

RF Exposure Evaluation

FCC ID: 2A6IU-X23

Measuring Standard

FCC Part 1(1.1310) and Part 2(2.1091)

KDB 680106 D01 RF Exposure Wireless Charging Base App v03

Test Configuration

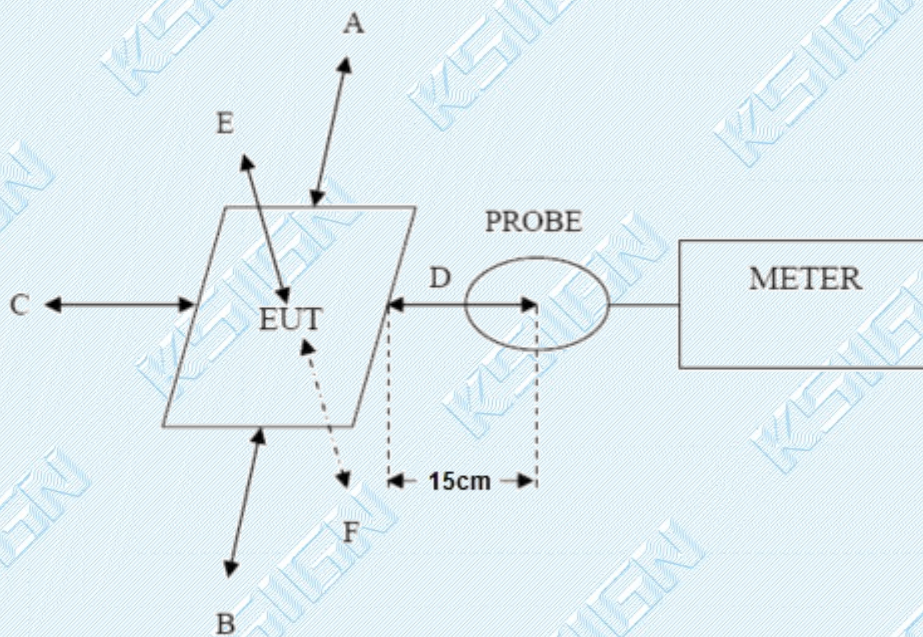
The test distance of Position E on the front side is 20cm, the test distance of Position A,B,C,D is 15cm using the equipment list above for determining compliance with the MPE requirements of FCC Part 1.1310.

The RF power density was measured at Under maximum load test.

The test distance of Position E on the front side is 20cm, the test distance of Position A,B,C,D is 15cm, the field probes were positioned at the location where there is maximum field strength. The maximum E-field and H-field is reported below.

This device uses a wireless charging circuit for power transfer operating at the frequency of 115KHz -205kHz. Thus, the 300kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).

TEST Setup



TRF No. FCC RF Exposure R4

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdkesign.cn Web: www.gdkesign.com

TEST Limits

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 Exposure				
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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

Measuring Device and Test Equipment

Description	Manufacturer	Model	S/N	Cal. Until
Probe FHP(1Hz-400KHz)	Narda Safety Test Solutions GmbH	EHP-50F	J-0015	Nov. 01, 2023
EHP50-TS	Narda	EHP50-TSR el 1.77	N/A	N/A
Adapter	MCDODO	CH-810 Pro	6921002681032	N/A
PHONE 1	Apple	iPhone 13	N/A	N/A

TEST MODE

MODE	TEST MODE DESCRIPTION
1	Wireless charging mode(Full load)
2	Wireless charging mode(Half load)
3	Wireless charging mode(Null load)

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TEST RESULT

☒ **Passed**
☐ **Not Applicable**

EUT	Car Wireless Fast Charger	Model Name. :	X23
Pressure:	1011hPa	Test Date:	2023-07-13

E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT								
EUT Side	Frequency Range (KHz)	Probe A (V/m)	Probe B (V/m)	Probe C (V/m)	Probe D (V/m)	Probe E (V/m)	Limits (V/m)	50% Limit (V/m)
Full load	115~205	0.85	0.83	0.84	0.86	3.07	614	307
Half load	115~205	0.82	0.80	0.83	0.82	2.92		
Null load	115~205	0.78	0.75	0.73	0.77	2.87		

H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT								
EUT Side	Frequency Range (KHz)	Probe A (A/m)	Probe B (A/m)	Probe C (A/m)	Probe D (A/m)	Probe E (A/m)	Limits (A/m)	50% Limit (A/m)
Full load	115~205	0.43	0.44	0.47	0.46	0.79	1.63	0.815
Half load	115~205	0.41	0.42	0.43	0.42	0.69		
Null load	115~205	0.40	0.40	0.42	0.41	0.63		

Remark: RF exposure should be assessed at 15 cm from all sides of the WPT device and 20 cm from the top of the device.

Measure from the center of the probe to the edge of the WPT device.

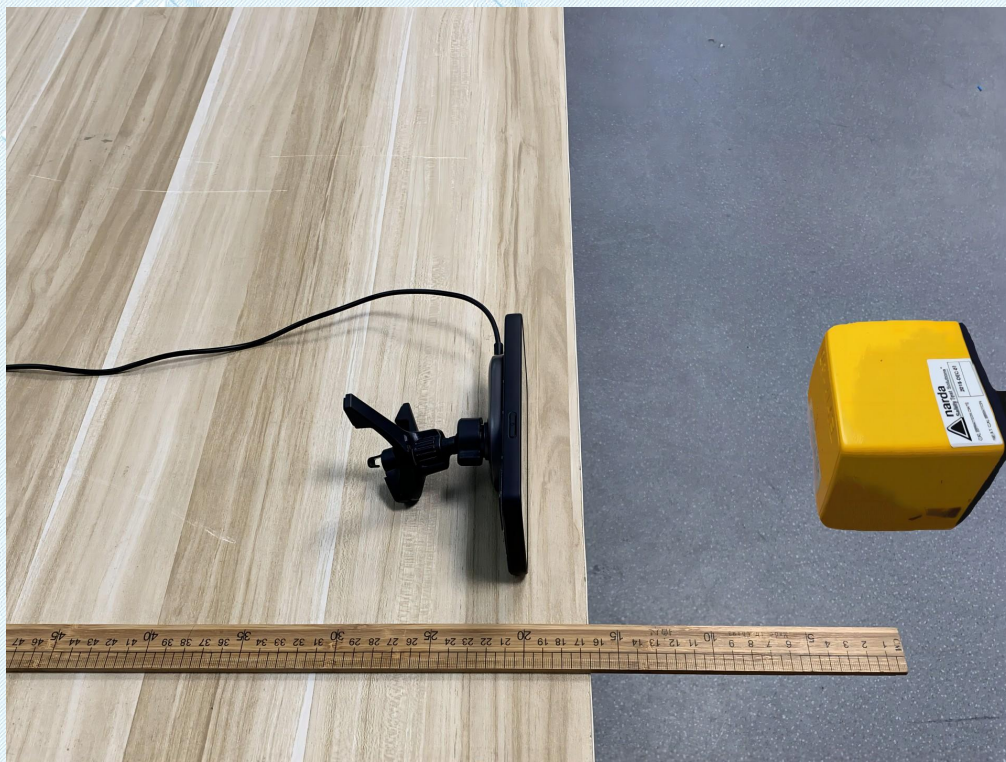
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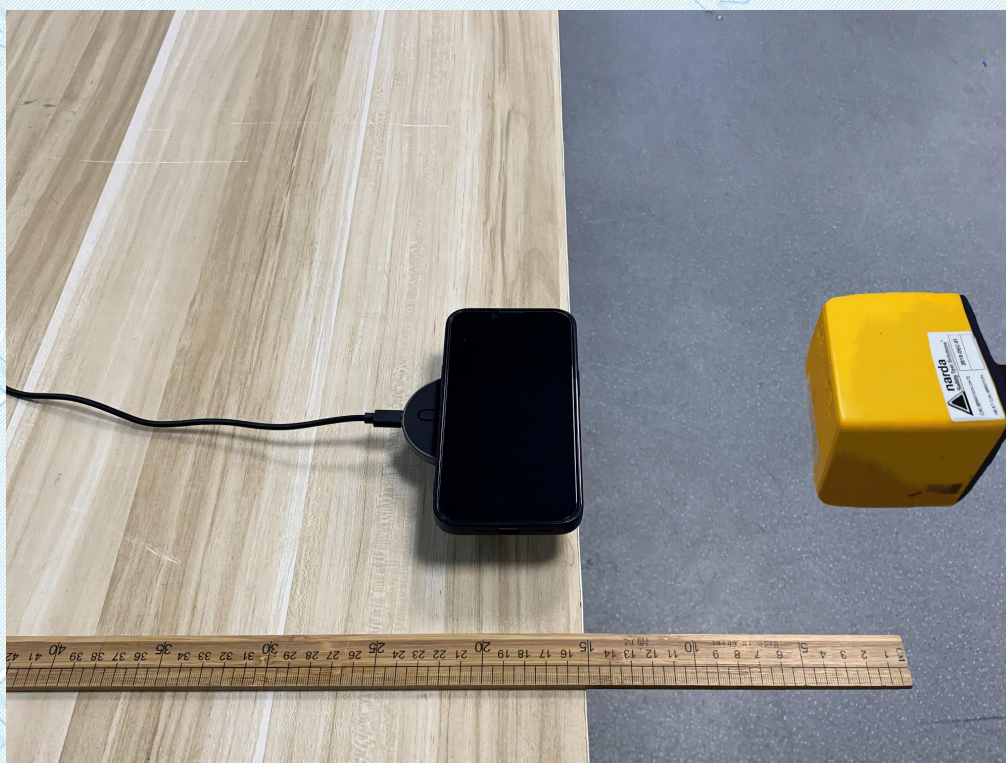
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PHOTOGRAPHS OF TEST SETUP

Position E



Position A



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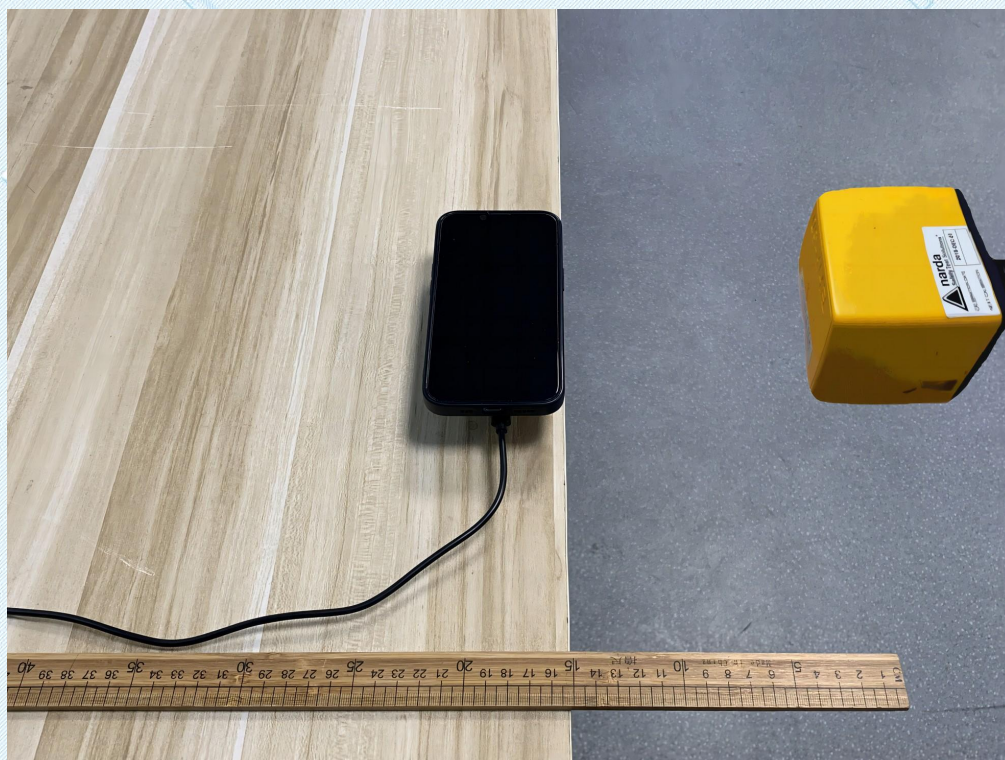
Position C



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*****THE END*****

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