RF Exposure Evaluation

Client Information:

Applicant:	RichGo Technology(ShenZhen) Co.,Ltd.
Applicant add.:	2102, Zhongliang Ziyun Building, District 22, Lingzhiyuan Community, Xin'an Street, Bao'an District, Shenzhen City,Guangdong Province,518101,P.R,China.
Manufacturer:	RichGo Technology(ShenZhen) Co.,Ltd.
Manufacturer add.:	2102, Zhongliang Ziyun Building, District 22, Lingzhiyuan Community, Xin'an Street, Bao'an District, Shenzhen City,Guangdong Province,518101,P.R,China.

Product Information:

Product Name:	ITFIT 5-in-1 Powerbank with Universal Travel Adapter
Model No.:	ITIFTPW19
Brand Name:	ITFIT
FCC ID:	2BCCT-ITIFTPW19
Applicable standards:	FCC CFR 47 PART 1, § 1.1310 KDB 680106 D01 Wireless Power Transfer v04

Prepared By:

Guangdong Asia Hongke Test Technology Limited

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Date of Receipt:	Mar. 12, 2024	Date of Test:	Mar. 12, 2024 ~ Mar. 15, 2024
Date of Issue:	Mar. 15, 2024	Test Result:	Pass

This device described above has been tested by Guangdong Asia Hongke Test Technology Limited and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Reviewed by: Sean She **Approved by:** Eder Zhan

Sean She Eder Zhan

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Revision History

Revision	Issue Date	Revisions	Revised By
00	Mar. 15, 2024	Initial Issue	Eder Zhan

1 TEST FACILITY

The test facility is recognized, certified or accredited by the following organizations:

FCC-Registration No.: 251906 Designation Number: CN1376

Guangdong Asia Hongke Test Technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 31737 CAB identifier: CN0165

The 3m Semi-anechoic chamber of Guangdong Asia Hongke Test Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 31737

A2LA-Lab Cert. No.: 7133.01

Guangdong Asia Hongke Test Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

1.1 Deviation from standard

None

1.2 Abnormalities from standard conditions

None

1.3 Test Location

Guangdong Asia Hongke Test Technology Limited

Address: B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Tel.: +86 0755-230967639 Fax.: +86 0755-230967639

2 GENERAL INFORMATION

EUT Name:	ITFIT 5-in-1 Powerbank with Universal Travel Adapter
Model No:	ITIFTPW19
Serial Model:	N/A
Test sample(s) ID:	AITSZ24031202001
Sample(s) Status:	Engineer sample
Operation frequency:	115kHz-205kHz
Modulation Technology:	ASK
Antenna Type:	loop coil Antenna
Antenna gain:	0dBi
Hardware version.:	N/A
Software version.:	N/A
Power supply:	AC Input：100-240~ 50/60Hz 0.3A（Max.） USB-C Input:5V 3A, 9V 2A,12V 1.5A Wireless Output：5W/7.5W/10W/15W USB -C Output：5V 3A,9V 2.22A,12V 1.67A（Max.20W） USB-A Output：5V 3A, 9V 2A, 12V 1.5A（Max.18W） USB-C Cable Output ：5V 3A,9V 2.22A,12V 1.67A （Max.20W） Total Max: 5V 3A Capacity ：10000mah@3.7V（37Wh）
Model different:	N/A
Note:	For a more detailed features description, please refer to the manufacturer’s specifications or the User's Manual.

3 Measuring Standard

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 KDB680106 D01: KDB 680106 D01 Wireless Power Transfer v04.

4 Requirements

According to the item 3 of KDB 680106 D01v04:

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 or beyond 15 cm surrounding the device, and 20 cm away from the top surface.

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

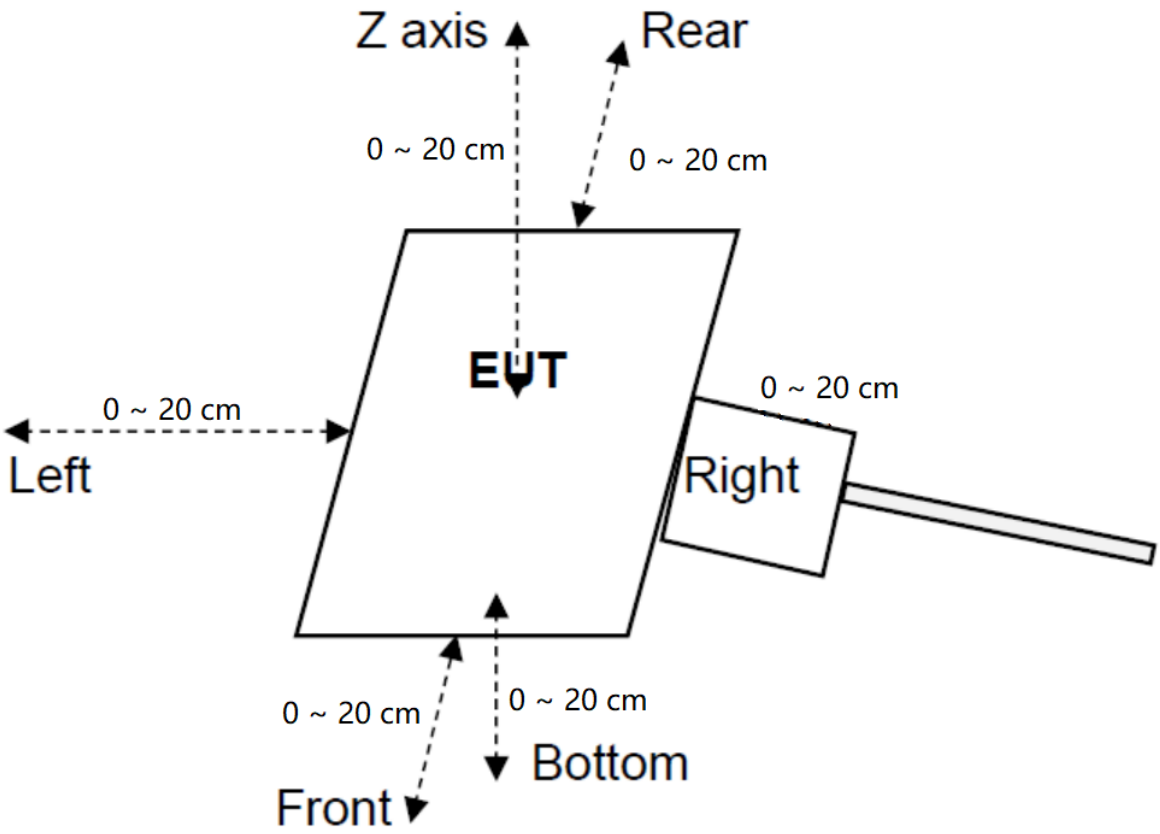
F=frequency in MHz
*=Plane-wave equivalent power density
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

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.

5 Test Setup



6 Test Procedure

1) The RF exposure test was performed in anechoic chamber.

2) The measurement probe was placed at test distance (2cm increments from 0 ~ 20 cm for all sides) which is between the edge of the charger and the geometric edge 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 D01 Wireless Power Transfer v04.

Remark：

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

2. When using the testing instrument MAGPy for testing, when selecting compliance location as probe tip in the settings, the measured value is extrapolated to 0mm.

7 Equipment Approval Considerations

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

Requirements of section 3 of KDB 680106 D01	Yes / No	Description
Mobile Device and Portable Device Configurations	Yes	Portable Device
Equipment Authorization Procedures for Devices Operating at Frequencies Below 4 MHz	Yes	The device operate in the frequency range 115kHz-205kHz
RF Exposure compliance may be ensured only for a minimum separation distance that is greater than 20 cm, while use conditions at smaller distances can still be considered unlikely.	No	The EUT H-field and E-field strengths at 0 cm surrounding the device.

8 Description of the test mode

Equipment under test was operated during the measurement under the following conditions:

Test Mode	Description	
Mode 1	EUT + Mobile phone	Record
Mode 2	Adapter + EUT + Mobile phone	Pre-test
Note: 1. All test modes were pre-tested, but we only recorded the worst case in this report. 2. Unfolded and folded mode were tested, but we only recorded the worst case.		

9 Peripheral List

No.	Equipment	Manufacturer	Model No.	Serial No.	Power cord	signal cable
1	Phone	Apple	iphone 14 Pro max	N/A	N/A	N/A
2	Adapter	HNT	HNT-QC530	N/A	N/A	N/A

10 Test Instruments list

Test Equipment	Manufacturer	Model No.	SN.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Magnetic Amplitude and Gradient Probe System	SPEAG	MAGPy-8H3D+E3D V2 & MAGPy-DAS V2	SZ186-06 & 3061	04.13.2023	04.12.2024

Parameter	Specs
PROBE DESIGN	
Diameter	60 mm
8 isotropic H-field sensors	concentric loops of 1 cm^2 arranged at the corner of a cube of 22 mm side length
1 isotropic E-field sensor	orthogonal dipole/monopole (arm length: 50 mm)
Measurement center	18.5 mm from the probe tip
Temperature range	0–40 °C
Dimensions	110 × 635 × 35 mm (MAGPy-8H3D+E3D V2 & MAGPy-DAS V2)
H-FIELD SPECIFICATION	
Frequency range	3 kHz–10 MHz
Measurement range	0.1–3200 A/m, 0.12 µT–4 mT
Gradient range	0–80 T/m/T
E-FIELD SPECIFICATION	
Frequency range	3 kHz–10 MHz
Measurement range	0.08–2000 V/m

Compliance Location: Center vs Tip-Surface of the Probe

The following information is from the equipment manual:

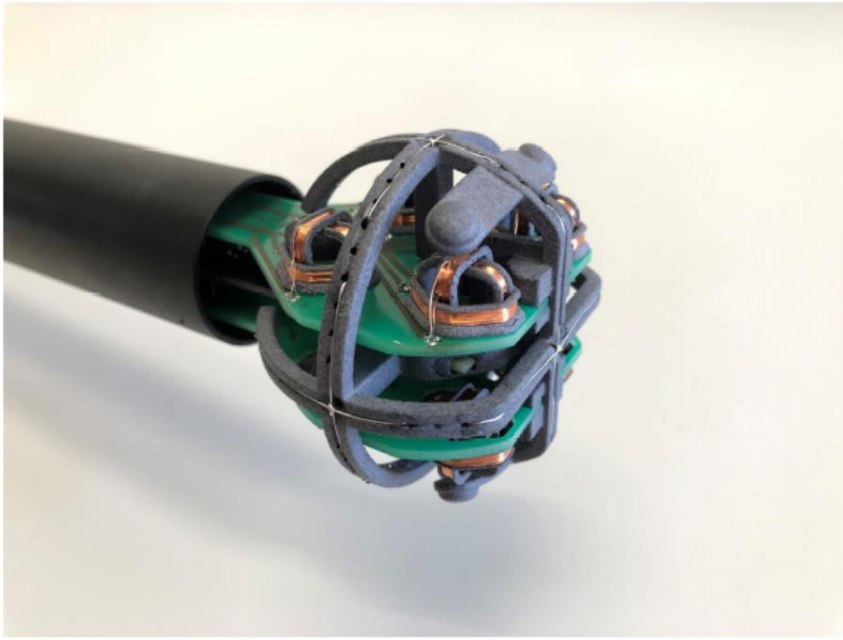


Figure 2.1: MAGPy-8H3D+E3D V2 probe, without the casing

In the MAGPy V2.0 implementation, the H-field is evaluated at the center of the probe (which is 18.5mm above the surface of its tip) and also at the surface of its tip.

In the MAGPy V2.0 implementation, the H-field is evaluated at the center of the probe (which is 18.5 mm above the surface of its tip) and also at the surface of its tip.

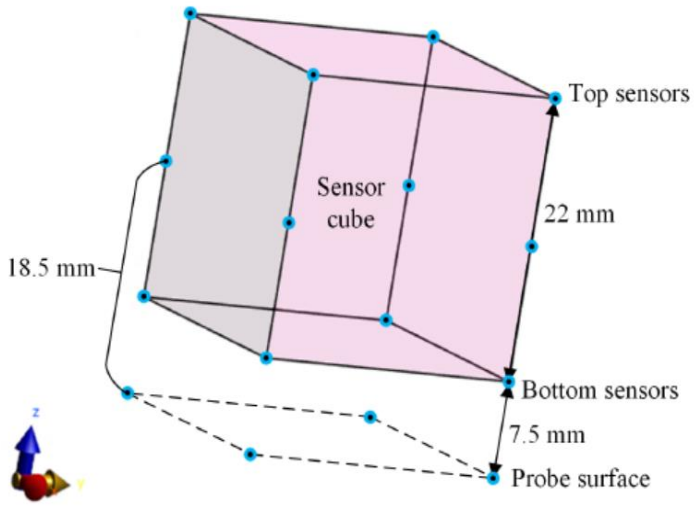


Figure 2.5: Extrapolation of the total H-field at the probe surface is made at each pair of sensors (i.e., bottom and top sensors) around the sensor cube

The total H-field at the tip-surface $H_{tip-surface}$ can be extrapolated using the total H-field measured at the top and bottom sensors (Figure 2.5), H_{top} and H_{bottom}, as well as the normalized H-field gradient G_n. The field extrapolation formula is a polynomial function of G_n ($\Delta d = 18.5$ mm) [7].

$$H_{tip-surface} = \frac{H_{bottom} + H_{top}}{2} \sum_{i=0}^{7} c_i \left(G_n \Delta d\right)^i \tag{1.6}$$

The polynomial coefficients c_i are given in Table 2.2. They have been determined from simulations of 70 coils covering normalized gradients up to 80 for the 97.5th percentile (Figure 2.6). This provides a conservative estimate of the total H-field at the tip-surface without large overestimation.

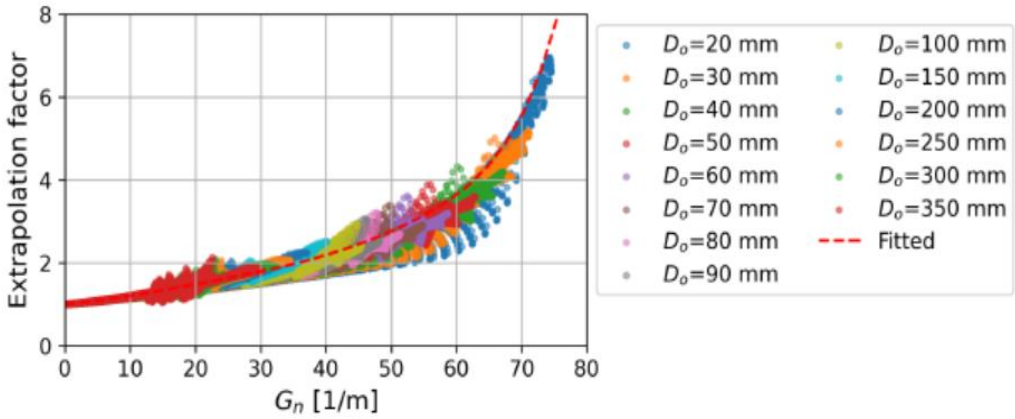


Figure 2.6: Extrapolation factors (i.e., ratios between the simulated results of $H_{tip-surface}$ and $\frac{H_{bottom}+H_{top}}{2}$) plotted as a function of the normalized H-field gradient. The data are from simulations of 70 coils with varying outer diameters D_o and filling ratios (0.1–0.9). The predication of the polynomial function $\sum_{i=0}^{7} c_i \left(G_n \Delta d\right)^i$ with coefficients fitted for 97.5th percentile (i.e., the red dashed line) is also shown.

Coefficient	Value
c_0	1.00
c_1	1.00
c_2	-1.01
c_3	15.9
c_4	-50.8
c_5	74.7
c_6	-51.4
c_7	13.7

Table 2.2: Coefficients of the polynomial function for the H-field extrapolation to the tip-surface of the probe, determined with 0.975 quantile regression (i.e., the 97.5th percentile)

11 Test Result

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
0cm	＜ 1%	Top	13.55	1.21
0cm	＜ 1%	Bottom	13.45	1.20
0cm	＜ 1%	Left	13.56	1.15
0cm	＜ 1%	Right	13.64	1.12
0cm	＜ 1%	Front	13.61	1.14
0cm	＜ 1%	Rear	13.64	1.13
Limit			614	1.63
Margin Limit (%)			2.22%	74.23%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
0cm	＜ 50%	Top	13.45	1.29
0cm	＜ 50%	Bottom	13.54	1.16
0cm	＜ 50%	Left	13.50	1.08
0cm	＜ 50%	Right	13.66	1.21
0cm	＜ 50%	Front	13.62	1.17
0cm	＜ 50%	Rear	13.72	1.21
Limit			614	1.63
Margin Limit (%)			2.23%	79.14%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
0cm	＜ 99%	Top	13.42	1.26
0cm	＜ 99%	Bottom	13.54	1.15
0cm	＜ 99%	Left	13.46	1.09
0cm	＜ 99%	Right	13.65	1.18
0cm	＜ 99%	Front	13.60	1.35
0cm	＜ 99%	Rear	13.55	1.19
Limit			614	1.63
Margin Limit (%)			2.22%	82.82%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
2cm	＜ 1%	Top	13.05	1.17
2cm	＜ 1%	Bottom	12.98	1.21
2cm	＜ 1%	Left	13.01	1.18
2cm	＜ 1%	Right	13.04	1.13
2cm	＜ 1%	Front	13.00	1.18
2cm	＜ 1%	Rear	13.01	1.13
Limit			614	1.63
Margin Limit (%)			2.13%	74.23%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
2cm	＜ 50%	Top	12.99	1.34
2cm	＜ 50%	Bottom	12.90	1.11
2cm	＜ 50%	Left	13.03	1.21
2cm	＜ 50%	Right	13.00	1.01
2cm	＜ 50%	Front	12.91	1.20
2cm	＜ 50%	Rear	13.05	1.02
Limit			614	1.63
Margin Limit (%)			2.13%	82.21%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
2cm	＜ 99%	Top	12.97	1.19
2cm	＜ 99%	Bottom	12.84	1.12
2cm	＜ 99%	Left	13.04	1.15
2cm	＜ 99%	Right	13.05	1.02
2cm	＜ 99%	Front	13.02	1.14
2cm	＜ 99%	Rear	12.95	0.92
Limit			614	1.63
Margin Limit (%)			2.13%	73.01%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
4cm	＜ 1%	Top	12.72	1.05
4cm	＜ 1%	Bottom	12.77	1.01
4cm	＜ 1%	Left	12.75	0.98
4cm	＜ 1%	Right	12.76	0.93
4cm	＜ 1%	Front	12.91	0.94
4cm	＜ 1%	Rear	12.83	0.93
Limit			614	1.63
Margin Limit (%)			2.10%	64.42%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
4cm	＜ 50%	Top	12.83	0.96
4cm	＜ 50%	Bottom	12.78	0.91
4cm	＜ 50%	Left	12.61	0.87
4cm	＜ 50%	Right	12.79	0.97
4cm	＜ 50%	Front	12.98	0.89
4cm	＜ 50%	Rear	12.81	0.84
Limit			614	1.63
Margin Limit (%)			2.11%	59.51%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
4cm	＜ 99%	Top	12.76	1.06
4cm	＜ 99%	Bottom	12.77	0.85
4cm	＜ 99%	Left	12.59	0.88
4cm	＜ 99%	Right	12.71	0.96
4cm	＜ 99%	Front	12.93	0.96
4cm	＜ 99%	Rear	12.84	0.78
Limit			614	1.63
Margin Limit (%)			2.11%	65.03%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
6cm	＜ 1%	Top	12.58	0.98
6cm	＜ 1%	Bottom	12.68	0.91
6cm	＜ 1%	Left	12.67	0.89
6cm	＜ 1%	Right	12.77	0.92
6cm	＜ 1%	Front	12.71	0.91
6cm	＜ 1%	Rear	12.57	0.86
Limit			614	1.63
Margin Limit (%)			2.08%	60.12%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
6cm	＜ 50%	Top	12.62	1.01
6cm	＜ 50%	Bottom	12.63	0.88
6cm	＜ 50%	Left	12.73	0.91
6cm	＜ 50%	Right	12.73	0.98
6cm	＜ 50%	Front	12.73	0.79
6cm	＜ 50%	Rear	12.59	0.80
Limit			614	1.63
Margin Limit (%)			2.07%	61.96%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
6cm	＜ 99%	Top	12.80	1.08
6cm	＜ 99%	Bottom	12.46	0.81
6cm	＜ 99%	Left	12.79	0.81
6cm	＜ 99%	Right	12.71	0.99
6cm	＜ 99%	Front	12.75	0.77
6cm	＜ 99%	Rear	12.51	0.87
Limit			614	1.63
Margin Limit (%)			2.08%	66.26%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
8cm	＜ 1%	Top	12.31	0.93
8cm	＜ 1%	Bottom	12.42	0.89
8cm	＜ 1%	Left	12.39	0.95
8cm	＜ 1%	Right	12.42	0.89
8cm	＜ 1%	Front	12.46	0.94
8cm	＜ 1%	Rear	12.50	0.90
Limit			614	1.63
Margin Limit (%)			2.04%	58.28%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
8cm	＜ 50%	Top	12.29	1.01
8cm	＜ 50%	Bottom	12.54	0.84
8cm	＜ 50%	Left	12.33	0.81
8cm	＜ 50%	Right	12.46	1.05
8cm	＜ 50%	Front	12.46	0.96
8cm	＜ 50%	Rear	12.48	0.86
Limit			614	1.63
Margin Limit (%)			2.04%	64.42%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
8cm	＜ 99%	Top	12.19	0.97
8cm	＜ 99%	Bottom	12.49	0.90
8cm	＜ 99%	Left	12.27	0.88
8cm	＜ 99%	Right	12.53	1.07
8cm	＜ 99%	Front	12.58	0.99
8cm	＜ 99%	Rear	12.55	0.84
Limit			614	1.63
Margin Limit (%)			2.05%	65.64%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
10cm	＜ 1%	Top	13.10	1.01
10cm	＜ 1%	Bottom	13.16	0.96
10cm	＜ 1%	Left	13.13	0.91
10cm	＜ 1%	Right	13.16	0.94
10cm	＜ 1%	Front	13.22	0.99
10cm	＜ 1%	Rear	13.12	0.95
Limit			614	1.63
Margin Limit (%)			2.15%	61.96%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
10cm	＜ 50%	Top	13.11	1.06
10cm	＜ 50%	Bottom	13.06	0.89
10cm	＜ 50%	Left	13.24	0.86
10cm	＜ 50%	Right	13.09	0.92
10cm	＜ 50%	Front	13.21	1.02
10cm	＜ 50%	Rear	13.12	0.86
Limit			614	1.63
Margin Limit (%)			2.16%	65.03%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
10cm	＜ 99%	Top	13.20	1.01
10cm	＜ 99%	Bottom	13.22	0.87
10cm	＜ 99%	Left	13.30	0.81
10cm	＜ 99%	Right	13.02	1.00
10cm	＜ 99%	Front	13.10	1.05
10cm	＜ 99%	Rear	13.14	0.85
Limit			614	1.63
Margin Limit (%)			2.17%	64.42%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
12cm	＜ 1%	Top	13.01	0.93
12cm	＜ 1%	Bottom	13.03	0.85
12cm	＜ 1%	Left	12.88	0.88
12cm	＜ 1%	Right	12.85	0.82
12cm	＜ 1%	Front	12.92	0.86
12cm	＜ 1%	Rear	12.91	0.91
Limit			614	1.63
Margin Limit (%)			2.12%	57.06%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
12cm	＜ 50%	Top	13.05	1.05
12cm	＜ 50%	Bottom	13.08	0.88
12cm	＜ 50%	Left	13.07	0.83
12cm	＜ 50%	Right	12.85	0.71
12cm	＜ 50%	Front	12.91	0.88
12cm	＜ 50%	Rear	13.04	0.84
Limit			614	1.63
Margin Limit (%)			2.13%	64.42%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
12cm	＜ 99%	Top	13.00	0.95
12cm	＜ 99%	Bottom	13.09	0.92
12cm	＜ 99%	Left	13.03	0.70
12cm	＜ 99%	Right	12.99	0.69
12cm	＜ 99%	Front	12.92	0.80
12cm	＜ 99%	Rear	13.22	0.74
Limit			614	1.63
Margin Limit (%)			2.15%	58.28%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
14cm	＜ 1%	Top	12.89	0.85
14cm	＜ 1%	Bottom	12.77	0.81
14cm	＜ 1%	Left	12.71	0.89
14cm	＜ 1%	Right	12.84	0.81
14cm	＜ 1%	Front	12.88	0.79
14cm	＜ 1%	Rear	12.97	0.86
Limit			614	1.63
Margin Limit (%)			2.11%	54.60%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
14cm	＜ 50%	Top	12.80	0.71
14cm	＜ 50%	Bottom	12.77	0.85
14cm	＜ 50%	Left	12.76	1.02
14cm	＜ 50%	Right	12.92	0.77
14cm	＜ 50%	Front	12.86	0.82
14cm	＜ 50%	Rear	12.99	0.76
Limit			614	1.63
Margin Limit (%)			2.12%	62.58%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
14cm	＜ 99%	Top	12.81	0.73
14cm	＜ 99%	Bottom	12.78	0.66
14cm	＜ 99%	Left	12.65	1.00
14cm	＜ 99%	Right	12.95	0.68
14cm	＜ 99%	Front	12.93	1.01
14cm	＜ 99%	Rear	12.90	0.63
Limit			614	1.63
Margin Limit (%)			2.11%	61.96%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
16cm	＜ 1%	Top	12.43	0.70
16cm	＜ 1%	Bottom	12.46	0.75
16cm	＜ 1%	Left	12.27	0.81
16cm	＜ 1%	Right	12.32	0.81
16cm	＜ 1%	Front	12.37	0.84
16cm	＜ 1%	Rear	12.53	0.91
Limit			614	1.63
Margin Limit (%)			2.04%	55.83%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
16cm	＜ 50%	Top	12.40	0.73
16cm	＜ 50%	Bottom	12.51	0.91
16cm	＜ 50%	Left	12.28	0.71
16cm	＜ 50%	Right	12.26	0.81
16cm	＜ 50%	Front	12.32	0.85
16cm	＜ 50%	Rear	12.55	0.93
Limit			614	1.63
Margin Limit (%)			2.04%	57.06%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
16cm	＜ 99%	Top	12.32	0.80
16cm	＜ 99%	Bottom	12.43	0.78
16cm	＜ 99%	Left	12.39	0.71
16cm	＜ 99%	Right	12.32	0.77
16cm	＜ 99%	Front	12.16	0.83
16cm	＜ 99%	Rear	12.54	0.91
Limit			614	1.63
Margin Limit (%)			2.04%	55.83%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
18cm	＜ 1%	Top	12.28	0.62
18cm	＜ 1%	Bottom	12.19	0.66
18cm	＜ 1%	Left	12.23	0.64
18cm	＜ 1%	Right	12.25	0.71
18cm	＜ 1%	Front	12.43	0.65
18cm	＜ 1%	Rear	12.43	0.68
Limit			614	1.63
Margin Limit (%)			2.02%	43.56%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
18cm	＜ 50%	Top	12.27	0.60
18cm	＜ 50%	Bottom	12.23	0.70
18cm	＜ 50%	Left	12.21	0.71
18cm	＜ 50%	Right	12.22	0.85
18cm	＜ 50%	Front	12.41	0.65
18cm	＜ 50%	Rear	12.48	0.54
Limit			614	1.63
Margin Limit (%)			2.03%	52.15%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
18cm	＜ 99%	Top	12.35	0.58
18cm	＜ 99%	Bottom	12.29	0.80
18cm	＜ 99%	Left	12.22	0.65
18cm	＜ 99%	Right	12.27	0.75
18cm	＜ 99%	Front	12.49	0.61
18cm	＜ 99%	Rear	12.55	0.41
Limit			614	1.63
Margin Limit (%)			2.04%	49.08%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
20cm	＜ 1%	Top	11.99	0.49
20cm	＜ 1%	Bottom	12.00	0.52
20cm	＜ 1%	Left	12.14	0.44
20cm	＜ 1%	Right	12.02	0.48
20cm	＜ 1%	Front	11.89	0.49
20cm	＜ 1%	Rear	11.88	0.56
Limit			614	1.63
Margin Limit (%)			1.98%	34.36%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
20cm	＜ 50%	Top	11.89	0.53
20cm	＜ 50%	Bottom	12.12	0.67
20cm	＜ 50%	Left	12.22	0.52
20cm	＜ 50%	Right	11.96	0.44
20cm	＜ 50%	Front	12.05	0.41
20cm	＜ 50%	Rear	12.02	0.61
Limit			614	1.63
Margin Limit (%)			1.99%	41.10%

MPE				
Test distance	Battery levels	Probe from EUT Side	E-field (V/m)	H-field (A/m)
20cm	＜ 99%	Top	11.87	0.60
20cm	＜ 99%	Bottom	12.24	0.77
20cm	＜ 99%	Left	12.32	0.55
20cm	＜ 99%	Right	11.89	0.50
20cm	＜ 99%	Front	12.09	0.46
20cm	＜ 99%	Rear	11.95	0.75
Limit			614	1.63
Margin Limit (%)			2.01%	47.24%

E-field (V/m):

According to the following table, when we backward derivation 0cm, it should be 13.28(V/m), with a deviation from the actual test value of 3.22%.

E-field (V/m)			
0cm	2cm	4cm	6cm
13.72	13.05	12.81	12.59

Note:

1. Estimated value (0cm) / Measured value(4cm) = Measured value(2cm) / Measured value(6cm)
2. Deviation = [Measured value(0cm) - Estimated value (0cm)] / Measured value(0cm)
3. Estimated value (0cm) = 13.05*12.81/12.59 = 13.28(V/m)
4. Deviation = (13.72-13.28)/13.72 = 3.22%

H-field (A/m):

According to the following table, when we backward derivation 0cm, it should be 1.42(A/m), with a deviation from the actual test value of 5.28%.

H-field (A/m)			
0cm	2cm	4cm	6cm
1.35	1.14	0.96	0.77

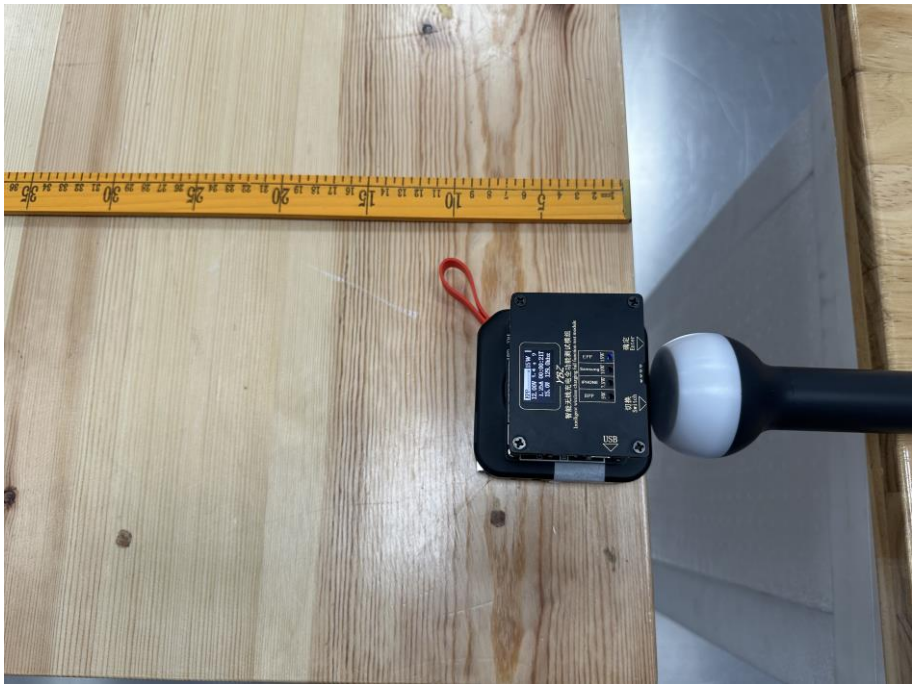
Note:

1. Estimated value (0cm) / Measured value(4cm) = Measured value(2cm) / Measured value(6cm)
2. Deviation = [Measured value(0cm) - Estimated value (0cm)] / Measured value(0cm)
3. Estimated value (0cm) = 1.14*0.96/0.77 = 1.42(A/m)
4. Deviation = (1.35-1.42)/1.35 = 5.28%

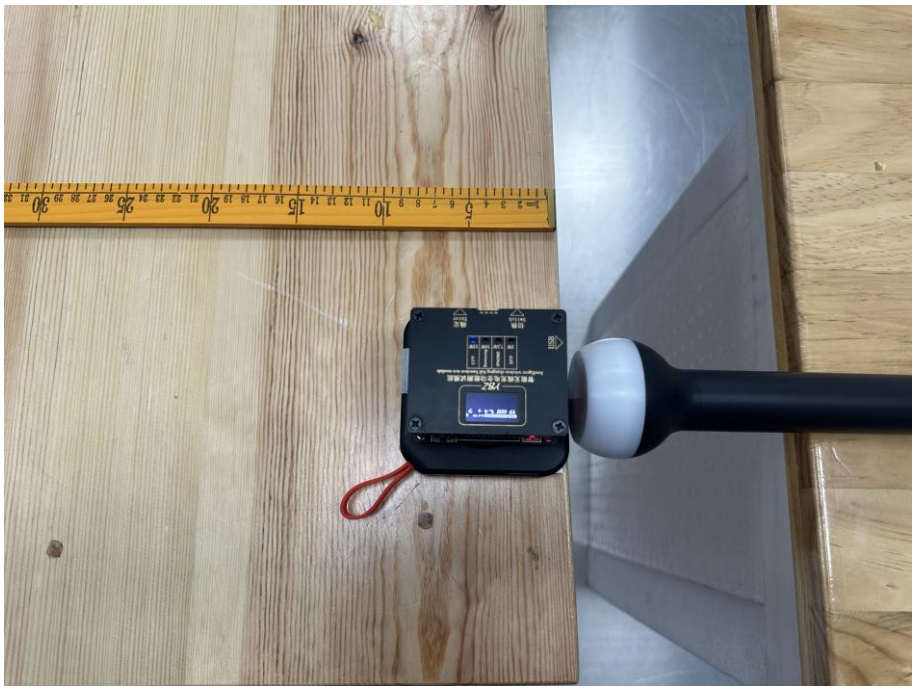
12 Test Setup photo

0cm-Botton

0cm-Front

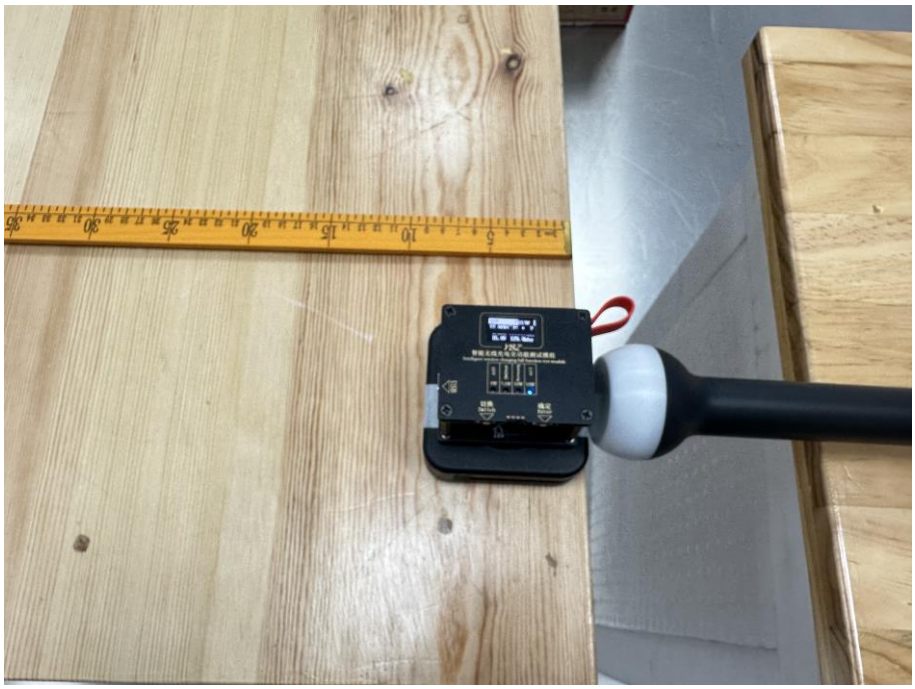


0cm-Left

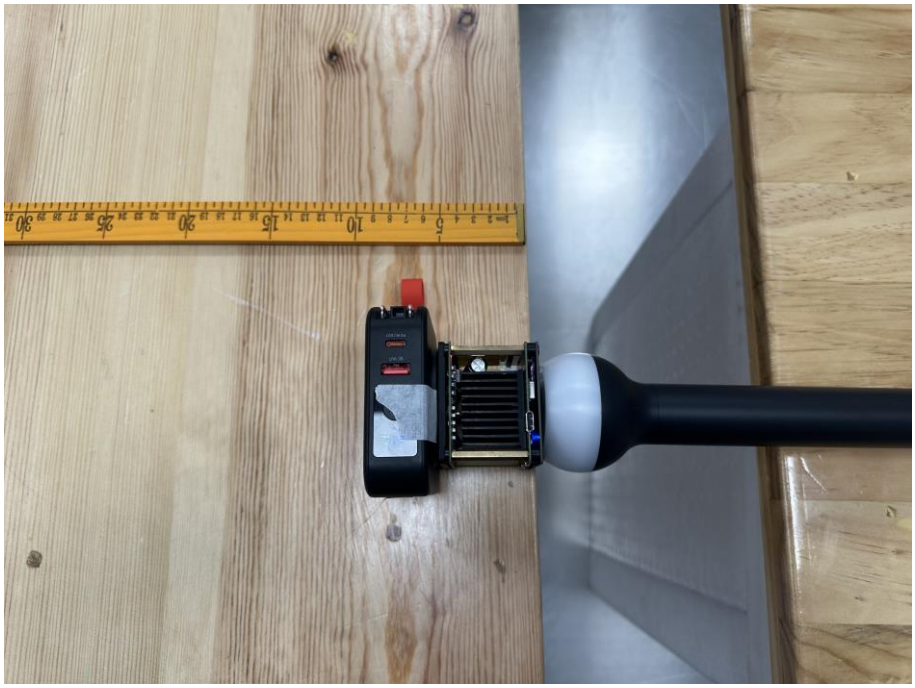


0cm-Rear

0cm-Right



0cm-Top



End of report