Shenzhen Huntkey Electric Co., Ltd

TEST REPORT

SCOPE OF WORK
EMC TESTING–SCA009

REPORT NUMBER
201127057GZU-002

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Applicant Name & Address	:	Shenzhen Huntkey Electric Co., Ltd Huntkey Industrial Park,XueXiang Village,Bantian Street,LONGGANG DISTRICT,518129,ShenZhen,Guangdong,China
Manufacturing Site	:	Same as applicant
Intertek Report No:		201127057GZU-002
FCC ID:		2AVYR-SCA009

Test standards

47 CFR PART 1, Subpart I, Section 1.1310
KDB 680106 D01 RF Exposure Wireless Charging App v03r01

Sample Description

Product	:	Wireless Charging Base
Model No.	:	SCA009
Electrical Rating	:	INPUT: 9V ⎓ 2A or 5V ⎓ 2A OUTPUT: 10W Max
Serial No.		Not Labeled
Date Received	:	27 November 2020
Date Test Conducted	:	5 July 2022

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1.0 TEST RESULT SUMMARY

Classification of EUT: Class B

Test Item	Standard	Result
EMF	47 CFR PART 1, Subpart I, Section 1.1310	PASS

Remark:
When determining the test results, measurement uncertainty of tests has been considered.
The worst case's test data is input 9V/2A,which is presented in this test report.

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2.0 General Description

2.1 Product Description

Operating Frequency	111.7-147.5 KHz
Type of Modulation:	MSK
Antenna Type	Inductive loop coil antenna
Antenna gain:	0 dBi
Power Supply:	Input: 9.0Vdc, 2.0A, Powered by adaptor V3330L0A1-EU provided by Intertek; Output: 10W Max
Power cord:	0.8 m x 2 wires unscreened DC supply cable

2.2 Test Facility

Room102/104, No 203, KeZhu Road, Science City, GETDD Guangzhou, China

A2LA Certificate Number 0078.10
Intertek Testing Services Shenzhen Ltd. Guangzhou Branch is accredited by A2LA and Listed in FCC website. FCC accredited test labs may perform both Certification testing under Parts 15 and 18 and Declaration of Conformity testing.

2.3 EUT Exercising Software

N/A

2.4 Special Accessories

N/A

2.5 Equipment Modification

Any modifications installed previous to testing by Shenzhen Huntkey Electric Co., Ltd will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch.

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2.6 Support Equipment List and Description

This product was tested with corresponding support equipment as below:

Support Equipment:

Equipment	Model No.	Rating	Supplier
WPT client	Tx-test2	DC 12V/0.83A,DC 7.5V/1.06A,DC 5V/1A	Shenzhen Huntkey Electric Co., Ltd
Adapter	V3330L0A1-EU	100-240~, 50/60Hz, 0.85A	Intertek

Remark: the WPT client was one of typical client devices, it's selected such that the EUT was fully exercised at maximum power from its transmitter. It will not be sold together.

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above evaluated respectively

Pretest mode	Description	
Standby Mode	kept transmitting continuously	
Charging Mode	CH: Low	WPT client is full load power mode,half full load power mode and saturated charging mode respectively, keep transmitting continuously.
	CH: Middle	
	CH: High	

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3.0 EMF TEST

3.1 Standard Requirement

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 limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.1m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	F/300	6
1500-100000	--	--	5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	F/1500	30
1500-100000	--	--	1.0	30

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

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3.2 Test Data

Input Voltage: 120V/60Hz
Ambient Condition: 24℃, 50%RH

Test distance: 15 cm surrounding the device, and 20 cm away from the surface from the coil.

H-Filed Strength:

Test Position	**Probe Measure Result (A/m)**			**50% Limit (A/m)**	**Limit (A/m)**
	Full load power mode	Half full load power mode	Saturated charging mode		
Side 1	0.042	0.037	0.034	0.815	1.63
Side 2	0.031	0.034	0.032	0.815	1.63
Side 3	0.032	0.035	0.032	0.815	1.63
Side 4	0.037	0.036	0.033	0.815	1.63
Top	0.046	0.042	0.041	0.815	1.63

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4.0 Test Equipment List

Equip. No.	Equipment	Model	Manufacturer	Cal. date	Due date
EM007-03	Exposure Level Tester	ELT-400	NARDA	28/02/2022	28/02/2023

**********End of the test report**********