-25	2024-11-02	2025-11-01

Conducted Emissions Test (Software)					
Used	Description	Manufacturer	Name	Version	
☑	Software for Conducted Emissions Test	R&S	EMC32	9.25.00	

Radiated Emissions Test (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
☑	EMI test receiver	R&S	ESR7	222993	2024-03-23	2025-03-15	2026-03-14
☑	EMI test receiver	R&S	ESR26	126703	2023-11-25	2024-11-02	2025-11-01
☑	Spectrum Analyzer	R&S	FSV3044	222992	2024-03-23	2025-03-15	2026-03-14
☑	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZB 1513	155456	2021-06-03	2024-05-27	2027-05-26
☑	Receiver Antenna (30MHz-1GHz)	Schwarzbeck	VULB 9168	171952	2021-07-05	2024-07-04	2027-07-03
☑	Receiver Antenna (1GHz-18GHz)	R&S	HF907	126705	2022-02-28	2025-02-17	2028-02-16
☑	Receiver Antenna (18GHz-26.5GHz)	Schwarzbeck	BBHA9170	126706	2022-02-28	2025-02-17	2028-02-16
☑	Pre-amplification (To 18GHz)	Tonscned	TAP01018050	224539	2023-10-10	2024-10-10	2025-10-09
☑	Pre-amplification (To 18GHz)	R&S	SCU-18D	134667	2023-11-25	2024-11-02	2025-11-01
☑	Pre-amplification (To 26.5GHz)	R&S	SCU-26D	135391	2023-11-25	2024-11-02	2025-11-01
☑	Band Reject Filter	Wainwright	WRCGV12-2375-2400-2485-2510-40SS	1	2023-12-18	2024-11-02	2025-11-01
☑	High Pass Filter	COM-MW	ZBF13-3-18G-01	2	2023-12-18	2024-11-02	2025-11-01

Radiated Emissions Test (Software)					
Used	Description	Manufacturer	Name	Version	
☑	Software for Radiated Emissions Test	Tonscend	JS32-RE	5.0.0.2	

Antenna Port Test (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
☑	Spectrum Analyzer	Keysight	N9010B	155368	2024-03-23	2025-03-15	2026-03-14
☑	Power Meter	MWT	MW100-RFCB	221694	2024-03-23	2025-03-15	2026-03-14
☑	Power Meter	Anritsu	MA24406A	12896	2024-03-23	2025-03-15	2026-03-14
☑	Attenuator	PASTERNACK	PE7087-6	1624	/	2024-11-04	2025-11-03

Antenna Port Test (Software)					
Used	Description	Manufacturer	Name	Version	
☑	Software for Antenna Port Test	Tonscend	JS1120-3 Test System	V3.2.22	

6. MEASUREMENT METHODS

No.	Test Item	KDB Name	Section
1	6 dB Bandwidth and 99% Occupied Bandwidth	KDB 558074 D01 15.247 Meas Guidance v05r02	8.2
2	Output Power	KDB 558074 D01 15.247 Meas Guidance v05r02	8.3.2.3 (11.9.1.3 Method PKPM of ANSI C63.10)
3	Power Spectral Density	KDB 558074 D01 15.247 Meas Guidance v05r02	8.4 (11.10.2 Method PKPSD of ANSI C63.10)
4	Out-of-band emissions in non-restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.5
5	Out-of-band emissions in restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.6
6	Band-edge	KDB 558074 D01 15.247 Meas Guidance v05r02	8.7
7	Conducted Emission Test for AC Power Port	ANSI C63.10-2013	6.2

7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

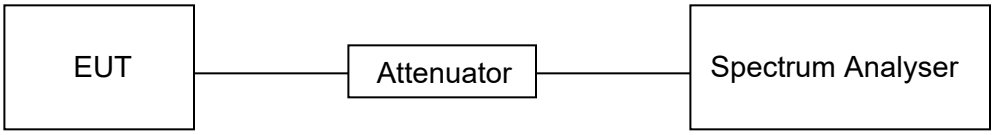
LIMITS

None; for reporting purposes only

PROCEDURE

FCC KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



TEST RESULTS

Please refer to the original report.

7.2. 6 dB BANDWIDTH

LIMITS

FCC Part15 (15.247), Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 47 CFR 15.247(a)(2)	6dB Bandwidth	>= 500kHz	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

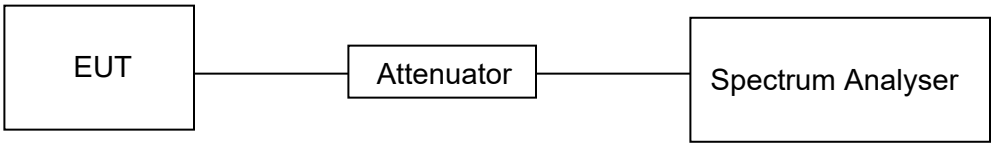
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Frequency Span	Peak
Detector	100 kHz
RBW	≥3 × RBW
VBW	Max hold
Trace	Max hold
Sweep	Auto couple

a) Use the 99% power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

TEST SETUP



TEST RESULTS

Please refer to the original report.

7.3. CONDUCTED OUTPUT POWER

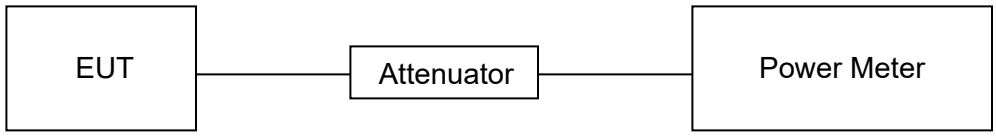
LIMITS

FCC Part15 (15.247), Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5

TEST PROCEDURE

Place the EUT on the table and set it in the transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power sensor.
Measure the power of each channel.
PK Detector used for PK result.

TEST SETUP



TEST RESULTS

Please refer to the original report.

7.4. POWER SPECTRAL DENSITY

LIMITS

FCC Part15 (15.247), Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC §15.247 (e)	Power Spectral Density	8 dBm/3 kHz	2400-2483.5

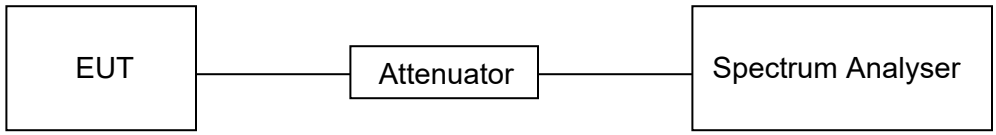
TEST PROCEDURE

Refer to FCC KDB 558074, connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	3 kHz ≤ RBW ≤100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.
If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP



TEST RESULTS

Please refer to the original report.

7.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

FCC Part15 (15.247), Subpart C		
Section	Test Item	Limit
FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Refer to FCC KDB 558074, connect the UUT to the spectrum analyser and use the following settings:

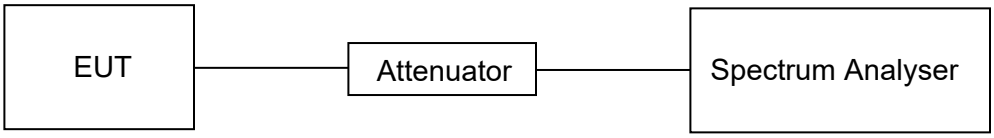
Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
measurement points	≥span/RBW
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level.

TEST SETUP



TEST RESULTS

Please refer to the original report.

8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

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

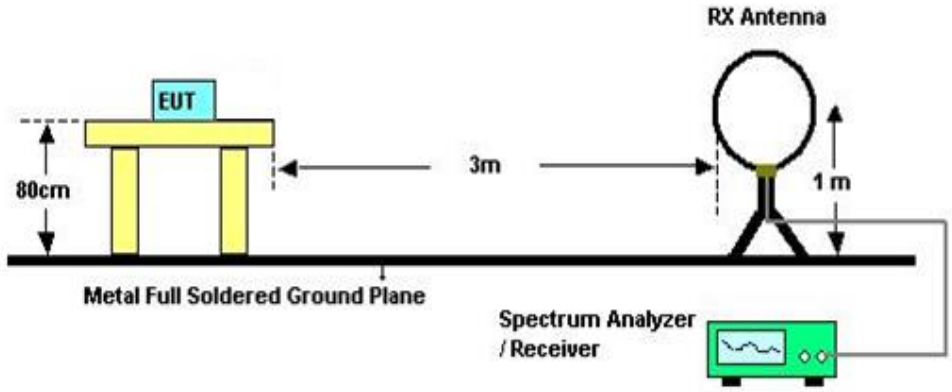
Restricted bands of operation

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.

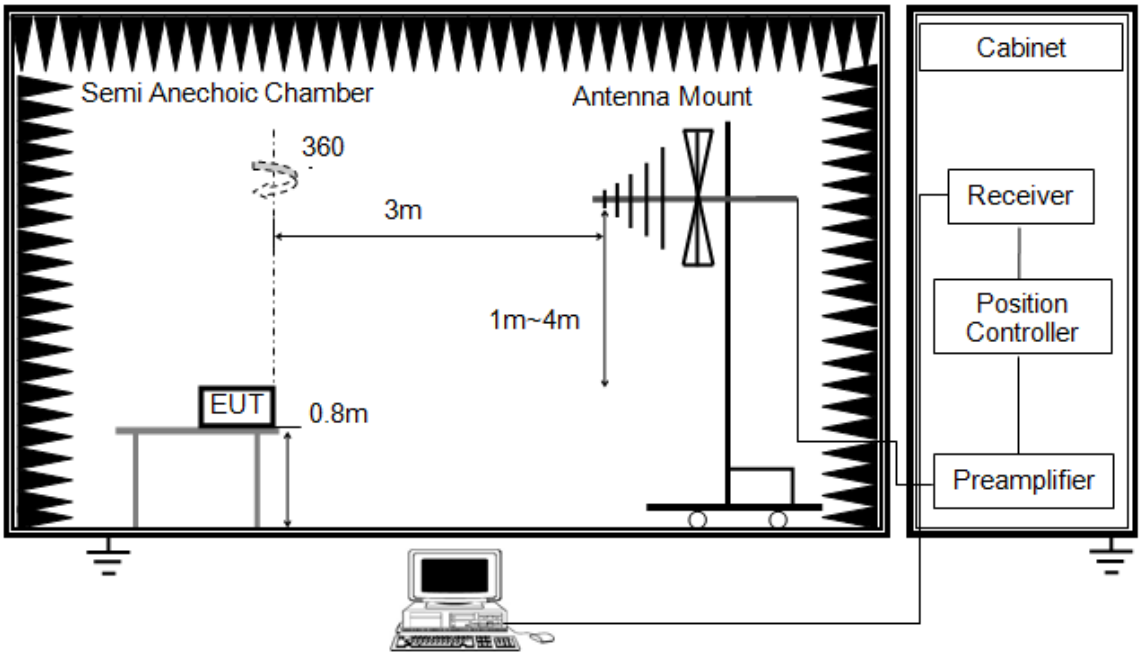
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector

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)

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.

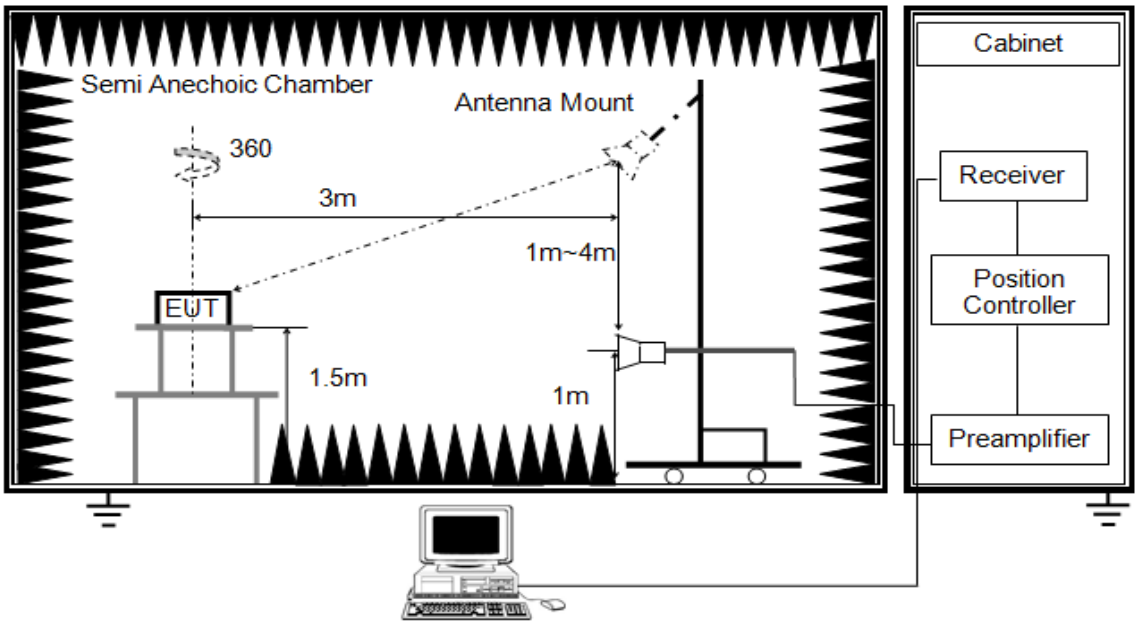
3. The EUT was placed on a turntable with 12 mm above ground.

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.

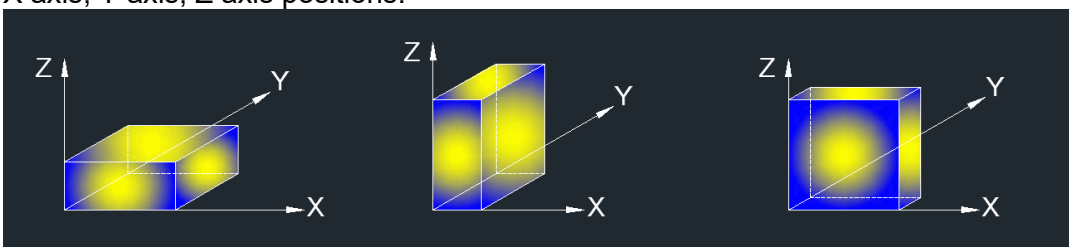
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

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

Note 2: The antenna can be tilted from 0° to 90°. All these angles were tested, but only the data for the worst-case (0°) condition were included in the report

8.2. TEST ENVIRONMENT

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

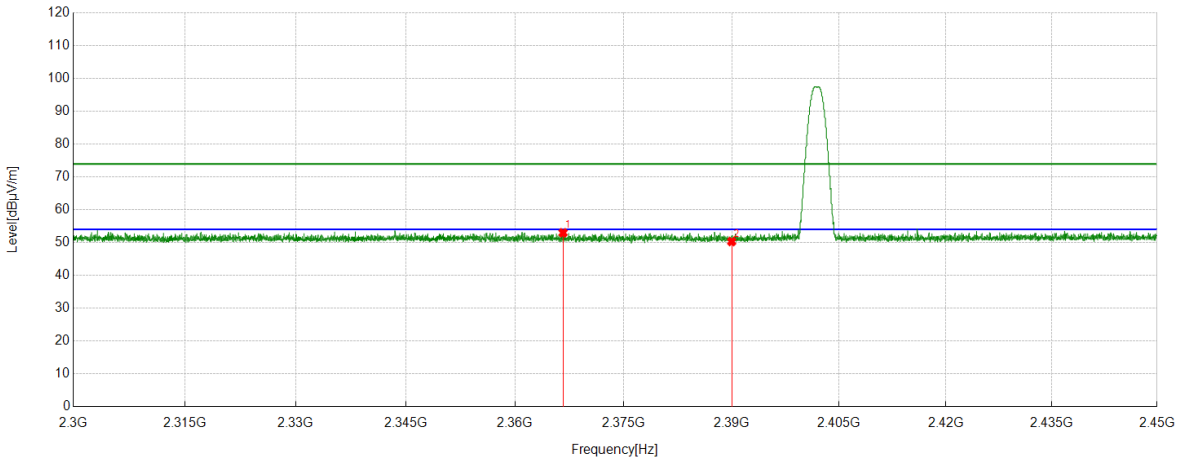
8.3. RESTRICTED BANDEDGE

TEST RESULT TABLE

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

TEST GRAPHS

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Horizontal	PASS

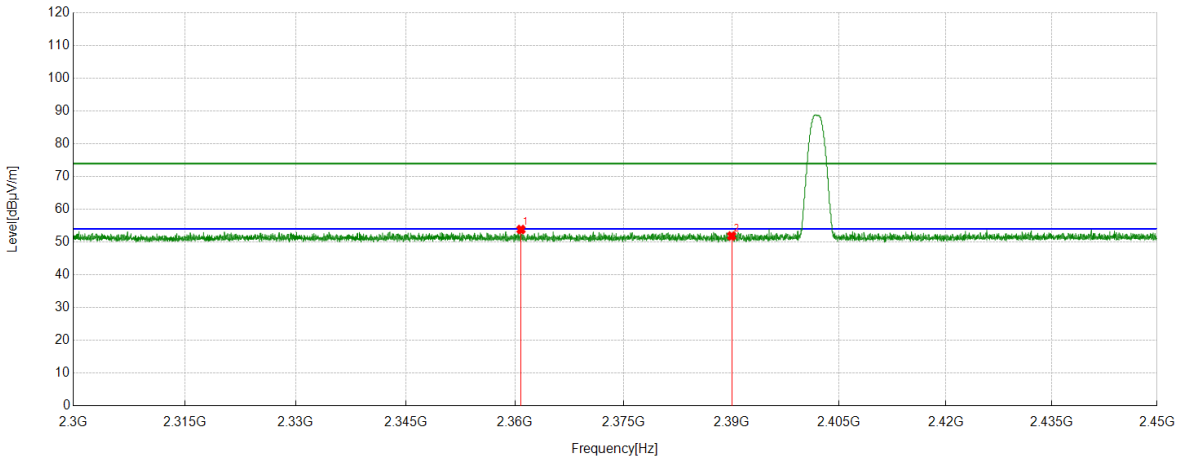


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2366.6271	39.36	13.62	52.98	74.00	-21.02	Horizontal
2	2390.0000	36.59	13.72	50.31	74.00	-23.69	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

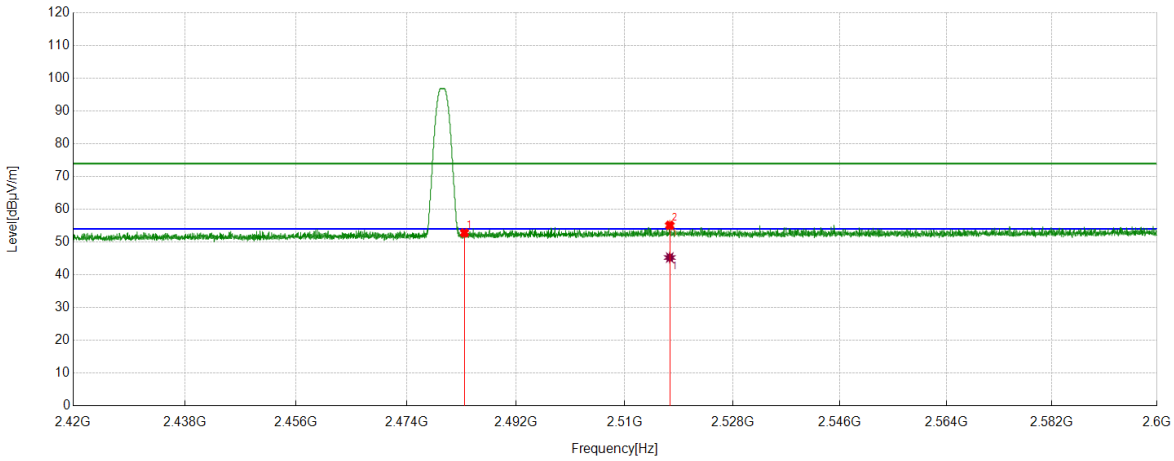


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2360.8326	40.30	13.53	53.83	74.00	-20.17	Vertical
2	2390.0000	38.14	13.72	51.86	74.00	-22.14	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:

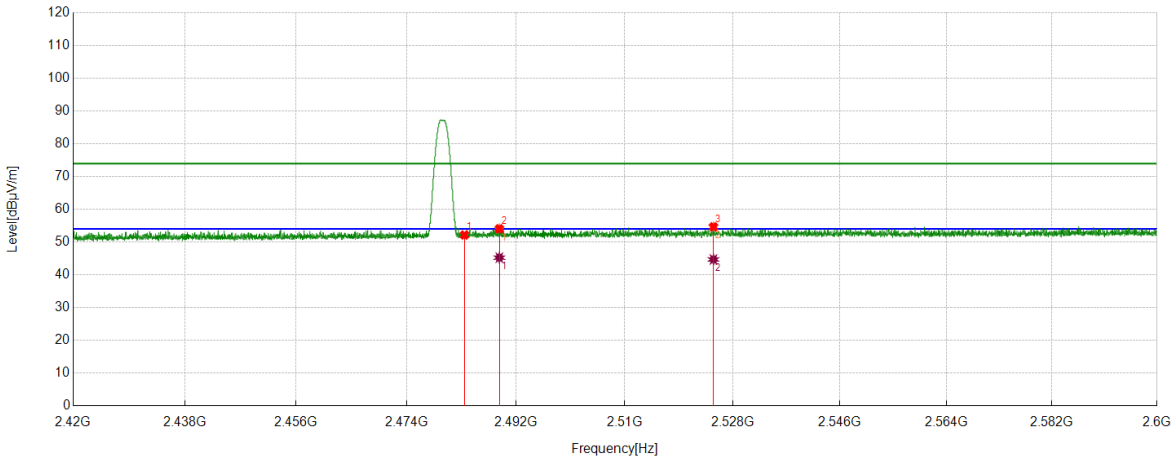
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	38.69	14.12	52.81	74.00	-21.19	Horizontal
2	2517.4822	40.62	14.49	55.11	74.00	-18.89	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2517.4822	30.78	14.49	45.27	54.00	-8.73	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:

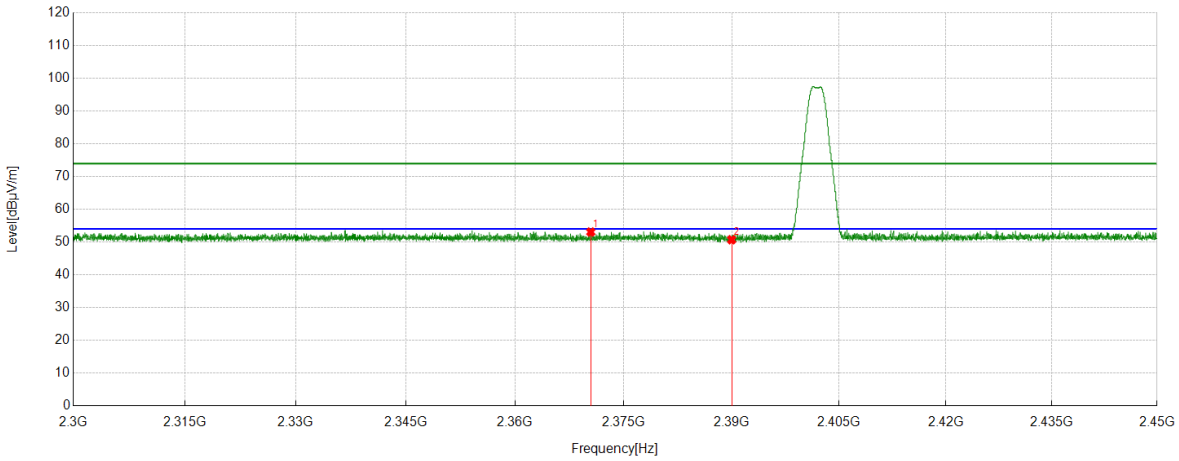
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	38.04	14.12	52.16	74.00	-21.84	Vertical
2	2489.2412	39.81	14.23	54.04	74.00	-19.96	Vertical
3	2524.7731	40.14	14.50	54.64	74.00	-19.36	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2489.2412	31.00	14.23	45.23	54.00	-8.77	Vertical
2	2524.7731	30.18	14.50	44.68	54.00	-9.32	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

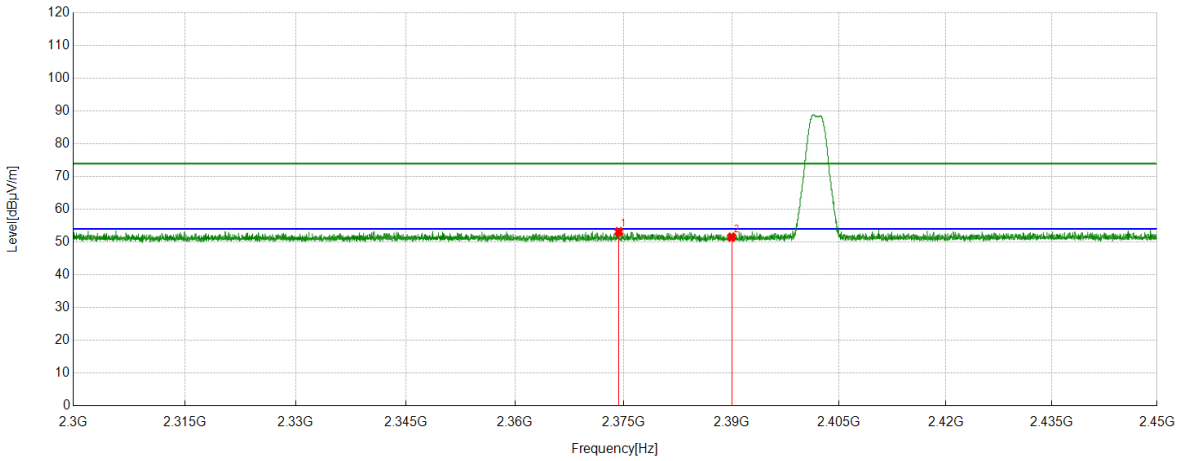


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2370.4526	39.40	13.67	53.07	74.00	-20.93	Horizontal
2	2390.0000	36.99	13.72	50.71	74.00	-23.29	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

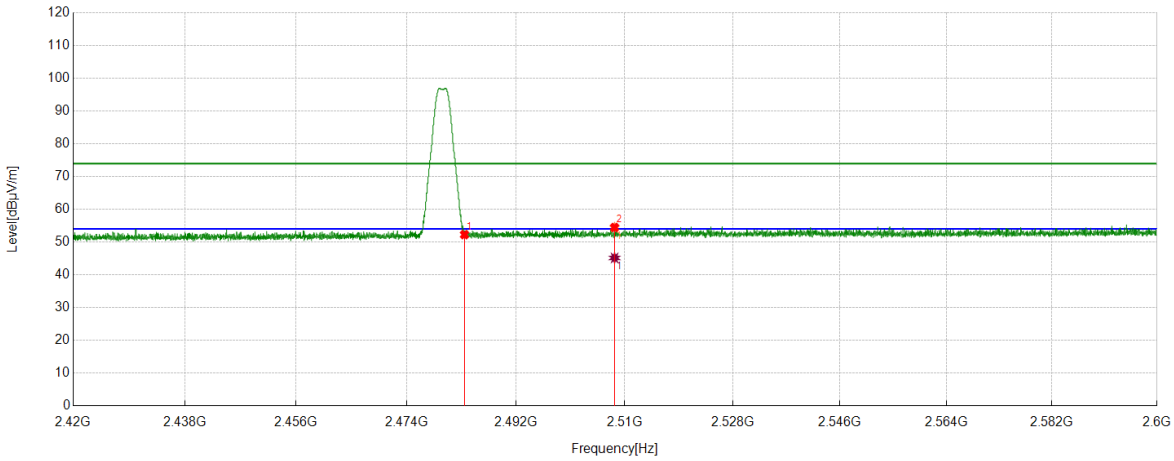


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2374.3343	39.44	13.72	53.16	74.00	-20.84	Vertical
2	2390.0000	37.78	13.72	51.50	74.00	-22.50	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:

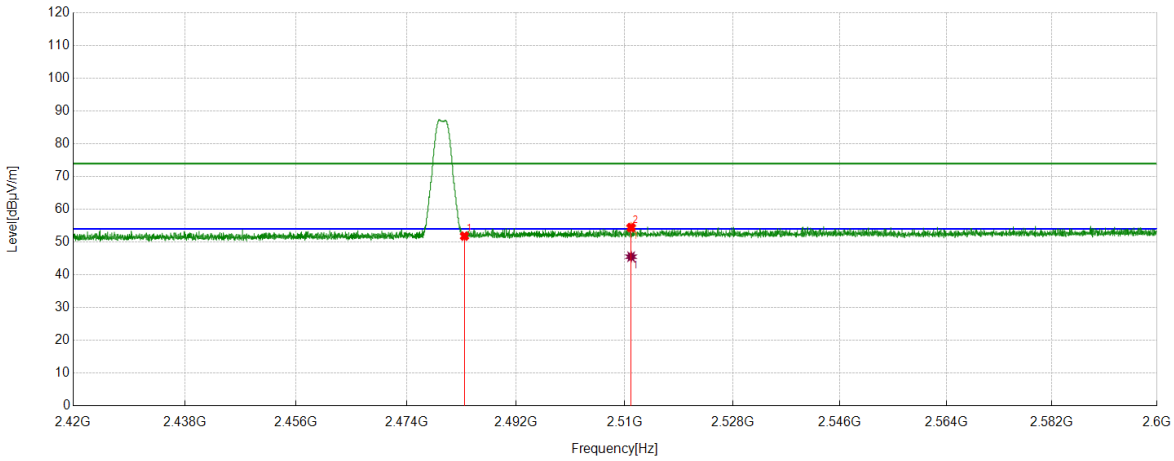
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	38.14	14.12	52.26	74.00	-21.74	Horizontal
2	2508.3010	40.09	14.37	54.46	74.00	-19.54	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2508.3010	30.78	14.37	45.15	54.00	-8.85	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	37.69	14.12	51.81	74.00	-22.19	Vertical
2	2511.0464	40.01	14.43	54.44	74.00	-19.56	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	2511.0464	31.09	14.43	45.52	54.00	-8.48	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.

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 1M	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 1M	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

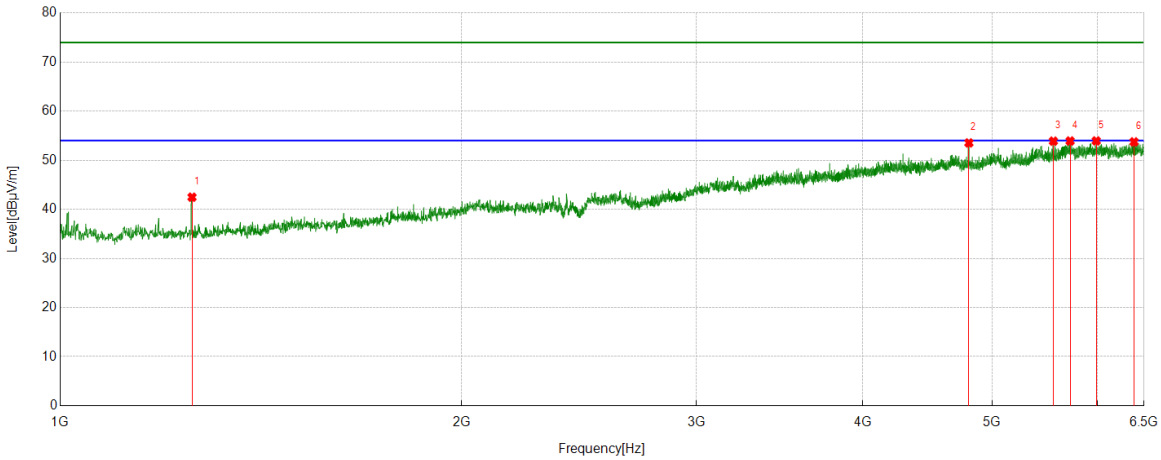
Test Mode	Channel	Puw(dBm)	Verdict
BLE 1M	MCH	<Limit	PASS

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

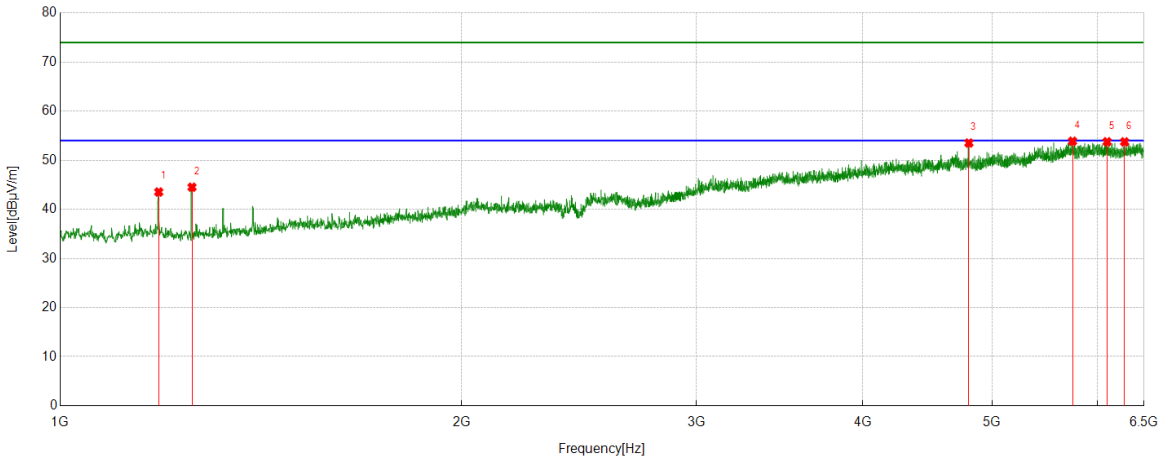


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.7820	44.45	-1.98	42.47	74.00	-31.53	Horizontal
2	4803.7255	38.25	15.28	53.53	74.00	-20.47	Horizontal
3	5558.0073	36.91	16.98	53.89	74.00	-20.11	Horizontal
4	5720.9651	36.08	17.84	53.92	74.00	-20.08	Horizontal
5	5984.9981	35.47	18.47	53.94	74.00	-20.06	Horizontal
6	6388.6111	34.41	19.33	53.74	74.00	-20.26	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

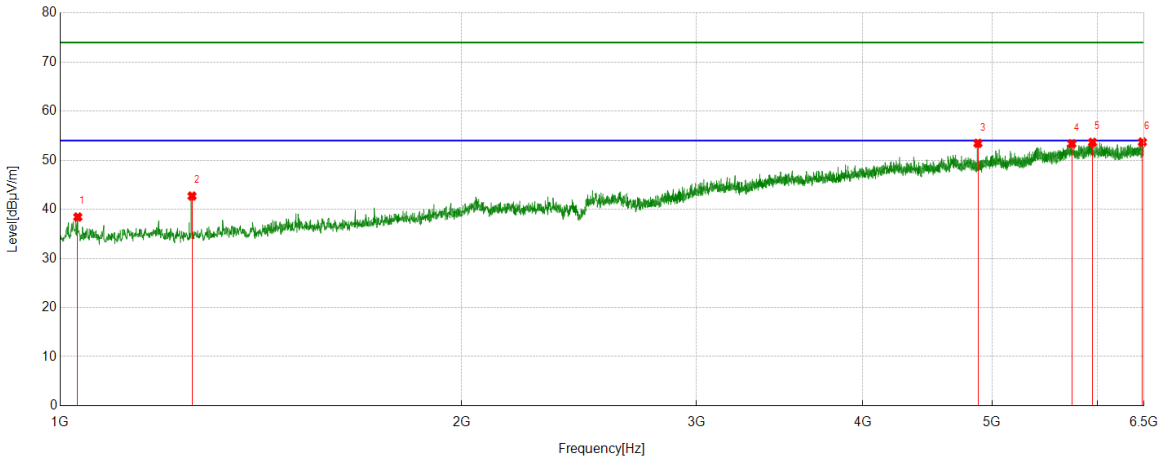


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.48	-1.95	43.53	74.00	-30.47	Vertical
2	1255.7820	46.49	-1.98	44.51	74.00	-29.49	Vertical
3	4803.7255	38.23	15.28	53.51	74.00	-20.49	Vertical
4	5745.0306	35.92	17.95	53.87	74.00	-20.13	Vertical
5	6098.4498	35.32	18.44	53.76	74.00	-20.24	Vertical
6	6285.4732	34.99	18.75	53.74	74.00	-20.26	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. 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

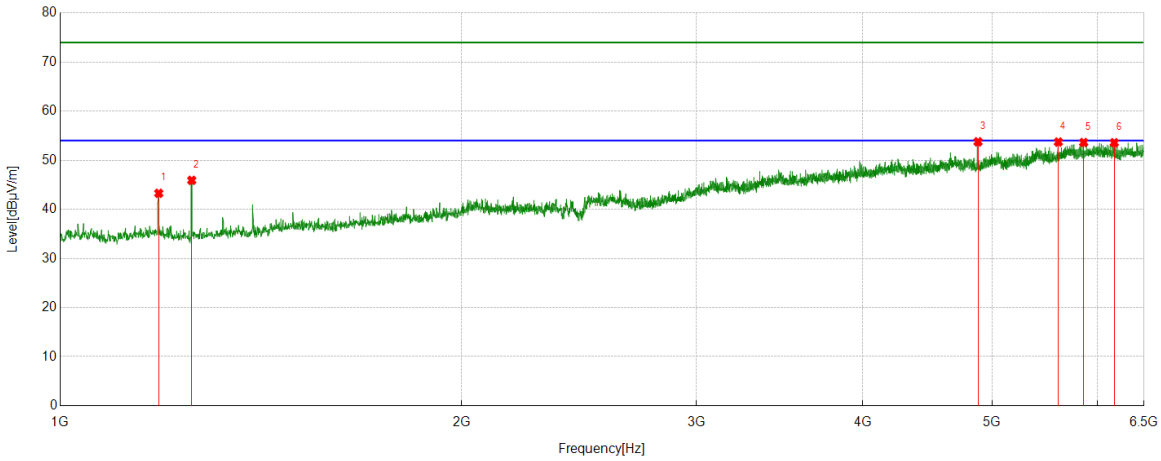


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1030.9414	40.14	-1.71	38.43	74.00	-35.57	Horizontal
2	1255.7820	44.68	-1.98	42.70	74.00	-31.30	Horizontal
3	4879.3599	38.55	14.89	53.44	74.00	-20.56	Horizontal
4	5739.5299	35.33	18.03	53.36	74.00	-20.64	Horizontal
5	5946.4933	35.19	18.45	53.64	74.00	-20.36	Horizontal
6	6481.4352	34.81	18.89	53.70	74.00	-20.30	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

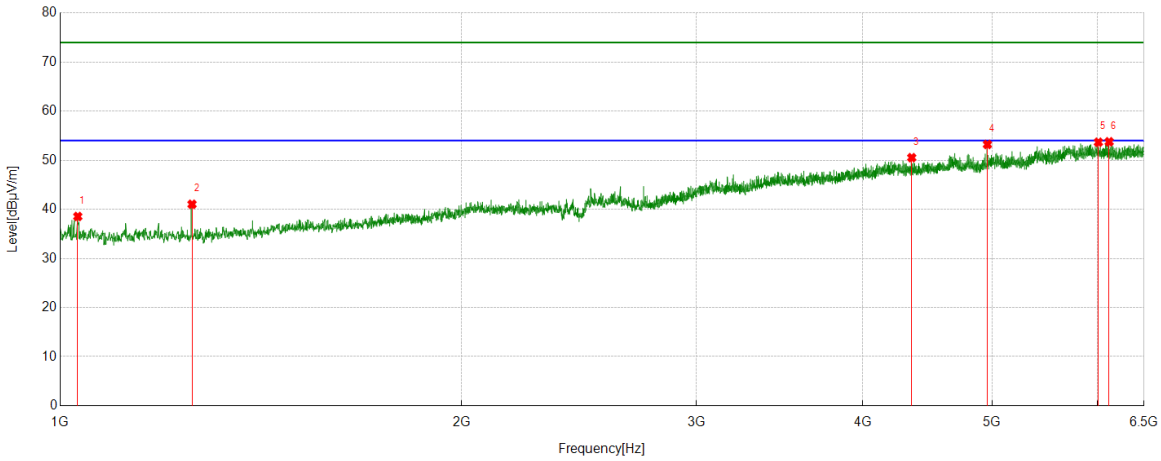


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.22	-1.95	43.27	74.00	-30.73	Vertical
2	1255.0944	47.89	-1.98	45.91	74.00	-28.09	Vertical
3	4880.0475	38.85	14.90	53.75	74.00	-20.25	Vertical
4	5606.1383	36.41	17.30	53.71	74.00	-20.29	Vertical
5	5856.4196	35.57	18.04	53.61	74.00	-20.39	Vertical
6	6174.0843	34.69	18.88	53.57	74.00	-20.43	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

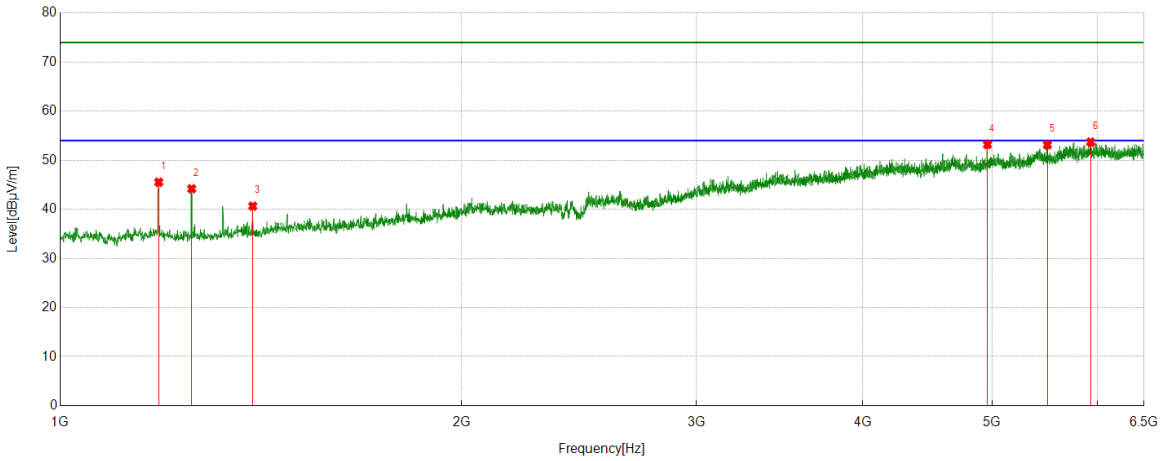


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1030.9414	40.25	-1.71	38.54	74.00	-35.46	Horizontal
2	1255.7820	43.01	-1.98	41.03	74.00	-32.97	Horizontal
3	4351.9815	36.79	13.74	50.53	74.00	-23.47	Horizontal
4	4959.8075	37.61	15.61	53.22	74.00	-20.78	Horizontal
5	6007.6885	35.37	18.30	53.67	74.00	-20.33	Horizontal
6	6119.7650	35.33	18.43	53.76	74.00	-20.24	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

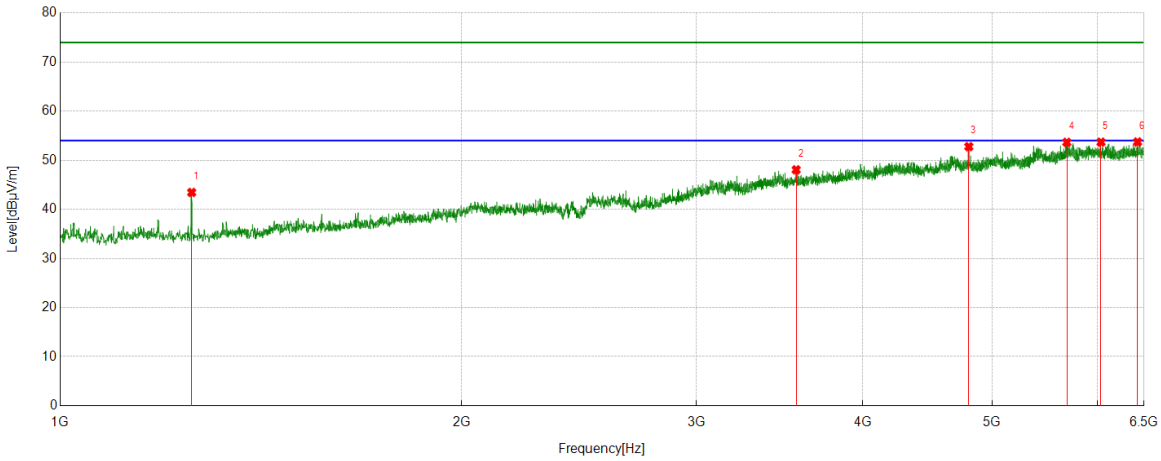


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	47.48	-1.95	45.53	74.00	-28.47	Vertical
2	1255.0944	46.17	-1.98	44.19	74.00	-29.81	Vertical
3	1394.6743	42.10	-1.45	40.65	74.00	-33.35	Vertical
4	4959.8075	37.58	15.61	53.19	74.00	-20.81	Vertical
5	5500.9376	36.47	16.66	53.13	74.00	-20.87	Vertical
6	5927.2409	34.90	18.81	53.71	74.00	-20.29	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

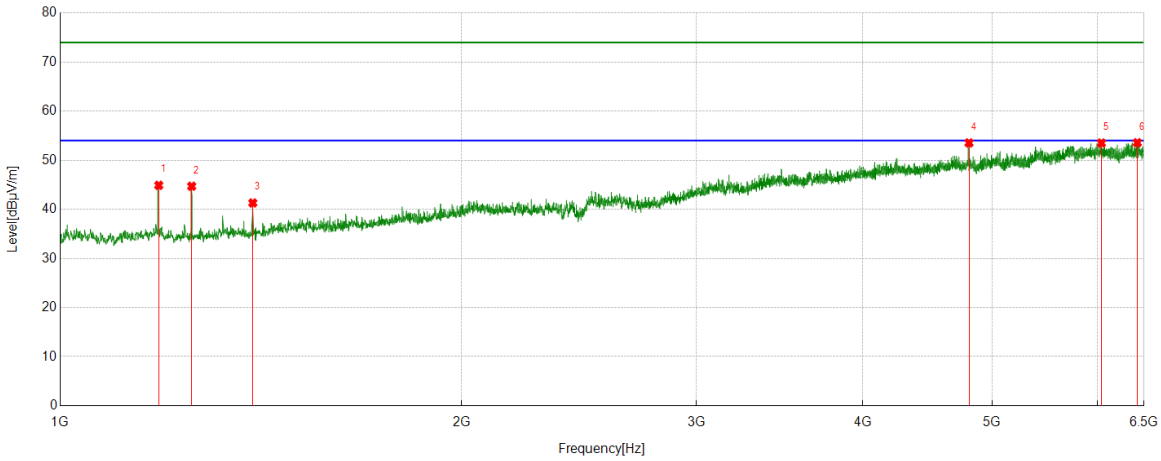


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	45.42	-1.98	43.44	74.00	-30.56	Horizontal
2	3564.6956	37.04	11.01	48.05	74.00	-25.95	Horizontal
3	4803.0379	37.46	15.31	52.77	74.00	-21.23	Horizontal
4	5688.6486	36.13	17.52	53.65	74.00	-20.35	Horizontal
5	6034.5043	35.52	18.16	53.68	74.00	-20.32	Horizontal
6	6427.8035	34.76	18.97	53.73	74.00	-20.27	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

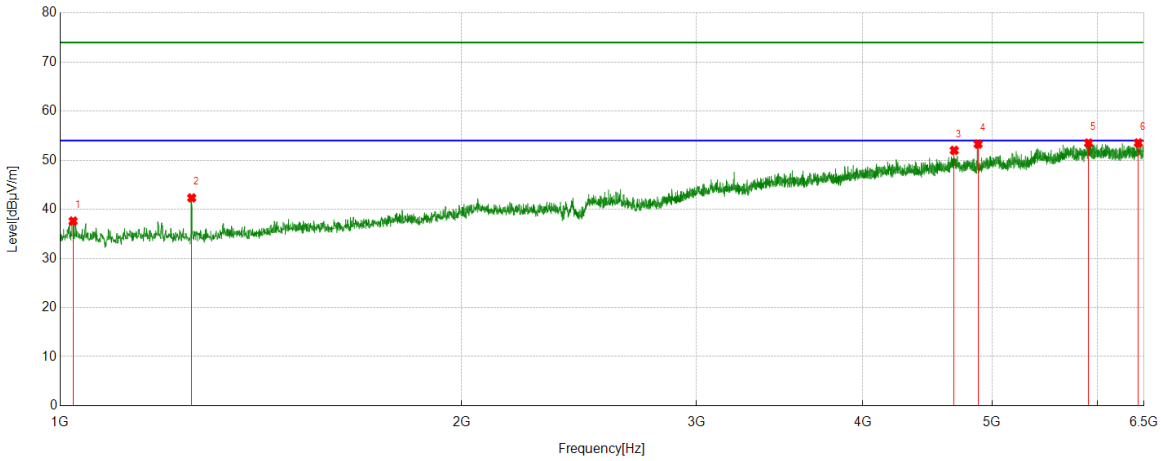


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	46.85	-1.95	44.90	74.00	-29.10	Vertical
2	1255.0944	46.68	-1.98	44.70	74.00	-29.30	Vertical
3	1394.6743	42.75	-1.45	41.30	74.00	-32.70	Vertical
4	4804.4131	38.28	15.25	53.53	74.00	-20.47	Vertical
5	6038.6298	35.36	18.15	53.51	74.00	-20.49	Vertical
6	6425.0531	34.61	18.95	53.56	74.00	-20.44	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

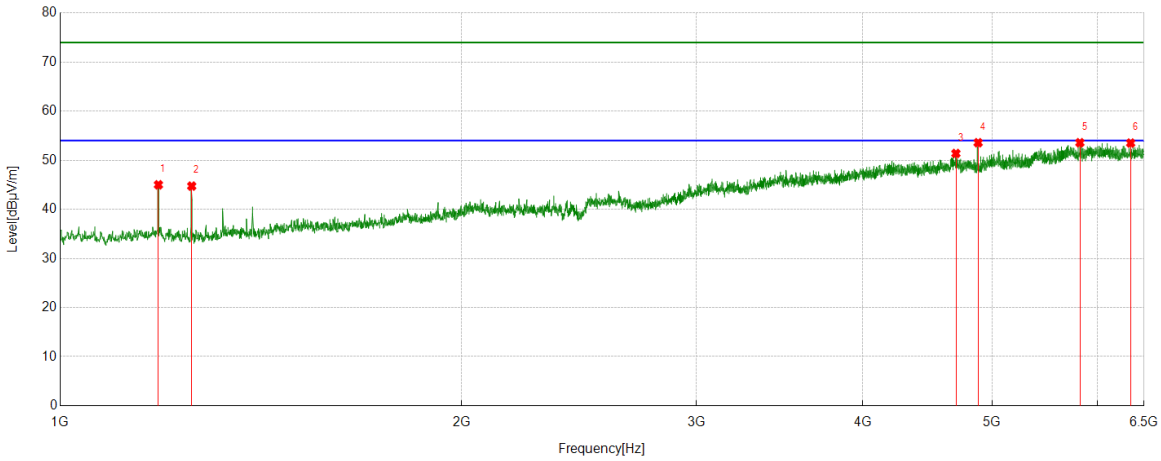


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1022.6903	39.50	-1.89	37.61	74.00	-36.39	Horizontal
2	1255.0944	44.31	-1.98	42.33	74.00	-31.67	Horizontal
3	4683.3979	36.59	15.42	52.01	74.00	-21.99	Horizontal
4	4880.7351	38.41	14.89	53.30	74.00	-20.70	Horizontal
5	5905.9257	35.50	17.99	53.49	74.00	-20.51	Horizontal
6	6436.0545	34.57	18.95	53.52	74.00	-20.48	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

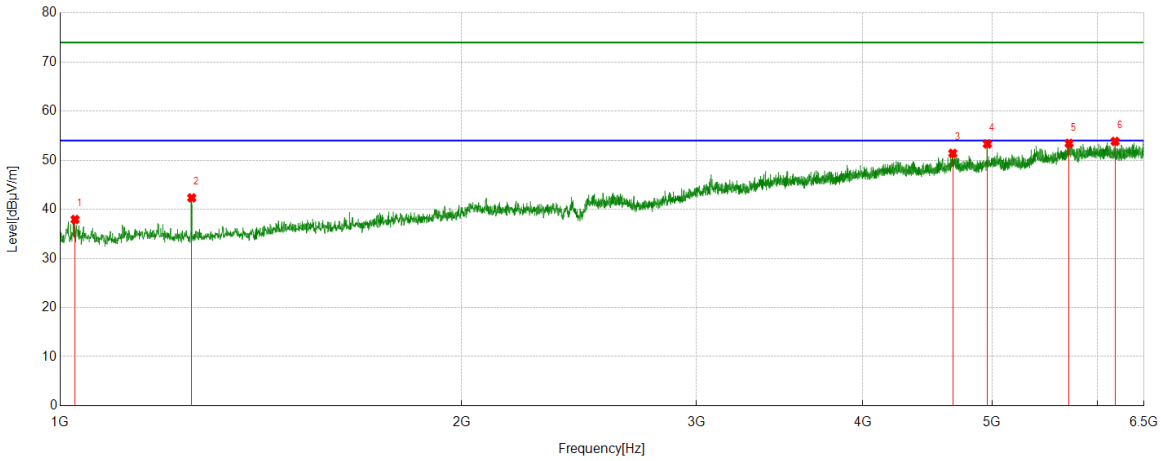


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1184.9606	46.93	-1.93	45.00	74.00	-29.00	Vertical
2	1255.0944	46.72	-1.98	44.74	74.00	-29.26	Vertical
3	4697.1496	36.14	15.24	51.38	74.00	-22.62	Vertical
4	4880.7351	38.68	14.89	53.57	74.00	-20.43	Vertical
5	5818.6023	34.66	18.91	53.57	74.00	-20.43	Vertical
6	6351.4814	33.91	19.59	53.50	74.00	-20.50	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

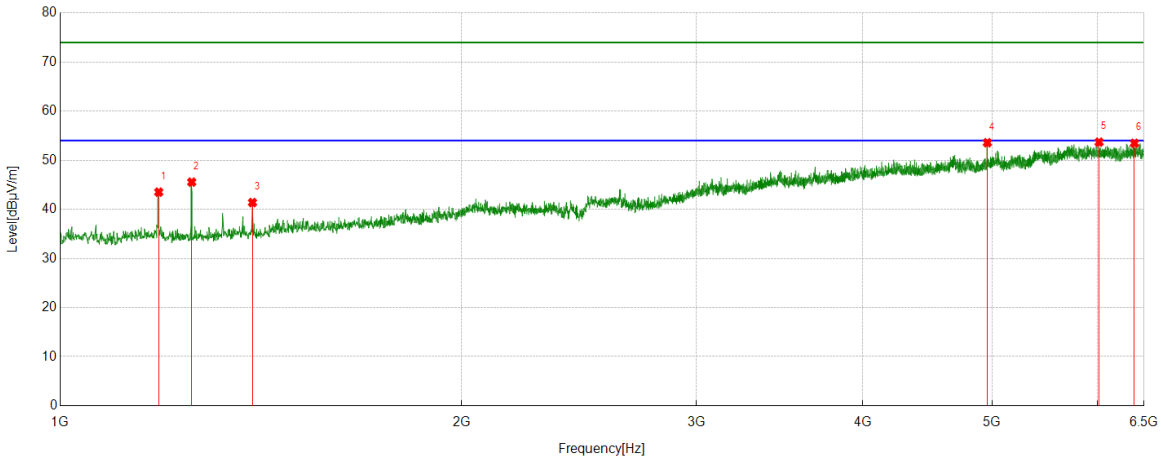


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1026.1283	39.74	-1.81	37.93	74.00	-36.07	Horizontal
2	1255.0944	44.32	-1.98	42.34	74.00	-31.66	Horizontal
3	4671.7090	36.15	15.26	51.41	74.00	-22.59	Horizontal
4	4959.1199	37.73	15.59	53.32	74.00	-20.68	Horizontal
5	5710.6513	35.77	17.67	53.44	74.00	-20.56	Horizontal
6	6183.0229	34.93	18.91	53.84	74.00	-20.16	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:

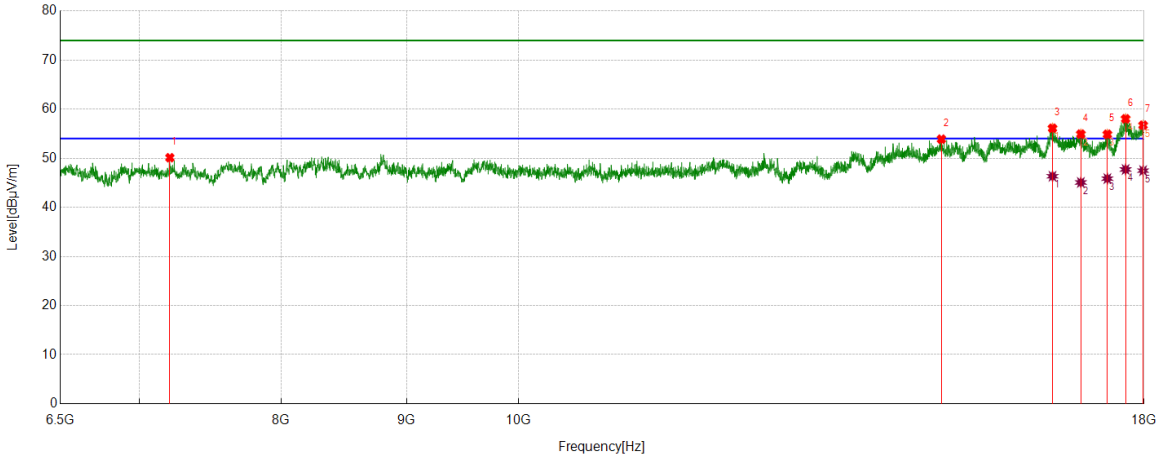
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.46	-1.95	43.51	74.00	-30.49	Vertical
2	1255.0944	47.52	-1.98	45.54	74.00	-28.46	Vertical
3	1393.9867	42.82	-1.44	41.38	74.00	-32.62	Vertical
4	4959.1199	37.98	15.59	53.57	74.00	-20.43	Vertical
5	6014.5643	35.47	18.22	53.69	74.00	-20.31	Vertical
6	6393.4242	34.21	19.25	53.46	74.00	-20.54	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:

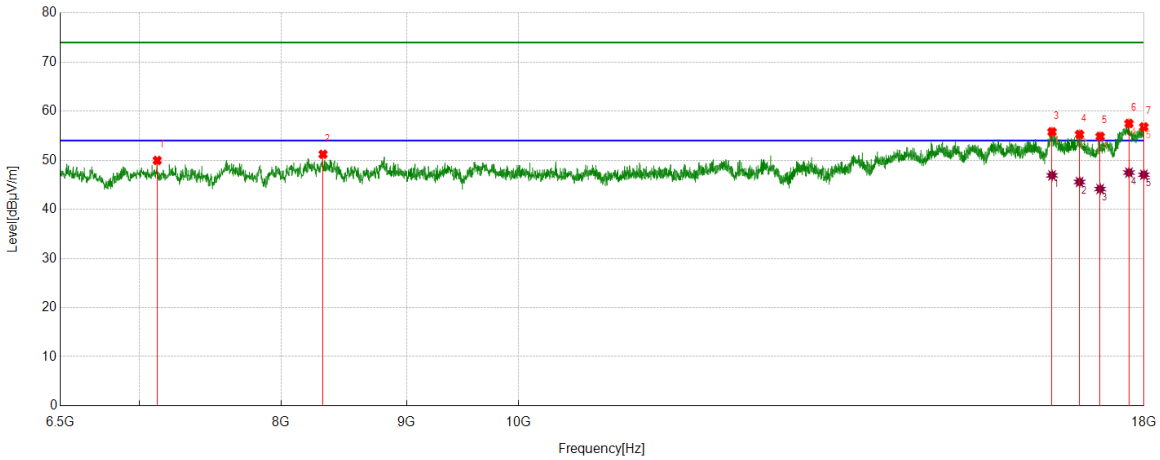
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7205.9007	46.00	4.11	50.11	74.00	-23.89	Horizontal
2	14878.7974	41.19	12.70	53.89	74.00	-20.11	Horizontal
3	16516.3145	39.43	16.68	56.11	74.00	-17.89	Horizontal
4	16961.9952	38.03	16.89	54.92	74.00	-19.08	Horizontal
5	17390.4238	36.76	18.12	54.88	74.00	-19.12	Horizontal
6	17690.8989	38.88	19.15	58.03	74.00	-15.97	Horizontal
7	17984.1855	36.08	20.65	56.73	74.00	-17.27	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	16516.3145	29.65	16.68	46.33	54.00	-7.67	Horizontal
2	16961.9952	28.18	16.89	45.07	54.00	-8.93	Horizontal
3	17390.4238	27.73	18.12	45.85	54.00	-8.15	Horizontal
4	17690.8989	28.56	19.15	47.71	54.00	-6.29	Horizontal
5	17984.1855	26.83	20.65	47.48	54.00	-6.52	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:

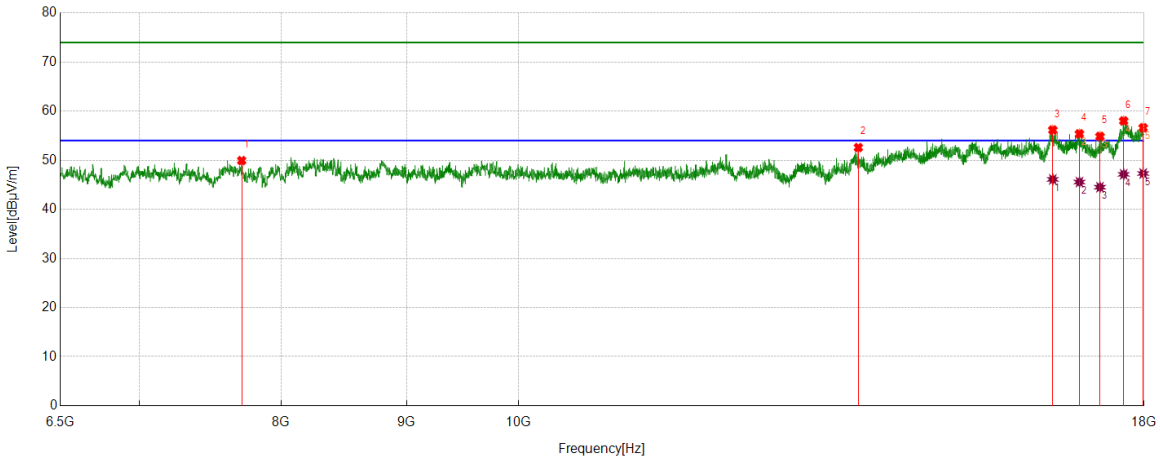
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7121.0776	45.84	4.12	49.96	74.00	-24.04	Vertical
2	8321.5402	45.22	5.99	51.21	74.00	-22.79	Vertical
3	16509.1261	39.07	16.72	55.79	74.00	-18.21	Vertical
4	16941.8677	38.43	16.83	55.26	74.00	-18.74	Vertical
5	17272.5341	37.29	17.56	54.85	74.00	-19.15	Vertical
6	17746.9684	37.91	19.58	57.49	74.00	-16.51	Vertical
7	17997.1246	36.22	20.57	56.79	74.00	-17.21	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	16509.1261	30.20	16.72	46.92	54.00	-7.08	Vertical
2	16941.8677	28.74	16.83	45.57	54.00	-8.43	Vertical
3	17272.5341	26.58	17.56	44.14	54.00	-9.86	Vertical
4	17746.9684	27.91	19.58	47.49	54.00	-6.51	Vertical
5	17997.1246	26.48	20.57	47.05	54.00	-6.95	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:

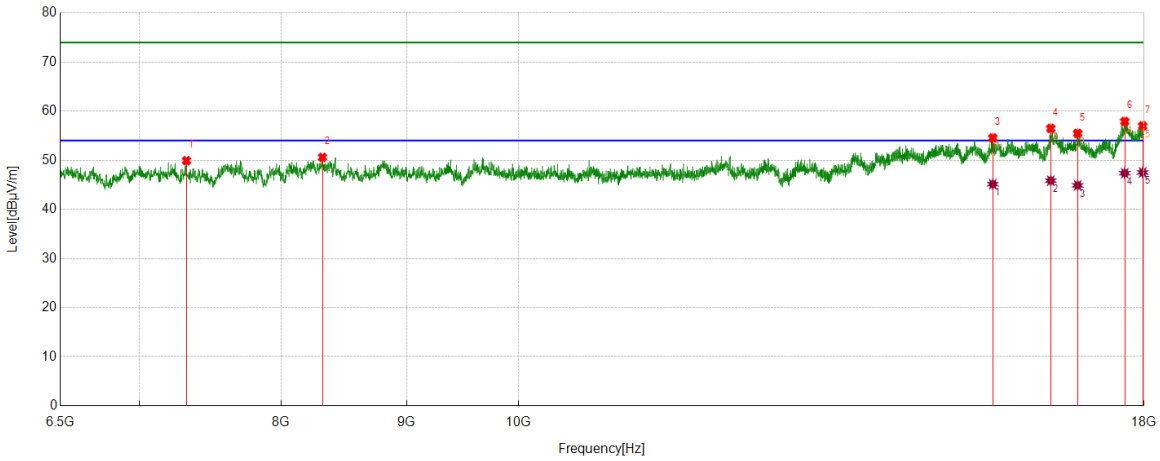
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7709.0886	44.58	5.35	49.93	74.00	-24.07	Horizontal
2	13761.7202	41.16	11.43	52.59	74.00	-21.41	Horizontal
3	16520.6276	39.53	16.63	56.16	74.00	-17.84	Horizontal
4	16940.4301	38.56	16.82	55.38	74.00	-18.62	Horizontal
5	17269.6587	37.30	17.56	54.86	74.00	-19.14	Horizontal
6	17659.2699	39.14	18.87	58.01	74.00	-15.99	Horizontal
7	17985.6232	35.97	20.65	56.62	74.00	-17.38	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	16520.6276	29.47	16.63	46.10	54.00	-7.90	Horizontal
2	16940.4301	28.74	16.82	45.56	54.00	-8.44	Horizontal
3	17269.6587	26.95	17.56	44.51	54.00	-9.49	Horizontal
4	17659.2699	28.26	18.87	47.13	54.00	-6.87	Horizontal
5	17985.6232	26.65	20.65	47.30	54.00	-6.70	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:

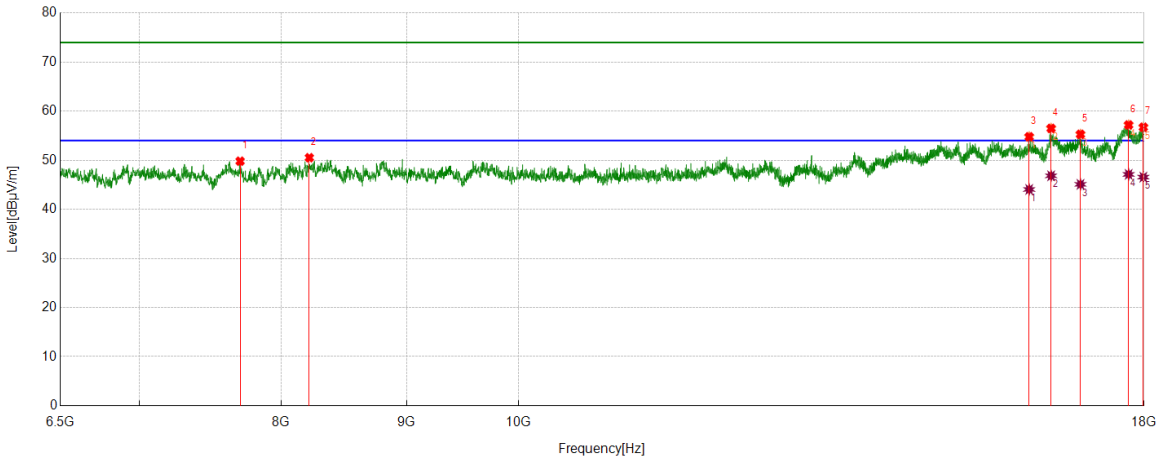
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7319.4774	45.95	3.97	49.92	74.00	-24.08	Vertical
2	8317.2272	44.54	6.05	50.59	74.00	-23.41	Vertical
3	15614.8894	40.96	13.59	54.55	74.00	-19.45	Vertical
4	16488.9986	39.81	16.68	56.49	74.00	-17.51	Vertical
5	16911.6765	38.83	16.64	55.47	74.00	-18.53	Vertical
6	17676.5221	38.92	18.98	57.90	74.00	-16.10	Vertical
7	17976.9971	36.38	20.62	57.00	74.00	-17.00	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	15614.8894	31.53	13.59	45.12	54.00	-8.88	Vertical
2	16488.9986	29.16	16.68	45.84	54.00	-8.16	Vertical
3	16911.6765	28.24	16.64	44.88	54.00	-9.12	Vertical
4	17676.5221	28.38	18.98	47.36	54.00	-6.64	Vertical
5	17976.9971	26.89	20.62	47.51	54.00	-6.49	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:

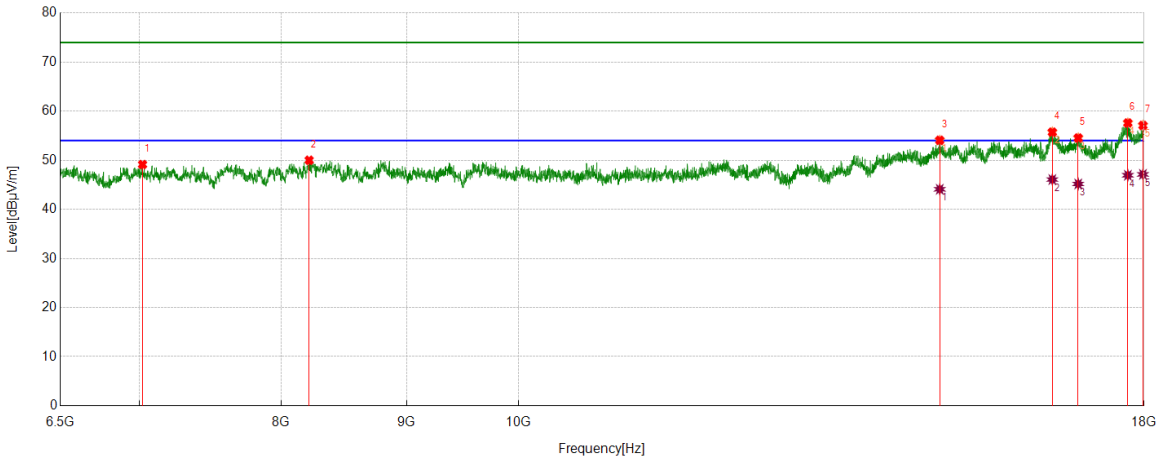
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7697.5872	44.21	5.60	49.81	74.00	-24.19	Horizontal
2	8215.1519	44.51	6.01	50.52	74.00	-23.48	Horizontal
3	16158.3323	39.38	15.40	54.78	74.00	-19.22	Horizontal
4	16494.7493	39.88	16.61	56.49	74.00	-17.51	Horizontal
5	16956.2445	38.40	16.88	55.28	74.00	-18.72	Horizontal
6	17741.2177	37.64	19.55	57.19	74.00	-16.81	Horizontal
7	17988.4986	36.08	20.64	56.72	74.00	-17.28	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	16158.3323	28.65	15.40	44.05	54.00	-9.95	Horizontal
2	16494.7493	30.22	16.61	46.83	54.00	-7.17	Horizontal
3	16956.2445	28.21	16.88	45.09	54.00	-8.91	Horizontal
4	17741.2177	27.57	19.55	47.12	54.00	-6.88	Horizontal
5	17988.4986	25.92	20.64	46.56	54.00	-7.44	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:

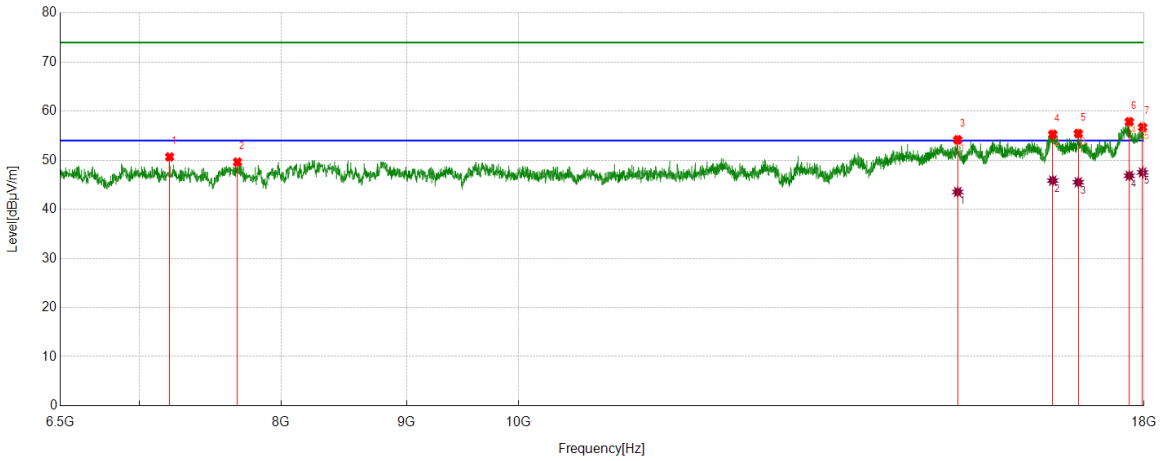
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7023.3154	45.15	3.98	49.13	74.00	-24.87	Vertical
2	8213.7142	44.03	5.97	50.00	74.00	-24.00	Vertical
3	14855.7945	41.30	12.76	54.06	74.00	-19.94	Vertical
4	16513.4392	39.01	16.71	55.72	74.00	-18.28	Vertical
5	16920.3025	37.73	16.80	54.53	74.00	-19.47	Vertical
6	17728.2785	38.07	19.52	57.59	74.00	-16.41	Vertical
7	17981.3102	36.43	20.66	57.09	74.00	-16.91	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	14855.7945	31.33	12.76	44.09	54.00	-9.91	Vertical
2	16513.4392	29.36	16.71	46.07	54.00	-7.93	Vertical
3	16920.3025	28.37	16.80	45.17	54.00	-8.83	Vertical
4	17728.2785	27.42	19.52	46.94	54.00	-7.06	Vertical
5	17981.3102	26.46	20.66	47.12	54.00	-6.88	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:

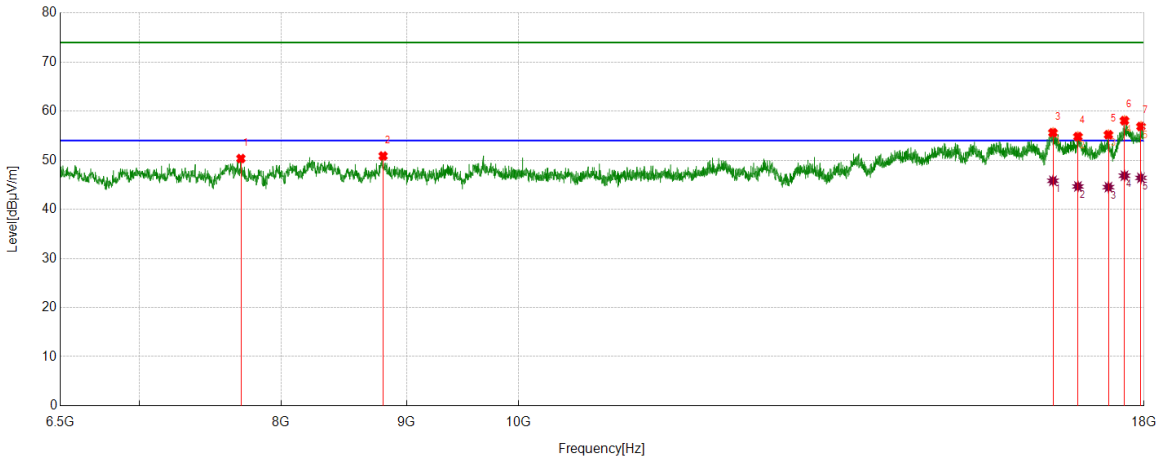
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7204.4631	46.55	4.13	50.68	74.00	-23.32	Horizontal
2	7678.8974	44.20	5.43	49.63	74.00	-24.37	Horizontal
3	15108.8261	40.97	13.19	54.16	74.00	-19.84	Horizontal
4	16520.6276	38.65	16.63	55.28	74.00	-18.72	Horizontal
5	16921.7402	38.64	16.80	55.44	74.00	-18.56	Horizontal
6	17752.7191	38.28	19.56	57.84	74.00	-16.16	Horizontal
7	17975.5594	36.12	20.60	56.72	74.00	-17.28	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	15108.8261	30.35	13.19	43.54	54.00	-10.46	Horizontal
2	16520.6276	29.23	16.63	45.86	54.00	-8.14	Horizontal
3	16921.7402	28.72	16.80	45.52	54.00	-8.48	Horizontal
4	17752.7191	27.28	19.56	46.84	54.00	-7.16	Horizontal
5	17975.5594	26.92	20.60	47.52	54.00	-6.48	Horizontal
6	17926.6783	25.88	20.16	46.04	54.00	-7.96	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. 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:

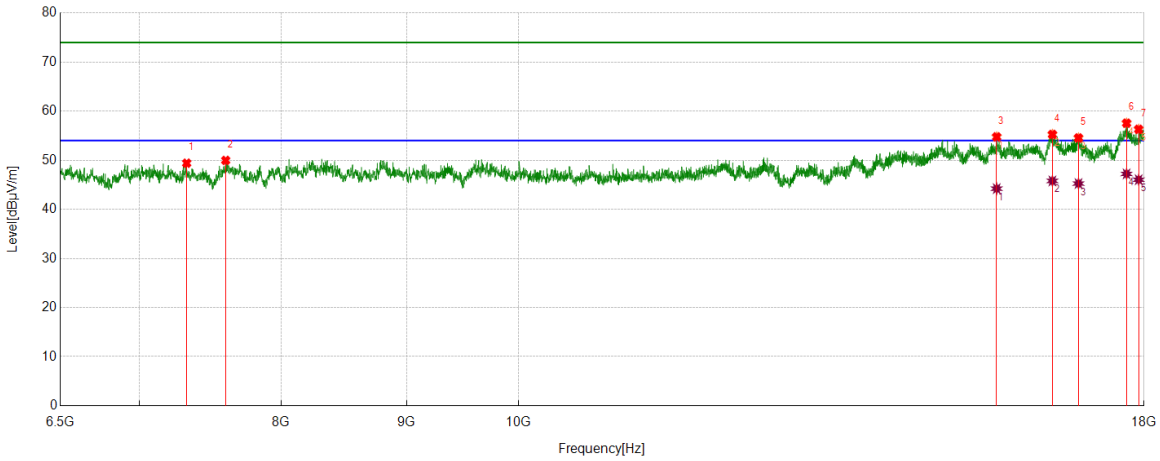
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7703.3379	44.75	5.59	50.34	74.00	-23.66	Vertical
2	8804.6006	44.53	6.34	50.87	74.00	-23.13	Vertical
3	16523.5029	39.06	16.56	55.62	74.00	-18.38	Vertical
4	16915.9895	38.10	16.72	54.82	74.00	-19.18	Vertical
5	17407.6760	37.00	18.20	55.20	74.00	-18.80	Vertical
6	17672.2090	39.13	18.94	58.07	74.00	-15.93	Vertical
7	17948.2435	36.46	20.42	56.88	74.00	-17.12	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	16523.5029	29.26	16.56	45.82	54.00	-8.18	Vertical
2	16915.9895	27.94	16.72	44.66	54.00	-9.34	Vertical
3	17407.6760	26.32	18.20	44.52	54.00	-9.48	Vertical
4	17672.2090	27.91	18.94	46.85	54.00	-7.15	Vertical
5	17948.2435	25.99	20.42	46.41	54.00	-7.59	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:

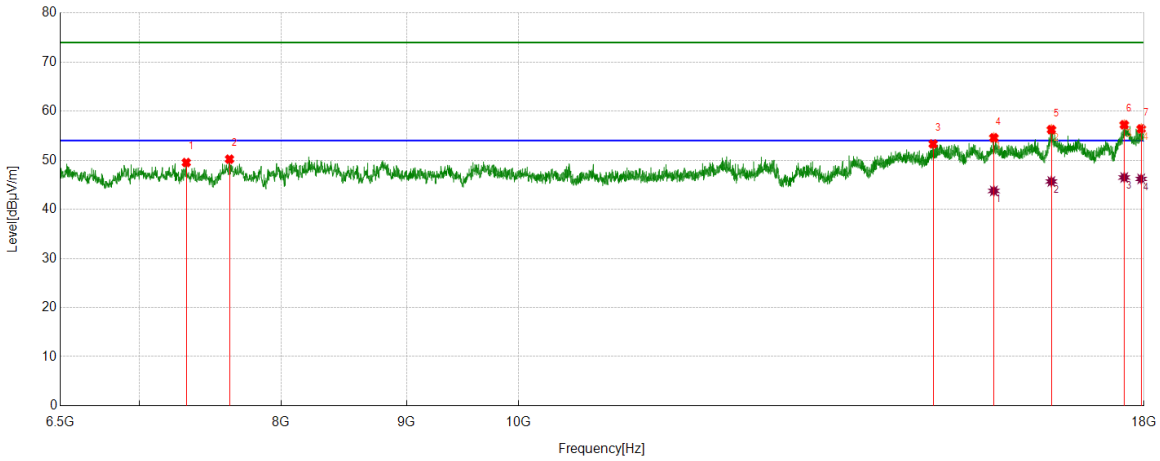
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7320.9151	45.44	3.96	49.40	74.00	-24.60	Horizontal
2	7594.0743	44.87	5.10	49.97	74.00	-24.03	Horizontal
3	15672.3966	40.84	13.92	54.76	74.00	-19.24	Horizontal
4	16514.8769	38.56	16.70	55.26	74.00	-18.74	Horizontal
5	16924.6156	37.75	16.79	54.54	74.00	-19.46	Horizontal
6	17706.7133	38.22	19.33	57.55	74.00	-16.45	Horizontal
7	17909.4262	36.39	19.91	56.30	74.00	-17.70	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	15672.3966	30.29	13.92	44.21	54.00	-9.79	Horizontal
2	16514.8769	29.09	16.70	45.79	54.00	-8.21	Horizontal
3	16924.6156	28.46	16.79	45.25	54.00	-8.75	Horizontal
4	17706.7133	27.89	19.33	47.22	54.00	-6.78	Horizontal
5	17909.4262	26.12	19.91	46.03	54.00	-7.97	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:

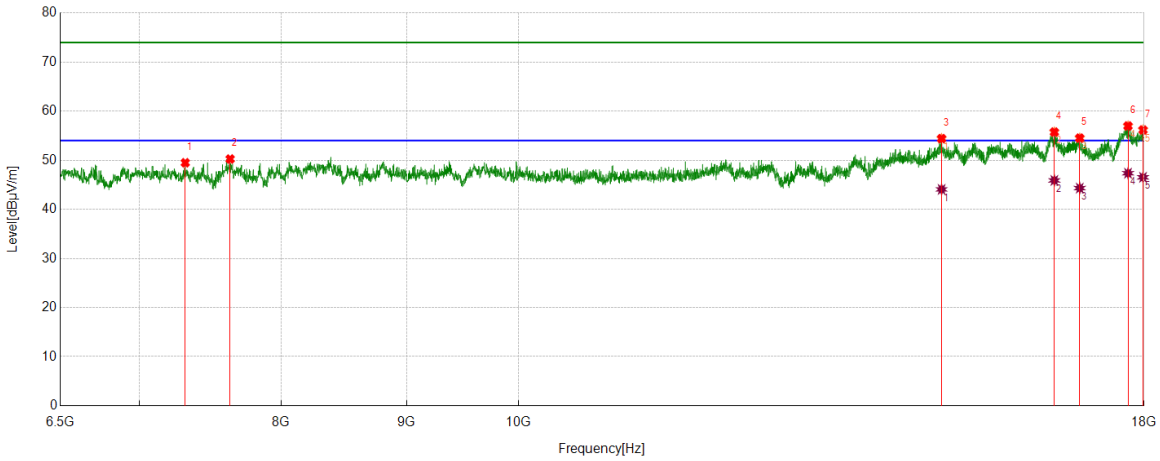
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7318.0398	45.55	3.98	49.53	74.00	-24.47	Vertical
2	7621.3902	44.93	5.29	50.22	74.00	-23.78	Vertical
3	14763.7830	40.47	12.85	53.32	74.00	-20.68	Vertical
4	15630.7038	40.92	13.66	54.58	74.00	-19.42	Vertical
5	16499.0624	39.71	16.53	56.24	74.00	-17.76	Vertical
6	17667.8960	38.32	18.91	57.23	74.00	-16.77	Vertical
7	17952.5566	35.92	20.47	56.39	74.00	-17.61	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	15630.7038	30.09	13.66	43.75	54.00	-10.25	Vertical
2	16499.0624	29.15	16.53	45.68	54.00	-8.32	Vertical
3	17667.8960	27.58	18.91	46.49	54.00	-7.51	Vertical
4	17952.5566	25.73	20.47	46.20	54.00	-7.80	Vertical
5	17929.5537	25.80	20.18	45.98	54.00	-8.02	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:

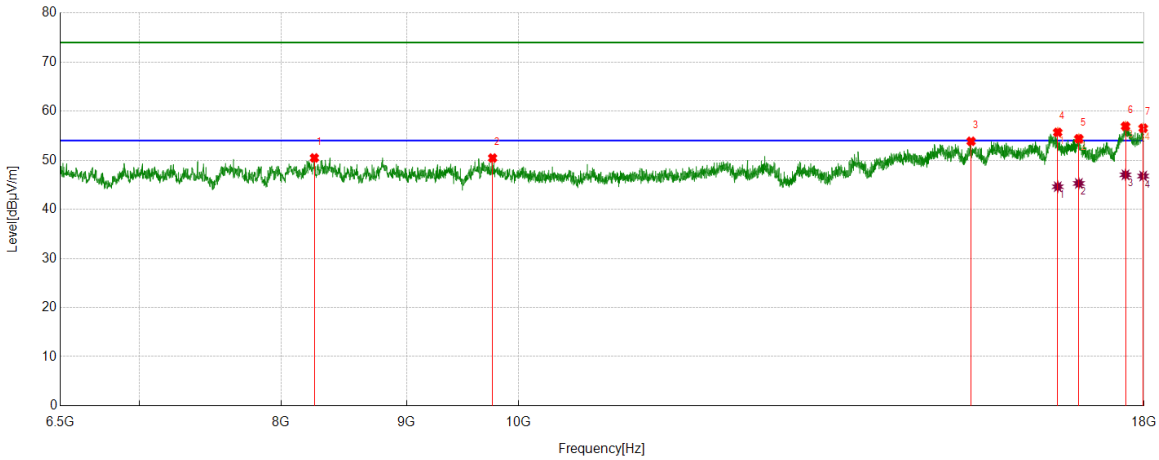
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	7310.8514	45.46	4.03	49.49	74.00	-24.51	Horizontal
2	7625.7032	44.97	5.28	50.25	74.00	-23.75	Horizontal
3	14881.6727	41.70	12.71	54.41	74.00	-19.59	Horizontal
4	16545.0681	39.19	16.55	55.74	74.00	-18.26	Horizontal
5	16944.7431	37.67	16.84	54.51	74.00	-19.49	Horizontal
6	17731.1539	37.45	19.53	56.98	74.00	-17.02	Horizontal
7	17982.7478	35.51	20.66	56.17	74.00	-17.83	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	14881.6727	31.35	12.71	44.06	54.00	-9.94	Horizontal
2	16545.0681	29.34	16.55	45.89	54.00	-8.11	Horizontal
3	16944.7431	27.48	16.84	44.32	54.00	-9.68	Horizontal
4	17731.1539	27.83	19.53	47.36	54.00	-6.64	Horizontal
5	17982.7478	25.86	20.66	46.52	54.00	-7.48	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	8253.9692	44.25	6.22	50.47	74.00	-23.53	Vertical
2	9759.2199	43.92	6.53	50.45	74.00	-23.55	Vertical
3	15300.0375	40.62	13.24	53.86	74.00	-20.14	Vertical
4	16598.2623	39.02	16.66	55.68	74.00	-18.32	Vertical
5	16930.3663	37.61	16.77	54.38	74.00	-19.62	Vertical
6	17689.4612	37.80	19.13	56.93	74.00	-17.07	Vertical
7	17985.6232	35.88	20.65	56.53	74.00	-17.47	Vertical

AV Result:

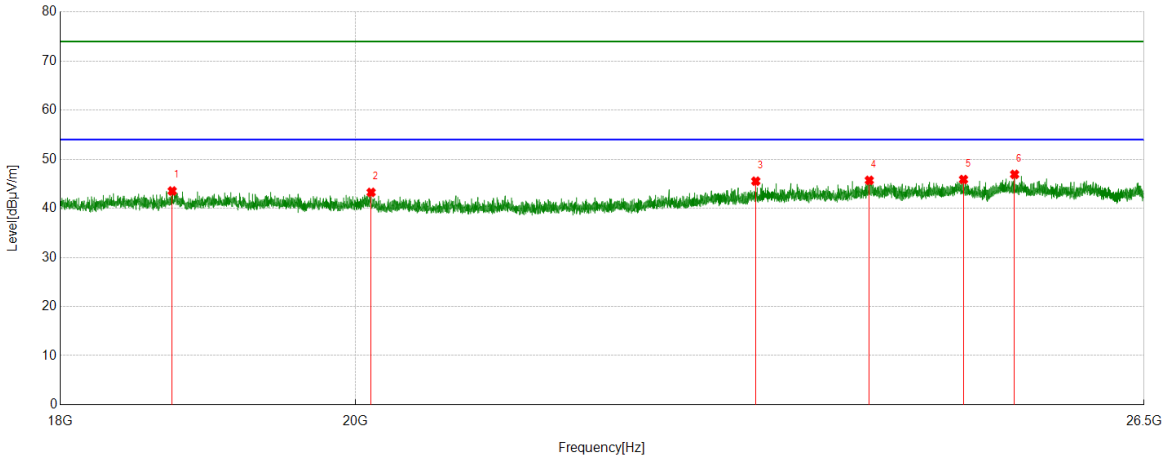
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	16598.2623	27.95	16.66	44.61	54.00	-9.39	Vertical
2	16930.3663	28.51	16.77	45.28	54.00	-8.72	Vertical
3	17689.4612	27.91	19.13	47.04	54.00	-6.96	Vertical
4	17985.6232	26.13	20.65	46.78	54.00	-7.22	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 ~ 26.5GHz (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
BLE 1M	MCH	Horizontal	PASS

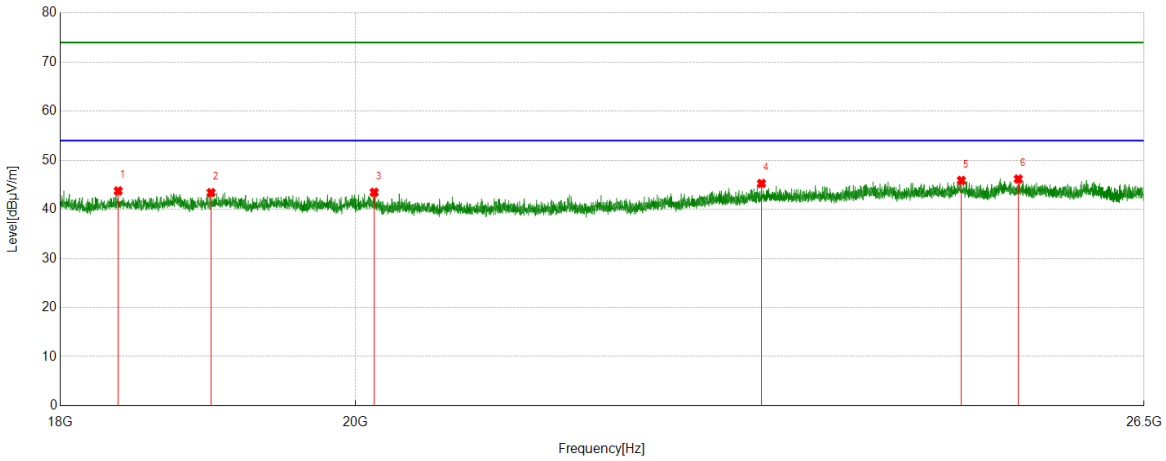


PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	18734.4734	49.76	-6.23	43.53	74.00	-30.47	Horizontal
2	20112.4612	48.43	-5.18	43.25	74.00	-30.75	Horizontal
3	23071.6072	49.03	-3.50	45.53	74.00	-28.47	Horizontal
4	24025.4025	48.33	-2.63	45.70	74.00	-28.30	Horizontal
5	24846.5847	49.26	-3.39	45.87	74.00	-28.13	Horizontal
6	25303.9304	50.24	-3.32	46.92	74.00	-27.08	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:

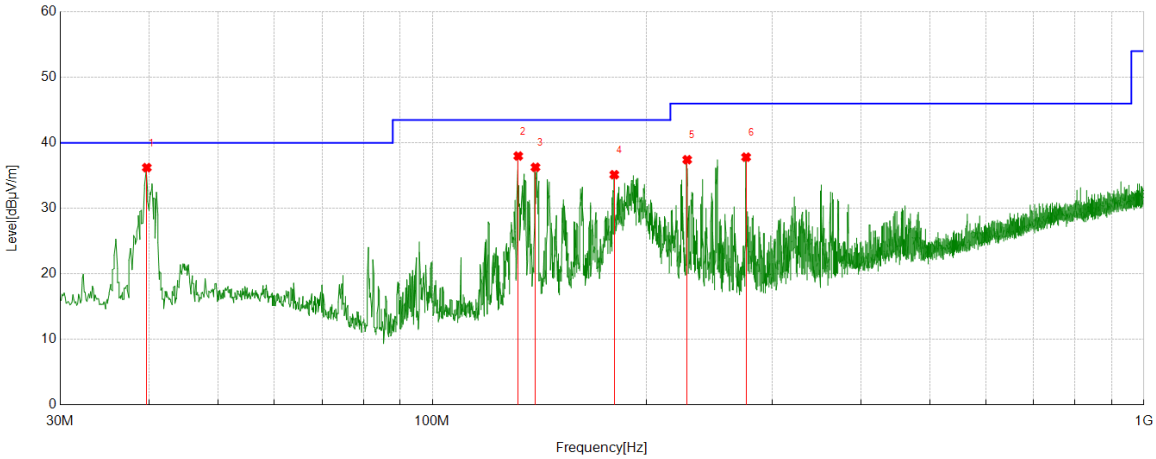
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	18376.5877	50.43	-6.69	43.74	74.00	-30.26	Vertical
2	18996.2996	49.50	-6.09	43.41	74.00	-30.59	Vertical
3	20134.5635	48.68	-5.21	43.47	74.00	-30.53	Vertical
4	23118.3618	48.73	-3.46	45.27	74.00	-28.73	Vertical
5	24827.8828	49.25	-3.37	45.88	74.00	-28.12	Vertical
6	25337.0837	49.46	-3.29	46.17	74.00	-27.83	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 30MHz ~ 1GHz (WORST-CASE CONFIGURATION)

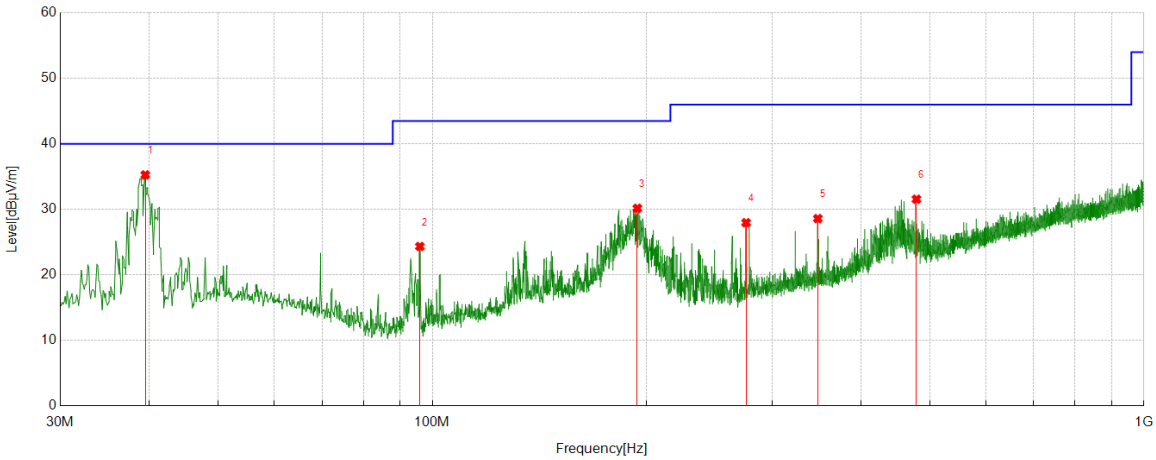
Test Mode	Channel	Polarization	Verdict
BLE 1M	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	39.7010	16.75	19.47	36.22	40.00	-3.78	Peak
2	132.0542	18.83	19.16	37.99	43.50	-5.51	Peak
3	139.6210	16.38	19.89	36.27	43.50	-7.23	Peak
4	180.1710	16.31	18.83	35.14	43.50	-8.36	Peak
5	228.0938	19.91	17.52	37.43	46.00	-8.57	Peak
6	276.0166	17.46	20.36	37.82	46.00	-8.18	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



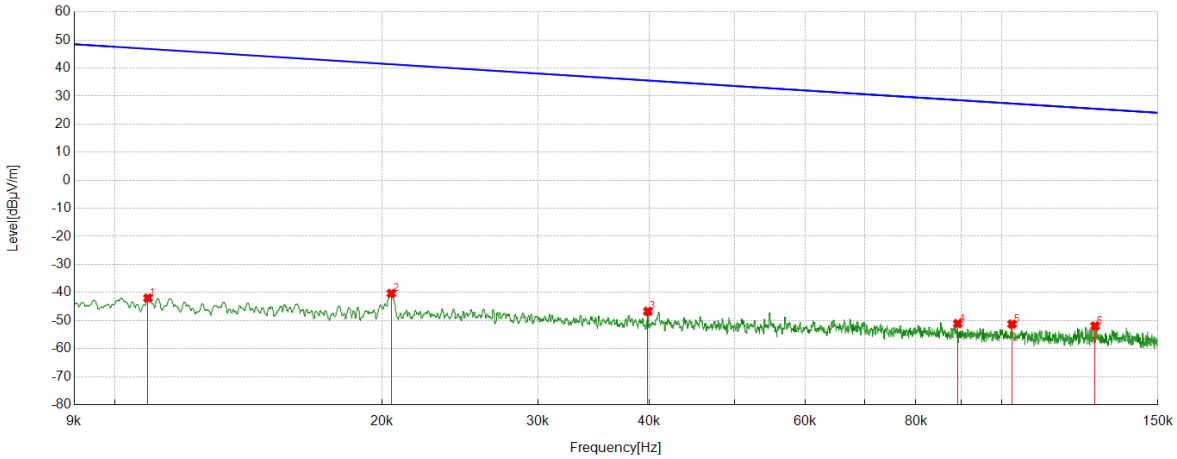
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	39.5070	15.83	19.43	35.26	40.00	-4.74	Peak
2	96.0636	9.24	15.09	24.33	43.50	-19.17	Peak
3	194.1404	12.77	17.39	30.16	43.50	-13.34	Peak
4	276.0166	7.59	20.36	27.95	46.00	-18.05	Peak
5	348.0948	6.45	22.14	28.59	46.00	-17.41	Peak
6	478.8639	6.04	25.51	31.55	46.00	-14.45	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 9kHz ~ 30MHz (WORST CASE CONFIGURATION-FACE ON)

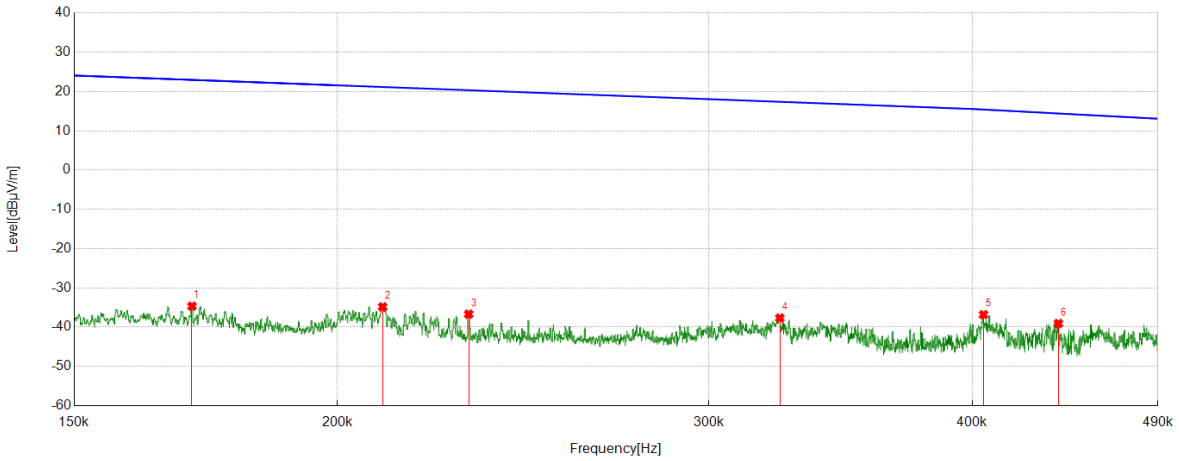
Test Mode	Channel	Frequency Range	Verdict
BLE 1M	MCH	9kHz~150kHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.0109	19.89	-61.89	-42.00	46.83	-88.83	Peak
2	0.0205	21.41	-61.74	-40.33	41.37	-81.70	Peak
3	0.0399	14.86	-61.60	-46.74	35.58	-82.32	Peak
4	0.0892	10.57	-61.66	-51.09	28.60	-79.69	Peak
5	0.1027	10.42	-61.71	-51.29	27.37	-78.66	Peak
6	0.1274	9.76	-61.72	-51.96	25.51	-77.47	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.

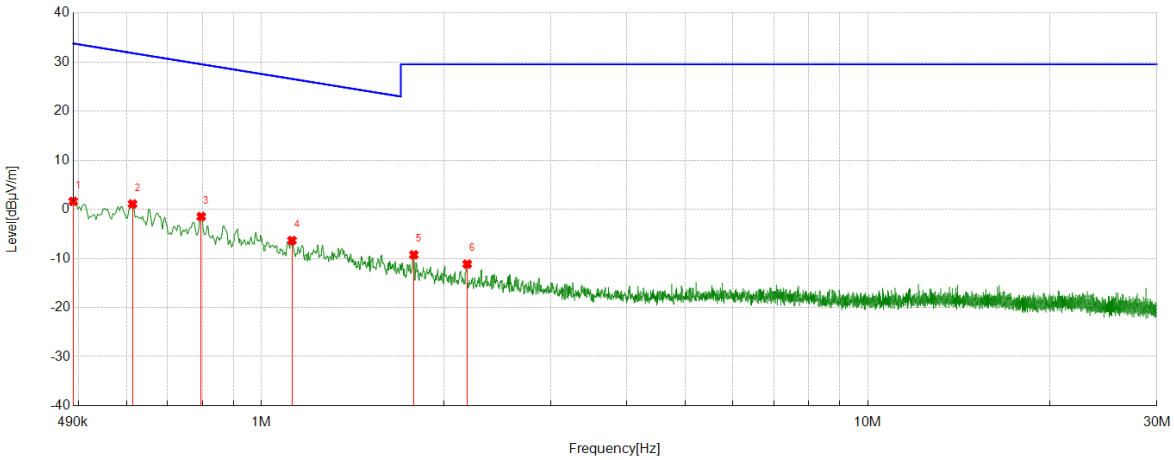
Test Mode	Channel	Frequency Range	Verdict
BLE 1M	MCH	150kHz~490kHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.1706	27.09	-61.76	-34.67	22.97	-57.64	Peak
2	0.2101	26.94	-61.78	-34.84	21.15	-55.99	Peak
3	0.2308	25.10	-61.79	-36.69	20.34	-57.03	Peak
4	0.3242	24.14	-61.82	-37.68	17.39	-55.07	Peak
5	0.4050	25.03	-61.84	-36.81	15.41	-52.22	Peak
6	0.4395	22.80	-61.86	-39.06	14.41	-53.47	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	0.4900	23.50	-21.88	1.62	33.80	-32.18	Peak
2	0.6140	22.99	-21.89	1.10	31.84	-30.74	Peak
3	0.7969	20.40	-21.87	-1.47	29.57	-31.04	Peak
4	1.1245	15.52	-21.86	-6.34	26.59	-32.93	Peak
5	1.7856	12.57	-21.83	-9.26	29.54	-38.80	Peak
6	2.1870	10.67	-21.83	-11.16	29.54	-40.70	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.

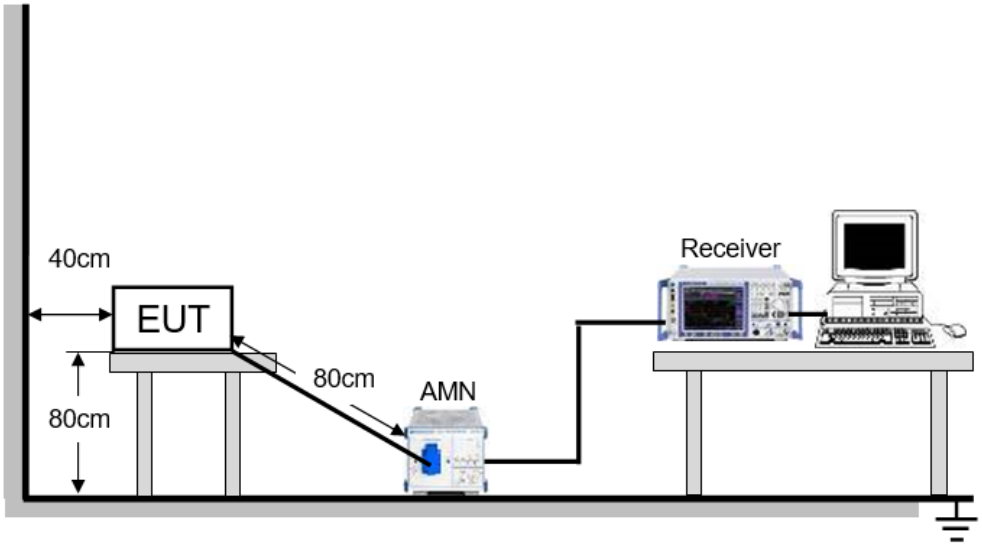
9. AC POWER LINE CONDUCTED EMISSIONS

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 12 mm 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 RESULTS

Please refer to the original 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