

# RF EXPOSURE REPORT

## FOR

<b>Applicant</b>	:	TYLT, inc.
<b>Address</b>	:	685 Cochran St. Suite 200, Simi Valley, California, United States
<b>Equipment under Test</b>	:	Wireless Charger
<b>Model No.</b>	:	QIVENTBK-AT
<b>Trade Mark</b>	:	/
<b>FCC ID</b>	:	2AOAF-500
<b>Manufacturer</b>	:	TYLT, inc.
<b>Address</b>	:	685 Cochran St. Suite 200, Simi Valley, California, United States

**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

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

**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.**

<b>Report No:</b>	DDT-R18042302-3E1		
<b>Date of Test:</b>	Apr. 23, 2018~May 04, 2018	<b>Date of Report:</b>	May 04, 2018

**Prepared By:**

*Sam Li*

**Sam Li/Engineer**

**Approved By:**

  
**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.

### Revision history

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	May 04, 2018	

## 1. General information

### 1.1. Description of Equipment

EUT* Name	: Wireless Charger
Model Number	: QIVENTBK-AT
EUT function description	: Please reference user manual of this device
Power supply	: DC 5V/9V from external AC Adapter
Wireless charging Operation frequency	: 125kHz-205kHz
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
Magnetic field probe	narda	ELT probe 100cm <sup>2</sup>	M0157	2017/09/17	1 Year

### 3. Method of measurement

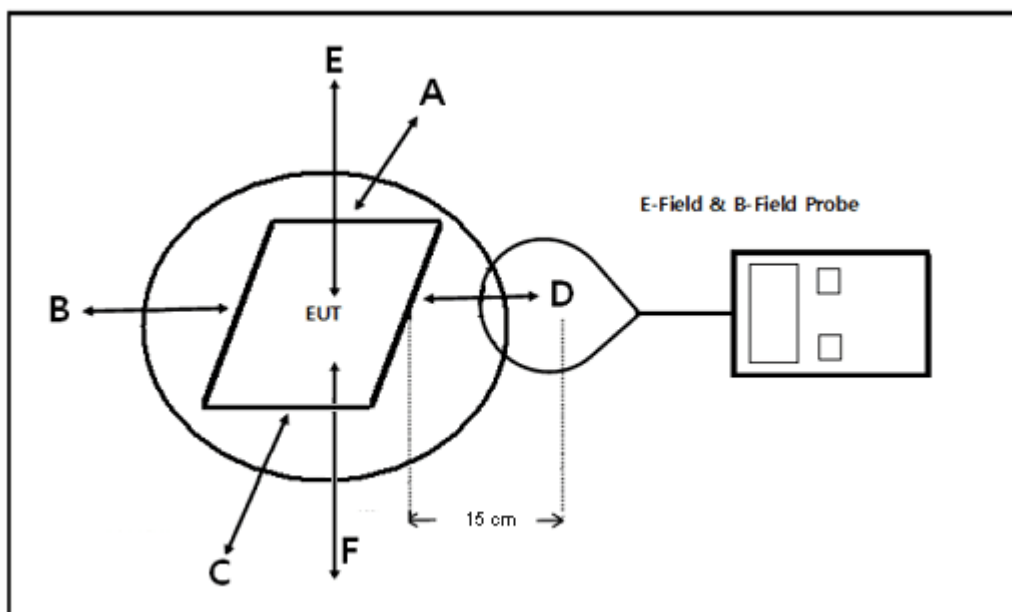
#### 3.1. Applicable Standard

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.

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

According KDB680106 D01v02: RF Exposure Wireless Charging Apps v03.

#### 3.2. Block diagram of test setup



Note: Due to installation limitations no tests from the underside of the charging device (Test Position F) are required.

#### 3.3. Test Procedure

- The RF exposure test was performed in shielded chamber.
- The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.
- The measurement probe used to search of highest strength.
- The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- The EUT were measured according to the dictates of KDB 680106D01v03.

### 3.4. Limit

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	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, Zero charge and intermediate charge mode

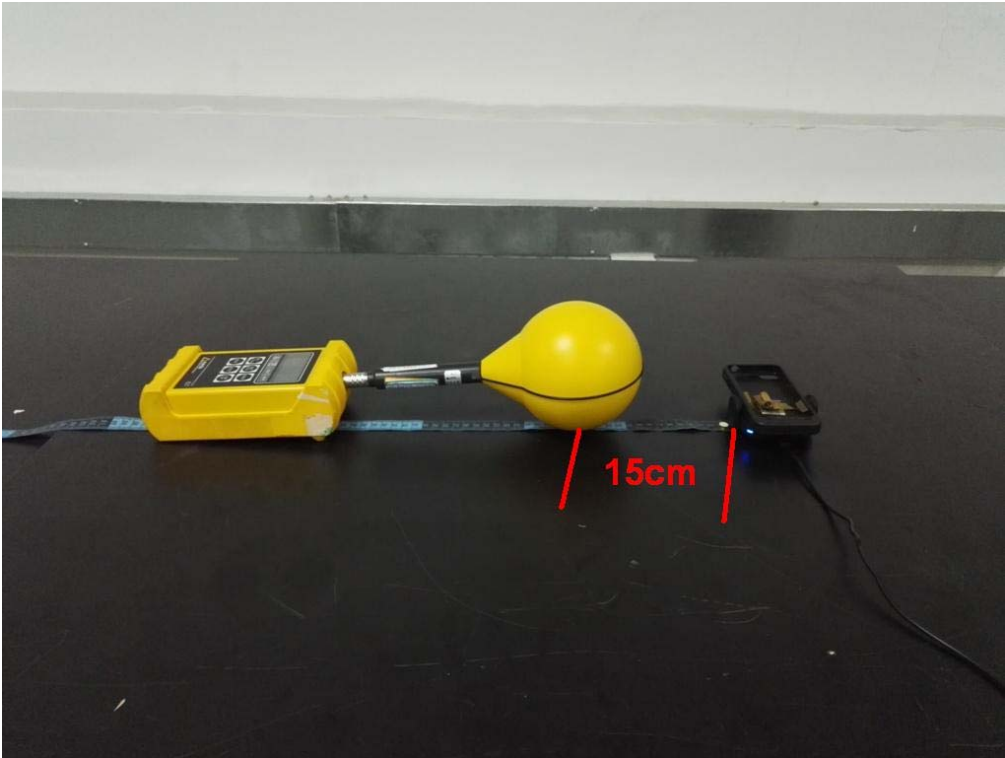
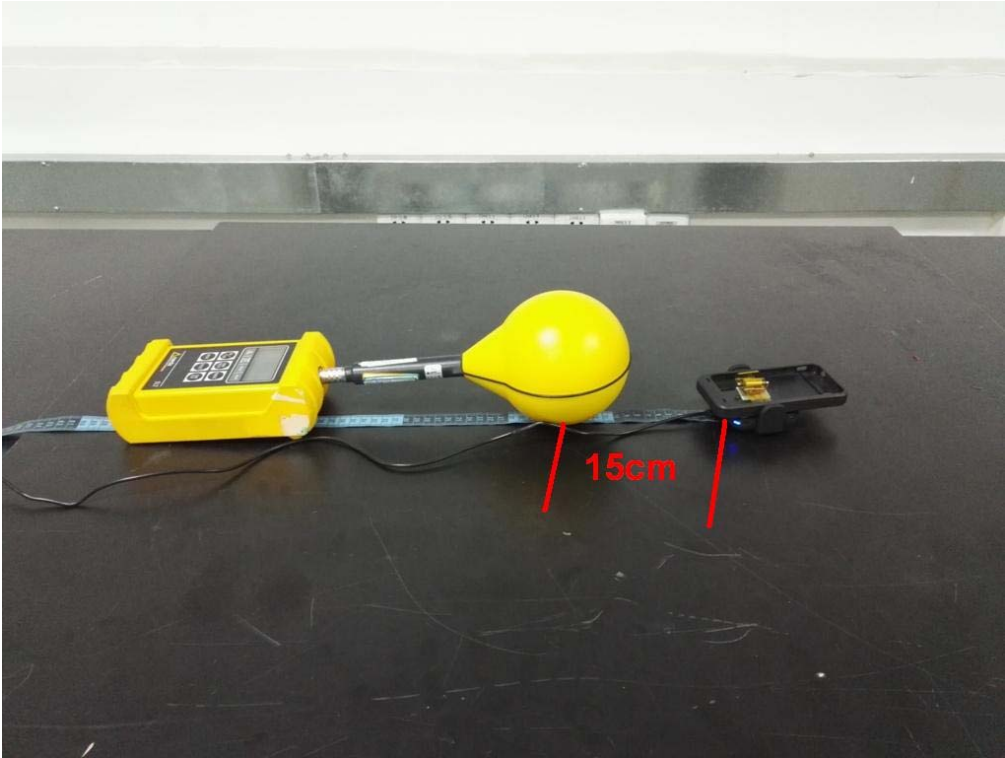
E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)

Test Position	Probe Measure Result(V/m)			Limits Test (V/m)
	Full Load	Zero charge	intermediate charge	
A	4.45	4.86	4.63	614
B	4.67	5.02	4.90	614
C	5.02	5.38	5.25	614
D	4.24	4.70	4.42	614
E	5.98	6.46	6.17	614

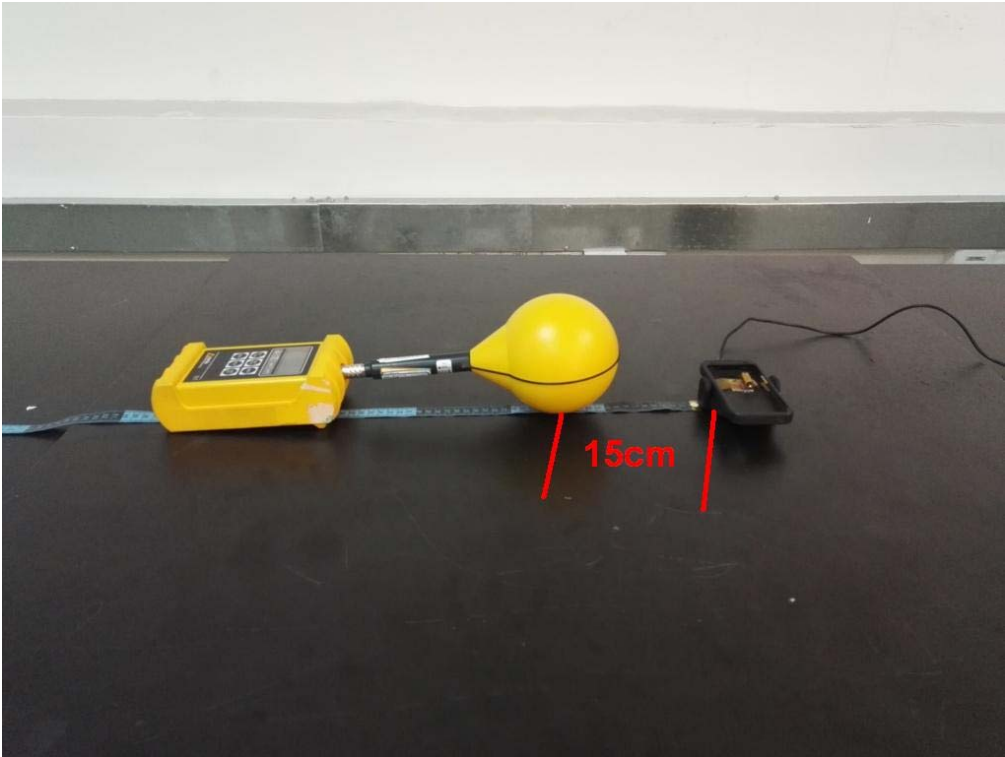
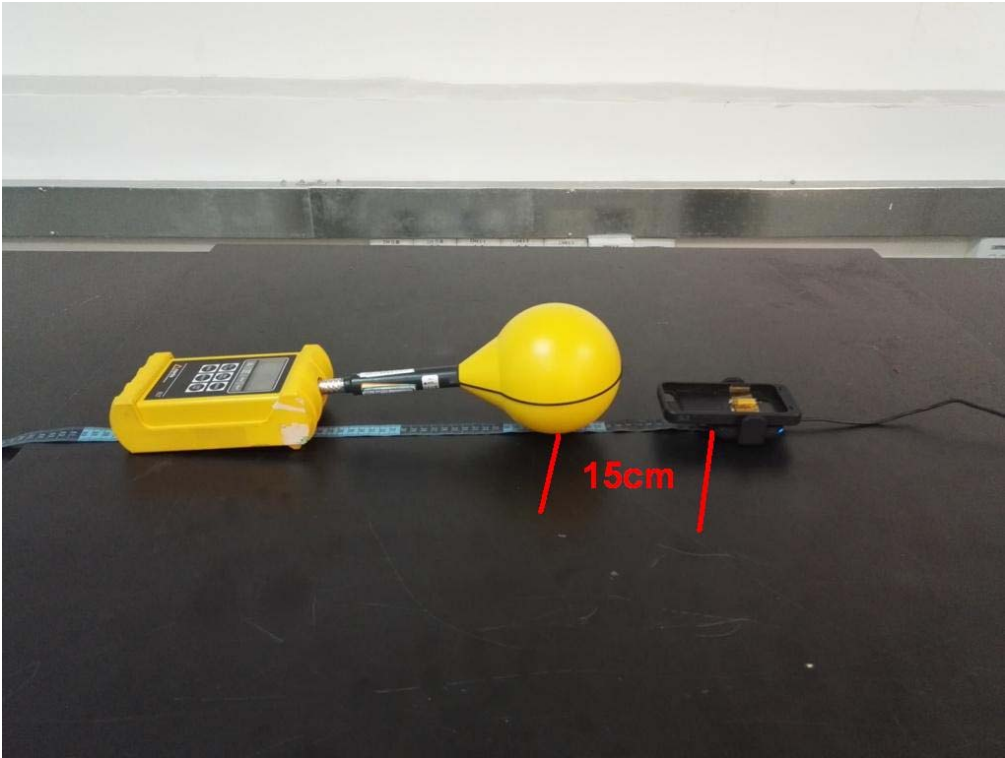
H-Filed Strength at 15 cm from the edges surrounding the EUT and 20cm above the top surface of the EUT (A/m)

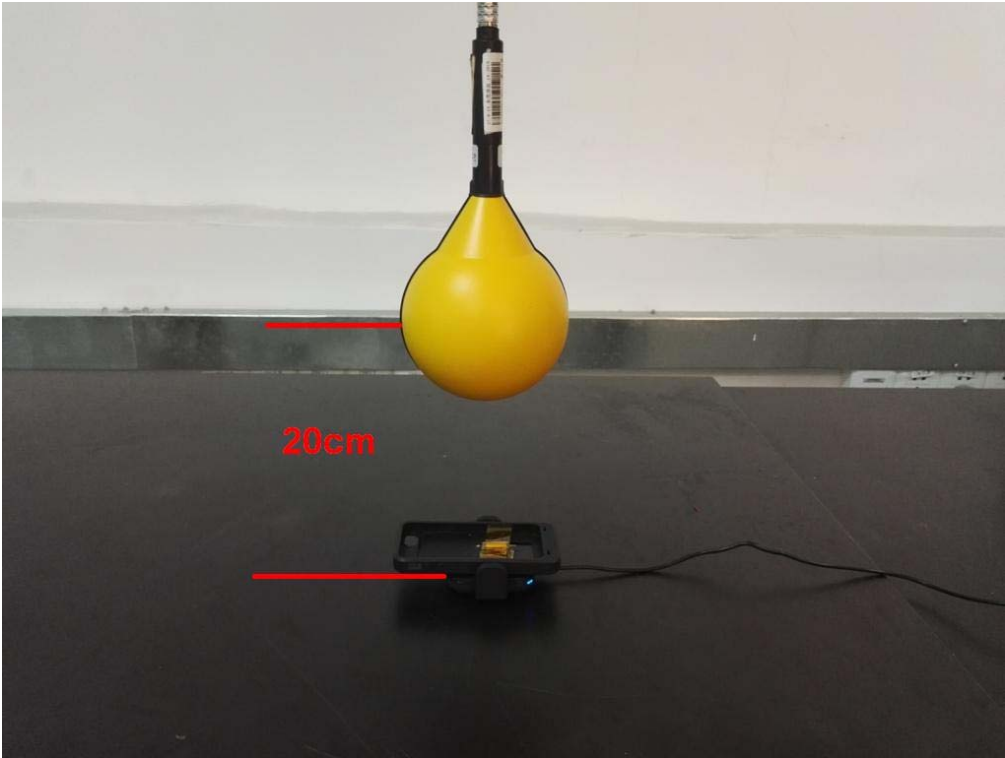
Test Position	Probe Measure Result(A/m)			Limits Test (A/m)
	Full Load	Zero charge	intermediate charge	
A	0.297	0.312	0.306	1.63
B	0.267	0.280	0.273	1.63
C	0.275	0.289	0.281	1.63
D	0.231	0.247	0.239	1.63
E	0.349	0.367	0.358	1.63

4. Test Setup Photo









**END OF REPORT**