TEST REPORT

Report No.:	BCTC2211813702-2E
Applicant:	Shenzhen X-nego Industrial Co., LTD
Product Name:	Rush Charge 5000mAh Mc Wireless Powerbank
Model/Type Ref.:	RCM50-G1-BLCK
Tested Date:	2022-11-11 to 2022-11-16
Issued Date:	2022-11-16

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2A3UQRCM50-G1-BLCK

Product Name:	Rush Charge 5000mAh Mc Wireless Powerbank
Trademark:	RUSH CHARGE
Model/Type Ref.:	RCM50-G1-BLCK RCM50-G1-WHTE, RCM50-G1-ALGN, XRC50
Prepared For:	Shenzhen X-nego Industrial Co., LTD
Address:	9A Building A2 Lilang International Jewelry Park, Nanwan Street LongGang District, Shenzhen City, China
Manufacturer:	Shenzhen X-nego Industrial Co., LTD
Address:	9A Building A2 Lilang International Jewelry Park, Nanwan Street LongGang District, Shenzhen City, 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:	2022-11-11
Sample tested Date:	2022-11-11 to 2022-11-16
Issue Date:	2022-11-16
Report No.:	BCTC2211813702-2E
Test Standards:	FCC CFR 47 part1, 1.1307(b), 1.1310
Test Results:	PASS

Tested by:

Brave Zeng/ 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
BCTC2211813702-2E	2022-11-16	Original	Valid

2. Product Information

2.1 Product Information

Model/Type Ref.:	RCM50-G1-BLCK RCM50-G1-WHTE, RCM50-G1-ALGN, XRC50
Model differences:	All the model are the same circuit and RF module, except model names.
Product Description:	Rush Charge 5000mAh Wireless Power bank
Operation Frequency:	115kHz-205kHz
Antenna installation:	loop coil antenna
Ratings:	Type-C Input: 5V/2.5A;9V/2.0A;12V/1.5A Type-C Output:5V/3A;9V/2.2A;12V/1.67A Wireless Output:5W,7.5W,10W
Hardware Version:	N/A
Software Version:	N/A

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.	Wireless load	---	---	---	auxiliary
2.	Adapter	---	BCTC001	---	auxiliary

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	Charging(5V 2.5A)+Wireless（5W）
Test Modes 2	Charging(5V 2.5A)+Wireless（7.5W）
Test Modes 3	Charging(5V 2.5A)+Wireless（10W）
Test Modes 4	Charging(9V 2A)+Wireless（5W）
Test Modes 5	Charging(9V 2A)+Wireless（7.5W）
Test Modes 6	Charging(9V 2A)+Wireless（10W）
Test Modes 7	Charging(12V 1.5A)+Wireless（5W）
Test Modes 8	Charging(12V 1.5A)+Wireless（7.5W）
Test Modes 9	Charging(12V 1.5A)+Wireless（10W）
Test Modes 10	Wireless Charging（5W）

Test Modes 11	Wireless Charging（7.5W）
Test Modes 12	Wireless Charging（10W）

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

Equipment	Manufacturer	Model No.	Serial No.	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	Aug. 30, 2022	Aug. 29, 2023
843 Chamber	ETS	843	84301	Aug. 27, 2020	Aug. 26, 2023
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\

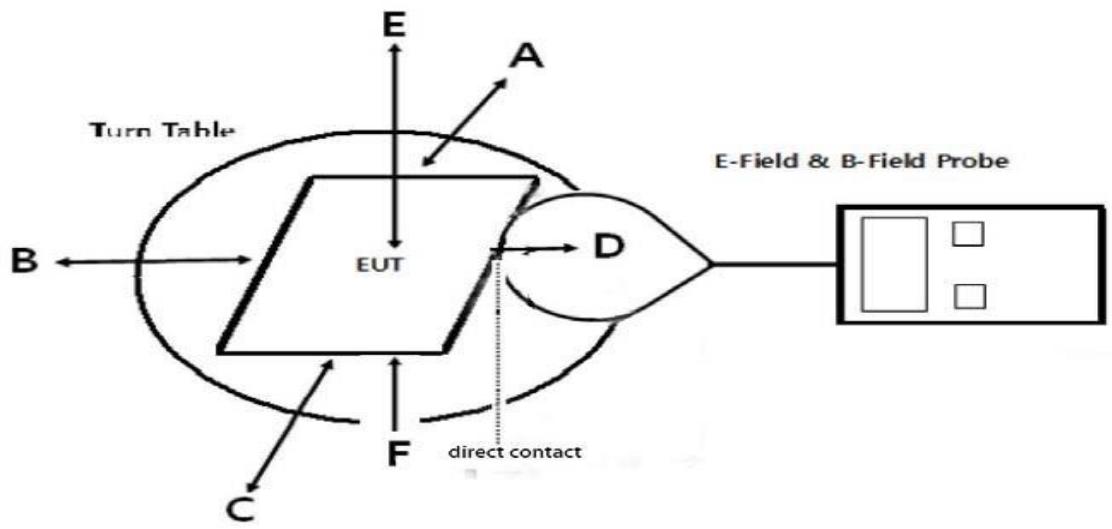
4. Method Of Measurement

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 Apps v02.

4.2 Block Diagram Of Test Setup

A:



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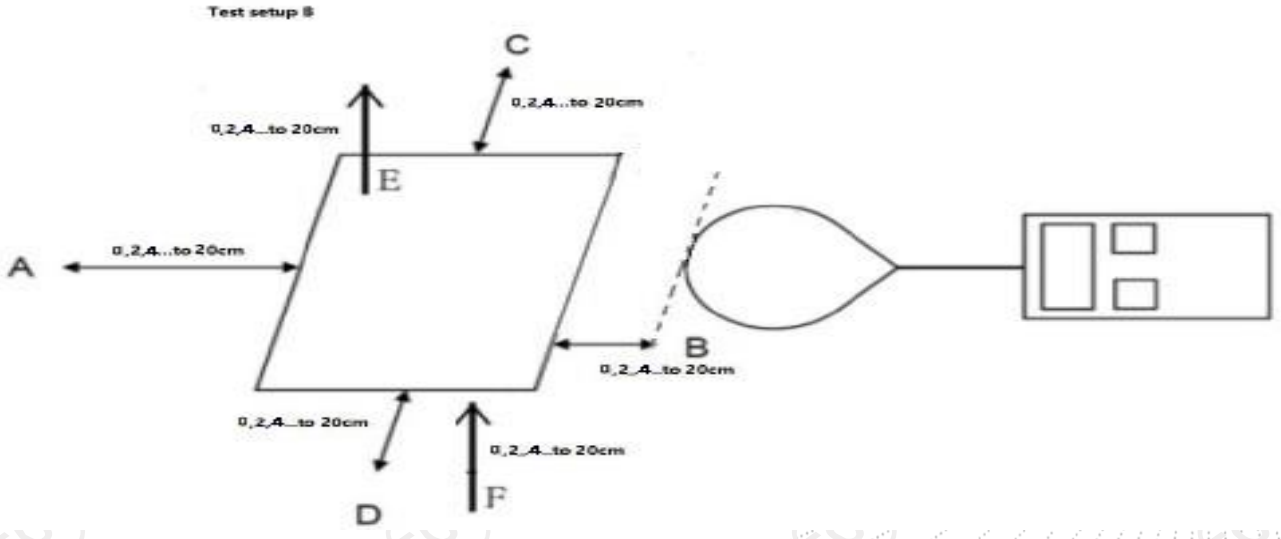


4.3 Limit

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) he RF exposure test was performed in anechoic chamber.
b) 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.
c)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) were completed.
d)The EUT was measured according to the dictates of KDB680106
D01v03r01
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 D01v03

1) Power transfer frequency is less than 1MHz

Yes, the device operate in the frequency range from 115-205KHz

2) Output power from each primary coil is less than or equal to 15 watts.

Yes, the maximum output power of the primary coil is 10W.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that able to detect and allow coupling onlybetween individual pair of coils.

No, the prototype has only a single coil.

4) Client device is inserted in or placed directly in contact with the transmitter.

Yes, client device is placed directly in contact with the transmitter.

5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

No,The product is portable

6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Yes, the EUT field strength levels are 10% x MPE limit.

4.9 E And H Field Strength

For setup A:
Worst Case Operating Mode: Mode 12

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

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	0.162	0.009	0.001	0.145	0.035	0.009	2.038
115kHz-205kHz	50% battery	0.077	0.154	0.022	0.067	0.000	0.004	2.038
115kHz-205kHz	99% battery	0.090	0.116	0.091	0.056	0.158	0.029	2.038

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	0.130	0.007	0.001	0.116	0.028	0.007	1.63
115kHz-205kHz	50% battery	0.061	0.123	0.017	0.054	0.000	0.003	1.63
115kHz-205kHz	99% battery	0.072	0.093	0.073	0.044	0.127	0.023	1.63

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	0.080	0.065	0.071	0.065	0.076	0.068	614
115kHz-205kHz	50% battery	0.069	0.072	0.075	0.067	0.070	0.076	614
115kHz-205kHz	99% battery	0.069	0.067	0.067	0.070	0.077	0.075	614

For setup B:
Worst Case Operating Mode: Mode 12

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(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position F(uT)	Limits (uT)
0	0.044	0.090	0.113	0.023	0.102	0.131	2.038
2	0.133	0.131	0.164	0.099	0.106	0.038	2.038
4	0.074	0.124	0.152	0.122	0.081	0.054	2.038
6	0.065	0.115	0.046	0.111	0.125	0.160	2.038
8	0.047	0.189	0.131	0.041	0.034	0.176	2.038
10	0.020	0.101	0.024	0.063	0.150	0.047	2.038
12	0.161	0.053	0.107	0.046	0.075	0.106	2.038
14	0.133	0.022	0.057	0.044	0.037	0.085	2.038
16	0.119	0.138	0.145	0.174	0.006	0.073	2.038
18	0.080	0.131	0.051	0.176	0.079	0.114	2.038
20	0.111	0.102	0.178	0.077	0.173	0.056	2.038

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	0.035	0.072	0.090	0.019	0.082	0.104	1.63
2	0.106	0.105	0.131	0.079	0.084	0.030	1.63
4	0.059	0.099	0.122	0.097	0.065	0.043	1.63
6	0.052	0.092	0.037	0.089	0.100	0.128	1.63
8	0.037	0.151	0.104	0.033	0.028	0.141	1.63
10	0.016	0.081	0.020	0.050	0.120	0.038	1.63
12	0.128	0.042	0.086	0.037	0.060	0.085	1.63
14	0.107	0.018	0.046	0.035	0.030	0.068	1.63
16	0.095	0.110	0.116	0.139	0.005	0.058	1.63
18	0.064	0.105	0.041	0.141	0.063	0.091	1.63
20	0.089	0.081	0.142	0.061	0.139	0.044	1.63

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	0.085	0.104	0.121	0.104	0.135	0.086	614
2	0.104	0.016	0.099	0.049	0.002	0.018	614
4	0.019	0.141	0.132	0.019	0.065	0.052	614
6	0.027	0.093	0.009	0.098	0.083	0.085	614
8	0.115	0.118	0.066	0.044	0.114	0.018	614
10	0.089	0.010	0.088	0.077	0.136	0.027	614
12	0.116	0.010	0.026	0.123	0.056	0.089	614
14	0.057	0.133	0.053	0.107	0.116	0.011	614
16	0.152	0.129	0.045	0.039	0.124	0.134	614
18	0.139	0.038	0.022	0.156	0.068	0.006	614
20	0.124	0.082	0.031	0.052	0.116	0.076	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(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position F(uT)	Limits (uT)
0	0.081	0.087	0.181	0.113	0.119	0.097	2.038
2	0.011	0.095	0.036	0.119	0.031	0.009	2.038
4	0.094	0.168	0.177	0.158	0.142	0.103	2.038
6	0.188	0.013	0.000	0.115	0.020	0.124	2.038
8	0.161	0.011	0.102	0.196	0.106	0.063	2.038
10	0.013	0.032	0.045	0.138	0.119	0.119	2.038
12	0.160	0.075	0.184	0.168	0.049	0.146	2.038
14	0.113	0.193	0.124	0.091	0.044	0.114	2.038
16	0.061	0.031	0.191	0.035	0.002	0.127	2.038
18	0.106	0.074	0.095	0.006	0.019	0.189	2.038
20	0.143	0.011	0.138	0.024	0.083	0.091	2.038

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	0.065	0.069	0.145	0.091	0.096	0.078	1.63
2	0.009	0.076	0.029	0.095	0.025	0.007	1.63
4	0.075	0.134	0.142	0.127	0.113	0.082	1.63
6	0.150	0.011	0.000	0.092	0.016	0.099	1.63
8	0.129	0.009	0.082	0.157	0.085	0.050	1.63
10	0.010	0.025	0.036	0.110	0.095	0.095	1.63
12	0.128	0.060	0.147	0.134	0.039	0.117	1.63
14	0.090	0.155	0.099	0.073	0.035	0.092	1.63
16	0.049	0.025	0.152	0.028	0.002	0.101	1.63
18	0.084	0.059	0.076	0.005	0.015	0.151	1.63
20	0.114	0.009	0.110	0.019	0.066	0.072	1.63

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	0.024	0.100	0.106	0.045	0.034	0.039	614
2	0.079	0.123	0.138	0.049	0.114	0.079	614
4	0.044	0.132	0.071	0.111	0.018	0.065	614
6	0.106	0.152	0.020	0.047	0.064	0.012	614
8	0.053	0.100	0.146	0.068	0.062	0.094	614
10	0.029	0.071	0.068	0.054	0.024	0.135	614
12	0.051	0.008	0.027	0.092	0.037	0.036	614
14	0.075	0.012	0.081	0.062	0.078	0.060	614
16	0.046	0.118	0.153	0.016	0.055	0.149	614
18	0.044	0.022	0.141	0.144	0.152	0.034	614
20	0.106	0.061	0.072	0.043	0.001	0.141	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(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position F(uT)	Limits (uT)
0	0.070	0.131	0.102	0.047	0.152	0.077	2.038
2	0.161	0.083	0.154	0.169	0.135	0.070	2.038
4	0.106	0.023	0.183	0.162	0.162	0.191	2.038
6	0.045	0.164	0.012	0.066	0.133	0.195	2.038
8	0.083	0.067	0.033	0.018	0.146	0.183	2.038
10	0.047	0.066	0.096	0.070	0.174	0.050	2.038
12	0.189	0.022	0.099	0.063	0.193	0.186	2.038
14	0.056	0.172	0.112	0.103	0.093	0.141	2.038
16	0.055	0.079	0.019	0.012	0.046	0.054	2.038
18	0.050	0.166	0.136	0.082	0.153	0.171	2.038
20	0.169	0.061	0.050	0.018	0.054	0.092	2.038

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	0.056	0.105	0.082	0.038	0.122	0.061	1.63
2	0.128	0.067	0.123	0.135	0.108	0.056	1.63
4	0.085	0.019	0.146	0.130	0.130	0.153	1.63
6	0.036	0.131	0.010	0.053	0.107	0.156	1.63
8	0.066	0.054	0.027	0.014	0.117	0.147	1.63
10	0.038	0.053	0.077	0.056	0.139	0.040	1.63
12	0.152	0.018	0.079	0.051	0.154	0.149	1.63
14	0.045	0.138	0.090	0.083	0.074	0.113	1.63
16	0.044	0.063	0.016	0.010	0.037	0.043	1.63
18	0.040	0.133	0.109	0.066	0.122	0.137	1.63
20	0.135	0.048	0.040	0.015	0.043	0.073	1.63

Note: A/m=uT/1.25

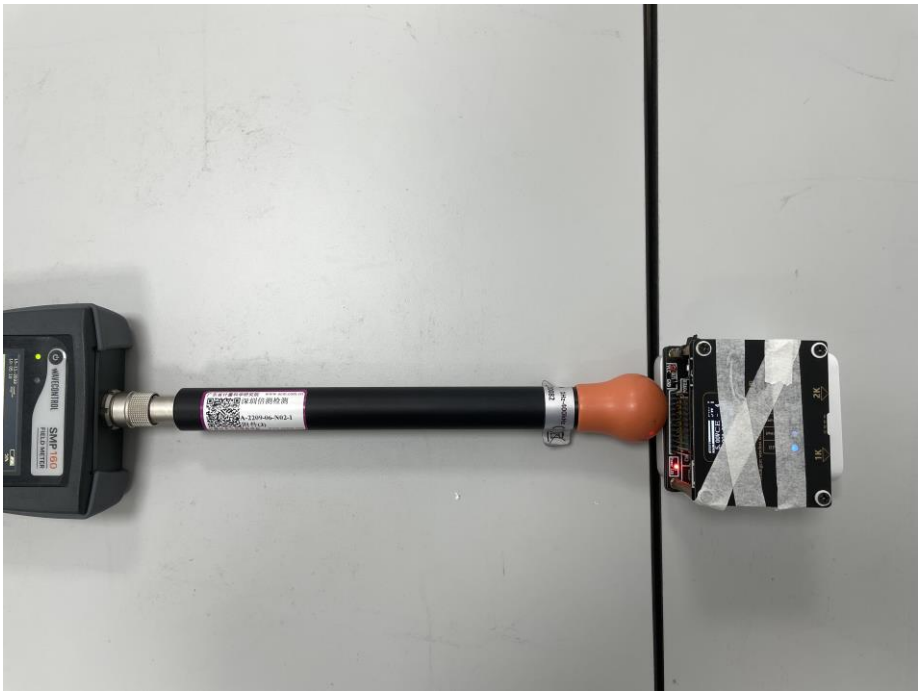
E-Filed Strength at (distance from 0cm to 20cm at 2cm iteration) surrounding the EUT (V/m)

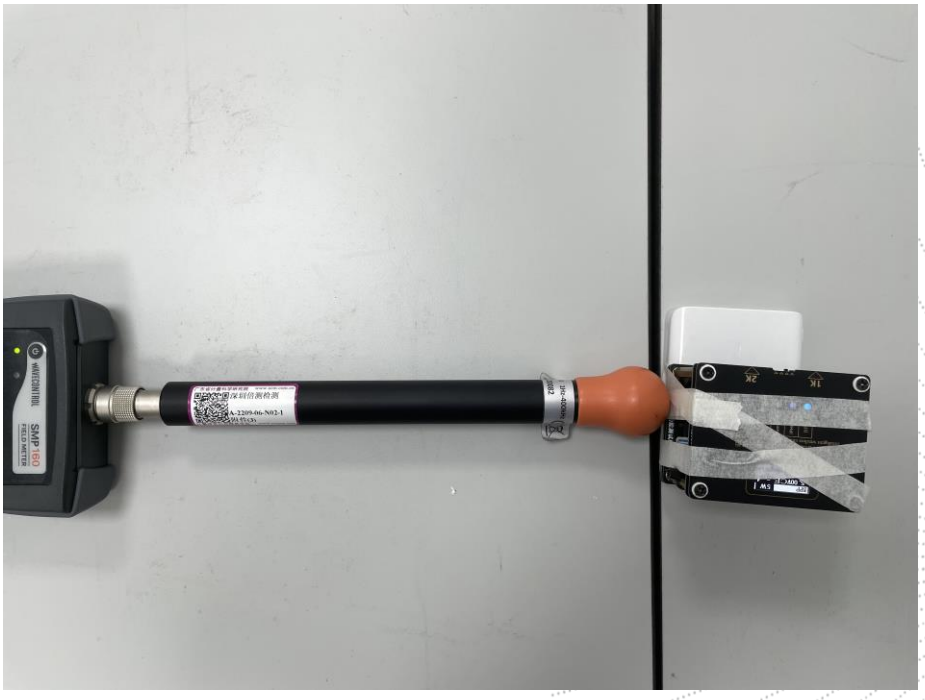
Test distance (cm)	Test Position A(V/m)	Test Position B(V/m)	Test Position C(V/m)	Test Position D(V/m)	Test Position E(V/m)	Test Position F(V/m)	Limits (V/m)
0	0.019	0.120	0.071	0.073	0.008	0.081	614
2	0.070	0.107	0.065	0.093	0.003	0.064	614
4	0.078	0.130	0.146	0.090	0.043	0.073	614
6	0.080	0.136	0.053	0.059	0.135	0.044	614
8	0.080	0.068	0.127	0.057	0.142	0.050	614
10	0.004	0.157	0.059	0.117	0.013	0.004	614
12	0.004	0.153	0.093	0.020	0.001	0.030	614
14	0.104	0.086	0.023	0.123	0.039	0.049	614
16	0.045	0.136	0.031	0.015	0.104	0.033	614
18	0.089	0.053	0.093	0.031	0.068	0.031	614
20	0.091	0.063	0.042	0.152	0.004	0.093	614

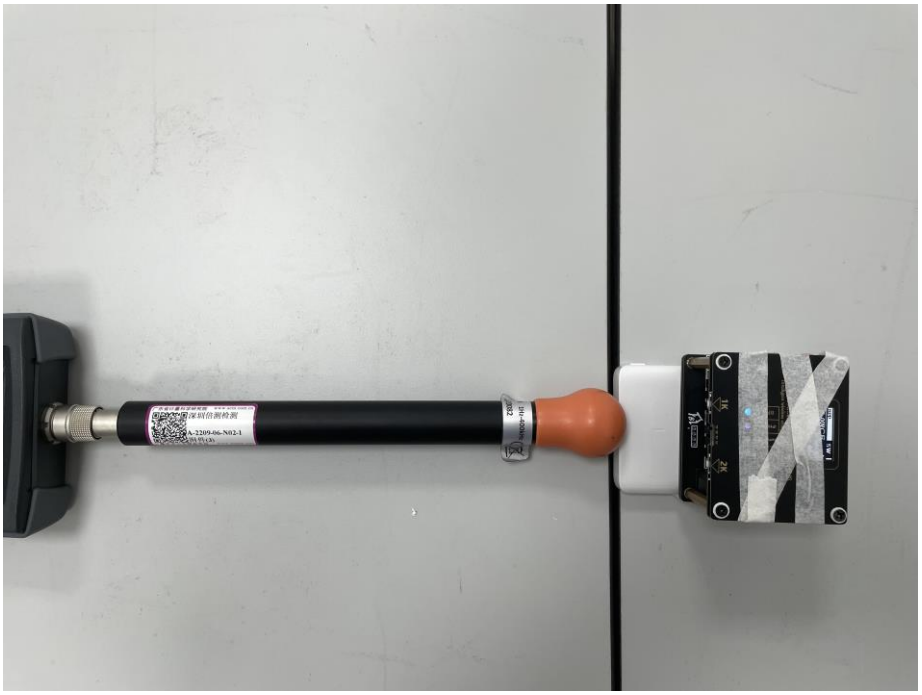
Note: In the frequency range of 1k-10M, except the fundamental frequency, other transmissions of the power transmission system are less than 20dB lower than the maximum fundamental transmission, so it is not necessary to evaluate.

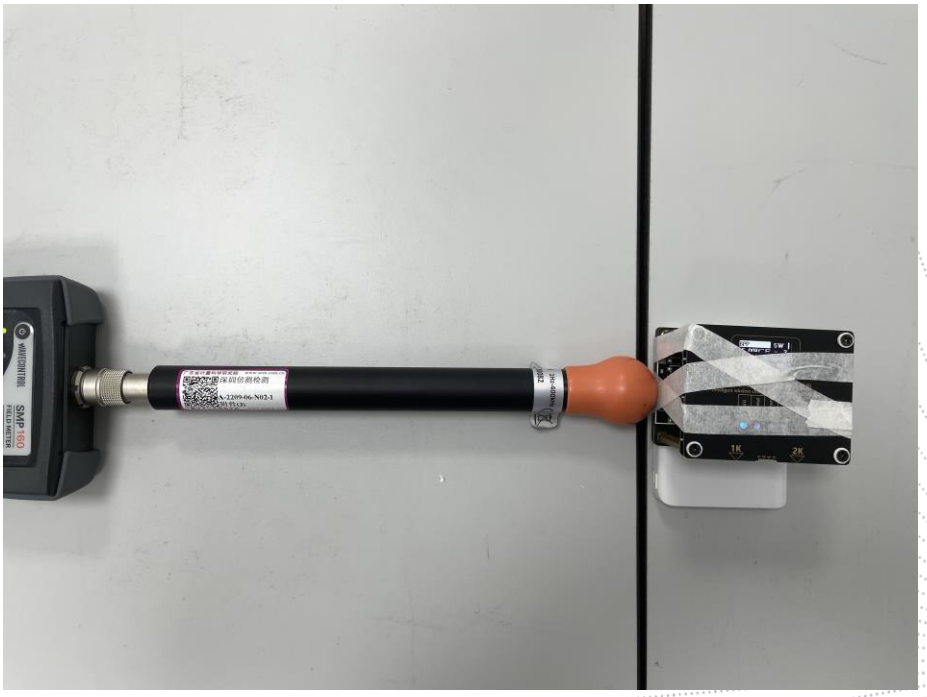
5. Photographs Of Test Set-Up

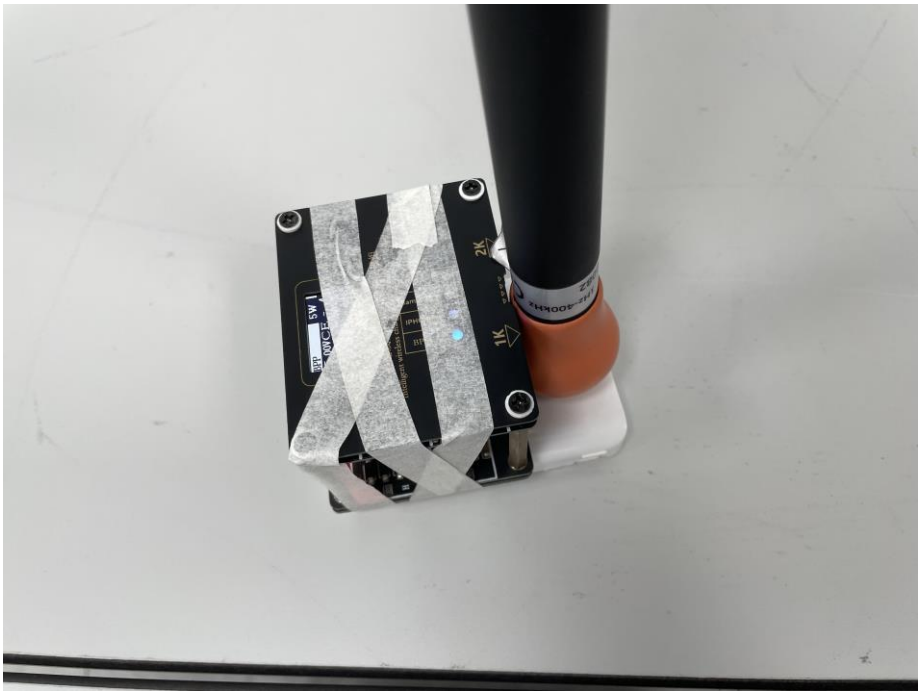
0CM

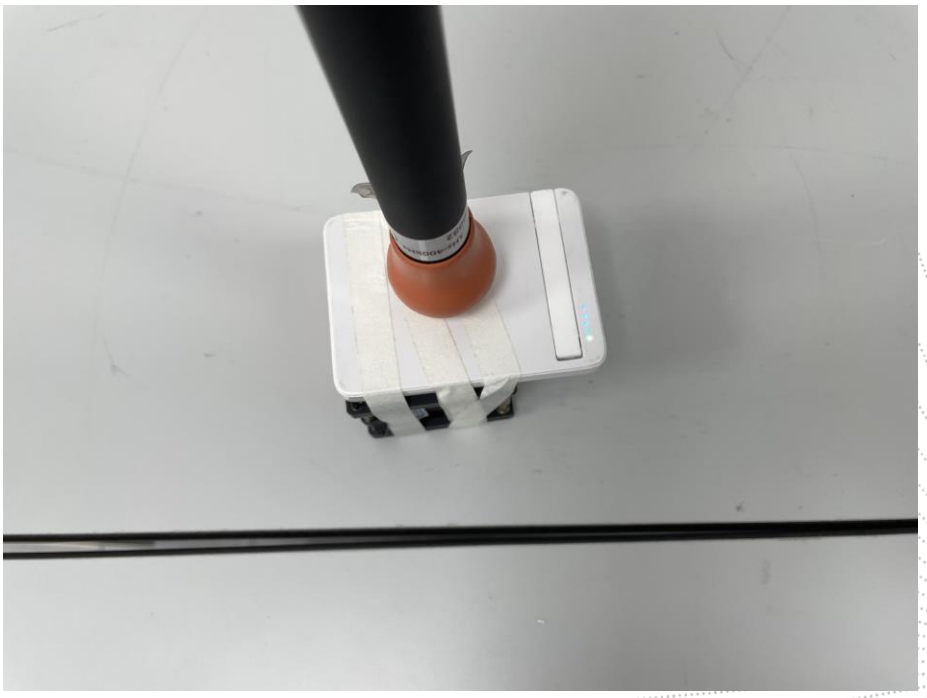





1K
2K
SW


ANRITSU/TRIL
SMP160
FIELD METER
1K
2K
SW





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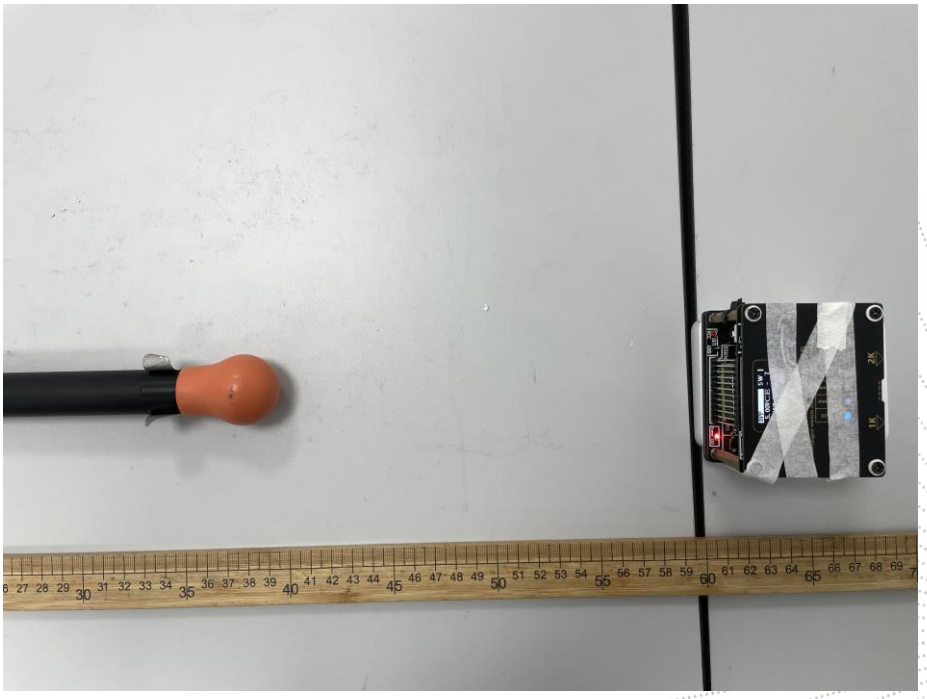

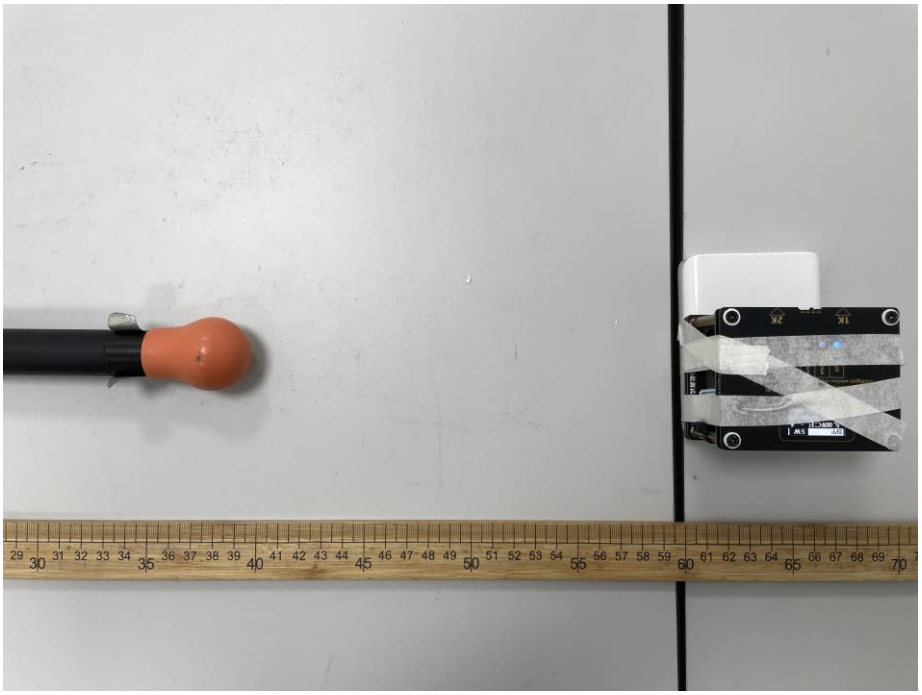

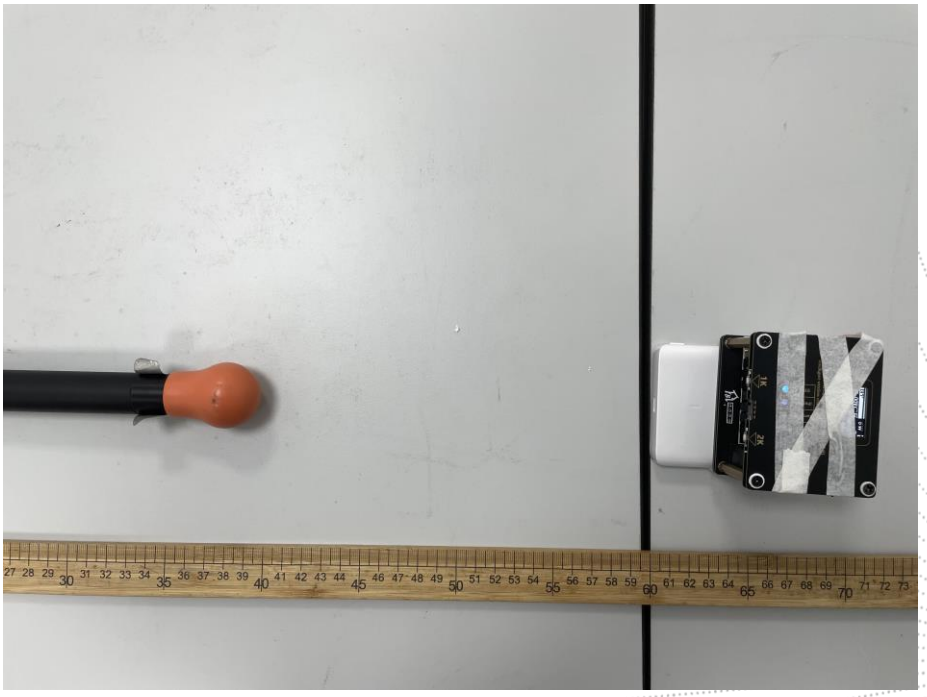

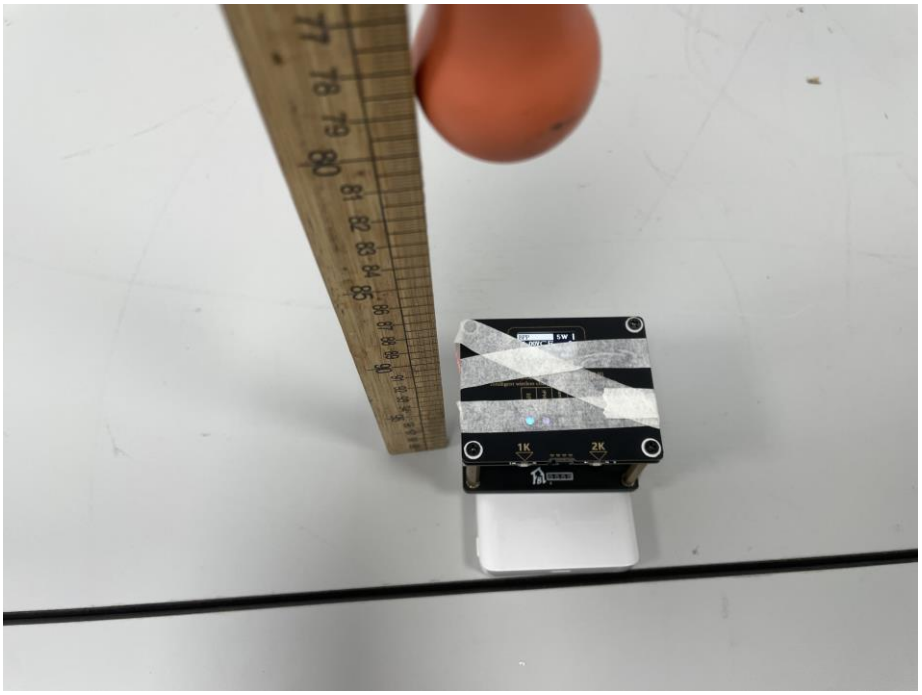
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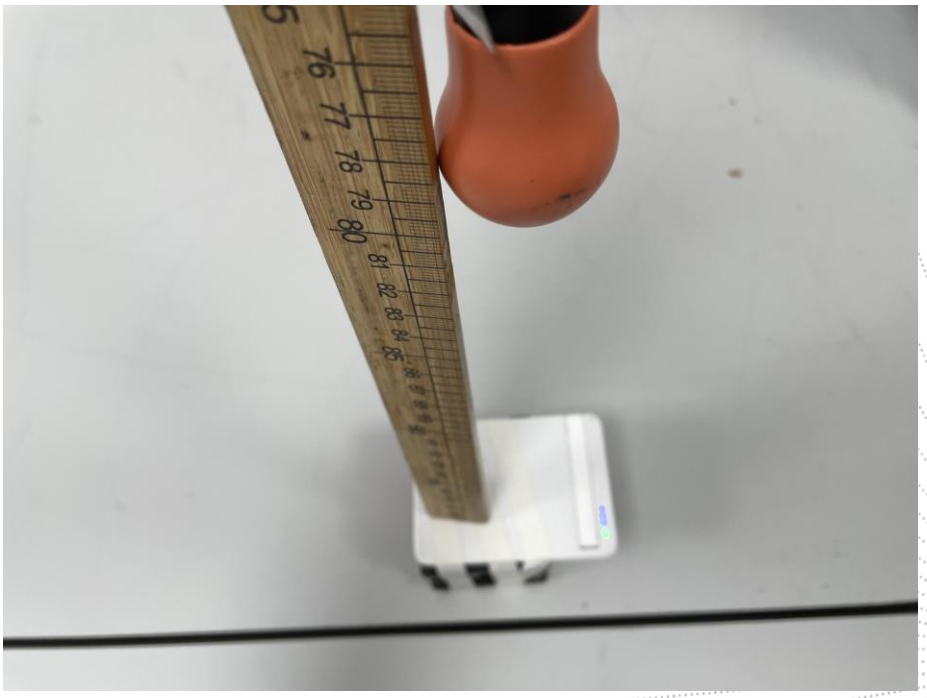

STATEMENT

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** ※※※※※