

FCC TEST REPORT

FCC ID: 2BSND-G31

On Behalf of

Huizhou Gratronic Technology Co., Ltd

3 in 1 Wireless Charger

Model No.: G31

Prepared for : Huizhou Gratronic Technology Co., Ltd
Address : Room 2002, Dali Building, Maidi Road, Huicheng District, Huizhou

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

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TEST REPORT DECLARATION

Applicant : Huizhou Gratronic Technology Co., Ltd
Address : Room 2002, Dali Building, Maidi Road, Huicheng District, Huizhou
Manufacturer : Huizhou Gratronic Technology Co., Ltd
Address : Room 2002, Dali Building, Maidi Road, Huicheng District, Huizhou
EUT Description : 3 in 1 Wireless Charger
(A) Model No. : G31
(B) Trademark : Gratronic

Measurement Standard Used:

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

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



Approved by (name + signature).....:

Simple Guan
Project Manager



Date of issue.....:

September 17, 2025

Revision History

Revision	Issue Date	Revisions	Revised By
V0	September 17, 2025	Initial released Issue	Felix Pang

1. Test Result Summary

Requirement	CFR 47 Section	Result
RF EXPOSURE	§1.1307(b)(1), §1.1310& KDB680106	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	:	3 in 1 Wireless Charger
Model No.	:	G31
DIFF.	:	/
Power supply	:	Input: 5 V  3 A, 9 V  3 A, 15 V  3 A Phone Output: 25W Max Earphone Output: 5W Max Watch Output: 2.5W Max
Radio Technology	:	Wireless power transmission systems
Operation frequency	:	Phone: 110.1-366.4 KHz Earphone: 110.1-205 KHz Watch: 325-350 KHz
Modulation	:	ASK
Antenna Type	:	Coil Antenna
Connector cable loss	:	0dBi
Software version	:	V1.0
Hardware version	:	V1.0
Note	:	Antenna information is provided by applicant. Testing lab is not responsible for the accuracy of the information.

2.2. Accessories of Device (EUT)

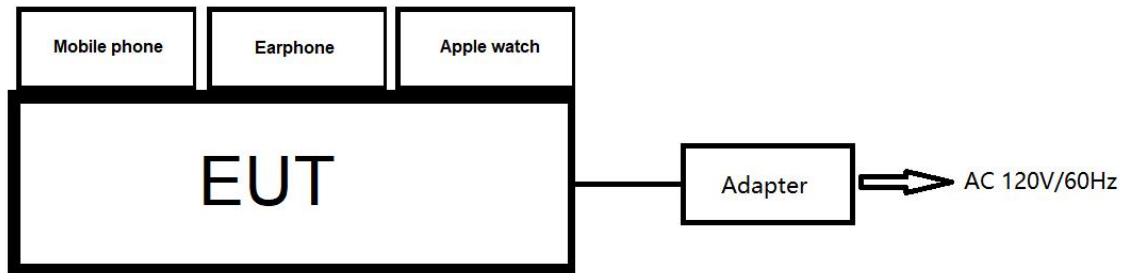
Accessories	:	N/A
Manufacturer	:	N/A
Model	:	N/A
specifications	:	N/A

2.3. Tested Supporting System Details

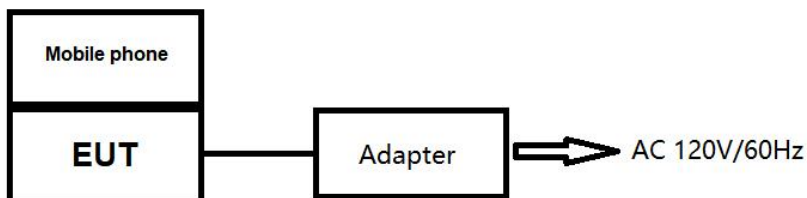
No.	Description	Manufacturer	Model	Serial Number	Certification
1	AC ADAPTER	Xiaomi	MDY-08-EH	/	/
2	Mobile phone	Apple Inc.	iPhone15	/	/
3	Earphone	Apple Inc.	A2031	/	/
4	Apple watch	Apple Inc.	ultra 2	/	/

2.4. Block Diagram of connection between EUT and simulators

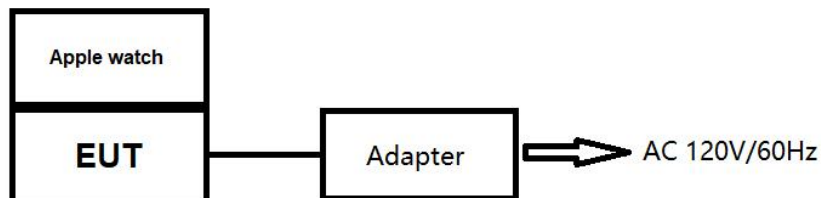
Mode 1 & 2 & 3:



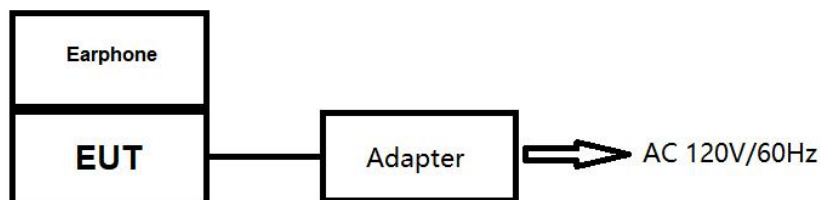
Mode 4 & 5 & 6:



Mode 7 & 8 & 9:



Mode 10 & 11 & 12:



2.5. Description of Test Modes

Number	Modes
1	AC Mains + Phone charging port + Earphone charging port + Watch charging port(Battery Status: $\leq 1\%$)
2	AC Mains + Phone charging port + Earphone charging port + Watch charging port(Battery Status:50%)
3	AC Mains + Phone charging port + Earphone charging port + Watch charging port(Battery Status: $\geq 98\%$)
4	AC Mains + Phone charging port(Battery Status: $\leq 1\%$)
5	AC Mains + Phone charging port(Battery Status:50%)
6	AC Mains + Phone charging port(Battery Status: $\geq 98\%$)
7	AC Mains + Watch charging port(Battery Status: $\leq 1\%$)
8	AC Mains + Watch charging port(Battery Status:50%)
9	AC Mains + Watch charging port(Battery Status: $\geq 98\%$)
10	AC Mains + Earphone charging port(Battery Status: $\leq 1\%$)
11	AC Mains + Earphone charging port(Battery Status:50%)
12	AC Mains + Earphone charging port(Battery Status: $\geq 98\%$)
13	Standby
Note:1. All test modes has been tested, this report only reflected the model 4 worst mode.	

2.6. Test Conditions

Items	Required
Temperature range:	15-35°C
Humidity range:	25-75%
Pressure range:	86-106kPa

2.7. 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

2.8. Measurement Uncertainty

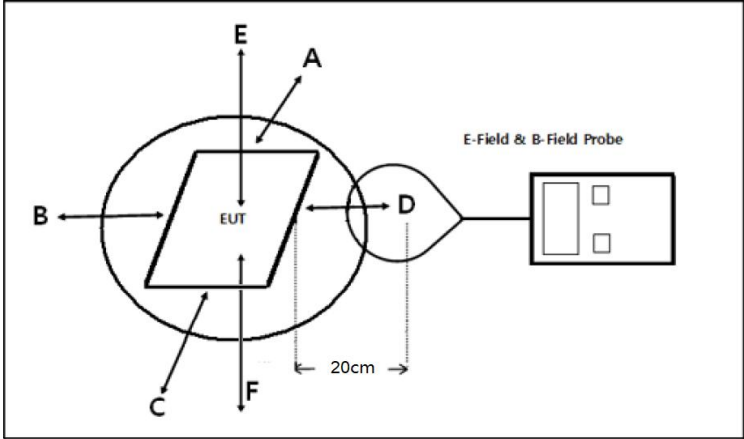
(95% confidence levels, k=2)

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

Test Requirement:	FCC Rules and Regulations KDB680106
Test Method:	§1.1307(b)(1) & KDB680106
Limits:	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 §2.1091 RF exposure is calculated. According KDB 680106 D01 Wireless Power Transfer v04: RF Exposure Wireless Charging.
Test Setup:	 E to position is 20cm, F is the bottom of the product
Test Mode:	Transmitting Mode (Mobile phone will be charge at zero charge, intermediate charge, and full charge.)
Test Procedure:	1. The RF exposure test was carried out on a non-metallic table top 80cm high in the shielding darkroom. 2. The measurement probe was placed at test distance (20 cm for Top side) which is between the edge of the charger and the geometric centre of probe. 3. The test time is maintained for more than one minute. 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 680106 D01 Wireless Power Transfer v04.
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	2025.05.22	1 Year
2	Magnetic field probe 100cm2	narda	ELT probe 100cm2	M-2116	2025.05.22	1 Year

3.1.3. Test data

We have evaluated mode 1 to mode 13 and the worst mode 4 is showed in this report.

Frequency Range (MHz)	Unit	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	50%Limits (A/m)	Limits (A/m)	Test result
0.1101-0.3664	(A/m)	0.15	0.20	0.19	0.18	0.22	0.25	0.815	1.63	PASS
	A (uT)	0.19	0.25	0.24	0.22	0.28	0.31			
0.1101-0.205	(A/m)	0.18	0.20	0.19	0.23	0.18	0.26			
	A (uT)	0.22	0.25	0.24	0.29	0.23	0.32			
0.325-0.350	(A/m)	0.18	0.19	0.17	0.20	0.21	0.24			
	A (uT)	0.23	0.24	0.21	0.25	0.26	0.30			

The device could support transmission with ANT1, ANT2, ANT3 simultaneously.

$MPE1/LIMIT + MPE2/LIMIT + MPE3/LIMIT = 0.25/0.815 + 0.26/0.815 + 0.24/0.815 = 0.920 \leq 1$

Note: Calculation: $A/m = uT/1.25$

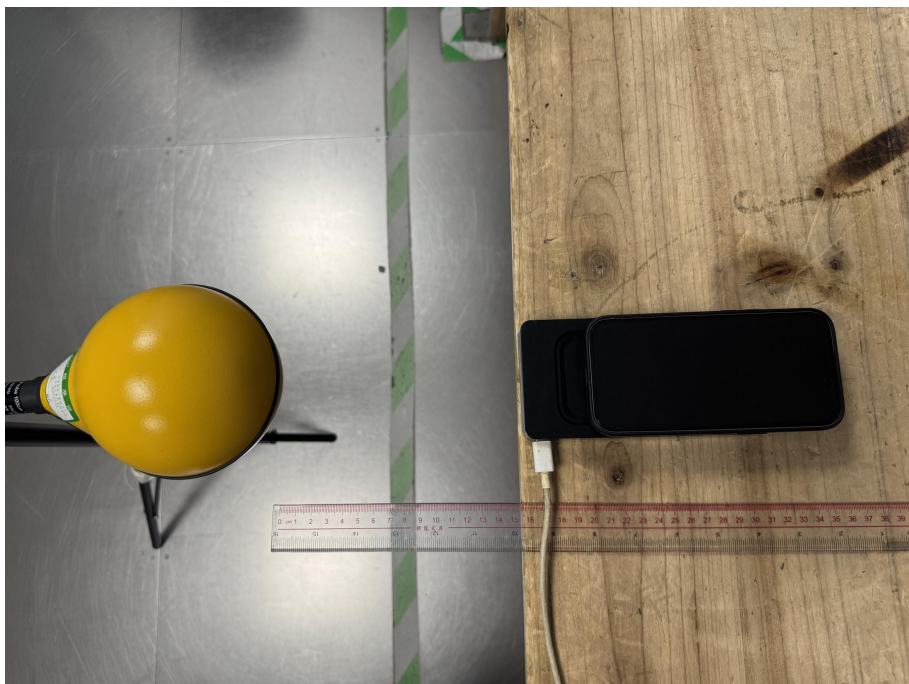
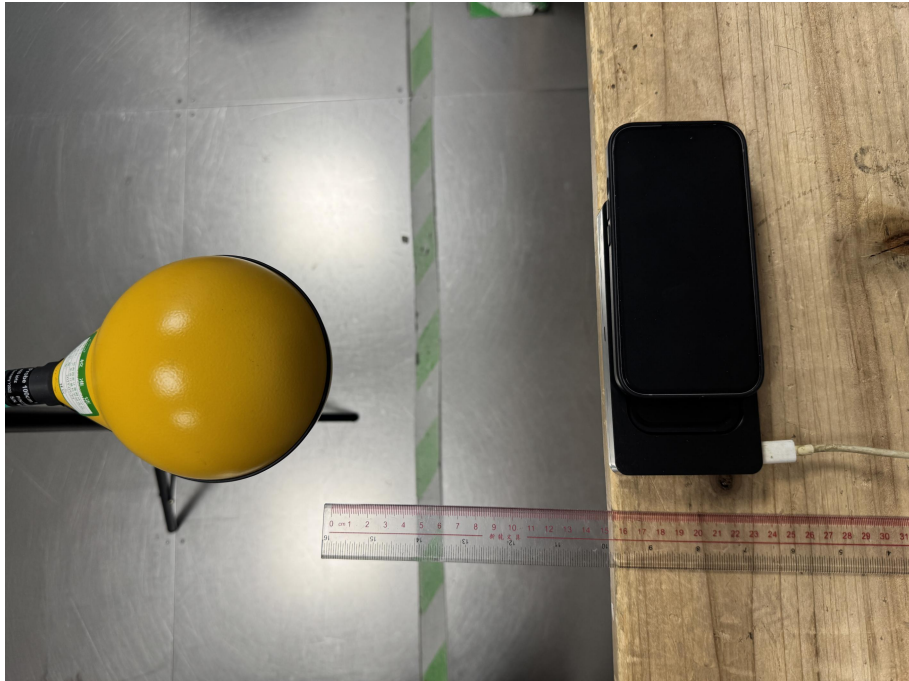
Frequency Range (MHz)	Unit	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	50%Limits (V/m)	Limits Test (V/m)	Test result
0.1101-0.3664	V/m	57.30	75.40	72.38	66.35	84.45	93.50	307	614	PASS
0.1101-0.205	V/m	66.35	75.40	72.38	87.46	69.37	96.51			
0.325-0.350	V/m	69.37	72.38	63.34	75.40	78.42	90.48			

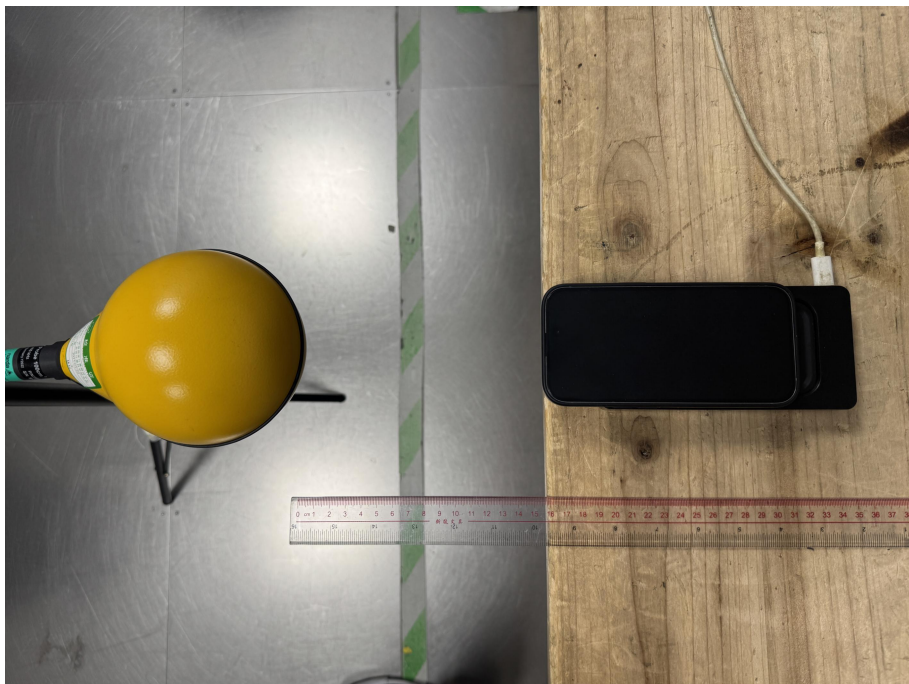
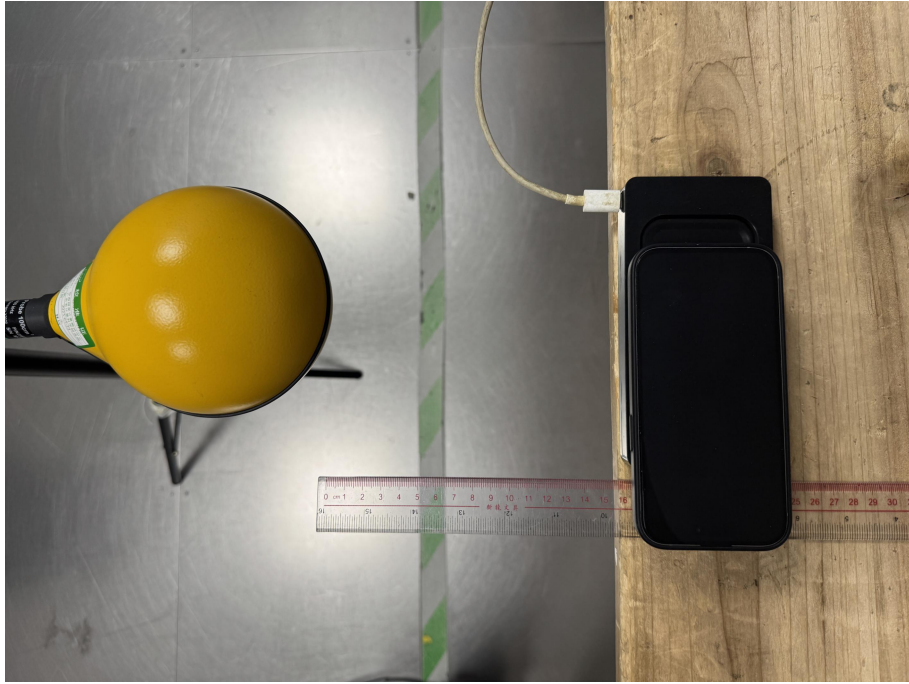
The device could support transmission with ANT1, ANT2, ANT3 simultaneously.

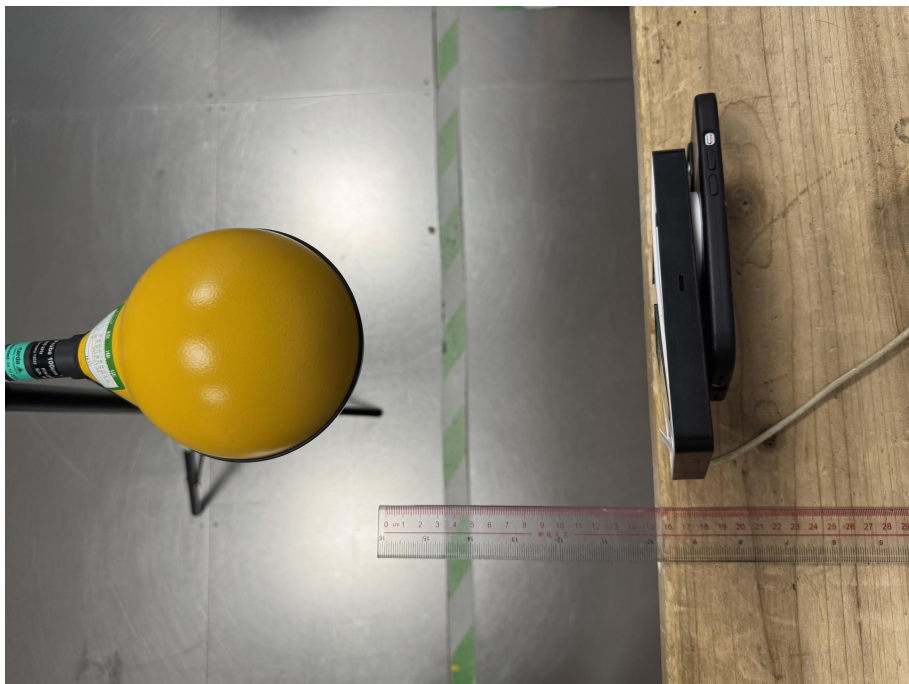
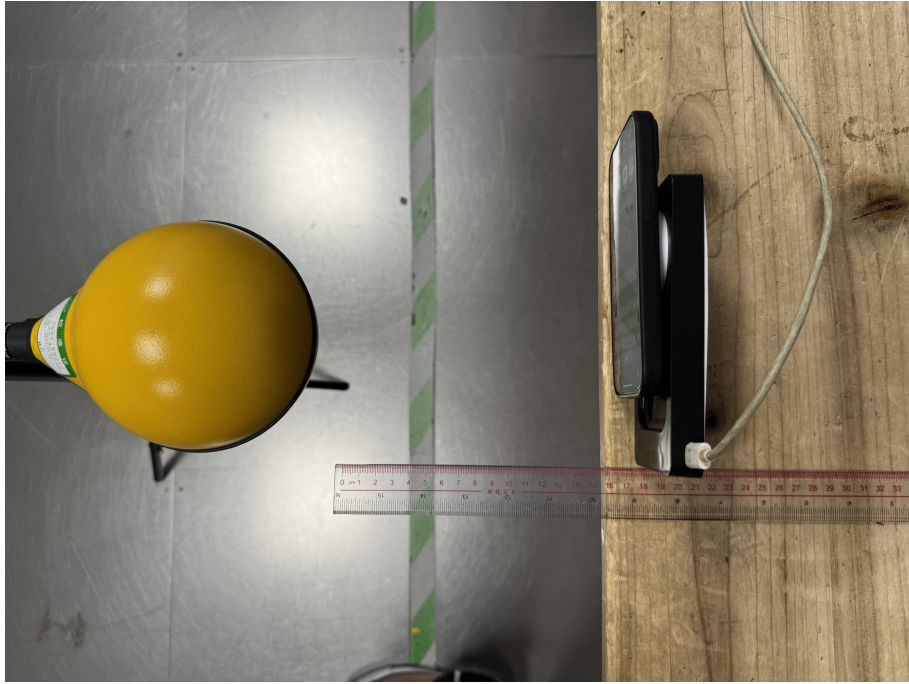
$MPE1/LIMIT + MPE2/LIMIT + MPE3/LIMIT = 93.50/307 + 96.51/307 + 90.48/307 = 0.914 \leq 1$

Note: $V/m = A/m * 377$

4. Photos of test setup







-----END OF REPORT-----