

# **RF EXPOSURE REPORT**

# FOR

Applicant		KREAFUNK APS		
Address of Applicant		Klamsagervej 35 A, st.8230 Abyhoj,Denmark		
Manufacturer	:	SHENZHEN RUNXINFENG TECHNOLOGY CO.,LTD		
Address of Manufacturer	•	Building A6, 1st Floor, Nanpu Road, Xinqiao Street, Bao'an District, Shenzhen City, Guangdong Province, China		
Equipment under Test		Wireless charger		
Model No.		Paddy		
FCC ID		2ACVC-PADDY		
Test Standard(s)	• •	FCC CFR 47 part1, 1.1307(b), 1.1310; KDB680106 D01 Wireless Power Transfer v04		
Report No.	• •	DDT-RE24010331-8E02		
Issue Date	•••	2024/04/08		
Issued By	•	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808		



# **Table of Contents**

	Test report declares	
1.	General Information	5
1.1.	Description of equipment	5
1.2.	Accessories of EUT	5
1.3.	Assistant equipment used for test	5
1.4.	Block diagram of EUT configuration for test	5
1.5.	Assess laboratory	6
2.	Equipment Used During Test	7
3.	Method of Measurement	
3.1.	Applicable standard	
3.2.	Block diagram of test setup	
3.3.	<sup>®</sup> Test procedure	8
3.4.	Equipment approval considerations:	9
3.5.	E and H Field Strength	
4.	Test Setup Photo	
5	Photos of the EUT	

# **Test Report Declare**

Applicant	:	KREAFUNK APS
Address	:	Klamsagervej 35 A, st.8230 Abyhoj,Denmark
Equipment under Test	:	Wireless charger
Model No.	:	Paddy
Manufacturer	:	SHENZHEN RUNXINFENG TECHNOLOGY CO., LTD
Address	•	Building A6, 1st Floor, Nanpu Road, Xinqiao Street, Bao'an District, Shenzhen City, Guangdong Province, China

**Assess Standard Used:** FCC CFR 47 part1, 1.1307(b), 1.1310; KDB680106 D01 Wireless Power Transfer v04.

#### We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No.:	DDT-RE24010331-8E02			
Date of Receipt:	2024/02/06	Date of Test:	2024/02/062024/04/07	

**Prepared By:** 

.y Huana Jacky Huang/Engineer



Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

# **Revision History**

Rev.	Revisions	Issue Date	Revised By
	Initial issue	2024/04/08	C
	P' P'	00	



## 1. General Information

## 1.1. Description of equipment

EUT Name	:	Wireless charger
Model Number	:	Paddy
EUT function description	:	Please reference user manual of this device
Power Supply	:	Input:5V–2A, 9V–2.5A Output: 5W, 7.5W, 10W, 15W
Wireless charging Operation frequency	(02)	115 kHz – 148.5 kHz 🤍 🛞
Antenna Type	:	Inductive loop coil antenna
Sample Number	:	S24010331-035
Number THIT is the shift of the second		t and in many other days to at

Note: EUT is the abbreviation of equipment under test.

## 1.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Description
USB cable	N/A	N/A	N/A

## 1.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Other
Dummy load	N/A	N/A	N/A
USB-C Power Adapter	apple	A1882	Input: 100-240V~ 50/60Hz, Output: 20V/1.5A or 15V/2A or 9V/3A or 5V/3A
Mobile Phone	HUAWEI	TAS-AL00	NA

## 1.4. Block diagram of EUT configuration for test

For mode 1: Tx mode (zero charge, intermediate charge, and full charge):



For mode 2: Standby mode:



## 1.5. Assess laboratory

Guangdong Dongdian Testing Service Co., Ltd. Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808. Tel.: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01 FCC Designation Number: CN1182, Test Firm Registration Number: 540522 Innovation, Science and Economic Development Canada Site Registration Number: 10288A Conformity Assessment Body identifier: CN0048 VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

# 2. Equipment Used During Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Electric and Magnetic	narda	EHP-200A	170WX91016	Sep. 21, 2023	1 Year

## 3. Method of Measurement

## 3.1. Applicable 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 KDB 680106 D01 Wireless Power Transfer v04.

### 3.2. Block diagram of test setup



Note: Due to installation limitations no tests from the underside of the charging device (Test Position F) are required. The test position F is required when the distance is 0cm.

#### 3.3. Test procedure

a) The RF exposure test was performed in shielded chamber.

b) The measurement probe was placed at test distance 20 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit.

c) The measurement probe used to search of highest strength.

d) The highest emission level was recorded and compared with limit as soon as measurement of each points(A, B, C, D, E) were completed.

e) The EUT were measured according to the dictates of KDB 680106 D01 Wireless Power Transfer v04.

## 3.4. Equipment approval considerations:

The EUT does comply with section 5.2 of KDB 680106 D01 Wireless Power Transfer v04.

(1) Power transfer frequency is less than 1 MHz.

Yes, the device operates in the frequency range from 115-148.5 kHz

(2) Output power from each primary coil is less than or equal to 15 watts

Yes, the maximum output power of the primary coil is 15 W.

(3) A client device providing the maximum permitted load is placed in physical contact with the transmitter(i.e., the surfaces of the transitter and client device enclosures need to be in physical contact)

Yes. client device is placed directly in contact with the transmitter.

(4) Only §2.1091-Mobile exposure conditions apply (i.e, this provision does not cover

§2.1093-Portableexposure conditions).

Yes, the EUT is for Mobile exposure.

(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. Thesemeasurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a I/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used rtest reduction purposes. The device shall be operated in documented worst-case compliance scenariosi.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coilsor antennas) that by design can simultaneously transmit are energized at their nominal maximum power.

Yes, the E-field and H-field strengths levels are less than 50% of MPE limit.

(6) For systems with more than onc radiating structure, the conditions specified in (5) must be met whenthe system is fully loaded (i.e, clients absorbing maximum power available), and with all the radiatingstructures operating at maximum power at the same time, as per design conditions. If the design allows oneor more radiating structures to be powered at a higher level while other radiating structures are not powered.then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, orone coil powered at 15 W: in this case, both scenarios shall be tested.

Yes, the transfer system includes only one primary coils.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
	(A) Limits for O	ccupational/Controlled Exp	osure	•
0.3-3.0	614	1.63	*100	6
3.0-30	1842/	f 4.89/1	f *900/f2	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 Gene	ral Population/Uncontrolled	Exposure	·
0.3-1.34	614	1.63	*100	30
1.34-30	824/	f 2.19/i	f *180/f2	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

#### TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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

## 3.5. E and H Field Strength

Test mode for wireless charger:

Mobile phone has been charged at zero charge, intermediate charge, and full charge with HUAWEI mobile phone TAS-AL00.

15W Load, 10W Load, 5W Load and 7.5W Load mode have been tested, the 15W load mode is the worst case and recorded in this report.

Note: All test modes were pre-tested, but we only recorded the worst case in this report.

i i noa Gaoligai e		gee earreanaing are		
	Prol	Limite		
Test Position	Full Load	Zero charge	intermediate charge	Test (A/m)
А	0.0976	0.0716	0.0871	1.63
B	0.1157	0.1841	0.1014	1.63
С	0.0875	0.1276	0.1791	1.63
D	0.1423	0.0825	0.0830	1.63
E-20cm	0.1307	0.1153	0.1290	1.63

#### H-Filed Strength at 20 cm from the edges surrounding the EUT (A/m)

#### E-Filed Strength at 20 cm from the edges surrounding the EUT (V/m)

	Prol	Limite			
Test Position	Full Load	Zero charge intermediate charge		Test (V/m)	
A	1.4373	2.8044	2.2291	614	
В	1.3512	2.1692	1.5402	614	
С	1.5893	2.6276	2.3346	614	
D	1.0946	2.2026	1.6749	614	
E-20cm	2.4668	3.3084	3.0001	614	

## E-Filed Strength at 20 cm from the edges surrounding the EUT (V/m)

Test Position	Probe Measure Result (V/m)	Limits
	15W	Test (V/m)
A	2.1635	614
В	<u> </u>	614 🔍 🕓
C	2.2747	614
D	2.6894	614
E-20cm	5.3938	614

#### H-Filed Strength at 20 cm from the edges surrounding the EUT (A/m)

Probe Measure Result(A/m)	Limits
15W	Test (A/m)
0.0726	1.63
0.0745	1.63
0.0991	1.63
0.0920	1.63
0.1686	1.63
	Probe Measure Result(A/m) 15W 0.0726 0.0745 0.0991 0.0920 0.1686

Guangdong Dongdian Testing Service Co., Ltd.

Report No.: DDT-RE24010331-8E02

# 5 Photos of the EUT

Please refer to DDT-Q24010331-8E appendix I.

