

RF EXPOSURE Test Report

Product: MAGNETIC WIRELESS PORTABLE
CHARGING POWER BANK

Trade Mark: N/A

Model Number: S400

FCC ID: 2BCZH-S400

Prepared for

Shenzhen Huanyu Baijia Technology Co., Ltd
505 Huichuang Workshop, Building B, No.8 Factory, Shijie Co., Ltd., Gushu
Community, Xixiang Street, Bao'an District, Shenzhen

Prepared by

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TEST RESULT CERTIFICATION

Applicant's Name : Shenzhen Huanyu Baijia Technology Co., Ltd
505 Huichuang Workshop, Building B, No.8 Factory, Shijie Co.,
Address : Ltd., Gushu Community, Xixiang Street, Bao'an District,
Shenzhen
Manufacturer's Name : Shenzhen Huanyu Baijia Technology Co., Ltd
505 Huichuang Workshop, Building B, No.8 Factory, Shijie Co.,
Address : Ltd., Gushu Community, Xixiang Street, Bao'an District,
Shenzhen

Product description

Product name : MAGNETIC WIRELESS PORTABLE CHARGING POWER
BANK
Model Number : S400
Standards : FCC CFR 47 PART 1 , 1.1310
Test procedure : KDB 680106 D01 Wireless Power Transfer v04

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

Date of Test :

Date (s) of performance of tests : Oct. 25, 2023~ Nov. 02, 2023

Test Result..... : **Pass**

Testing Engineer :

Zoe Su

(Z o e S u)

Technical Manager :

Gary Lu

(G a r y L u)

Authorized Signatory :

Leo Su

(L e o S u)

[illegible]

1 General Description

1.1 Description of EUT

Product name:	MAGNETIC WIRELESS PORTABLE CHARGING POWER BANK
Model name:	S400
Series Model:	N/A
Different of series model:	N/A
Operation frequency:	115–205 kHz
Operational mode:	Wireless charging
Modulation type:	ASK
Antenna type:	Coil Antenna
Hardware version:	V1.0
Software version:	V1.0
Battery:	DC 3.85V, 5000mAh, 19.25Wh
Power supply:	USB-C Input: DC 5V/3A, 9V/2A, 12V/1.5A USB-C Output: DC 5V/3A, 9V/2.2A, 12V/1.67A Wireless Output: 5W/7.5W/10W/15W
Adapter information:	N/A

1.2 Test Mode

Pretest Test Mode	Description of Mode
1	Charging+Wireless Output 5W
2	Wireless Output 7.5W
3	Wireless Output 10W
4	Wireless Output 15W

1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Ancillary Equipment

Equipment	Model	S/N	Manufacturer
Phone	iPhone 12pro	/	Apple Inc.
Adapter	MDY-10-EH	AA61905921 427IG	Selkang (Guigang) Co., Ltd

2 Test Facilities and Accreditations

2.1 Test Laboratory

Test Site	Shenzhen HongBiao Certification& Testing Co., Ltd
Test Site Location	Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China
Telephone:	(86-755) 2998 9321
Fax:	(86-755) 2998 5110
FCC Registration No.:	CN1341
A2LA Certificate No.:	6765.01

2.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C~35°C
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

2.3 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Measurement Frequency Range	U, (dB)	Note
RF frequency	2×10^{-5}	
RF power, conducted	± 0.57 dB	
Conducted emission(150kHz~30MHz)	± 2.5 dB	
Radiated emission(30MHz~1GHz)	± 4.2 dB	
Radiated emission (above 1GHz)	± 4.7 dB	
Temperature	± 1 degree	
Humidity	± 5 %	

2.4 Test Software

Software name	Manufacturer	Model	Version
EHP200-TS	Narda	EHP-200A	Rel 1.95

3 List of Test Equipment

Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E073	Electric and Magnetic Field Analyzer	Narda	EHP-200A	180ZX11013	2023-06-09	2024-06-08

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4 RF Exposure

4.1 Maximum Permissible Exposure

4.1.1. Limit

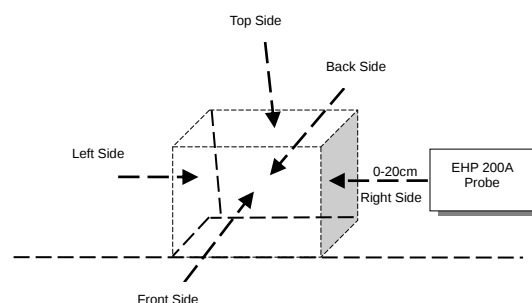
Frequency range(MHz)	Electric field strength(V/m)	Magnetic field strength(A/m)	Power density(mW/cm ²)	Averaging time(minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0 6	6
300-1500	/	/	f/300	6
1500-100000	/	/	5	6
(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

4.1.2. Test Procedures

- The RF exposure test was performed in anechoic chamber.
- Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm, starting from as close as possible out to 20 cm.
- The highest emission level was recorded and compared with limit.
- The EUT was measured according to the dictates of TCB Workshop "41-Part-18-&-Wireless-Power-Transfer - April 27, 2022"

4.1.3. Test Setup



4.1.4. Test Result

For portable exposure condition:

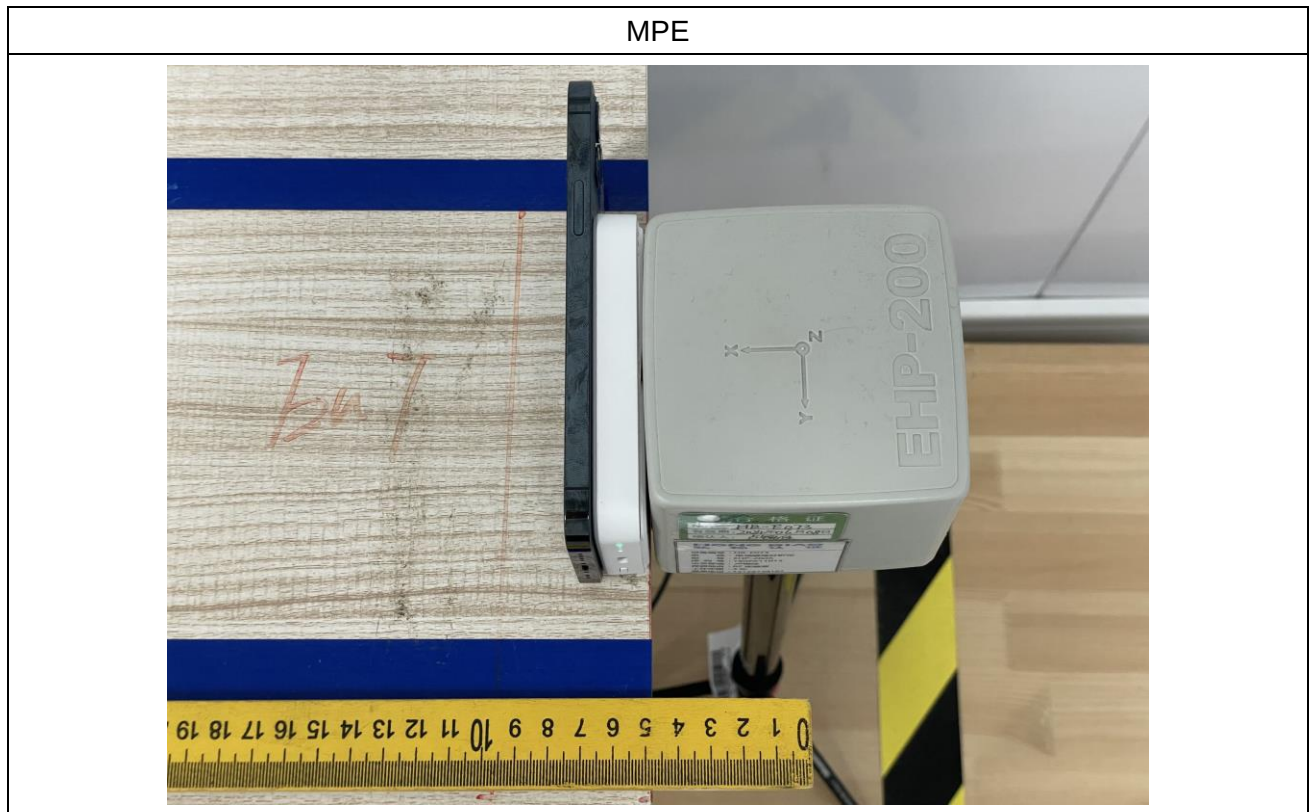
Note: operating modes with client device (1 %, 50%, 99% battery status of client device) have been test, only show the data of worst case of 1% battery status of client device.

H-field measurements taken every 2 cm (starting as close to 20 cm as possible) on each edge/top surface of the host/client pair were also evaluated for portable use conditions. The report reflects data for the worst 0 cm test distance mode only.

Test condition 1: Mode 4 operating mode with client device (1 % battery status of client device)
-test distance: 0cm

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E -field(V/m)	H-field(A/m)
<1%	Top	0	6.4057	0.1342
<1%	Left	0	7.5086	0.5212
<1%	Right	0	3.0524	0.0489
<1%	Front	0	7.0551	0.0470
<1%	Back	0	8.8309	0.0474
<1%	Bottom	0	23.679	0.0811
Limit			614	1.63
Margin Limit (%)			1.44%	31.98%

5 Photographs of the Test Setup



******* END OF REPORT *******