

TEST REPORT

Reference No..... : WTX21X03014176W-2
FCC ID : 2AY3MW01
Applicant : Shenzhen Qianwen Electronics Co., Ltd.
Address..... : Room 208, Building Songhua 2F,Xiangnan 4th Road,Minzhi Street,
Product Name : NewQ Magnetic Wireless Charger
Test Model. : W01
Standards : KDB 680106 D01 V03
Date of Receipt sample : Mar.01, 2021
Date of Test..... : Mar.01, 2021 to Mar.19, 2021
Date of Issue : Mar.19, 2021
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,
Block 70 Bao'an District, Shenzhen, Guangdong, China

Tel.: +86-755-33663308

Fax.: +86-755-33663309

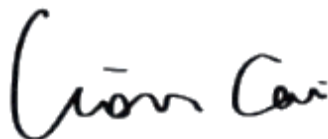
Tested by:

Reviewed By:

Approved & Authorized By:



Jason Su / Project Engineer



Lion Cai / RF Manager



Silin Chen / Manager

TABLE OF CONTENTS

1. GENERAL INFORMATION.....4

1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....4

1.2 TEST EQUIPMENT LIST AND DETAILS5

2. RF EXPOSURE TEST REPORT.....6

2.1 STANDARD APPLICABLE.....6

2.2 TEST CONDITIONS6

2.3 TEST PROCEDURE.....7

2.4 TEST RESULT.....7

2.5 TEST PHOTOS10

APPENDIX PHOTOGRAPHS.....11

Report version

Version No.	Date of issue	Description
Rev.00	Mar.19, 2021	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Shenzhen Qianwen Electronics Co., Ltd.
Address of applicant: Room 208, Building Songhua 2F,Xiangnan 4th Road, Minzhi Street,

Manufacturer: Shenzhen Qianwen Electronics Co., Ltd.
Address of manufacturer: Room 208, Building Songhua 2F,Xiangnan 4th Road, Minzhi Street,

General Description of EUT	
Product Name:	NewQ Magnetic Wireless Charger
Trade Name:	/
Model No.:	W01
Adding Model(s):	/
Battery Capacity	/
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Frequency Range:	112-145kHz
Antenna Type:	Coil Antenna
Rated Voltage:	DC5V/ DC9V
Rated Current:	2.4A/2A
Rated Power:	5W / 7.5W

1.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
MPE Measuring Instrument	Narda	ELT-400	M-0155/M-0170	2020-07-15	2021-07-14
Broadband Field Meter	Narda	NBM-520	D-1699	2020-06-21	2021-06-20

2. RF Exposure Test Report

2.1 Standard Applicable

According to § 1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

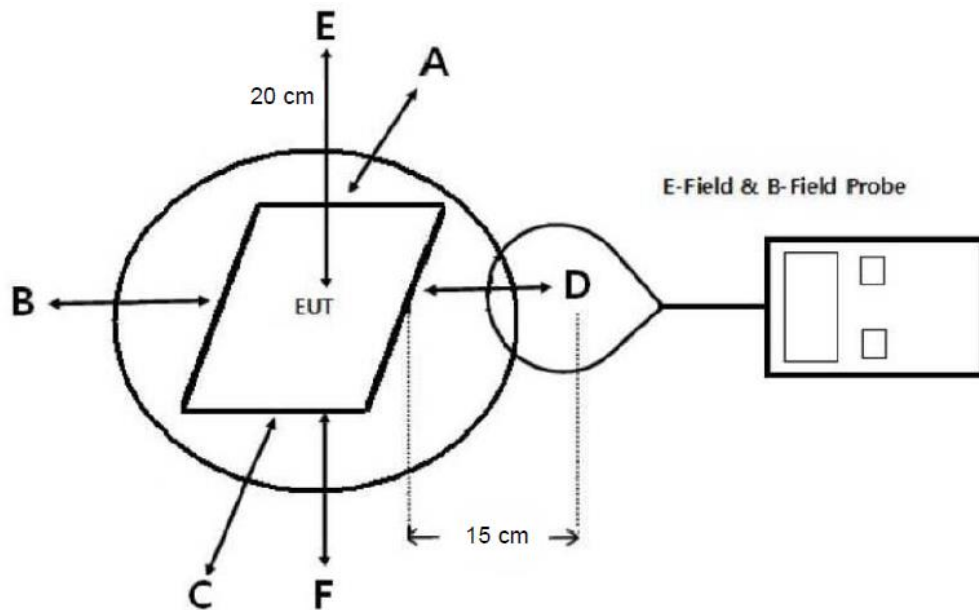
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

2.2 Test Conditions

Test Mode	Description	Remark	Power Supply Mode
TM1	Wireless charging	/	Input DC5V/2.4A; Output:5W
TM2	Wireless charging	/	Input DC9V/2A; Output:7.5W
Measurement Distance:	15 cm		

2.3 Test Procedure



- The measurement probe was placed at test distance (15 cm for A, B, C, D, F and 20 cm for E) which is between the edge of the charger and the geometric center of probe.
- The highest emission level was recorded at the measurement points (A, B, C, D, E, F).
- The EUT was measured according to the distance of KDB 680106 D01 V03.

2.4 Test Result

The EUT does comply with item 5.2 of KDB 680106 D01V03

- Power transfer frequency is less than 1 MHz
Yes, the device operates in the frequency range from 112kHz to 145kHz.
- Output power from each primary coil is less than or equal to 15 watts
Yes, the maximum output power of the primary coil is less than 15W.
- The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils
Yes, the client device includes only single primary coils.
- Client device is inserted in or placed directly in contact with the transmitter
Yes, Client device is placed directly in contact with the transmitter.
- Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

Waltek Testing Group (Shenzhen) Co., Ltd.

<http://www.semtest.com.cn>

Yes, It is mobile exposure conditions only.

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 less than 50% of the MPE limit, refer to test TM1, TM2 list, and the coils can't transmitted simultaneous.

Test Mode: TM1

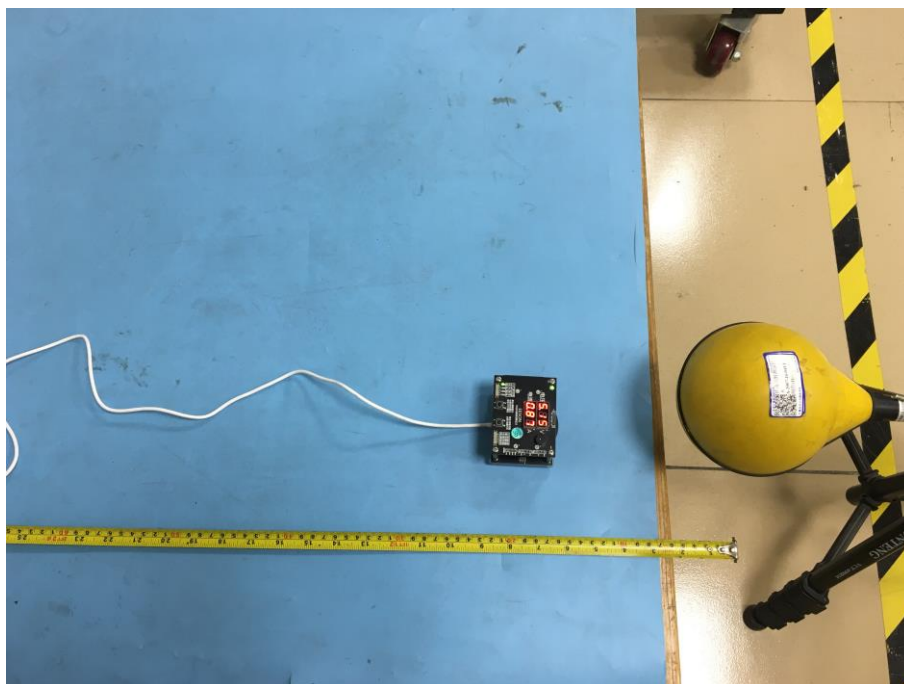
Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Top	37	614	307
Bottom	35	614	307
Side 1	32	614	307
Side 2	35	614	307
Side 3	34	614	307
Side 4	36	614	307
Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m)
Top	0.16	1.63	0.815
Bottom	0.17	1.63	0.815
Side 1	0.15	1.63	0.815
Side 2	0.16	1.63	0.815
Side 3	0.14	1.63	0.815
Side 4	0.13	1.63	0.815

Test Mode: TM2

Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Top	40	614	307
Bottom	42	614	307
Side 1	42	614	307
Side 2	41	614	307
Side 3	41	614	307
Side 4	39	614	307
Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m)
Top	0.16	1.63	0.815
Bottom	0.17	1.63	0.815
Side 1	0.15	1.63	0.815
Side 2	0.16	1.63	0.815
Side 3	0.14	1.63	0.815
Side 4	0.13	1.63	0.815

Note: this EUT was tested in 3 orthogonal positions and the worst case position (D point) data was reported.

2.5 Test Photos



APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

******* END OF REPORT *******