

FCC ID: 2AONA-WX1905C Page 1 of 13 Report No.: 18220WC00017002

# **FCC TEST REPORT**

Client Name Shenzhen Pilot Technology Co., Ltd

A1 Building, No.7 Shankeng Road, Shankeng Industrial

Address Park, Shanxia Community, Pinghu Street, Longgang

District, Shenzhen, China.

Product Name Wireless Power Bank

Date Mar. 31, 2020

Shenzhen Anbotek Compliance Laboratory Limited

Anbotek

Compliance Carda



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## TEST REPORT

Applicant : Shenzhen Pilot Technology Co., Ltd

Manufacturer : Shenzhen Pilot Technology Co., Ltd

Product Name : Wireless Power Bank
Model No. : WX1905C, WX1905A

Trade Mark : N.A.

Micro/Type-C Input: DC 5V, 2A (with DC 3.7V, 5000 mAh battery inside)

Rating(s) : USB-A/Type-C Output: DC 5V, 2.1A

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	Mar. 12, 2020
Date of Test	Mar. 12~28, 2020
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Prepared By	abotek Albotek Anbotek
Anboret Anborek Anborek Anborek	(Engineer / Dolly Mo)
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Reviewer	Anbores And
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Approved & Authorized Signer	And Anbotek Anbo. Anbote
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## 1. General Information

### 1.1. Client Information

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Applicant	: Shenzhen Pilot Technology Co., Ltd
Address	A1 Building, No.7 Shankeng Road, Shankeng Industrial Park, Shanxia Community, Pinghu Street, Longgang District, Shenzhen, China.
Manufacturer	: Shenzhen Pilot Technology Co., Ltd
Address	A1 Building, No.7 Shankeng Road, Shankeng Industrial Park, Shanxia Community, Pinghu Street, Longgang District, Shenzhen, China.
Factory	: Shenzhen Pilot Technology Co., Ltd
Address	A1 Building, No.7 Shankeng Road, Shankeng Industrial Park, Shanxia Community, Pinghu Street, Longgang District, Shenzhen, China.

## 1.2. Description of Device (EUT)

Product Name	:	Wireless Power Bank	tek Anbotek Anbotek Anbotek Anbote
Model No.	:	WX1905C, WX1905A (Note: All samples are the prepare "WX1905C" for to	e same except the model and appearance, so we est only.)
Trade Mark	:	N.A.	Anbotek Anbotek Anbotek Anbotek
Test Power Supply	:	AC 120V, 60Hz for adapte	er / DC 3.7V Battery inside
Test Sample No.	:	1-2-1(Normal Sample), 1-	-2-1(Engineering Sample)
		Operation Frequency:	110.1-205KHz
Product		Modulation Type:	QI Anbotek Anbotek Anbotek Anbotek
Description	•	Antenna Type:	Inductive loop coil Antenna
	58	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.





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#### 1.3. Auxiliary Equipment Used During Test

Adapter : Manufacturer: ZTE

M/N: STC-A2050I1000USBA-C

S/N: 201202102100876

Input: 100-240V~ 50/60Hz, 0.3A

Output: DC 5V, 2000mA

#### 1.4. Test Equipment List

	Item	Equipment	quipment Manufacturer Model No.		Serial No.	Last Cal.	Cal. Interval
	1,nb	Magnetic field meter	NARDA	ELT-400	423623	Dec. 23, 2019	1 Year
6	2	E-Field Probe	Narda	EF0391	Q15221	Nov.17, 2017	3 Year
o	3	H-Field Probe	Narda	HF3061	Q15835	Nov.17, 2017	3 Year

#### 1.5. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 3.9 dB (Horizontal	)otek p	upore Am	abotek	Anbotek
		Ur = 3.8 dB (Vertical)				Anbote
		inbote. And hotek	Anbotek	Anbou	anbotek.	Ant
Conduction Uncertainty	:	Uc = 3.4 dB	Anbotek	Anbo	k Anbore	lk.

#### 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 27, 2019.

#### 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, March 07, 2019.

#### **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.

Limits For Maximum Permissible Exposure (MPE)

		-V. 140"	( )							
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)						
(A) Limits for Occupational/Controlled Exposures										
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	l Population/Uncontrolle	d Exposure							
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	1.0	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).

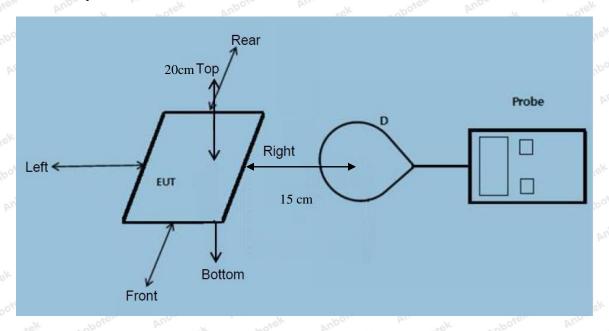
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<sup>=</sup>Plane-wave equivalent power density



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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.

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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 Power Pack with Wireless Power Bank
- 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



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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:	23.8°C	Relative Humidity:	54%
Pressure:	1012 hPa	Test Voltage:	DC 3.7V Battery inside

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

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)
notek p	upotek Ar	bo stek	Anbotek	Anbore	Y Pur	ek Anb	oten Anbo	otek
1%	110.1~205	0.35	0.39	0.22	0.49	0.92	307	614
	Anbotek	Anbo. atel	. Anbor	sk Aup	ok An	hotek	Anbotek	
Annahotel	Anbotek	Anbo	tek vu	potek p	upore	Pur	Anborek	Anbo
50%	110.1~205	1.42	1.36	1.23	1.32	1.57	307	614
	hotek Ani	otek V	ypo.	k. Vupotek	Anbore	Y Ann	rek Anbot	
Ole V	hotek	Aupotek	Aupo	Motek	Anbor	Di.	hotek An	otek
99%	110.1~205	2.22	2.17	2.16	2.23	2.08	307	614
	Ann	Anbotek	Aupo.	rek h.	botek	Anbore.	Andhotek	
Aupoten	ok hose	K Anbo	lek but	o dek	Motek	Aupore.	Pur Potek	Anbo
Stand-by	110.1~205	0.48	0.39	0.76	0.49	0.52	307	614
	Pose, Yur	worek.	Anbotek	Anbo.	h. abote	k Anbo	Le. VUL	



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

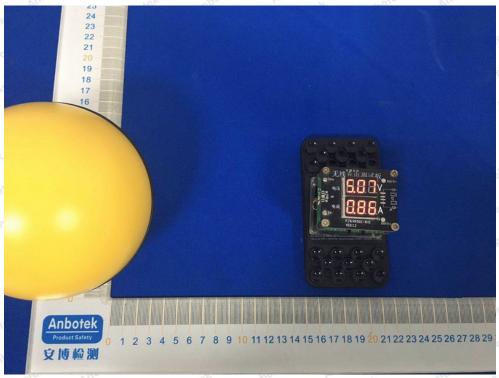
*	-	A1111		N 101			030	17.
Dotton	Frequency	Test	Test	Test	Test	Test	Reference	Limits
Battery	Range	Position	Position	Position	Position	Position	Limit	Test
power	(KHz)	A A	otek B	C	Amba D	Amborek	(A/m)	(A/m)
rek Ant	otek Aup	otek K	knbotek.	Anbore	And	Anbote	Anbo	lek k
1%	110.1~205	0.049	0.042	0.057	0.042	0.053	0.815	1.63
	Anborek	Anbore	Al. abotek	Anbore	ak Ano.	hotek p	hbotek Ar	por
And	Anbotek	Anbo	k Vupo	lek Aut	or A	potek	Anbotek	Anbo ofek
50%	110.1~205	0.27	0.56	0.38	0.34	0.48	0.815	1.63
ak Ant	otek Anbo	lek Vup	D. B.	anbotek	Anbore.	Andhotek	Anbotek	Anbo
Ann	-botek Ar	potek	iupo otek	nbotek	Anbore	ok Pur	rek Anbot	Sk V
99%	110.1~205	0.32	0.56	0.57	0.36	0.52	0.815	1.63
	Anbabotek	Anbotek	P.upo.	ek wp	otek Ar	poter A	hotek	Anbotek
Aupore	Amb	Anbote	Vupe	dek be	obotek	Anbore	Vun Potek	Anbotek
Stand-by	110.1~205	0.22	0.19	0.25	0.37	0.32	0.815	1.63
	yer Anbo	tek	abotek	Aupor	VI. Potek	Anboren	Anbo	SK 25
	1 2/2	YO. D	1	750	V 1215		The Mo.	loc.

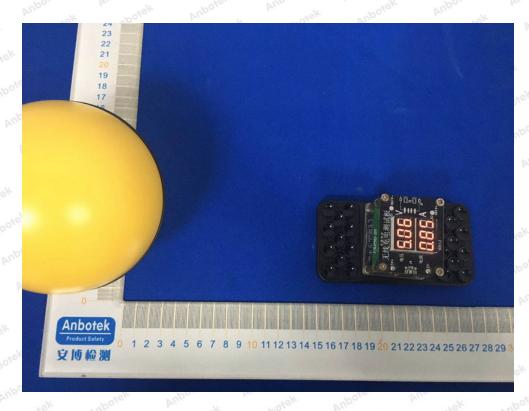


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## **APPENDIX I -- TEST SETUP PHOTOGRAPH**

Photo of MPE Measurement

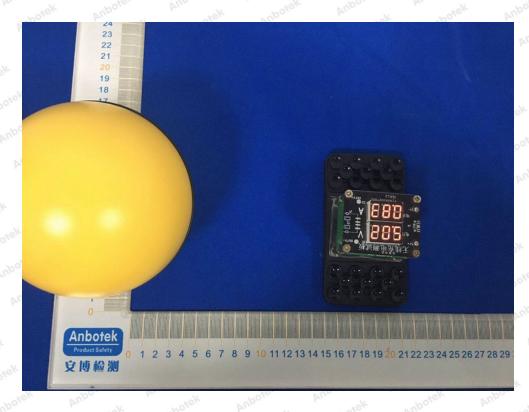




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