

TEST REPORT

Report No.: BCTC2302814173-2E

Applicant: Shenzhen Xinhui Wireless Intelligence Co., LTD

Product Name: 3 IN 1 WIRELESS CHARGER

Model/Type Ref.: XH-X3

Tested Date: 2023-02-07 to 2023-02-16

Issued Date: 2023-02-16

Shenzhen BCTC Testing Co., Ltd.



No.: BCTC/RF-EMC-005 Page 1 of

Edition: A.5



FCC ID: 2A8YB-XH-X3

Product Name: 3 IN 1 WIRELESS CHARGER

Trademark: N/A

XH-X3

Model/Type Ref.: X2, XH-X1, XH-X2, XH-X4, XH-X5, XH-X6, XH-X7, XH-X8, XH-X9, XH-X10,

XH-P1, XH-P2, XH-P3, XH-P4, XH-P5, XH-P6

Prepared For: Shenzhen Xinhui Wireless Intelligence Co., LTD

Address: C1105, Silver Star Science and Technology Building, No. 1301, Sightseeing

Road, Longhua District, Shenzhen, China

Manufacturer: Shenzhen Xinhui Wireless Intelligence Co., LTD

Address: C1105, Silver Star Science and Technology Building, No. 1301, Sightseeing

Road, Longhua 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: 2023-02-07

Sample tested Date: 2023-02-07 to 2023-02-16

Issue Date: 2023-02-16

Report No.: BCTC2302814173-2E

Test Standards: FCC CFR 47 part1, 1.1307(b), 1.1310

Test Results: PASS

Tested by:

Lei Chen

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.

No.: BCTC/RF-EMC-005 Page 2 of 13 / Edition: A.5



Table Of Content

rest	Report Declaration	Page
1.	Version	∠
2.	Product Information	5
2.1	Product Information	
2.2	Support Equipment	5
2.3	Test Mode	
3.	Test Facility And Test Instrument Used	
3.1	Test Facility	7
3.2	Test Instrument Used	
4.	Method Of Measurement	8
4.1	Applicable Standard	8
4.2	Block Diagram Of Test Setup	8
4.3	Limit	9
4.4	Test Procedure	
4.5	Equipment Approval Considerations	10
4.6	E And H Field Strength	1 1
5.	Photographs Of Test Set-Up	12

(Note: N/A Means Not Applicable)



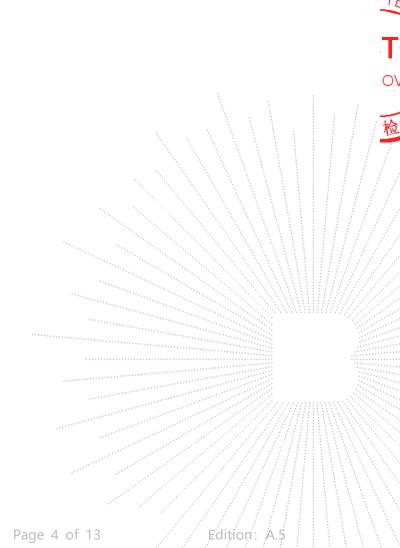






1. Version

Report No.	Issue Date	Description	Approved
BCTC2302814173-2E	TC2302814173-2E 2023-02-16		Valid



No.: BCTC/RF-EMC-005 Page 4 of 13



2. **Product Information**

Product Information 2.1

XH-X3

Model/Type Ref.: X2, XH-X1, XH-X2, XH-X4, XH-X5, XH-X6, XH-X7, XH-X8, XH-X9, XH-X10,

XH-P1, XH-P2, XH-P3, XH-P4, XH-P5, XH-P6

Model differences: All the model are the same circuit and RF module, except model names and color.

Product Description: 3 IN 1 WIRELESS CHARGER

Earphone: 115kHz-205kHz Operation Frequency:

Watch: 300kHz-350kHz

Antenna installation: loop coil antenna

Input: DC 9V/2A, 12V/1.5A

Phone: 115kHz-205kHz

Phone output: 5W/7.5W/10W/15W Ratings:

Earphone output: 5W Watch output: 3W

Hardware Version: N/A Software Version: N/A

The antenna gain of the product is provided by the customer, and the test data is Remark:

affected by the customer information.

Cable of Product

No	o.	Cable Type	Quantity	Provider	Length (m)	Shielded	Note
1				Applicant		Yes/No	With a ferrite ring in mid Detachable
2	2			встс		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 (Phone) + Wireless charger 5W (Earphone) + Wireless charger 3W (Watch)
Test Modes 2	Wireless charger 7.5W (Phone) + Wireless charger 5W (Earphone) + Wireless charger 3W (Watch)
Test Modes 3	Wireless charger 10W (Phone) + Wireless charger 5W (Earphone)
Test Modes 4	Wireless charger 10W (Phone) + Wireless charger 3W (Watch)

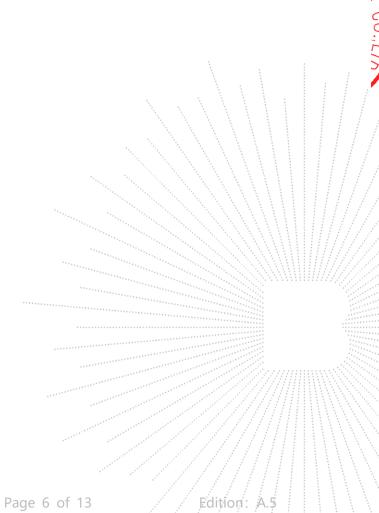
No.: BCTC/RF-EMC-005 Page 5 of 13 Edition:



Test Modes 5

Report No.: BCTC2302814173-2E

Wireless charger 15W (Phone)



No.: BCTC/RF-EMC-005 Page 6 of 13 / Edition: A.5



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	\	\							

No.: BCTC/RF-EMC-005 Page 7 of 13 / Edition: A.5



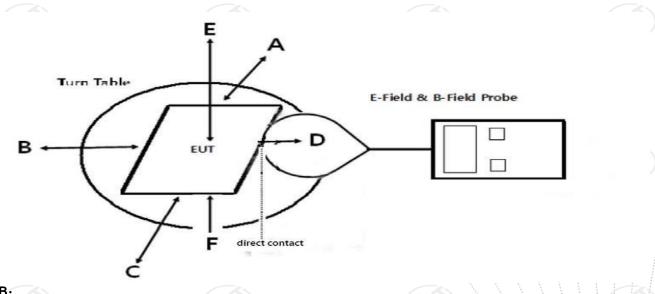
4. Method Of Measurement

4.1 Applicable Standard

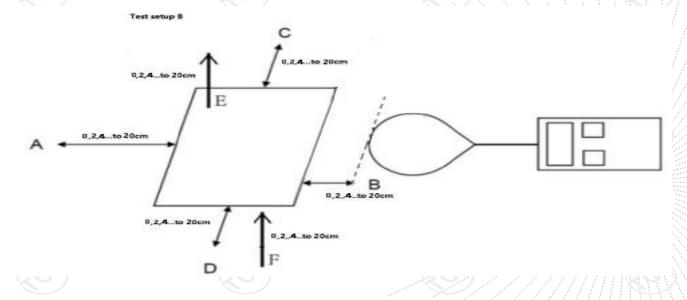
According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. According to §1.1310 and §2.1093 RF exposure is calculated. According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

4.2 Block Diagram Of Test Setup

A:



B:



No.: BCTC/RF-EMC-005

Page 8 of 13

Edition: A.5



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

No.: BCTC/RF-EMC-005 Page 9 of 13 Edition: A.5



4.5 Equipment Approval Considerations

The EUT does comply with item 5(b) of KDB 680106 D01v03

- Power transfer frequency is less than 1MHz
 Yes, the device operate in the frequency range from 115-350KHz
- 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 15W.
- 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.

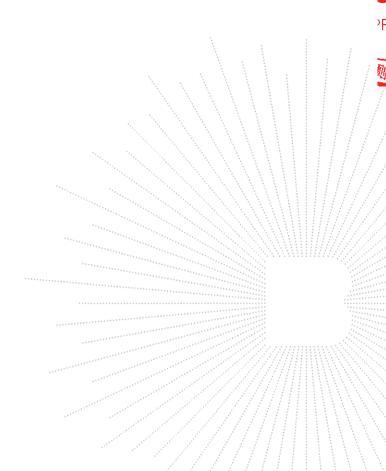
Yes, the transfer system includes only single primary and secondary coils.

- 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).

Yes, the EUT is a mophie device charging mat.

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.



No.: BCTC/RF-EMC-005 Page 10 of 13 / / Edition:/ A.5



4.6 E And H Field Strength

Worst Case Operating Mode: Mode 2

E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery level	Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position Top	10% Limits Test (V/m)	Limits Test (V/m)
1%	0.115-0.350	0.080	0.092	0.050	0.052	0.060	0.045	61.4	614
50%	0.115-0.350	0.008	0.107	0.083	0.099	0.082	0.027	61.4	614
99%	0.115-0.350	0.053	0.021	0.084	0.142	0.058	0.153	61.4	614

H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery level	Frequency Range (MHz)	Test Position A(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position Top(uT)	10% Limits Test (uT)	Limits Test (uT)
1%	0.115-0.350	0.012	0.017	0.061	0.228	0.110	0.008	0.204	2.038
50%	0.115-0.350	0.048	0.067	0.113	0.268	0.032	0.135	0.204	2.038
99%	0.115-0.350	0.010	0.062	0.081	0.209	0.059	0.026	0.204	2.038

Battery level	Frequency Range (MHz)	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 Top(A/m)	10% Limits Test (A/m)	Limits Test (A/m)
1%	0.115-0.350	0.009	0.014	0.049	0.183	0.088	0.006	0.163	1.63
50%	0.115-0.350	0.039	0.053	0.090	0.214	0.025	0.108	0.163	1.63
99%	0.115-0.350	0.008	0.049	0.065	0.167	0.047	0.021	0.163	1.63

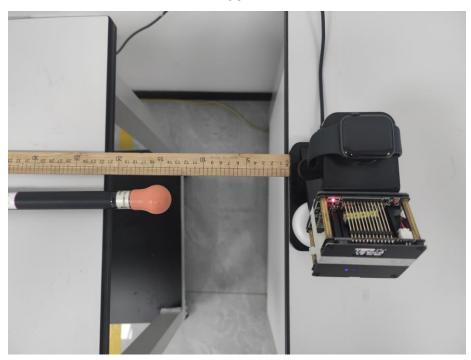
Note:A/m=uT÷1.25

No.: BCTC/RF-EMC-005 Page 11 of 13 / /Edition:/ A.5



5. Photographs Of Test Set-Up

15CM







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.

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

E-Mail: bctc@bctc-lab.com.cn

**** END ****

No.: BCTC/RF-EMC-005 Page 13 of 13 / / Edition:/ A.5