

TEST REPORT

Reference No. : WTD17S1195638-2E
FCC ID : XES-CH004B
Applicant : DONGGUAN HUGE SUN LIGHTING CO., LTD.
Address : New Street No.15, Da Cao Fang Zone Zhushan Town, Dongguan City,
Guangdong, China
Manufacturer : The same as above
Address : The same as above
Product : Wireless charger
Model(s) : CH004B
Standards : FCC Part 15 subpart C
Date of Receipt sample : 2017-11-20
Date of Test : 2017-11-21 to 2018-01-07
Date of Issue : 2018-01-08
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.

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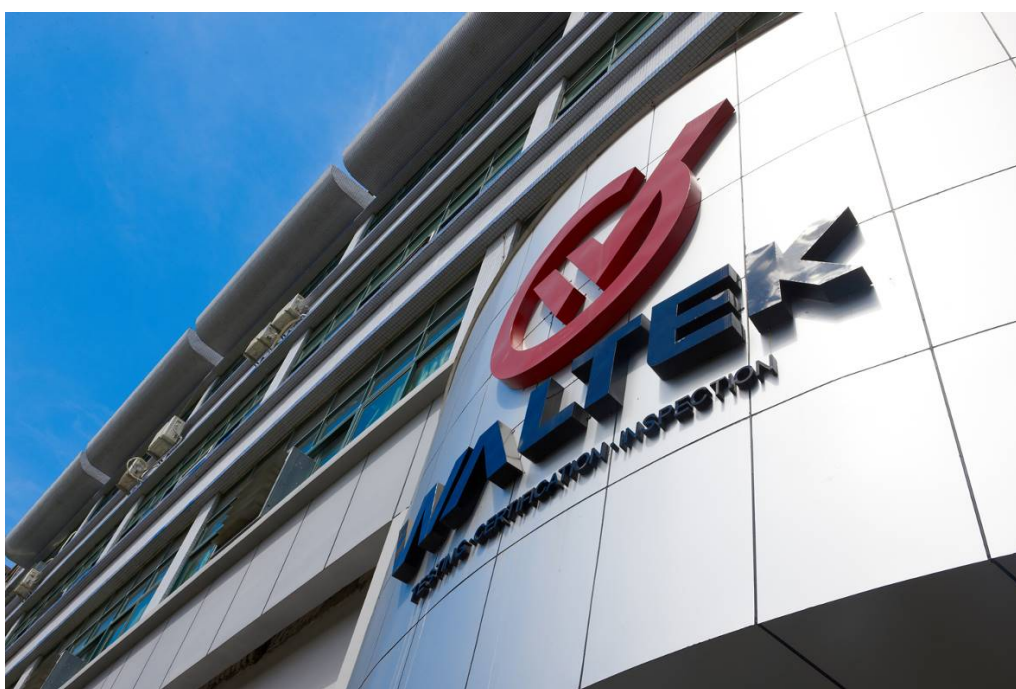


Philo Zhong

Philo Zhong / Manager

2 Laboratories Introduction

Waltek Services (Shenzhen) Co., Ltd is a professional third-party testing and certification laboratory with multi-year product testing and certification experience, established strictly in accordance with ISO/IEC 17025 requirements, and accredited by ILAC (International Laboratory Accreditation Cooperation) member. A2LA (American Association for Laboratory Accreditation) of USA, Meanwhile, Waltek has got recognition as registration and accreditation laboratory from EMSD (Electrical and Mechanical Services Department), and American Energy star, FCC(The Federal Communications Commission), CEC(California energy efficiency), IC(Industry Canada). It's the strategic partner and data recognition laboratory of international authoritative organizations, such as Intertek(ETL-SEMKO), TÜV Rheinland, TÜV SÜD, etc.



Waltek Services (Shenzhen) Co., Ltd is one of the largest and the most comprehensive third party testing laboratory in China. Our test capability covered four large fields: safety test. ElectroMagnetic Compatibility(EMC), and energy performance, wireless radio. As a professional, comprehensive, justice international test organization, we still keep the scientific and rigorous work attitude to help each client satisfy the international standards and assist their product enter into globe market smoothly.

2.1 Test Facility

A. Accreditations for Conformity Assessment (International)

Country/Region	Accreditation Body	Scope	Note
USA	A2LA (Certificate No.: 4243.01)	FCC ID \ DOC \ VOC	1
Canada		IC ID \ VOC	2
Japan		MIC-T \ MIC-R	-
Europe		EMCD \ RED	-
Taiwan		NCC	-
Hong Kong		OFCA	-
Australia		RCM	-
India	International Services	WPC	-
Thailand		NTC	-
Singapore		IDA	-
Note:			
1. FCC Designation No.: CN1201. Test Firm Registration No.: 523476.			
2. IC Canada Registration No.: 7760A			

B.TCBs and Notify Bodies Recognized Testing Laboratory.

Recognized Testing Laboratory of ...	Notify body number
TUV Rheinland	Optional.
Intertek	
TUV SUD	
SGS	
Phoenix Testlab GmbH	0700
Element Materials Technology Warwick Ltd	0891
Timco Engineering, Inc.	1177
Eurofins Product Service GmbH	0681

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4 General Information

4.1 General Description of E.U.T

Product:	Wireless charger
Model(s):	CH004B
Model Difference:	N/A
Type of Modulation:	ASK
Frequency Range:	0.112 ~ 0.205MHz
Antenna installation:	Coil Antenna

4.2 Details of E.U.T

Rating:	TX: Input: DC 5V $\overline{=}$ 2.5A (Adapter: Input: AC 100-240V, 50/60Hz, 0.55A; Output: 5V $\overline{=}$ 2.5A) RX: 5V 1000mA
Adapter	Model:GEO151UB-050250

5 Equipment Used during Test

5.1 Equipments List

RF EXPOSURE						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Protection Network	SCHWARZBECK	VDHH9502	9502-103	2017-04-12	2018-04-11
2	EMI Test Receiver	R&S	ESCI	101528	2017-04-12	2018-04-11

5.2 Description of Auxiliary Equipment

Equipment	Manufacturer	Model No.	Series No.
/	/	/	/

5.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by GUANG ZHOU GRG METROLOGY & TEST CO., LTD. address is No.163, Pingyun Rd. West of Huangpu Ave, Tianhe District, Guangzhou, Guangdong, China.

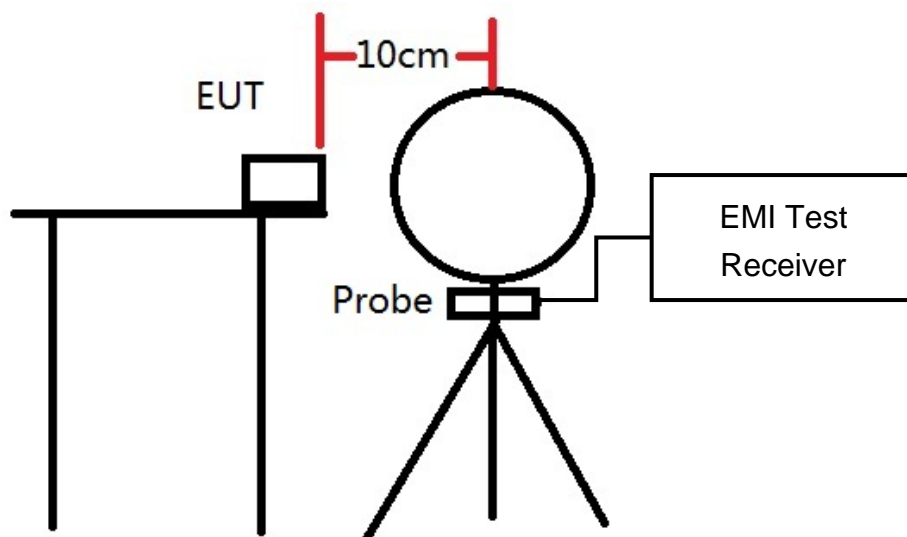
6 RF Exposure

Test Requirement:

Environmental evaluation and exposure limit according to FCC CFR 47 Part 1.1307(b), 1.1310

According KDB680106 D01v02: RF Exposure Wireless Charging Apps v02

6.1 Test Setup



These testing were performed at test configuration as above diagram.

EUT was placed on a table, and the measure probe was placed at a measurement distance of 10cm from the EUT to the center of the probe.

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

6.2 The procedures / limit

(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 Time 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
1500-100,000			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 Time 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
1500-100,000			1.0	30

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

6.3 Test Data

E-Field

Test Side	Separation Distance(cm)	E-Field Measured(V/m)	E-Field Limit(V/m)
Left	10	5.34	614
Right	10	5.54	614
Front	10	5.54	614
Rear	10	5.52	614
Top	10	6.46	614
Bottom	10	6.45	614
Margin Limit (%)		1.05%	

H-Field

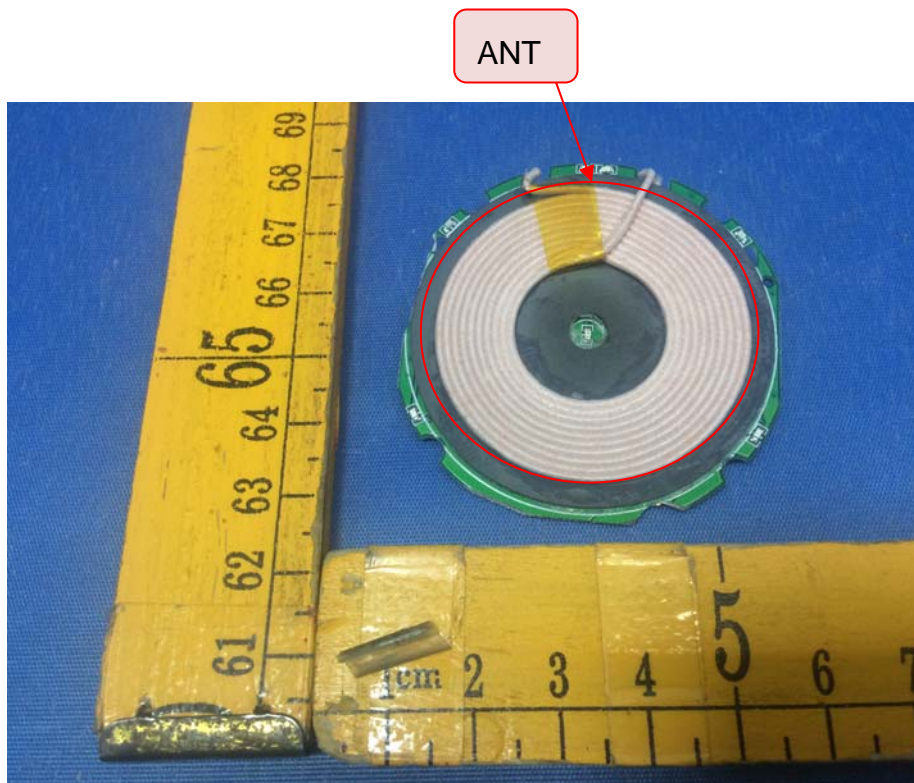
Test Side	Separation Distance(cm)	H-Field Measured(A/m)	H-Field Limit(A/m)
Left	10	0.20	1.63
Right	10	0.17	1.63
Front	10	0.17	1.63
Rear	10	0.21	1.63
Top	10	0.39	1.63
Bottom	10	0.33	1.63
Margin Limit (%)		23.93%	

Remark: The device meets the mobile RF exposure limit at a 10cm separation distance as specified in §2.1091 of the FCC Rules. The maximum leakage fields at 10 cm surrounding the device from transmitting coil is demonstrated to be less than 30% of the MPE limit.

Please refer to above E and H field Strength test results.

6.4 EUT coupling surface area

The inductive area is below (Coupling area: \varnothing 35 mm, The located at top of the equipment):



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