

■Report No.: DDT-R17122905-3E1

■Issued Date: Jan. 25, 2018

# RF EXPOSURE REPORT

### **FOR**

Applicant	:	SHENZHEN EPQI TECHNOLOGY CO., LTD
Address	•	Floor 6, Block 7, Zhongyuntai Industry Park, Songbai Road, Shiyan Town, Bao'an District, Shenzhen, China.
Equipment under Test	•	wireless charger
Model No. ONG DI		ES300A, ES300B, ES300C, ES300D, ES300E, ES300F, ES400A, ES400B, ES400C, ES400D, ES400E, ES400F
Trade Mark	•	EPQI
FCC ID		2AOPC-ES300
Manufacturer	••	SHENZHEN EPQI TECHNOLOGY CO., LTD
Address	••	Floor 6, Block 7, Zhongyuntai Industry Park, Songbai Road, Shiyan Town, Bao'an District, Shenzhen, China.

Issued By: Dongguan Dongdian Testing Service Co., Ltd.

**Add:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

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### **TEST REPORT DECLARE**

Applicant	:	SHENZHEN EPQI TECHNOLOGY CO., LTD	
		Floor 6, Block 7, Zhongyuntai Industry Park, Songbai Road, Shiyan Town, Bao'an District, Shenzhen, China.	
Equipment	:	wireless charger	
Model No.	ES300A, ES300B, ES300C, ES300D, ES300E, ES300F, ES400 ES400B, ES400C, ES400D, ES400E, ES400F		
Trade Mark	: EPQI		
Manufacturer	: SHENZHEN EPQI TECHNOLOGY CO., LTD		
I Vadroce " · I		Floor 6, Block 7, Zhongyuntai Industry Park, Songbai Road, Shiyan Town, Bao'an District, Shenzhen, China.	

Assess Standard Used: FCC CFR 47 part1, 1.1307(b), 1.1310

680106 D01 RF Exposure Wireless Charging Apps v02

#### We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No:	DDT-R17122905-3E1				
Date of Test:	Jan. 05, 2018~Jan. 25, 2018	Date of Report:	Jan. 25, 2018		

Prepared By:

Sam Li/Engineer

APPROVED

Kevin Feng/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

### 1. General information

### 1.1. Description of Equipment

EUT* Name		wireless charger
Model Number	:	ES300A, ES300B, ES300C, ES300D, ES300E, ES300F, ES400A, ES400B, ES400C, ES400D, ES400E, ES400F
Difference of model number	:	All models are identical, except the model number and colors, all tests are performed on model ES300A.
EUT function description	:	Please reference user manual of this device
Power supply	:	DC 5V or 9V from external AC Adapter
Wireless charging Operation frequency	:	120kHz-210kHz
Antenna Type	:	Inductive loop coil antenna
Sample Type	:	Series production

Note: EUT is the ab. of equipment under test.

### 1.2. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Serial No.	Other
Simulation load	/	/	/	/
USB cable	/	/	/	/
AC adapter	HUAWEI	HW-050200C3W	/	Input: AC 100-240V 50/60Hz 0.5A MAX Output: DC 5.0V 2A

### 1.3. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City,

Guangdong Province, China, 523808

Tel: +86-0769-89201699, E-mail: ddt@dgddt.com, http://www.dgddt.com

FCC Registration Number: 270092 Industry Canada site registration number: 10288A-1

## 2. Equipment used during test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Electromagnetic Analyer	narda	ELT-400	N-0157	2017/09/17	1 Year
Electrical and Magnetic field probe	narda	ELT probe 100cm <sup>2</sup>	M0157	2017/09/17	1 Year

#### 3. Method of measurement

### 3.1. Applicable Standard

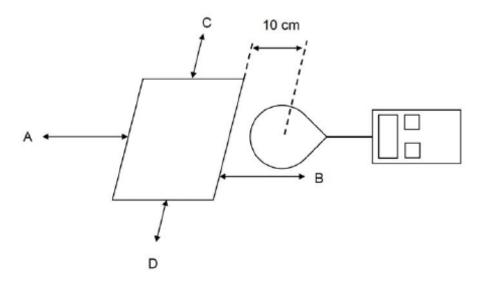
According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

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According to §1.1310 and §2.1093 RF exposure is calculated.

According KDB680106 D01v02: RF Exposure Wireless Charging Apps v02.

### 3.2. Block diagram of test setup



#### 3.3. Test Procedure

- a) The RF exposure test was performed on 360 degree turn table in anechoic chamber.
- b) The measurement probe was placed at test distance (10cm) which is between the edge of the charger and the geometric centre of probe.
- c) The turn table was rotated 360d degree to search of highest strength.
- d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- e) The EUT were measured according to the dictates of KDB 680106D01v02.

### 3.4. **Limit**

TABLE 1-LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
	(A) Limits for O	ccupational/Controlled Exp	osure	
0.3-3.0	614	1.63	*100	6
3.0-30	1842/1	4.89/1	*900/f2	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
	(B) Limits for Gene	ral Population/Uncontrolled	Exposure	
0.3-1.34	614	1.63	*100	30
1.34-30	824/1	2.19/1	*180/f2	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz \* = Plane-wave equivalent power density

### 3.5. E and H field Strength

Test mode for wireless charger: Dummy load: Full Load mode

Phone load: Zero charge, intermediate charge and full charge mode

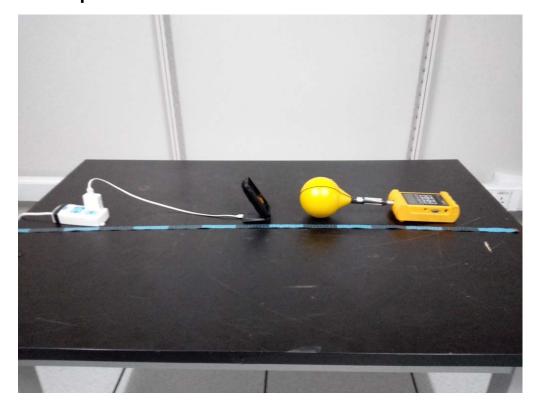
E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)

L-1 lied offeright at 10 cm from the edges surrounding the LOT (V/III)							
		Limits					
Test Position	Full Load	Zero charge	intermediate charge	full charge	Test (V/m)		
Α	1.24	1.13	1.19	1.22	614		
В	1.24	1.14	1.18	1.23	614		
С	1.25	1.15	1.20	1.24	614		
D	1.24	1.13	1.18	1.23	614		
Тор	1.26	1.15	1.20	1.25	614		
Bottom	1.25	1.14	1.19	1.25	614		

H-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)

Test Position	Full Load	Zero charge	re Result(A/m) intermediate charge	full charge	Limits Test (A/m)
Α	0.144	0.112	0.128	0.144	1.63
В	0.152	0.120	0.128	0.144	1.63
С	0.160	0.112	0.136	0.152	1.63
D	0.144	0.104	0.120	0.144	1.63
Тор	0.168	0.128	0.144	0.168	1.63
Bottom	0.160	0.112	0.128	0.152	1.63

## 4. Test Setup Photo



**END OF REPORT**