FCC Supplier's Declaration of Conformity (SDoC) Test Report

Shenzhen XTAR Electronics Co., Ltd

L8 BOX Battery Charging Case

Test Model: L8 BOX

Applicant's name	:	Shenzhen XTAR Electronics Co., Ltd
Address	:	5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area, Longgang District, Shenzhen, Guangdong, China
Name of testing laboratory preparing the report	:	Shenzhen Southern LCS Compliance Testing Co., Ltd.
Address	:	101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China.
Tel	:	(+86)755-29871520
Fax	:	(+86)755-29871521
Web	:	www.LCS-cert.com
Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample	:	October 17, 2025
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	October 17, 2025-October 21, 2025
Date of issue	:	October 22, 2025

FCC SDoC TEST REPORT

CFR47 FCC Part 15 Subpart B

Radio Frequency Devices - Unintentional Radiators

Testing Laboratory.....:	Shenzhen Southern LCS Compliance Testing Co., Ltd. 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China.	
Test Specification: **Standard.....:**	 CFR47 FCC Part 15 Subpart B ANSI C63.4-2014	
Equipment Under Test.....:	**L8 BOX Battery Charging Case**	
Trademark.....:	N/A	
Test Model/Type.....:	L8 BOX	
Rating.....:	Input: DC 5V, 3A Output 1: 1.2V Ni-MH 1.45V 0.5A*8 Output 2: 1.5V Li-ion 5V 0.5A*6/0.38A*8	
Test Results .....:	**PASS**	
Tested by.....:	Zom Zhang (Engineer)	Zom Zhang
Supervised by.....:	Kris Mai (Engineer)	Kris Mai
Check by.....:	Amy Liu (Technique principal)	Liu
Approved by .....:	Dm Gu (Manager)	Dmgu
Test Report Form No.....:	TRF-4-E-001 Ver. A/1	
TRF Originator.....:	Shenzhen Southern LCS Compliance Testing Co., Ltd.	
Master TRF.....:	/	

Shenzhen LCS Compliance Testing Laboratory Ltd. APPROVED

FCC SDoC - TEST REPORT

Test Report No.....:	**LCSB10165028E**

Applicant.....: Address.....: Telephone.....: Fax.....:	**Shenzhen XTAR Electronics Co., Ltd** 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area, Longgang District, Shenzhen, Guangdong, China / /
Manufacturer.....: Address.....: Telephone.....: Fax.....:	**Shenzhen XTAR Electronics Co., Ltd** 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area, Longgang District, Shenzhen, Guangdong, China / /
Factory.....: Address.....: Telephone.....: Fax.....:	**Shenzhen XTAR Electronics Co., Ltd** 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area, Longgang District, Shenzhen, Guangdong, China / /

General disclaimer:

The applicant and manufacturer information, product name, model, trademark and other information in this report are all provided by the applicant, and this laboratory is not responsible for verifying its authenticity. It is not permitted to copy extracts of these test result without the written permission of the test laboratory. The test report merely corresponds to the test sample.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the test are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. the climatic conditions during the test were in the following Limits:

Ambient temperature	10℃ - 40℃
Relative Humidity air	10% - 90%

Climate values will be recorded and recorded separately if specifically required in the base standard or application product/product series standard.

POSSIBLE TEST CASE VERDICTS

Test cases does not apply to test object	N/A
Test object does meet requirement	P(Pass) / PASS
Test object does not meet requirement	F(Fail) / FAIL
Not measured	N/M

DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

☒	Indicate that the conditions, standards or equipment listed is applicable to this report / test / EUT.
☐	Indicate that the conditions, standards or equipment listed is not applicable to this report / test / EUT.

REVISION HISTORY

Revision	Issue Date	Revision Content	Revised by
000	October 22, 2025	Initial Issue	-

Remark:
000) : “---”

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF THE ITEM(S)

Equipment Under Test	L8 BOX Battery Charging Case
Test Model/Type	L8 BOX
Additional Models/Type	--
Description of Model difference	--
Rating	Input: DC 5V, 3A Output 1: 1.2V Ni-MH 1.45V 0.5A*8 Output 2: 1.5V Li-ion 5V 0.5A*6/0.38A*8
Classification of device	☐ Class A ☒ Class B

Model List:

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1.2. OPERATING MODE(S) USED OF TESTS

During the tests, the following operating mode(s) has(have) been used.

Operating Mode	Operating Mode description	Used for testing
1	Working(DC 5V From USB Host Unit)	☒
2	Working(DC 3.7V From battery)	☐
3	HDMI	☐
4	Full load	☐
Note: Output 1.2V*4+1.5V*4		

1.3. SUPPORT / AUXILIARY EQUIPMENT FOR THE EUT

EUT has been tested using the following auxiliary equipment :

Manufacturer	Description	Model	Serial Number
Xiaomi Communication Technology Co., LTD	Power adapter	MDY-12-EF	TA62305N201981G

1.4. DESCRIPTION OF TEST FACILITY

Test Location	Shenzhen Southern LCS Compliance Testing Co., Ltd. 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China.

2. 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 LCS 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.

Measurement	Uncertainty (U_{lab})	Uncertainty (U_{cispr})
Conducted disturbance (150kHz - 30MHz)	± 2.80 dB	± 3.6 dB
Radiated disturbance (30MHz - 200MHz)	± 4.66 dB	± 5.2 dB
Radiated disturbance (200MHz - 1GHz)	± 4.64 dB	± 5.0 dB

Supplementary information:

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

3. MEASURING DEVICES AND TEST EQUIPMENT

CONDUCTED DISTURBANCE						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	No. 1 shielded Room	CHENGYU	843	/	2023-04-26	2026-04-25
2	EMI Test Receiver	R&S	ESCI	101142	2025-04-18	2026-04-17
3	10dB Attenuator	SCHWARZBECK	VTSD9561-F	9561-F159	2025-04-18	2026-04-17
4	Artificial Mains Network	SCHWARZBECK	NSLK 8127	8127716	2025-04-18	2026-04-17
5	Artificial Mains Network	SCHWARZBECK	NSLK 8163	00043	2025-04-18	2026-04-17
6	Impedance Stabilization Network	SCHWARZBECK	NTFM 8158	NTFM8158#120	2025-04-18	2026-04-17
7	Voltage Probe	SCHWARZBECK	KT 9420	9420401	2025-04-18	2026-04-17
8	EMI Test Software	EZ	EZ_EMC	N/A	/	/

RADIATED DISTURBANCE						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2024-04-28	2027-04-27
2	EMI Test Receiver	R&S	ESCI3	101010	2025-04-18	2026-04-17
3	Log-periodic Antenna	SCHWARZBECK	VULB9163	5094	2025-04-19	2026-04-18
4	EMI Test Software	EZ	EZ_EMC	N/A	/	/
5	Controller system	SKET	SKC1000	N/A	/	/

4. VERDICT SUMMARY SECTION

This chapter present an overview of the standards and results. Refer the next chapter for details of measured test results and applied test levels.

4.1. STANDARD(S)

CFR47 FCC Part 15 Subpart B - Radio frequency devices Subpart B - Unintentional radiators.

ANSI C63.4-2014 - American national standard for methods of measurement of radio noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz.

4.2. OVERVIEW OF RESULTS

EMISSION TESTS - CFR47 FCC Part 15 Subpart B		
Requirement - Test case	**Limit**	**Verdict**
Conducted Disturbance	Clause 15.107	PASS
Radiated Disturbance	Clause 15.109	PASS

Supplementary information : ---

5. EMISSION TESTS

5.1. CONDUCTED DISTURBANCE

Standard	CFR47 FCC Part 15 Subpart B
Referenced Standard(s)	ANSI C63.4-2014

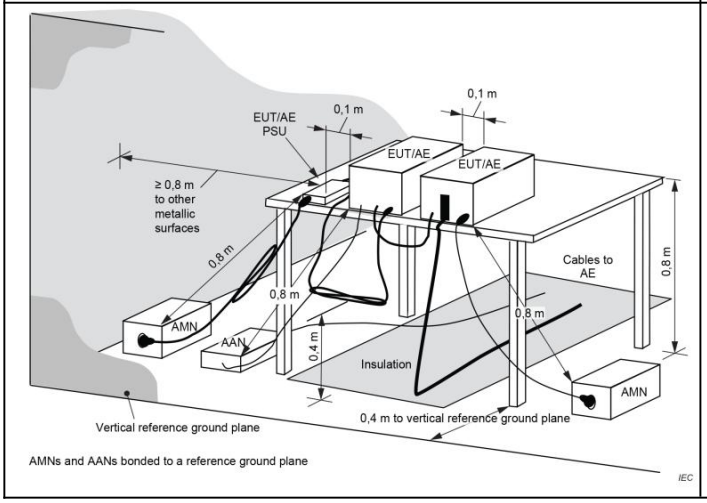
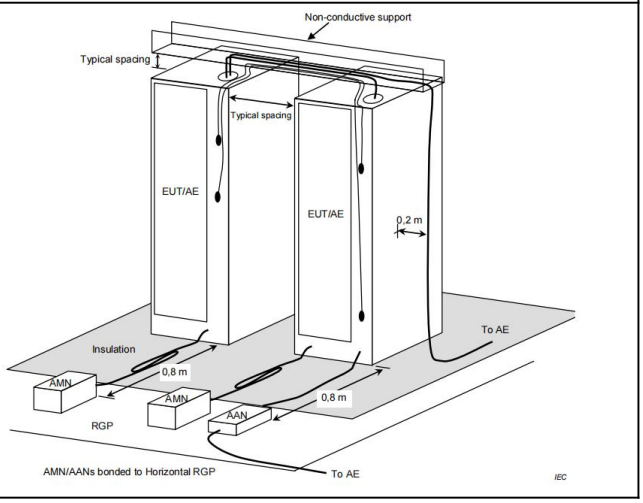
Disturbance voltage limits at AC power ports of Class B equipment

Frequency range [MHz]	Limit: Quasi-peak [dB(μV)]	Limit: Average[dB(μV)]	IF BW
0,15 - 0,5	66 - 56	56 - 46	9 kHz
0,5 - 5,0	56	46	
5,0 - 30	60	50	
1) At the transition frequency, the lower limit applies.			

Disturbance voltage limits at AC power ports of Class A equipment

Frequency range [MHz]	Limit: Quasi-peak [dB(μV)]	Limit: Average[dB(μV)]	IF BW
0,15 - 0,5	79	66	9 kHz
0,5 - 30	73	60	
1) At the transition frequency, the lower limit applies.			

Test configuration

Test Setup for table-top	Test Setup for Floor standing
	

Test Procedure Description

For Table-top, EUT shall be placed at (0,8 ± 0,05) m above the reference plane of the test site selected for measurement. for Floor standing, EUT shall be placed at (0,12 ± 0,04) m above the reference plane of the test site selected for measurement.and connected to the AC mains through artificial mains network (LISN). EUT is powered by V-type artificial power network,and the distance from LISN or is 0,8m. the part of the EUT power cord exceeding 0,8m folds in parallel to form a 0,3-0,4 m eights harness.

Test Results refer to Annex A.1

5.2. RADIATED DISTURBANCE

Standard	CFR47 FCC Part 15 Subpart B
Referenced Standard(s)	ANSI C63.4-2014
Test method	Semi Anechoic Chamber (SAC)

SAC Radiated disturbance limit for Class B equipment (3 m distance)

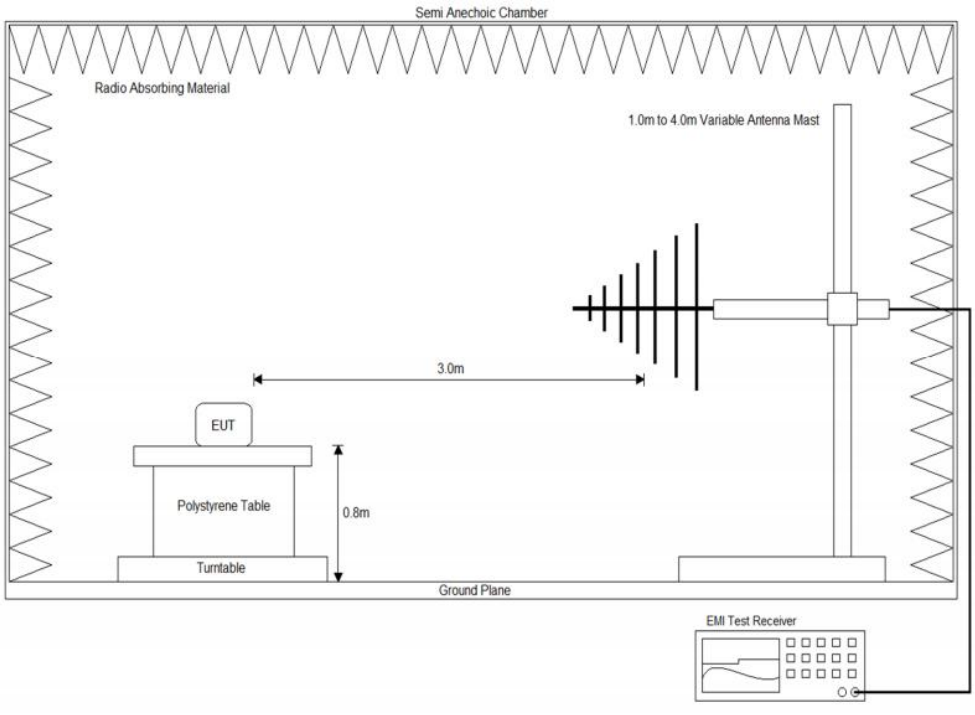
Frequency range [MHz]	Limit: Quasi-peak		IF BW
	[μV/m]	[dB(μV/m)]	
30 - 88	100	40	120 KHz
88 - 216	150	43.5	
216 - 960	200	46	
960 - 1000	500	54	

SAC Radiated disturbance limit for Class A equipment (10 m distance)

Frequency range [MHz]	Limit: Quasi-peak		IF BW
	[μV/m]	[dB(μV/m)]	
30 - 88	90	39	120 KHz
88 - 216	150	43.5	
216 - 960	210	46.5	
960 - 1000	300	49.5	

1) At the transition frequency, the lower limit applies.
2) Emission level (dB)μV = 20 log Emission level μV/m.

Test configuration



Test Procedure Description

Radiated Emissions were measured 3 metres away from the EUT in the Semi Anechoic Chamber facility, which is an ANSI C63.4 compliant semi-anechoic chamber with ground plane. The EUT was placed on a non-conductive table, at a height of 0.8m above the ground plane. the turntable can rotate 360 degrees to determine the position of the maximum emission level. the EUT is set 3 meters away from the receiving antenna, which is mounted on an antenna tower. the antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Log-periodic antenna or horn antenna is used as a receiving antenna. both horizontal and vertical polarization of the antenna is set on test.

Test Results refer to Annex A.2

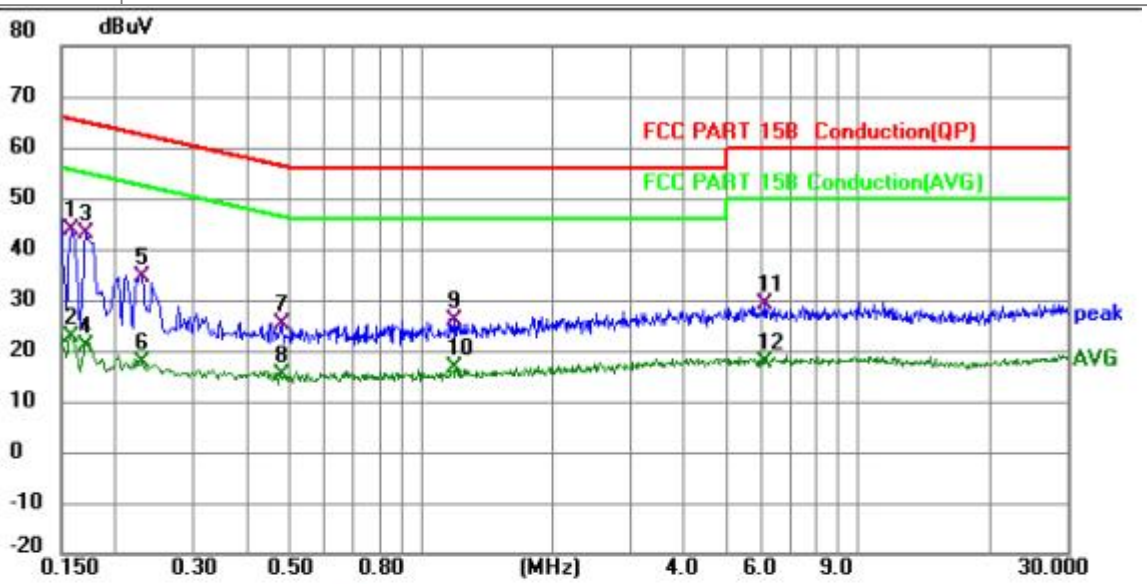
ANNEX A - TEST RESULTS

A.1. CONDUCTED DISTURBANCE TEST RESULTS

This Test Environment Conditions: 22.7℃, 53.7%RH

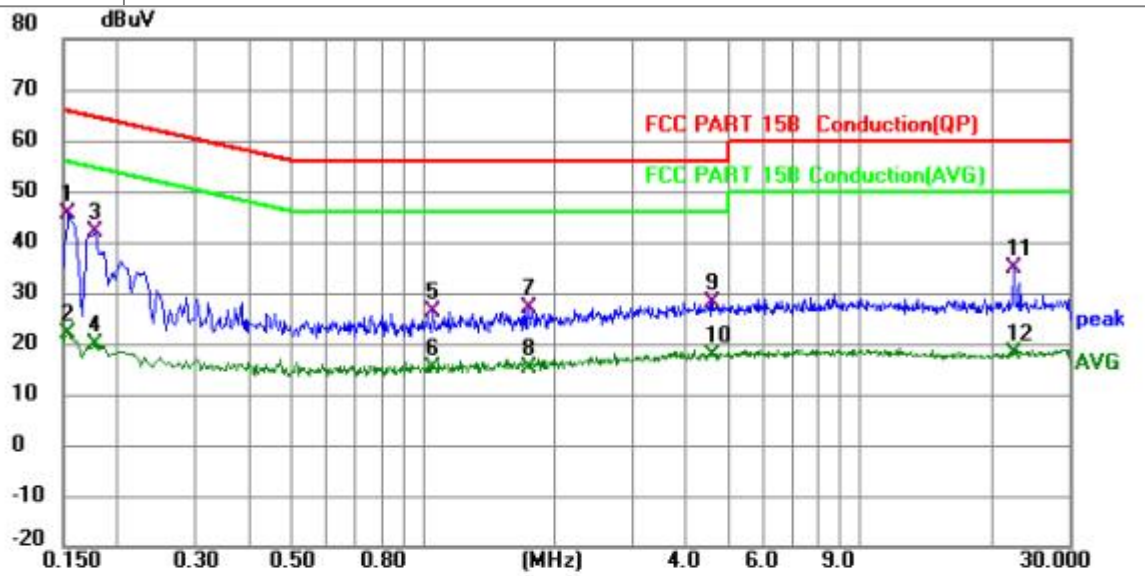
M/N: L8 BOX
Input voltage: DC 5V From USB Host Unit
Operating mode: Mode 1

Pol:	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1580	23.35	20.31	43.66	65.57	-21.91	QP	
2		0.1580	2.22	20.31	22.53	55.57	-33.04	AVG	
3		0.1700	22.69	20.32	43.01	64.96	-21.95	QP	
4		0.1700	0.47	20.32	20.79	54.96	-34.17	AVG	
5		0.2300	14.28	20.34	34.62	62.45	-27.83	QP	
6		0.2300	-2.79	20.34	17.55	52.45	-34.90	AVG	
7		0.4780	5.10	20.14	25.24	56.37	-31.13	QP	
8		0.4780	-5.11	20.14	15.03	46.37	-31.34	AVG	
9		1.1900	5.58	20.48	26.06	56.00	-29.94	QP	
10		1.1900	-4.05	20.48	16.43	46.00	-29.57	AVG	
11		6.1100	8.55	20.51	29.06	60.00	-30.94	QP	
12		6.1100	-2.94	20.51	17.57	50.00	-32.43	AVG	

Pol:	Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1539	25.13	20.32	45.45	65.79	-20.34	QP	
2		0.1539	1.50	20.32	21.82	55.79	-33.97	AVG	
3		0.1780	21.72	20.33	42.05	64.58	-22.53	QP	
4		0.1780	-0.67	20.33	19.66	54.58	-34.92	AVG	
5		1.0540	5.96	20.46	26.42	56.00	-29.58	QP	
6		1.0540	-5.31	20.46	15.15	46.00	-30.85	AVG	
7		1.7460	6.63	20.51	27.14	56.00	-28.86	QP	
8		1.7460	-5.22	20.51	15.29	46.00	-30.71	AVG	
9		4.5820	7.52	20.53	28.05	56.00	-27.95	QP	
10		4.5820	-2.85	20.53	17.68	46.00	-28.32	AVG	
11		22.4340	13.93	20.82	34.75	60.00	-25.25	QP	
12		22.4340	-2.96	20.82	17.86	50.00	-32.14	AVG	

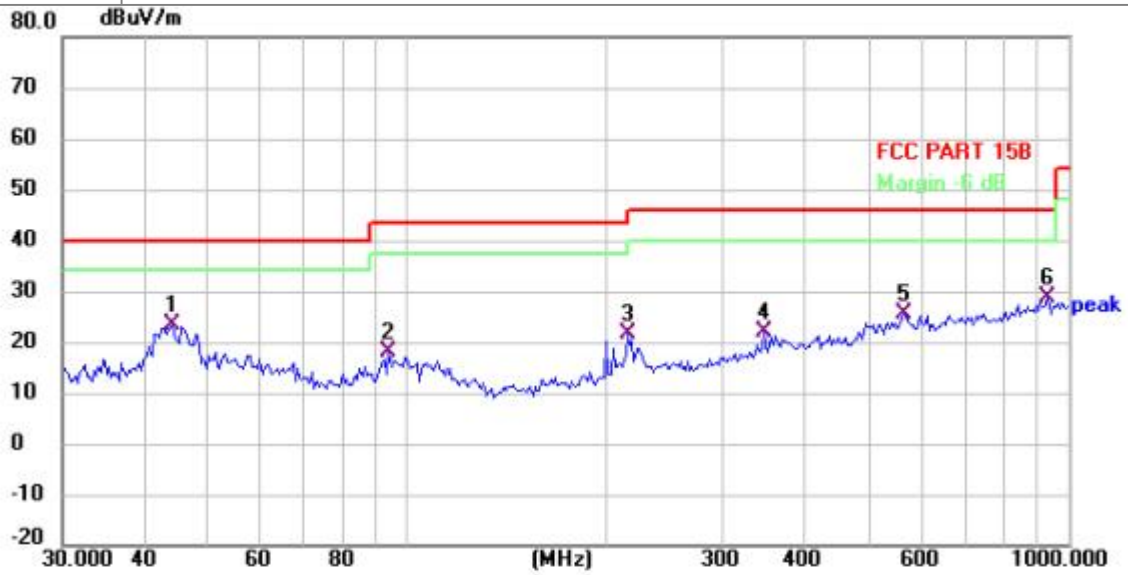
Remark:
Level=Reading Level + Correction Factor
Correction Factor=Cable Loss + LISN Factor
(The Reading Level is recorded by software which is not shown in the sheet)

A.2. RADIATED DISTURBANCE TEST RESULTS

This Test Environment Conditions: 23.6℃, 52.3%RH

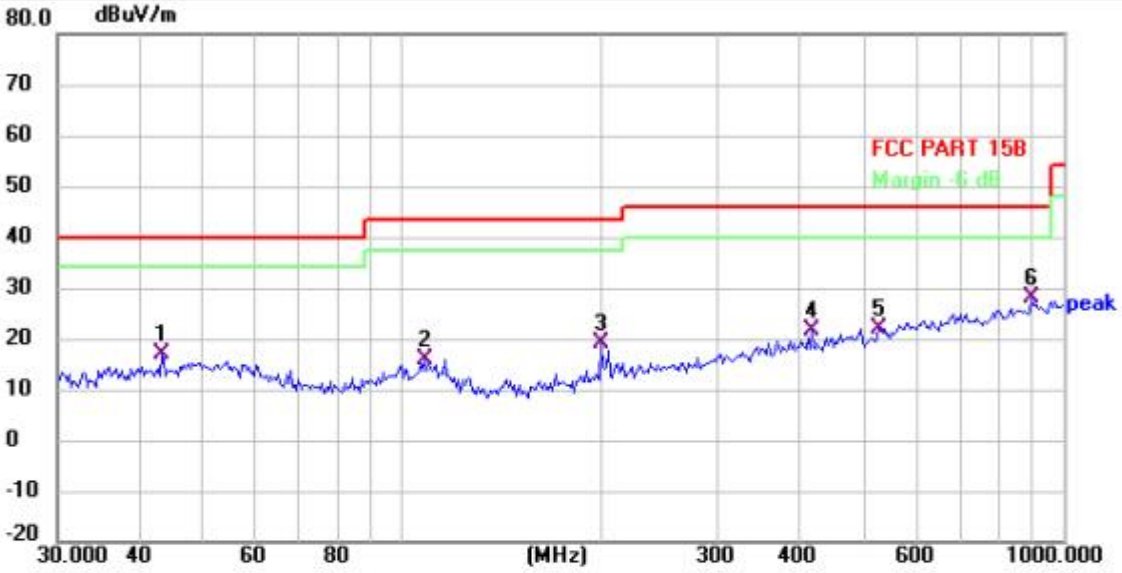
M/N: L8 BOX
Input voltage: DC 5V From USB Host Unit
Operating mode: Mode 1

Pol:	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	44.120	34.04	-10.76	23.28	40.00	-16.72	QP	
2		93.440	31.41	-13.33	18.08	43.50	-25.42	QP	
3		215.268	33.81	-12.33	21.48	43.50	-22.02	QP	
4		346.809	30.55	-8.69	21.86	46.00	-24.14	QP	
5		562.662	31.18	-5.47	25.71	46.00	-20.29	QP	
6		932.272	29.99	-1.16	28.83	46.00	-17.17	QP	

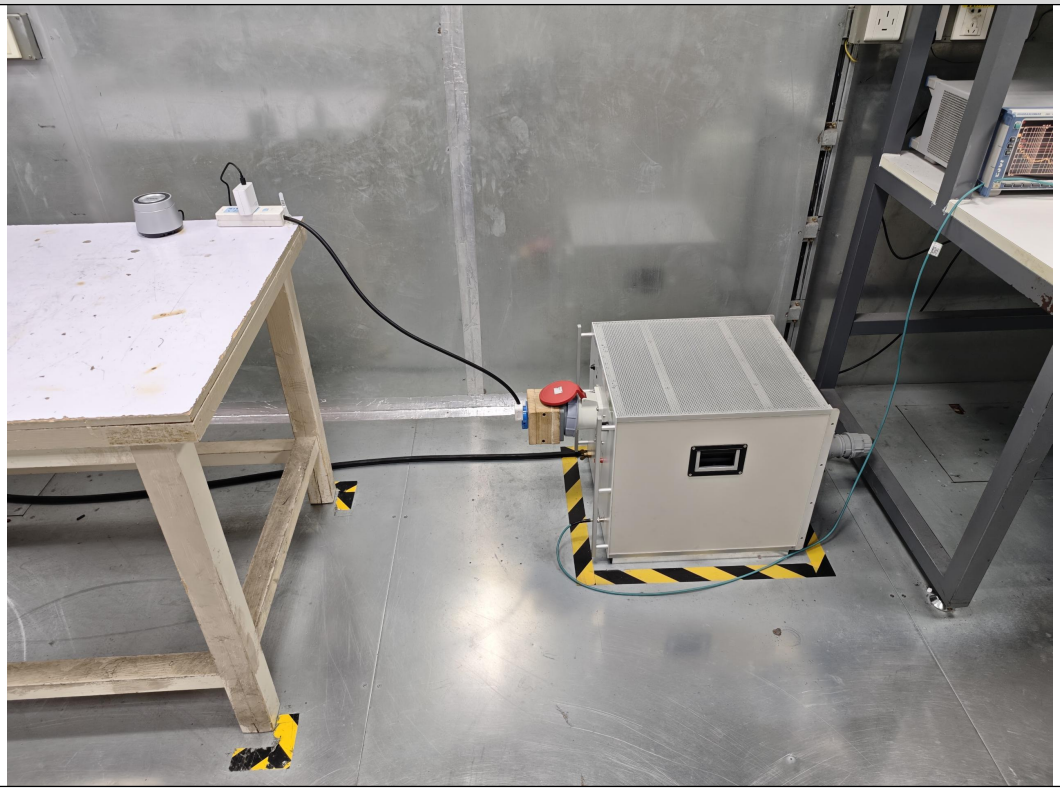
Pol:	Horizontal



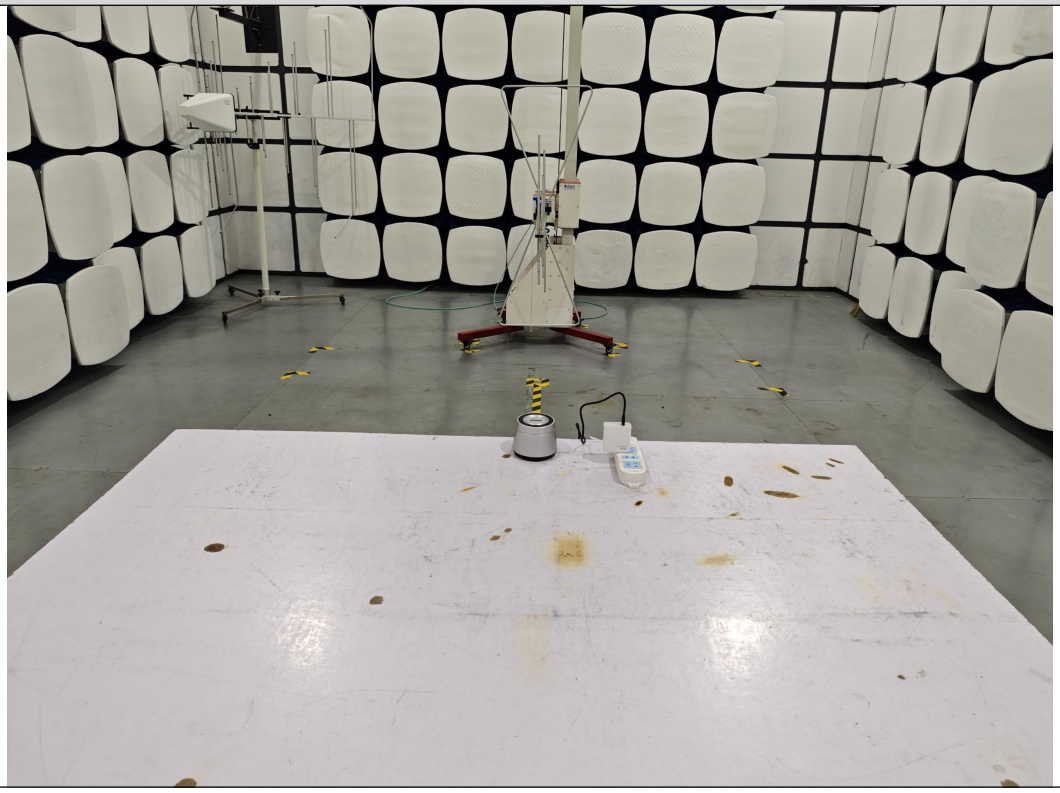
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		43.202	27.77	-10.94	16.83	40.00	-23.17	QP	
2		108.267	27.25	-11.36	15.89	43.50	-27.61	QP	
3		199.286	32.53	-13.38	19.15	43.50	-24.35	QP	
4		416.179	29.26	-7.64	21.62	46.00	-24.38	QP	
5		524.554	28.08	-6.02	22.06	46.00	-23.94	QP	
6	*	893.857	29.49	-1.28	28.21	46.00	-17.79	QP	

ANNEX B - TEST PHOTOS

B.1. Conducted Disturbance



B.2. Radiated Disturbance



ANNEX C - EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Fig. 1

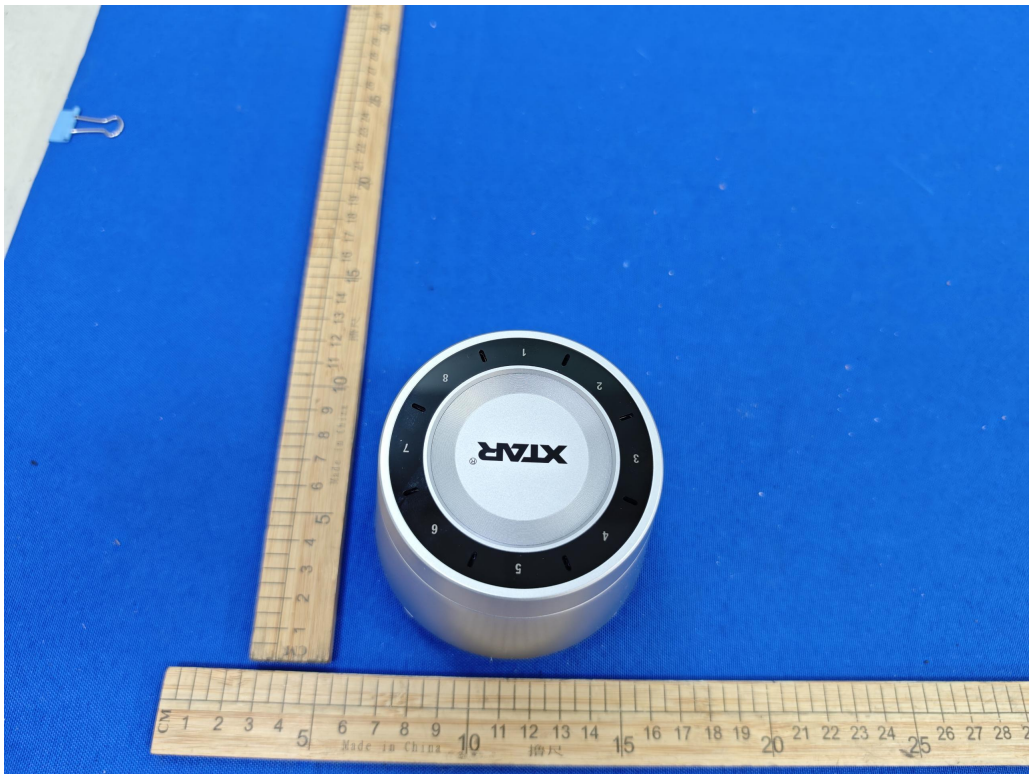


Fig. 2

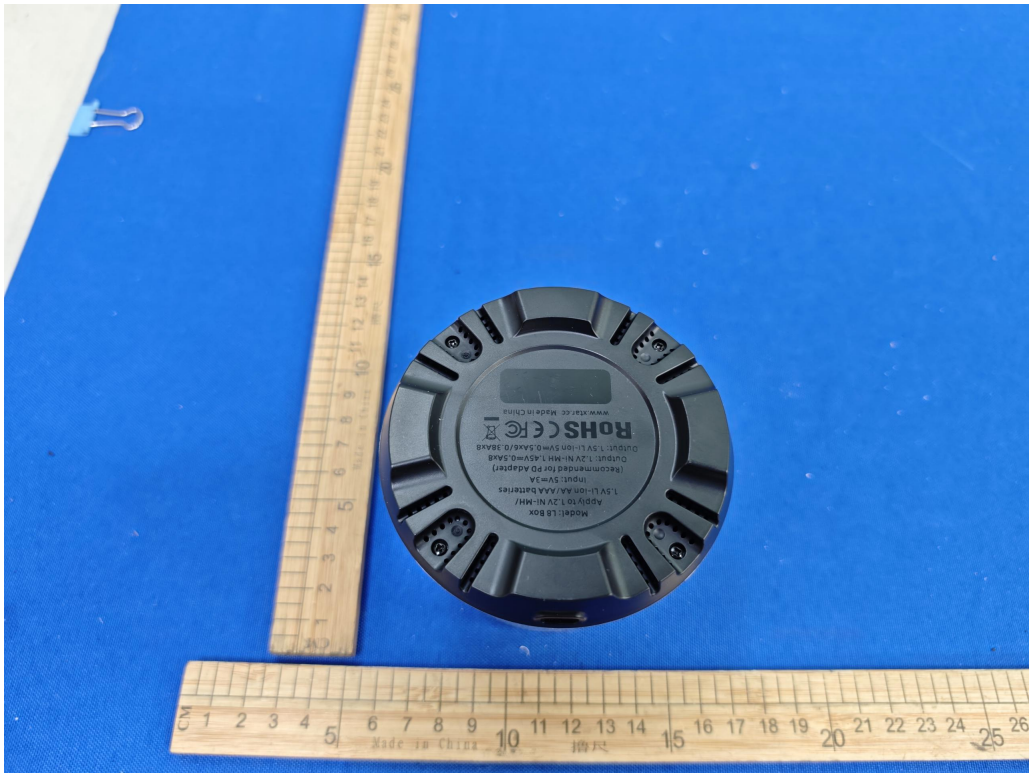


Fig. 3

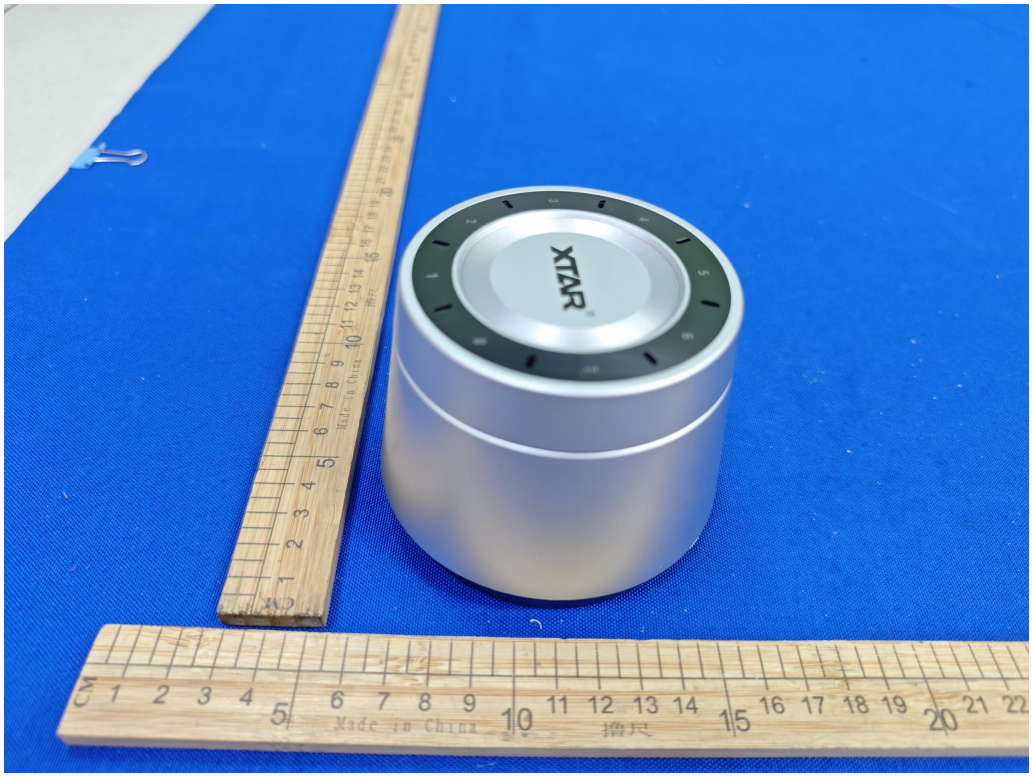


Fig. 4


Model: L8 Box
Apply to 1.2V Ni-MH/
1.5V Li-ion AA/AAA batteries
Input: 5V⎓3A
(Recommended for PD Adapter)
Output: 1.2V Ni-MH 1.45V⎓0.5Ax8
Output: 1.5V Li-ion 5V⎓0.5Ax6/0.38Ax8
RoHS
www.xtar.cc Made in China

Fig. 5

Fig. 6

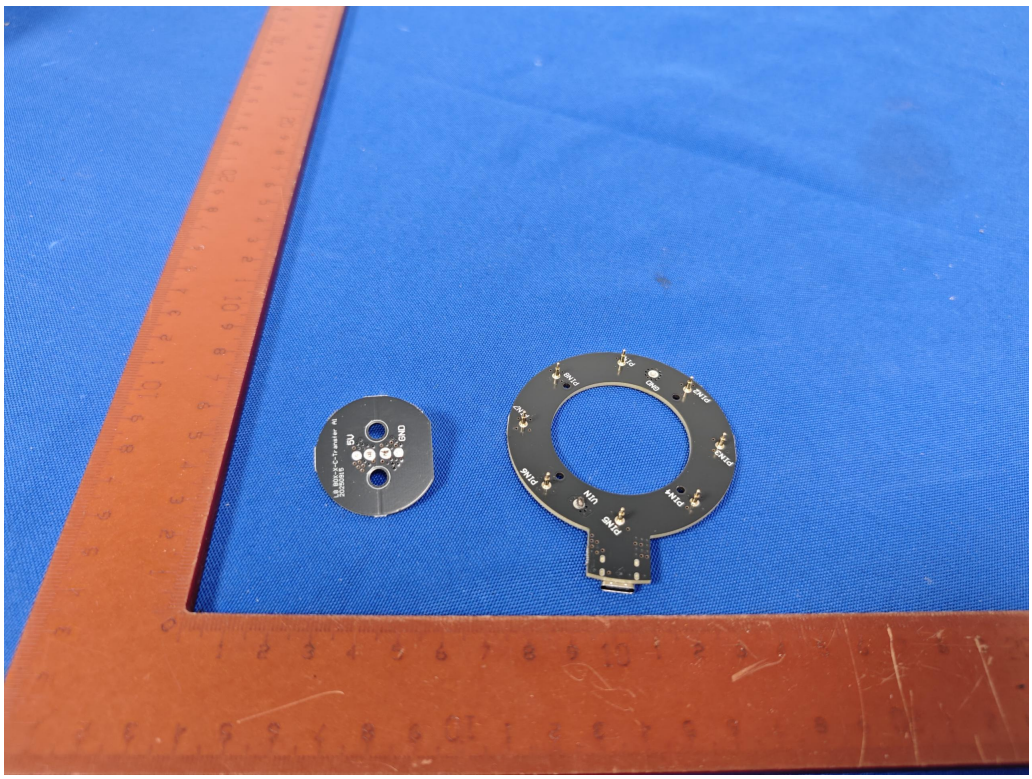


Fig. 7

Fig. 8

Fig. 9

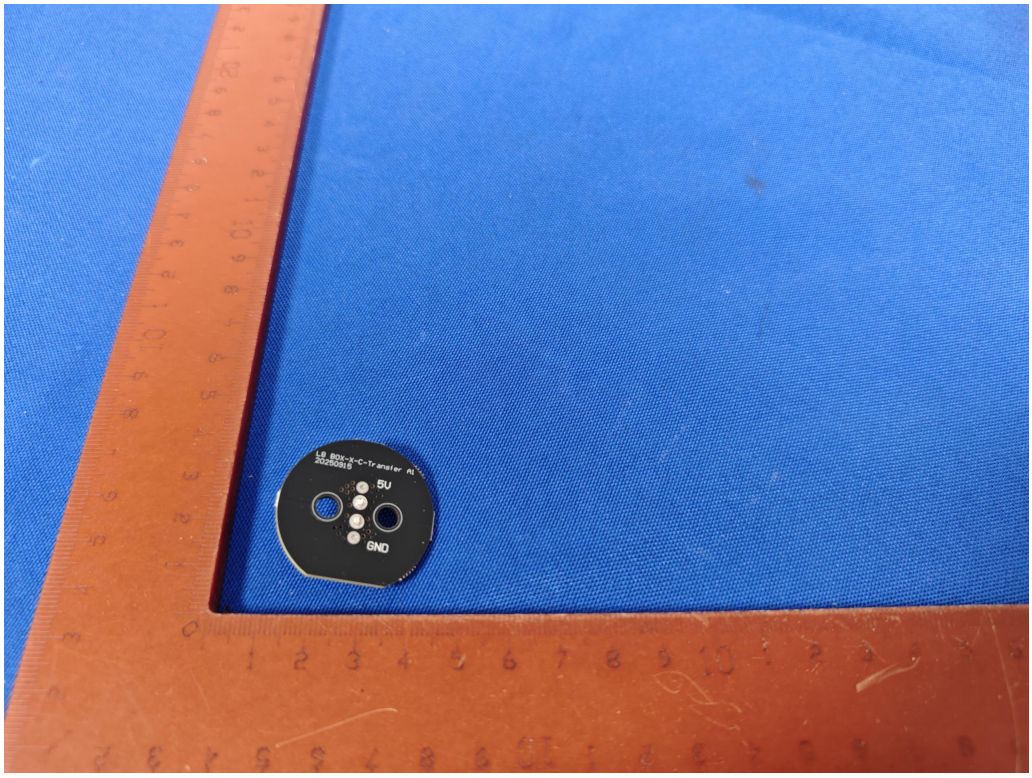


Fig. 10

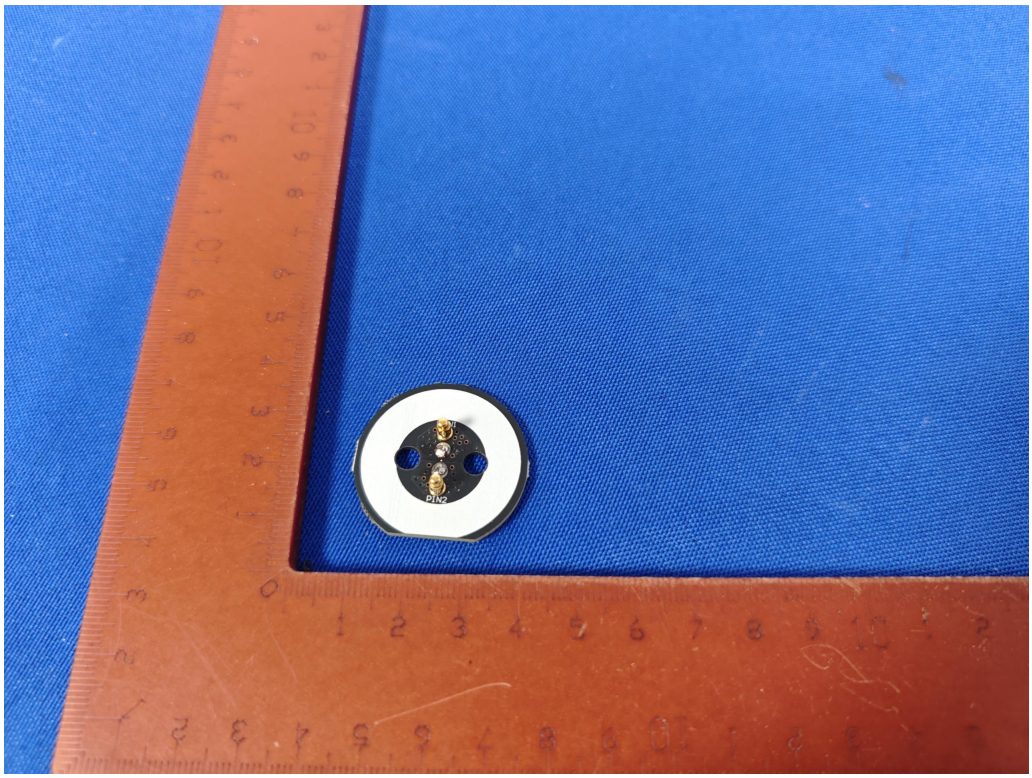


Fig. 11

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