



RF EXPOSURE Test Report

Report No.: MTi210326009-01E2

Date of issue: May 07, 2021

Applicant: Shenzhen Shi Aiker Electronic
Technology Co., Ltd.

Product name: Magnetic Wireless Power Bank

Model(s): KY200, KY200-1, KY200-2

FCC ID: 2AVG2-KY200

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>



Instructions

1. The report shall not be partially reproduced without the written consent of the laboratory;
2. The test results of this report are only responsible for the samples submitted;
3. This report is invalid without the seal and signature of the laboratory;
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5. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.



TEST RESULT CERTIFICATION

Applicant's name	Shenzhen Shi Aiker Electronic Technology Co., Ltd.
Address	6th Floor, Building C, No. 9 East, Shangxue Technology Industrial City, Xinxue Community, Bantian Street, Longgang District, Shenzhen
Manufacturer's Name	Shenzhen Shi Aiker Electronic Technology Co., Ltd.
Address	6th Floor, Building C, No. 9 East, Shangxue Technology Industrial City, Xinxue Community, Bantian Street, Longgang District, Shenzhen
Product description	
Product name	Magnetic Wireless Power Bank
Trademark	N/A
Model Name	KY200
Serial Model	KY200-1, KY200-2
Standards	FCC CFR 47 PART 1 , 1.1310
Test procedure	KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01
Date of Test	
Date (s) of performance of tests	Mar. 29, 2021 ~ Apr. 26, 2021
Test Result	Pass

This device described above has been tested by Shenzhen Microtest Co., Ltd. and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Testing Engineer :

Cindy Qin

(Cindy Qin)

Technical Manager :

Leo Su

(Leo Su)

Authorized Signatory :

Tom Xue

(Tom Xue)



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1 General Information

1.1 Description of EUT

Product name:	Magnetic Wireless Power Bank
Brand name:	N/A
Model name:	KY200
Series model:	KY200-1, KY200-2
Deference in serial model:	All the models are of the same circuit and RF module, except the color and model No..
Operation frequency:	110–205 kHz
Operational mode:	Wireless charging
Modulation type:	ASK
Antenna type:	Coil Antenna
Power source:	DC 9V from adapter AC 120V/60Hz or DC 3.85V from battery
Input:	5V/2A, 9V/2A
Battery:	DC 3.85V 3750mAh
Adapter information:	N/A

1.2 Ancillary equipment list

Equipment	Model	S/N	Manufacturer
Load	YBZ1.1	/	YBZ

1.3 Measurement uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %, $U=2xUc(y)$

Radiated emission(150kHz~30MHz)	± 2.5 dB
Radiated emission(30MHz~1GHz)	± 4.2 dB
Radiated emission (above 1GHz)	± 4.3 dB
Temperature	±1 degree
Humidity	± 5 %



2 Testing site

Test Site	Shenzhen Microtest Co., Ltd
Test Site Location	101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinghe Community, Fuhai Street, Bao' an District, Shenzhen, Guangdong, China.
FCC Registration No.:	448573

Address: 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinghe Community, Fuhai Street, Bao' an District, Shenzhen, Guangdong, China.



3 List of test equipment

Equipment No.	Equipment Name	Manufacturer	Model	Serial No.	Calibration date	Due date
MTI-E115	Electric and Magnetic Field Probe - Analyzer	Narda Safety Test Solutions GmbH	EHP-200A	/	2020/11/12	2021/11/11



4 Test Results

4.4 Maximum permissible exposure

4.4.1 Limit

Frequency range(MHz)	Electric field strength(V/m)	Magnetic field strength(A/m)	Power density(mW/cm ²)	Averaging time(minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0 6	6
300-1500			f/300	6
1500-100000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100000			1	30
f = frequency in MHz * = Plane-wave equivalent power density				

4.4.2 Test Procedures

E and H-field measurements should be made with the center of the probe at a distance of 15 cm surrounding the device and 20 cm above the top surface of the primary/client pair.

These measurements should be repeated for three different client battery levels, 1%, 50%, and 99%.

Record the test results.

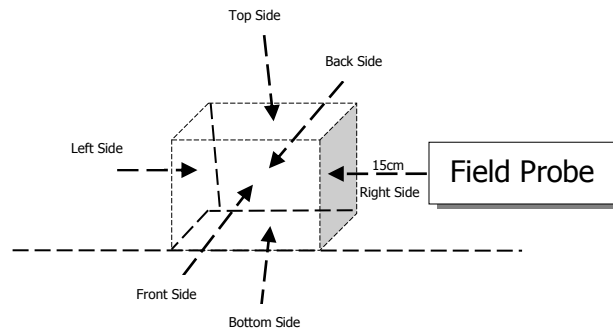
KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01:

- (1) Power transfer frequency is less than 1 MHz
- (2) Output power from each primary coil is less than or equal to 15 watts.
- (3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.
- (4) Client device is 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 anywhere at or beyond 15 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.

Note: The device can charge wired (mobile) or wirelessly (portable) is not in compliance with KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01 conditions (5).



4.4.3 Test Setup



4.4.4 Test mode

test Mode	Description
Mode 1	Mobile phone (5W)
Mode 2	Mobile phone (7.5W)
Mode 3	Mobile phone (10W)
Mode 4	Mobile phone (15W)

NOTE: The test modes were carried out for all operation modes. The test mode 4 of the EUT was the worst test mode for MPE, and its test data was showed.



4.4.5 Test Result

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<1%	Top	0	1.29	0.1135
<1%	Bottom	0	1.25	0.1126
<1%	Left	0	1.35	0.1128
<1%	Right	0	1.27	0.1133
<1%	Front	0	1.25	0.1123
<1%	Back	0	1.24	0.1124
Limit			614	1.63
Margin Limit (%)			0.210 %	6.963 %

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<50%	Top	0	1.31	0.1136
<50%	Bottom	0	1.24	0.1127
<50%	Left	0	1.36	0.1127
<50%	Right	0	1.28	0.1132
<50%	Front	0	1.25	0.1125
<50%	Back	0	1.25	0.1126
Limit			614	1.63
Margin Limit (%)			0.213 %	6.969 %

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<99%	Top	0	1.32	0.1134
<99%	Bottom	0	1.25	0.1126
<99%	Left	0	1.34	0.1128
<99%	Right	0	1.27	0.1131
<99%	Front	0	1.26	0.1127
<99%	Back	0	1.26	0.1126
Limit			614	1.63
Margin Limit (%)			0.215 %	6.957 %



Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<1%	Top	5	1.21	0.1121
<1%	Bottom	5	1.23	0.1122
<1%	Left	5	1.21	0.1118
<1%	Right	5	1.19	0.1113
<1%	Front	5	1.23	0.1115
<1%	Back	5	1.18	0.1119
Limit			614	1.63
Margin Limit (%)			0.197 %	6.877 %

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<50%	Top	5	1.24	0.1124
<50%	Bottom	5	1.23	0.1124
<50%	Left	5	1.26	0.1118
<50%	Right	5	1.21	0.1115
<50%	Front	5	1.24	0.1115
<50%	Back	5	1.21	0.1118
Limit			614	1.63
Margin Limit (%)			0.202 %	6.896 %

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<99%	Top	5	1.25	0.1126
<99%	Bottom	5	1.24	0.1127
<99%	Left	5	1.28	0.1117
<99%	Right	5	1.29	0.1117
<99%	Front	5	1.32	0.1115
<99%	Back	5	1.25	0.1118
Limit			614	1.63
Margin Limit (%)			0.204 %	6.908%



Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<1%	Top	10	0.71	0.0705
<1%	Bottom	10	0.74	0.0713
<1%	Left	10	0.72	0.0715
<1%	Right	10	0.69	0.0712
<1%	Front	10	0.71	0.0714
<1%	Back	10	0.72	0.0711
Limit			614	1.63
Margin Limit (%)			0.116 %	4.325 %

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<50%	Top	10	0.69	0.0719
<50%	Bottom	10	0.71	0.0715
<50%	Left	10	0.72	0.0713
<50%	Right	10	0.74	0.0718
<50%	Front	10	0.72	0.0714
<50%	Back	10	0.73	0.0711
Limit			614	1.63
Margin Limit (%)			0.112 %	4.411 %

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E – field(V/m)	H–field(A/m)
<99%	Top	10	0.68	0.0714
<99%	Bottom	10	0.72	0.0711
<99%	Left	10	0.73	0.0709
<99%	Right	10	0.72	0.0718
<99%	Front	10	0.73	0.0717
<99%	Back	10	0.71	0.0716
Limit			614	1.63
Margin Limit (%)			0.111 %	4.380 %



4.4.6 MPE Setup photo



----END OF REPORT----