FCC TEST REPORT

FCC ID: 2BKUE-000401

On Behalf of

Ji'an Zhongrui Electronics Co.,Ltd.

2-IN-1 Magnetic WirelessCharger

Model No.:000401

Prepared for	:	Ji'an Zhongrui Electronics Co.,Ltd.
Address	:	4/f, building D, entrepreneurship incubator base, Ji'an National high-tech zone, Ji'an County

Prepared By	:	Shenzhen PSI Testing Co., Ltd.
Address	:	1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Report Number	:	psi2503143-C01-R04
Date of Receipt	:	March 14, 2025
Date of Test	:	March 14, 2025-March 26, 2025
Date of Report	:	March 26, 2025
Version Number	:	V0

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TEST REPORT DECLARATION

Applicant	:	Ji'an Zhongrui Electronics Co.,Ltd.
Address	:	4/f, building D, entrepreneurship incubator base, Ji'an National high-tech zone, Ji'an County
Manufacturer	:	Ji'an Zhongrui Electronics Co.,Ltd.
Address	:	4/f, building D, entrepreneurship incubator base, Ji'an National high-tech zone, Ji'an County
EUT Description	:	2-IN-1 Magnetic WirelessCharger
		(A) Model No. : 000401
		(B) Trademark : AVACON BENFEI

Measurement Standard Used:

FCC CFR 47 PART 1, FCC CFR 47 part1, 1.1307(b), 1.1310, 2.1093

KDB 680106 D01 Wireless Power Transfer v04

Test Result: PASS

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness test. Also, this report shows that the EUT is technically compliant with the KDB 680106 D01 requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....…..:	Felix Pang Test Engineer	Felix Pang
Approved by (name + signature)…....:	Simple Guan Project Manager	Simple Guan
Date of issue……..:	January 17, 2025	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	March 26, 2025	Initial released Issue	Felix Pang

1. Test Result Summary

Requirement	CFR 47 Section	Result
RF EXPOSURE	§1.1307(b)(1), §1.1310, §2.1093 & KDB680106 D01	PASS

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

5. Decision rules for the conclusion of this test report: decision by actual test data without considering measurement uncertainty.

2. EUT Description

2.1. Description of Device (EUT)

EUT Name	:	2-IN-1 Magnetic WirelessCharger
Model No.	:	000401
DIFF.	:	N/A
Power supply	:	Input Output :5V⎓3A, 9V⎓2A, 12V⎓1.67A Out put:15WMax IOS Device output power:7.5WMax
Radio Technology	:	Wireless power transmission systems
Operation frequency	:	115KHz -205KHz
Modulation	:	ASK
Antenna Type	:	Coil Antenna
Connector cable loss	:	0dB
Software version	:	N/A
Hardware version	:	N/A
Note	:	Antenna information is provided by applicant. Testing lab is not responsible for the accuracy of the information.

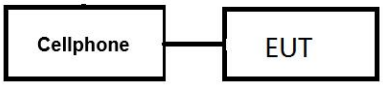
2.2. Accessories of Device (EUT)

Accessories	:	N/A
Manufacturer	:	N/A
Model	:	N/A
specifications	:	N/A

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification
1	Cellphone	Apple	iPhone 15 Pro Max	N/A	N/A
2	Adapter	Apple	A2244	N/A	N/A
3	USB cable	N/A	1M	N/A	N/A

2.4. Block Diagram of connection between EUT and simulators



2.5. Equipment Approval Considerations

The EUT does comply with KDB 680106 D01 as follow table.

Requirements of KDB 680106 D01	Yes/ No	Description
Mobile Device and Portable Device Configurations	Yes	Mobile Device
Equipment Authorization Procedures for Devices Operating at Frequencies Below 4 MHz	Yes	The device operate in the frequency range 115KHz~205KHz

2.6. Description of Test Modes

Mode	Test mode description
1	Mode 1: AC/DC Adapter + EUT + Mobile Phone (Battery Status: <1%)
2	Mode 2: AC/DC Adapter + EUT + Mobile Phone (Battery Status: <50%)
3	Mode 3: AC/DC Adapter + EUT + Mobile Phone (Battery Status: <100%)
4	Mode 4: EUT + Mobile Phone (Battery Status: <1%)
5	Mode 5: EUT + Mobile Phone (Battery Status: <50%)
6	Mode 6: EUT + Mobile Phone (Battery Status: <100%)

Note: The client operating modes (client battery status 1%, 50%, 99%) have been tested and only display data for the worst-case scenario Mode 1 of the client battery status.

2.7. Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	26℃
Humidity range:	25-75%	54%
Pressure range:	86-106kPa	101kPa

2.8. Test Facility

Shenzhen PSI Testing Co., Ltd.
1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission
Registration Number: 916281

2.9. Measurement Uncertainty

(95% confidence levels, k=2)

Item	**Uncertainty**
Uncertainty for H-Field	2.39dB
Uncertainty for E-Field	2.45dB
Uncertainty for conducted RF Power	0.65dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

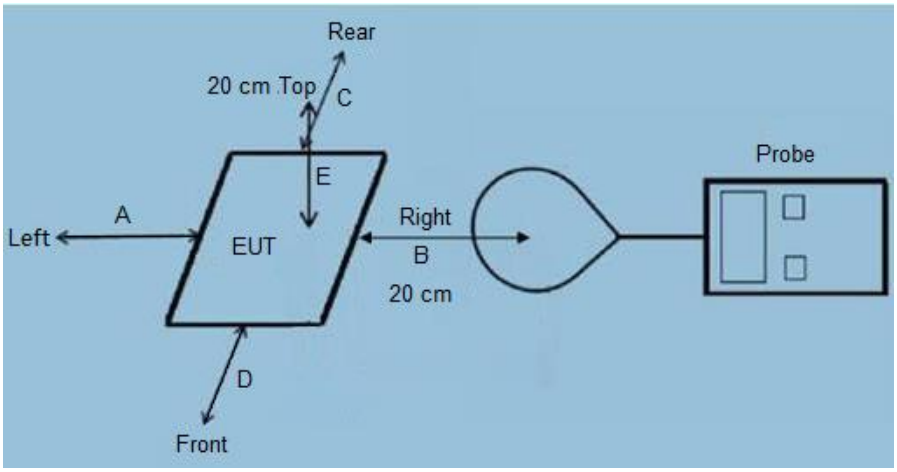
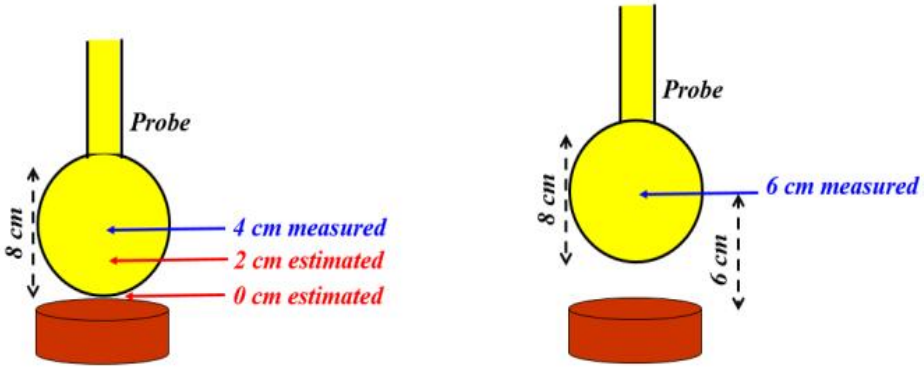
3. Test Results and Measurement Data

3.1. RF EXPOSURE TEST

3.1.1. Test Specification

<table>
<tr><td>Test Requirement:</td><td>FCC Rules and Regulations KDB680106</td></tr>
<tr><td>Test Method:</td><td>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 D01: KDB 680106 D01 Wireless Power Transfer v03.</td></tr>
<tr><td>Limits:</td><td>According to the item 3 of KDB 680106 D01v03:
Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.
(1) Mobile Device and Portable Device Configurations
(2) Equipment Authorization Procedures for Devices Operating at Frequencies Below 4 MHz
(3) The aggregate H-field strengths anywhere at (15cm & 20cm) surrounding the device six surfaces.

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)
Limits for Maximum Permissible Exposure (MPE)
<table>
<tr><th>Frequency range (MHz)</th><th>Electric field strength (V/m)</th><th>Magnetic field strength (A/m)</th><th>Power density (mW/cm^2)</th><th>Averaging time (minutes)</th></tr>
<tr><td colspan="5">(A) Limits for Occupational/Controlled Exposures</td></tr>
<tr><td>0.3-3.0</td><td>614</td><td>1.63</td><td>*(100)</td><td>6</td></tr>
<tr><td>3.0-30</td><td>1842/f</td><td>4.89/f</td><td>*(900/f^2)</td><td>6</td></tr>
<tr><td>30-300</td><td>61.4</td><td>0.163</td><td>1.0</td><td>6</td></tr>
<tr><td>300-1500</td><td>/</td><td>/</td><td>f/300</td><td>6</td></tr>
<tr><td>1500-100,000</td><td>/</td><td>/</td><td>5</td><td>6</td></tr>
<tr><td colspan="5">(B) Limits for General Population/Uncontrolled Exposure</td></tr>
<tr><td>0.3-1.34</td><td>614</td><td>1.63</td><td>*(100)</td><td>30</td></tr>
<tr><td>1.34-30</td><td>824/f</td><td>2.19/f</td><td>*(180/f^2)</td><td>30</td></tr>
<tr><td>30-300</td><td>27.5</td><td>0.073</td><td>0.2</td><td>30</td></tr>
<tr><td>300-1500</td><td>/</td><td>/</td><td>f/1500</td><td>30</td></tr>
<tr><td>1500-100,000</td><td>/</td><td>/</td><td>1.0</td><td>30</td></tr>
<tr><td colspan="5">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).</td></tr>
</table>
</td></tr>
</table>

Test Setup:	 Figure 1  Figure 2
Test Mode:	Communication Mode (Mobile phone will been charge at zero charge, intermediate charge, and full charge.)
Test Procedure:	1) The RF exposure test was performed in anechoic chamber. 2) The measurement probe was placed at test distance (15cm & 20cm) which is between the edge of the charger and the geometric center of probe. 3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E, F) were completed. 4) The EUT was measured according to the dictates of KDB 680106 D01v03.
Test Result:	PASS

3.1.2. Test Instruments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Exposure Level Tester	narda	ELT-400	O-0729	2024.05.06	1 Year
2	Magnetic field probe 100cm2	narda	ELT probe 100cm2	M-2116	2024.05.06	1 Year

Note: The probe radius is 8 cm

3.1.3. Test data

The probe radius is 8 cm.

E-Field Strength at 20cm from the edges surrounding the EUT

Charging Battery Level	Measured E-Field Strength Values (V/m)						FCC E-Field Strength Limits (V/m)
	Test Position A (20cm)	Test Position B (20cm)	Test Position C (20cm)	Test Position D (20cm)	Test Position E (20cm)	Test Position F (20cm)	
99%	8.371	8.371	10.755	9.857	10.115	11.153	614
50%	10.425	10.425	9.965	9.767	9.476	11.265	614
1%	9.228	9.228	8.715	9.067	9.971	10.315	614

Note: V/m= A/m *377

H-Field Strength at 20 cm from the edges surrounding the EUT

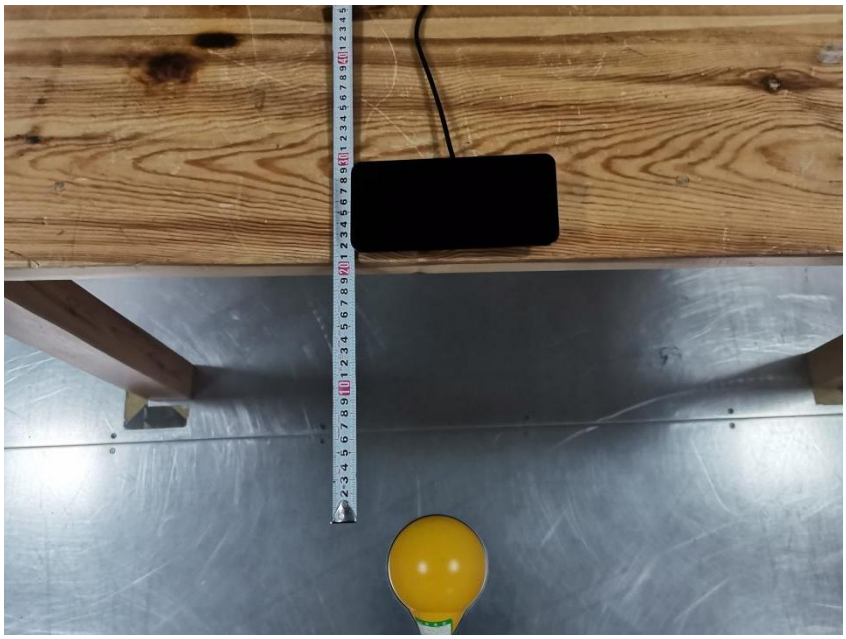
Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)						FCC H-Field Strength Limits (A/m)
		Test Position A (20cm)	Test Position B (20cm)	Test Position C (20cm)	Test Position D (20cm)	Test Position E (20cm)	Test Position F (20cm)	
99%	uT	0.028	0.036	0.033	0.034	0.037	0.036	--
99%	A/m	0.022	0.029	0.026	0.027	0.030	0.029	1.63
50%	uT	0.035	0.033	0.032	0.031	0.037	0.036	--
50%	A/m	0.028	0.026	0.026	0.025	0.030	0.029	1.63
1%	uT	0.031	0.029	0.030	0.033	0.034	0.032	--
1%	A/m	0.027	0.023	0.025	0.027	0.026	0.024	1.63

Note: A/m=uT/1.25

3.1.4. Conclusion

PASS

4. Photos of test setup



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