

Date

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# FCC TEST REPORT

Client Name	: JMTek Industries(Shenzhen) Co., Ltd
Address	<ul><li>14G, Innovation Tech Building, Quanzhi Science and</li><li>Technology innovation Park, ShaJing Street, Bao'an District, ShenZhen, China</li></ul>
Product Name	: Wireless Mouse Pad

: Jul. 29, 2021



### Shenzhen Anbotek Compliance Laboratory Limited

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Applicant	: JMTek Industries(Shenzhen) Co., Ltd
Manufacturer	: JMTek Industries(Shenzhen) Co., Ltd
Product Name	: Wireless Mouse Pad
Model No.	: WMP100, WMP200, WMP300, WMP400
Trade Mark	: N.A. hotek Anborek Anborek Anborek Anborek
Rating(s)	Input: 5V==2A, 9V==2A Output:5V==1A(5W), 9V==1.1A(10W)
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

Jul. 07, 2021 Jul. 07~20, 2021

Jane Flla

(Ella Liang)

lingkungsin

(Kingkong Jin)

Approved & Authorized Signer

Shenzhen Anbotek Compliance Laboratory Limited

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# 1. General Information

# 1.1. Client Information

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Address	. 14G, Innovation Tech Building, Quar Park, ShaJing Street, Bao'an District	nzhi Science and Technology innovation , ShenZhen, China
Manufacturer	: JMTek Industries(Shenzhen) Co., Lto	d Ambotek Ambu A. Ambotek
Address	14G, Innovation Tech Building, Quar Park, ShaJing Street, Bao'an District	nzhi Science and Technology innovation , ShenZhen, China
Factory	: JMTek Industries(Shenzhen) Co., Lto	Anborek Anborek Anborek Anborek Anborek
Address	14G, Innovation Tech Building, Quar Park, ShaJing Street, Bao'an District	nzhi Science and Technology innovation , ShenZhen, China

# 1.2. Description of Device (EUT)

Product Name	:	Wireless Mouse Pad					
Model No.	:	WMP100, WMP200, WMP300 (Note: All samples are the s "WMP100" for test only.)	), WMP400 same except the appearance, so we prepare				
Trade Mark	:	N.A Anborek Anborek	Anbotek Anbotek Anbote Annote				
Test Power Supply	:	AC 120V, 60Hz/ AC 240V, 60H	tz Anbotek Anbotek Ant				
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)					
		Operation Frequency:	110.1-205KHz				
Product		Modulation Type:	FSK Anborek Anborek Anborek				
Description	•	Antenna Type:	Inductive loop coil Antenna				
		Antenna Gain(Peak):	0 dBi				

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# 1.3. Auxiliary Equipment Used During Test

Adapter	: M/N: A2023
	Input: AC 100-240V 0.7A 50-60Hz
	USB1 Output: DC 5V 2.4A
	USB1 Output: DC 5V 2.4A
Wireless charging	Manufacturer: Shenzhen Ouju Technology Co., Ltd.
load	M/N: CD2531
	Power: 5W/7.5W/10W/15W
	Last Cal.: Oct. 26, 2020
	Cal. Interval: 1 Year

# 1.4. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval	
nbtel	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)	Anbotek Anbor An
		Ur = 3.8 dB (Vertical)	Anbotek Anbot At Anbotek
		stek Anbore Ant	Anbotek Anbo
Conduction Uncertainty	:	Uc = 3.4 dB	sk Anboten Anbo

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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	Ι	1	f/300	6
1500-100,000	1	7	5	6
	(B) Limits for Genera	I Population/Uncontrolle	d Exposure	

Limits For Maximum Permissible Exposure (MPE)

#### \*(100) 0.3-1.34 614 1.63 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 1 300-1500 f/1500 30 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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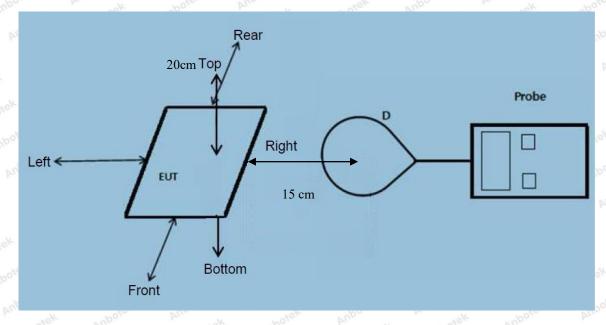
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# 2.2. Test Setup



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 10W.

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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 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.

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

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

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

			-				1	124
Dettern Anbr	Frequency	Test	Test	Test	Test	Test	Reference	Limits
Battery	Range	Position	Position	Position	Position	Position	Limit	Test
power	(KHz)	A	Botek	Cipotes	D	otek E	(V/m)	(V/m)
Amabotek	Anboten	Anby Lotek	Anboth	sk Anbe	rek bu	abotek	Anboter	Anburbotek
1%	110.1-205	0.36	0.45	0.40	0.41	0.53	307	614
Pri.	tek Anboth	Ano	Hatek	unbotek	Anboi	Al. botek	Anboten	Ant
*ek	botek Ant	oter pr	wotek	Anbotek	Anbo,	K sto	tek Anbote	K Ann
50%	110.1-205	1.45	1.89	1.38	1.51	1.68	307	614
Anbors	Allabotek	Anboten	Anbe	4 anbo	ek Anb	or po	abotek I	nboten
Anbor	A. obotek	Anboten	Ano	otek ar	potek I	inpo, vek	Antobotek	Anboten
99%	110.1-205	2.39	2.79	2.40	2.35	2.81	307	614
ek Anbo	And An	otek An	poten p	nbo	Anbotek	Anbore	ek pote	5 Anbr
botek An	bound build	-botek	Anboten	Anotek	Anbote	Anbo	all Alex	stek p
Stand-by	110.1-205	0.39	0.54	0.38	0.37	0.51	307	614
Anbotek	Anbore	Annobotek	Anboter	Anbo	otek p	nbotek	Anboit P	abotek

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Battery power	Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
optek Anb	stek Anbot	otek pou	nbotek	Anbotek	Anborek	Anbotek	Anbote	K AUD
1%	110.1-205	0.025	0.047	0.053	0.037	0.047	0.815	1.63
po. botek	Anboten	And	nabotek	Anbore	Pri.	otek An	poten Ant	Net
Anthotek		Anbo	nbot	ek Anbo	ie An	botek	Anboten	inbo atek
50%	110.1-205	0.39	0.48	0.38	0.38	0.55	0.815	1.63
Ann	tek Anboth	an Anb.	-tek	abotek	Anbore	Anthotek	Anbotek	Anbo
ore Ano	hotek Ant	otek Al	100 stek	Anbotek	Anbore	K hote	K Anbote	An
99%	110.1-205	0.53	0.71	0.60	0.42	0.41	0.815	1.63
Anboter		Anbotek	Anbor	K sbo	ek Anb	oter Ani	Lotek A	nbotek
Anboten	Anusbotek	Anbotek	Anbo	stek pr	potek P	nbore	Antobotek	Anbotek
Stand-by	110.1-205	0.55	0.37	0.47	0.59	0.45	0.815	1.63
stek Anbo	Ano Ano	otek pr	potek I	inbu	Anbotek	Anboto	K sbotek	Ant

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

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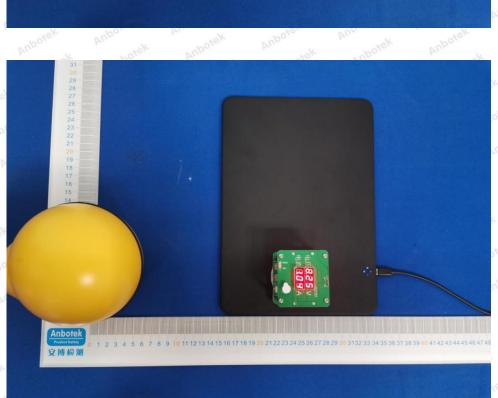




Photo of MPE Measurement

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

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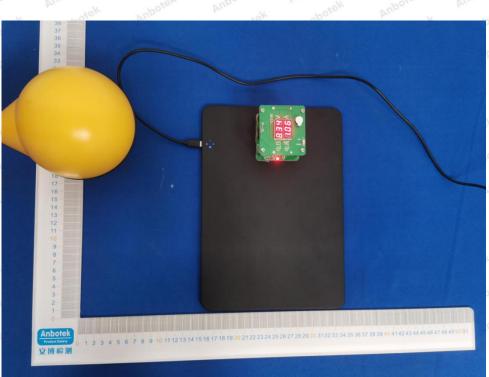


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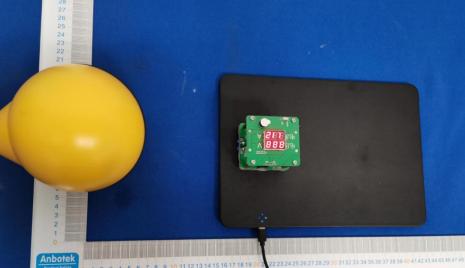
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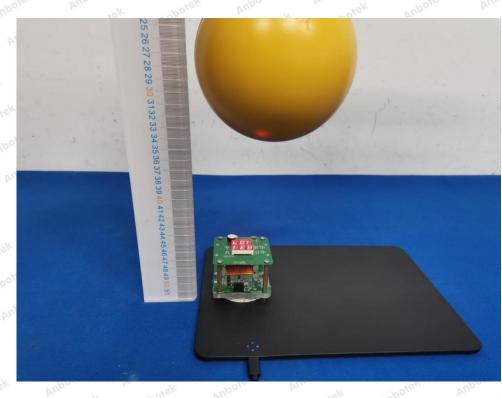


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End of Report

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