TEST REPORT

Report No.:	BCTC2507284395E
Applicant:	Shenzhenshi weiduli Technology Co.,Ltd.
Product Name:	Ai mobile power bank
Test Model:	Ai1
Tested Date:	2025-07-25 to 2025-08-13
Issued Date:	2025-08-13

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2A48S-AI1

Product Name:	Ai mobile power bank
Trademark:	N/A
Model/Type Reference:	Ai1 BFPB4
Prepared For:	Shenzhenshi weiduli Technology Co.,Ltd.
Address:	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China
Manufacturer:	Shenzhenshi weiduli Technology Co.,Ltd.
Address:	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date:	2025-07-25
Sample Tested Date:	2025-07-25 to 2025-08-13
Issue Date:	2025-08-13
Report No.:	BCTC2507284395E
Test Standards:	FCC CFR 47 part1, 1.1307(b), 1.1310 FCC CFR 47 part2, 2.1091 KDB680106 D01v04: RF Exposure Wireless Charging Apps v04
Test Results:	PASS

Tested by:

Shanshan. Zhang / Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp.This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full.The tested sample(s) and the sample information are provided by the client.

Table Of Content

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2507284395E	2025-08-13	Original	Valid

2. Product Information

2.1 Product Information

Model/Type Reference:	Ai1 BFPB4
Model Differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	N/A
Software Version:	N/A
Modulation:	ASK
Operation Frequency:	111kHz-205kHz
Antenna installation:	loop coil antenna
Ratings:	Input: DC 5V/3A, DC9V/2A Output: DC 5V/3A, DC9V/2.22A, DC 12V/1.67A Wireless charger: 5W/7.5W/10W/15W

2.2 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	ADAPTER	UGREEN	CD122	---	---
E-2	Dummy Load	---	---	---	---

Notes:
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.

2.3 Test Mode

Mobile:

Test Mode	Description of Mode
1	Charging+Full Load(5W)
2	Charging+Half Load(2.5W)
3	Charging+Null Load

Portable:

Test Mode	Description of Mode
4	Full Load(15W)
5	Half Load(7.5W)
6	Null Load

Note:
1. All test mode were tested and passed, only shows the worst case mode which were recorded in this report.
2. When the EUT is in charging mode, the wireless output only support 5W.

3. Test Facility And Test Instrument Used

3.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.
FCC Test Firm Registration Number: 712850
A2LA certificate registration number is: CN1212
ISED Registered No.: 23583
ISED CAB identifier: CN0017

3.2 Test Instrument Used

EMF Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Magnetic Amplitude and Gradient Probe System	Schmid & Partner Engineering AG	MAGPy -8H3D+E3D V2	3077	2024-12-11	2025-12-10
Magnetic Amplitude and Gradient Probe System	Schmid & Partner Engineering AG	MAGPy-DAS V2	3066	2024-12-11	2025-12-10
Software	Schmid & Partner Engineering AG	MAGPy 2.8	2.8.1	/	/

MAGPy probe information:
Magnetic Amplitude and Gradient Probe System of probe MAGPy-8H3D+E3D V2 consists of eight isotropic H-field subprobes and one isotropic E-field subprobe that are all integrated inside the probe head with a flat tip. Each isotropic H-field subprobe comprises three concentric orthogonal loop coil sensors. The isotropic E-field subprobe is composed of three orthogonal sensors (x and y sensors are dipoles and the sensor measuring the z component is a monopole). In total, the MAGPy-8H3D+E3D V2 probe is thus composed of nine subprobes and 27 single sensors that measure in the time-domain. The flat-tip probe design brings the sensors closer to the tip (e.g., the closest H-field sensors are now 7.5mm from the tip).

The probe specifications are provided in Table 2.1.

Parameter	Specs
PROBE DESIGN	
Diameter	60 mm
8 isotropic H-field sensors	concentric loops of 1 cm^2 arranged at the corner of a cube of 22 mm side length
1 isotropic E-field sensor	orthogonal dipole/monopole (arm length: 50 mm)
Measurement center	18.5 mm from the probe tip
Temperature range	0–40 °C
Dimensions	110 × 635 × 35 mm (MAGPy-8H3D+E3D V2 & MAGPy-DAS V2)
H-FIELD SPECIFICATION	
Frequency range	3 kHz–10 MHz
Measurement range	0.1–3200 A/m, 0.12 µT–4 mT
Gradient range	0–80 T/m/T
E-FIELD SPECIFICATION	
Frequency range	3 kHz–10 MHz
Measurement range	0.08–2000 V/m

Table 2.1: MAGPy-8H3D+E3D V2 probe specifications

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI)

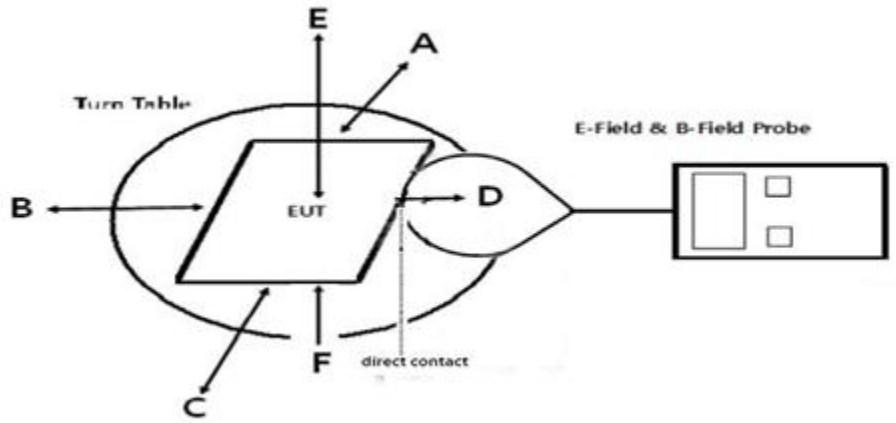
4. Method Of Measurement

4.1 Applicable Standard

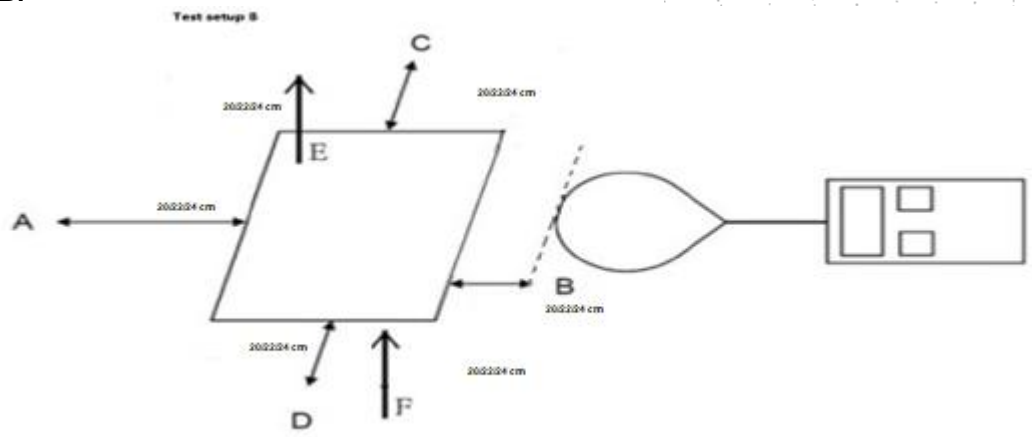
According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. According to §1.1310 and §2.1091 RF exposure is calculated. According KDB680106 D01v04: RF Exposure Wireless Charging Apps v04.

4.2 Block Diagram Of Test Setup

A:



B:



4.3 Limit

Limits for Occupational / Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time |E|²,|H|² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

Limits for General Population / Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time |E|²,|H|² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180 / f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1	30

4.4 Test procedure

a)The RF exposure test was performed in anechoic chamber.
b) Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm, starting from as close as possible out to 20 cm for test setup A(Portable);
and the measurement Probe was placed at 20/22/24 cm for the test setup B(Mobile).
c)The highest emission level was recorded and compared with limit as soon as measurement of each
d)The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E, F) were completed.
d)The EUT was measured according to the dictates of KDB680106 D01v04
f)Remark:The EUT's test position A, B, C, D , E and F is valid for the E and H field measurements.

4.5 Equipment Approval Considerations

The EUT does comply with item 5(b) of KDB 680106 D01v04

1) WPT operating frequency (or frequencies).
The device operate in the frequency range from 111-205kHz.

2) Conducted power for each radiating structure.
Support 5W/7.5W/10W/15W, When the EUT is in charging mode, it only support 5W.

3) A client device providing the maximum permitted load is placed in physical contact with the transmitter.
Yes, client device is placed directly in contact with the transmitter.

4) § 2.1091-Mobile or § 2.1093-Portable demonstrated scenarios of operation, including RF exposure compliance information.
The EUT is § 2.1093-Portable device.

5) Maximum distance from the WPT transmitter at which, by design, a load can be charged (including slow-charging operations).
5mm

4.6 E and H field Strength

Mobile: Test Mode 1

H-Field Strength at 20 cm surrounding the EUT and 20cm above the top surface of the EUT
(We measured the distance of 20cm, 22cm and 24cm, and recorded the test data of the worst 20cm.)

Test mode	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position F(A/m)	50% Limits Test (A/m)	Limits Test (A/m)
Full Load	0.02	0.03	0.01	0.02	0.01	0.02	0.815	1.63

E-Field Strength at 20 cm surrounding the EUT and 20cm above the top surface of the EUT
(We measured the distance of 20cm, 22cm and 24cm, and recorded the test data of the worst 20cm.)

Test mode	Test Position A(V/m)	Test Position B(V/m)	Test Position C(V/m)	Test Position D(V/m)	Test Position E(V/m)	Test Position F(V/m)	50% Limits Test (V/m)	Limits Test (V/m)
Full Load	0.04	0.03	0.06	0.05	0.07	0.05	307	614

Portable: Test Mode 4 (the worst mode)
Transmitter Battery level: 100% battery

H-Filed Strength at (distance from 2cm to 20cm at 2cm iteration) surrounding the EUT (A/m)

Test distance (cm)	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position F(A/m)	Limits (A/m)
2	0.1113	0.0828	0.0734	0.0929	0.0447	0.0458	1.63
4	0.0429	0.0257	0.0268	0.0294	0.0171	0.0181	1.63
6	0.0198	0.0109	0.0128	0.0149	0.0093	0.0095	1.63
8	0.0150	0.0067	0.0085	0.0107	0.0060	0.0074	1.63
10	0.0147	0.0058	0.0085	0.0103	0.0059	0.0072	1.63
12	0.0148	0.0058	0.0080	0.0102	0.0058	0.0070	1.63
14	0.0151	0.0058	0.0075	0.0098	0.0058	0.0076	1.63
16	0.0141	0.0067	0.0075	0.0109	0.0055	0.0065	1.63
18	0.0145	0.0069	0.0078	0.0103	0.0052	0.0067	1.63
20	0.0146	0.0063	0.0077	0.0100	0.0051	0.0066	1.63

Using Biot-Savart Law, the value of 2cm can be estimated through the test results of 4cm:
Distance: 2cm

Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position F(A/m)	Limits (A/m)
0.1430	0.0857	0.0893	0.0980	0.0518	0.0548	1.63

Agreement Ratio
Distance: 2cm

Transmitter Battery level: 100% battery						
Test Position	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position F(A/m)
Measure Value (A/m)	0.1113	0.0828	0.0734	0.0929	0.0447	0.0458
Valuation (A/m)	0.1430	0.0857	0.0893	0.0980	0.0518	0.0548
Agreement ratio	24.93	3.44	19.55	5.34	14.72	17.89
Limit	30%	30%	30%	30%	30%	30%
Test result	Pass	Pass	Pass	Pass	Pass	Pass

Using Biot-Savart Law, the value of 4cm can be estimated through the test results of 6cm:
Distance: 4cm

Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position F(A/m)	Limits (A/m)
0.0466	0.0257	0.0302	0.0351	0.0197	0.0221	1.63

Agreement Ratio
Distance: 4cm

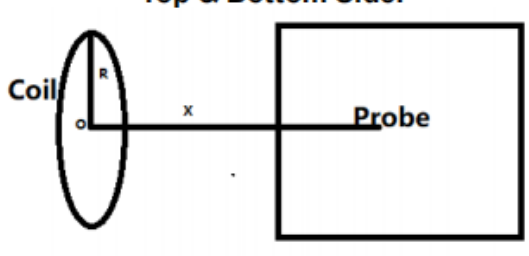
Transmitter Battery level: 100% battery						
Test Position	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position F(A/m)
Measure Value (A/m)	0.0429	0.0257	0.0268	0.0294	0.0171	0.0181
Valuation(A/m)	0.0466	0.0257	0.0302	0.0351	0.0197	0.0221
Agreement ratio	8.27	0.00	11.93	17.67	14.13	19.90
Limit	30%	30%	30%	30%	30%	30%
Test result	Pass	Pass	Pass	Pass	Pass	Pass

As the model is sufficient, the value of 0cm can be estimated through the results of 2 cm
Using Biot-Savart Law, the value of 0cm can be estimated through the test results of 2cm:
Distance: 0cm

Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position F(A/m)	Limits (A/m)
0.8582	0.6385	0.5660	0.7163	0.1820	0.1865	1.63
Test result: Pass						

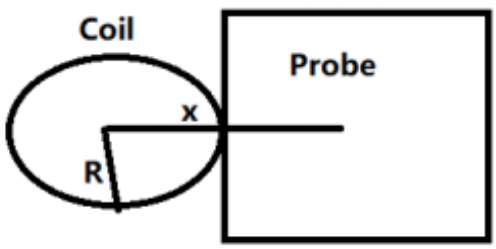
Note: Biot-Savart Law:

Top & Bottom Side:



$$B = \frac{\mu_0 * I * N * R^2}{2 * (R^2 + x^2)^{3/2}}$$

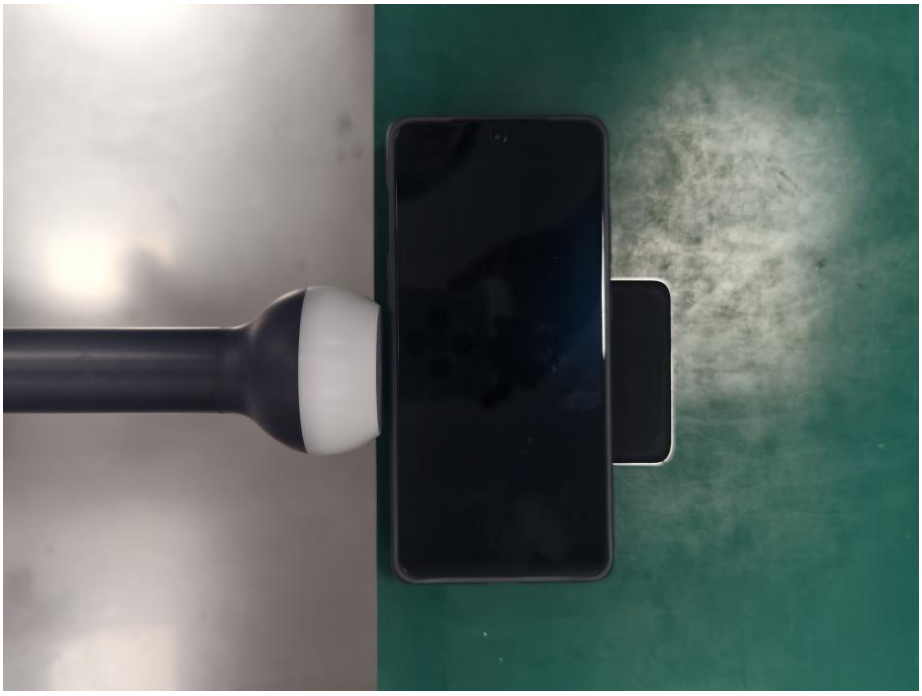
Front, left, right & rear Side:



$$B = \frac{\mu_0 * I * N}{2 * x}$$

5. Photographs Of Test Set-Up

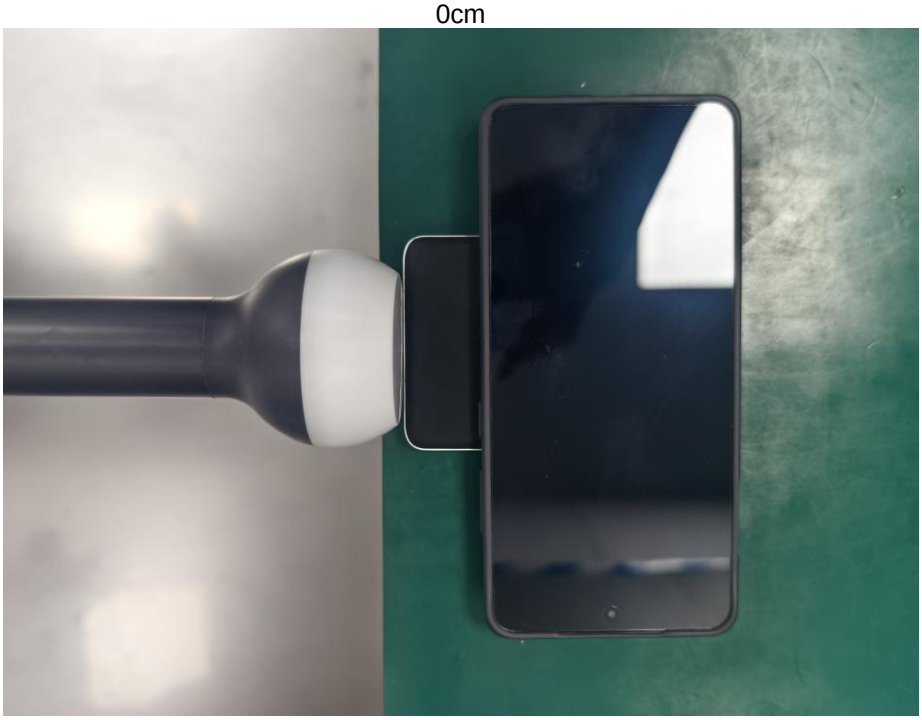
Test Position A Front
0cm



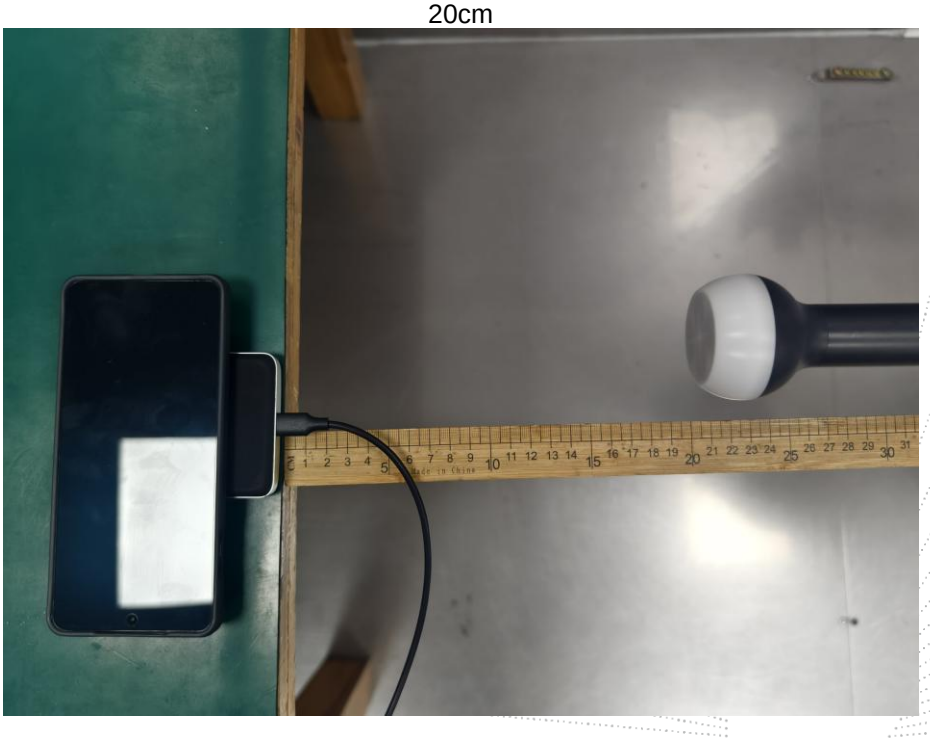
20cm

Test Position B Black

0cm

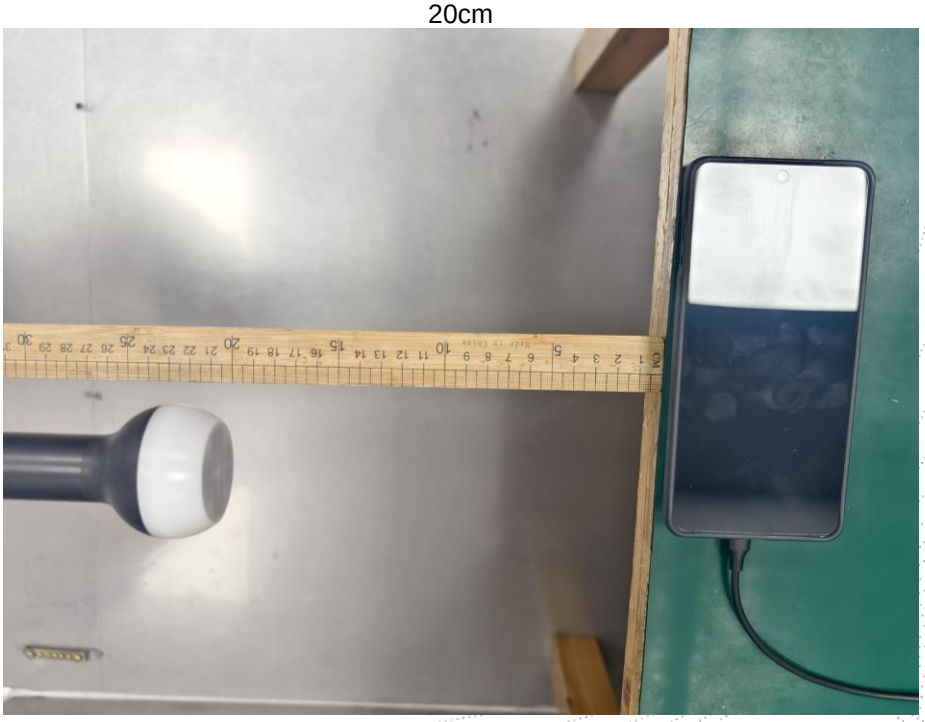


20cm



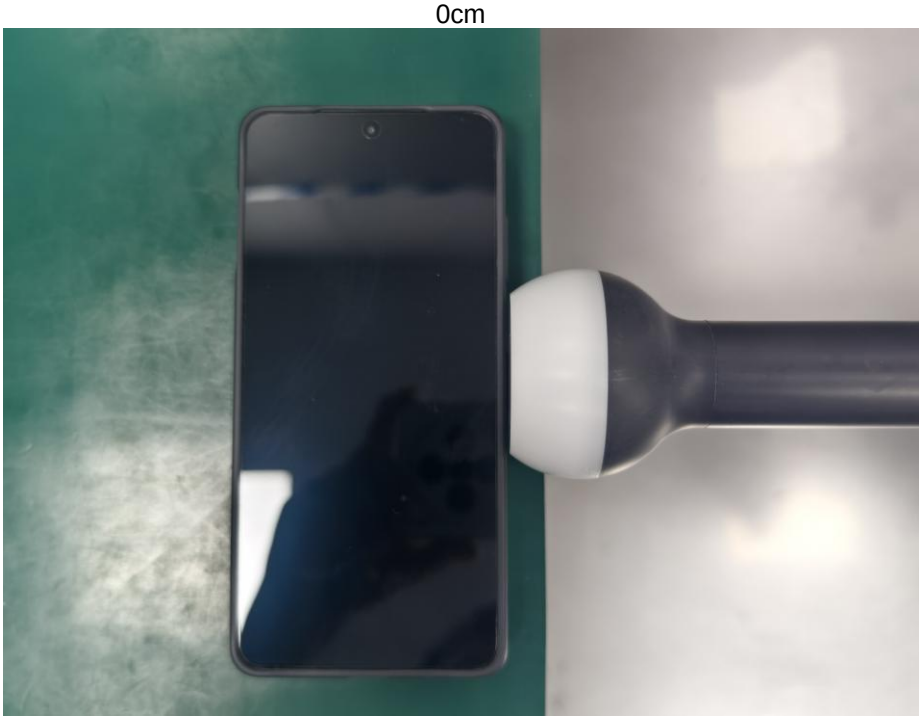
Test Position C Left
0cm

20cm



Test Position D Right

0cm

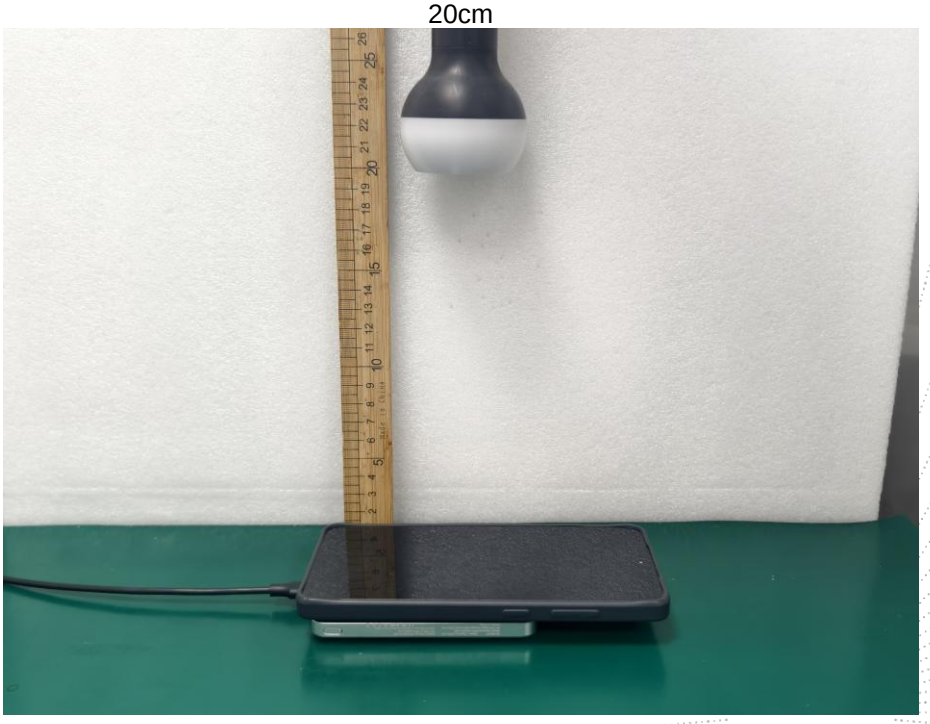


20cm

Test Position E Top

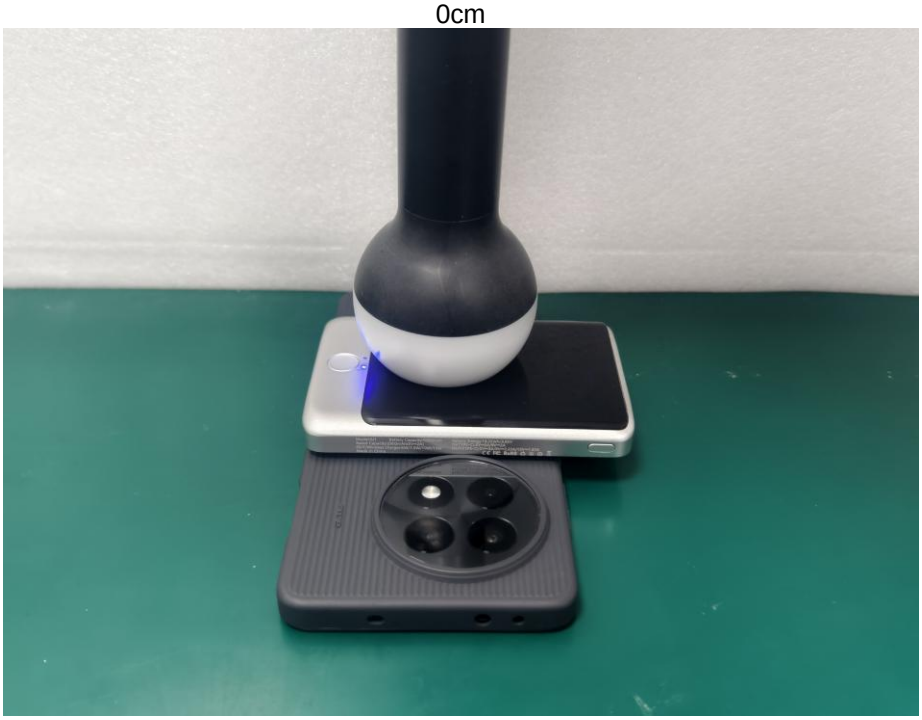
0cm

20cm

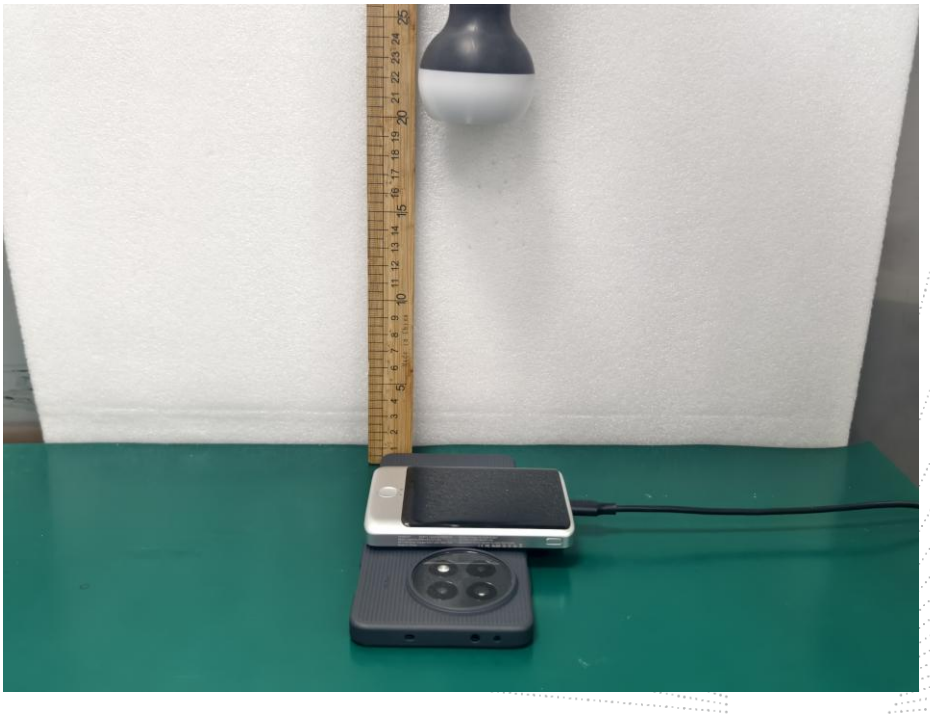


Test Position F Bottom

0cm



20cm



STATEMENT

1. The equipment lists are traceable to the national reference standards.

2. The test report can not be partially copied unless prior written approval is issued from our lab.

3. The test report is invalid without the "special seal for inspection and testing".

4. The test report is invalid without the signature of the approver.

5. The test process and test result is only related to the Unit Under Test.

6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.

7. The quality system of our laboratory is in accordance with ISO/IEC17025.

8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:
1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

TEL: 400-788-9558

P.C.: 518103

FAX: 0755-33229357

Website: http://www.chnbctc.com

Consultation E-mail: bctc@bctc-lab.com.cn

Complaint/Advice E-mail: advice@bctc-lab.com.cn

※※※※※ END ※※※※※