

FCC Test Report

Test Report

On Behalf of

Shenzhen Global Flying Technology Co., Ltd

For

TPMS Tire Pressure Reset Device

Model No.: EL-50448+EL-50449

FCC ID: 2BX8U-EL-50448

Prepared For: **Shenzhen Global Flying Technology Co., Ltd**
9G, Building A, Huaqiang Plaza, Huaqiang North Street, Futian District,
Shenzhen, China

Prepared By : **Shenzhen HUAKE Testing Technology Co., Ltd.**
1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping,
Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Date of Test: **Aug. 31, 2026 ~ Sep. 14, 2026**

Date of Report: **Sep. 14, 2026**

Report Number: **HK26090300917-E**

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Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Test Result Certification

Applicant's Name : Shenzhen Global Flying Technology Co., Ltd

Address : 9G, Building A, Huaqiang Plaza, Huaqiang North Street, Futian District, Shenzhen, China

Manufacture's Name : Shenzhen Global Flying Technology Co., Ltd

Address : 9G, Building A, Huaqiang Plaza, Huaqiang North Street, Futian District, Shenzhen, China

Product Description

Trade Mark : N/A

Product Name : TPMS Tire Pressure Reset Device

Model and/or Type Reference : EL-50448+EL-50449

Standards : FCC Rules and Regulations Part 15 Subpart C (Section 15.209), ANSI C63.10: 2020

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Date of Test :

Date (s) of performance of tests : **Aug. 31, 2026 ~ Sep. 14, 2026**

Date of Issue : **Sep. 14, 2026**

Test Result : **Pass**

Testing Engineer

Len Liao

Len Liao

Technical Manager

Sliver Wan

Sliver Wan

Authorized Signatory

Jason Zhou

Jason Zhou



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HUAK TESTING

**** Issued History ****

Revision	Description	Issued Date	Remark
Revision 1.0	Initial Test Report Release	Sep. 14, 2026	Jason Zhou



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1. Test Summary

1.1 Test Procedures and Results

Description of Test	Section Number	Result
Conducted Emissions Test	15.207	N/A
Radiated Emission Test	15.209	PASS
Antenna Requirement	15.203	PASS
Note: 1. PASS: Test item meets the requirement. 2. Fail: Test item does not meet the requirement. 3. N/A: Test case does not apply to the test object. 4. The test result judgment is decided by the limit of test standard.		

1.2 Information of the Test Laboratory

Shenzhen HUAKE Testing Technology Co., Ltd.

Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

1.3 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

No.	Item	MU
1	Conducted Emission 0.15~30MHz	$\pm 2.22\text{dB}$
2	All Emissions, Radiated(<1G)	$\pm 3.60\text{dB}$
3	Temperature	$\pm 0.1^\circ\text{C}$
4	Humidity	$\pm 1.0\%$

2. General Information

2.1 General Description of EUT

Product Name:	TPMS Tire Pressure Reset Device
Model No:	EL-50448+EL-50449
Series Model(s):	N/A
Model Difference:	N/A
Trade Mark:	N/A
Antenna Type:	Coil Antenna
Antenna Gain:	-56dBi
Operation frequency:	125KHz
Number of Channels:	1
Modulation Type:	ASK
Power Supply:	DC 9V From Battery
Note: 1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. 2. Antenna gain Refer to the antenna specifications. 3. The cable loss data is obtained from the supplier. 4. The test results in the report only apply to the tested sample.	

2.2 Carrier Frequency of Channels

Operation Frequency each of channel	
Channel	Frequency
1	125KHz

2.3 Operation of EUT during testing

Operating Mode

The mode is used: Transmitting mode

2.4 Description of Test Setup

Operation of EUT during Radiation Testing:



2.5 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Trade Mark	Model Name	Specification	Remark
1	TPMS Tire Pressure Reset Device	N/A	EL-50448+EL-50449	N/A	EUT

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

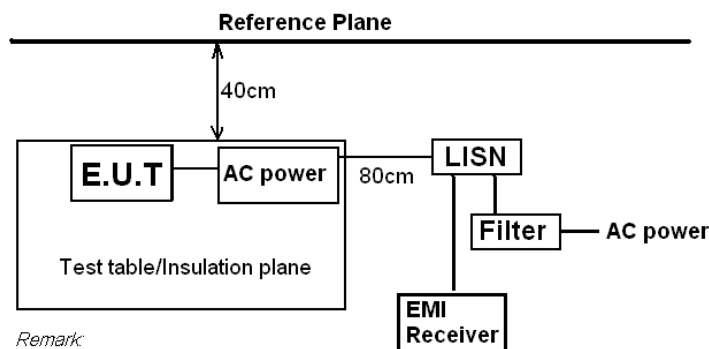
**2.6 Measurement Instruments List**

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	L.I.S.N.	R&S	ENV216	HKE-002	2026/02/11	1 Year
2	L.I.S.N.	R&S	ENV216	HKE-059	2026/02/04	1 Year
3	EMI Test Receiver	R&S	ESR-7	HKE-005	2026/02/06	1 Year
4	Spectrum analyzer	Agilent	N9020A	HKE-025	2026/02/06	1 Year
5	Spectrum analyzer	KEYSIGHT	N9020A	HKE-117	2026/02/06	1 Year
6	Spectrum analyzer	R&S	FSV3044	HKE-126	2026/02/06	1 Year
7	Preamplifier	Schwarzbeck	EMC051845SE	HKE-006	2026/02/04	1 Year
8	Preamplifier	Agilent	83051A	HKE-016	2026/02/04	1 Year
9	Preamplifier	QJD	QJD18-40-50	HKE-030	2026/02/05	1 Year
10	6dB Attenuator	Pasternack	6dB	HKE-152	2026/02/06	1 Year
11	EMI Test Receiver	R&S	ESR-7	HKE-010	2026/02/06	1 Year
12	Broadband Antenna	Schwarzbeck	VULB9168	HKE-167	2026/02/06	2 Year
13	Loop Antenna	COM-POWER	AL-130R	HKE-014	2026/02/06	2 Year
14	Horn Antenna	Schwarzbeck	9120D	HKE-013	2026/02/06	2 Year
15	Broadband Horn Antenna	A-INFO	LB-180400-KF	HKE-031	2026/02/06	2 Year
16	EMI Test Software	Tonscend	JS32-CE 2.5.0.6	HKE-081	/	/
17	EMI Test Software	Tonscend	JS32-RE 5.0.0	HKE-082	/	/
18	RF Automatic control unit	Tonscend	JS0806-2	HKE-060	2026/02/06	1 Year
19	High pass filter unit	Tonscend	JS0806-F	HKE-055	2026/02/06	1 Year
20	Wireless Communication Test Set	R&S	CMW500	HKE-027	2026/02/06	1 Year
21	High-low temperature chamber	Guangke	HT-80L	HKE-118	2026/02/06	1 Year
22	Temperature and humidity meter	Boyang	HTC-1	HKE-075	2026/03/06	1 Year
23	RF Test Software	Tonscend	JS1120-3 Version 3.6.21	HKE-083	/	/
24	10dB Attenuator	Schwarzbeck	VTSD9561F	HKE-153	2026/02/04	1 Year
25	RSE Test Software	Tonscend	JS36-RSE 5.0.0	HKE-184	/	/

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3. Conducted Emission Test

3.1 Block Diagram of Test Setup



Remark:

E.U.T: Equipment Under Test

LISN: Line Impedance Stabilization Network

Test table height=0.8m

3.2 Conducted Power Line Emission Limit

According to FCC Part 15.207(a)

Frequency (MHz)	Maximum RF Line Voltage (dBμV)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207 Line Conducted Emission Limit is same as above table.

3.3 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 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2, Support equipment, if needed, was placed as per ANSI C63.10.
- 3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4, If a EUT received DC power from the USB Port of Notebook PC, the PC's 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

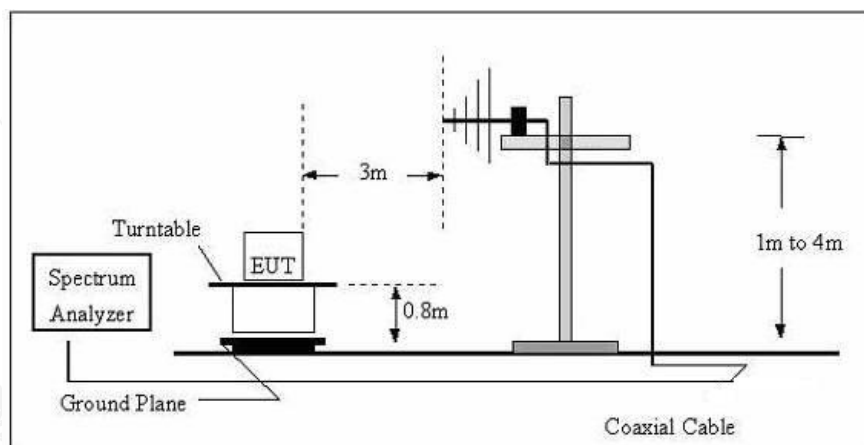
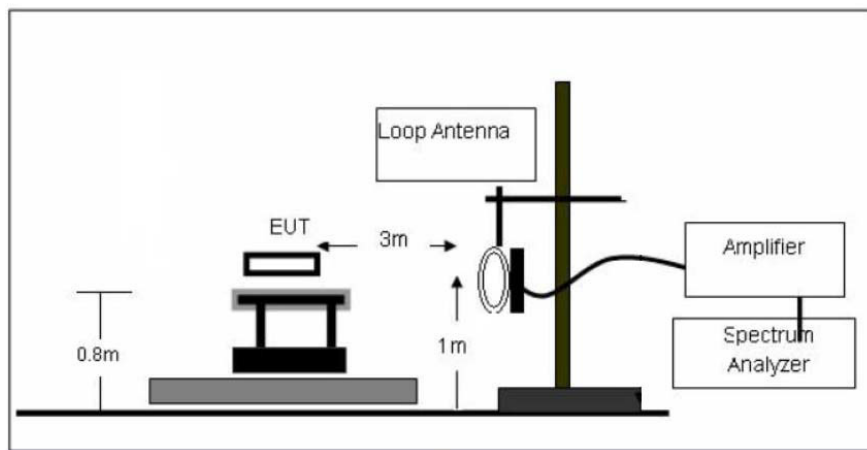
3.4. Test Result

Not applicable.

Note: EUT Power Supply by Battery Powered, so this test item not applicable.

4. Radiated Emissions

4.1 Block Diagram of Test Setup





4.2 Rules and specifications

CFR 47 Part 15, section 15.205

Only spurious emissions are permitted in any of the frequency bands listed the tables in these sections.

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

CFR 47 Part 15, section 15.209

The emissions from an intentional radiator shall not exceed the limits in the tables in these sections using an average detector

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F (kHz)	300
0.490-1.705	24000/F (kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Limit calculation and transfer to 3m distance as showed in the following table:

Frequency (MHz)	Limit (dBuV/m)	Distance (m)
0.009-0.490	$20\log(2400/F(\text{KHz}))+40\log(300/3)$	3
0.490-1.705	$20\log(24000/F(\text{KHz}))+40\log(30/3)$	3
1.705-30.0	69.5	3
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

CFR 47 Part 15, section 15.35

When average radiated emission measurements are specified, the limit on the peak level of the radio Frequency emission is 20dB above the maximum permitted average emission limit.

Transmitter Spurious Emissions 9KHz-30MHz			
	9-150KHz	150-490KHz	490KHz-30MHz
Resolution Bandwidth	200Hz	9KHz	9KHz
Detector	Peak	Peak	Peak
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep Time	Auto	Auto	Auto

4.3 Test Procedure

Measurement distance 3m

For the measurement range up to 30MHz in the following plots the field strength result from 3m Distance measurement are extrapolated to 300m and 30m distance respectively, by 40dB/decade, According to part 15.31(f)(2), per antenna factor scaling. Measurements below 1000MHz are performed with a peak detector and compared to average limits, Measurements with an average detector are not required.

Note:

For battery operated equipment, the equipment tests shall be performed using a new battery.

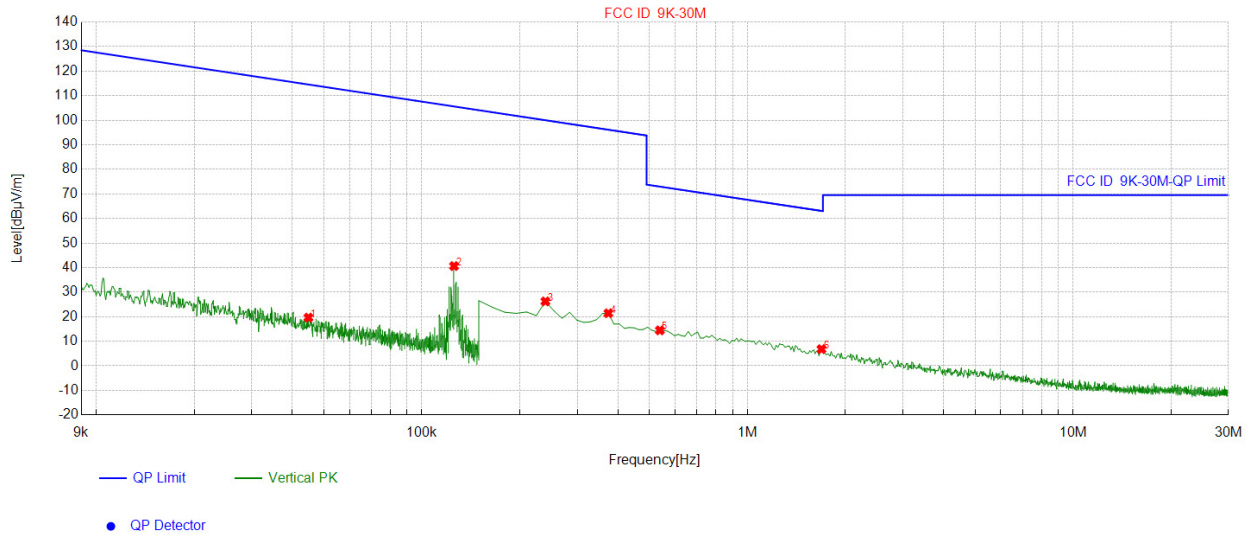


HUAKE TESTING 4.4 Test Result

PASS

Note: this EUT was tested for all models and the worst case model data was reported.

For 9KHz-30MHz



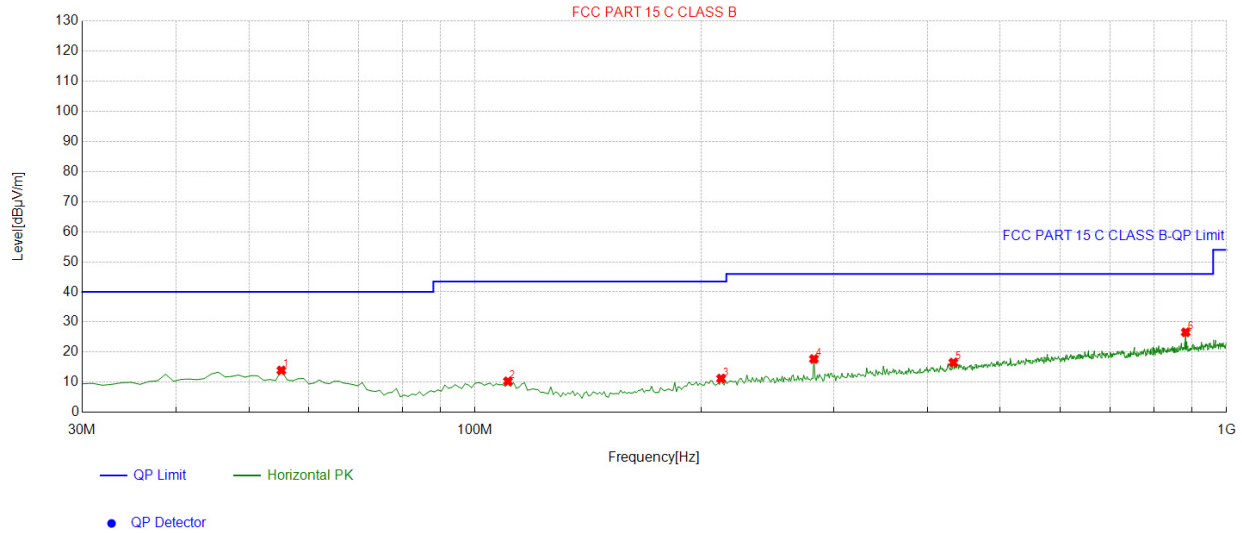
Suspected List

NO.	Freq. [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]
1	0.045	-16.76	36.40	19.64	114.56	94.92
2	0.125	-17.27	57.90	40.63	105.62	64.99
3	0.240	-18.10	44.35	26.25	100.01	73.76
4	0.374	-17.69	39.11	21.42	96.15	74.73
5	0.538	-17.47	31.93	14.46	72.99	58.53
6	1.688	-16.56	23.36	6.80	63.09	56.29

Remark: Factor = Cable loss + Antenna factor – Preamplifier; Level = Reading + Factor; Margin = Limit – Level;

For 30MHz-1GHz

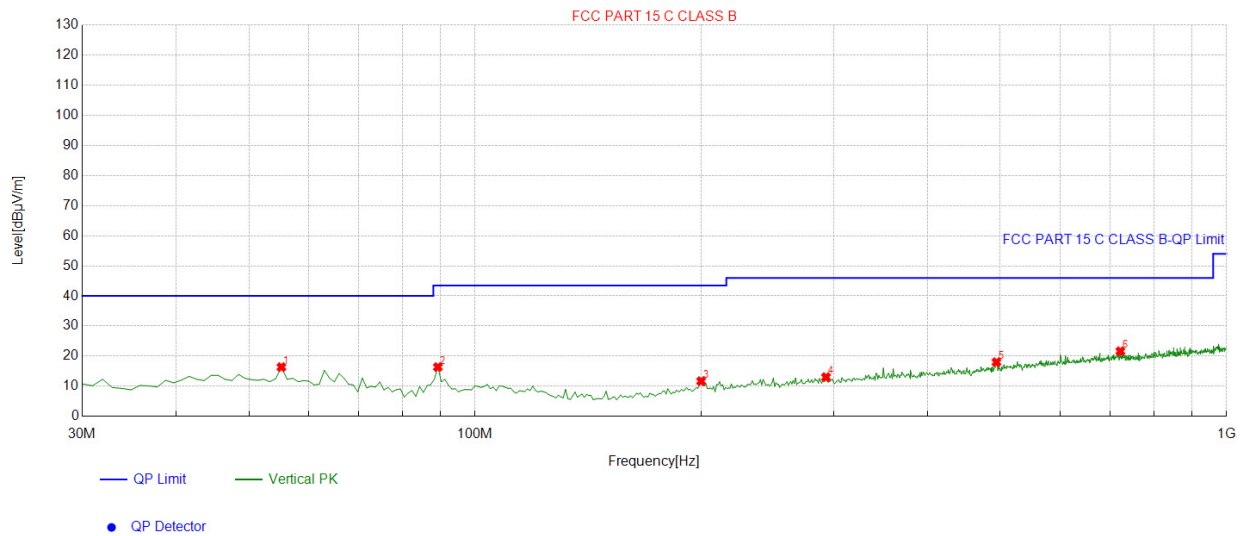
Antenna polarity: H



Suspected List									
NO.	Freq. [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	55.245	-12.25	26.21	13.96	40.00	26.04	100	88	Horizontal
2	110.591	-14.94	25.26	10.32	43.50	33.18	100	281	Horizontal
3	212.543	-14.61	25.85	11.24	43.50	32.26	100	54	Horizontal
4	282.452	-12.63	30.37	17.74	46.00	28.26	100	116	Horizontal
5	432.953	-9.22	25.78	16.56	46.00	29.44	100	68	Horizontal
6	882.513	-2.20	28.82	26.62	46.00	19.38	100	359	Horizontal

Remark: Factor = Cable loss + Antenna factor – Preamplifier; Level = Reading + Factor; Margin = Limit – Level;

Antenna polarity: V



Suspected List									
NO.	Freq. [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	55.245	-12.25	28.62	16.37	40.00	23.63	100	113	Vertical
2	89.229	-16.37	32.76	16.39	43.50	27.11	100	138	Vertical
3	199.920	-14.69	26.39	11.70	43.50	31.80	100	19	Vertical
4	293.133	-12.32	25.36	13.04	46.00	32.96	100	152	Vertical
5	494.124	-8.15	26.16	18.01	46.00	27.99	100	289	Vertical
6	722.302	-4.31	25.96	21.65	46.00	24.35	100	103	Vertical

Remark: Factor = Cable loss + Antenna factor – Preamplifier; Level = Reading + Factor; Margin = Limit – Level;

5. 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.

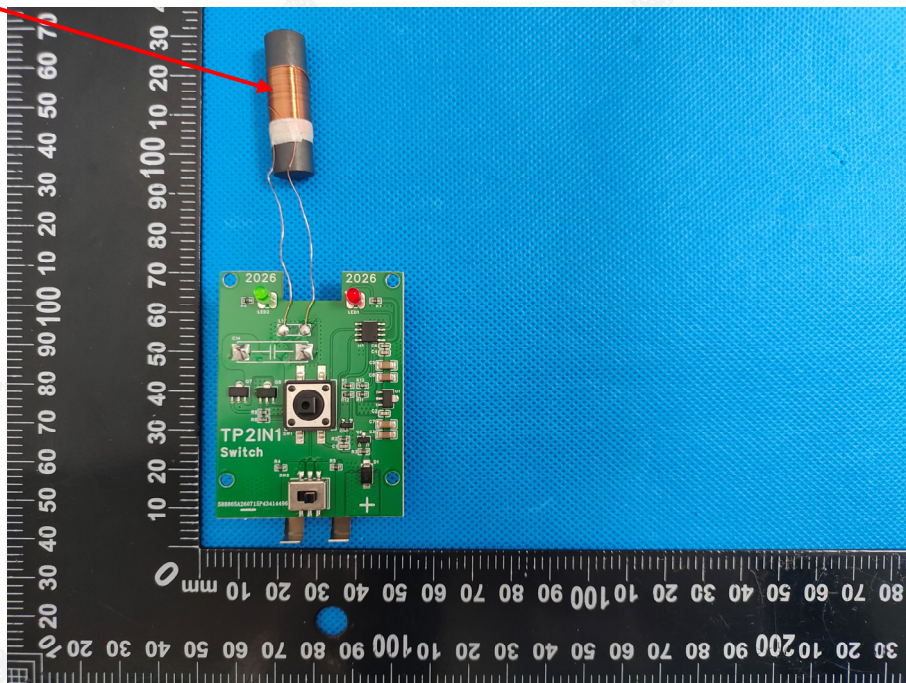
Refer to statement below for compliance.

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

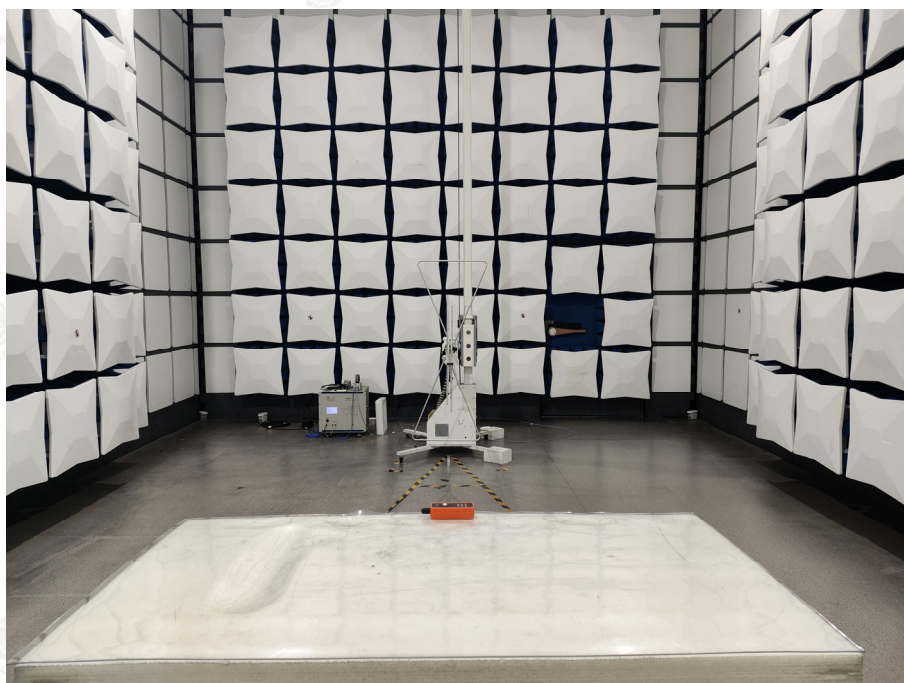
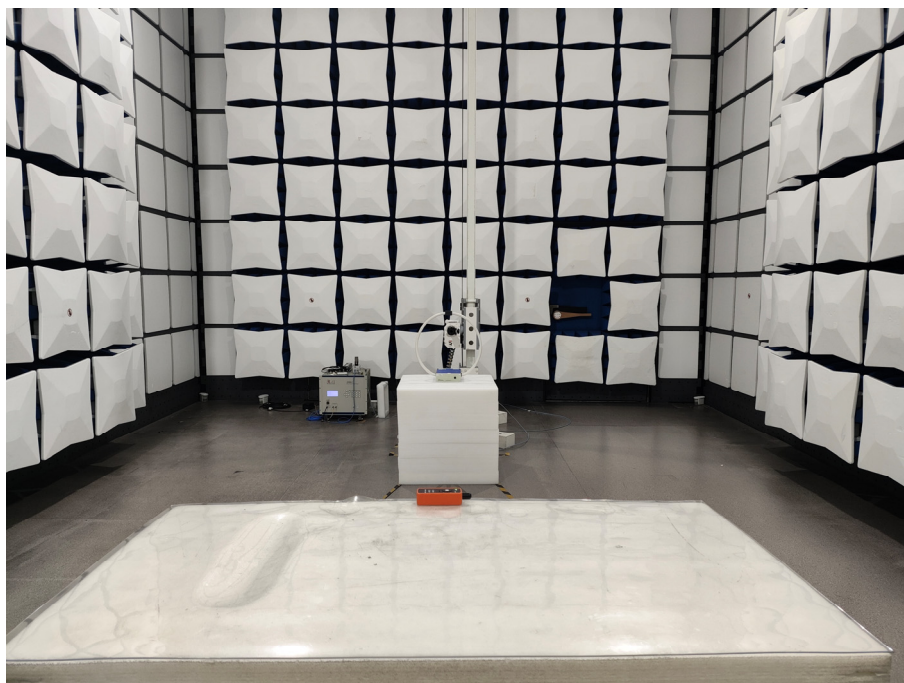
The antenna used in this product is a Coil Antenna, which permanently attached. It conforms to the standard requirements. The gain of antenna used for transmitting is -56dBi.

Antenna



6. Test Setup Photos of the EUT

Radiated Emissions



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Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

7. Photos of the EUT

Reference to the report: ANNEX A of external photos and ANNEX B of internal photos

-----End of test report-----