

 Report No.: 18220WC10093002
 FCC ID:2APU5-WPC380A
 Page 1 of 14

# FCC TEST REPORT

Client Name	: JMTek Industries(Shenzhen) Co., Ltd
ak Anborek Anborek	14G, Innovation Tech Building, Quanzhi Science and
Address	: Technology innovation Park, ShaJing Street, Bao'an
Product Name	District, ShenZhen, China : Wireless Charger

botek Anbore An

Date

Jun. 18, 2021



#### Shenzhen Anbotek Compliance Laboratory Limited

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# TEST REPORT

Applicant	: JMTek Industries(Shenzhen) Co., Ltd
Manufacturer	: JMTek Industries(Shenzhen) Co., Ltd
Product Name	: Wireless Charger
Model No.	: WPC380, WPC380B, WPC380W
Trade Mark	N.A model photek photek
Rating(s)	Input: DC 5V/2A Wireless output: 5W

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.

Date of Receipt Date of Test

Prepared By

May 13, 2021 May 13~May 27, 2021

Ella biang

(Ella Liang)

Approved & Authorized Signer

ingtingin

(Kingkong Jin)

Shenzhen Anbotek Compliance Laboratory Limited

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# 1. General Information

# 1.1. Client Information

Applicant	: JMTek Industries(Shenzhen) Co., Ltd	YUT POX
Address	14G, Innovation Tech Building, Quanzhi Science and Technology innov Park, ShaJing Street, Bao'an District, ShenZhen, China	/ation
Manufacturer	: JMTek Industries(Shenzhen) Co., Ltd	4
Address	14G, Innovation Tech Building, Quanzhi Science and Technology innov Park, ShaJing Street, Bao'an District, ShenZhen, China	/ation
Factory	: JMTek Industries(Shenzhen) Co., Ltd	nbotek
Address	14G, Innovation Tech Building, Quanzhi Science and Technology innov Park, ShaJing Street, Bao'an District, ShenZhen, China	/ation

# 1.2. Description of Device (EUT)

Product Name	:	Wireless Charger	nbotek Anbor Anbotek Anbotek					
Model No.	:	WPC380, WPC380B, WPC38 (Note: All samples are the "WPC380" for test only.)	30W same except the appearance, so we prepare					
Trade Mark	:	N.A Model And	Anbotek Anbotek Anbotek Ant					
Test Power Supply	:	AC 120V, 60Hz for adapter/ A	C 240V, 60Hz for adapter					
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)						
		Operation Frequency:	110.1-205KHz					
Product		Modulation Type:	FSK					
Description	ŀ	Antenna Type:	Inductive loop coil Antenna					
		Antenna Gain(Peak):	0 dBi					

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# 1.3. Auxiliary Equipment Used During Test

Þ	Adapter	:	M/N: A2013	And	abotek	Anbor
			Input: AC 100-240V, 0.7A, 50-60Hz			Anboten
			Output: 3.6-5.5V 3A/ 6.5-9V 2A/ 9-	12V=1.5A		hotek
	Wireless charging	:	M/N: CD2577		rek Anbore	Ann
~	load		Power: 5W/7.5W/10W/15W	or Ann	N NOTE	in anbo

# 1.4. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interva
1 nb	Magnetic field meter	NARDA	ELT-400	423623	Dec. 24, 2018	3 Year
2	E-Field Probe	Narda	EF0391	Q15221	Nov.17, 2020	3 Year
3	H-Field Probe	Narda	HF3061	Q15835	Nov.17, 2020	3 Year

# 1.5. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 3.9 dB (Horizontal)	10010
		Ur = 3.8 dB (Vertical)	Aupo.
		nbortek Anborek Anbore Ano hotek Anborek	Anb
Conduction Uncertainty	:	Uc = 3.4 dB	V I

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# 1.6. 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, September 30, 2020.

### ISED-Registration No.: 8058A

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, September 30, 2020.

# **Test Location**

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

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# 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 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 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.

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 Occ	upational/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	I Population/Uncontrolle	ed Exposure	

Limits For Maximum Permissible Exposure (MPE)

#### 1.63 \*(100) 0.3-1.34 614 30 \*(180/f<sup>2</sup>) 1.34-30 824/f 2.19/f 30 30-300 27.5 0.073 0.2 30 1 1 30 300-1500 f/1500 1500-100,000 1 1.0 30

F=frequency in MHz

\*=Plane-wave equivalent power density

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).

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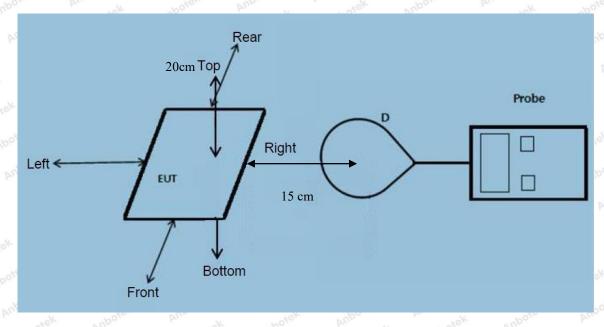
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# 2.2. Test Setup



Note: Measurements should be made at 15 cm surrounding the EUT and 20cm above the top surface of the EUT.

# 2.3. Test Procedure

1) The RF exposure test was performed in anechoic chamber.

2) The measurement probe was placed at required test distance 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 110.1-205KHz.
- 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
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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 exposure conditions

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.

- Conducted the measurement with the required distance and the test results please refer to the section 2.4.

2.4.2. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1	1.1307(b), 1.1310
--	-------------------

Temperature:	22.5°C	by.	Relative Humidity:	49 %
Pressure:	1012 hPa	Anbor	Test Voltage:	AC 120V, 60Hz for adapter

Battery power	Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
And both	Anbotel	Anbo	stek N	1botek	panbon	Annotek	Anbolek	And
Anu	otek onbo	tek Ant	Jor p	botek	Anbote	Ano	ek Anbotek	Anb
poter 1%	110.1-205	0.42	0.51	0.46	0.47	0.59	307	614
obotek	Anboro A	hotek	Anboten	Anbe	K	rok Ant	Porc Prin	
P. abotek	Anbore	Annotek	anbotek	Anbo.	rek pr	botek	Anbote, Ar	Lotek
50%	110.1-205	1.43	1.87	1.36	1.49	1.66	307	614
k hote	K Anbotek	Anbor	stek Nr	botek	inboter	Anubotek	Anbotek	
walk who	otek Anbo	ok Anb	- otek	anbotek	Anboth	And	K Anbotek	AUP
99%	110.1-205	2.41	2.81	2.42	2.37	2.83	307 M <sup>00</sup>	614
inboter I	in botek	Anbotek	Anbo, otek	Anbote	s Aupor	er Ant	botek Ar	
Anbort	Anbotek	Anboten	Anos	ek Anb	stek An	portek	nbotek	Anboten
Stand-by	110.1-205	0.42	0.57	0.41	0.40	0.54	307	614
Anbore	kek subot	sk Aupr	ster An	potek p	Anbotek	Anboro	Annabotek	

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

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241	100	NO.	U O		Pro C			P
Battery	Frequency	Test	Test	Test	🔊 Test 📈	Test	Reference	Limits
power	Range	Position	Position	Position	Position	Position	Limit	Test
power	(KHz)	A	otek B Ar	C P	D	AntErek	(A/m)	(A/m)
tek Anb	ptek Anbo	rek pr	obotek	Anboton	Anthotek	Anbotek	Anbo	K
1%	110.1-205	0.030	0.052	0.058	0.042	0.052	0.815	1.63
hotek		Anbo, stek		Anbote	Anu	otek An	potek Ant	o. Hek
Any botek	Anbotek	Anbo	nbot	ek Aupo	no. An	botek	Anbotek	inbo stek
50%	110.1-205	0.35	0.44	0.34	0.34	0.51	0.815	1.63
Ann	tek Anboth	an Anbe	-xek	nbotek	Anbore	Anthotek	Anbotek	Anbo
An-	botek Ant	oten Al	ibo stek	Anbotek	Anbore	K both	k Anbote	P.C
99%	110.1-205	0.46	0.64	0.53	0.35	0.34	0.815	1.63
Anboter		Anbotek		K sbo	ek Anb	oter Ani	Lotek p	nbotek
Anboten	Anubotek	Anbotek	Aupo	ret pi	potek I	nboten	und hotek	Anbotek
Stand-by	110.1-205	0.49	0.31	0.41	0.53	0.39	0.815	1.63
ek Anbo	K AND	otek an	potek	inbo	abotek	Anbote	And hotek	an

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

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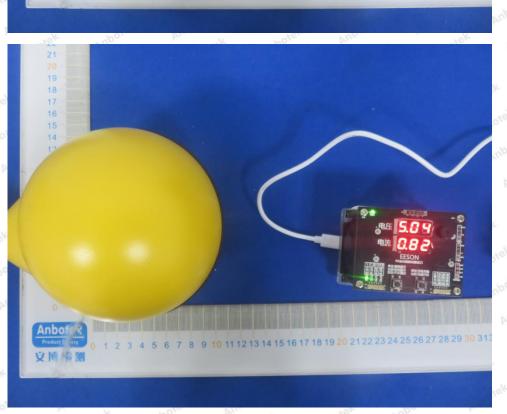




Photo of MPE Measurement

# **APPENDIX I -- TEST SETUP PHOTOGRAPH**

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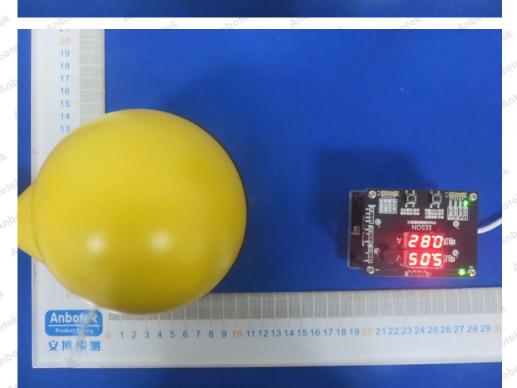


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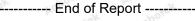


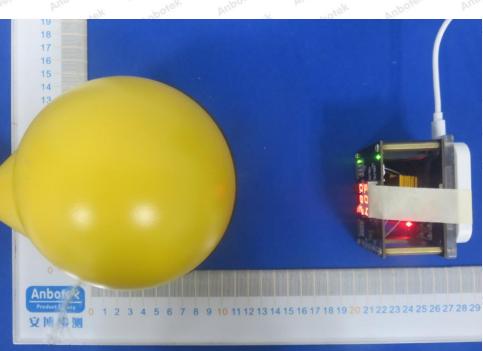
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