

RF Exposure Evaluation

FCC ID:2BTRD-IW51

Applicant Name..... : Shenguang Jiyuan Intelligent Manufacturing (Shenzhen) Technology Co., Ltd.

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Manufacturer Name..... : Shenguang Jiyuan Intelligent Manufacturing (Shenzhen) Technology Co., Ltd.

Address..... : 302, A Bldg, RunFeng industry Park, 4197 Baoan Road, Gushu, Xixiang, Baoan, Shenzhen,GuangDong,China

Product..... : 25W Magnetic Wireless Charger

Model(s)..... : iw51

Additional Model(s)..... : iw53, iw55, iw58

Trademark..... : /

Model Difference..... : iw51 is the test model, while other models are derivative models. These models are the same on the circuit, only with different model names and colour. Therefore, the test data of iw51 can represent the remaining models.

Prepared by..... : Guangdong Zhonghan Testing Technology Co., Ltd.

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Date of Receipt..... : Mar. 26, 2026

Date of Test(s)..... : Mar. 26, 2026 to Apr. 2, 2026

Date of Issue..... : Apr. 2, 2026

Test Requested..... : Select test(s) as requested by the client.

Test Standard(s)..... : KDB 680106 D01 Wireless Power Transfer v04

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

Prepared by:

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Kimi Lu/ Engineer

Reviewed by:

Baret Wu

Baret Wu/ Director



Note: The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report shall not be reproduced except in full, without prior written approval of ZHT. This document may be altered or revised by ZHT, personnel only, and shall be noted in the revision of the document.

Table of Contents

Page

1. GENERAL INFORMATION	3
1.1. GENERAL DESCRIPTION OF EUT	3
1.2. TEST MODES	4
1.3. AUXILIARY EQUIPMENT	5
2. RF EXPOSURE TEST	6
2.1. MEASURING STANDARD	6
2.2. REQUIREMENTS	6
2.3. LIMITS	6
2.4. TEST SETUP	7
2.5. TEST PROCEDURE	7
2.6. MEASUREMENT UNCERTAINTY	7
2.7. TEST INSTRUMENTS LIST	8
2.8. TEST RESULT	8
2.9. TEST PHOTOS	9

1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

Product Name:	25W Magnetic Wireless Charger
Test Model No.:	iw51
Hardware version:	V1.0
Software version:	V1.0
Operation Frequency:	110.1-205kHz, 360 kHz
Modulation type:	ASK
Antenna Type:	Inductive loop coil Antenna
Antenna gain:	0dBi
Ratings:	Input: PPS3.3~21V/1.5A Output: 5W, 7.5W, 10W, 15W, 25W(Max)
Sample Number:	260326104YP001
Remark:The antenna gain is provided by the customer, if the data provided by the customer is not accurate, Guangdong Zhonghan Testing Technology Co., Ltd. does not assume any responsibility.	

1.2. TEST MODES

Test Modes:	
Mode 1	AC Adapter + Wireless charging mode(25W)
Mode 2	AC Adapter + Wireless charging mode(15W)
Mode 3	AC Adapter + Wireless charging mode(10W)
Mode 4	AC Adapter + Wireless charging mode(7.5W)
Mode 5	AC Adapter + Wireless charging mode(5W)
Mode 6	Standby
Note: All modes were tested, only the worst-case was recorded in the report. Mode 1 is the worst mode.	

1.3. AUXILIARY EQUIPMENT

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	AC Adapter	Lanto Electronic Ltd.	191106C	/	AE
E-2	Mobile phone	Apple Inc.	iPhone 16 Plus	/	AE

2. RF EXPOSURE TEST

2.1. MEASURING STANDARD

KDB 680106 D01 Wireless Power Transfer v04

2.2. REQUIREMENTS

According to the item 5 of KDB 680106 D01 v04:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

Requirements of section 3 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 Cellphone: 110.1-140kHz, 360 kHz
RF Exposure compliance may be ensured only for a minimum conditions at smaller distances can still be considered unlikely.separation distance that is greater than 20 cm, while use	Yes	The EUT H-field and E-field strengths at 20 cm surrounding the device.

2.3. LIMITS

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)

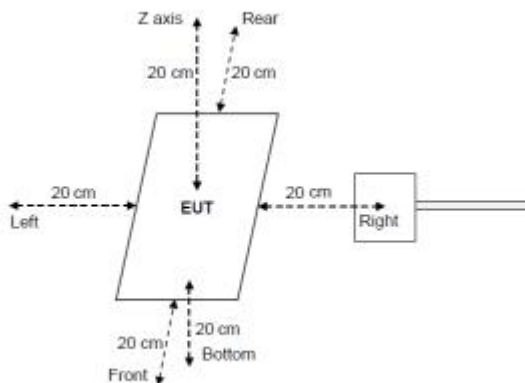
Limits for Maximum Permissible Exposure (MPE)

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

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).

2.4. TEST SETUP

For mobile exposure conditions:



2.5. TEST PROCEDURE

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (20 cm from all sides and 20 cm from the top) 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) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v04.

Remark: The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

2.6. MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	H-field	0.7dB
2	E-field	1.06dB

Decision Rule

- ☒ Uncertainty is not included
☐ Uncertainty is included

2.7. TEST INSTRUMENTS LIST

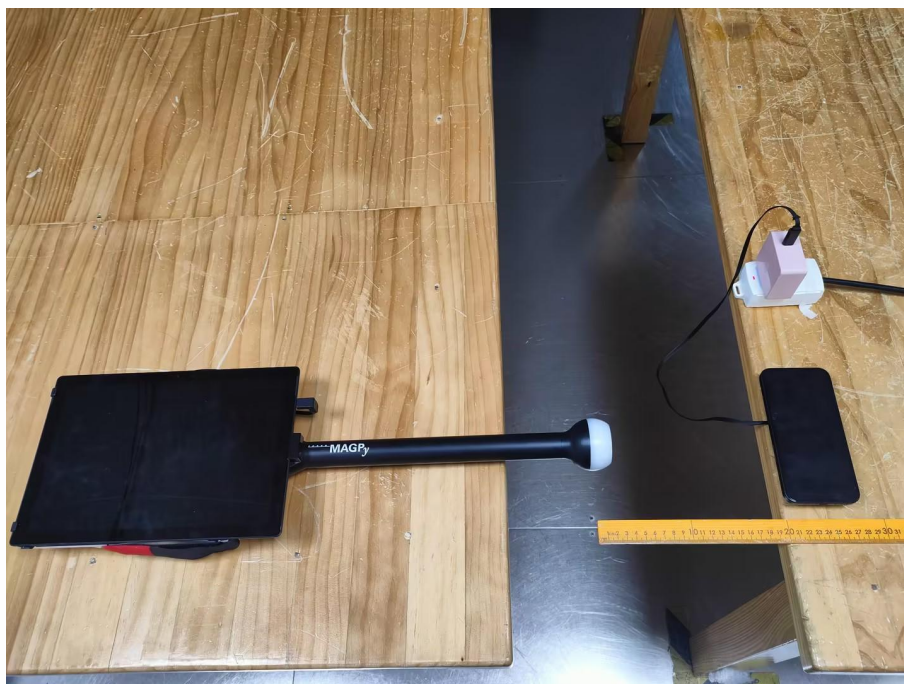
Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Next Cal.
Near-field Electric and Electric Field Sensor System	Schmid & Partner Engineering AG	MAGPy-8H3D+E3D V2	3127	September 09, 2025	September 08, 2026
Near-field Electric and Electric Field Sensor System	Schmid & Partner Engineering AG	MAGPy-DASV2	3121	September 09, 2025	September 08, 2026

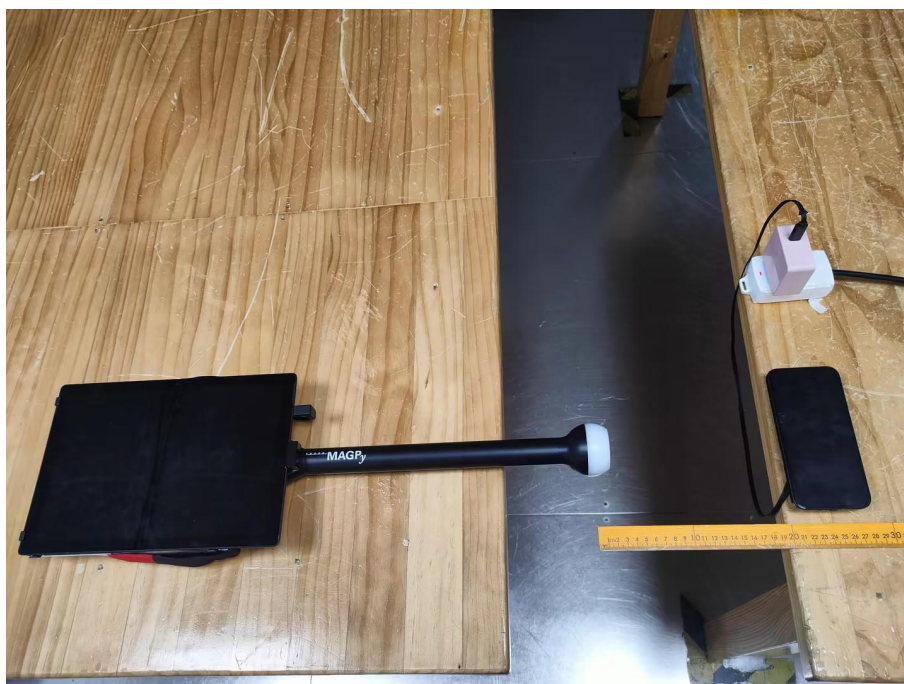
2.8. TEST RESULT

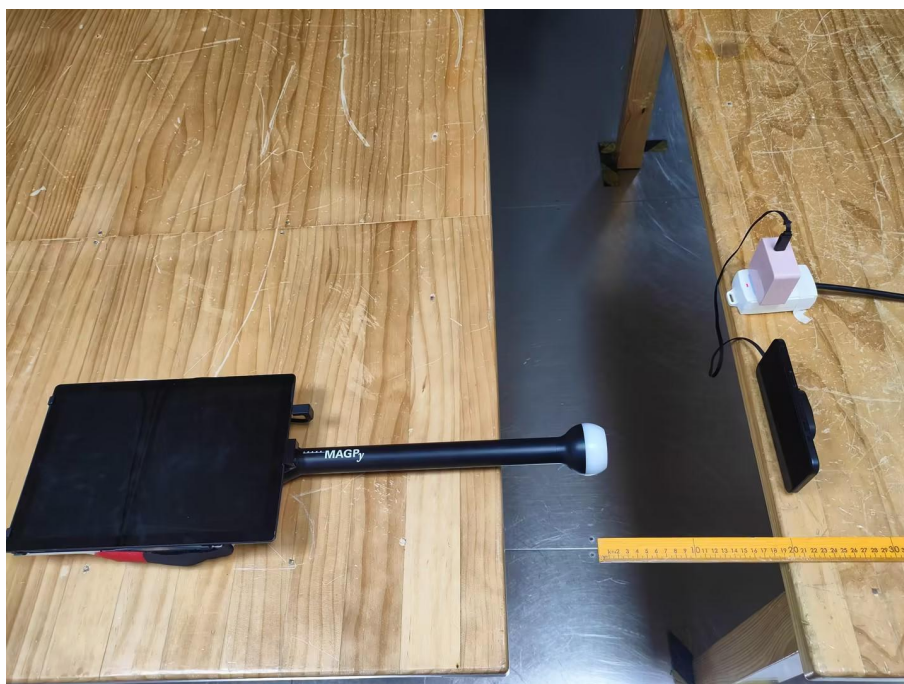
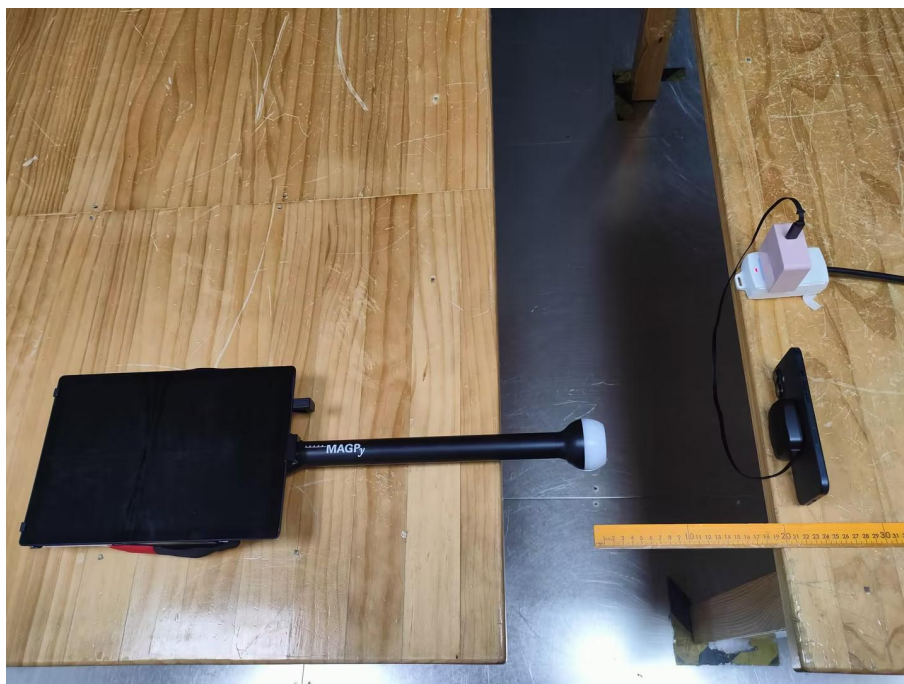
We have evaluated mode 1 to mode 6 and the worst mode 1 is showed in this report.

Test Mode	Test Position A (A/m)	Test Position B (A/m)	Test Position C (A/m)	Test Position D (A/m)	Test Position E (A/m)	50% Limits (A/m)	Limits (A/m)	test result
Mode 1	0.23	0.24	0.29	0.17	0.22	0.815	1.63	PASS
Test Mode	Test Position A (V/m)	Test Position B (V/m)	Test Position C (V/m)	Test Position D (V/m)	Test Position E (V/m)	50% Limits (V/m)	Limits (V/m)	test result
Mode 1	0.89	0.79	1.43	1.24	1.31	307	614	PASS

2.9. TEST PHOTOS







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