# **FCC MPE TEST REPORT**

FCC ID: 2ARGJZCWX-013

**Product:** Random paste wireless charging

Trade Name: N/A

Model Name: ZCWX-013

Serial Model: ZCWX-014

Report No.: UNIA2018101217-2FR-01

# **Prepared for**

Shenzhen Infinite Intelligence Technology Co., Ltd

No. 233 Shangjing Industrial Area, Longnan Rd, Longgang District, Shenzhen, China

# Prepared by

Shenzhen United Testing Technology Co., Ltd.

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# **TEST RESULT CERTIFICATION**

Applicant's name:	Shenzhen Infinite Intelligence Technology Co., Ltd
Address:	No. 233 Shangjing Industrial Area, Longnan Rd, Longgang District, Shenzhen, China
Manufacture's Name:	Shenzhen Infinite Intelligence Technology Co., Ltd
Address:	No. 233 Shangjing Industrial Area, Longnan Rd, Longgang District, Shenzhen, China
Product description	
Product name:	Random paste wireless charging
Trade Mark:	N/A
Model and/or type reference :	ZCWX-013, ZCWX-014
Standards:	FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03
Co., Ltd., and the test results with the FCC requirements. A report.  This report shall not be reprodocument may be altered or	has been tested by Shenzhen United Testing Technology show that the equipment under test (EUT) is in compliance and it is applicable only to the tested sample identified in the duced except in full, without the written approval of UNI, this revised by Shenzhen United Testing Technology Co., Ltd., noted in the revision of the document.
	: Oct. 12, 2018 ~ Oct. 18, 2018
Date of Issue	
Test Result	
Prepared by:	Kahn Yang  Kahn yang Editor TECHNO  Sherrin Qan
Reviewer:	Sherwin Q. n/Supervisor
Approved & Authorized Signe	er:Liuze/Manager

Note: For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

	Channel List											
Channel	Frequency(KHz)	Channel	Frequency(MHz)									
01	125											

The EUT antenna is Coil Antenna. No antenna other than that furnished by the responsible party shall be used with the device.

#### 1. SUMMARY OF TEST RESULTS

1.1 Test procedures according to the technical standards: FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03

FCC CFR 47										
Standard Section	Judgment	Remark								
FCC CFR 47 part1,	Electric Field Strength (E) (V/m)	PASS								
1.1310 KDB680106 D01 v03(3)(3)	Magnetic Field Strength (H) (A/m)	PASS								

#### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expended uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k=2}$ , providing a level of confidence of approximately 95%.

No.	Item	Uncertainty
1	All emissions,radiated(<30M)(9KHz-30MHz)	±2.45dB
2	Temperature	±0.5°C
3	Humidity	±2%

#### 1.3 Test Instruments

Description	Brand	Model No.	Frequency Range	Calibrated Until
Broadband Field Meter	NARDA	NBM-550		Jan. 01, 2019
Magnetic Field Meter	NARDA	ELT-400	1–400kHz	Jan. 01, 2019
Magnetic Probe	NARDA	HF-3061	300kHz-30MHz	Jan. 01, 2019
Magnetic Probe	NARDA	HF-0191	27–1000MHz	Jan. 01, 2019
Broadband Field Meter	NARDA	NBM-550		Jan. 01, 2019
Electric Field Meter	COMBINOVA	EFM 200	5Hz-400kHz	Jan. 01, 2019
E-Field Probe	NARDA	EF-0391	100kHz–3GHz	Jan. 01, 2019
E-Field Probe	NARDA	EF-6091	100MHz–60GHz	Jan. 01, 2019

NOTE: The calibration interval of the above test instruments is 12 months.

#### 2. MAXIMUM PERMISSIBLE EXPOSURE

#### 2.1 MAXIMUM PERMISSIBLE EXPOSURE

Limit of Maximum Permissible Exposure

	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 Genera	al Population / Uncontro	olled 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								

Note 1: f = frequency in MHz; \*Plane-wave equivalent power density.

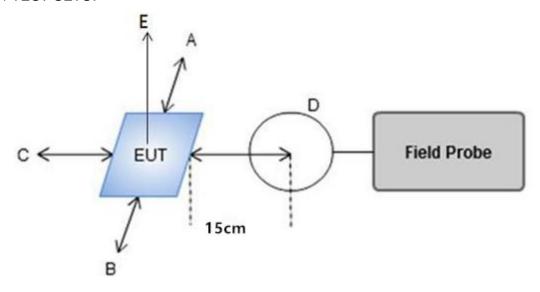
<sup>2:</sup> For the applicable limit, see FCC 1.1310, 680106 D01 RF Exposure Wireless Charging Apps v03.

<sup>3:</sup> Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

#### 3. TEST PROCEDURE

a. For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device.

#### 4.1 TEST SETUP



#### 4.2 TEST PHOTO



#### 4.3 RESULT OF MAXIMUM PERMISSIBLE EXPOSURE

#### For Full load mode:

#### E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

	,		<u> </u>	0	` /		
Frequency	Test	Test	Test	Test	Test	Reference	Limits Test
Range (MHz)	Position A	Position B	Position C	Position D	Position E	Limit (V/m)	(V/m)
0.125	1.16	1.11	1.10	1.12	1.12	184.2	614

#### H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

			,		` '		
Frequency	Test	Test	Test	Test	Test	Reference	Limits Test
Range (MHz)	Position A	Position B	Position C	Position D	Position E	Limit (A/m)	(A/m)
0.125	0.18	0.20	0.17	0.16	0.16	0.489	1.63

#### For Half Load for wrist band mode:

#### E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test	Reference	Limits Test
Range (MHz)	Position A	Position B	Position C	Position D	Position E	Limit (V/m)	(V/m)
0.125	1.18	1.18	1.16	1.16	1.12	184.2	614

#### H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Reference	Limits Test
Range (MHz)	Position A	Position B	Position C	Position D	Position E	Limit (A/m)	(A/m)
0.125	0.12	0.16	0.18	0.20	0.18	0.489	1.63

# For Half Load for shoepod mode:

# E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		Limits Test (V/m)
0.125	1.09	1.10	1.18	1.16	1.16	184.2	614

# H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Reference	Limits Test
Range (MHz)	Position A	Position B	Position C	Position D	Position E	Limit (A/m)	(A/m)
0.125	0.16	0.16	0.16	0.18	0.16	0.489	1.63

#### For No load mode:

### E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test		Limits Test
Range (MHz)	Position A	Position B	Position C	Position D	Position E		(V/m)
0.125	1.15	1.15	1.20	1.21	1.16	184.2	614

# H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Reference	Limits Test
Range (MHz)	Position A	Position B	Position C	Position D	Position E	Limit (A/m)	(A/m)
0.125	0.16	0.15	0.15	0.15	0.18	0.489	1.63

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