

TEST REPORT

Report No.: BCTC2211890506-2E

Applicant: ShenZhen Zhongyi Technology CO., Ltd.

Product Name: 10000mAh Wireless Power Bank

Model/Type Ref.: 573-M2050Q

Tested Date: 2022-11-23 to 2022-12-01

Issued Date: 2022-12-01

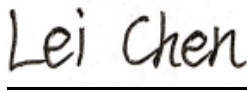
Shenzhen BCTC Testing Co., Ltd.



FCC ID: 2A9Q9-573-M2050Q

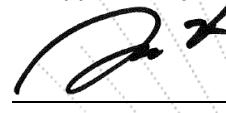
Product Name: 10000mAh Wireless Power Bank
Trademark: N/A
Model/Type Ref.: 573-M2050Q
Prepared For: ShenZhen Zhongyi Technology CO., Ltd.
Address: Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community, Bantian Street, Longgang District, Shenzhen, China
Manufacturer: ShenZhen Zhongyi Technology CO., Ltd.
Address: Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community, Bantian Street, Longgang 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: 2022-11-23
Sample tested Date: 2022-11-23 to 2022-12-01
Issue Date: 2022-12-01
Report No.: BCTC2211890506-2E
Test Standards: FCC CFR 47 part1, 1.1307(b), 1.1310
Test Results: PASS

Tested by:



Lei Chen/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.

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(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2211890506-2E	2022-12-01	Original	Valid

2. Product Information

2.1 Product Information

Model/Type Ref.: 573-M2050Q
 Model differences: N/A
 Product Description: 10000mAh Wireless Power Bank
 Operation Frequency: 115kHz-205kHz
 Antenna installation: loop coil antenna
 Ratings:
 Lightning Input: DC 5V/2A
 Type-C Input: DC 5V/3A, 9V/2A, 12V/1.5A
 Wireless Output: 5W, 7.5W, 10W, 15W
 Type-C Output: DC 5V/3A, 9V2.22A, 12V/1.67A
 USB-A Output: DC 5V/4.5A, 9V/2.2A, 12V/1.67A
 Total Output: DC 5V/3A

Cable of Product

No.	Cable Type	Quantity	Provider	Length (m)	Shielded	Note
1	--	--	Applicant	---	Yes/No	With a ferrite ring in mid Detachable
2	--	--	BCTC	--	Yes/No	--

2.2 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
1.	Adapter	UGreen	CD122	---	---

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

Test Modes 1	Wireless charger 5W
Test Modes 2	Wireless charger 7.5W
Test Modes 3	Wireless charger 10W
Test Modes 4	Wireless charger 15W

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

IC Registered No.: 23583

3.2 Test Instrument Used

EMF Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Electromagnet -ic radiation tester	Wavecontrol	SMP160	19SN0980	May 26, 2022	May 25, 2023
Electromagne- tic field probe	Wavecontrol	WP400-3	20WP120082	Sept. 08, 2022	Sept. 07, 2023
843 Chamber	ETS	843	84301	Aug. 27, 2020	Aug. 26, 2023
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\

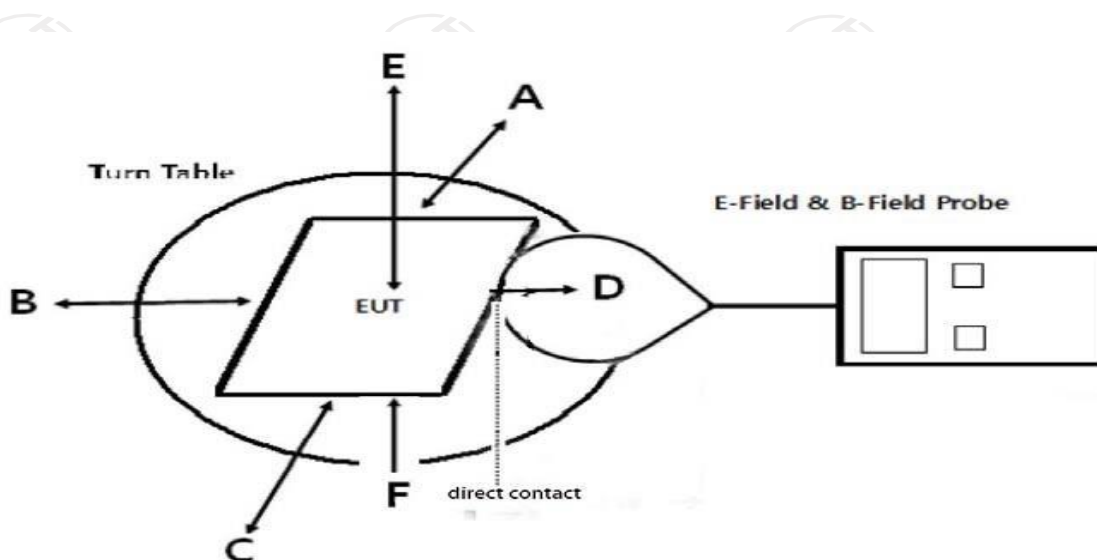
4. Method Of Measurement

4.1 Applicable Standard

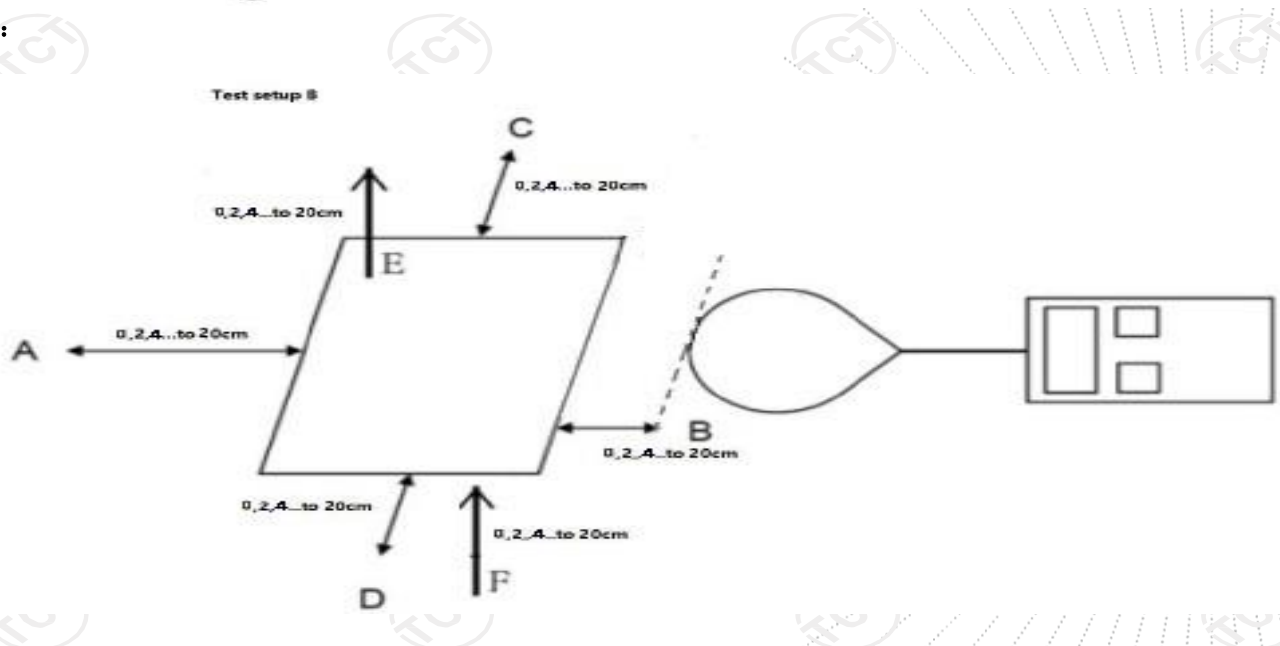
According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. According to §1.1310 and §2.1093 RF exposure is calculated. According KDB680106 D01v03: RF Exposure Wireless Charging v02.

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/ cm ²)	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/ cm ²)	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

- he RF exposure test was performed in anechoic chamber.
- The measurement probe was placed at 0 cm surrounding the device for test setup A; and the measurement Probe was placed from 0 cm to 20 cm, in 2 cm maximum increment measured from the edge of the device For the test setup B.
- The highest emission level was recorded and compared with limit as soon as measurement of eachd) 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.
- The EUT was measured according to the dictates of KDB680106 D01v03r01
- Remark:
The EUT's test position A, B, C, D , E and F is valid for the E and H field measurements.

4.5 E And H Field Strength

For setup A:
Worst Case Operating Mode: Mode 4

H-Filed Strength at 0 cm from edges surrounding the EUT (A/m)

Frequency Range (KHz)	Operation condition	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)
115kHz-205kHz	1% battery	0.023	0.056	0.046	0.196	0.060	0.100	1.63
115kHz-205kHz	50% battery	0.065	0.062	0.052	0.135	0.026	0.009	1.63
115kHz-205kHz	99% battery	0.087	0.043	0.016	0.005	0.064	0.051	1.63

Frequency Range (KHz)	Operation condition	Test Position A (uT)	Test Position B (uT)	Test Position C (uT)	Test Position D (uT)	Test Position E (uT)	Test Position F (uT)	Limits (uT)
115kHz-205kHz	1% battery	0.029	0.070	0.058	0.245	0.075	0.125	2.038
115kHz-205kHz	50% battery	0.082	0.078	0.065	0.168	0.032	0.012	2.038
115kHz-205kHz	99% battery	0.108	0.053	0.020	0.007	0.080	0.064	2.038

Note:A/m=uT÷1.25

E-Filed Strength at 0 cm from edges surrounding the EUT (V/m)

Frequency Range (KHz)	Operation condition	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)	Limits (V/m)
115kHz-205kHz	1% battery	0.077	0.118	0.011	0.126	0.026	0.124	614
115kHz-205kHz	50% battery	0.008	0.100	0.072	0.040	0.020	0.066	614
115kHz-205kHz	99% battery	0.002	0.060	0.041	0.134	0.068	0.133	614

For setup B:
Worst Case Operating Mode: Mode 6

1% battery

H-Filed Strength at (distance from 0cm 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)
0	0.011	0.012	0.060	0.094	0.023	0.040	1.63
2	0.056	0.025	0.001	0.015	0.011	0.090	1.63
4	0.079	0.076	0.083	0.111	0.073	0.118	1.63
6	0.003	0.020	0.086	0.205	0.041	0.015	1.63
8	0.089	0.023	0.068	0.040	0.080	0.145	1.63
10	0.089	0.111	0.012	0.131	0.022	0.052	1.63
12	0.005	0.044	0.048	0.188	0.074	0.091	1.63
14	0.032	0.018	0.021	0.059	0.009	0.016	1.63
16	0.111	0.069	0.082	0.133	0.044	0.150	1.63
18	0.048	0.093	0.011	0.180	0.046	0.011	1.63
20	0.001	0.092	0.070	0.037	0.032	0.055	1.63

Test distance (cm)	Test Position A(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position F(uT)	Limits (uT)
0	0.014	0.015	0.075	0.118	0.029	0.050	2.038
2	0.070	0.032	0.001	0.019	0.013	0.113	2.038
4	0.098	0.095	0.104	0.139	0.091	0.147	2.038
6	0.004	0.025	0.108	0.256	0.051	0.019	2.038
8	0.111	0.029	0.085	0.049	0.100	0.182	2.038
10	0.111	0.139	0.015	0.164	0.028	0.066	2.038
12	0.007	0.055	0.060	0.235	0.093	0.114	2.038
14	0.040	0.023	0.026	0.074	0.011	0.019	2.038
16	0.138	0.087	0.102	0.167	0.055	0.187	2.038
18	0.060	0.116	0.014	0.225	0.058	0.014	2.038
20	0.001	0.115	0.087	0.046	0.040	0.068	2.038

Note: A/m = $\mu\text{T} \div 1.25$

E-Filed Strength at (distance from 0cm to 20cm at 2cm iteration) surrounding the EUT (V/m)

Test distance (cm)	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)	Limits (V/m)
0	0.081	0.085	0.047	0.029	0.034	0.145	614
2	0.065	0.067	0.069	0.175	0.034	0.131	614
4	0.087	0.039	0.037	0.084	0.068	0.126	614
6	0.086	0.092	0.052	0.113	0.037	0.100	614
8	0.064	0.116	0.022	0.178	0.045	0.096	614
10	0.026	0.105	0.030	0.057	0.088	0.078	614
12	0.043	0.044	0.014	0.193	0.081	0.046	1.63
14	0.067	0.037	0.035	0.157	0.030	0.006	614
16	0.005	0.094	0.092	0.008	0.017	0.063	614
18	0.102	0.085	0.083	0.084	0.038	0.123	614
20	0.034	0.096	0.020	0.030	0.081	0.081	614

50% battery

H-Filed Strength at (distance from 0cm 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)
0	0.089	0.001	0.008	0.095	0.022	0.071	1.63
2	0.010	0.057	0.005	0.160	0.050	0.146	1.63
4	0.035	0.064	0.040	0.159	0.073	0.100	1.63
6	0.011	0.070	0.043	0.033	0.021	0.023	1.63
8	0.108	0.092	0.080	0.194	0.029	0.044	1.63
10	0.046	0.080	0.038	0.220	0.003	0.121	1.63
12	0.041	0.105	0.022	0.086	0.025	0.138	1.63
14	0.009	0.100	0.055	0.091	0.057	0.032	1.63
16	0.060	0.106	0.083	0.017	0.049	0.086	1.63
18	0.041	0.001	0.037	0.165	0.036	0.079	1.63
20	0.090	0.095	0.057	0.055	0.037	0.076	1.63

Test distance (cm)	Test Position A(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position F(uT)	Limits (uT)
0	0.111	0.001	0.010	0.119	0.027	0.088	2.038
2	0.012	0.071	0.007	0.200	0.063	0.183	2.038
4	0.044	0.080	0.050	0.199	0.091	0.125	2.038
6	0.014	0.088	0.054	0.042	0.026	0.028	2.038
8	0.135	0.115	0.100	0.243	0.037	0.055	2.038
10	0.058	0.100	0.048	0.276	0.003	0.152	2.038
12	0.051	0.132	0.027	0.108	0.032	0.172	2.038
14	0.011	0.125	0.068	0.114	0.071	0.040	2.038
16	0.075	0.132	0.103	0.021	0.062	0.108	2.038
18	0.051	0.001	0.046	0.206	0.045	0.099	2.038
20	0.113	0.119	0.072	0.069	0.046	0.095	2.038

Note: $A/m = uT \div 1.25$

E-Filed Strength at (distance from 0cm to 20cm at 2cm iteration) surrounding the EUT (V/m)

Test distance (cm)	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)	Limits (V/m)
0	0.058	0.076	0.083	0.028	0.087	0.140	614
2	0.029	0.050	0.021	0.179	0.004	0.151	614
4	0.044	0.099	0.049	0.170	0.064	0.154	614
6	0.085	0.123	0.090	0.179	0.015	0.130	614
8	0.060	0.083	0.074	0.072	0.046	0.137	614
10	0.080	0.116	0.034	0.006	0.040	0.025	614
12	0.050	0.072	0.053	0.048	0.033	0.073	614
14	0.091	0.092	0.065	0.090	0.065	0.025	614
16	0.080	0.030	0.018	0.179	0.052	0.054	614
18	0.032	0.038	0.091	0.036	0.042	0.002	614
20	0.036	0.015	0.021	0.109	0.073	0.026	614

99% battery

H-Filed Strength at (distance from 0cm 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)
0	0.046	0.048	0.006	0.120	0.073	0.081	1.63
2	0.008	0.043	0.050	0.098	0.006	0.048	1.63
4	0.048	0.108	0.016	0.040	0.032	0.134	1.63
6	0.060	0.066	0.031	0.035	0.084	0.042	1.63
8	0.097	0.013	0.057	0.222	0.014	0.140	1.63
10	0.057	0.050	0.089	0.131	0.071	0.029	1.63
12	0.003	0.088	0.081	0.163	0.043	0.048	1.63
14	0.010	0.118	0.059	0.022	0.069	0.152	1.63
16	0.035	0.030	0.014	0.119	0.088	0.007	1.63
18	0.061	0.014	0.042	0.143	0.030	0.018	1.63
20	0.064	0.111	0.092	0.122	0.069	0.019	1.63

Test distance (cm)	Test Position A(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position F(uT)	Limits (uT)
0	0.057	0.060	0.008	0.149	0.091	0.101	2.038
2	0.010	0.054	0.062	0.123	0.008	0.060	2.038
4	0.060	0.135	0.020	0.050	0.040	0.167	2.038
6	0.075	0.082	0.039	0.043	0.105	0.053	2.038
8	0.121	0.016	0.071	0.277	0.018	0.175	2.038
10	0.072	0.062	0.111	0.164	0.089	0.036	2.038
12	0.004	0.110	0.102	0.204	0.053	0.060	2.038
14	0.013	0.148	0.074	0.028	0.087	0.190	2.038
16	0.043	0.038	0.017	0.149	0.110	0.008	2.038
18	0.076	0.017	0.052	0.178	0.038	0.023	2.038
20	0.080	0.139	0.116	0.153	0.086	0.024	2.038

Note: A/m=uT÷1.25

E-Filed Strength at (distance from 0cm to 20cm at 2cm iteration) surrounding the EUT (V/m)

Test distance (cm)	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)	Limits (V/m)
0	0.105	0.097	0.029	0.156	0.014	0.027	614
2	0.094	0.098	0.014	0.181	0.088	0.025	614
4	0.028	0.116	0.062	0.191	0.031	0.060	614
6	0.086	0.059	0.060	0.150	0.013	0.084	614
8	0.106	0.108	0.067	0.168	0.072	0.070	614
10	0.033	0.061	0.027	0.112	0.028	0.071	614
12	0.088	0.014	0.079	0.140	0.017	0.086	614
14	0.053	0.096	0.070	0.175	0.038	0.051	614
16	0.102	0.011	0.050	0.137	0.036	0.015	614
18	0.011	0.092	0.020	0.157	0.068	0.122	614
20	0.057	0.085	0.047	0.145	0.047	0.050	614

Note: In the frequency range of 1k-10M, except the fundamental frequency, other transmissions of the power transmission system are less than 20dB lower than the maximum fundamental transmission, so it is not necessary to evaluate.

5. Photographs Of Test Set-Up

20CM



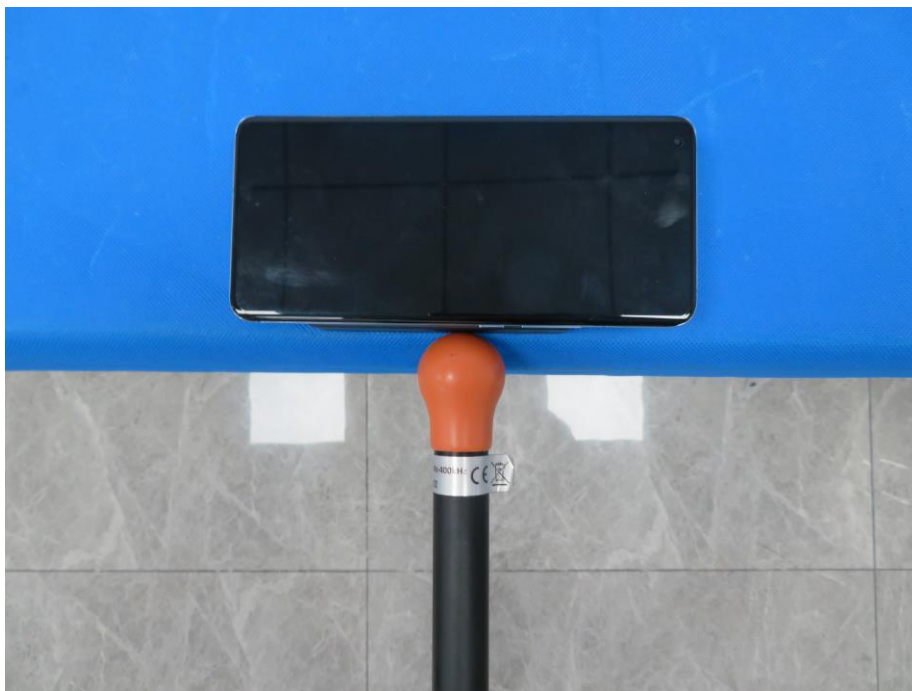


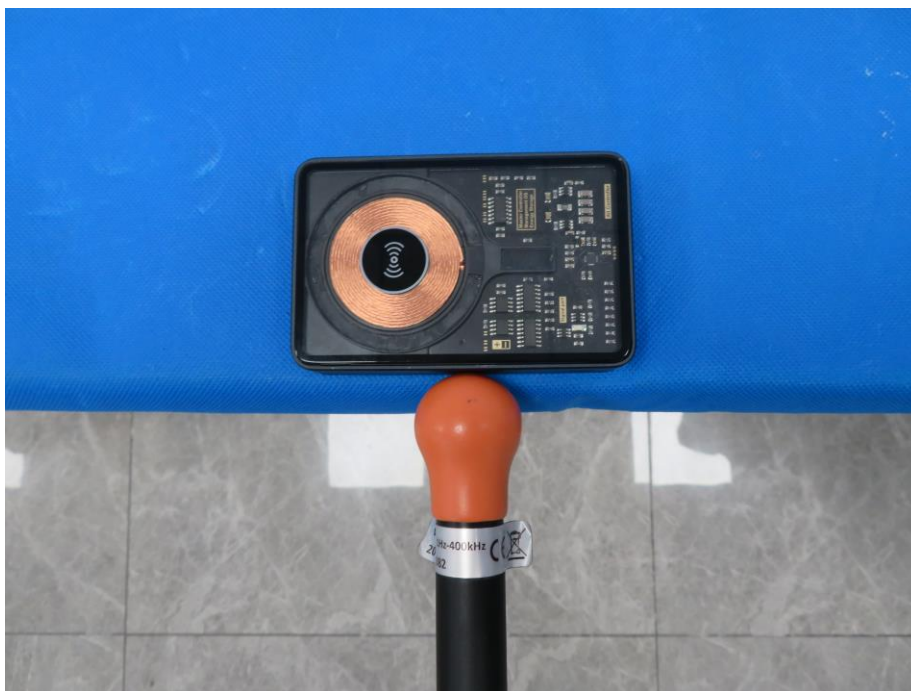


0CM









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 test report without CMA mark is only used for scientific research, teaching, enterprise product development and internal quality control purposes.
8. The quality system of our laboratory is in accordance with ISO/IEC17025.
9. 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.

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***** END *****

