



Shenzhen CTL Testing Technology Co., Ltd.
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TEST REPORT

FCC PART 15.247

Report Reference No. : CTL2501102025-WF02

Original Report No. : CTL2307032122-WF02

Compiled by: Happy Guo
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Approved by: Ivan Xie
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Product Name : True Wireless Earbuds with Charging Case

Model/Type reference : DXMA1902092

List Model(s)..... : Please look at page 2

Trade Mark..... : DEWALT

FCC ID..... : 2ADH6-190209RC

Applicant's name : E-filliate Incorporated

Address of applicant : 11321 White Rock Rd. Rancho Cordova, CA 95742, USA

Test Firm..... : Shenzhen CTL Testing Technology Co., Ltd.

Address of Test Firm : Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road,
Nanshan District, Shenzhen, China 518055

Test specification..... :

Standard : FCC Part 15.247: Operation within the bands 902-928 MHz,
2400-2483.5 MHz and 5725-5850 MHz.

TRF Originator : Shenzhen CTL Testing Technology Co., Ltd.

Master TRF..... : Dated 2011-01

Date of receipt of test item : Feb 18, 2025

Date of Test Date..... : Feb 18, 2025-Feb 21 , 2025

Date of Issue : Feb 24 , 2025

Result..... : Pass

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TEST REPORT

Test Report No. :	CTL2307032122-WF02	Feb 24 , 2025
		Date of issue

Equipment under Test : True Wireless Earbuds with Charging Case

Sample No : CTL2307032122

Model /Type : DXMA1902092

Listed Models : 190 2095 DW2, DXMA1902095,190 2092 DW2,
DXMA1902092,190 2095 DWE, 190 2095, 190 2095 DW3,
190 2095 XXX, DXMA1902095E,190 2092 DWE, 190 2092,
190 2092 DW3, 190 2092 XXX, DXMA1902095E,
DXMA1902092E, 190 2092 DW2 BA, 190 2092 DWG BA

Applicant : E-filliate Incorporated

Address : 11321 White Rock Rd. Rancho Cordova, CA 95742,USA

Manufacturer : Eminence Technology (HK) Company Limited

Address : Rooms 1506-1508, 15/F., Laws Commercial Plaza, 788
Cheung Sha Wan Road, Kowloon, Hong Kong.

Test result	Pass *
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* In the configuration tested, the EUT complied with the standards specified page 5.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the issuing testing laboratory.

**** Modified History ****

Revisions	Description	Issued Data	Report No.	Remark
Version 1.0	Initial Test Report Release	2023-07-13	CTL2307032122-WF02	Tracy Qi
Version 2.0	The headset battery information has been changed, the Type-C port of the charging bay has been changed, and the series model has been added	2025-02-24	CTL2501102025-WF02	Tracy Qi

Note: This report data is derived from CTL2307032122-WF02

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1. SUMMARY

1.1. TEST STANDARDS

The tests were performed according to following standards:

[FCC Rules Part 15.247](#): Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

[ANSI C63.10: 2013](#): American National Standard for Testing Unlicensed Wireless Devices

[KDB 558074 D01 15.247 Meas Guidance v05r02](#) : Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247

1.2. Test Description

FCC PART 15.247		
FCC Part 15.207	AC Power Conducted Emission	PASS
FCC Part 15.109/ 15.205/ 15.209	Radiated Emissions	PASS
FCC Part 15.247(d)	Band Edge	PASS
FCC Part 15.203/15.247 (b)	Antenna Requirement	PASS

Note: N/A= not applicable

1.3. Test Facility

1.3.1 Address of the test laboratory

Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No. 3011, Shahexi Road, Nanshan, Shenzhen 518055 China

There is one 3m semi-anechoic chamber and two line conducted labs for final test. The Test Sites meet the requirements in documents ANSI C63.10 and CISPR 32/EN 55032 requirements.

1.3.2 Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L7497

Shenzhen CTL Testing Technology Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No. 4343.01

Shenzhen CTL Testing Technology Co., Ltd, EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

IC Registration No.: 9618B

CAB identifier: CN0041

The 3m alternate test site of Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements with Registration No.: 9618B on Jan. 22, 2019.

FCC-Registration No.: 399832

Designation No.: CN1216

Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 399832, December 08, 2017.

1.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Shenzhen CTL Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for CTL laboratory is reported:

Test	Measurement Uncertainty	Notes
Transmitter power conducted	± 0.57 dB	(1)
Transmitter power Radiated	± 2.20 dB	(1)
Conducted spurious emission 9KHz-40 GHz	± 1.60 dB	(1)
Occupied Bandwidth	± 0.20 ppm	(1)
Radiated Emission 30~1000MHz	± 4.08 dB	(1)
Radiated Emission Above 1GHz	± 4.32 dB	(1)
Conducted Disturbance 0.15~30MHz	± 3.20 dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95%

(2) confidence level using a coverage factor of $k=1.96$.

2. GENERAL INFORMATION

2.1. Environmental conditions

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

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

2.2. General Description of EUT

Product Name:	True Wireless Earbuds with Charging Case
Model/Type reference:	DXMA1902092
Power supply:	DC 3.85V from battery
Bluetooth LE	
Supported type:	Bluetooth Low Energy
Modulation:	GFSK
Operation frequency:	2402MHz to 2480MHz
Channel number:	40
Channel separation:	2 MHz
Antenna type:	Ceramic Antenna
Antenna gain:	2.36 dBi

Note1: For more details, please refer to the user's manual of the EUT.

Note2: Antenna gain provided by the applicant.

2.3. Description of Test Modes and Test Frequency

The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing.

There are 40 channels provided to the EUT and Channel 00/19/39 were selected for BLE test.

Operation Frequency List :

Channel	Frequency (MHz)
00	2402
02	2404
03	2406
:	:
19	2440
:	:
37	2476
38	2478
39	2480

Note: The line display in grey were the channel selected for testing

2.4. Equipments Used during the Test

Conducted Emission					
Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
EMI Test Receiver	ROHDE & SCHWARZ	ESCI	1166.5950.03	2024/04/30	2025/04/29
LISN	ROHDE & SCHWARZ	ESH2-Z5	860014/010	2024/04/30	2025/04/29
Limitator	ROHDE & SCHWARZ	ESH3-Z2	100408	2024/04/30	2025/04/29
Software:					
Name of Software:			Version:		
ES-K1			V1.71		

Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
Active Loop Antenna	Da Ze	ZN30900A	/	2024/04/30	2025/04/29
Double cone logarithmic antenna	Schwarzbeck	VULB 9168	824	2023/02/13	2026/02/12
Horn Antenna	Sunol Sciences Corp.	DRH-118	A062013	2024/11/25	2027/11/24
Amplifier	MRT-AP01M06	MRT	S-001	2024/04/30	2025/04/29
Amplifier	Agilent	8449B	3008A02306	2024/04/30	2025/04/29
Amplifier	Brief&Smart	LNA-4018	2104197	2024/05/03	2025/05/02
EMI Test Receiver	ROHDE & SCHWARZ	ESCI	1166.5950.03	2024/04/30	2025/04/29
Spectrum Analyzer	RS	FSP	1164.4391.38	2024/05/03	2025/05/02
Name of Software:					
EZ_EMC(Below 1GHz)					
EZ_EMC(Above 1GHz)					

RF Conducted					
Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
Spectrum Analyzer	Keysight	N9020A	MY53420874	2024/05/01	2025/04/30
Temperature/Humidity Meter	Ji Yu	MC501	/	2024/05/04	2025/05/03
Software:					
Name of Software:			Version:		
TST-PASS			V2.0		

2.5. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended to comply with Section 15.247 of the FCC Part 15, Subpart C Rules.

2.6. Modifications

No modifications were implemented to meet testing criteria.

3. TEST CONDITIONS AND RESULTS

3.1. Conducted Emissions Test

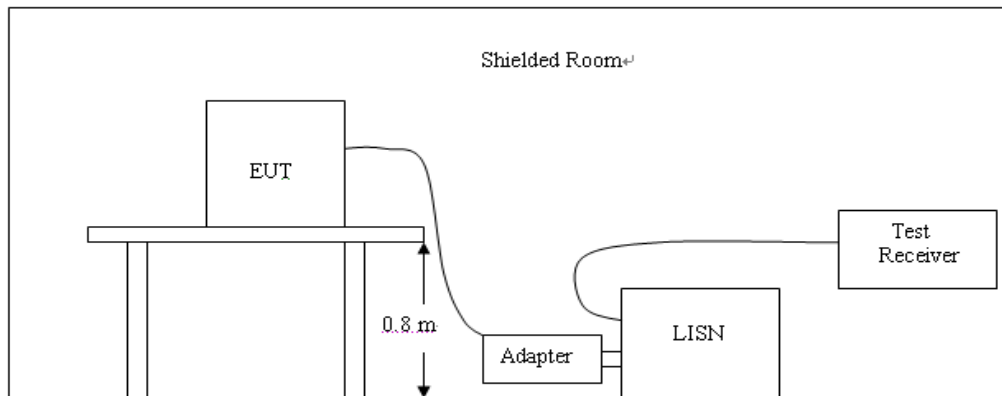
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a Smart Watchop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10:2013.
2. Support equipment, if needed, was placed as per ANSI C63.10:2013.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10:2013.
4. The adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST RESULTS

Remark:

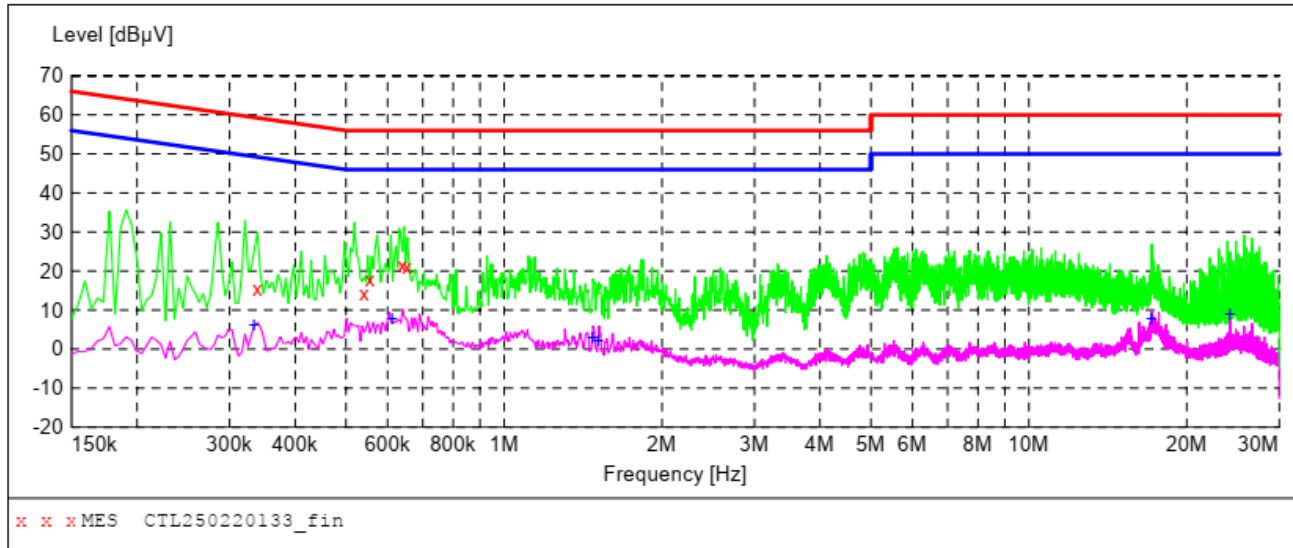
1. All low, middle and high channel were tested; only the worst result of low channel was reported as below:

Line:

L

SCAN TABLE: "Voltage (9K-30M)FIN"

Short Description: 150K-30M Voltage

**MEASUREMENT RESULT: "CTL250220133_fin"**

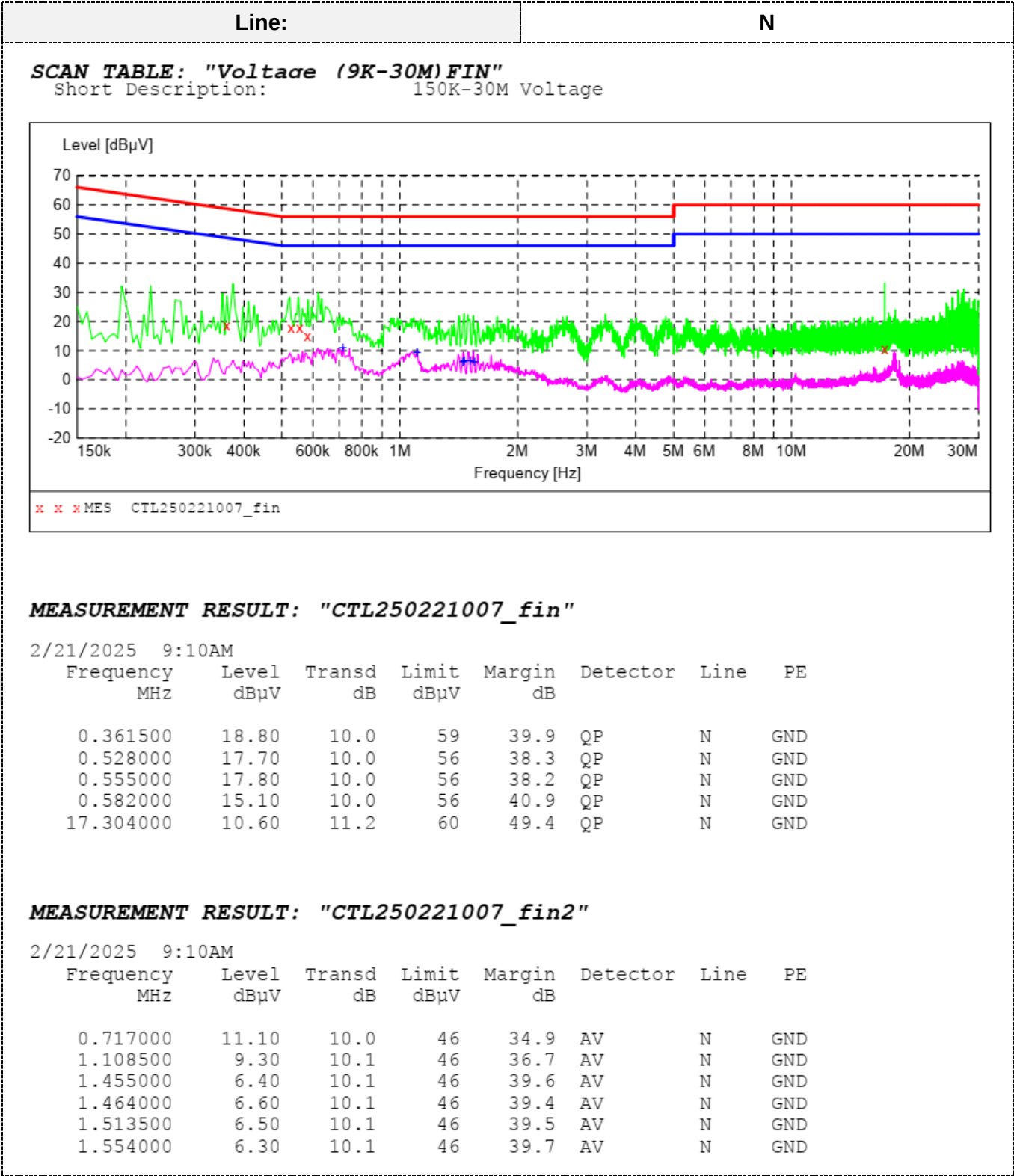
2/20/2025 10:01AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.339000	15.60	10.0	59	43.6	QP	L1	GND
0.541500	14.10	10.0	56	41.9	QP	L1	GND
0.555000	18.00	10.0	56	38.0	QP	L1	GND
0.640500	21.30	10.0	56	34.7	QP	L1	GND
0.654000	21.00	10.0	56	35.0	QP	L1	GND

MEASUREMENT RESULT: "CTL250220133_fin2"

2/20/2025 10:01AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.334500	6.00	10.0	49	43.3	AV	L1	GND
0.613500	7.80	10.0	46	38.2	AV	L1	GND
1.477500	2.90	10.1	46	43.1	AV	L1	GND
1.513500	2.20	10.1	46	43.8	AV	L1	GND
17.155500	7.70	11.2	50	42.3	AV	L1	GND
24.175500	9.20	10.7	50	40.8	AV	L1	GND



3.2. Radiated Emissions and Band Edge

Limit

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emission out of authorized band shall not exceed the following table at a 3 meters measurement distance.

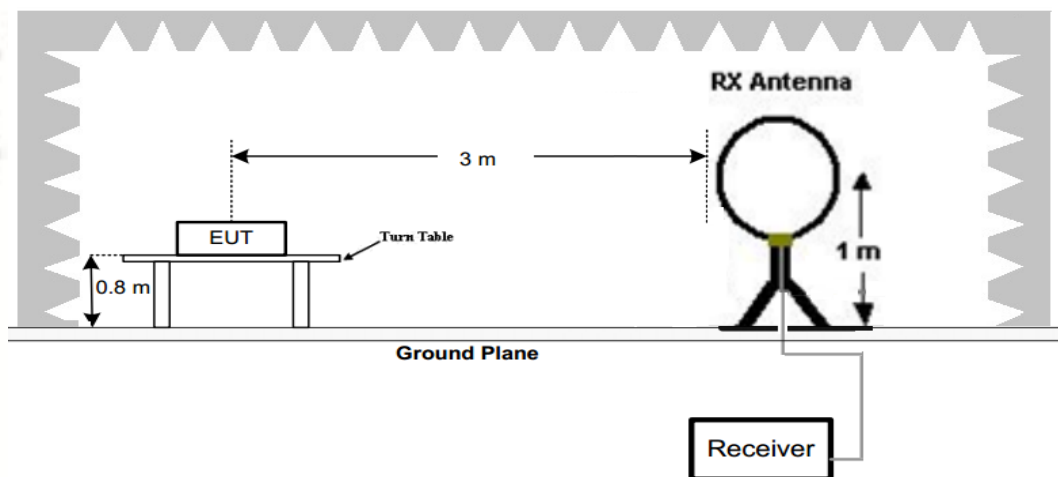
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Radiated emission limits

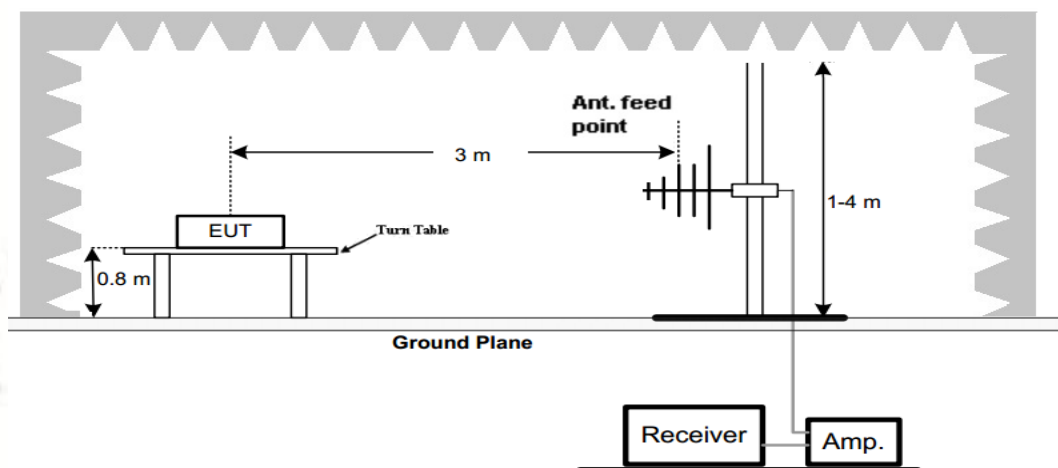
Frequency (MHz)	Distance (Meters)	Radiated (dB μ V/m)	Radiated (μ V/m)
0.009-0.49	3	$20\log(2400/F(\text{KHz}))+40\log(300/3)$	$2400/F(\text{KHz})$
0.49-1.705	3	$20\log(24000/F(\text{KHz}))+40\log(30/3)$	$24000/F(\text{KHz})$
1.705-30	3	$20\log(30)+40\log(30/3)$	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

TEST CONFIGURATION

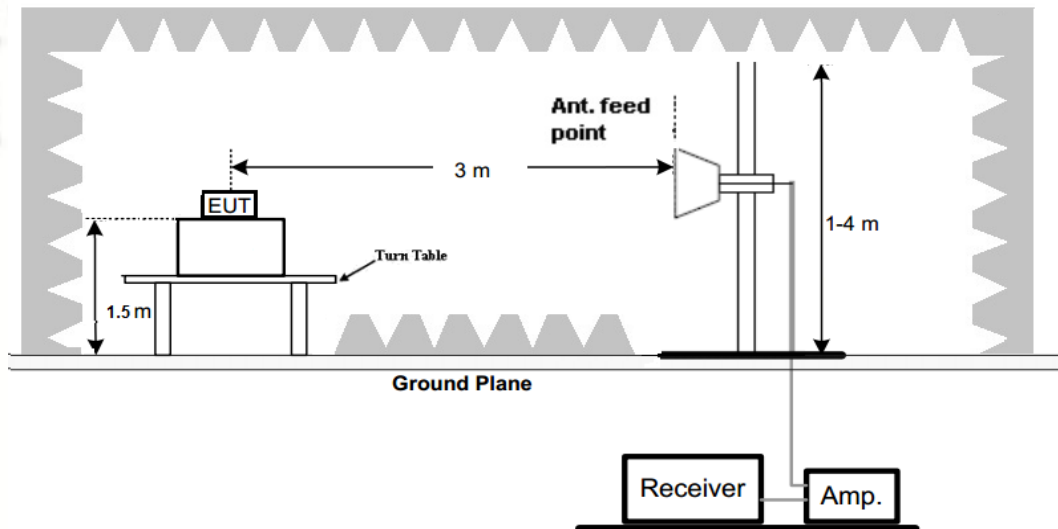
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz

**Test Procedure**

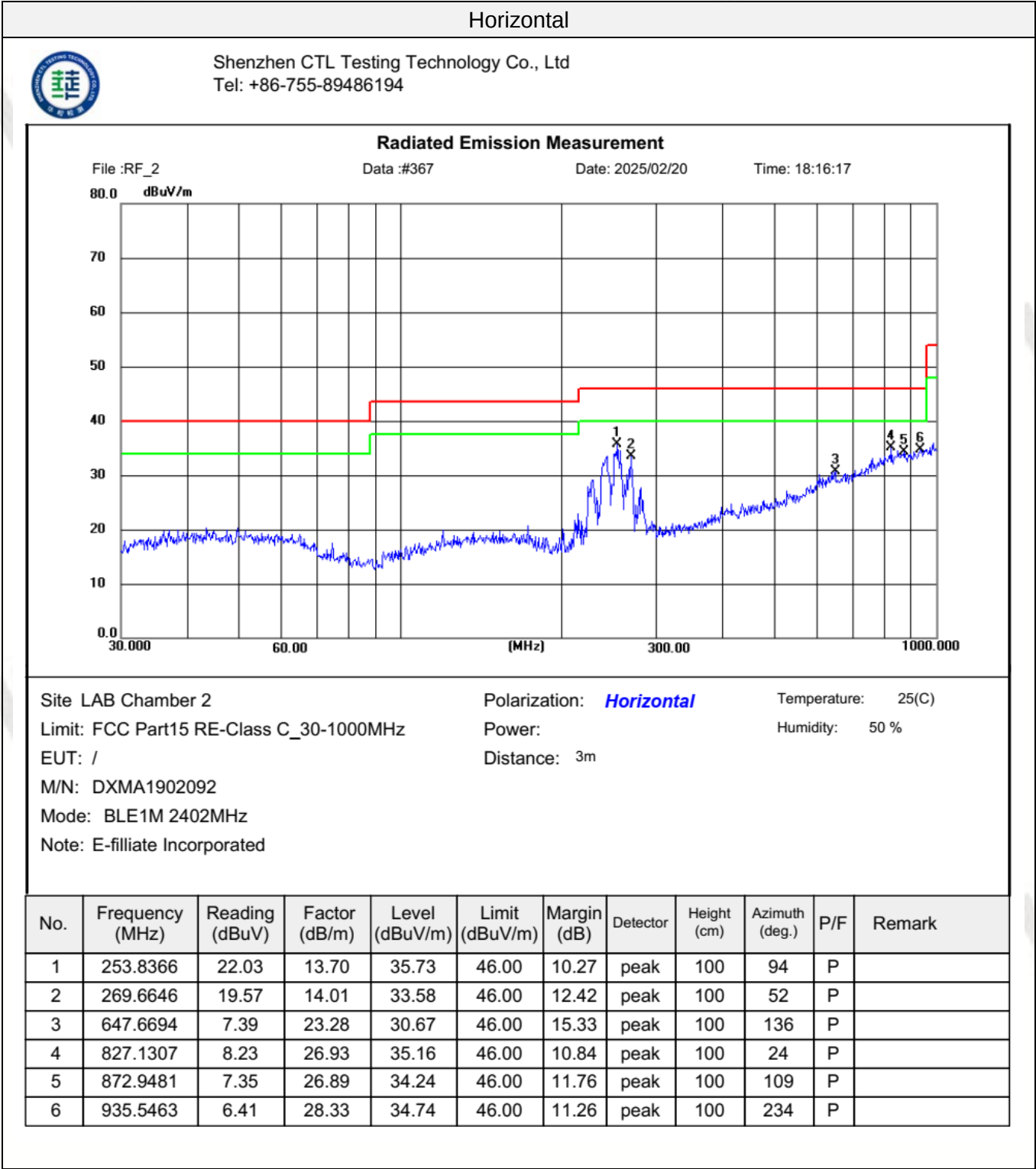
1. Below 1GHz measurement the EUT is placed on a turntable which is 0.8m above ground plane, and above 1GHz measurement EUT was placed on a low permittivity and low loss tangent turn table which is 1.5m above ground plane.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0°C to 360°C to acquire the highest emissions from EUT
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measurements have been completed.
5. The EUT was pretested with 3 orientations placed on the table for the radiated emission
6. measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were
7. shown in this report

TEST RESULTS

Remark:

1. We have tested low channel, middle channel, high channel, only recorded worst at low channel.
2. Radiated emission test from 9 KHz to 10th harmonic of fundamental was verified, Found the emission level are attenuated 20dB below the limits from 9 kHz to 30MHz and above 18GHz, so it does not recorded in the report.

For 30MHz-1GHz



Vertical



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Tel: +86-755-89486194

Radiated Emission Measurement

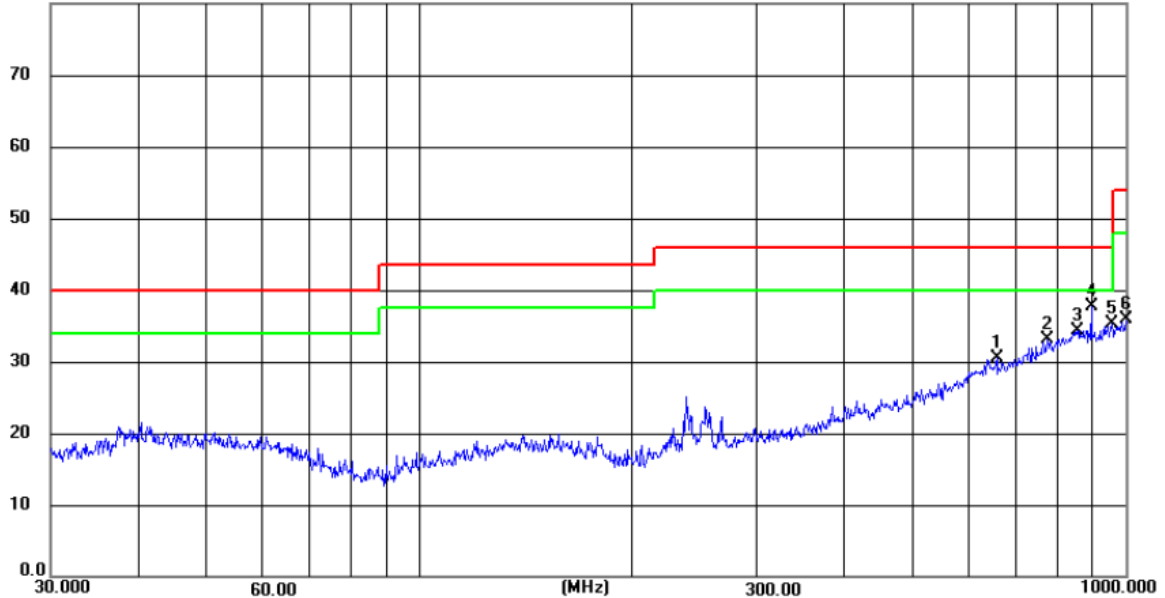
File :RF_2

Data :#368

Date: 2025/02/20

Time: 18:17:08

80.0 dBuV/m



Site LAB Chamber 2

Polarization: **Vertical**

Temperature: 25(C)

Limit: FCC Part15 RE-Class C_30-1000MHz

Power:

Humidity: 50 %

EUT: /

Distance: 3m

M/N: DXMA1902092

Mode: BLE1M 2402MHz

Note: E-filiate Incorporated

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	656.8178	7.29	23.30	30.59	46.00	15.41	peak	100	56	P	
2	776.8778	7.08	26.08	33.16	46.00	12.84	peak	100	280	P	
3	854.7737	6.97	27.43	34.40	46.00	11.60	peak	100	140	P	
4	894.6406	10.05	27.63	37.68	46.00	8.32	peak	100	350	P	
5	957.1148	6.96	28.37	35.33	46.00	10.67	peak	100	294	P	
6	1000.0000	6.93	28.92	35.85	54.00	18.15	peak	100	196	P	

For 1GHz to 25GHz**BLE Mode (above 1GHz)**

Frequency(MHz):			2402		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4804.00	50.62	PK	74.00	23.38	46.11	33.49	6.91	35.89	4.51
4804.00	--	AV	54.00	--	--	--	--	--	--
5674.00	44.52	PK	74.00	29.48	37.31	34.38	7.10	34.27	7.21
5674.00	--	AV	54.00	--	--	--	--	--	--
7206.00	46.50	PK	74.00	27.50	35.40	36.95	9.18	35.03	11.10
7206.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2402		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4804.00	50.22	PK	74.00	23.78	45.71	33.49	6.91	35.89	4.51
4804.00	--	AV	54.00	--	--	--	--	--	--
5564.00	46.56	PK	74.00	27.44	39.00	34.69	7.23	34.36	7.56
5564.00	--	AV	54.00	--	--	--	--	--	--
7206.00	44.75	PK	74.00	29.25	33.65	36.95	9.18	35.03	11.10
7206.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2440		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4880.00	47.87	PK	74.00	26.13	41.62	33.60	6.95	34.30	6.25
4880.00	--	AV	54.00	--	--	--	--	--	--
5654.00	42.35	PK	74.00	31.65	34.72	34.57	7.16	34.10	7.63
5654.00	--	AV	54.00	--	--	--	--	--	--
7320.00	44.66	PK	74.00	29.34	32.97	37.46	9.23	35.00	11.69
7320.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2440		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4880.00	47.88	PK	74.00	26.12	41.63	33.60	6.95	34.30	6.25
4880.00	--	AV	54.00	--	--	--	--	--	--
5784.00	42.54	PK	74.00	31.46	34.90	34.58	7.16	34.10	7.64
5784.00	--	AV	54.00	--	--	--	--	--	--
7320.00	46.42	PK	74.00	27.58	34.73	37.46	9.23	35.00	11.69
7320.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2480		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4960.00	48.11	PK	74.00	25.89	43.19	33.84	7.00	35.92	4.92
4960.00	--	AV	54.00	--	--	--	--	--	--
6156.00	44.88	PK	74.00	29.12	37.34	34.67	7.22	34.35	7.54
6156.00	--	AV	54.00	--	--	--	--	--	--
7440.00	45.36	PK	74.00	28.64	33.41	37.64	9.28	34.97	11.95
7440.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2480		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4960.00	50.65	PK	74.00	23.35	45.73	33.84	7.00	35.92	4.92
4960.00	--	AV	54.00	--	--	--	--	--	--
6174.00	44.88	PK	74.00	29.12	37.69	34.36	7.10	34.27	7.19
6174.00	--	AV	54.00	--	--	--	--	--	--
7440.00	45.77	PK	74.00	28.23	33.82	37.64	9.28	34.97	11.95
7440.00	--	AV	54.00	--	--	--	--	--	--

REMARKS:

1. Emission level (dBuV/m) =Raw Value (dBuV)+Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
3. Margin value = Limit value- Emission level.
4. -- Mean the PK detector measured value is below average limit.
5. RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.
6. Other emissions are attenuated 20dB below the limits from 9kHz to 30MHz, so it does not recorded in report.

Results of Band Edges Test (Radiated)

Frequency(MHz):			2402		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2402.00	100.15	PK	--	--	66.76	28.78	4.61	0.00	33.39
2402.00	91.54	AV	--	--	58.15	28.78	4.61	0.00	33.39
2372.00	43.74	PK	74.00	30.26	10.66	28.52	4.56	0.00	33.08
2372.00	--	AV	54.00	--	--	--	--	--	--
2390.00	44.58	PK	74.00	29.42	11.26	28.72	4.60	0.00	33.32
2390.00	--	AV	54.00	--	--	--	--	--	--
2400.00	46.79	PK	--	--	13.40	28.78	4.61	0.00	33.39
2400.00	--	AV	--	--	--	--	--	--	--

Frequency(MHz):			2402		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2402.00	98.51	PK	--	--	65.12	28.78	4.61	0.00	33.39
2402.00	91.57	AV	--	--	58.18	28.78	4.61	0.00	33.39
2372.00	44.39	PK	74.00	29.61	11.31	28.52	4.56	0.00	33.08
2372.00	--	AV	54.00	--	--	--	--	--	--
2390.00	45.62	PK	74.00	28.38	12.3	28.72	4.60	0.00	33.32
2390.00	--	AV	54.00	--	--	--	--	--	--
2400.00	46.71	PK	--	--	13.32	28.78	4.61	0.00	33.39
2400.00	--	AV	--	--	--	--	--	--	--

Frequency(MHz):			2480		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2480.00	96.62	PK	--	--	63	28.92	4.70	0.00	33.62
2480.00	91.31	AV	--	--	57.69	28.92	4.70	0.00	33.62
2483.50	47.59	PK	74.00	26.41	13.96	28.93	4.70	0.00	33.63
2483.50	--	AV	54.00	--	--	--	--	--	--
2490.00	45.61	PK	74.00	28.39	11.95	28.95	4.71	0.00	33.66
2490.00	--	AV	54.00	--	--	--	--	--	--
2500.00	43.21	PK	74.00	30.79	9.53	28.96	4.72	0.00	33.68
2500.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2480		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2480.00	100.71	PK	--	--	67.09	28.92	4.70	0.00	33.62
2480.00	93.41	AV	--	--	59.79	28.92	4.70	0.00	33.62
2483.50	47.96	PK	74.00	26.04	14.33	28.93	4.70	0.00	33.63
2483.50	--	AV	54.00	--	--	--	--	--	--
2488.00	45.83	PK	74.00	28.17	12.17	28.95	4.71	0.00	33.66
2488.00	--	AV	54.00	--	--	--	--	--	--
2500.00	41.52	PK	74.00	32.48	7.84	28.96	4.72	0.00	33.68
2500.00	--	AV	54.00	--	--	--	--	--	--

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
3. Margin value = Limit value - Emission level.
4. -- Mean the PK detector measured value is below average limit.
5. RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.
6. For fundamental frequency, RBW 3MHz VBW 3MHz Peak detector is for PK Value; RMS detector is for AV value.
7. Other emissions are attenuated 20dB below the limits from 9kHz to 30MHz, so it does not recorded in report.

3.3. Antenna Requirement

Standard Applicable

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, 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

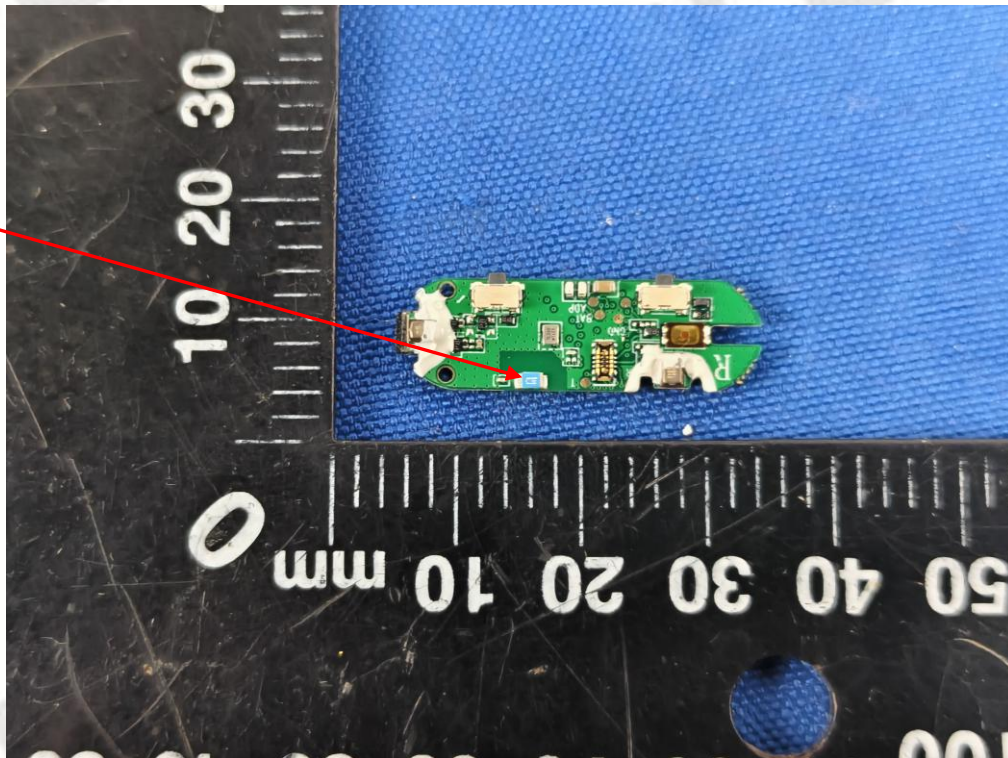
FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1) (I):

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

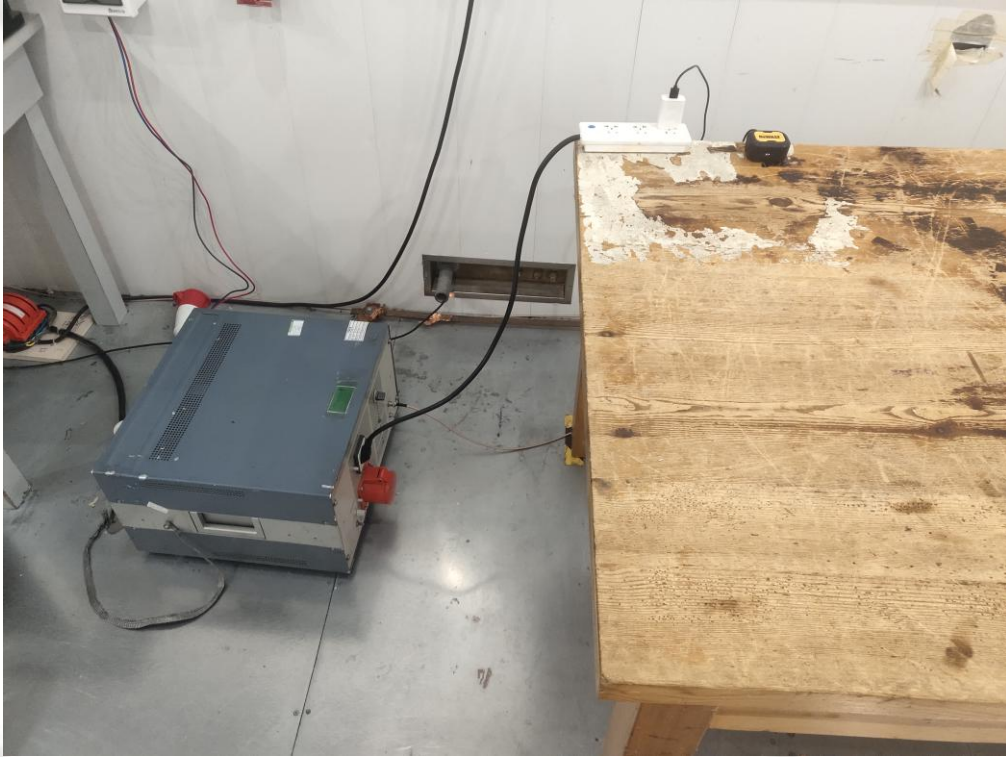
Test Result:

The maximum gain of antenna was 2.36dBi.

Bluetooth
Antenna



4. Test Setup Photos of the EUT





5. External and Internal Photos of the EUT

Reference to the test report No. CTL2307032122-WF01.

***** End of Report *****