

MPE TEST REPORT

Report No:STS2304061H01

Issued for

Shenzhen Yize Innovation Technology Co., Ltd.

201, 2nd Floor, Building 3, Yunli Smart Park, Bantian Street, Longgang District, Shenzhen, CN

Product Name:	Fast Wireless Charger
Brand:	N/A
Model Number:	K2
Series Model(s):	N/A
FCC ID:	2BA6N-K2
Test Standard:	FCC CFR 47 part 1, 1.1310

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APPROVAL

Shenzhen STS Test Services Co., Ltd.
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•	TEST RESULT CERTIFICATION
Applicant's Name: Address	Shenzhen Yize Innovation Technology Co., Ltd. 201, 2nd Floor, Building 3, Yunli Smart Park, Bantian Street,
	Longgang District, Shenzhen, CN
Manufacturer's Name:	DongGuan RuiHong Lian Technology Co.,Ltd.
Address:	Floor 3, building 2, No.12, Yongqiang Road, Huangjiang Town, Dongguan City, Guangdong Province, China
Product Description	
Product Name:	Fast Wireless Charger
Brand:	N/A
Model Number:	K2
Series Model(s):	N/A
Standards:	FCC CFR 47 part 1, 1.1310
Test Procedure:	680106 D01 RF Exposure Wireless Charging Apps v03
under test (EUT) is in compliance sample identified in the report. This report shall not be reproduce	been tested by STS, the test results show that the equipment with the FCC requirements. And it is applicable only to the tested ed except in full, without the written approval of STS, this document, personal only, and shall be noted in the revision of the document.
Date of receipt of test item:	19 Apr. 2023
Date of performance of tests:	19 Apr. 2023 ~ 07 June 2023
Date of Issue:	07 June 2023
Test Result:	Pass
Testing Engineer	: Chins cher
	(Chris Chen)
Technical Manag	ger: Sean She APPROVAL 6
	(Sean She)

(Bovey Yang)

Authorized Signatory:



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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	07 June 2023	STS2304061H01	ALL	Initial Issue





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03

FCC CFR 47				
Standard Section	Test Item	Judgment	Remark	
FCC CFR 47 part1,	Electric Field Strength (E) (V/m)	PASS		
1.1310 KDB680106 D01v03	Magnetic Field Strength (H) (A/m)	PASS		

1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add.: A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,

Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569 IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

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 $\mathbf{95}$ %.

No.	Item	Uncertainly
1	H-filed	±0.83dB
2	E-filed	±0.91dB



1.3 GENERAL DESCRIPTION OF THE EUT

Product Name	Fast Wireless Charger
Brand	N/A
Model Number	K2
Series Model(s)	N/A
Model Difference	N/A
Equipemnt Category	Non-ISM frequency
Antenna Type	Please refer to the Note 2.
Operating frequency	110.5-205KHz
Modulation Type	ASK
Rating	Input: DC 5V 3A, DC 9V 2A, DC 12V 1.5A Output: 15W Max/10W/7.5W/5W
Hardware version number	N/A
Software version number	N/A
Connecting I/O Port(s)	Please refer to the Note 1.

Note:

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

2. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	NOTE
1	N/A	K2	Coil 1	NA	Antenna
1	N/A	K2	Coil 2	NA	Antenna

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

3. Test Mode

Test Mode	Description
Mode 1	Standby (No load)
Mode 2	Coil antenna 1_Charging+TX Mode (Low load_5W)
Mode 3	Coil antenna 1_Charging+TX Mode (Half load_7.5W)
Mode 4	Coil antenna 1_Charging+TX Mode (Full load_15W)
Mode 5	Coil antenna 2_Charging+TX Mode (Low load_5W)
Mode 6	Coil antenna 2_Charging+TX Mode (Half load_7.5W)
Mode 7	Coil antenna 2_Charging+TX Mode (Full load_15W)

Coil 1 or Coil 2:

Input: DC 5V 3A, Output: 5W.

Input: DC 9V 2A, Output: 7.5W/10W. Input: DC 12V 1.5A, Output: 15W.



1.4 EQUIPMENTS LIST FOR ALL TEST ITEMS

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Electric and Magnetic field Probe - Analyzer	Narda	EHP 200A	180ZX10220	2023.02.28	2024.02.27

1.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS Necessary accessories

		1100000419 41	000001100		
Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
/	Tablet PC	Fire	Fire HD 10 Plus	N/A	N/A
/	Adapter	Huawei	HW-050450C00	N/A	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in [®] Length [®] column.
- (2) "YES" is means "with core"; "NO" is means "without core".



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 Po		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)	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

Note 2: For the applicable limit, see FCC 1.1310, 680106 D01 RF Exposure Wireless Charging Apps v03 Note 3: 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.

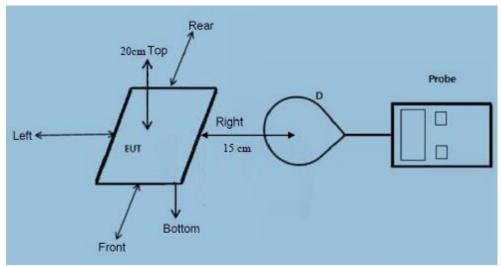
Note 4: The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.



2.2 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 20 cm(Top) and 15cm(Edge). 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 20 cm(Top) and 15cm(Edge) measured from the center of the probe(s) to the edge of the device.

2.3 TEST SETUP



Remark: The EHP 200A probe antenna diameter is less than 11.5cm.

2.4 TEST RESULTS

The EUT does comply with item 5 KDB680106 D01 v03.

- (1) Power transfer frequency is less than 1 MHz. (Conform)
- (2) Output power from each primary coil is less than or equal to 15 watts. (Conform)
- (3) 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. (Conform)
- (4) Client device is placed directly in contact with the transmitter. (Conform)
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).(Conform)
- (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. (Conform)



2.5 MAXIMUM PERMISSIBLE EXPOSURE

Coil-1

Maximum Permissible Exposure				
Test Mode:	Mode 4			
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
< 1% Battery	15cm	Front	0.449	0.12
< 1% Battery	15cm	Rear	0.45	0.108
< 1% Battery	15cm	Left	0.443	0.109
< 1% Battery	15cm	Right	0.424	0.111
< 1% Battery	20cm	Тор	0.431	0.115
Limit			614	1.63
Margin Limit (%)			0.08%	9.20%

Maximum Permissible Exposure				
Test Mode:	Mode 3			
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
50% Battery	15cm	Front	0.446	0.118
50% Battery	15cm	Rear	0.445	0.122
50% Battery	15cm	Left	0.439	0.097
50% Battery	15cm	Right	0.441	0.132
50% Battery	20cm	Тор	0.44	0.133
Limit			614	1.63
Margin Limit (%)			0.08%	8.40%

Maximum Permissible Exposure				
Test Mode:	Mode 2			
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
> 99% Battery	15cm	Front	0.455	0.118
> 99% Battery	15cm	Rear	0.444	0.122
> 99% Battery	15cm	Left	0.43	0.1
> 99% Battery	15cm	Right	0.434	0.114
> 99% Battery	20cm	Тор	0.432	0.127
Limit			614	1.63
Margin Limit (%)			0.08%	8.96%



Coil-2

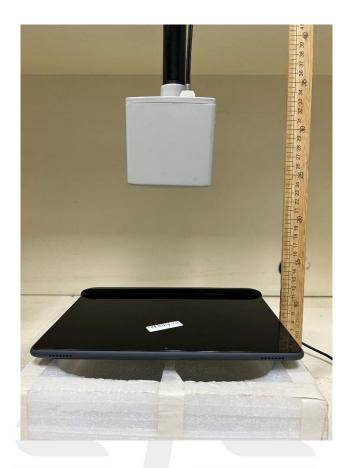
Maximum Permissible Exposure				
Test Mode:	Mode 7			
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
< 1% Battery	15cm	Front	0.455	0.113
< 1% Battery	15cm	Rear	0.431	0.116
< 1% Battery	15cm	Left	0.430	0.111
< 1% Battery	15cm	Right	0.448	0.128
< 1% Battery	20cm	Тор	0.448	0.128
Limit			614	1.63
Margin Limit (%)			0.08%	8.56%

Maximum Permissible Exposure				
Test Mode:	Mode 6			
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
50% Battery	15cm	Front	0.456	0.121
50% Battery	15cm	Rear	0.442	0.102
50% Battery	15cm	Left	0.434	0.115
50% Battery	15cm	Right	0.438	0.125
50% Battery	20cm	Тор	0.432	0.130
Limit			614	1.63
Margin Limit (%)			0.08%	9.13%

Maximum Permissible Exposure				
Test Mode:	Mode 5			
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
> 99% Battery	15cm	Front	0.446	0.114
> 99% Battery	15cm	Rear	0.428	0.101
> 99% Battery	15cm	Left	0.440	0.122
> 99% Battery	15cm	Right	0.432	0.114
> 99% Battery	20cm	Тор	0.445	0.115
Limit			614	1.63
Margin Limit (%)			0.08%	8.56%



MPE SETUP PHOTO



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