

RF Exposure Evaluation

FCC ID:2BVXC-IPCW5006B

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Manufacturer Name..... : Dongguan Uka-Cham Electronics Tech. Co., Ltd
Address..... : 5F, Bld A4, Yifanghuigu Science Park, Lingnan Rd 106#, Shigu, Tangxia,
Dongguan City, Guangdong, China 523729
Product..... : 5K WIRELESS POWER BANK WITH USB-C CHARGING
Model(s)..... : IPCW5006B
Additional Model(s)..... : /
Trademark..... : iLive
Model Difference..... : /
Prepared by..... : Guangdong Zhonghan Testing Technology Co., Ltd.
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Date of Receipt..... : Apr. 29, 2026
Date of Test(s)..... : Apr. 29, 2026-May 9, 2026
Date of Issue..... : May 9, 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.

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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.

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1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

Product Name:	5K WIRELESS POWER BANK WITH USB-C CHARGING
Test Model No.:	IPCW5006B
Hardware version:	V1.0
Software version:	V1.0
Operation Frequency:	115-205kHz
Modulation type:	ASK
Antenna Type:	Inductive loop coil Antenna
Antenna gain:	0dBi
Power supply:	Input: DC 5 V/3 A, DC 9 V/2 A, DC 12 V/ 1.5 A Type-c output: DC 5 V/3 A, DC 9 V/2.22 A, DC 12 V/ 1.67 A, SCP 10 V/2.25 A Phone Wireless charging output: 5 W/7.5 W/10 W/15 W Li Battery Energy: 5000mAh/3.7V/18.5Wh
Sample Number:	260429128YP001
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 Mains + Adapter + Phone charging port (Battery Status:≤1%)
Mode 2	AC Mains + Adapter + Phone charging port(Battery Status:50%)
Mode 3	AC Mains + Adapter + Phone charging port(Battery Status:≥98%)
Mode 4	AC Mains + Phone charging port(Battery Status:≤1%)
Mode 5	AC Mains + Phone charging port(Battery Status:50%)
Mode 6	AC Mains + Phone charging port(Battery Status:≥98%)
Mode 7	Standby
Note: All modes were tested, only the worst-case was recorded in the report. Mode 4 is the worst mode.	

1.3. Auxiliary equipment

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1	AC Adapter	iforg	191106C	/	AE
2	Mobile phone	iQOO	iQOO 12 Pro	/	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	Portable Device
Equipment Authorization Procedures for Devices Operating at Frequencies Below 4 MHz	Yes	The device operate in the frequency range 115-205 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 0-20 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)

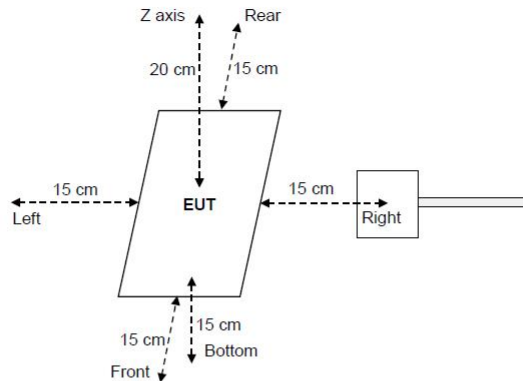
Limits for Maximum Permissible Exposure (MPE)

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

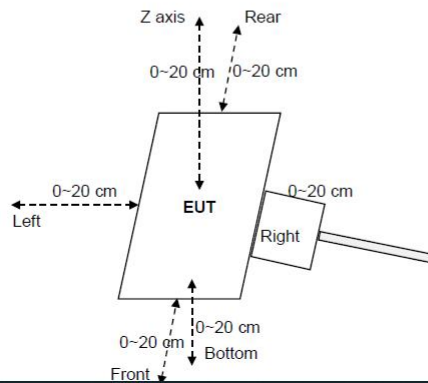
F=frequency in MHz
 * =Plane-wave equivalent power density
 RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

2.4. Test Setup

For mobile exposure conditions:



For portable exposure conditions:



2.5. Test Procedure

1) For mobile exposure conditions:

- The RF exposure test was performed in anechoic chamber.
- E and H-field measurements should be made with the center of the probe at a distance of 15 cm surrounding the EUT and 20 cm above the top surface of the primary/client pair.
- The highest emission level was recorded and compared with limit.
- The EUT was measured according to the dictates of KDB 680106 v03r01.

2) For portable exposure conditions:

- The RF exposure test was performed in anechoic chamber.
- E and H-field measurements should be made with the probe at 0 cm for all side of the EUT.
- The highest emission level was recorded and compared with limit.

3) For portable exposure conditions: Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm, starting from as close as possible out to 10 cm

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 No.	SN.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Exposure Level Tester	Narda	ELT-400	180ZX10220	Sep. 25, 2025	Sep. 24, 2026
Magnetic field probe 100cm ²	Narda	ELT probe 100cm ²	M0675	Sep. 25, 2025	Sep. 24, 2026

2.8. Test Result

We have evaluated mode 1 to mode 7 and the worst mode 4 is showed in this report.

H-Filed Strength from the edges surrounding the EUT (A/m)										
The measurement probe was placed at test distance which is between the edge of the charger and the geometric of probe(cm)	Test Mode	Unit	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	Limits (A/m)	test result
6	Mode 4	A (uT)	0.235	0.356	0.420	0.326	0.454	0.426	1.63	PASS
		(A/m)	0.188	0.285	0.336	0.261	0.363	0.341		
8	Mode 4	A (uT)	0.325	0.342	0.335	0.445	0.464	0.334	1.63	PASS
		(A/m)	0.260	0.274	0.268	0.356	0.371	0.267		
10	Mode 4	A (uT)	0.332	0.315	0.352	0.321	0.375	0.366	1.63	PASS
		(A/m)	0.266	0.252	0.282	0.257	0.300	0.293		
12	Mode 4	A (uT)	0.350	0.351	0.311	0.345	0.352	0.314	1.63	PASS
		(A/m)	0.280	0.281	0.249	0.276	0.282	0.251		
14	Mode 4	A (uT)	0.332	0.344	0.343	0.350	0.269	0.302	1.63	PASS
		(A/m)	0.266	0.275	0.274	0.280	0.215	0.242		
16	Mode 4	A (uT)	0.325	0.312	0.322	0.362	0.413	0.542	1.63	PASS
		(A/m)	0.260	0.250	0.258	0.290	0.330	0.434		
18	Mode 4	A (uT)	0.262	0.226	0.301	0.295	0.265	0.274	1.63	PASS
		(A/m)	0.210	0.181	0.241	0.236	0.212	0.219		
20	Mode 4	A (uT)	0.235	0.269	0.321	0.256	0.278	0.426	1.63	PASS
		(A/m)	0.188	0.215	0.257	0.205	0.222	0.341		

Note: Calculation: A/m=uT/1.25

Note: Biot-Savar law:

1. Magnetic field on the axis of a current-carrying circle coil:

$$B = \frac{\mu_0 I R^2}{2(R^2 + X^2)^{\frac{3}{2}}}$$

R is the coil outside diameter radius.

X is the distance from the test point to the center of the coil circle.

B is the magnetic magnetic field.

2. According to the KDB 680106, the model needs to be validated by probe measurements at the two points closest to the surface of the device, in 2cm increments, and if there is a 30% agreement between the model and the (E-field and/or h-field) probe measurements, the validation is considered sufficient.

3. We derived the field strengths at 10cm to 8cm and 8cm to 6cm, respectively, which are close to the actual test values, based on the field strength at 6 cm, the field strength at 4cm and 2cm and 0 cm can be deduced.

4. A table of error data between the assessed and measured values:

distance (cm)	Measurements	distance (cm)	Assessed	Error	Limit
	(A/m)		(A/m)	(%)	(%)
10	0.300	/	/	/	/
8	0.371	10 to 8	0.415	-10.60	<30
6	0.363	8 to 6	0.590	-38.47	<30

5. Calculation process:

distance (cm)	Position Left (A/m)
8	0.415
6	0.590
4	0.845
2	1.141
0	1.292

$$8\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{2}{3}} = 0.328 * 2(0.055^2 + 0.08^2)^{\frac{3}{2}} = 0.01173413$$

$$\text{To 6cm: } B = \frac{u_0IR^2}{2(R^2 + X^2)^{\frac{2}{3}}} = \frac{0.01173413}{2(0.055^2 + 0.06^2)^{\frac{3}{2}}} = 0.590$$

$$6\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{2}{3}} = 0.2234 * 2(0.055^2 + 0.06^2)^{\frac{3}{2}} = 0.01172625$$

$$\text{To 4cm: } B = \frac{u_0IR^2}{2(R^2 + X^2)^{\frac{2}{3}}} = \frac{0.01172625}{2(0.055^2 + 0.04^2)^{\frac{3}{2}}} = 0.845$$

$$4\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{2}{3}} = 0.3830 * 2(0.055^2 + 0.04^2)^{\frac{3}{2}} = 0.01172438$$

$$\text{To 2cm: } B = \frac{u_0IR^2}{2(R^2 + X^2)^{\frac{2}{3}}} = \frac{0.01172438}{2(0.055^2 + 0.02^2)^{\frac{3}{2}}} = 1.141$$

$$2\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{2}{3}} = 0.6011 * 2(0.055^2 + 0.02^2)^{\frac{3}{2}} = 0.01172378$$

$$\text{To 0cm: } B = \frac{u_0IR^2}{2(R^2 + X^2)^{\frac{2}{3}}} = \frac{0.01172378}{2(0.055^2 + 0^2)^{\frac{3}{2}}} = 1.292$$

2.9. Test Photo

