## **TEST REPORT**

**Reference No.** : WTK20S12095841W002

**FCC ID** ..... : 2AIY7CD-1086

Applicant.....: Shenzhen Uniwins Technology Co., Limited

2-3/F., Bldg. B, Quanyuanfa Industrial Park, Guanlan Avenue, Guanlan

Address.....: Town, Longhua New District

Shenzhen China

Manufacturer .....: Dongguan Uniwins Technology Co., Ltd

Yangxin Rd., Yangchong village, Dalang, Dongguan, China

Product...... 3-in-1 Wireless charging pad

Model(s). ..... : CD-1086

Standards..... FCC CFR47 Part 1.1307 FCC CFR47 Part 1.1310

Date of Receipt sample .... : 2020-12-14

**Date of Test** ...... : 2020-12-15 to 2020-12-21

**Date of Issue**.....: 2020-12-23

Test Result..... : Pass

#### Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

# Prepared By: Waltek Testing Group Co., Ltd.

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# 3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTK20S12095 841W002	2020-12-14	2020-12-14 to 2020-12-21	2020-12-23	Original	-	Valid

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#### 4 General Information

#### 4.1 General Description of E.U.T

Product: 3-in-1 Wireless charging pad

Model(s): CD-1086

Model Difference: N/A

Type of Modulation: ASK

Frequency Range: 110-205kHz

Antenna installation: Inductive loop coil Antenna

Hardware Version: V1.1

Software Version: V1.1

#### 4.2 Details of accessories

Ratings: Input: 5V/2A

Wireless output: 5W

Model: A138A-120-150U-US2

Adapter: Input: 100-240 ~ 50/60Hz, 0.5A

Output: Output: 5V==2.5A / 9V==2A / 12V==1.5A

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#### 4.3 Test Mode

Test Mode	Descriptions
Standby mode	EUT alone powered by AC/DC adapter
Charaina mada	Ant.1 loading of 5 W
Charging mode	Ant.2 loading of 3 W

**Note**: EUT was investigated with client device under normal charging condition as above then worst value was only report.

### 4.4 Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Services (Shenzhen) Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Services (Shenzhen) Co., Ltd. EMC Laboratory `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. Registration number 523476, September 10, 2019.

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# 5 Test Summary

Test Items	Test Requirement	Result
Electric Field Strength (E) (V/m)	FCC CFR 47 part1 § 1.1310	PASS
Magnetic Field Strength (H) (A/m)	KDB 680106 D01 v03	PASS

Note: -

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## **6 Equipment Used during Test**

## 6.1 Equipments List

RF EXPOSURE								
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date		
1	Magnetic Field Meter	NARDA	ELT-400	M-0155/M- 0170	2020-07-24	2021-07-23		

## 6.2 Description of Auxiliary Equipment

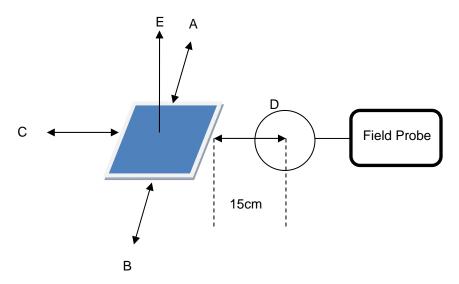
Equipment	Manufacturer	Model No.	Series No.
Simulated load	/	/	/
Adapter	AOHAI power	A138A-120-150U-US2	N/A

## 6.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R. China.

### 7 RF Exposure

#### 7.1 Test Setup



The RF exposure test was performed in anechoic chamber.

The probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.

The EUT was put in different directions (Left, Right, Front, Rear, Top and Bottom) to obtain the maximum reading.

The EUT was measured according to the dictates of KDB 680106 D01 RF Exposure Wireless Charging App v03.

#### 7.2 Equipment approval considerations (clause 5 b) of KDB 680106 D01 v03

- (1) Power transfer frequency is less than 1 MHz.
- (2) Output power from each primary coil is less than or equal to 15 watts.
- (3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.
- (4) Client device is placed directly in contact with the transmitter.
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
- (6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

#### 7.3 FCC Rules

§1.1310: The criteria listed in the following table 1 shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of FCC part 2.1093 of this chapter.

TABLE 1-LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field Magnetic field strength strength (V/m) (A/m)		Power density (mW/cm²)	Averaging time (minutes)
(A) Lim	nits for Occupational	//Controlled Exposu	res	
0.3–3.0	614 1842/f	1.63 4.89/f	*(100) *(900/f²)	6
30-300	61.4	0.163	1.0	i
300–1500 1500–100,000			f/300 5	"
(B) Limits	for General Populati	on/Uncontrolled Exp	oosure	
0.3–1.34	614 824/f	1.63 2.19/f	*(100) *(180/f²)	30 30

TABLE 1-LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)-Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/em²)	Averaging time (minutes)
30–300	27.5	0.073		30
300–1500 1500–100,000			f/1500 1.0	30 30

f = frequency in MHz

#### 7.4 EUT Operation

Operating Environment:

Temperature: 23.5 °C Humidity: 51.1 % RH

Atmospheric Pressure: 101.2kPa

Charging mode: Loading of 10 W **EUT Operation:** 

Only the worst case transmitting mode were record in the report.

f = frequency in MHz

\* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

#### 7.5 Test Result

Maximum RF exposure reading and percentage

	Electric Field Limit		Magnetic Field Limit			
FCC	Maximum RMS (V/m)	Percentage (%)	FCC	Maximum RMS (A/m)	Percentage (%)	
614	15.00	2.44	1.623	0.28	17.26	

E-Filed Strength (V/m) of charging mode: Ant.1 loading of 5 W

Frequency Range		Test Position					
MHz	А	В	С	D	E	(V/m)	
0.137	15.00	12.33	8.27	11.13	9.73	15.00	

H-Filed Strength (A/m) of charging mode: Ant.1 loading of 5 W

Frequency Range		Test Position					
MHz	А	В	С	D	Е	(A/m)	
0.137	0.280	0.088	0.097	0.197	0.097	0.280	

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## 8 Photographs of test setup

Note: Please refer to appendix: Appendix-CD-1086-Photos.

====End of Report=====