DGD International Limited

TEST REPORT

SCOPE OF WORK
EMC TESTING–2046010

REPORT NUMBER
190905013GZU-002

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TEST REPORT

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Manufacturing Site	:	Same as applicant
Intertek Report No:		190905013GZU-002
FCC ID:		2AMHH-2046010

Test standards

47 CFR PART 1, Subpart I, Section 1.1310
KDB 680106 D01 RF Exposure Wireless Charging Apps v03

Sample Description

Product	:	HY-VS-VSOP-XO KIT DE CHARGE PAD LUMINOUS
Model No.	:	2046010
Electrical Rating	:	Input: 4.96Vdc, 0.3A (Powered by adaptor) for single charge pad Total Input: 8.94W for 6 Pic charge pad Wireless output: 3.7Vdc, 0.14A, 0.52W max.
Adaptor:		Model: AK 18WG-0500200DP Input: 100-240V, 50/60Hz 0.5A
Power cord:		1.8m x 2 wires unscreened DC cable
Serial No.		Not Labeled
Date Received	:	05 September 2019
Date Test Conducted	:	05 September 2019-05 December 2019

Prepared and Checked By

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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.

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2.0 General Description

2.1 Product Description

Operating Frequency	542KHz
Type of Modulation:	MSK
Antenna Type	Inductive loop coil antenna
Antenna gain:	0 dBi
Power Supply:	Input: 5Vdc, 2A (Powered by adaptor) Wireless output: 3.7Vdc, 0.14A, 0.52W max.
Power cord:	1.8m x 2 wires unscreened DC cable

2.2 Test Facility

Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou 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 DGD International Limited 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
Lighting pads	2045958	--	Client

Remark: the Lighting pads was one of typical client devices, it's selected such that the EUT was fully exercised at maximum power from its transmitter.

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

Pre-test mode	Description
Charging Mode	Lighting pads is charging at 1% battery power, 50% and 99% battery power respectively, keep transmitting continuously.

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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 above the top surface from all simultaneous transmitting coils

H-Filed Strength:

Test Position	**Probe Measure Result (A/m)**			**50% Limit (A/m)**	**Limit (A/m)**
	Mobile in 1% battery power	Mobile in 50% battery power	Mobile in 99% battery power		
Side 1	0.0015	0.0014	0.0012	0.815	1.63
Side 2	0.0013	0.0014	0.0013	0.815	1.63
Side 3	0.0014	0.0012	0.0012	0.815	1.63
Side 4	0.0015	0.0013	0.0013	0.815	1.63
Top	0.0016	0.0014	0.0013	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	2018/12/11	2019/12/11

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