# FCC TEST REPORT

For

Shenzhen Mossloo Industrial Co.,Ltd Wireless Charging Receiver for iOS Phones

Model No.: 7141-4

Prepared For : Shenzhen Mossloo Industrial Co.,Ltd

Address : Road One No.4, Science Industrial Park, Shangxue Village, Bantian

Street, Longgang District, Shenzhen, China

Prepared By : Shenzhen Anbotek Compliance Laboratory Limited

Address : 1/F, Building D, Sogood Science and Technology Park, Sanwei

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Report Number : SZAWW180516010-02

Date of Test : May 16~Jun. 22, 2018

Date of Report : Jun. 22, 2018



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# TEST REPORT

Applicant : Shenzhen Mossloo Industrial Co.,Ltd

Manufacturer : Shenzhen Mossloo Industrial Co.,Ltd

Product Name : Wireless Charging Receiver for iOS Phones

Model No. : 7141-44

Trade Mark : N.A.

Rating(s) : Input: DC 5V, 800mA

Test Standard(s) : FCC Part 1.1310, 1.1307(b)

Test Method(s) : KDB680106 D01 RF Exposure Wireless Charging Apps v03

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 1.1307 & KDB680106 D01 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Prepared by

(Engineer / Oliay Yang)

(Supervisor / Calvin Liu)

Approved & Authorized Signer

(Manager / Tom Chen)



# 1. General Information

## 1.1. Client Information

Applicant	:	Shenzhen Mossloo Industrial Co.,Ltd
Address	:	Road One No.4, Science Industrial Park, Shangxue Village, Bantian Street, Longgang District, Shenzhen, China
Manufacturer	:	Shenzhen Mossloo Industrial Co.,Ltd
Address	:	Road One No.4, Science Industrial Park, Shangxue Village, Bantian Street, Longgang District, Shenzhen, China

## 1.2. Description of Device (EUT)

Product Name	:	Wireless Charging Receiver for	iOS Phones
Model No.	:	7141-44	Anbotek Anbotek Anbotek Anbote
Trade Mark	:	N.A.	Anbotek Anbotes Anbotek Anb
Test Power Supply	:	AC 120V, 60Hz for adapter/AC	240V, 60Hz for adapter
		Operation Frequency:	110-205KHz
Product		Modulation Type:	MSK
Description	:	Antenna Type:	Loop Antenna
		Antenna Gain(Peak):	0 dBi

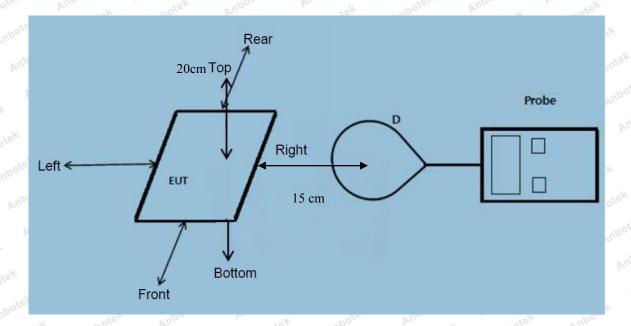
**Remark:** 1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

## 1.3. Auxiliary Equipment Used During Test

	70	3.0	The Marie and Ma
K	Adapter	:	Manufacturer: ZTE
			M/N: STC-A2050I1000USBA-C
0			S/N: 201202102100876
27			Input: 100-240V~50/60Hz 0.3A
			Output: DC 5V, 1000mA
			Anbott Ambotek Anbotek Anbotek Anbotek Anbotek Anbotek
K	Mobile Phone	:	iPhone 6s



#### 1.6. Description Of Test Setup



Note:Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device

#### 1.7. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Magnetic field meter	NARDA	ELT-400	423623	May 27, 2018	1 Year

#### 1.8. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111, July 31, 2017.

#### ISED-Registration No.: 8058A-1

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A-1, June 13, 2016.

#### **Test Location**

All Emissions tests were performed at Shenzhen Anbotek Compliance Laboratory Limited. at 1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518102

### 2. Measurement and Result

### 2.1. Requirements

According to the item 5.b of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

- 1) Power transfer frequency is less that 1 MHz
- 2) Output power from each primary coil is less than 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 inserted in or 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.

Limits For Maximum Permissible Exposure (MPE)

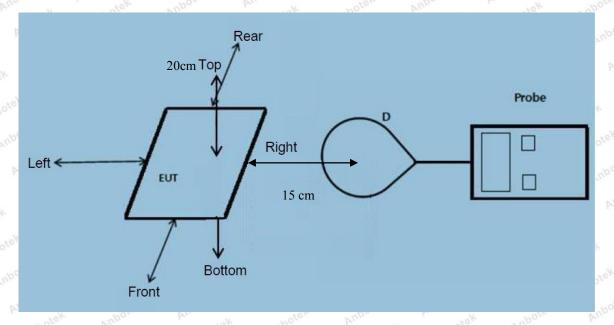
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
	(A) Limits for Occ	cupational/Controlled Ex	posures	*
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500	1	1	f/300	6
1500-100,000	1	1	5	6
	(B) Limits for Genera	Population/Uncontrolle	ed Exposure	ç-
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
300-1500	1	1	f/1500	30
1500-100,000	1	1	1.0	30

F=frequency in MHz

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

<sup>\*=</sup>Plane-wave equivalent power density

#### 2.2. Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device

#### 2.3. Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (15 cm) which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points
- (A, B, C, D, E) were completed.(A is the right, B is the back, C is the left, D is the front, and E is the top.)
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

#### Remark;

The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

#### 2.4. Test Result

- 2.4.1. Equipment Approval Considerations item 5.b of KDB 680106 D01 v03
- 1) Power transfer frequency is less that 1 MHz
- The device operate in the frequency range from 110 KHz to 205 KHz
- 2) Output power from each primary coil is less than 15 watts
  - The maximum output power of the primary coil is 5W.
- 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

- The transfer system including a charging system with only single primary coils is to detect and allow only between individual pairs of coils.
- 4) Client device is inserted in or placed directly in contact with the transmitter
- Client device is placed directly in contact with the transmitter.
- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)
  - The EUT is a mobile device
- 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.
- The EUT H-field strengths at 15 cm surrounding the device and 20 cm above the top surface are less than 50% the MPE limit.

The test results please refer to the section 2.4.2

2.4.2. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(b) 1.1310

E-Field Strength at 15 cm surrounding the EUT

Charge amount	Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Referenc e Limit (V/m)	Limits Test (V/m)
otek Anbe	itek Anbo	rek Mu		Anbotek	Anbo	Anbotek	Anbore	ek And
1%	110-205	0.27	0.23	0.26	0.18	0.21	307 M	614
Mpo, yek	anbotek	Anboten	Anbo	Anbote	K Aupo	rek Vu	botek	Aupotek
Anbo		Anbore	k Vun	lek Ant	otek k	Po. Vek	Anbotek	Anbote.
50%	110-205	1.13	1.12	1.26	1.17	1.13	307	614
Anbo	tek An	ek Anb	ofer Ar	botek	Anbotek	Anbore	An	k Anbo
ier Aupe	otek an	potek P	mbote	Ans	Anbotek	Aupor	ek anb	otek An
100%	110-205	2.43	2.35	2.36	2.49	2.27	307	614
Anbotek	Anbor	Anotek	Anbotek	Anbo	otek Ar	botek An	pole P	in abotek

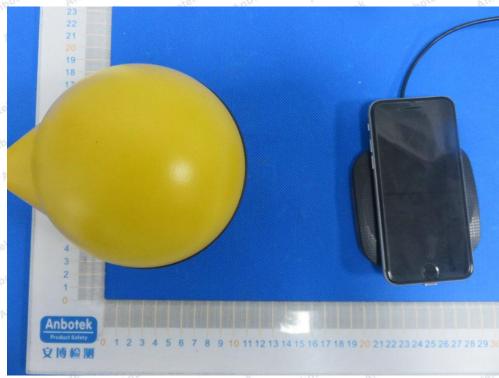
H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Charge	Frequency	Test N	Test	Test	Test	Test	Referenc e	Limits
amount	Range	Position	Position	Position	Position	Position	Limit	Test
amount	(KHz)	A	Botek	С	D	otek E Anb	(A/m)	(A/m)
Anbotek	Anbo	Anbotek	Anbote	ak And	botek	rupotek b	inbot stek	An Anbotek
1%	110-205	0.072	0.087	0.078	0.073	0.085	0.815	1.63
Anbote	K Anbore	rek bu	potek	inpoter K	Anbo	Anbotek	Anbore	ak Ans
otek Anb		otek k.	Anbotek	Anbote.	Ann	k Anbotel	Anbo	Jek A
50%	110-205	0.12	0.14	0.14	0.16	0.17	0.815	1.63
notek		Anboto	Annabote	Anbot	ek Anb	orek K.	nbotek	Anbote.
Annabotek	Anbotek	Anbor	sk Anb	otek An	pote.	hotek	Anbotek	Aupore
100%	110-205	0.22	0.24	0.32	0.36	0.27	0.815	1.63
Anbo		tek An'	DOL P	work.	Anbotek	Anbo	, abot	ek An



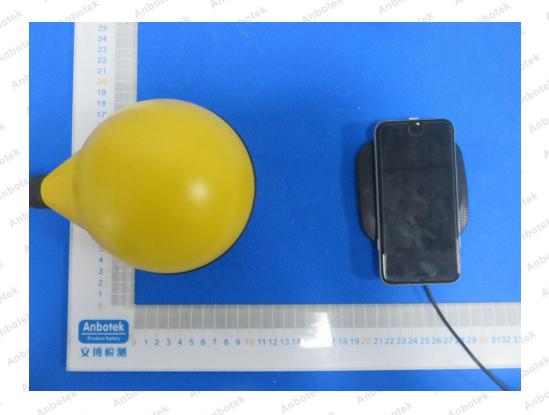
# APPENDIX I -- TEST SETUP PHOTOGRAPH

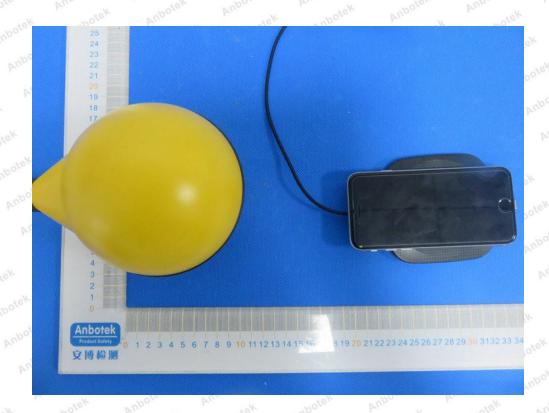
















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