

FCC RF EXPOSURE TEST REPORT

for

Shanghai Mobvoi Information Technology Company Limited

Wireless charger

WE20016

FCC ID : 2AHEA-WE20016

Prepared for :Shanghai Mobvoi Information Technology  
Company Limited  
Building 2-106, 1690 Cailun Road, China (Shanghai) free  
trade area, China

Prepared By : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Ke Feng Rd., 52 Block,  
Shenzhen Science & Industrial Park,  
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496  
Fax: (0755) 26632877

Report Number : ACS-R16182  
Date of Test : May.09, 2016  
Date of Report : May.18, 2016

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**REPORT VERIFICATION**

Applicant : Shanghai Mobvoi Information Technology Company Limited  
Manufacturer : Shanghai Mobvoi Information Technology Company Limited  
Product : Wireless charger  
(A) Model No. : WE20016  
(B) Power Supply : DC 5V  
(C) Test Voltage : DC 5V From Notebook Input AC 120V/60Hz

Test Standards:  
FCC Part 2.1091; 2.1093  
KDB 680106

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd.. The measurement results were contained in this test report and Audix Technology (Shenzhen) Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC RF Exposure requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd..

Date of Test : May.09, 2016 Report of date: May.18, 2016

Prepared by : Cindy Zhu Reviewed by : Sunny Lu  
Cindy Zhu / Assistant Sunny Lu / Assistant Manager



Approved & Authorized Signer:

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

Product	: Wireless charger
Model No.	: WE20016
Working Frequency	: 110KHz-205KHz
Applicant	: Shanghai Mobvoi Information Technology Company Limited Building 2-106, 1690 Cailun Road, China (Shanghai) free trade area, China
Manufacturer	: Shanghai Mobvoi Information Technology Company Limited Building 2-106, 1690 Cailun Road, China (Shanghai) free trade area, China
Date of Test	: May.09, 2016
Date of Receipt	: May.07, 2016
Sample Type	: Prototype production

## 1.2. Test Facility

### Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Ke Feng Rd., 52 Block, Shenzhen  
Science & Industrial Park, Nantou, Shenzhen,  
Guangdong, China

3m Anechoic Chamber : Certificated by FCC, USA  
Registration Number: 90454  
Valid Date: Dec.30, 2017

3m & 10m Anechoic Chamber : Certificated by FCC, USA  
Registration Number: 794232  
Valid Date: Jul.12, 2016

RF Anechoic Chamber : Dimensions are:  
[L]10m × [W]5.5m × [H]5m

EMC Lab. : Certificated by DAkkS, Germany  
Registration No: D-PL-12151-01-00  
Valid Date: Dec.15, 2016

Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Valid Date: Mar.31, 2017

## 1.3. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiated Spurious Emission test in RF chamber	3.6dB
Uncertainty for test site temperature and humidity	0.6
	3%

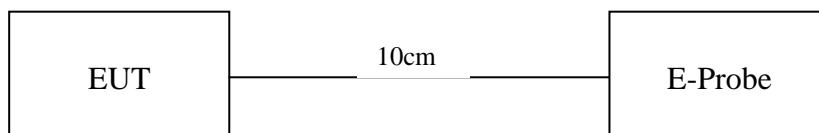
#### 1.4. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Broadband Field meter	Nadar	NBM-550	E-0716	Oct.20,15	1 Year
2.	PROBE	Nadar	EF-0391	D-0608	Oct.20,15	1 Year
3.	E-Field Probe	Nadar	EF-6091	01082	Oct.20,15	1 Year
4.	Probe	Nadar	HF-3061	D-0227	Oct.20,15	1 Year
5.	Probe	Nadar	HF-0191	D-0162	Oct.20,15	1 Year
6.	Field meter	Nadar	ELT-400	N-0163	Oct.20,15	1 Year
7.	ELT PROBE	Nadar	ELT PROBE	M-0609	Oct.20,15	1 Year

#### 1.5. Test Information

The EUT Working at normal charging mode, use the E-Probe measure the H-field strength, E-Field strength separately. The measure distance is 10cm.

#### 1.6. Test Setup



## 2. FCC MPE REQUIREMENT

### 2.1.GENERAL INFORMATION

For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 10 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 10 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m.

### 2.2.LIMIT

#### Basic Restrictions Reference levels

Basic restrictions for electric, magnetic and electromagnetic fields (0Hz to 300GHz)

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. ASSESS RESULTS

EUT: Wireless charger	M/N: WE20016
Test Site: Leo_Li	Date: 2016-05-09
Temperature : 23.2±0.6	Humidity: 54.7±3.0 %      Pressure: 101.1±1.0kpa

H- field strength result					
Position	Distance	H-field Strength (A/m)(Max)	Limit (A/m)	30% of Limit (A/m)	Result
Front	10cm	0.0154	1.63	0.489	PASS
Back	10cm	0.0183	1.63	0.489	PASS
Left	10cm	0.0162	1.63	0.489	PASS
Right	10cm	0.0183	1.63	0.489	PASS
Up	10cm	0.0163	1.63	0.489	PASS
Down	10cm	0.0158	1.63	0.489	PASS

E- field strength result					
Position	Distance	E-field Strength (V/m)(Max)	Limit (V/m)	30% of Limit (V/m)	Result
Front	10cm	0.14	614	184.2	PASS
Back	10cm	0.23	614	184.2	PASS
Left	10cm	0.29	614	184.2	PASS
Right	10cm	0.24	614	184.2	PASS
Up	10cm	0.58	614	184.2	PASS
Down	10cm	0.46	614	184.2	PASS

Note: The assess distance is 10cm.



#### 4. PHOTOGRAPHS









## 5. PHOTOS OF THE EUT

**Figure 1**  
EUT front view



**Figure 2**  
EUT rear view



**Figure 3**  
EUT left side view



**Figure 4**  
EUT right side view



**Figure 5**  
EUT top view



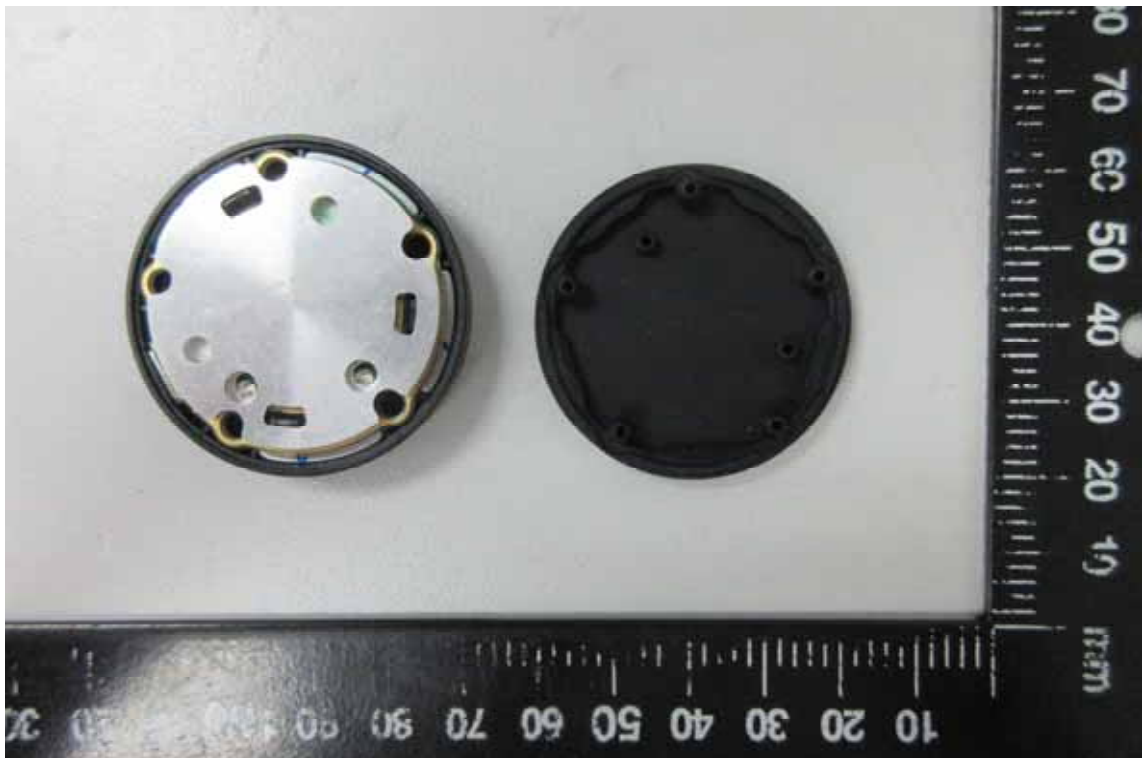
**Figure 6**  
EUT bottom view



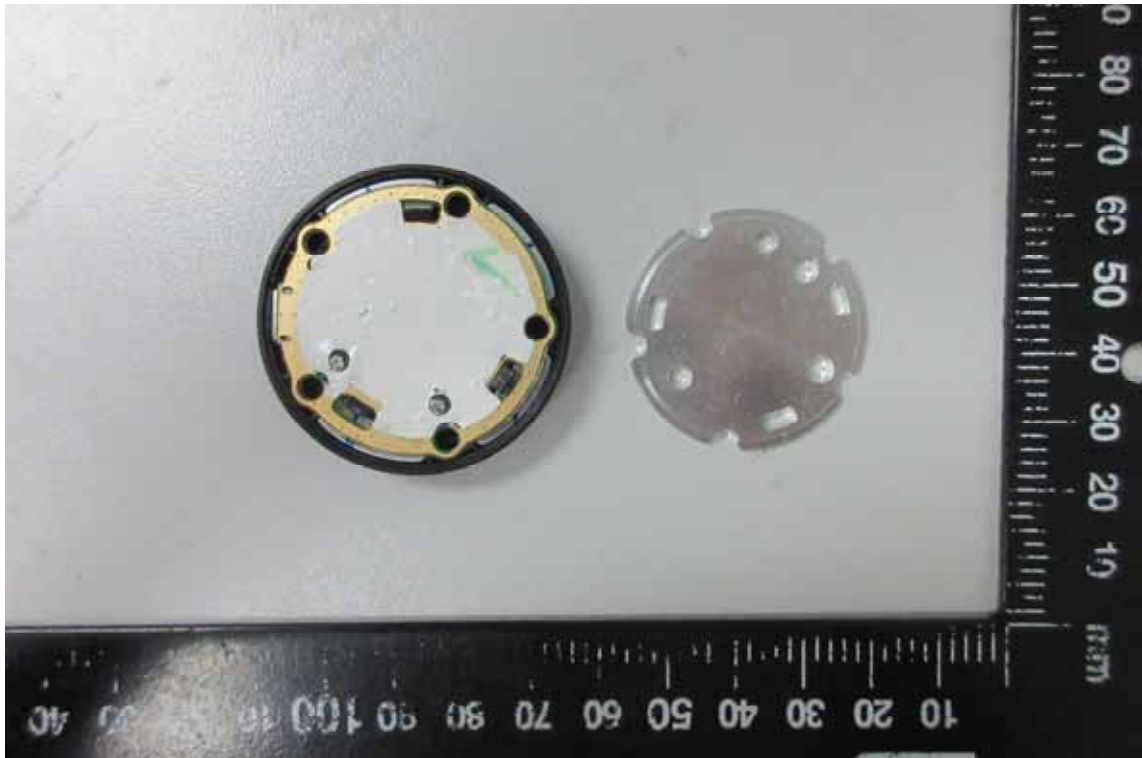
**Figure 7**  
Accessories



**Figure 8**  
EUT uncover view



**Figure 9**  
EUT uncover view



**Figure 10**  
EUT uncover view





**Figure 11**  
Mainboard front view



**Figure 12**  
Mainboard rear view

