

RF EXPOSURE REPORT

The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results, data evaluation, test procedures, and equipment of configurations shown in this report were made in accordance with the procedures in ANSI C63.10(2013).

Applicant / Manufacturer : ZHUHE (XIAMEN) NEW ENERGY TECHNOLOGY CO., LTD.

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Factory : XIAMEN ZHUHE ELECTRONIC TECHNOLOGY CO., LTD.

Address : Unit 301, No. 32, Xiangyue Road, Torch Hi-Tech Industrial Development Zone, Xiang'an, Xiamen.

E.U.T. : Wireless Charger

Brand Name : 

Model No. : WX10-G15-30mm

FCC ID : 2AVSVWX1001

Measurement Standard : FCC PART 15 Subpart C

Date of Receiver : February 28, 2020

Date of Test : March 02, 2020 to March 16, 2020

Date of Report : March 17, 2020

In the configuration tested, the EUT complied with the standards specified above.

This test report is for the customer shown above and their specific product only. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test

Product name	: Wireless Charger
Main model	: WX10-G15-30mm
Additional model	: N/A
Model difference	: N/A
Power Supply	: Input: DC 24-36V Output: 10W Max
Test voltage	: AC 120V 60Hz adapter input.
Adapter	: N/A
Cable	: DC Line: 20cm
Software version	: V1.0
Hardware version	: V1.0
Note	: N/A
Remark	: N/A
Frequency Range	: 110.5-130KHz
Test frequency	: 121.2KHz
Test output	: DC 9V 1.1A 10W Max

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2AVSVWX1001** filing to comply with FCC Part 15, Subpart C Rule.

1.3 Test Facility and Location

Site Description

EMC Lab : Listed by CNAS, August 13, 2018
The certificate is valid until August 13, 2024
The Laboratory has been assessed and proved to be in compliance with CNAS/CL01
The Certificate Registration Number is L5795.

Listed by A2LA, November 01, 2017
The certificate is valid until December 31, 2021
The Laboratory has been assessed and proved to be in compliance with ISO17025
The Certificate Registration Number is 4429.01

Listed by FCC, November 06, 2017
The Designation Number is CN1214
Test Firm Registration Number: 907417

Name of Firm

>Listed by Industry Canada, June 08, 2017
The Certificate Registration Number. Is 46405-9743
: Dongguan Nore Testing Center Co., Ltd.
(Dongguan NTC Co., Ltd.)

Site Location

: Building D, Gaosheng Science & Technology Park,
Zhouxi Longxi Road, Nancheng District, Dongguan
City, Guangdong Province, China

2. Measurement Uncertainty

Measurement Uncertainty for a Level of Confidence of 95%, $U=2\times U_c(y)$

Radiated emission(9KHz~150KHz)	$\pm 3.50\text{dB}$
Radiated emission(150KHz~30MHz)	$\pm 3.50\text{dB}$
Radiated emission(30MHz~1GHz)	$\pm 3.70\text{dB}$

3. Method of measurement

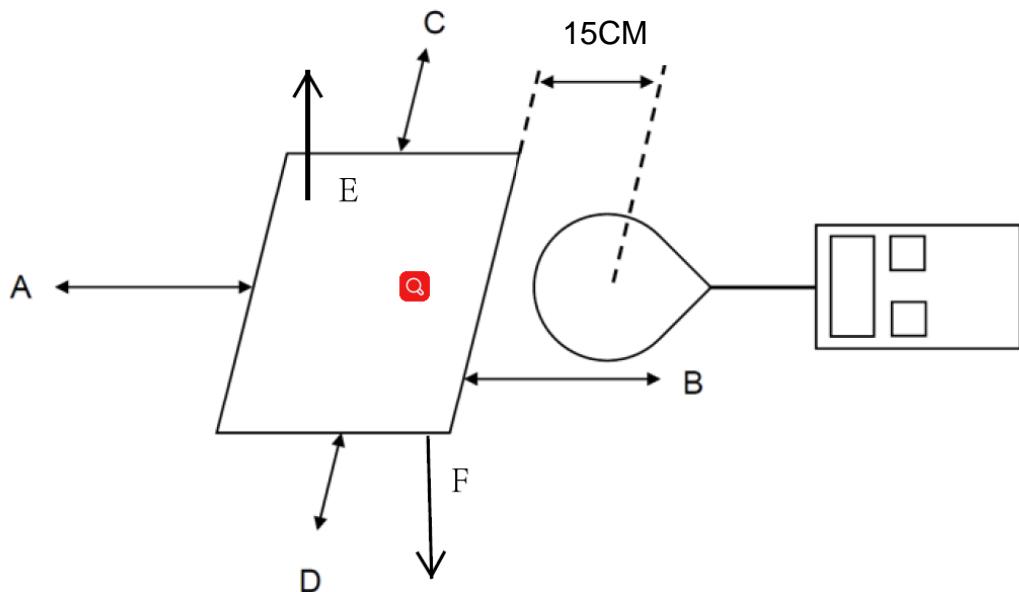
3.1 Applicable standard

According to 1.1307(b)(1), system 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 to KDB680106 D01V03: RF exposure wireless charging apps v03.

3.2 Test Setup



3.3 Test procedure

1. The RF exposure test was performed on 360 degree turn table in anechoic chamber;
2. The measurement probe was placed at test distance 15cm which is between the edge of the charger and 20cm between top of the charger and the geometric centre of probe.
3. The turn table was rotated 360 degree to search of highest strength.
4. The highest emission level was recorded and compared with limit as soon as measurement of each points (A,B,C,D,E) were completed.
5. The EUT were measured according to the dictates of KDB 680106D01V03

3.4 Equipment approval considerations

1. The EUT dose comply with item 5.2 of KDB 680106D01V03
 - a, Power transfer frequency is less than 1MHz.
YES; the device operated in the frequency range from 110.5-130KHz.
 - b, 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<15W.
 - c, 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 only between individual pair of coils.
YES; the transfer system includes only single primary and secondary coils.
 - d, Client device is placed directly in contact with the transmitter.
YES; Client device is placed directly in contact with the transmitter.
 - e, Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
YES;
 - f, The aggregate H-field strengths at 15cm surrounding the device and 20cm 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 less than 50% x MPE limits.

3.5 E and H field strength Limit

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30
<p>F=frequency in MHz *=Plane-wave equivalent power density RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).</p>				

Test Result

Mobile phone has been charge at zero charge, intermediate charge, and full charge.

Electric Field Emissions

Operation frequency	Test Position	Test Distance (cm)	Probe Measure Result(V/m)			Limit (V/m)	50% Limit (V/m)
			zero charge	intermediate charge	full charge		
121.2KHz	Side A	15	3.41	3.44	3.59	614	307
	Side B	15	3.54	3.67	3.60	614	307
	Side C	15	3.53	3.57	3.62	614	307
	Side D	15	3.51	3.78	3.58	614	307
	Side E	20	2.58	2.62	2.60	614	307

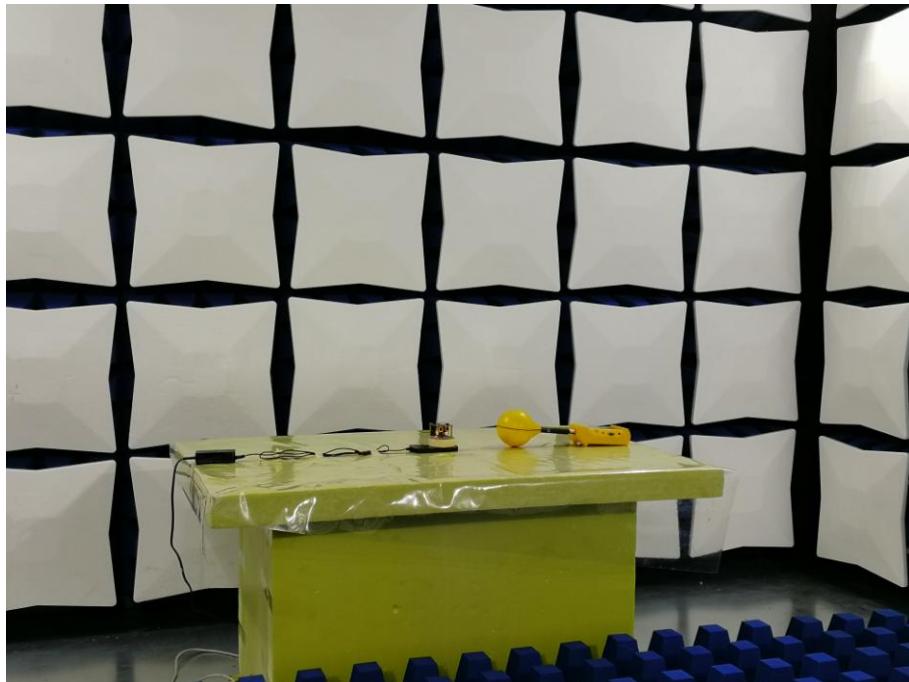
Magnetic Field Emissions

Operation frequency	Test Position	Test Distance (cm)	Probe Measure Result(A/m)			Limit (A/m)	50% Limit (A/m)
			zero charge	intermediate charge	full charge		
121.2KHz	Side A	15	0.0765	0.0755	0.0746	1.63	0.815
	Side B	15	0.0764	0.0734	0.0748	1.63	0.815
	Side C	15	0.0765	0.0746	0.0736	1.63	0.815
	Side D	15	0.0724	0.0755	0.0757	1.63	0.815
	Side E	20	0.0464	0.0467	0.0513	1.63	0.815

3.6 Test equipment list

Description	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due Date
3m semi-anechoic chamber	Zhongyu electron	9.2*6.2*63.4	N/A	July 03,2015	July 02, 2020
Exposure lever tester	Narda	ELT-400	N-0231	June 29,2019	June 28, 2020
Magnetic field probe 100cm ²	Narda	ELT Probe 100cm ²	M0675	June 29,2019	June 28, 2020

3.7 Test Photo



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