

FCC CERTIFICATION TEST REPORT

Applicant	:	Subblue Underwater AI Co.,Ltd
Address	:	Building 7, Jinbin Development Industrial Park, #45Muning Road, TEDA.TianJin China.
Manufacturer	:	Subblue Underwater AI Co.,Ltd
Address	:	Building 7, Jinbin Development Industrial Park, #45Muning Road, TEDA.TianJin China.
Equipment under Test	:	Subblue Underwater Scooter
Model No.	:	Vapor Pro Floater
Trade Mark	:	SUBBLUE
FCC ID	:	2ASEE-AP8003-1
Report No.	:	LS-R26032023-12F02
Issue Date	:	May. 25, 2026



LabSure Testing Services (Suzhou) Co., Ltd.

Table of Contents

	Test Report Declare.....	4
1.	Summary of Test Results.....	6
2.	General Test Information	7
2.1.	Description of EUT	7
2.2.	Accessories of EUT.....	8
2.3.	Assistant equipment used for test.....	8
2.4.	Block diagram of EUT configuration for test	8
2.5.	Test environment conditions	8
2.6.	Deviations of test standard.....	9
2.7.	Test laboratory	9
2.8.	Measurement uncertainty.....	9
3.	Equipment Used During Test.....	10
4.	6 dB Bandwidth and 99% Bandwidth.....	11
4.1.	General Information	11
4.2.	Block diagram of test setup.....	11
4.3.	Limits	11
4.4.	Test procedure	11
4.5.	Test result.....	13
4.6.	Test graphs	13
5.	Maximum Peak Output Power	16
5.1.	General Information	16
5.2.	Block diagram of test setup.....	16
5.3.	Limits	16
5.4.	Test procedure	16
5.5.	Test result.....	17
5.6.	Test graphs	18
6.	Power Spectral Density.....	19
6.1.	General Information	19
6.2.	Block diagram of test setup.....	19
6.3.	Limits	19
6.4.	Test procedure	19
6.5.	Test result.....	20
6.6.	Test graphs	21
7.	Band Edge Compliance (Conducted Method)	22
7.1.	General Information	22
7.2.	Block diagram of test setup.....	22

7.3.	Limits	22
7.4.	Test procedure	22
7.5.	Test result.....	23
7.6.	Test graphs	23
8.	RF Conducted Spurious Emissions	25
8.1.	General Information	25
8.2.	Block diagram of test setup.....	25
8.3.	Limits	25
8.4.	Test procedure	25
8.5.	Test result.....	26
8.6.	Test graphs	26
9.	Radiated Spurious Emission	29
9.1.	Block diagram of test setup.....	29
9.2.	Limit.....	30
9.3.	Test Procedure.....	31
9.4.	Test result.....	33
10.	Emissions in Restricted Frequency Bands	53
10.1.	General Information	53
10.2.	Block diagram of test setup.....	53
10.3.	Limit.....	53
10.4.	Test Procedure.....	53
10.5.	Test result.....	53
11.	Power Line Conducted Emission	59
11.1.	General Information	59
11.2.	Block diagram of test setup.....	59
11.3.	Power line conducted emission limits	59
11.4.	Test procedure	59
11.5.	Test result.....	60
12.	Antenna Requirements	61
12.1.	Limit.....	61
12.2.	Result	61
13.	Test Setup Photograph	62
14.	Photos of the EUT	62

Test Report Declare

Applicant	:	Subblue Underwater AI Co.,Ltd
Address	:	Building 7, Jinbin Development Industrial Park, #45Muning Road, TEDA.TianJin China.
Manufacturer	:	Subblue Underwater AI Co.,Ltd
Address	:	Building 7, Jinbin Development Industrial Park, #45Muning Road, TEDA.TianJin China.
Equipment under Test	:	Subblue Underwater Scooter
Model No.	:	Vapor Pro Floater
Trade Mark	:	SUBBLUE

Test Standard Used: 47 CFR FCC Part 15 Subpart C (Part 15.247).

Test Procedure Used: ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, KDB558074 D01 15.247 Meas Guidance v05r02

We Declare:

The equipment described above is tested by LabSure Testing Services (Suzhou) Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and LabSure Testing Services (Suzhou) Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above standards.

Report No:	LS-Q26032023-12F02		
Sample No:	Y26032023-07, Y26032023-08		
Date of Receipt:	Apr. 07, 2026	Date of Test:	Apr. 07, 2026~ May. 20, 2026

Prepared By:

Bacon Dong

Bacon Dong/Engineer

Reviewed By:

leon wu

Leon Wu/Director

Authorized By:

Chris Zhong

Chris Zhong/Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of LabSure Testing Services (Suzhou) Co., Ltd. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification. The results reported herein have been performed in accordance with the laboratory's terms of accreditation.

Revision History

Rev.	Revisions	Issue Date	Revised By
V0	Initial issue	May. 25, 2026	

1. Summary of Test Results

The EUT have been tested according to the applicable standards as referenced below.		
Description of Test Item	Standard	Verdict
6dB Bandwidth and 99% Bandwidth	FCC 15.247 (a) (2)	Pass
Maximum Conducted Output Power	FCC 15.247 (b) (3)	Pass
Power Spectral Density	FCC 15.247 (e)	Pass
Band-edge and Spurious Emissions (Conducted)	FCC 15.247 (d)	Pass
Radiated Spurious Emissions	FCC 15.247 (d) FCC 15.209 FCC 15.205	Pass
Radiated Band Edge Compliance	FCC 15.247 (d) FCC 15.209 FCC 15.205	Pass
Power Line Conducted Emission	FCC 15.207	N/A
Antenna Requirement	FCC 15.203	Pass
Note: 1)The measurement result for the sample received is <Pass> according to < ANSI C63.10-2020+ Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, KDB558074 D01 15.247 Meas Guidance v05r02, 47 CFR FCC Part 2, 47 CFR FCC Part 15 Subpart C > when < Simple Acceptance > decision rule is applied.		

2. General Test Information

2.1. Description of EUT

EUT Name	: Subblue Underwater Scooter
Model Number	: Vapor Pro Floater
EUT Function Description	: Please reference user manual of this device
Power Supply	: DC 3.7V by Polymer Li-ion built-in battery
Radio Specification	: Bluetooth (LE)
Operation Frequency	: 2402 MHz - 2480 MHz
Modulation	: GFSK
Data Rate	: 1Mbps
Antenna Type	: FPC Antenna
Antenna Gain	: Max. Peak Antenna Gain: 1.25 dBi (Declare by customer and the lab isn't responsible for the value)

Note1: The lab isn't responsible for the value provide by customer (Such as RF cable loss, antenna gain etc.)

Channel information					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454	/	
13	2428	27	2456	/	

2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Description	Remark
N/A	N/A	N/A	N/A	N/A

2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	EMC Compliance	SN
Notebook	Lenovo	Xiaoxin 14c RH10	FCC/CE	N/A

2.4. Block diagram of EUT configuration for test

Test software: EspRFTTestTool, Version: v4.7

The test software was used to control EUT work in Continuous Tx mode and Rx mode, and select test channel, wireless mode as below table.

The pathloss of external cable: 0.5dB (According to the manufacturer's claims)

Tested mode, channel, information			
Mode	Setting Tx Power	Channel	Frequency (MHz)
BLE 1M	6	CH0	2402
	6	CH19	2440
	6	CH39	2480

2.5. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Environment Parameter	Selected Values During Tests	
Relative Humidity	45% to 75%	
Atmospheric Pressure:	86 kPa to 106 kPa	
Temperature	TN	+20 °C to +28 °C
Voltage:	VL	N/A
	VN	DC 3.7V
	VH	N/A

Note: VL= Lower Extreme Test Voltage

VN= Nominal Voltage

VH= Upper Extreme Test Voltage

TN= Normal Temperature

2.6. Deviations of test standard

No deviation.

2.7. Test laboratory

Lab Information	Company Name: LabSure Testing Services (Suzhou) Co., Ltd. Address: Phase II, No.16 Runsheng Road, Suzhou Industrial Park, Suzhou, People's Republic of China. Tel: +86-0512-62531270, E-mail: labsure@lab-sure.com, www.lab-sure.com
Accreditation Certificate	A2LA (Certificate No.: 7346.01) LabSure Testing Services (Suzhou) Co., Ltd.. has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1397) LabSure Testing Services (Suzhou) Co., Ltd.. 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.: 32952; CAB No.:CN0182) LabSure Testing Services (Suzhou) Co., Ltd.. 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 Phase II, No.16 Runsheng Road, Suzhou Industrial Park, Suzhou, 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 LabSure Testing Services (Suzhou) Co., Ltd. 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.	

2.8. Measurement uncertainty

Test Item	Uncertainty
DTS Bandwidth	±1.9 %
Maximum Conducted Output Power	± 0.69dB
Maximum Power Spectral Density Level	±1.5 dB
Band-edge Compliance	± 1.9%
Conducted Spurious Emissions	9KHz-30MHz:±0.90dB
	30MHz-1GHz:±1.5 dB
	1GHz-12.75GHz: ±1.9dB
	12.75GHz-26.5GHz: ±2.1dB
Uncertainty for Radiation Emission Test (9kHz - 1 GHz)	9kHz-30MHz: 3.4 dB
	30MHz-1000MHz: 2.4 dB
Uncertainty for Radiation Emission Test (1 GHz - 40 GHz)	1GHz - 18 GHz:3.1 dB
	18GHz - 40 GHz: 4.3 dB
Uncertainty for Power Line Conduction Emission Test	3.0 dB (150 kHz - 30 MHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3. Equipment Used During Test

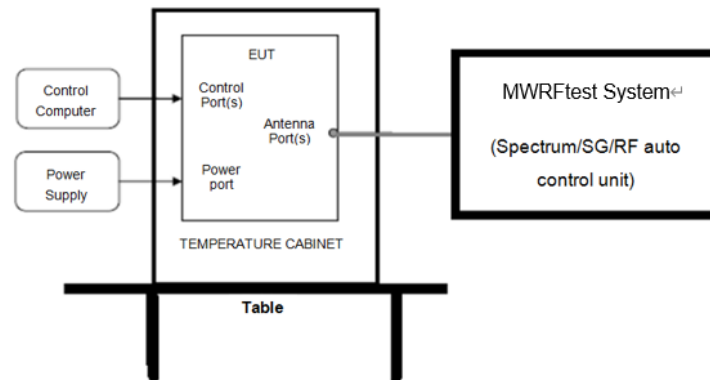
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
RF Conducted Test					
EXG Analog Signal Generator (9kHz-32GHz)	Keysight	N5173B	MY53270968	2026/02/11	1 Year
MXG Vector Signal Generator (100kHz-6GHz)	Agilent	N5182A	MY50143288	2026/02/11	1 Year
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	1201.0002K50-158800-Qi	2026/02/11	1 Year
PXA Signal Analyzer (3Hz-44GHz)	Keysight	N9030B	MY56320639	2026/03/14	1 Year
Temperature, humidity and pressure recorder	Huahanwei	THP40W-E	c0222020002d	2026/03/02	1 Year
RF Test Software	MWRFTest	MTS 8310	2.0.0.0	N/A	N/A
Radiated Spurious Emission 3m EMI Chamber					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
3m Anechoic Chamber	CeRuiTong	3m-SAC	N/A	2024/05/10	3 Year
Loop antenna (9kHz-30MHz)	SCHWARZBEC K	FMZB1519-60 D	00058	2024/11/05	3 Year
EMI Test Receiver	R&S	ESCi7	101138	2026/01/25	1 Year
Signal Analyzer	R&S	FSV40-N	101730	2026/01/25	1 Year
Hybrid antenna	TESEQ	CBL6141B	27421	2024/01/10	3 Year
Horn Antenna	ETS-Lindgren	3117	157735	2024/01/19	3 Year
Active Horn Antenna	Com-Power	AHA-840	10100024	2023/10/16	3 Year
Pre-Amplifier_HF	COM-MW	DPA8-1000-18 000-1012	05231257	2026/01/25	1 Year
Low Noise Amplifier	Tonscend	TAP10M1G40 N	806JSAP0399 04251006	2026/01/25	1 Year
Temperature, humidity and pressure recorder	Huahanwei	TH10R	c00286000EE1	2026/1/29	1 Year
Test software	TONSCEND	JS36-RSE	5.0.0	N/A	N/A
Power Line Conducted Emissions Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Shielding Room 1	Tai He Mao Rui	N/A	N/A	2024/01/25	3 Year
EMI Test Receiver	Rohde & Schwarz	ESCi3	101705	2026/01/25	1 Year
Two-Line V-Network	Rohde & Schwarz	ENV216	101064	2026/01/25	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	102704	2026/01/25	1 Year
Temperature, humidity and pressure recorder	HuaHanWei	THP40W-E	c0222020002 E	2026/01/25	1 Year
Test software	TONSCEND	JS32-CE	5.0.0	N/A	N/A

4. 6 dB Bandwidth and 99% Bandwidth

4.1. General Information

Test date	2026-04-13	Test engineer	Jimmy Qu	
Climate condition	Ambient temperature	21.2℃	Relative humidity	56.7%
	Atmospheric pressure	101.6kPa		
Test place	EMC Room 1#			

4.2. Block diagram of test setup



4.3. Limits

For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

4.4. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) 99% Bandwidth set the spectrum analyzer as follows:

RBW:	30 kHz
VBW:	100 kHz
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) 6 dB Bandwidth set the spectrum analyzer as follows:

RBW:	100 kHz
VBW:	300 kHz
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(4) Allow the trace to stabilize, measure the 6 dB and 99% bandwidth of signal.

4.5. Test result

Mode	Channel	99% bandwidth Result (MHz)	6 dB bandwidth Result (MHz)	6 dB width Limit (MHz)	Verdict
BLE 1M	CH0	1.014	0.642	>0.5	Pass
	CH19	1.013	0.643	>0.5	Pass
	CH39	1.013	0.642	>0.5	Pass

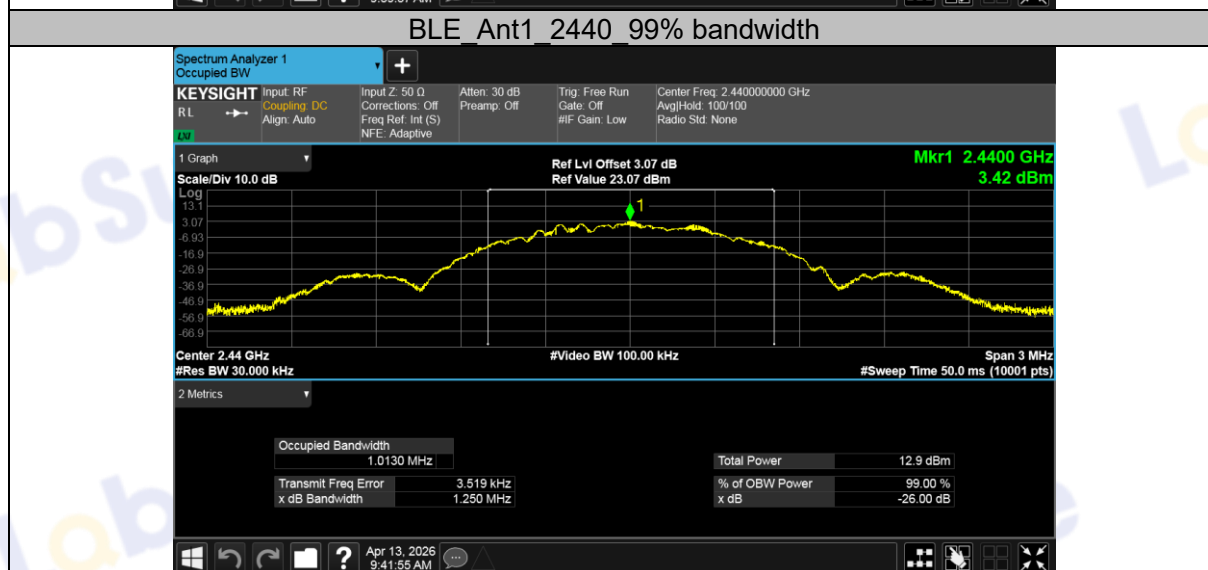
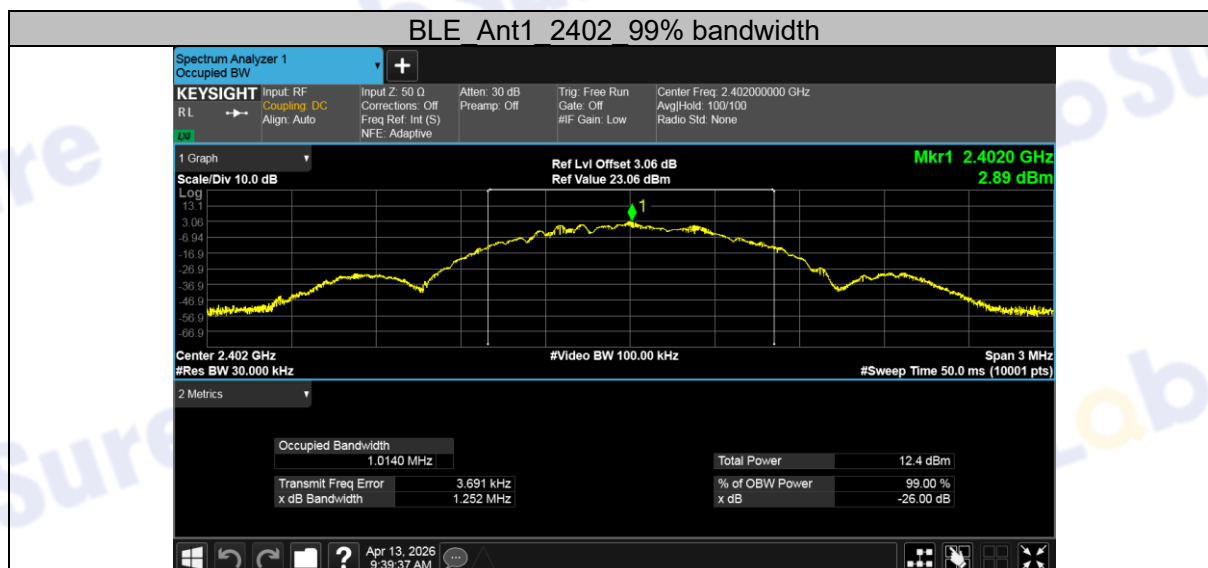
4.6. Test graphs

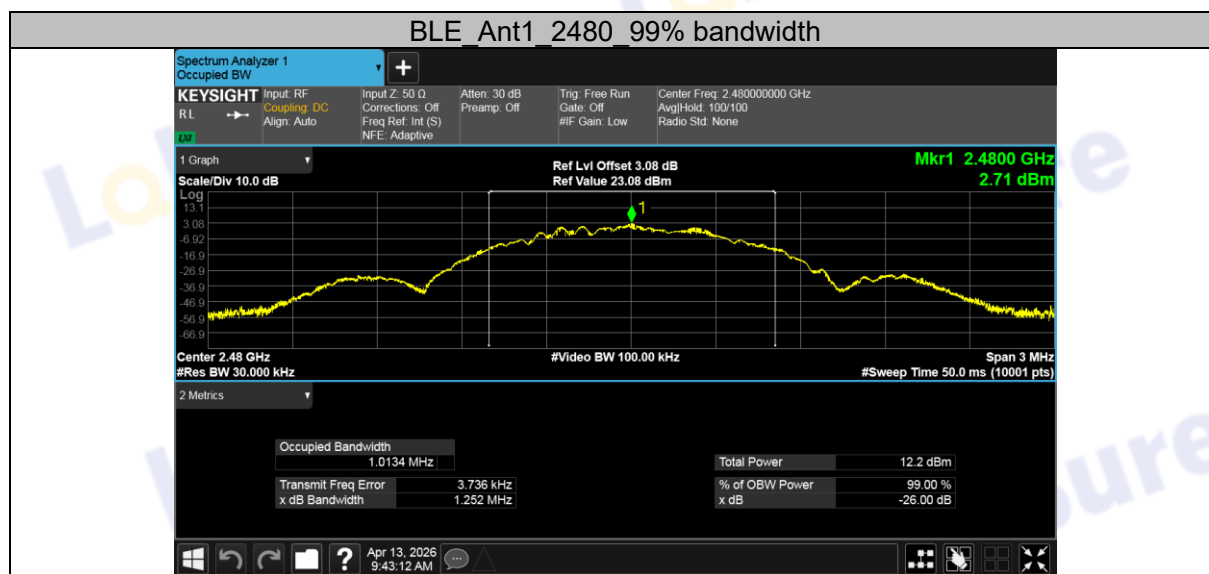
6 dB Bandwidth





99% OBW



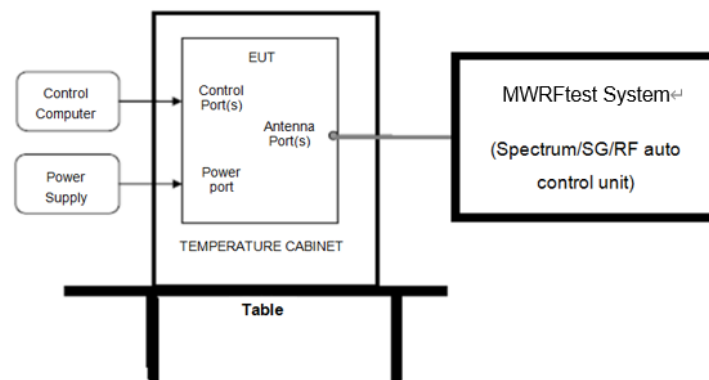


5. Maximum Peak Output Power

5.1. General Information

Test date	2026-04-13	Test engineer	Jimmy Qu	
Climate condition	Ambient temperature	21.2℃	Relative humidity	56.7%
	Atmospheric pressure	101.6kPa		
Test place	EMC Room 1#			

5.2. Block diagram of test setup



5.3. Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. If transmitting antennas of directional gain greater than 6dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.4. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) Set the spectrum analyzer as follows:

RBW:	≥DTS bandwidth
VBW:	≥3 x RBW
Span	≥3 x RBW
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

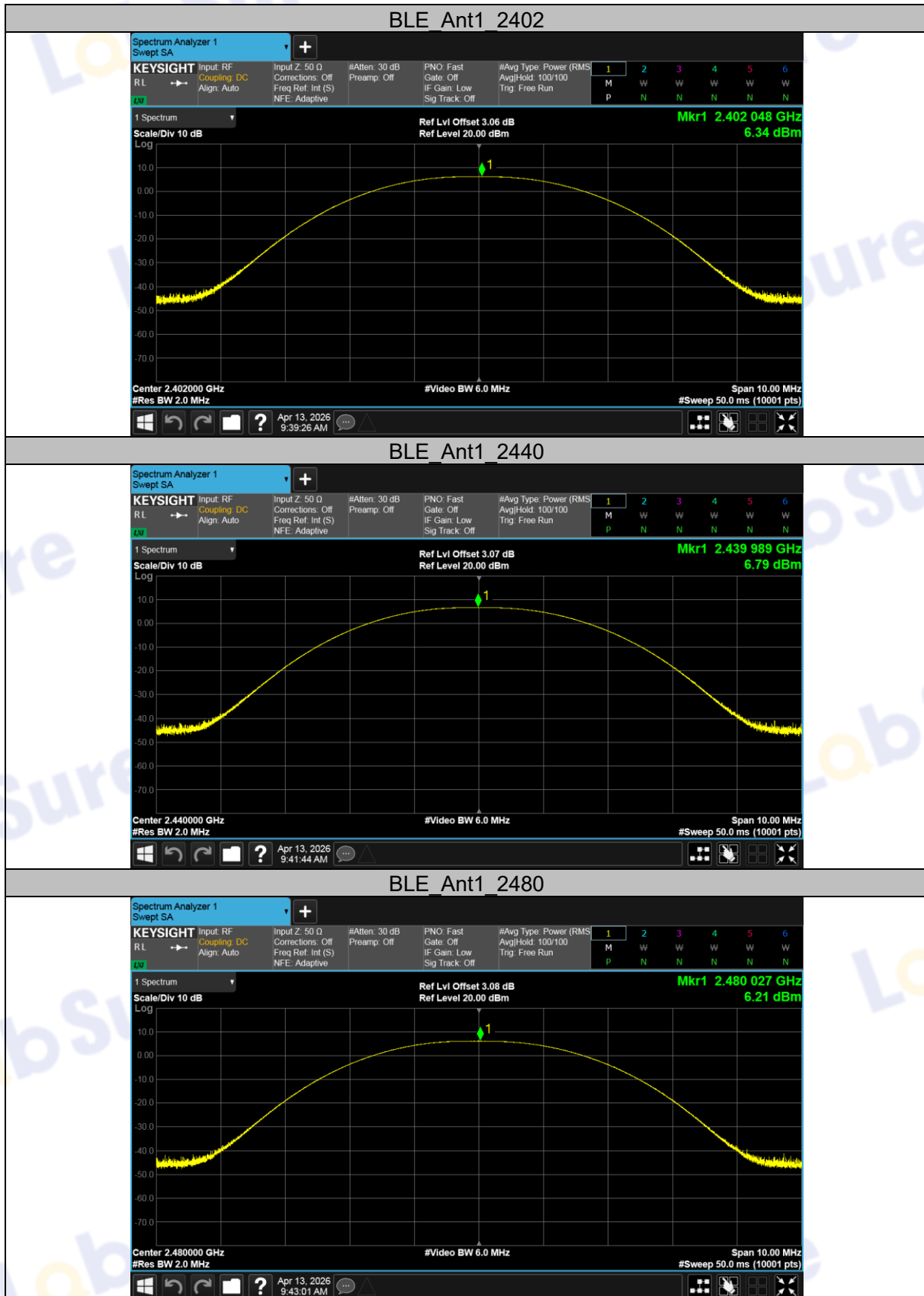
(3) Allow the trace to stabilize, Use the instrument's band/channel power measurement function

with the band limits set equal to the DTS bandwidth edges measure out the PK output power.

5.5. Test result

Mode	Freq. (MHz)	Peak Output Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	6.34	30	Pass
	2440	6.79	30	Pass
	2480	6.21	30	Pass

5.6. Test graphs

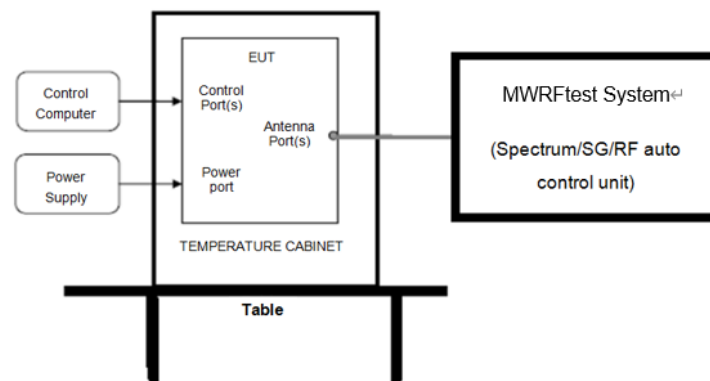


6. Power Spectral Density

6.1. General Information

Test date	2026-04-13	Test engineer	Jimmy Qu	
Climate condition	Ambient temperature	21.2℃	Relative humidity	56.7%
	Atmospheric pressure	101.6kPa		
Test place	EMC Room 1#			

6.2. Block diagram of test setup



6.3. Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

6.4. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) Set the spectrum analyzer as follows:

Center frequency	DTS Channel center frequency
RBW:	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW:	$\geq 3\text{RBW}$
Span	1.5 times the DTS bandwidth
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

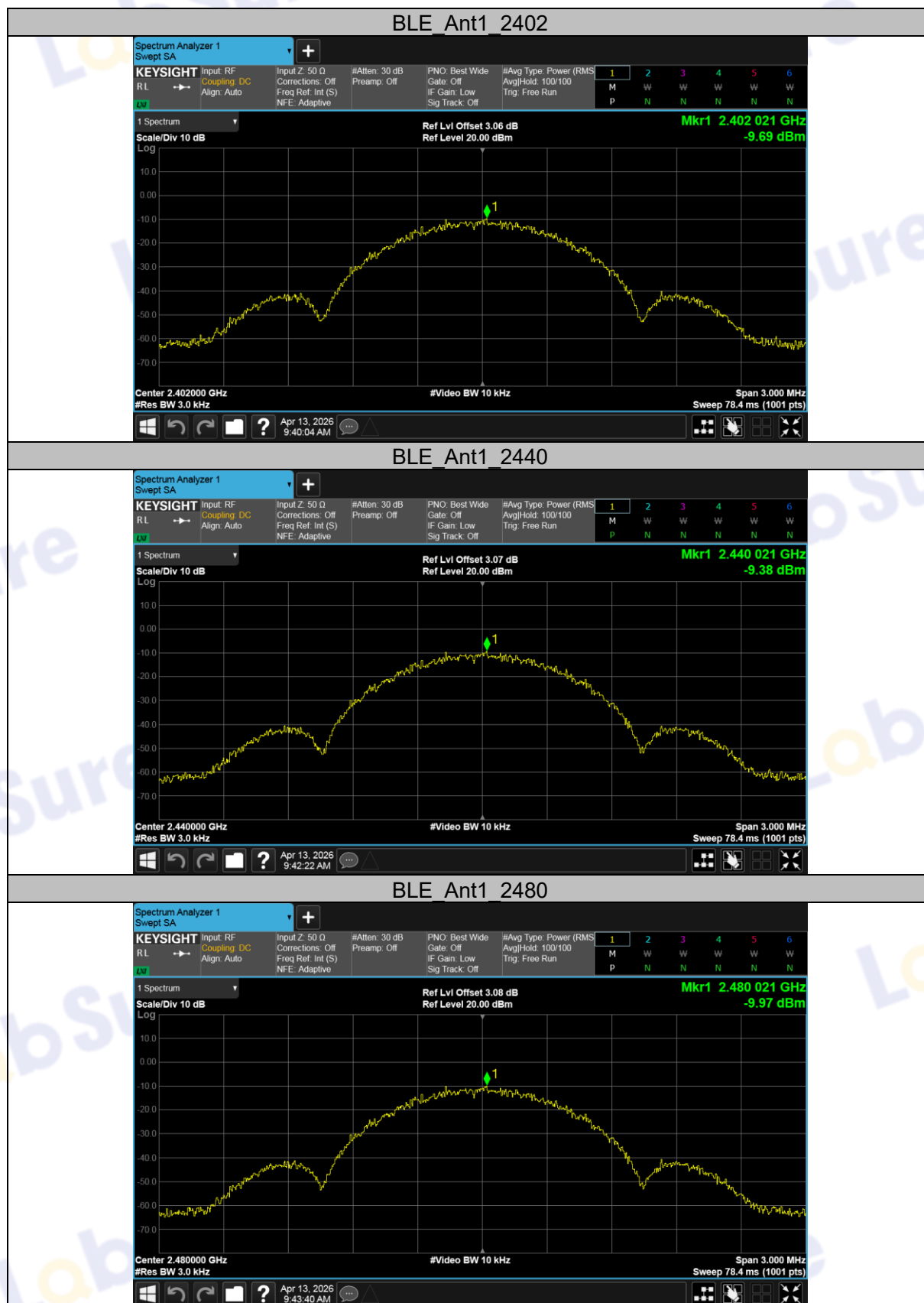
(3) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.

(4) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.5. Test result

EUT Set Mode	Antenna	Channel	Result (dBm/3 kHz)
BLE 1M	ANT1	CH0	-9.69
	ANT1	CH19	-9.38
	ANT1	CH39	-9.97
PSD Limit: <8 dBm/3 kHz			Verdict: Pass

6.6. Test graphs

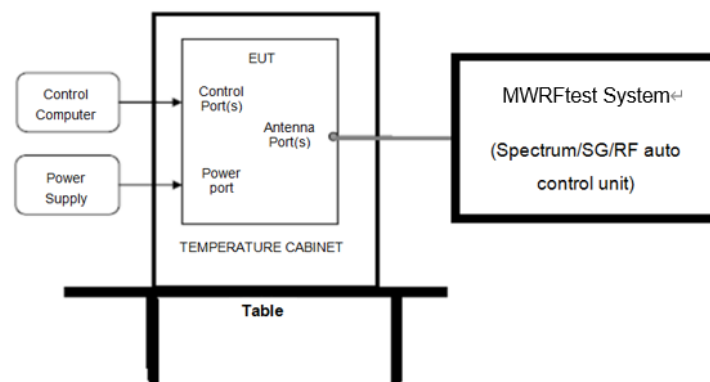


7. Band Edge Compliance (Conducted Method)

7.1. General Information

Test date	2026-04-13	Test engineer	Jimmy Qu	
Climate condition	Ambient temperature	21.2℃	Relative humidity	56.7%
	Atmospheric pressure	101.6kPa		
Test place	EMC Room 1#			

7.2. Block diagram of test setup



7.3. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

7.4. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) Establish a reference level by using the following procedure:

Center frequency	DTS Channel center frequency
RBW:	100 kHz
VBW:	300 kHz
Span	1.5 times the DTS bandwidth
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

- (3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak

power level to establish the reference level.

(4) Set the spectrum analyzer as follows:

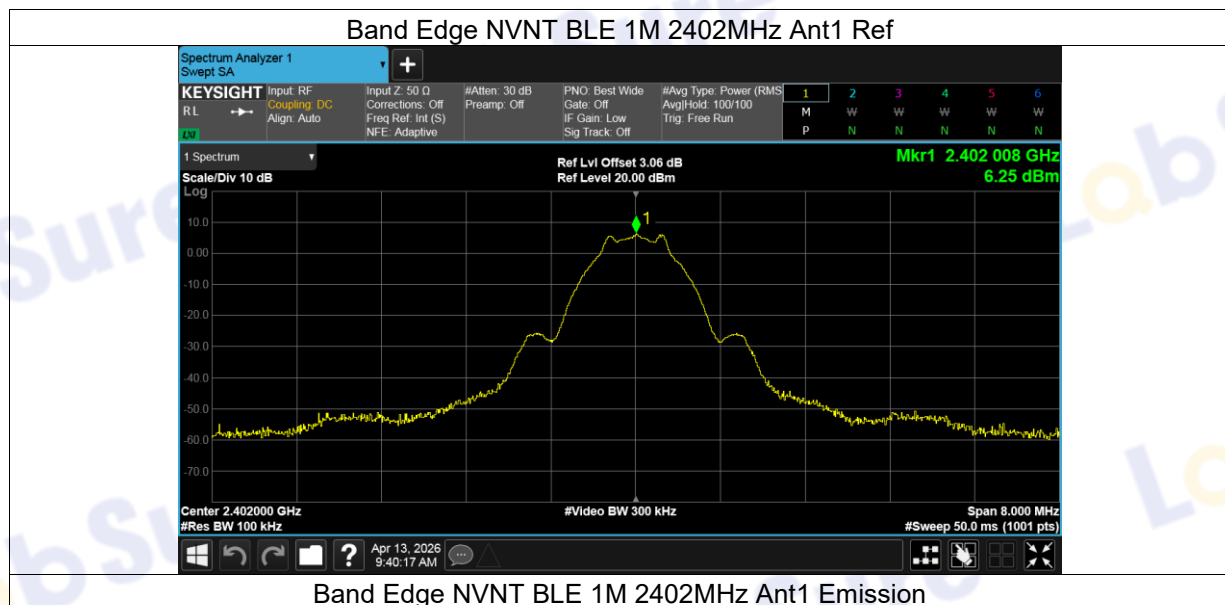
RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Number of measurement points	$\geq \text{span/RBW}$
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

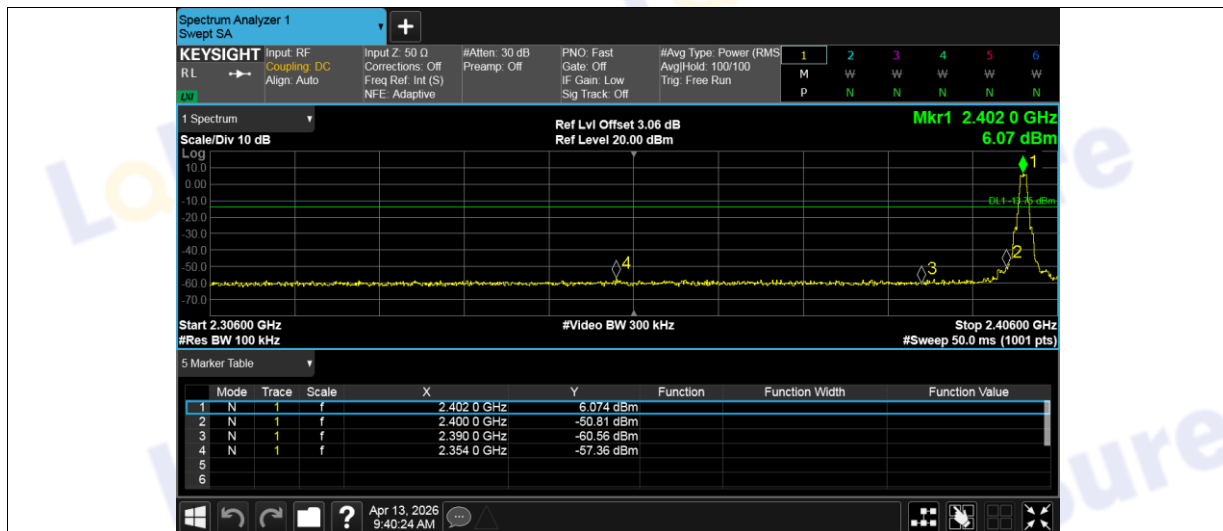
(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band.

7.5. Test result

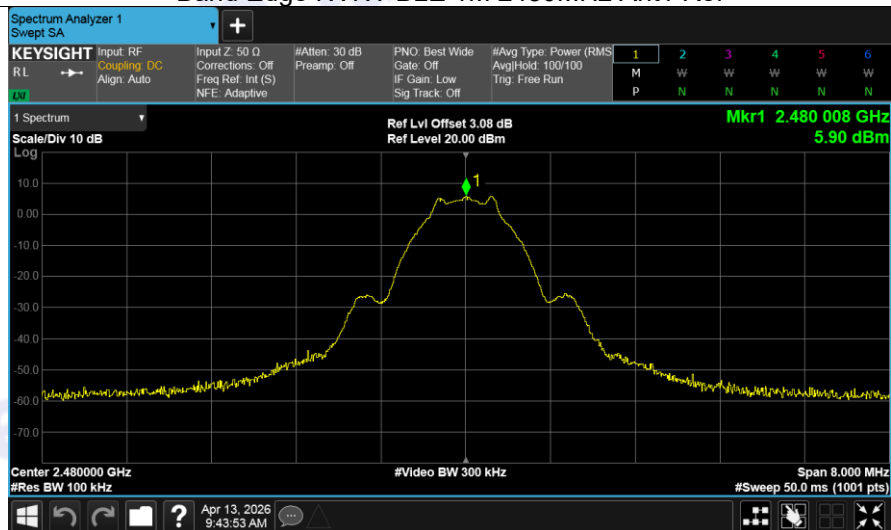
EUT Set Mode	CH or Frequency	Measured Range	Verdict
BLE 1M	CH0	2.300 GHz - 2.405 GHz	Pass
	CH39	2.470 GHz - 2.550 GHz	Pass

7.6. Test graphs

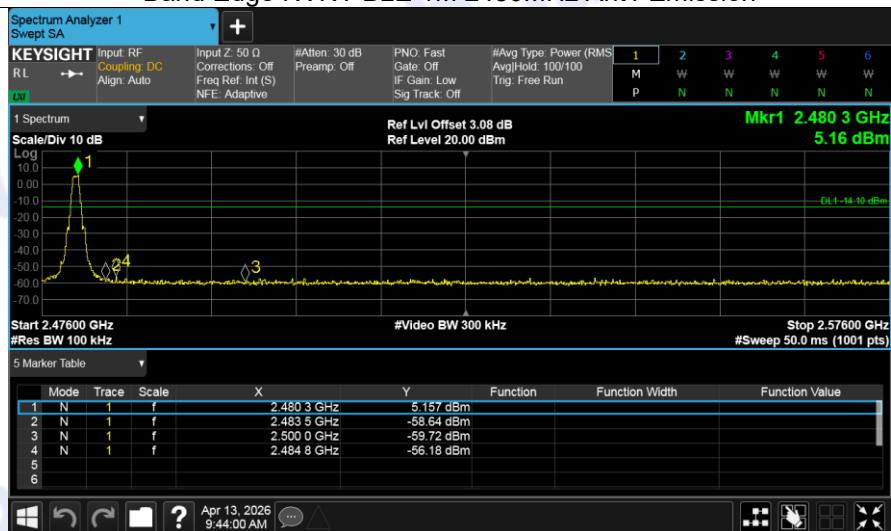




Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission

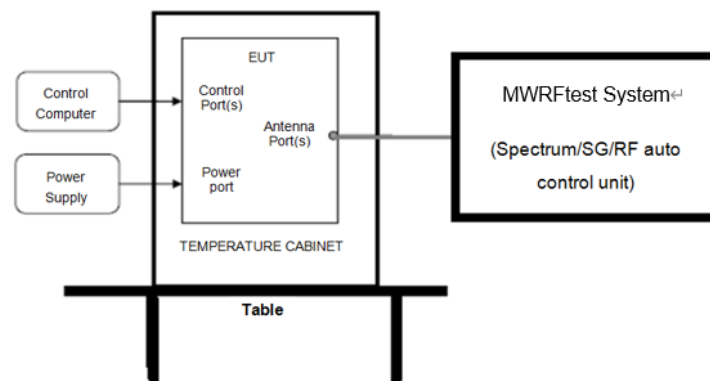


8. RF Conducted Spurious Emissions

8.1. General Information

Test date	2026-04-13	Test engineer	Jimmy Qu	
Climate condition	Ambient temperature	21.2℃	Relative humidity	56.7%
	Atmospheric pressure	101.6kPa		
Test place	EMC Room 1#			

8.2. Block diagram of test setup



8.3. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

8.4. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) Establish a reference level by using the following procedure:

Center frequency	Test frequency
RBW:	100 kHz
VBW:	300 kHz
Span	Wide enough to capture the peak level of the in-band emission
Detector Mode:	Peak
Sweep time:	auto

Trace mode

Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

(4) Set the spectrum analyzer as follows:

RBW: 100 kHz

VBW: 300 kHz

Span Encompass frequency range to be measured

Number of measurement

points $\geq \text{span}/\text{RBW}$

Detector Mode: Peak

Sweep time: auto

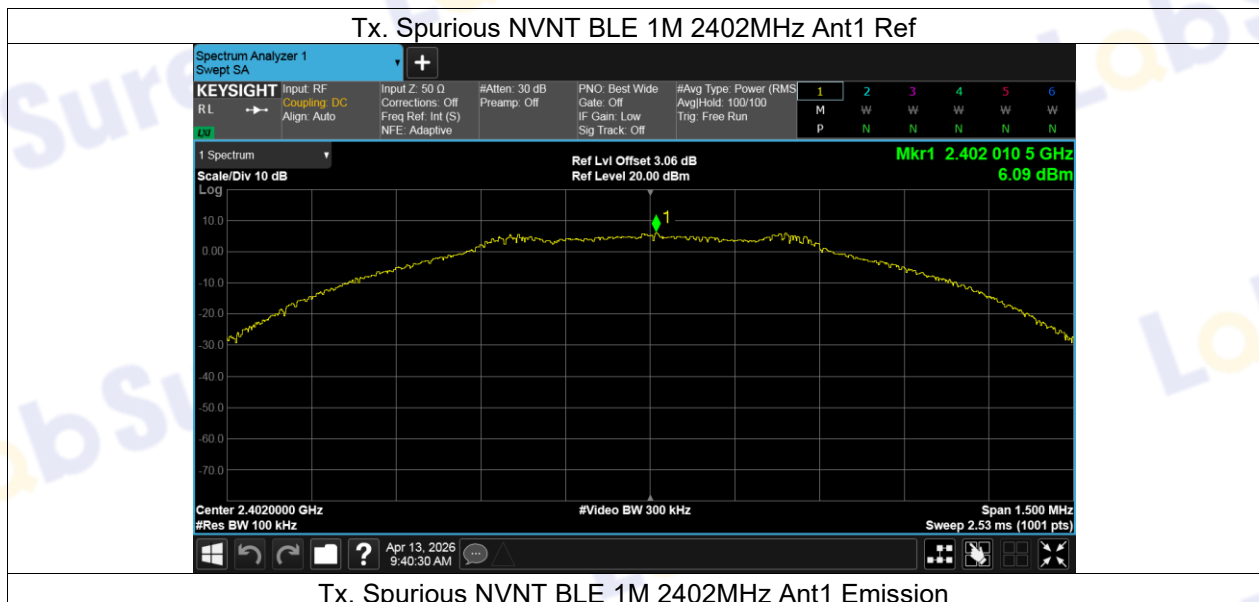
Trace mode Max hold

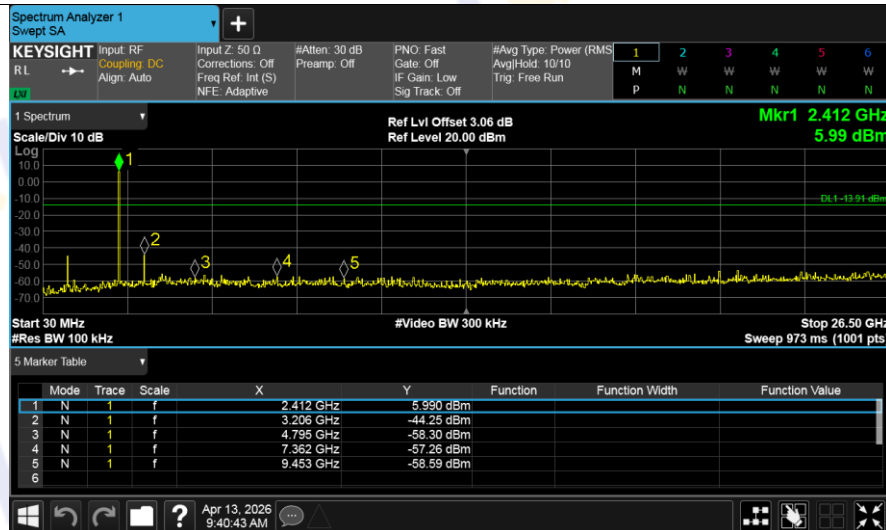
(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band.

8.5. Test result

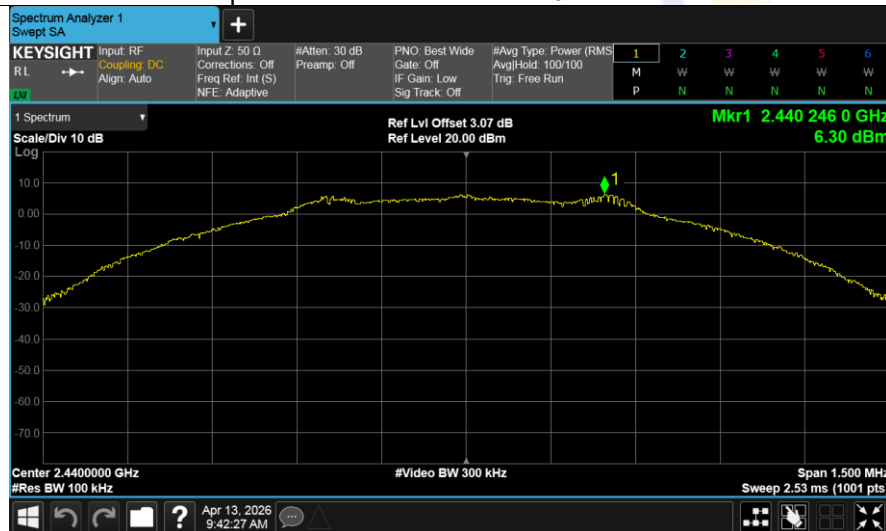
Mode	Freq. (MHz)	Verdict
BLE 1M	2402	Pass
	2440	Pass
	2480	Pass

8.6. Test graphs

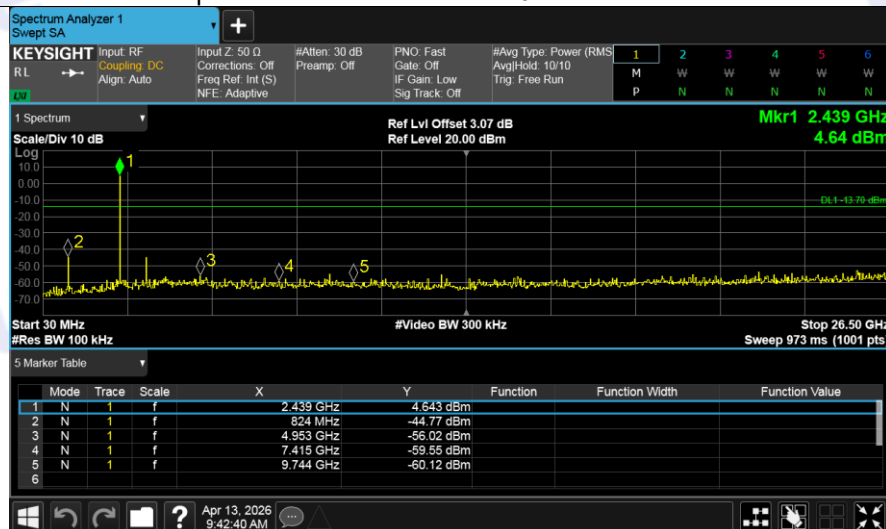




Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



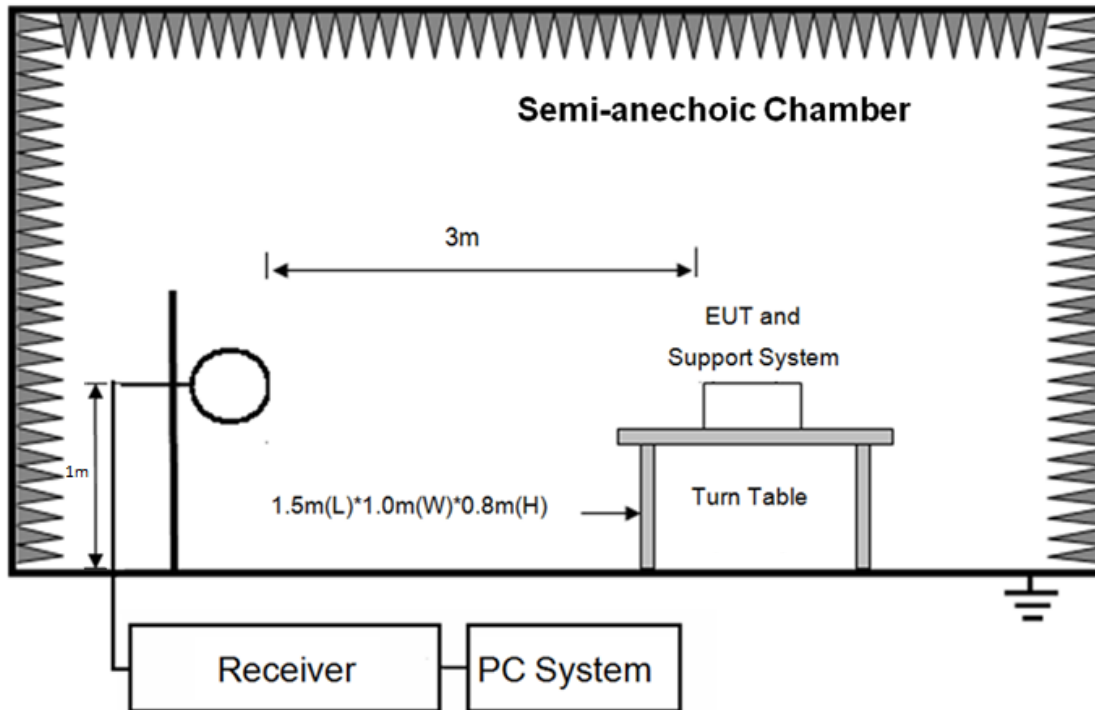
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



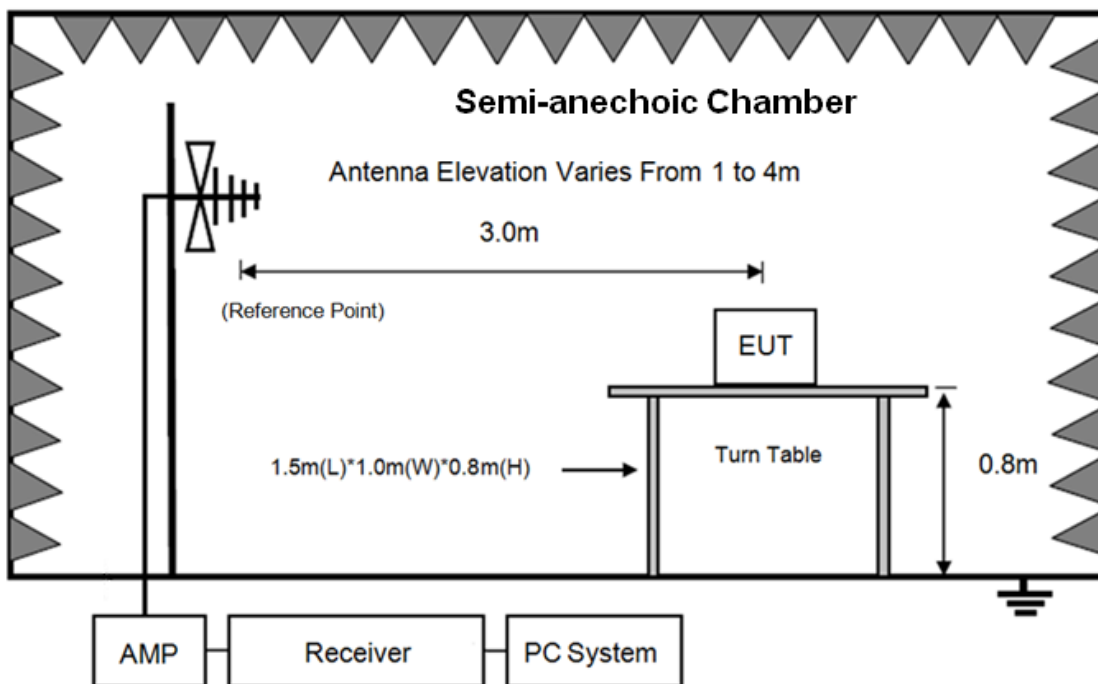
9. Radiated Spurious Emission

9.1. Block diagram of test setup

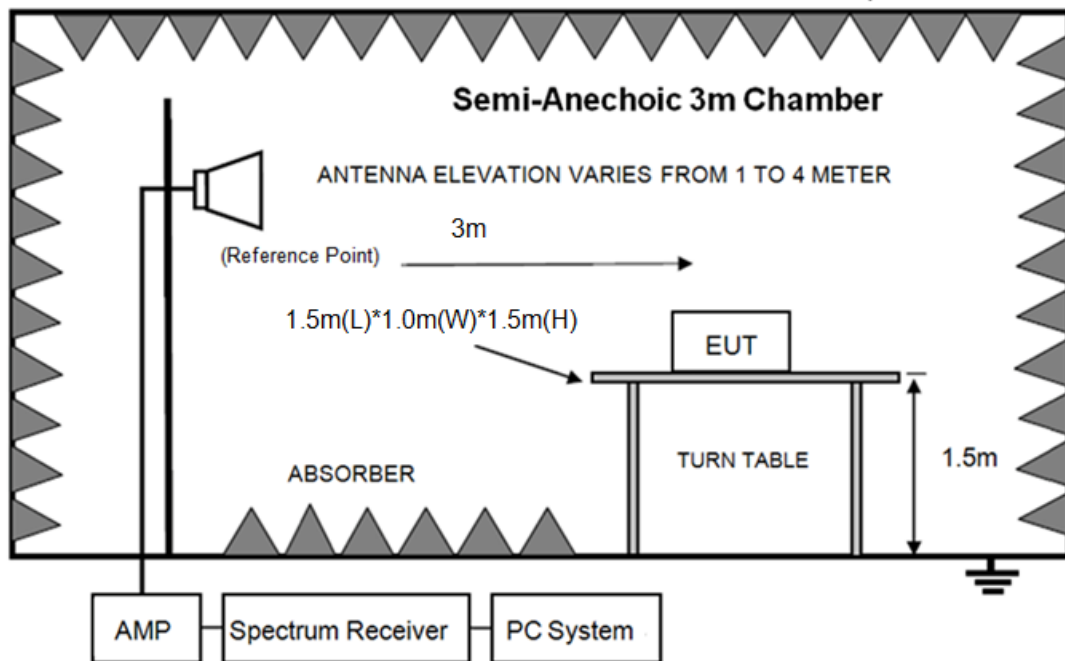
In 3 m Anechoic Chamber, test setup diagram for 9 kHz - 30 MHz:



In 3 m Anechoic Chamber, test setup diagram for 30 MHz - 1 GHz:



In 3 m Anechoic Chamber, test setup diagram for frequency above 1 GHz:



Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

9.2. Limit

8.2.1 FCC 15.205 Restricted frequency band

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
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&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			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6

8.2.2 FCC 15.209 Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 ~ 0.490	300	$2400/F(\text{kHz})$	$67.6-20\log(F)$
0.490 ~ 1.705	30	$24000/F(\text{kHz})$	$87.6-20\log(F)$
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz and above 1000 MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30 MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3\text{m}}(\text{dB}\mu\text{V/m}) = \text{Limit}_{30\text{m}}(\text{dB}\mu\text{V/m}) + 40\log(30\text{m}/3\text{m})$$

8.2.3 Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20 dB below the fundamental emissions or comply with 15.209 limits.

9.3. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1 G and 150 cm above the ground plane inside a semi-anechoic chamber for above 1 G.
- (2) Test antenna was located 3 m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test antenna distance
9 kHz - 30 MHz	Active Loop antenna	3 m
30 MHz - 1 GHz	Trilog Broadband Antenna	3 m
1 GHz - 18 GHz	Double Ridged Horn Antenna (1 GHz - 18 GHz)	3 m
18 GHz - 40 GHz	Horn Antenna (18 GHz - 40 GHz)	3m

According ANSI C63.10:2013 clause 6.4.4.2 and 6.5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also

is positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. For measurement above 30 MHz, the Trilog Broadband Antenna or Horn Antenna was located 3 m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 25 GHz:

- (a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1 m above ground.)
- (b) Change work frequency or channel of device if practicable.
- (c) Change modulation type of device if practicable.
- (d) Change power supply range from 85% to 115% of the rated supply voltage
- (e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 25 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9 kHz to 30 MHz and 18 GHz to 25 GHz, so below final test was performed with frequency range from 30 MHz to 18 GHz.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission.

Measurements in both horizontal and vertical polarities were made and the data was recorded.

In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.

(5) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz, for emissions from 9 kHz - 90 kHz, 110 kHz - 490 kHz and above 1 GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.

(6) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW.

Frequency band	RBW
9 kHz - 150 kHz	200 Hz
150 kHz - 30 MHz	9 kHz
30 MHz - 1 GHz	120 kHz

(7) For emissions above 1 GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3 MHz for Peak measure; According ANSI C63.10:2013 clause 4.1.4.2.2 procedure for average measure.

(8) X axis, Y axis, Z axis are tested, and worse setup X axis is reported.

9.4. Test result

Pass. (See below detailed test result)

All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limit.

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz and 18 GHz to 25 GHz, so the final test was performed with frequency range from 30 MHz to 18 GHz and recorded in below.

Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in left side GFSK, Tx 2402 MHz mode.

Note3: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

Result Table:

1) For 1GHz~3GHz

Test date	2026-04-19	Test engineer	Caleb Fu	
Climate condition	Ambient temperature	18.9°C	Relative humidity	68.2%
	Atmospheric pressure	101.3kPa		
Test place	3m chamber			

Test Mode	Channel	Test Result (dBμV/m)	Verdict
BLE 1M	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

2) For 3GHz~18GHz

Test date	2026-04-28	Test engineer	Caleb Fu	
Climate condition	Ambient temperature	20.0°C	Relative humidity	61.8%
	Atmospheric pressure	101.7kPa		
Test place	3m chamber			

Test Mode	Channel	Test Result (dBμV/m)	Verdict
BLE 1M	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

3) For 18GHz~26.5GHz

Test date	2026-05-20	Test engineer	Caleb Fu	
Climate condition	Ambient temperature	22.2°C	Relative humidity	63.2%
	Atmospheric pressure	101.2kPa		
Test place	3m chamber			

Test Mode	Channel	Test Result (dBμV/m)	Verdict
BLE 1M	MCH	<Limit	PASS

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

4) For 30MHz~1GHz

Test date	2026-04-19	Test engineer	Caleb Fu	
Climate condition	Ambient temperature	18.9°C	Relative humidity	68.2%
	Atmospheric pressure	101.3kPa		
Test place	3m chamber			

Test Mode	Channel	Test Result (dBμV/m)	Verdict
BLE 1M	MCH	<Limit	PASS

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

5) For 9KHz~30MHz

Test date	2026-04-19	Test engineer	Caleb Fu	
Climate condition	Ambient temperature	18.9°C	Relative humidity	68.2%
	Atmospheric pressure	101.3kPa		
Test place	3m chamber			

Test Mode	Channel	Test Result (dBμV/m)	Verdict
BLE 1M	MCH	<Limit	PASS

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

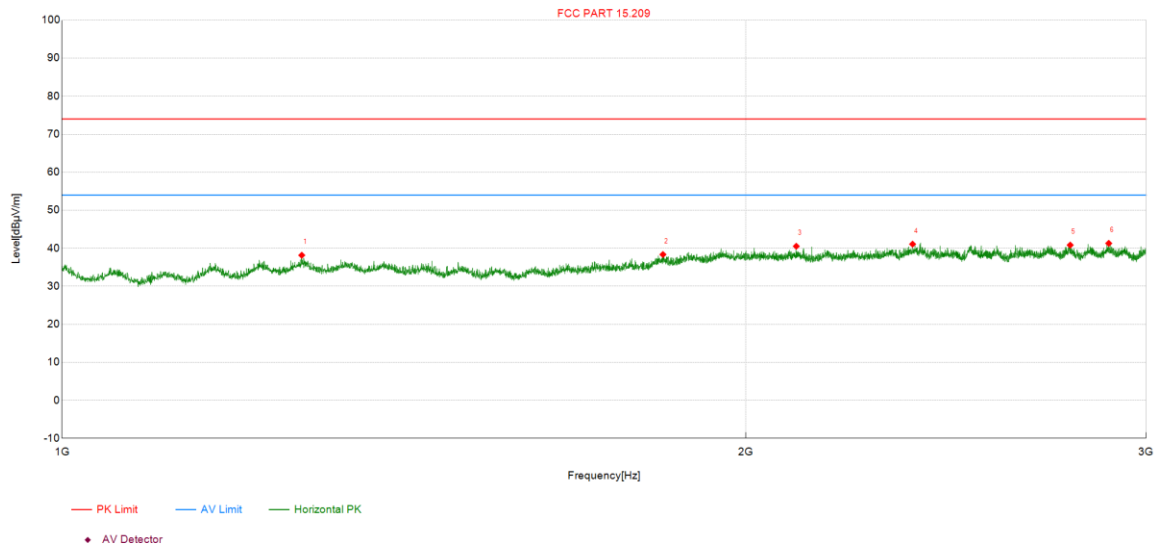
Note1: All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limit.

Note2: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

HARMONICS AND SPURIOUS EMISSIONS

Part I: 1GHz~3GHz:

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Horizontal	PASS



Suspected Data List

No.	Frequency (MHz)	Reading Level (dBμV)	Result (dBμV/m)	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	1275.00	57.14	38.17	-18.97	74.00	35.83	Peak
2	1838.50	55.63	38.36	-17.27	74.00	35.64	Peak
3	2104.50	55.89	40.53	-15.36	74.00	33.47	Peak
4	2367.75	55.37	41.09	-14.28	74.00	32.91	Peak
5	2777.75	54.73	40.84	-13.89	74.00	33.16	Peak
6	2888.50	54.56	41.30	-13.26	74.00	32.70	Peak

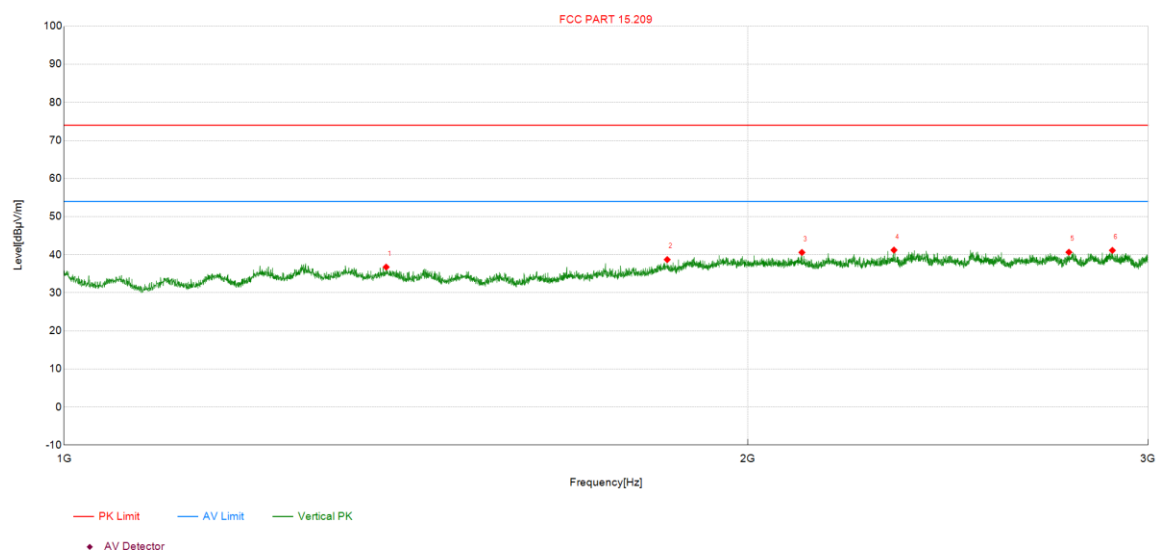
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Vertical	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	1386.00	56.13	36.76	-19.37	74.00	37.24	Peak
2	1842.75	55.89	38.72	-17.17	74.00	35.28	Peak
3	2112.25	55.95	40.60	-15.35	74.00	33.40	Peak
4	2318.75	55.85	41.22	-14.63	74.00	32.78	Peak
5	2768.50	54.51	40.66	-13.85	74.00	33.34	Peak
6	2893.25	54.36	41.14	-13.22	74.00	32.86	Peak

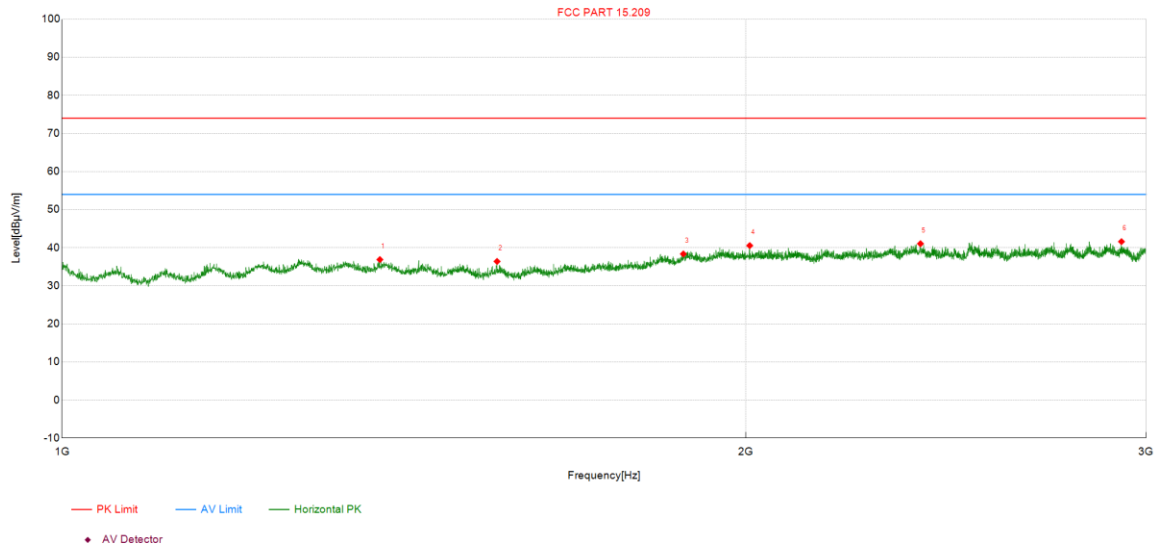
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	MCH	Horizontal	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	1380.00	56.23	36.89	-19.34	74.00	37.11	Peak
2	1554.00	56.81	36.40	-20.41	74.00	37.60	Peak
3	1877.00	54.94	38.37	-16.57	74.00	35.63	Peak
4	2007.50	56.02	40.56	-15.46	74.00	33.44	Peak
5	2386.75	55.13	41.05	-14.08	74.00	32.95	Peak
6	2926.00	55.00	41.60	-13.40	74.00	32.40	Peak

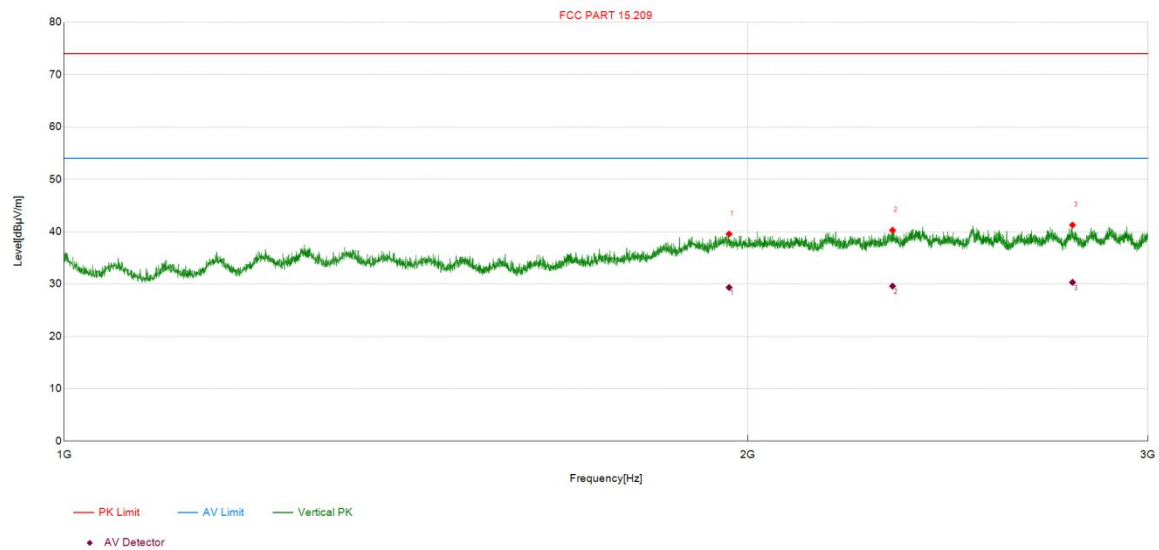
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	MCH	Vertical	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	1380.00	55.70	36.36	-19.34	74.00	37.64	Peak
2	1564.50	56.12	35.68	-20.44	74.00	38.32	Peak
3	1768.75	55.46	36.89	-18.57	74.00	37.11	Peak
4	1962.00	55.28	39.55	-15.73	74.00	34.45	Peak
5	2315.50	54.91	40.27	-14.64	74.00	33.73	Peak
6	2778.75	55.15	41.27	-13.88	74.00	32.73	Peak

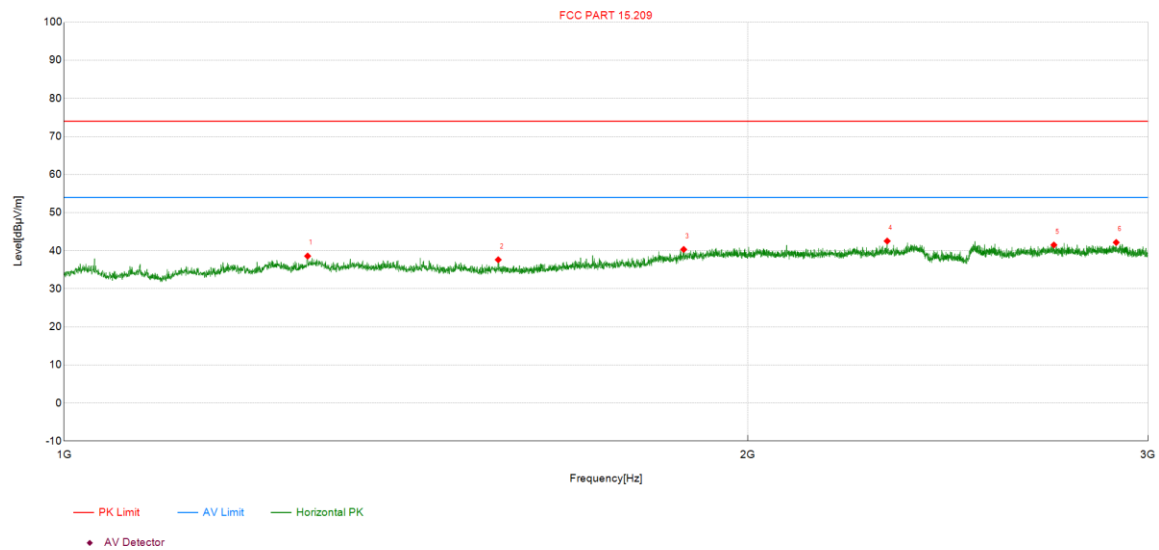
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Horizontal	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	1280.00	57.54	38.60	-18.94	74.00	35.40	Peak
2	1552.75	58.05	37.63	-20.42	74.00	36.37	Peak
3	1873.75	56.96	40.34	-16.62	74.00	33.66	Peak
4	2303.00	57.25	42.54	-14.71	74.00	31.46	Peak
5	2726.75	55.32	41.51	-13.81	74.00	32.49	Peak
6	2904.50	55.37	42.18	-13.19	74.00	31.82	Peak

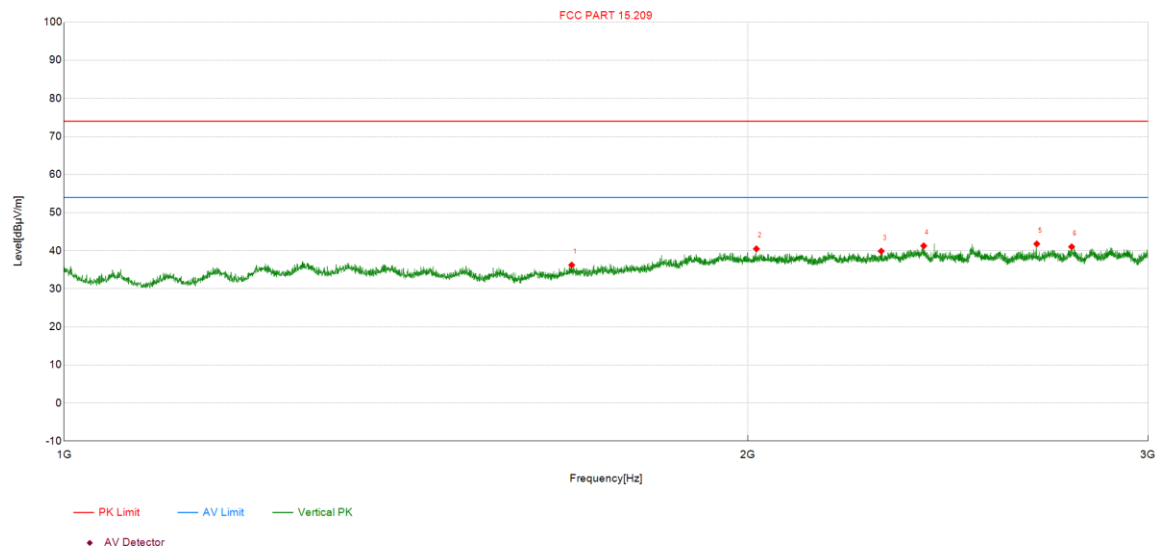
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Vertical	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	1672.75	55.72	36.24	-19.48	74.00	37.76	Peak
2	2017.00	55.97	40.50	-15.47	74.00	33.50	Peak
3	2289.00	54.67	39.89	-14.78	74.00	34.11	Peak
4	2389.75	55.33	41.29	-14.04	74.00	32.71	Peak
5	2679.75	55.94	41.80	-14.14	74.00	32.20	Peak
6	2776.25	54.91	41.04	-13.87	74.00	32.96	Peak

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

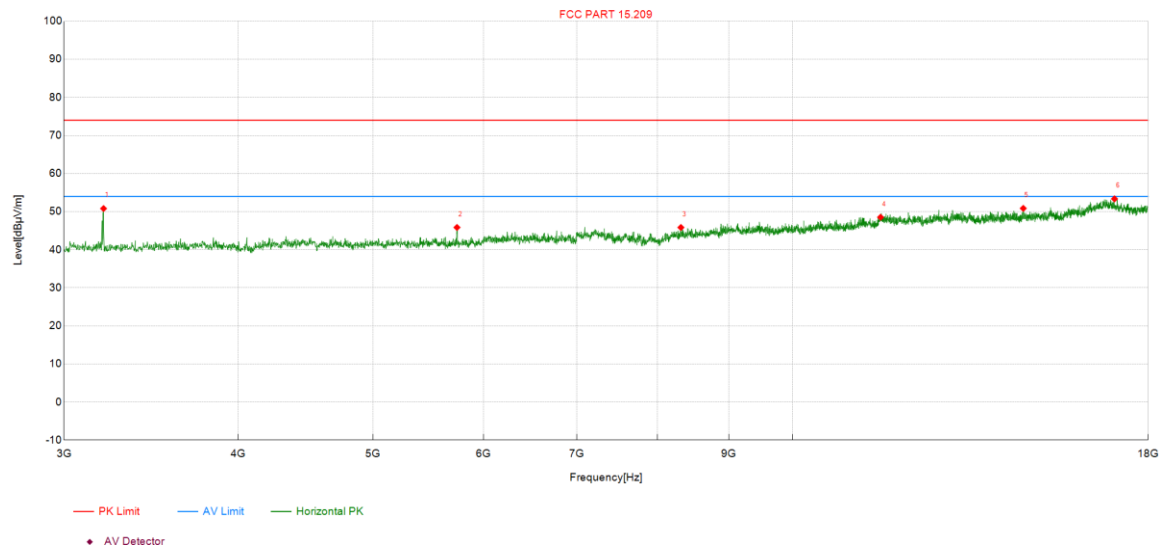
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Peak: Peak detector.

Part II: 3GHz~18GHz:

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Horizontal	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	3202.50	64.05	50.81	-13.24	74.00	23.19	Peak
2	5743.13	54.54	45.85	-8.69	74.00	28.15	Peak
3	8315.63	51.79	45.84	-5.95	74.00	28.16	Peak
4	11566.88	48.74	48.53	-0.21	74.00	25.47	Peak
5	14643.75	47.96	50.86	2.90	74.00	23.14	Peak
6	17026.88	45.85	53.36	7.51	74.00	20.64	Peak

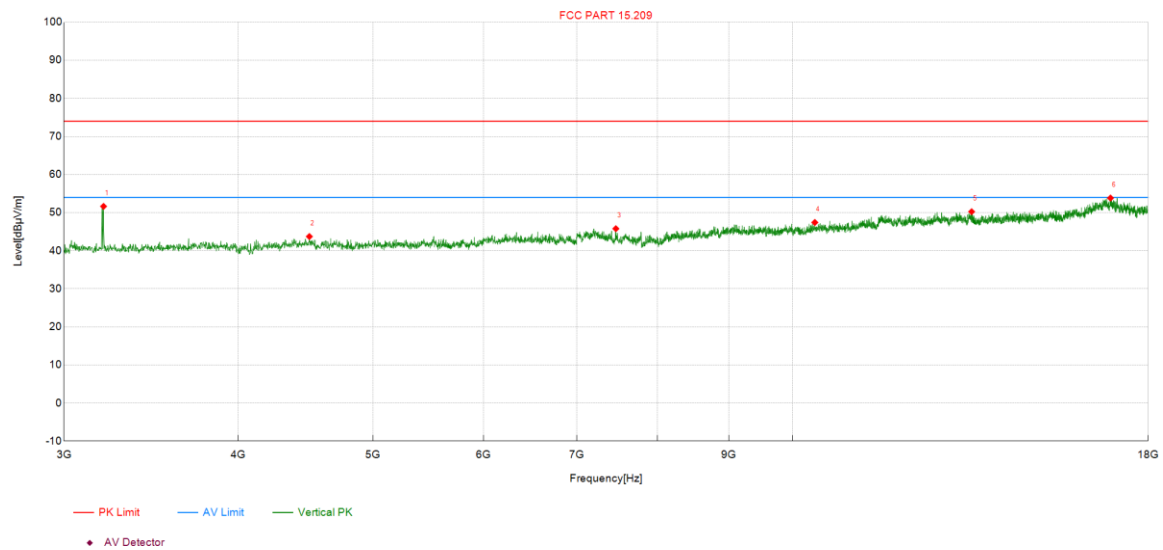
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Vertical	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	3202.50	64.89	51.65	-13.24	74.00	22.35	Peak
2	4500.00	53.77	43.73	-10.04	74.00	30.27	Peak
3	7468.13	52.08	45.79	-6.29	74.00	28.21	Peak
4	10376.25	49.79	47.42	-2.37	74.00	26.58	Peak
5	13445.63	48.83	50.25	1.42	74.00	23.75	Peak
6	16914.38	46.32	53.83	7.51	74.00	20.17	Peak

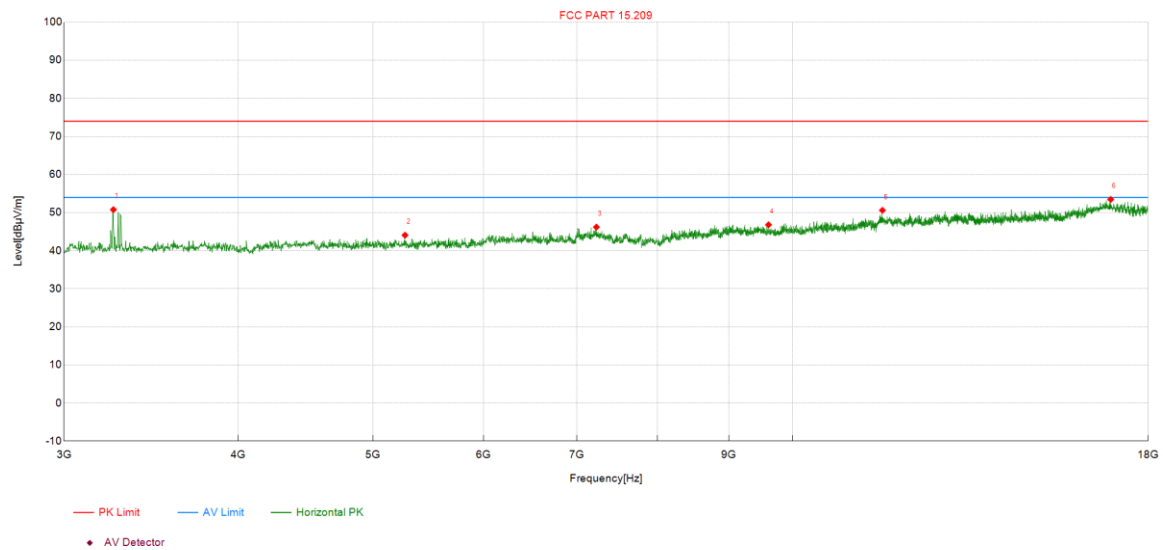
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	MCH	Horizontal	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	3255.00	64.11	50.79	-13.32	74.00	23.21	Peak
2	5270.63	53.49	44.08	-9.41	74.00	29.92	Peak
3	7231.88	52.24	46.20	-6.04	74.00	27.80	Peak
4	9611.25	50.51	46.80	-3.71	74.00	27.20	Peak
5	11602.50	50.79	50.61	-0.18	74.00	23.39	Peak
6	16920.00	45.96	53.46	7.50	74.00	20.04	Peak

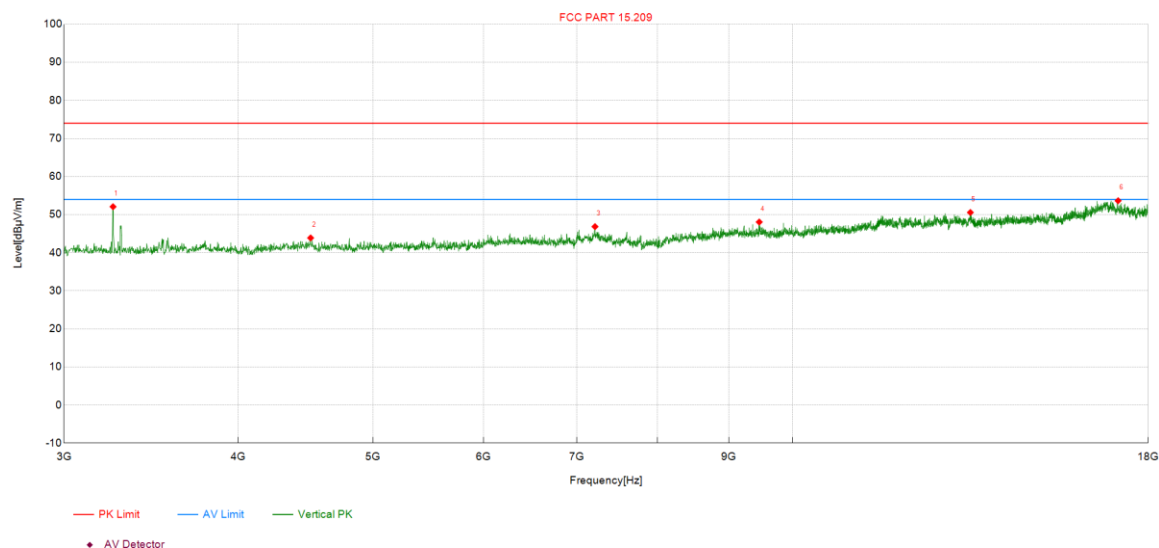
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	MCH	Vertical	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	3253.13	65.40	52.08	-13.32	74.00	21.92	Peak
2	4509.38	54.04	43.89	-10.15	74.00	30.11	Peak
3	7215.00	52.97	46.85	-6.12	74.00	27.15	Peak
4	9465.00	51.92	48.06	-3.86	74.00	25.94	Peak
5	13417.50	49.09	50.57	1.48	74.00	23.43	Peak
6	17128.13	46.14	53.65	7.51	74.00	20.35	Peak

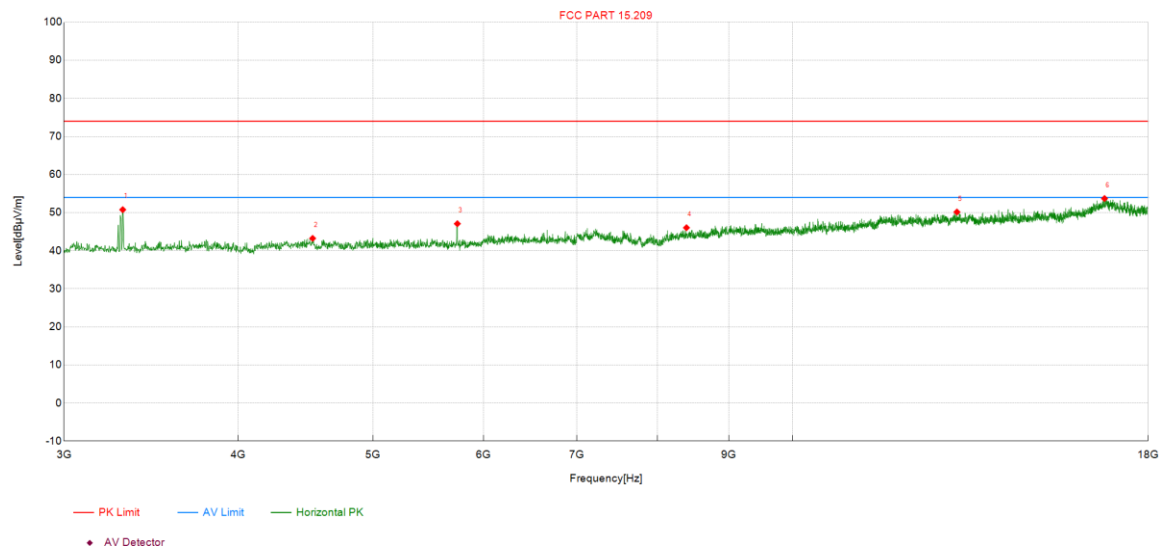
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Horizontal	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	3305.63	63.98	50.78	-13.20	74.00	23.22	Peak
2	4524.38	53.58	43.25	-10.33	74.00	30.75	Peak
3	5746.88	55.77	47.09	-8.68	74.00	26.91	Peak
4	8392.50	51.73	46.04	-5.69	74.00	27.96	Peak
5	13123.13	48.59	50.16	1.57	74.00	23.84	Peak
6	16747.50	46.27	53.71	7.44	74.00	20.29	Peak

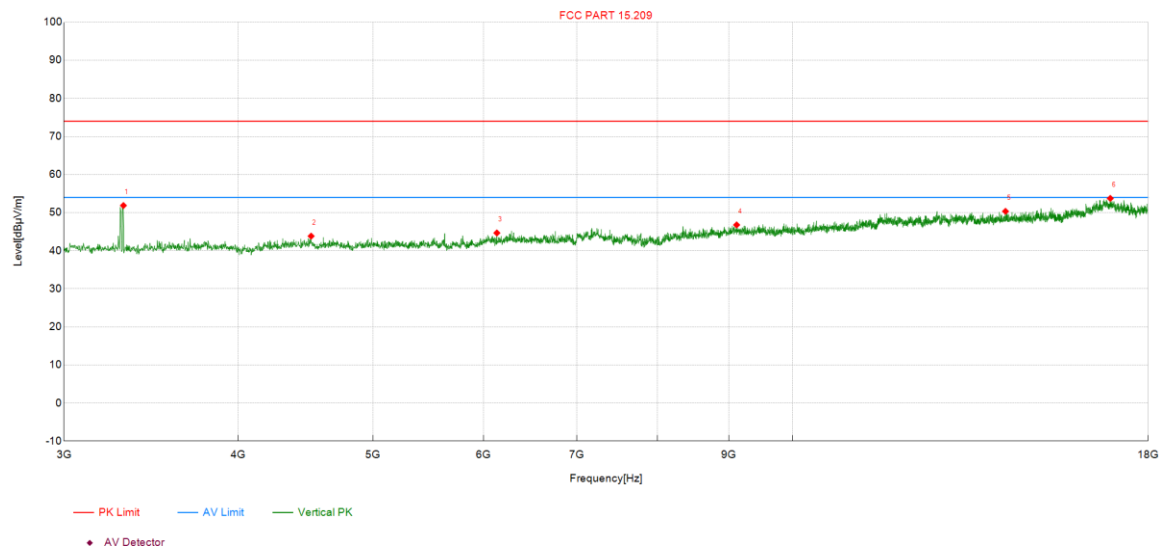
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Vertical	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	3309.38	65.05	51.87	-13.18	74.00	22.13	Peak
2	4513.13	54.02	43.83	-10.19	74.00	30.17	Peak
3	6135.00	52.46	44.67	-7.79	74.00	29.33	Peak
4	9118.13	51.02	46.78	-4.24	74.00	27.22	Peak
5	14220.00	48.06	50.34	2.28	74.00	23.66	Peak
6	16908.75	46.24	53.74	7.50	74.00	20.26	Peak

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

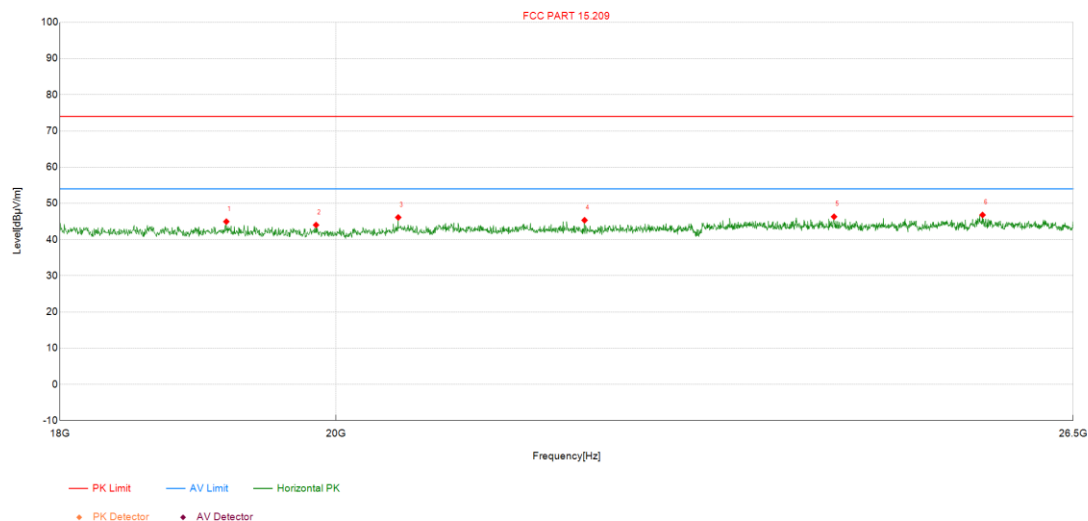
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Peak: Peak detector.

Part III: 18GHz~26.5GHz:

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Horizontal	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	19179.75	59.84	44.96	-14.88	74.00	29.04	Peak
2	19848.00	59.07	44.03	-15.04	74.00	29.97	Peak
3	20480.50	60.79	46.12	-14.67	74.00	27.88	Peak
4	21990.25	59.46	45.34	-14.12	74.00	28.66	Peak
5	24187.50	59.54	46.31	-13.23	74.00	27.69	Peak
6	25598.25	59.79	46.80	-12.99	74.00	27.20	Peak

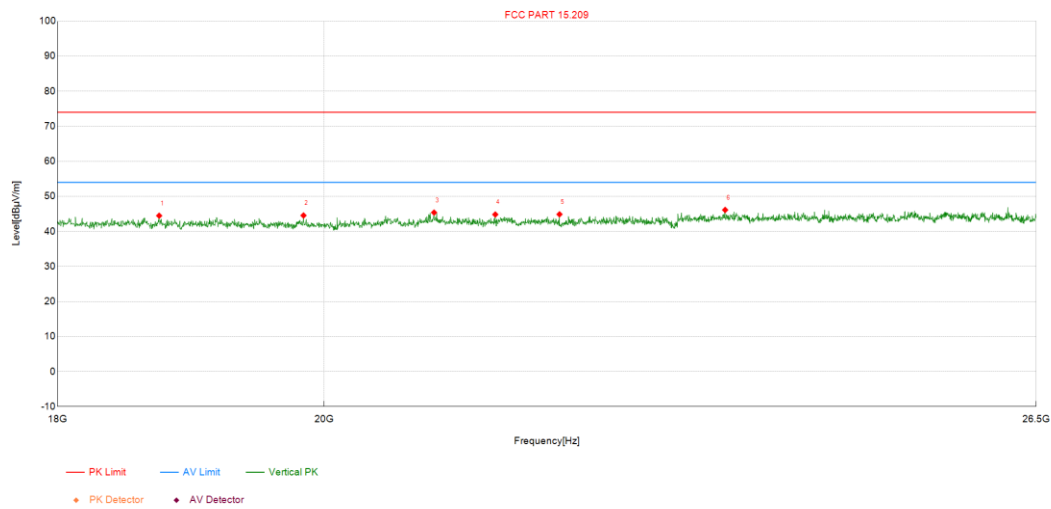
Note: 1. Measurement = Reading Level + Correct Factor.

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.

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Vertical	PASS



Suspected Data List							
No.	Frequency	Reading Level	Result	Correct Factor	Limit	Margin	Remark
	(MHz)	(dBμV)	(dBμV/m)	(dB/m)	(dBμV/m)	(dB)	
1	18737.00	59.27	44.48	-14.79	74.00	29.52	Peak
2	19837.00	59.59	44.55	-15.04	74.00	29.45	Peak
3	20887.50	59.87	45.38	-14.49	74.00	28.62	Peak
4	21399.00	59.37	44.83	-14.54	74.00	29.17	Peak
5	21949.00	59.06	44.88	-14.18	74.00	29.12	Peak
6	23434.00	59.41	46.13	-13.28	74.00	27.87	Peak

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

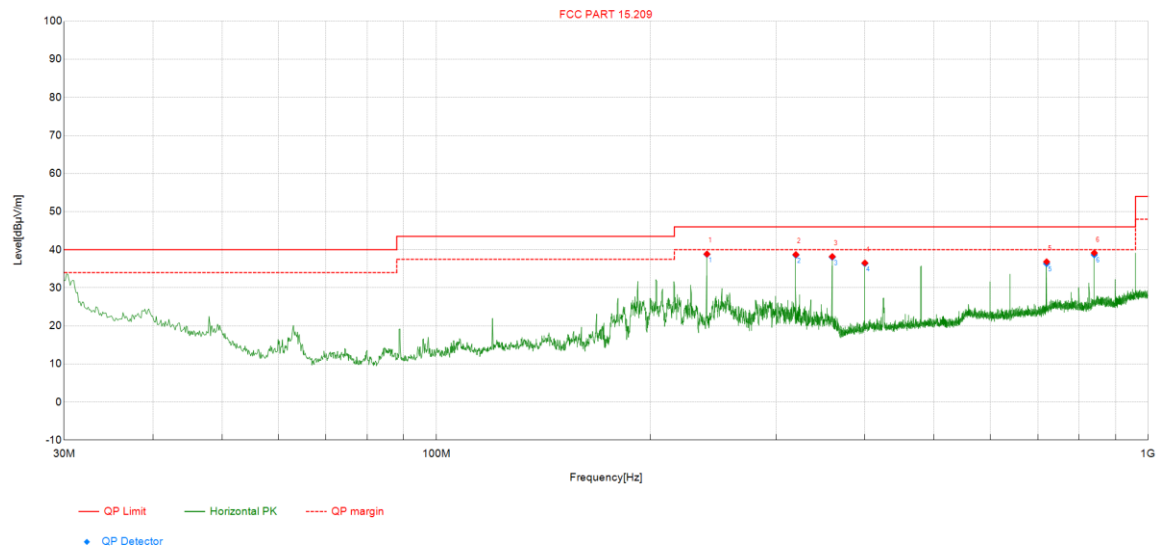
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Peak: Peak detector.

Part IV: 30MHz~1GHz:

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Horizontal	PASS

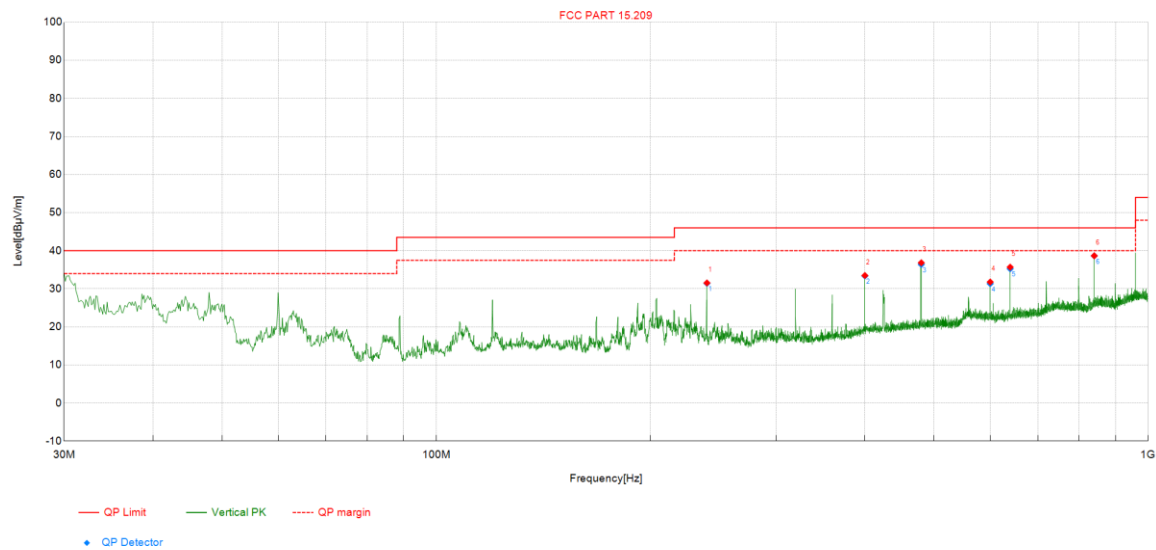


No.	Frequency (MHz)	Factor [dB/m]	QP Reading [dBμV]	QP Value [dBμV/m]	QP Limit [dBμV/m]	Margin [dB]	Remark
1	240.01	-22.05	60.83	38.78	46.00	7.22	QP
2	320.03	-19.89	58.45	38.56	46.00	7.44	QP
3	360.04	-18.80	56.84	38.04	46.00	7.96	QP
4	400.06	-17.14	53.5	36.36	46.00	9.64	QP
5	720.16	-10.87	47.22	36.35	46.00	9.65	QP
6	840.07	-8.55	47.22	38.67	46.00	7.33	QP

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

2. QP: Quasi-Peak detector.

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Vertical	PASS



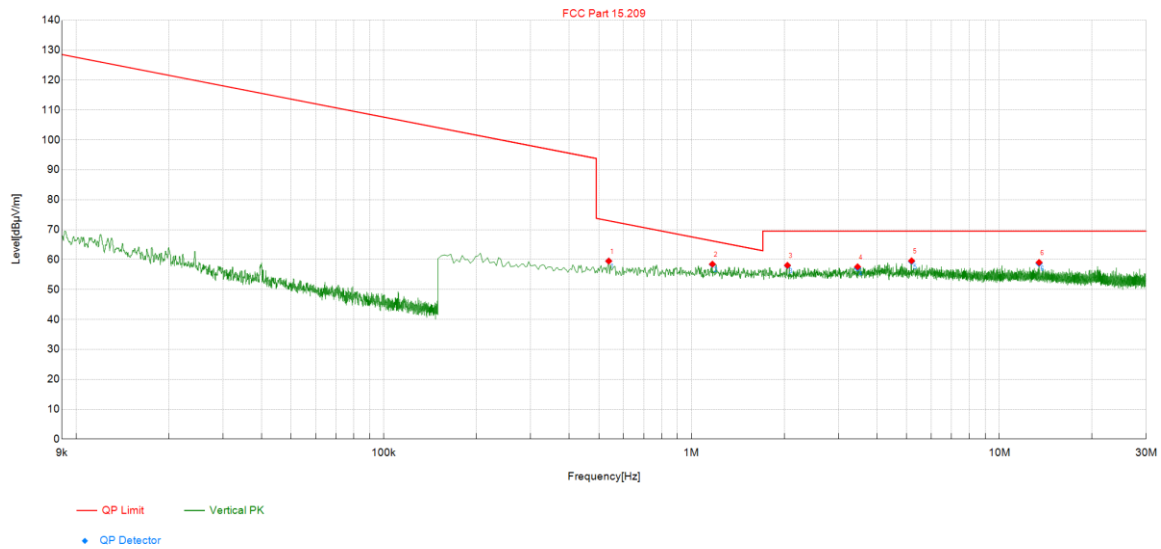
No.	Frequency (MHz)	Factor [dB/m]	QP Reading [dBμV]	QP Value [dBμV/m]	QP Limit [dBμV/m]	Margin [dB]	Remark
1	240.01	-22.05	53.48	31.43	46.00	14.57	QP
2	400.06	-17.14	50.52	33.38	46.00	12.62	QP
3	480.08	-15.56	51.96	36.40	46.00	9.60	QP
4	600.00	-12.92	44.27	31.35	46.00	14.65	QP
5	640.01	-12.17	47.42	35.25	46.00	10.75	QP
6	840.07	-8.55	47.2	38.65	46.00	7.35	QP

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

2. QP: Quasi-Peak detector.

Part V: Below 30MHz:

Test Mode	Channel	Polarization	Verdict
BLE	HCH	Vertical	PASS



No.	Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	0.54	39.12	20.38	59.50	72.99	13.49	QP
2	1.17	39.25	19.13	58.38	66.25	7.87	QP
3	2.05	39.27	18.71	57.98	69.54	11.56	QP
4	3.46	39.44	17.74	57.18	69.54	12.36	QP
5	5.19	39.43	19.94	59.37	69.54	10.17	QP
6	13.47	39.37	19.36	58.73	69.54	10.81	QP

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

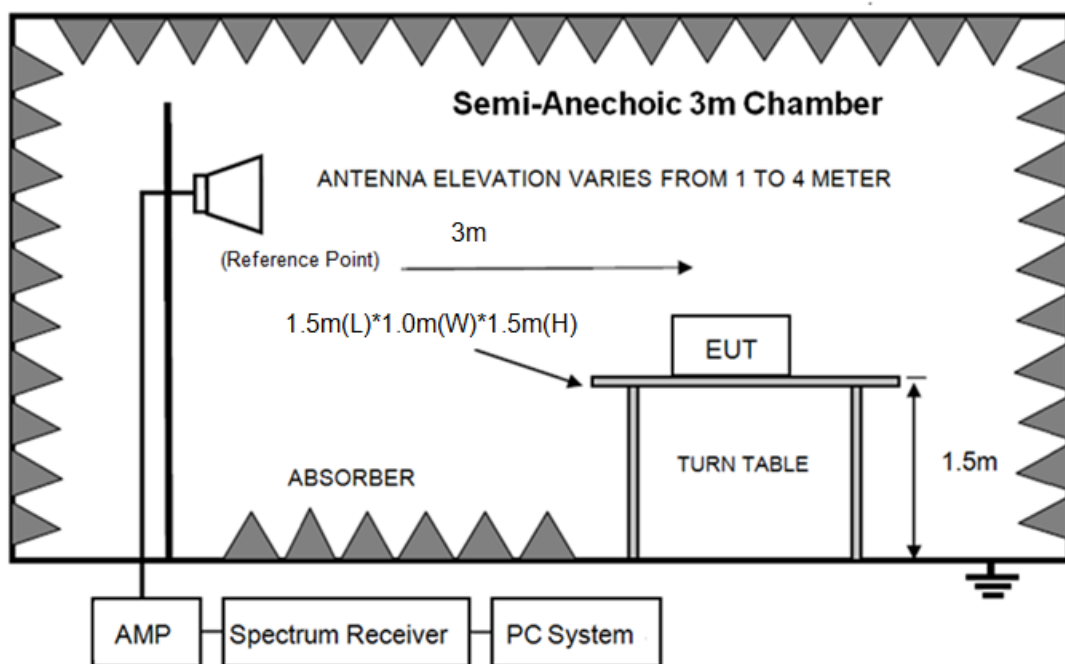
2. Only the worst-case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

10. Emissions in Restricted Frequency Bands

10.1. General Information

Test date	2026-04-19	Test engineer	Caleb Fu	
Climate condition	Ambient temperature	18.9℃	Relative humidity	68.2%
	Atmospheric pressure	101.3kPa		
Test place	3m chamber			

10.2. Block diagram of test setup



10.3. Limit

All restriction band should comply with 15.209, other emission should be at least 20 dB below the fundamental.

10.4. Test Procedure

Same with clause 8.3 except change investigated frequency range from 2310 MHz to 2410 MHz and 2475 MHz to 2500 MHz.

Remark: All restriction band have been tested, and only the worst case is shown in report.

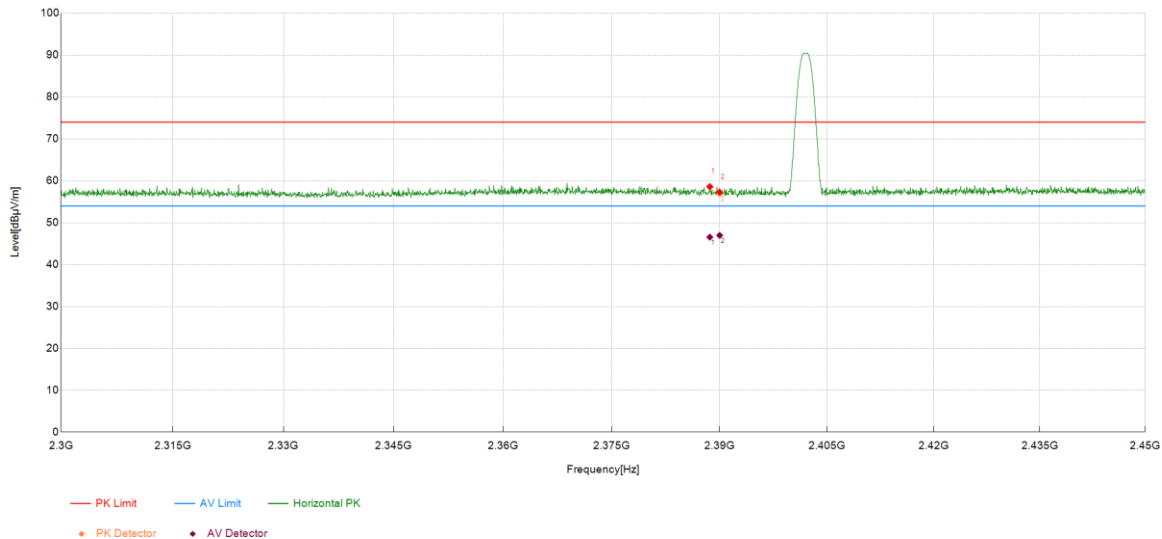
10.5. Test result

Pass. (See below detailed test result)

Note: Scan with all side, the worst case is left side recorded in this report.

Radiated Emission Test Result

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Horizontal	PASS



Suspected Data List

No.	Frequency (MHz)	Reading Level (dBμV)	Result level (dBμV/m)	Correct Factor (dB/m)	PK Limit (dBμV/m)	PK Margin (dB)	Remark	Polarization
1	2388.63	56.68	58.62	1.94	74.00	15.38	Peak	Horizontal
2	2390.00	55.34	57.30	1.96	74.00	16.70	Peak	Horizontal

Final Data List

No.	Frequency (MHz)	Factor (dB/m)	AV Reading (dBμV)	AV Value (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Remark	Polarization
1	2388.63	1.94	44.60	46.54	54.00	7.46	AV	Horizontal
2	2390.00	1.96	45.01	46.97	54.00	7.03	AV	Horizontal

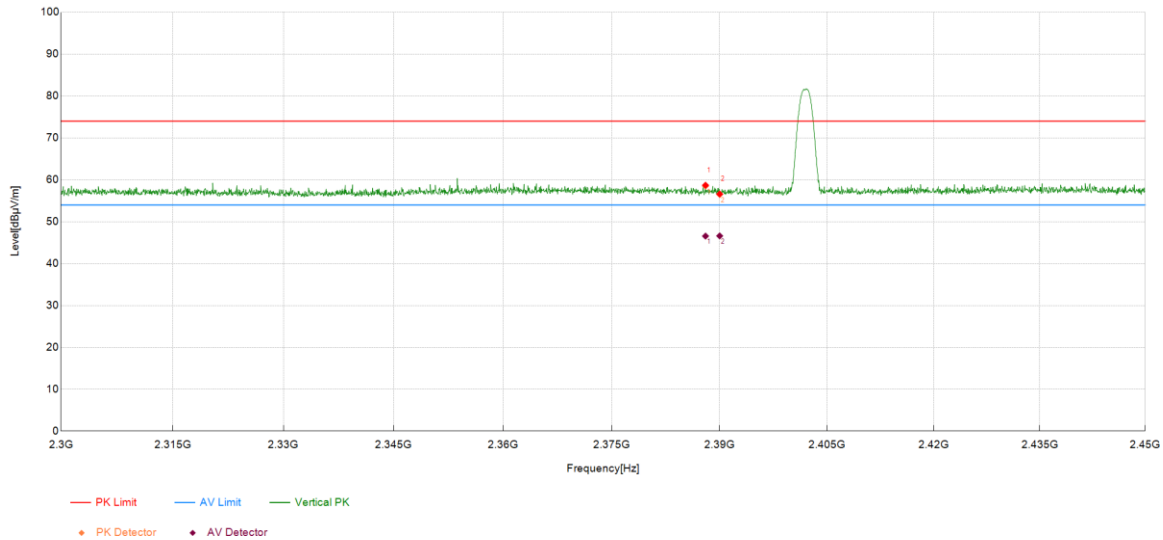
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

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.

Radiated Emission Test Result

Test Mode	Channel	Polarization	Verdict
BLE 1M	LCH	Vertical	PASS



Suspected Data List

No.	Frequency (MHz)	Reading Level (dBμV)	Result level (dBμV/m)	Correct Factor (dB/m)	PK Limit (dBμV/m)	PK Margin (dB)	Remark	Polarization
1	2388.03	56.76	58.70	1.94	74.00	15.30	Peak	Vertical
2	2390.00	54.64	56.60	1.96	74.00	17.40	Peak	Vertical

Final Data List

No.	Frequency (MHz)	Factor (dB/m)	AV Reading (dBμV)	AV Value (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Remark	Polarization
1	2388.03	1.94	44.62	46.56	54.00	7.44	AV	Vertical
2	2390.00	1.96	44.65	46.61	54.00	7.39	AV	Vertical

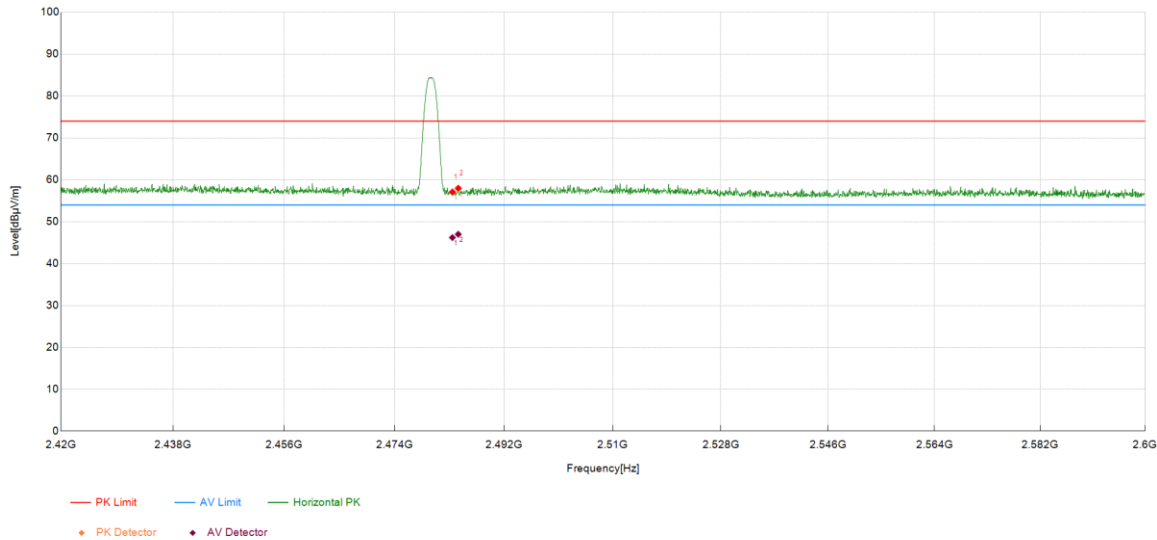
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

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.

Radiated Emission Test Result

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Horizontal	PASS



Suspected Data List

No.	Frequency (MHz)	Reading Level (dBμV)	Result level (dBμV/m)	Correct Factor (dB/m)	PK Limit (dBμV/m)	PK Margin (dB)	Remark	Polarization
1	2483.50	55.16	57.08	1.92	74.00	16.92	Peak	Horizontal
2	2484.46	56.06	57.99	1.93	74.00	16.01	Peak	Horizontal

Final Data List

No.	Frequency (MHz)	Factor (dB/m)	AV Reading (dBμV)	AV Value (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Remark	Polarization
1	2483.50	1.92	44.29	46.21	54.00	7.79	AV	Horizontal
2	2484.46	1.93	45.07	47.00	54.00	7.00	AV	Horizontal

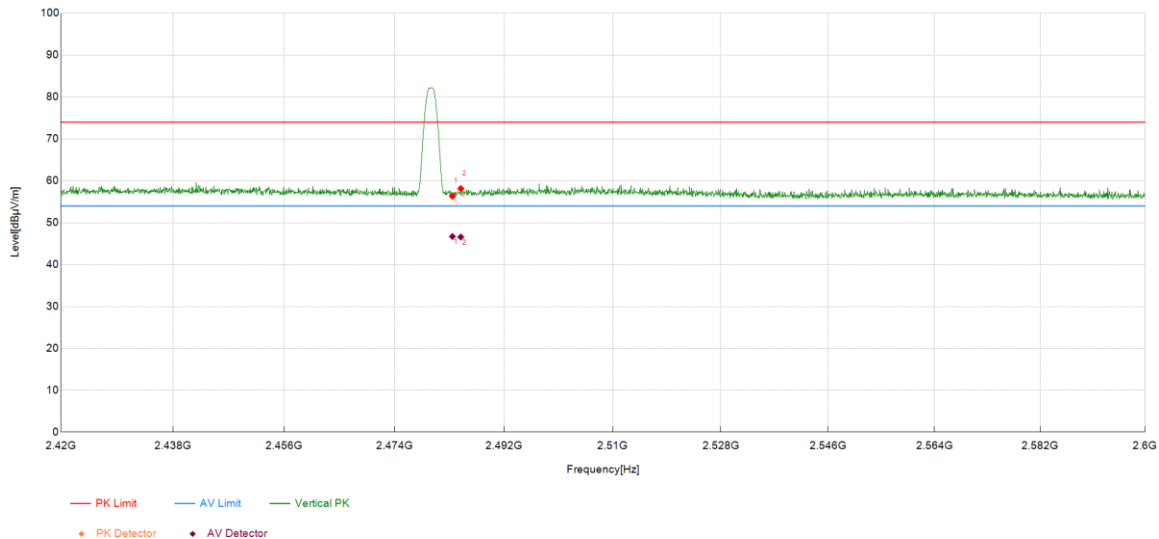
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

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.

Radiated Emission Test Result

Test Mode	Channel	Polarization	Verdict
BLE 1M	HCH	Vertical	PASS

**Suspected Data List**

No.	Frequency (MHz)	Reading Level (dBμV)	Result level (dBμV/m)	Correct Factor (dB/m)	PK Limit (dBμV/m)	PK Margin (dB)	Remark	Polarization
1	2483.50	54.48	56.40	1.92	74.00	17.60	Peak	Vertical
2	2484.88	56.21	58.14	1.93	74.00	15.86	Peak	Vertical

Final Data List

No.	Frequency (MHz)	Factor (dB/m)	AV Reading (dBμV)	AV Value (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Remark	Polarization
1	2483.50	1.92	44.78	46.70	54.00	7.30	AV	Vertical
2	2484.88	1.93	44.65	46.58	54.00	7.42	AV	Vertical

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

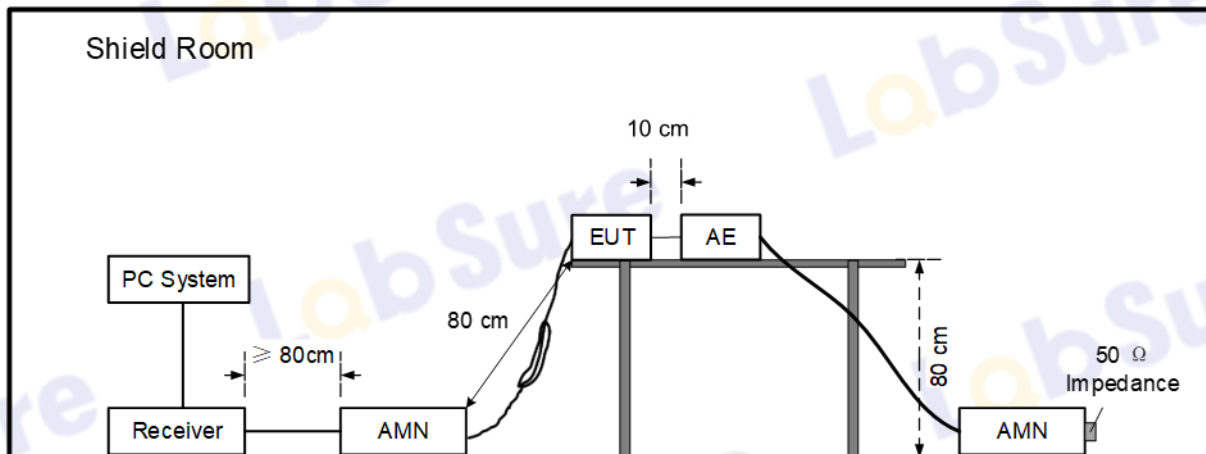
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

11. Power Line Conducted Emission

11.1. General Information

Test date	N/A	Test engineer	/	
Climate condition	Ambient temperature	/	Relative humidity	/
	Atmospheric pressure	/		
Test place	/			

11.2. Block diagram of test setup



11.3. Power line conducted emission limits

Frequency	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150 kHz ~ 500 kHz	66 ~ 56*	56 ~ 46*
500 kHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

11.4. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80 cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 3.0 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

11.5. Test result

Not applicable, the power is supplied by DC 3.7V Polymer Li-ion built-in battery in Vapor Pro Floater.

12. Antenna Requirements

12.1. Limit

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

12.2. Result

The antenna used for this product is FPC antenna and no antenna other than that furnished by the responsible party shall be used with the device, maximum antenna gain is 1.25 dBi.

13. Test Setup Photograph

See the Appendix Test Setup Photos

14. Photos of the EUT

See the Appendix External EUT Photos and Appendix Internal EUT Photos

END OF REPORT