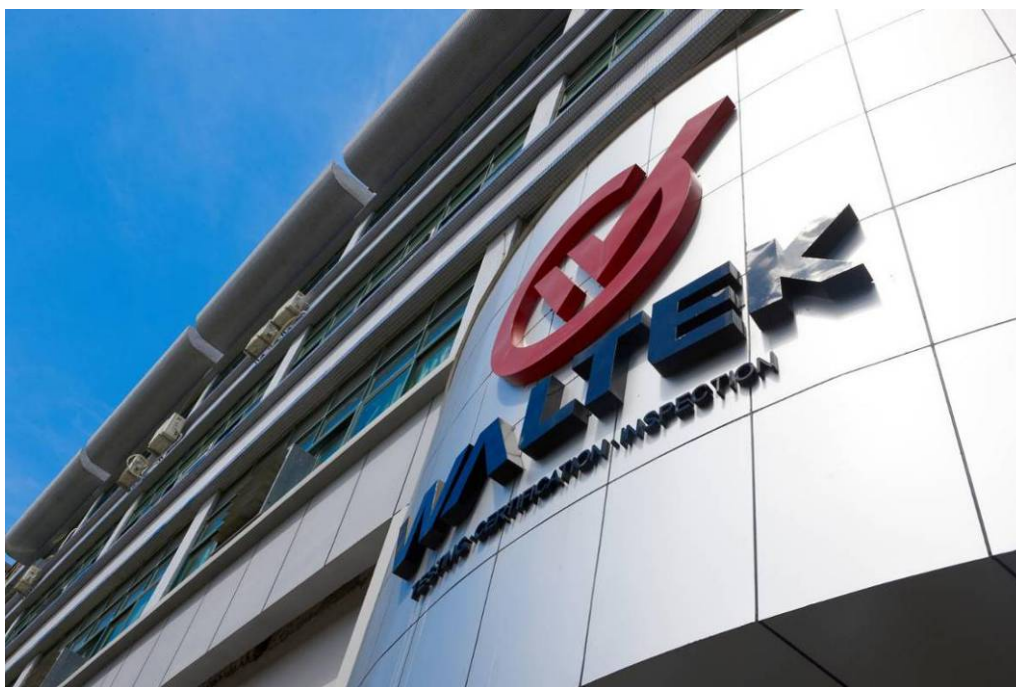




## 1 Laboratories Introduction

**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, the certification number is 4243.01) of USA, CNAS (China National Accreditation Service for Conformity Assessment, the registration number is L3110) of China. 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), ISED Canada (Innovation, Science and Economic Development 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.

## 1.1 Test Facility

### A. Accreditations for Conformity Assessment (International)

Country/Region	Scope Covered By	Scope	Note
USA	ISO/IEC 17025	FCC ID \ SDoC(VOC/DOC)	1
Canada		IC ID \ VOC	2
Japan		MIC-T \ MIC-R	-
Europe		EMCD \ RED	-
Taiwan		NCC	-
Hong Kong		OFCA	-
Australia		RCM	-
India		WPC	-
Thailand		NTC	-
Singapore		IDA	-
Note: 1. FCC Designation No.: CN1201. Test Firm Registration No.: 523476. 2. ISED CAB identifier: CN0013. Test Firm 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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### 3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTS19S09064761W002	2019-09-19	2019-09-20 to 2019-09-23	2019-09-24	original	-	Valid

## 4 General Information

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

Product:	Easy One Touch Wireless 2
Model(s):	HLCRIO143
Type of Modulation:	ASK
Frequency Range:	0.112-0.130MHz
Antenna installation:	Coil Antenna

### 4.2 Details of accessories

Ratings:	Input: DC 5V, 3A; 9V, 1.67A; 12V, 1.5A
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### 4.3 Test Mode

All the test model(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

Test mode	Test channel
Transmitting with Full Load*	125.43kHz
Transmitting with Half Load	125.43kHz
Transmitting with No Load	125.43kHz

All the mode were tested and passed, "\*" show the worst case mode which were recorded in this report.

## 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	2019-04-12	2020-04-11
2	EMI Test Receiver	R&S	ESCI	101528	2019-04-12	2020-04-11

### 5.2 Description of Auxiliary Equipment

Equipment	Manufacturer	Model No.	Specification
Wireless charging receiver	Waltek Services (Shenzhen) Co., Ltd	/	10W
Car charger	ChaungYu	CHY-CC-U2CQ3M	QC3.0: 5V/2.1A, 9V/2A, 12V/1.5A
AC adapter	/	QC01	Input: AC110-240V, 50/60Hz, 0.6A Output: 3.6-6V,3A; 6.2-9V,2A; 9.2-12V,1.5A

### 5.3 Test Equipment Calibration

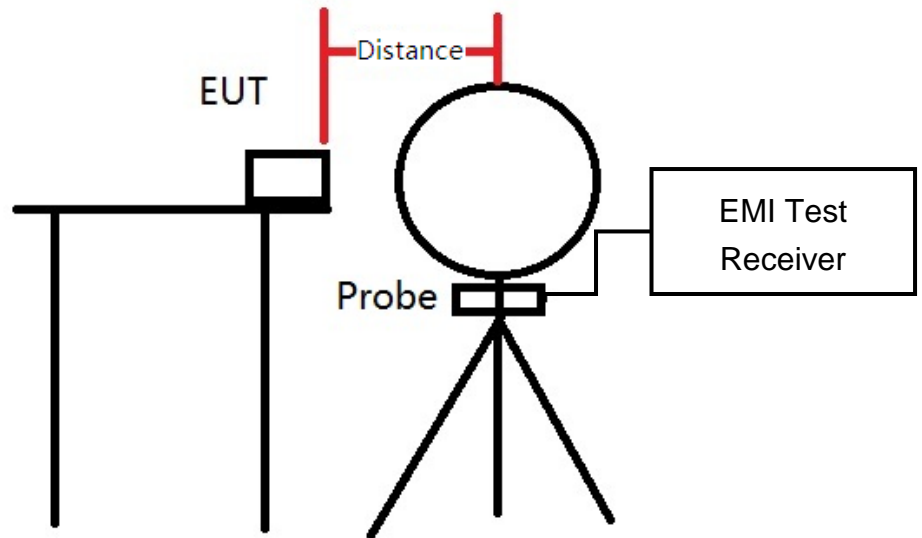
All the test equipments used are valid and calibrated by GUANG ZHOU GRG METROLOGY & TEST CO., LTD. address is No.163, Pingyun Rd. West of Huangpu Ave, Tianhe District, Guangzhou, Guangdong, China.

## 6 RF Exposure

Test Requirement:

Environmental evaluation and exposure limit according to FCC CFR 47 Part 1.1307 (c) and (d), 1.1310. According KDB680106 D01 RF Exposure Wireless Charging Apps v03

### 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 20cm from the top of EUT to the center of the probe and 15cm from other directions of 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 <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> 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 <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> 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

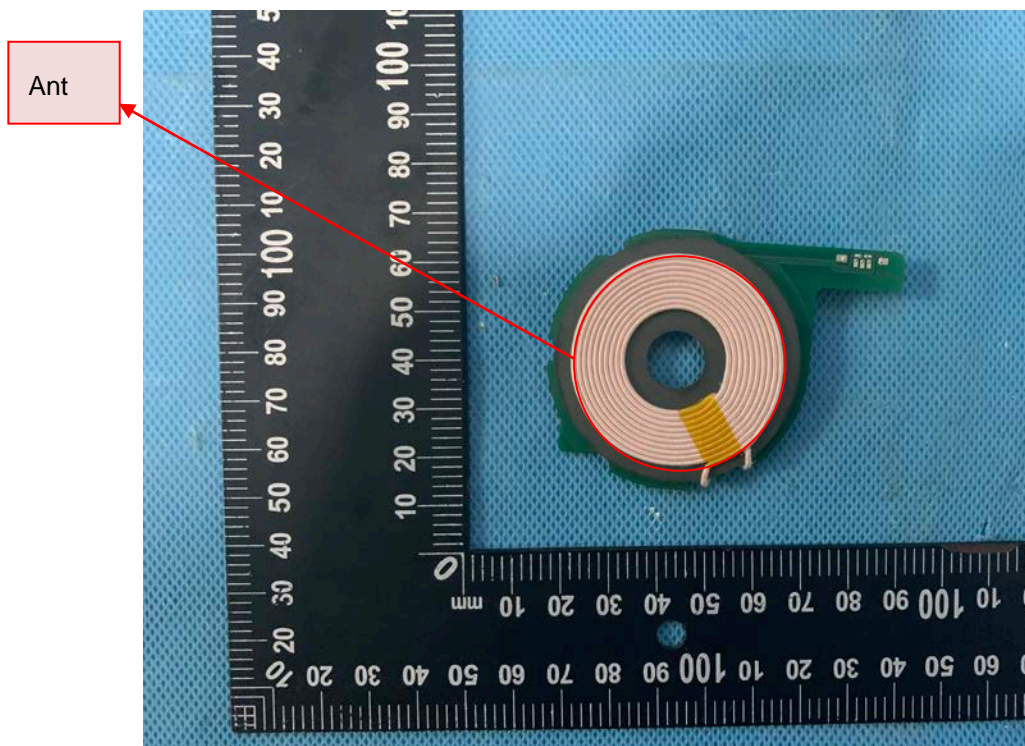
Test Side	Separation Distance(cm)	H-Field Measured(A/m)	MPE Limit(A/m)	Result
Left	15	0.42	1.63	Compliance
Right	15	0.40	1.63	Compliance
Front	15	0.36	1.63	Compliance
Rear	15	0.34	1.63	Compliance
Top	20	0.51	1.63	Compliance
Bottom	15	0.48	1.63	Compliance
% of MPE Limit	31.29%		Limit	50%

Remark: The device meets the RF exposure limit at a distance as specified in §1.1310 of the FCC Rules and meeting all of the following requirements as follows.

- (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.

#### 6.4 EUT coupling surface area

The inductive area is below (Coupling area:  $\varnothing$  40 mm, The located at top of the equipment):



## **7 Photograph – RF Exposure Test Setup**

Note: Refer to the file HLCRIO143\_Tsup Pho.

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