



# TEST REPORT

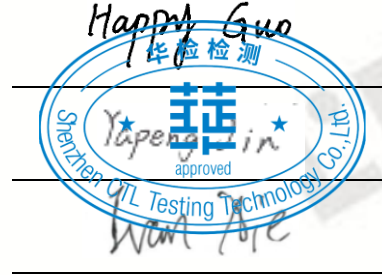
## FCC PART 15.247

Report Reference No.....: CTL2312295011-WF

Compiled by: Happy Guo  
( position+printed name+signature) (File administrators)

Tested by: Yapeng Jin  
( position+printed name+signature) (Test Engineer)

Approved by: Ivan Xie  
( position+printed name+signature) (Manager)



Product Name .....: Wireless Party Speaker

Model/Type reference .....: 100094813

List Model(s).....: N/A

Trade Mark.....: **onn.**

FCC ID.....: **HBOPA2323**

Applicant's name .....: **SHENZHEN FENDA TECHNOLOGY CO., LTD.**

Address of applicant .....: Fenda Hi-Tech Park, Zhoushi Road, Shiyan Street, Baoan District, Shenzhen, China

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

Address of Test Firm .....: Zone A, 1st Floor, Warehouse 2, Baisha Logistics Company, No. 3011 Shahe West Road, Nanshan District, Shenzhen

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 .....: Jan.02,2024

Date of Test Date.....: Jan.02,2024- Jan.08,2024

Date of Issue .....: Jan.09,2024

Result.....: **Pass**

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# TEST REPORT

<b>Test Report No. :</b> CTL2312295011-WF	Jan.09,2024
	Date of issue

Equipment under Test : Wireless Party Speaker

Sample No : CTL2312295011

Model /Type : 100094813

Listed Models : N/A

**Applicant** : SHENZHEN FENDA TECHNOLOGY CO., LTD.

Address : Fenda Hi-Tech Park, Zhoushi Road, Shiyan Street, Baoan District, Shenzhen, China

**Manufacturer** : SHENZHEN FENDA TECHNOLOGY CO., LTD.

Address : Fenda Hi-Tech Park, Zhoushi Road, Shiyan Street, Baoan District, Shenzhen, China

<b>Test result</b>	<b>Pass *</b>
--------------------	---------------

\*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.



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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

## 1.2. Test Description

FCC PART 15.247		
FCC Part 15.207	AC Power Conducted Emission	PASS
FCC Part 15.247(d)	Spurious RF Conducted Emission	PASS
FCC Part 15.247(b)	Maximum Peak Output Power	NA
FCC Part 15.205/15.209	Radiated Emissions	PASS
FCC Part 15.203/15.247 (b)	Antenna Requirement	PASS

### 1.3. Test Facility

#### 1.3.1 Address of the test laboratory

Shenzhen CTL Testing Technology Co.,Ltd.  
Zone A, 1st Floor, Warehouse 2, Baisha Logistics Company, No. 3011 Shahe West Road,  
Nanshan District, Shenzhen

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
20dB Emission Bandwidth	±1.9%	(1)
Carrier Frequency Separation	±1.9%	(1)
Maximum Power Spectral Density Level	±0.98 dB	(1)
Number of Hopping Channel	±1.9%	(1)

Time of Occupancy	$\pm 0.11\%$	(1)
Max Peak Conducted Output Power	$\pm 0.98$ dB	(1)
Band-edge Spurious Emission	$\pm 1.21$ dB	(1)
Conducted RF Spurious Emission	9kHz-7GHz: $\pm 1.09$ dB 7GHz-26.5GHz: $\pm 3.27$ dB	(1)
Radiated Emission 9KHz~30MHz	$\pm 3.40$ dB	(1)
Radiated Emission 30~1000MHz	$\pm 4.10$ dB	(1)
Radiated Emission Above 1GHz	$\pm 4.32$ dB	(1)
Conducted Disturbance 0.15~30MHz	$\pm 3.20$ dB	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% 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:	Wireless Party Speaker
Model/Type reference:	100094813
Power supply:	DC 14.8V from battery or AC 120V/60Hz
Hardware version:	PA2323-MD
Software version:	V1.61
<b>Bluetooth:</b>	
Version:	Supported BR/EDR
Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	PCB Antenna
Antenna gain:	1.94 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 (Duty Cycle more than 98%) and receiving mode for testing .There are 79 channels provided to the EUT and Channel 00/39/78 were selected to test.

### Operation Frequency :

Channel	Frequency (MHz)
<b>00</b>	<b>2402</b>
01	2403
⋮	⋮
38	2440
<b>39</b>	<b>2441</b>
40	2442
⋮	⋮
77	2479
<b>78</b>	<b>2480</b>

Preliminary tests were performed in each mode and packet length of BT, and found worst case as bellow, finally test were conducted at those mode and recorded in this report.

Test Items	Worst case
Conducted Emissions	DH5 Middle channel
Radiated Emissions	DH5
Maximum Conducted Output Power	DH5/2DH5/3DH5
Out-of-band Emissions	DH5/2DH5/3DH5

## 2.4. Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
LISN	R&S	ESH2-Z5	860014/010	2023/05/04	2024/05/03
Double cone logarithmic antenna	Schwarzbeck	VULB 9168	824	2023/02/13	2026/02/12
Horn Antenna	Ocean Microwave	OBH100400	26999002	2021/12/22	2024/12/21
EMI Test Receiver	R&S	ESCI	1166.5950.03	2023/05/04	2024/05/03
Spectrum Analyzer	Agilent	E4407B	MY41440676	2023/05/05	2024/05/04
Spectrum Analyzer	Agilent	N9020A	US46220290	2023/05/05	2024/05/04
Spectrum Analyzer	Keysight	N9020A	MY53420874	2023/05/05	2024/05/04
Horn Antenna	Sunol Sciences Corp.	DRH-118	A062013	2021/12/23	2024/12/22
Active Loop Antenna	Da Ze	ZN30900A	/	2021/05/13	2024/05/12
Amplifier	Agilent	8449B	3008A02306	2023/05/04	2024/05/03
Amplifier	MRT Technology(Suzhou)Co., Ltd	MRT-AP01M06	S-001	2023/05/04	2024/05/03
Amplifier	Brief&Smart	LNA-4018	2104197	2023/05/05	2024/05/04
Temperature/Humidity Meter	Ji Yu	MC501	/	2023/05/09	2024/05/08
Power Sensor	Agilent	U2021XA	MY53340004	2023/05/05	2024/05/04
Power Sensor	Agilent	U2021XA	MY54080012	2023/05/05	2024/05/04
Power Sensor	Agilent	U2021XA	MY54510008	2023/05/05	2024/05/04
Power Sensor	Agilent	U2021XA	MY55060003	2023/05/05	2024/05/04
Spectrum Analyzer	RS	FSP	1164.4391.38	2023/05/05	2024/05/04
Test Software					
Name of Software			Version		
TST-PASS			V2.0		
EZ_EMG(Below 1GHz)			V1.1.4.2		
EZ_EMG((Above 1GHz)			V1.1.4.2		

## 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

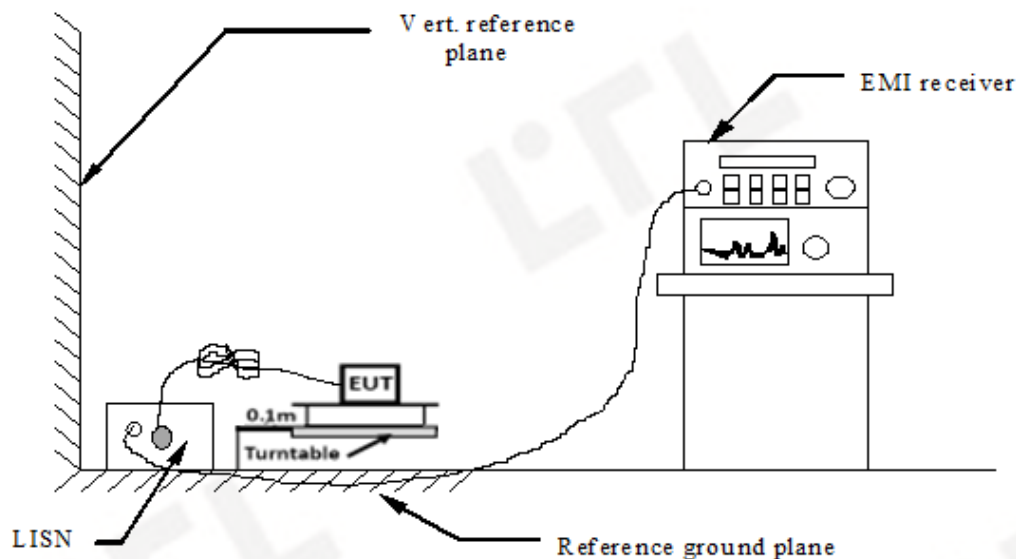
##### LIMIT

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



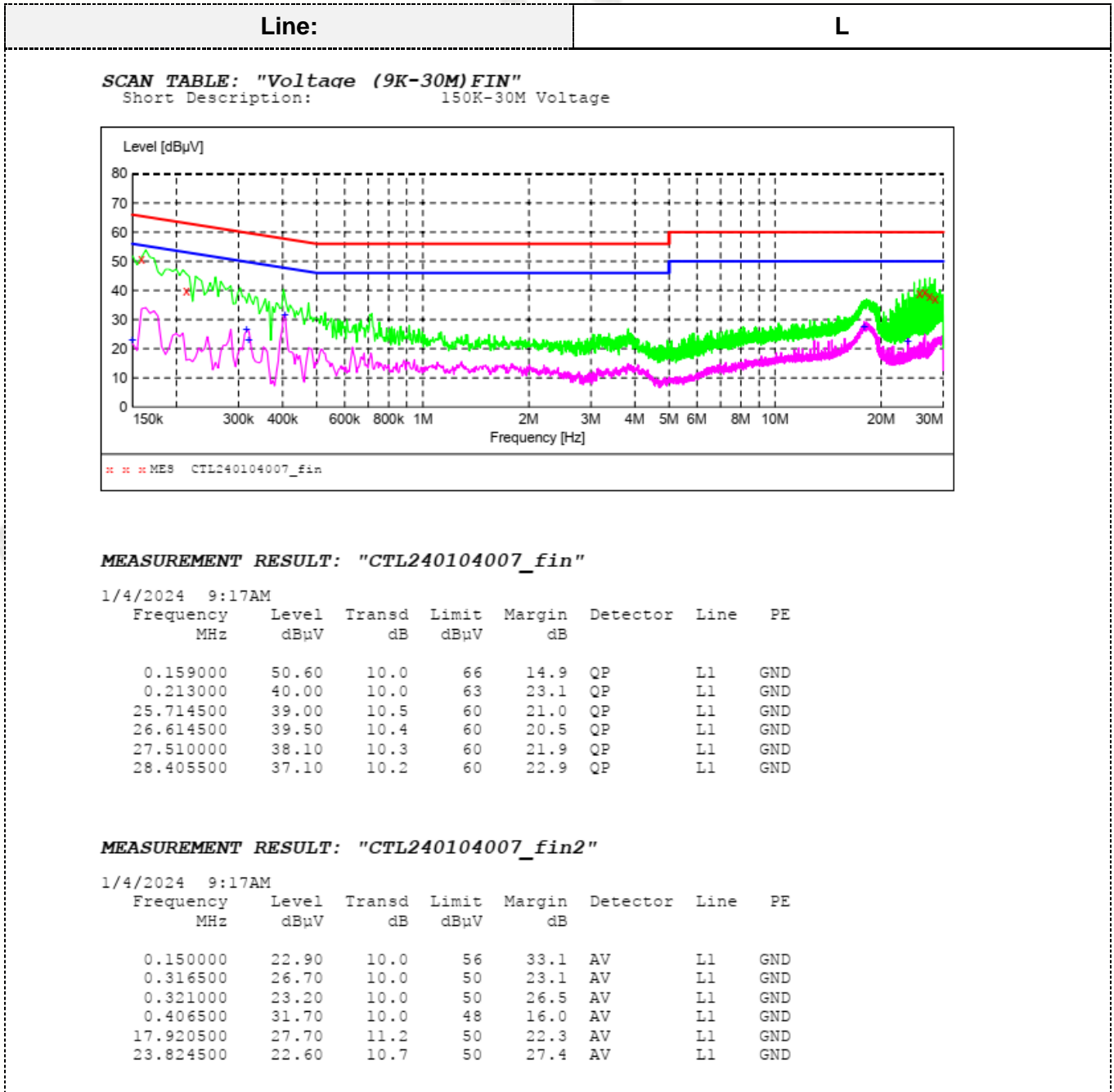
##### TEST PROCEDURE

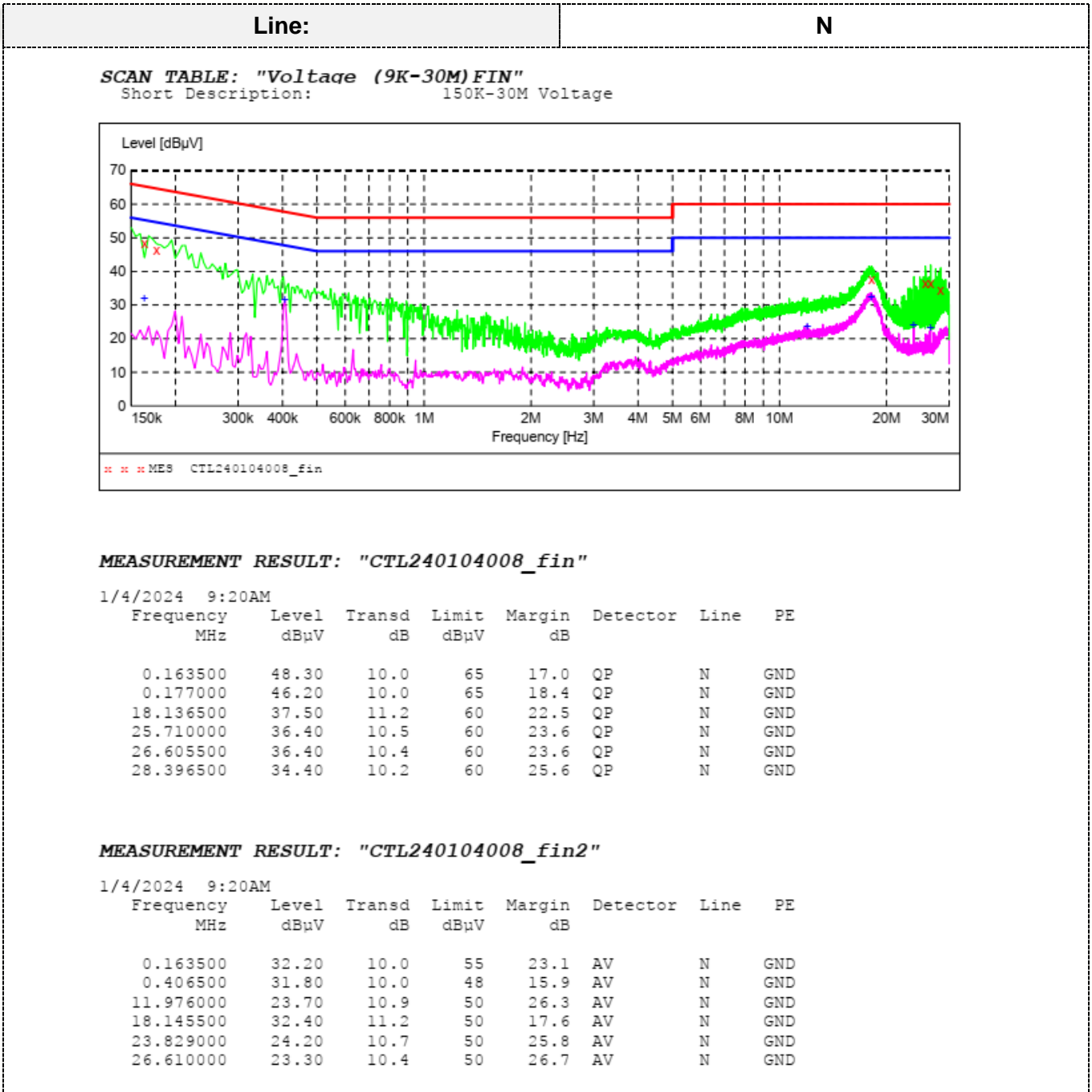
1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.1 meters is used and is placed on the ground plane as per ANSI C63.10:2013.
2. Support equipment, if needed, was placed as 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: All modes of GFSK, Pi/4 DQPSK, and 8DPSK were test at Low, Middle, and High channel; only the worst result of GFSK Middle Channel was reported as below:





### 3.2. Radiated Emissions

#### 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.

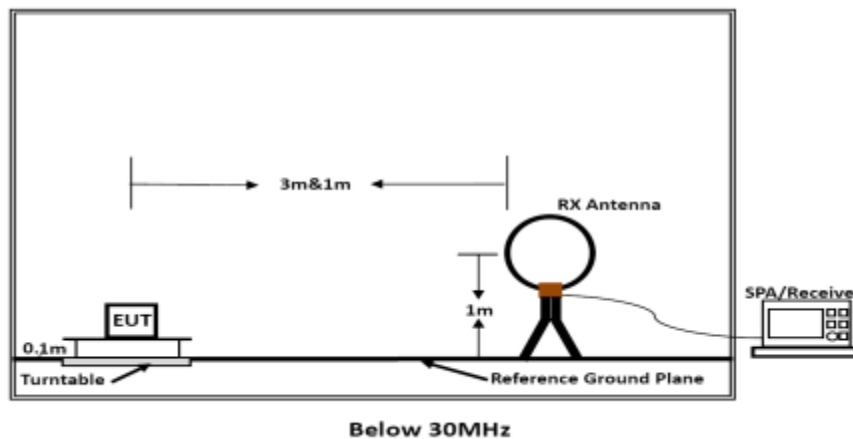
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Radiated emission limits

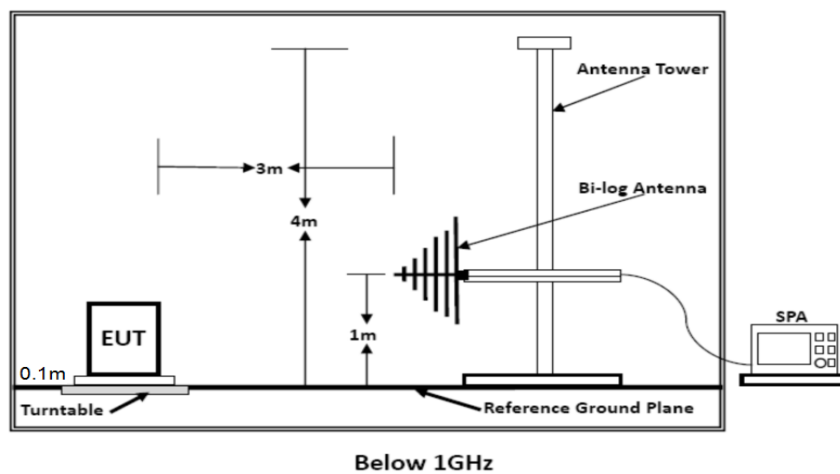
Frequency (MHz)	Distance (Meters)	Radiated (dBµV/m)	Radiated (µV/m)
0.009-0.49	3	$20\log(2400/F(\text{KHz}))+40\log(300/3)$	$2400/F(\text{KHz})$
0.49-1.705	3	$20\log(24000/F(\text{KHz}))+40\log(30/3)$	$24000/F(\text{KHz})$
1.705-30	3	$20\log(30)+40\log(30/3)$	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960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

#### TEST CONFIGURATION

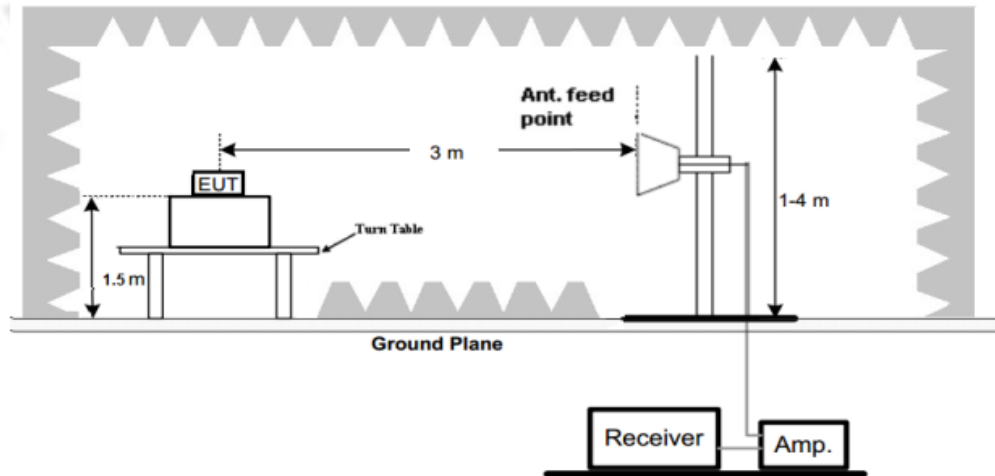
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(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 0.1m above ground plane, and above 1GHz measurement EUT was placed on a low permittivity and low loss tangent turn table which is 1.5 m above ground plane.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360° 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 measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

### TEST RESULTS

Remark:

1. We measured Radiated Emission at GFSK,  $\pi/4$  DQPSK and 8DPSK mode from 9 KHz to 18GHz and recorded worst case at GFSK DH5 mode..
2. For below 1GHz testing recorded worst at GFSK DH5 low channel.
3. 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, so it does not recorded in report.

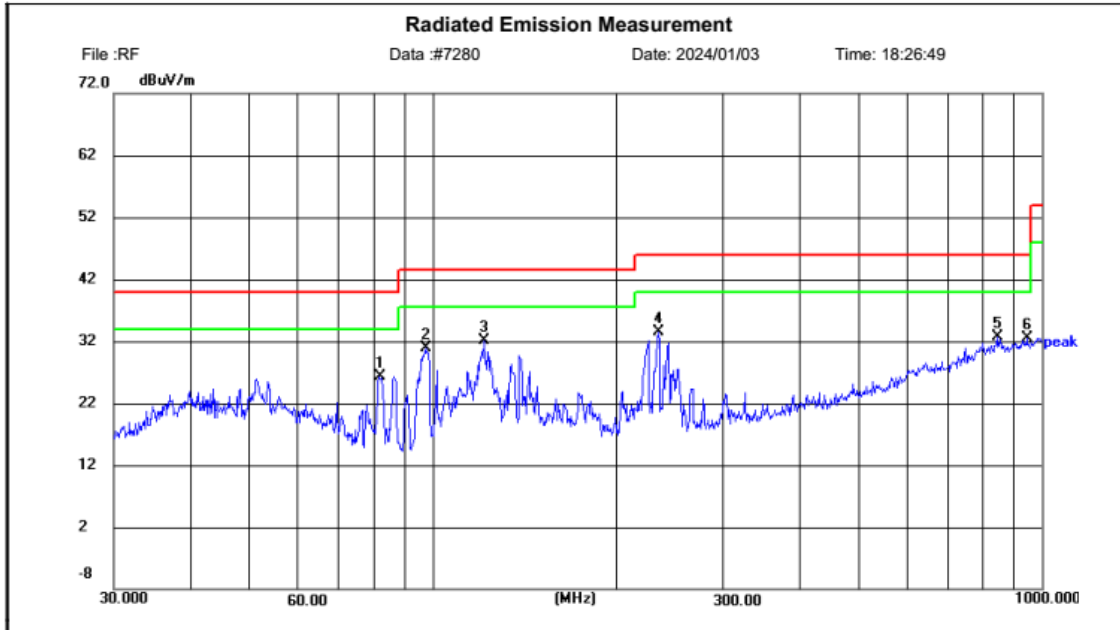


For 30MHz-1GHz

Horizontal



Shenzhen CTL Testing Technology Co., Ltd  
Tel: +86-755-89486194



Site: LAB Chamber 2  
 Limit: FCC Part15 RE-Class C\_30-1000MHz  
 EUT: /  
 M/N: 100094813  
 Mode: BT 2402MHz  
 Note: SHENZHEN FENDA TECHNOLOGY CO., LTD.

Polarization: **Horizontal**  
 Power:  
 Distance: 3m

Temperature: 25(C)  
 Humidity: 50 %

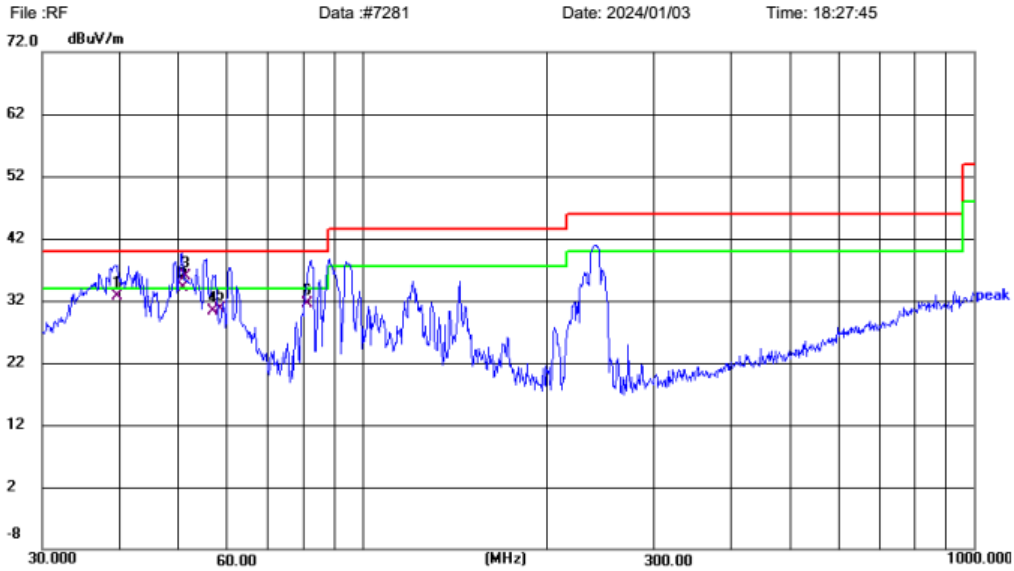
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	81.7832	16.45	9.93	26.38	40.00	13.62	peak	100	255	P	
2	97.4559	19.96	10.99	30.95	43.50	12.55	peak	100	92	P	
3	121.5485	19.12	13.04	32.16	43.50	11.34	peak	100	284	P	
4	234.9909	20.54	12.87	33.41	46.00	12.59	peak	100	322	P	
5	845.0877	7.12	25.51	32.63	46.00	13.37	peak	100	16	P	
6	945.4400	6.19	26.33	32.52	46.00	13.48	peak	100	265	P	

Vertical



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Radiated Emission Measurement



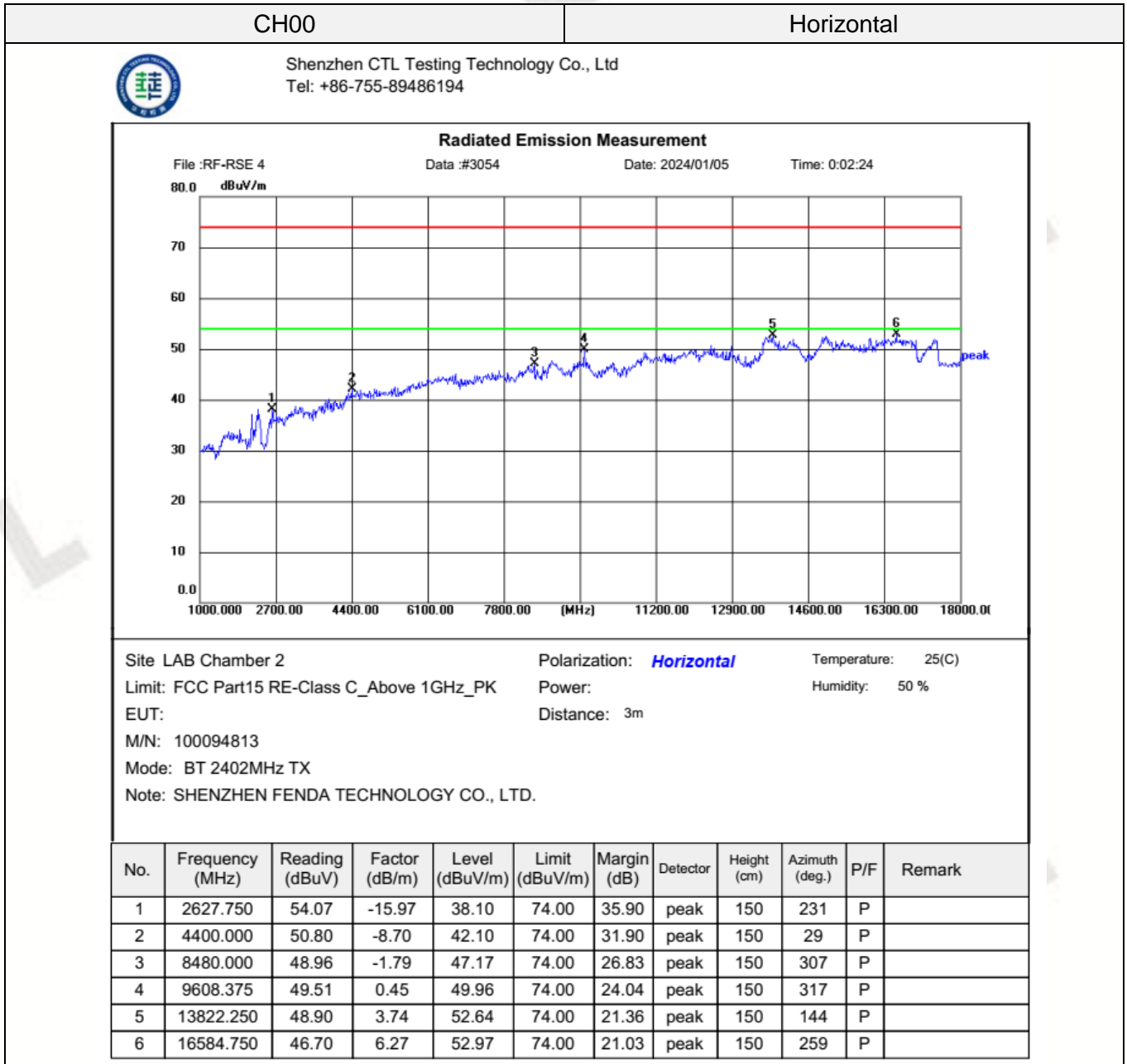
Site LAB Chamber 2 Polarization: **Vertical** Temperature: 25(C)  
 Limit: FCC Part15 RE-Class C\_30-1000MHz Power: Humidity: 50 %  
 EUT: / Distance: 3m  
 M/N: 100094813  
 Mode: BT 2402MHz  
 Note: SHENZHEN FENDA TECHNOLOGY CO., LTD.

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	39.8133	18.49	14.18	32.67	40.00	7.33	QP	100	360	P	
2	50.7872	19.81	14.22	34.03	40.00	5.97	QP	100	0	P	
3	51.4331	21.74	14.21	35.95	40.00	4.05	QP	100	0	P	
4	56.8800	16.53	13.87	30.40	40.00	9.60	QP	100	360	P	
5	58.6688	16.78	13.83	30.61	40.00	9.39	QP	100	0	P	
6	81.4388	21.58	9.93	31.51	40.00	8.49	QP	100	360	P	

**For 1GHz to 18GHz**

Note: GFSK, Pi/4 DQPSK and 8DPSK all have been tested, only worse case GFSK is reported.

**GFSK (above 1GHz)**



CH00

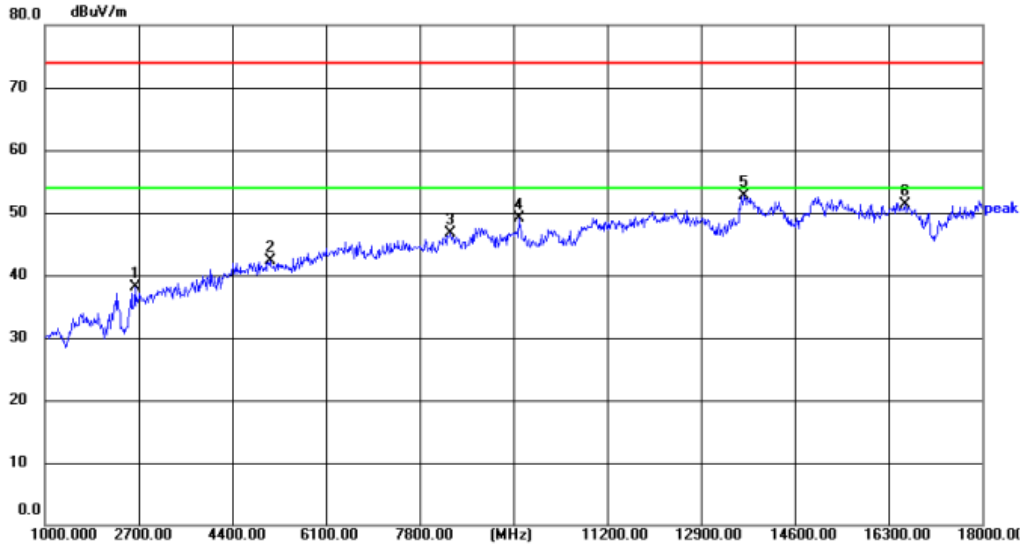
Vertical



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**Radiated Emission Measurement**

File :RF-RSE 4      Data :#3055      Date: 2024/01/05      Time: 0:03:22



Site LAB Chamber 2      Polarization: **Vertical**      Temperature: 25(C)  
 Limit: FCC Part15 RE-Class C\_Above 1GHz\_PK      Power:      Humidity: 50 %  
 EUT:      Distance: 3m  
 M/N: 100094813  
 Mode: BT 2402MHz TX  
 Note: SHENZHEN FENDA TECHNOLOGY CO., LTD.

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	2632.000	54.12	-15.93	38.19	74.00	35.81	peak	150	272	P	
2	5092.750	50.12	-7.85	42.27	74.00	31.73	peak	150	129	P	
3	8367.375	48.81	-2.08	46.73	74.00	27.27	peak	150	72	P	
4	9608.375	48.69	0.45	49.14	74.00	24.86	peak	150	216	P	
5	13686.250	48.72	3.90	52.62	74.00	21.38	peak	150	101	P	
6	16612.375	44.97	6.31	51.28	74.00	22.72	peak	150	168	P	

CH39

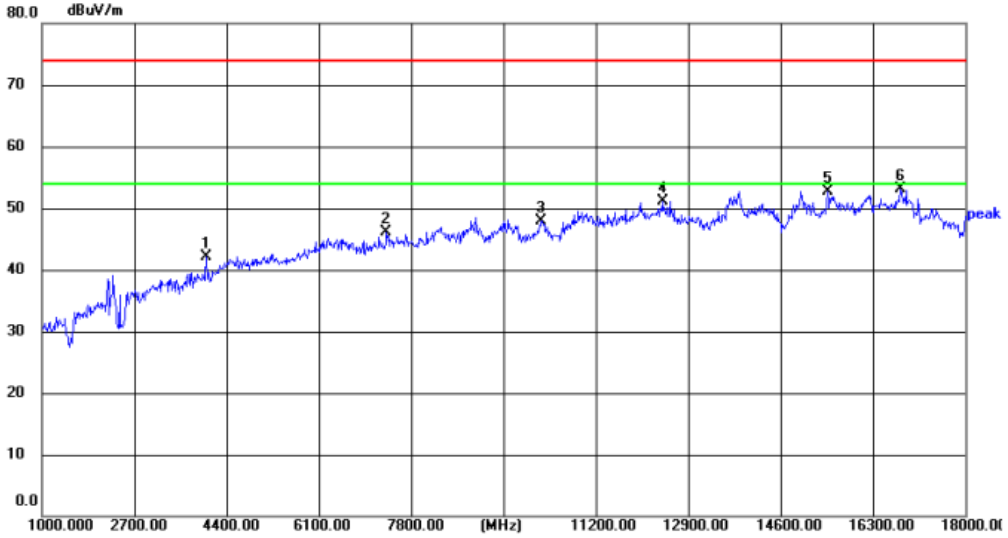
Horizontal



Shenzhen CTL Testing Technology Co., Ltd  
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**Radiated Emission Measurement**

File :RF-RSE 4      Data :#3120      Date: 2024/01/05      Time: 21:35:47



Site LAB Chamber 2      Polarization: **Horizontal**      Temperature: 25(C)  
 Limit: FCC Part15 RE-Class C\_Above 1GHz\_PK      Power:      Humidity: 50 %  
 EUT:      Distance: 3m  
 M/N: 100094813  
 Mode: BT 2441MHz TX  
 Note: SHENZHEN FENDA TECHNOLOGY CO., LTD.

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	4028.125	52.27	-10.18	42.09	74.00	31.91	peak	150	2	P	
2	7351.625	48.99	-2.87	46.12	74.00	27.88	peak	150	264	P	
3	10209.750	47.63	0.32	47.95	74.00	26.05	peak	150	313	P	
4	12434.625	48.90	2.24	51.14	74.00	22.86	peak	150	303	P	
5	15479.750	48.92	3.84	52.76	74.00	21.24	peak	150	323	P	
6	16820.625	46.47	6.59	53.06	74.00	20.94	peak	150	50	P	

CH39

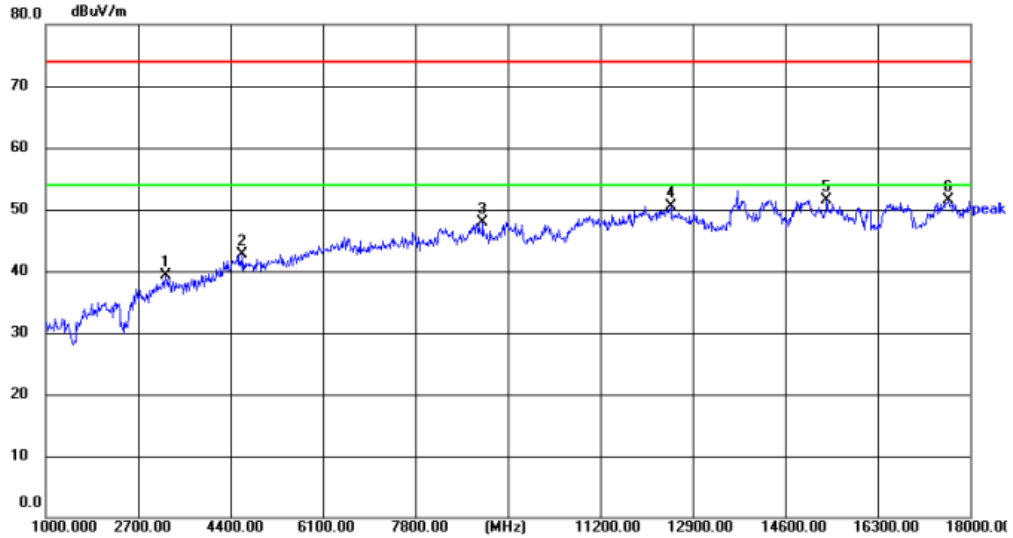
Vertical



Shenzhen CTL Testing Technology Co., Ltd  
Tel: +86-755-89486194

**Radiated Emission Measurement**

File :RF-RSE 4      Data :#3121      Date: 2024/01/05      Time: 21:36:45



Site LAB Chamber 2      Polarization: **Vertical**      Temperature: 25(C)  
 Limit: FCC Part15 RE-Class C\_Above 1GHz\_PK      Power:      Humidity: 50 %  
 EUT:      Distance: 3m  
 M/N: 100094813  
 Mode: BT 2441MHz TX  
 Note: SHENZHEN FENDA TECHNOLOGY CO., LTD.

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	3218.500	52.38	-13.06	39.32	74.00	34.68	peak	150	37	P	
2	4621.000	50.94	-8.24	42.70	74.00	31.30	peak	150	184	P	
3	9053.750	48.12	-0.23	47.89	74.00	26.11	peak	150	135	P	
4	12502.625	48.26	2.29	50.55	74.00	23.45	peak	150	174	P	
5	15373.500	47.85	3.75	51.60	74.00	22.40	peak	150	262	P	
6	17609.000	42.32	9.11	51.43	74.00	22.57	peak	150	87	P	

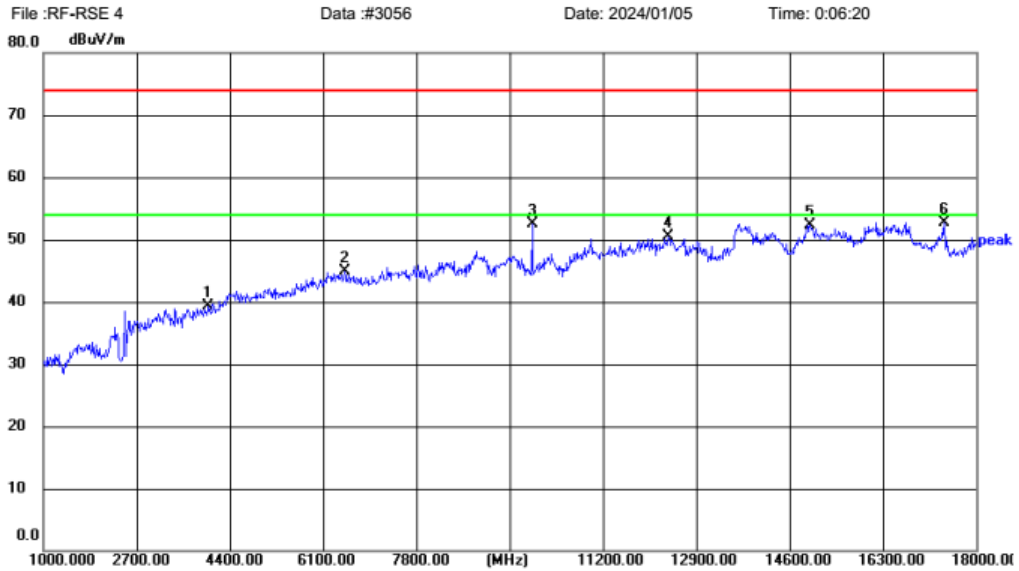
CH78

Horizontal



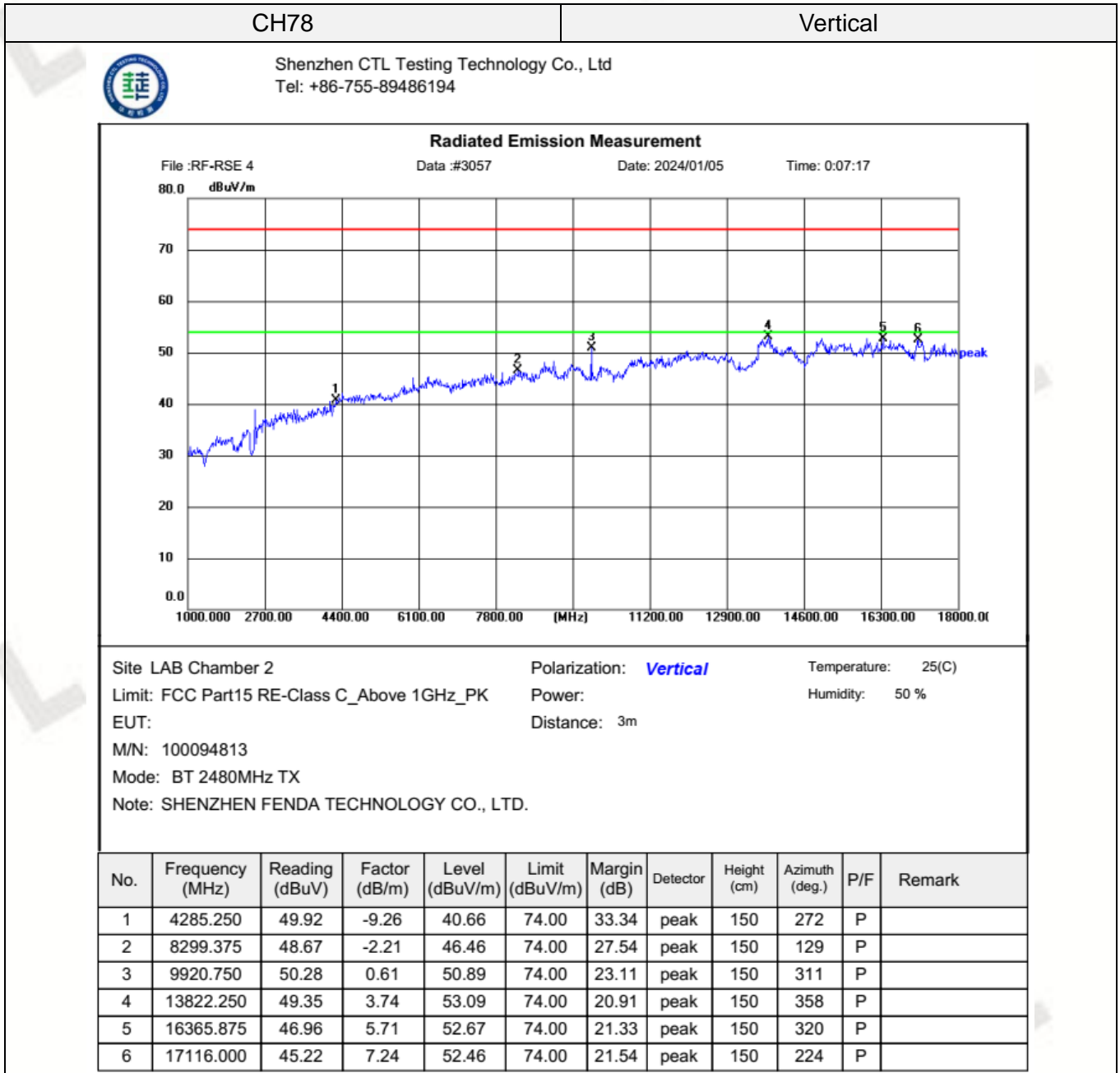
Shenzhen CTL Testing Technology Co., Ltd  
Tel: +86-755-89486194

**Radiated Emission Measurement**



Site LAB Chamber 2      Polarization: **Horizontal**      Temperature: 25(C)  
 Limit: FCC Part15 RE-Class C\_Above 1GHz\_PK      Power:      Humidity: 50 %  
 EUT:      Distance: 3m  
 M/N: 100094813  
 Mode: BT 2480MHz TX  
 Note: SHENZHEN FENDA TECHNOLOGY CO., LTD.

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	4017.500	49.55	-10.23	39.32	74.00	34.68	peak	150	20	P	
2	6501.625	49.12	-4.30	44.82	74.00	29.18	peak	150	231	P	
3	9920.750	51.83	0.61	52.44	74.00	21.56	peak	150	260	P	
4	12404.875	48.31	2.23	50.54	74.00	23.46	peak	150	49	P	
5	14978.250	49.03	3.29	52.32	74.00	21.68	peak	150	260	P	
6	17428.375	43.73	8.88	52.61	74.00	21.39	peak	150	155	P	



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.



### 3.3. Maximum Peak Output Power

#### Limit

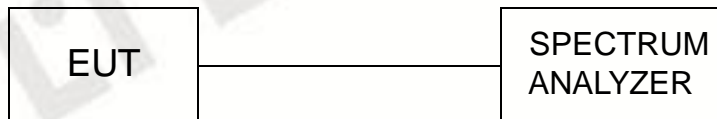
For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels: 1 watt.

For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

#### Test Procedure

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum.

#### Test Configuration



#### Test Results

REMARKS:Product changes do not involve RF and do not require testing power

## 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.

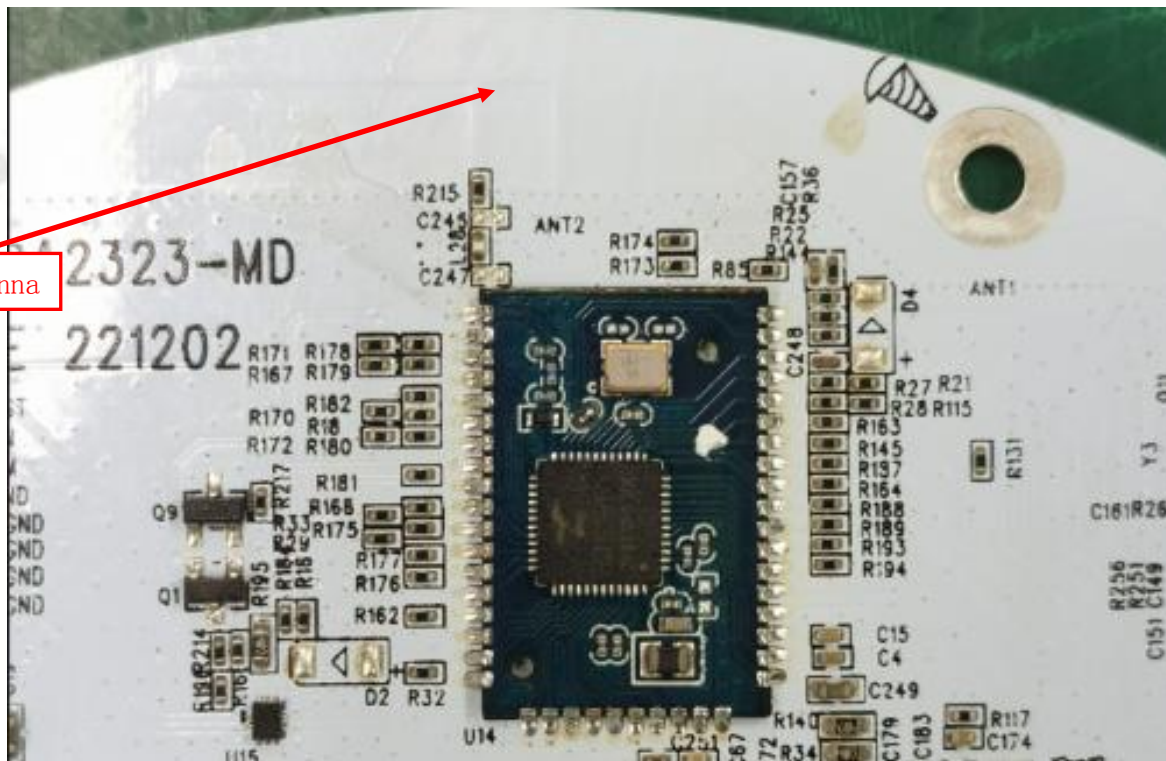
And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### **Refer to statement below for compliance**

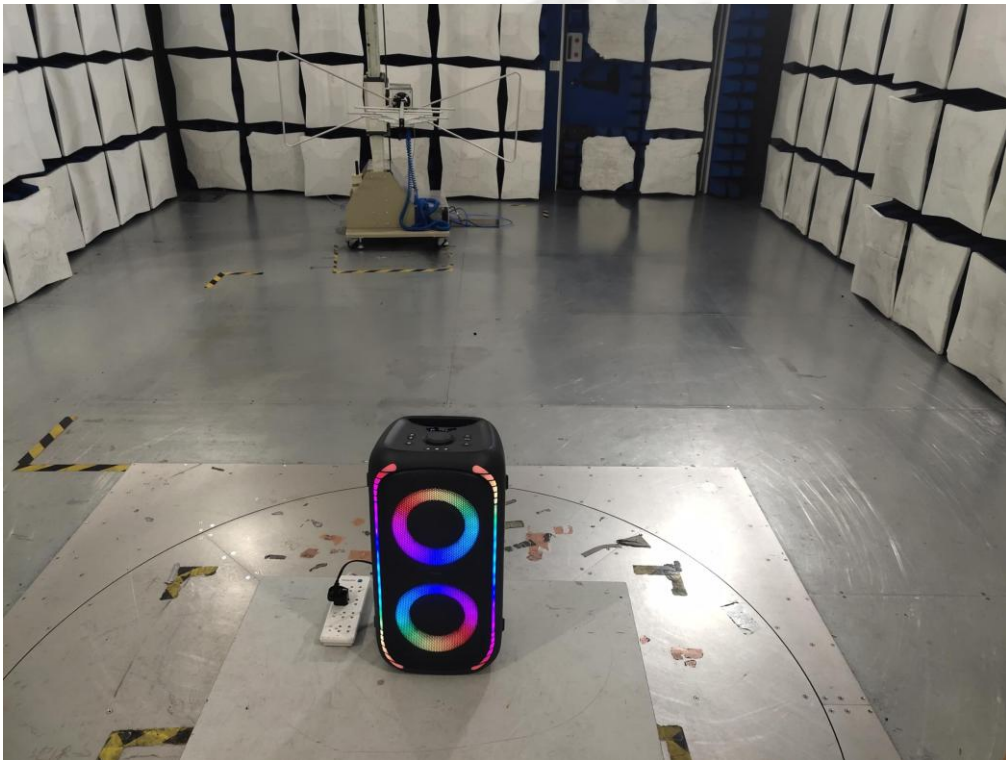
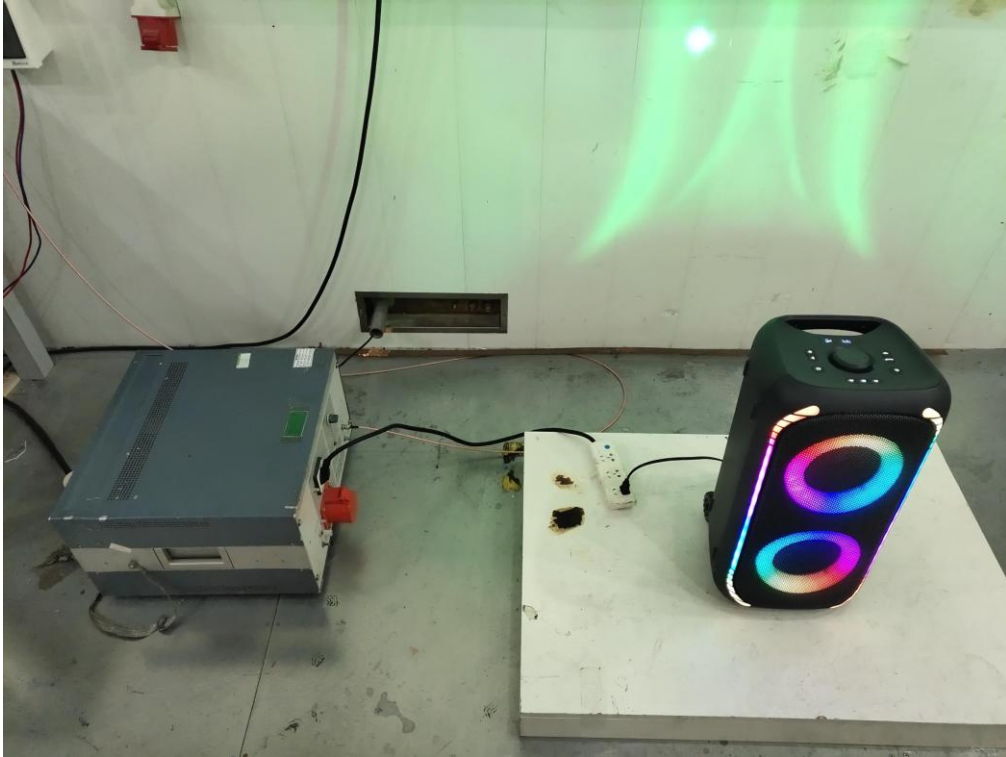
The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

### Antenna Connected Construction

The maximum gain of antenna was 1.94dBi



#### 4. Test Setup Photos of the EUT





## 5. Photos of the EUT

### External Photos of EUT



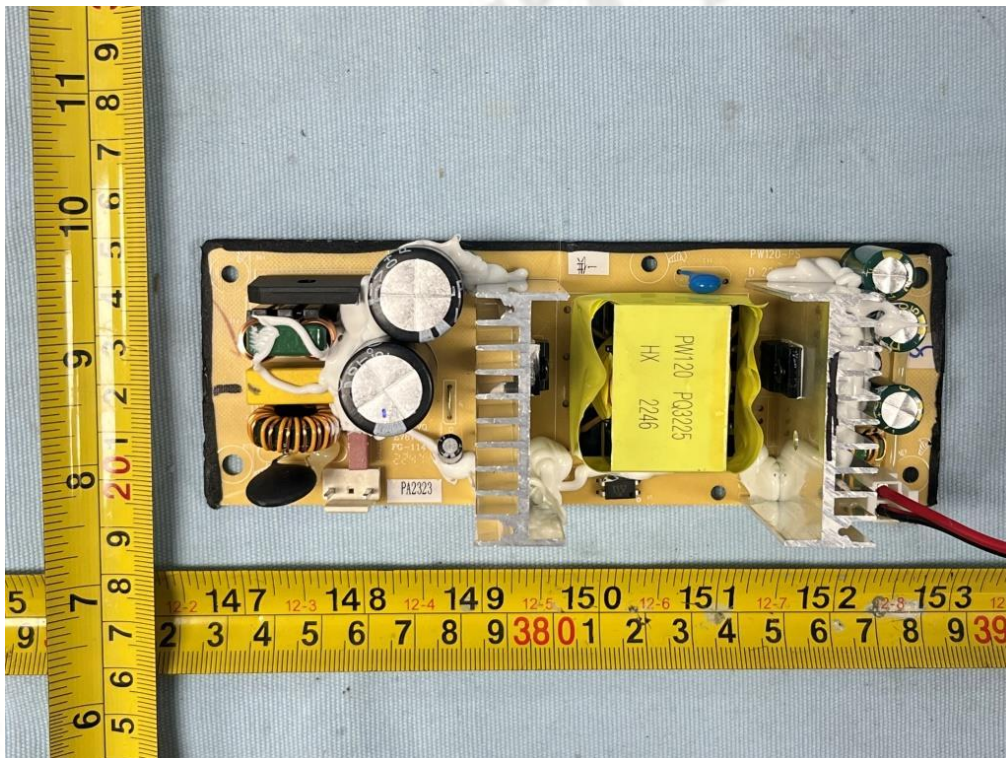


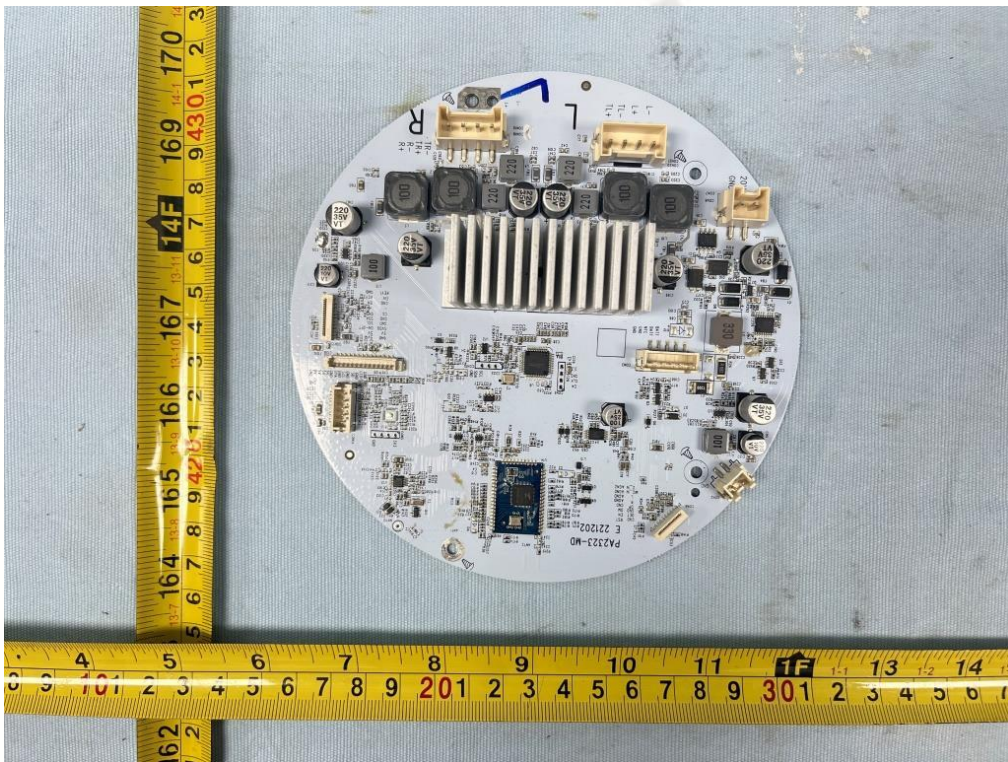
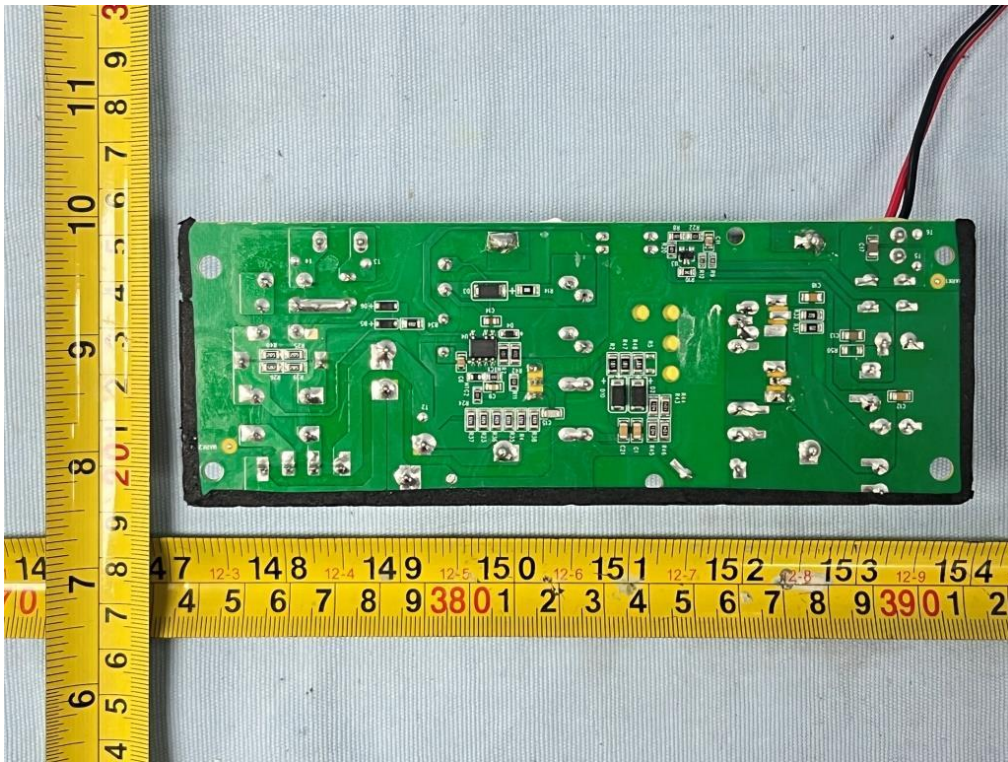


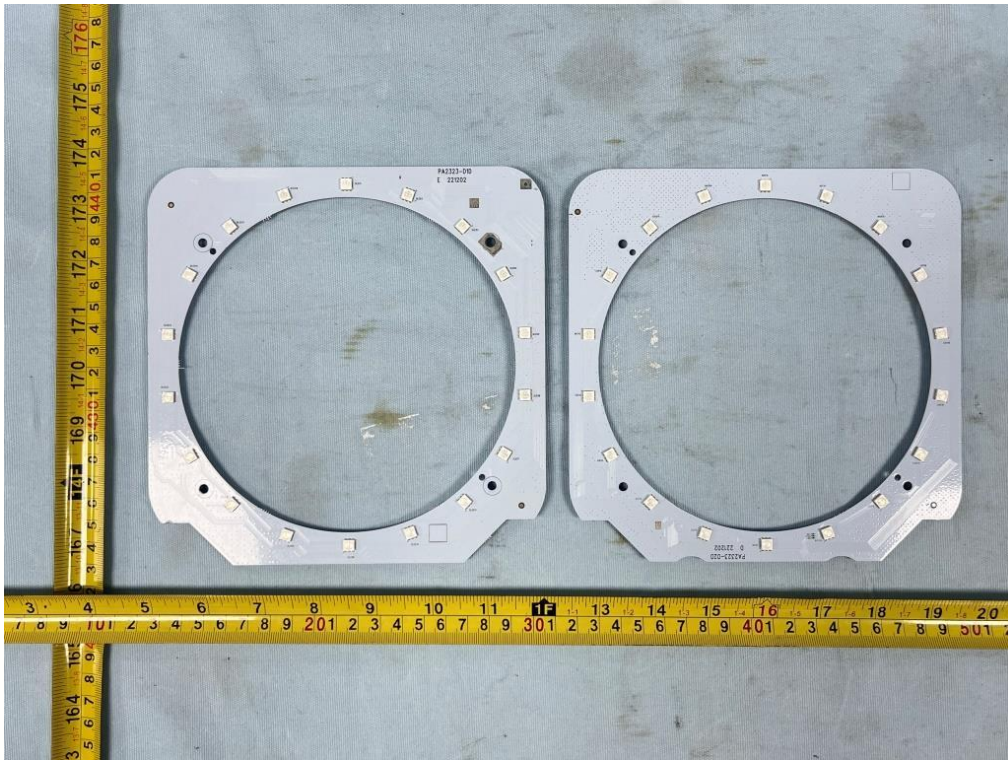
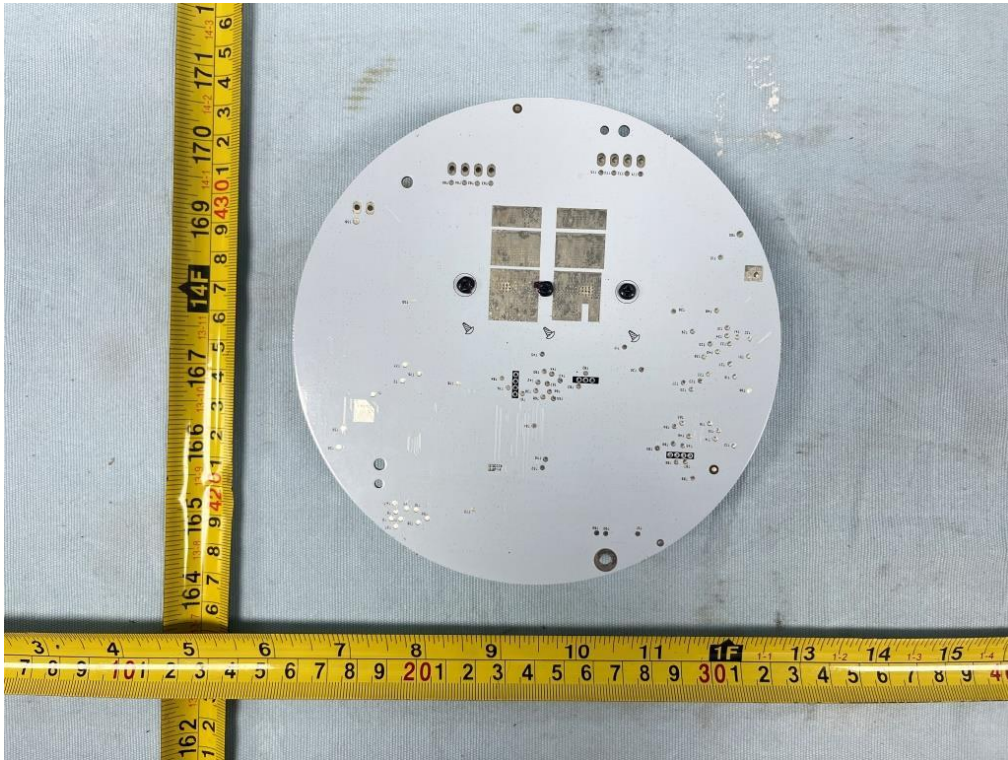




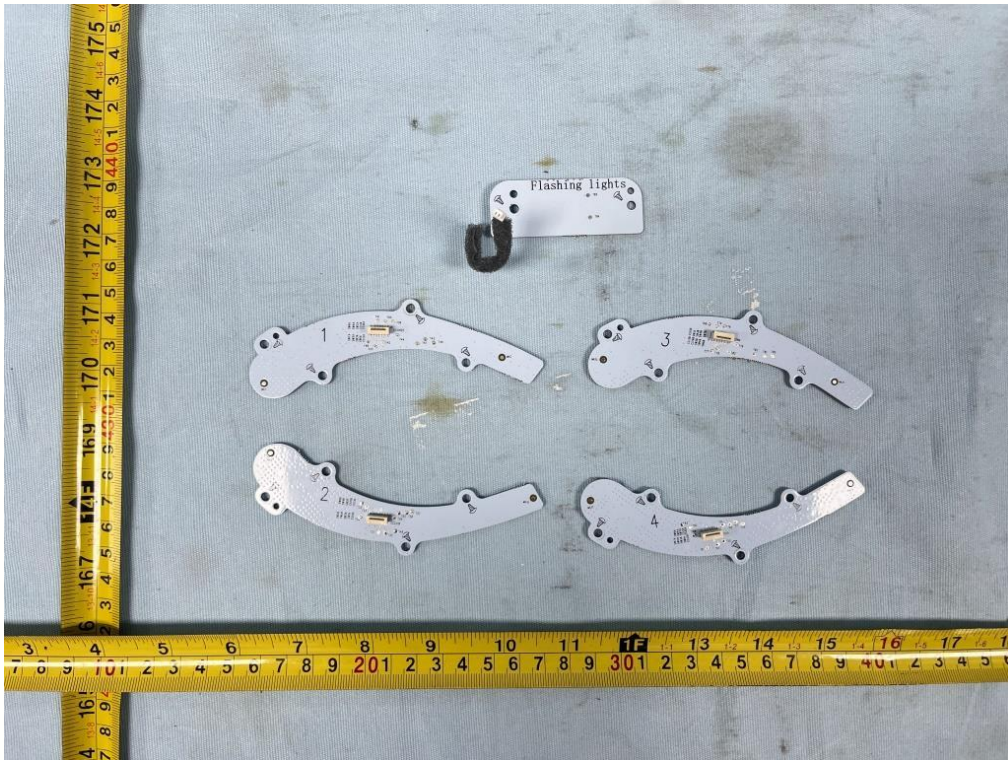
Internal Photos of EUT

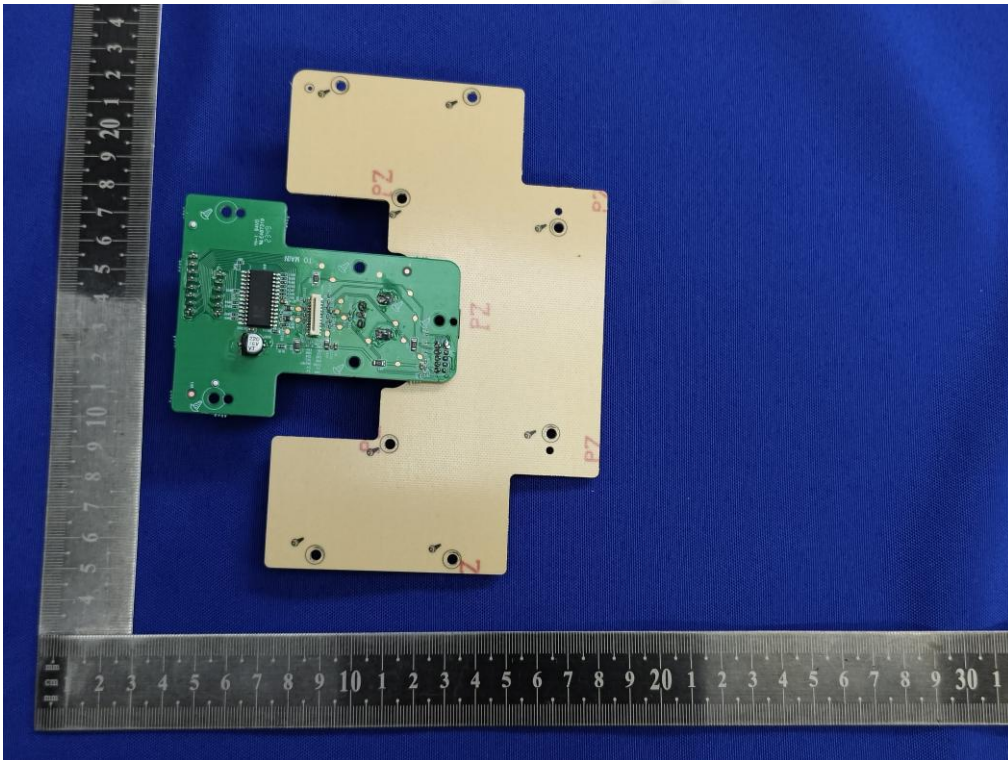


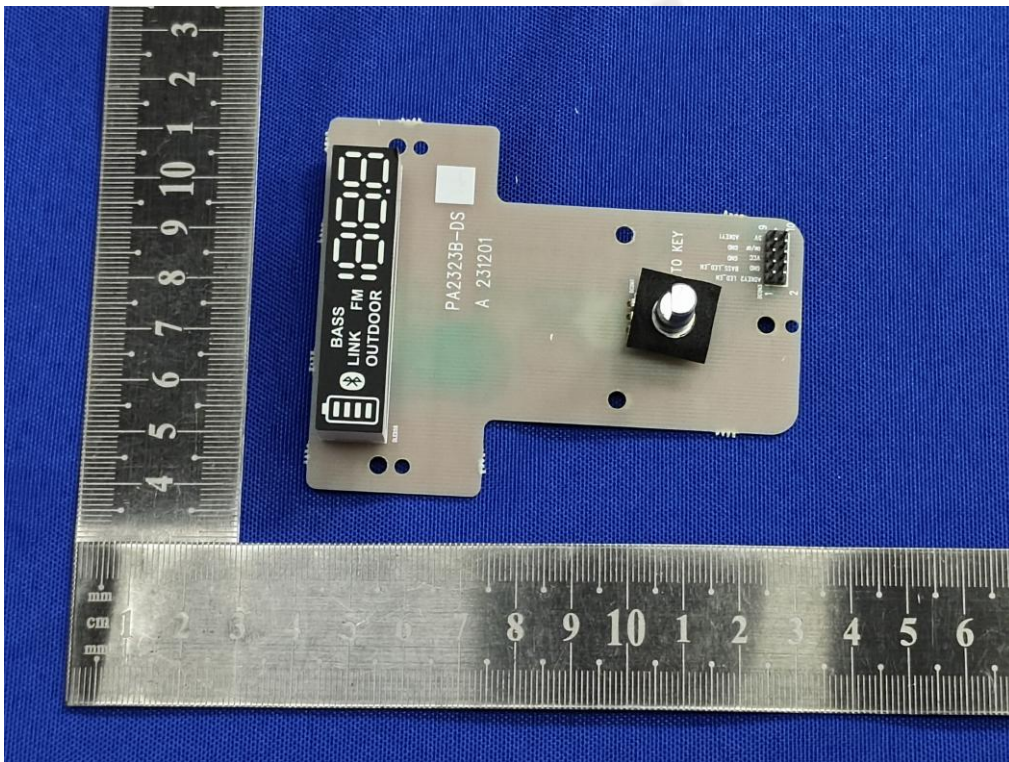
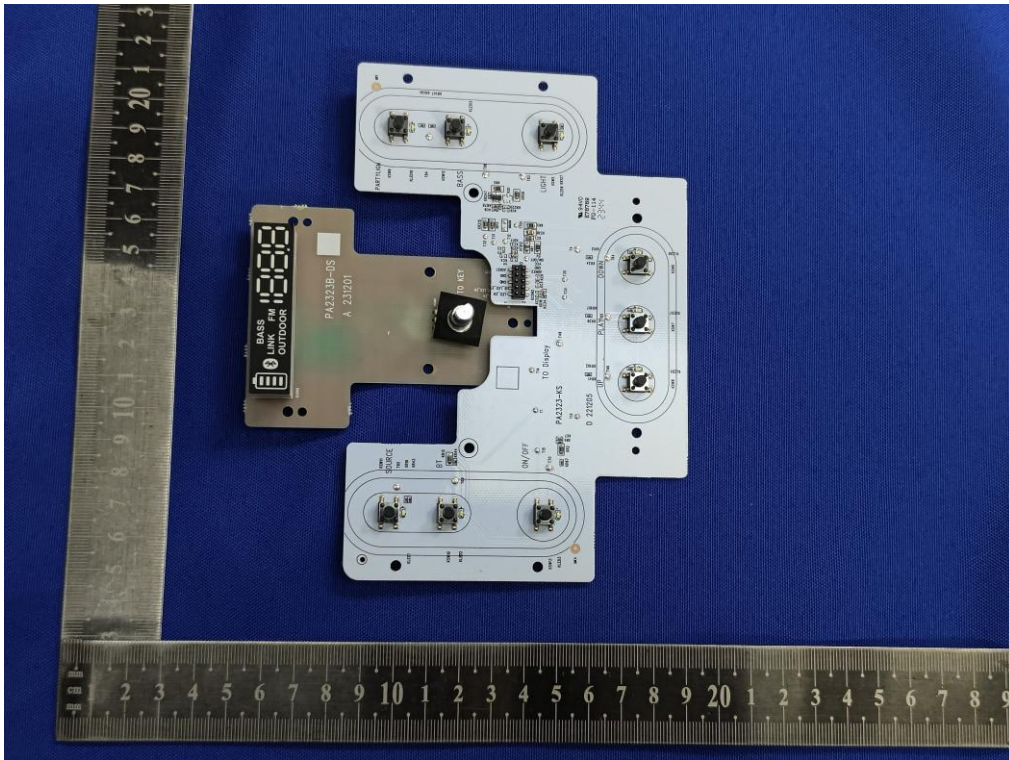


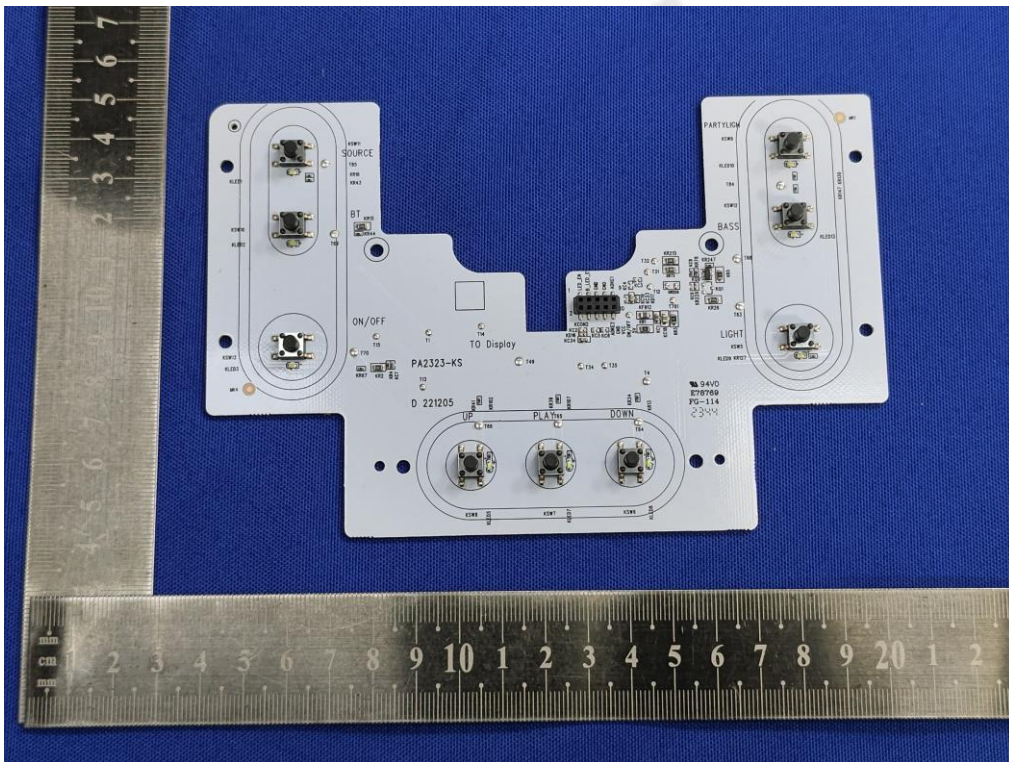
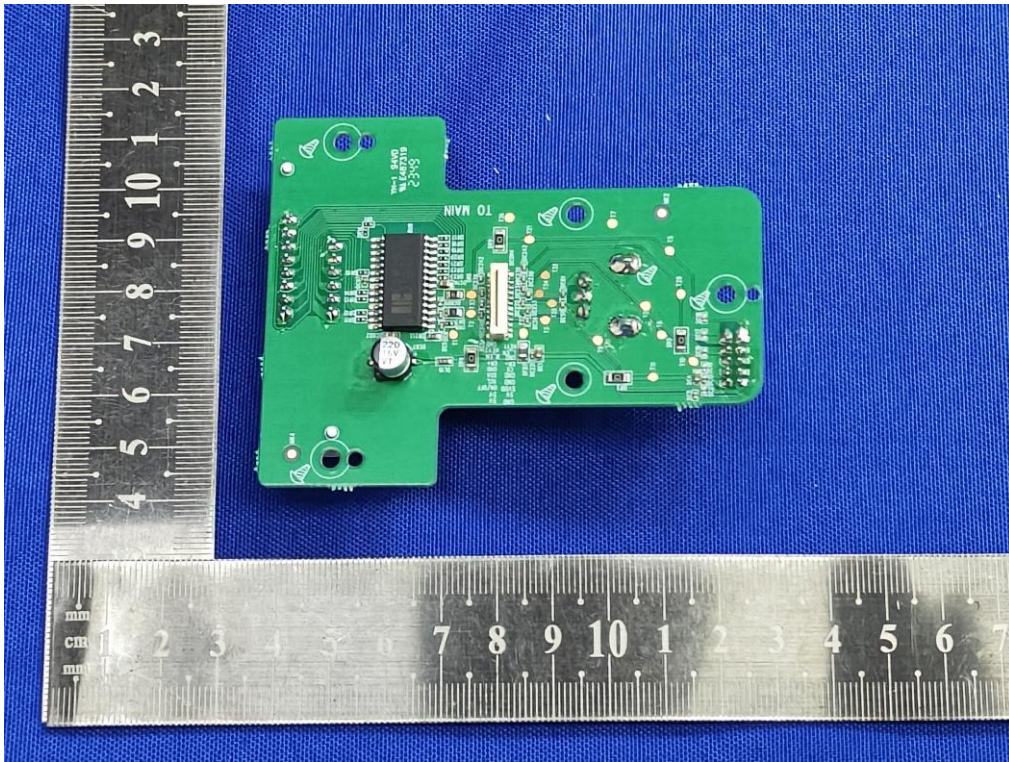




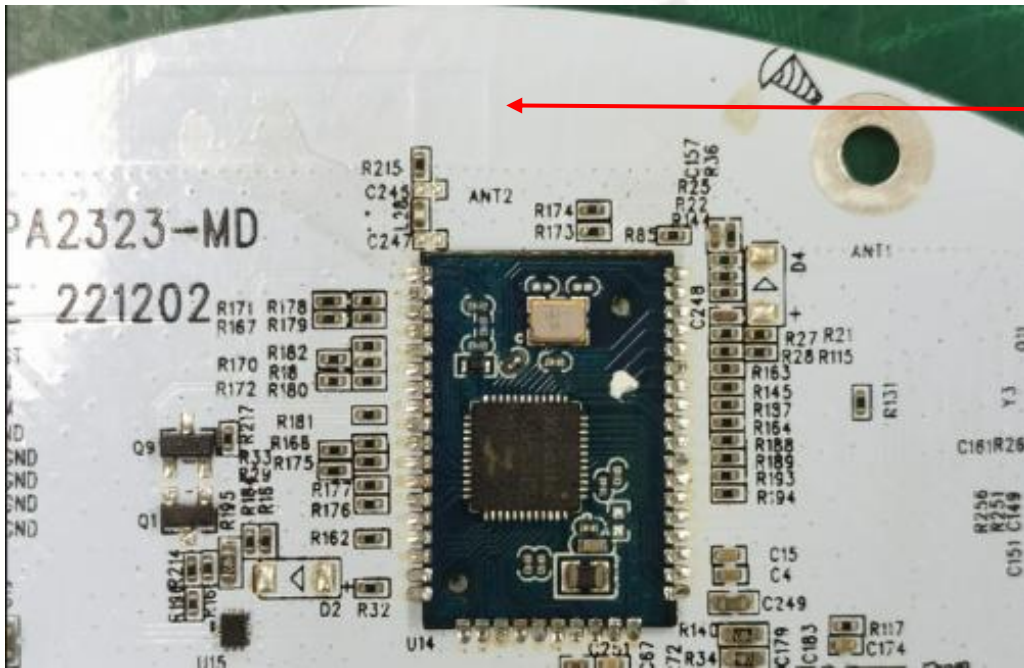
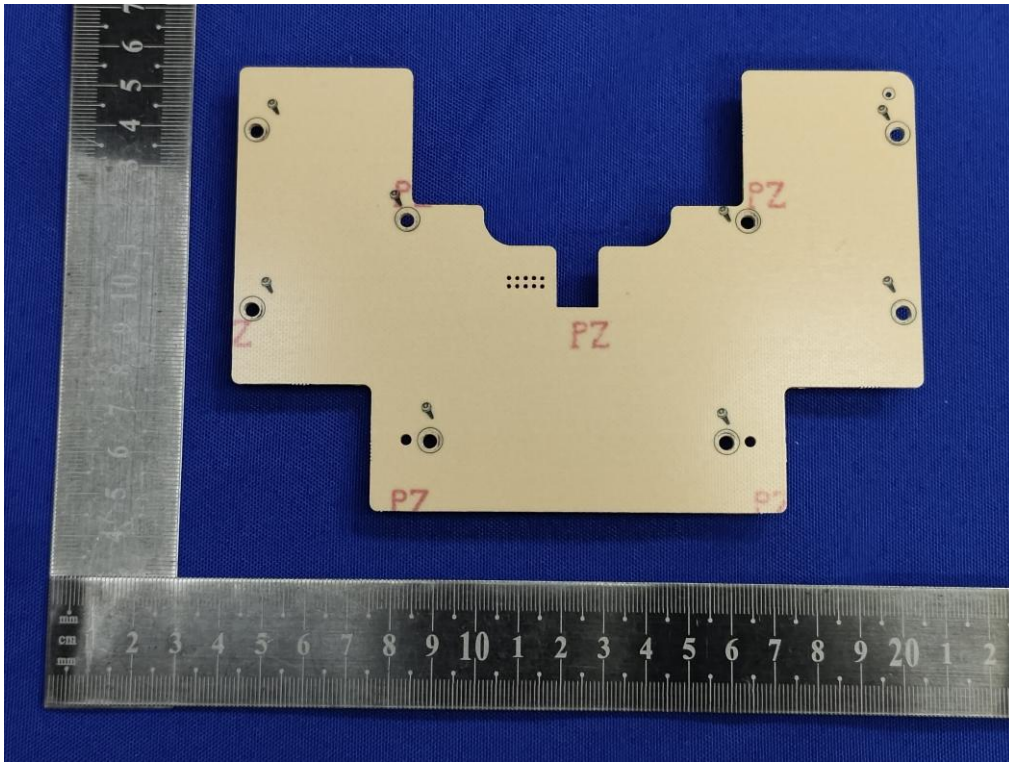












BT Antenna

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