# RF EXPOSURE Test Report

**Product:** portable power source

**Trade Mark:** N/A

**Model Number:** PB-50

**FCC ID:** 2BV6O-PB50

**Prepared for**

Guangzhou Xinhua Communication Technology Co., Ltd.

Room 2501, Building A, TCL Building, No. 18, Haizhou Road, Haizhu District, Guangzhou, Guangdong, China

**Prepared by**

Shenzhen HongBiao Certification& Testing Co., Ltd

Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China

Tel.: +86-755-2998 9321 Fax.: +86-755-2998 5110

Website: http://www.sz-hongbiao.com

# Table of Contents

# TEST RESULT CERTIFICATION

| | | |
|---|---|---|
| **Applicant's Name** | : | Guangzhou Xinhua Communication Technology Co., Ltd. |
| Address | : | Room 2501, Building A, TCL Building, No. 18, Haizhou Road, Haizhu District, Guangzhou, Guangdong, China |
| **Manufacturer's Name** | : | Guangzhou Xinhua Communication Technology Co., Ltd. |
| Address | : | Room 2501, Building A, TCL Building, No. 18, Haizhou Road, Haizhu District, Guangzhou, Guangdong, China |
| **Product description** | | |
| Product name | : | portable power source |
| Model Number | : | PB-50 |
| **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 | : | Mar. 26, 2026~May 18, 2026 |
| Test Result | : | **Pass** |

**Testing Engineer** : Zoe Su

**( Z o e S u )**

**Technical Manager** : Ming Liu

**( M i n g L i u )**

**Authorized Signatory** : Leo Su

**( L e o S u )**

## Revision History

| Revised No. | Date of Issue | Description |
|---|---|---|
| 01 | May 18, 2026 | Original |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

# 1 General Description

## 1.1 Description of EUT

| | |
|---|---|
| Product name: | portable power source |
| Model name: | PB-50 |
| Series Model: | PB-55, PB-57, PB-59 |
| Different of series model: | The product model is PB-50 the same PCB layout, electronic schematic and Antenna with PB-55, PB-57, PB-59.Only the model name are difference. |
| Operation frequency: | 115-205kHz |
| Operational mode: | Wireless charging |
| Modulation type: | ASK |
| Antenna type: | Coil Antenna |
| Battery: | N/A |
| Power supply: | Total Output:5V-2A<br>Type-C Input:5V-2A/9V-2A<br>Wireless Output:5W/7.5W/10W/15W<br>Battery:5000mAh 19.25Wh/3.85V |
| Adapter information: | N/A |

## 1.2 Test Mode

| Pretest Test Mode | Description of Mode |
|---|---|
| 1 | Wireless Output (Phone: 5W) |
| 2 | Wireless Output (Phone: 7.5W) |
| 3 | Wireless Output (Phone: 10W) |
| 4 | Wireless Output (Phone: 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 | LE2120 | 98d9b780 | Shenzhen Oneplus Technology 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.: | 848916 |
| Designation Number: | CN1340 |
| A2LA Certificate No.: | 6765.01 |

## 2.2 Environmental Conditions

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

| | |
|---|---|
| Temperature: | 15ºC~35ºC |
| Relative Humidity: | 20%~75% |
| Air Pressure: | 98kPa~101kPa |

## 2.3 Measurement Uncertainty

The reported uncertainty of measurement y ± 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 %.
The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.
In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

| Measurement Frequency Range | U，(dB) | Note |
|---|---|---|
| RF frequency | $2x\ 10^{-5}$ | |
| E-field | ± 2.5 dB | |
| H-field | ± 4.2 dB | |
| Temperature | ±1 degree | |
| Humidity | ± 5 % | |

## 2.4 Test Software

| Software name | Manufacturer | Model | Version |
|---|---|---|---|

| | | | |
|---|---|---|---|
| MAGPy V2.6 | Schmid & Partner Engineering AG | MAGPy V2.6 | V2.6 |

# 3 List of Test Equipment

| Item | Equipment No. | Equipment name | Manufacturer | Model | Serial No. | Calibration date | Due date |
|---|---|---|---|---|---|---|---|
| 1 | HB-E077 | Magnetic Amplitude and Gradient Probe System | Schmid & Partner Engineering AG | MAGPy -8H3D+E3D | 3107 | 2026-05-11 | 2027-05-10 |
| 2 | HB-E078 | Magnetic Amplitude and Gradient Probe System | Schmid & Partner Engineering AG | MAGPy-DAS | 3097 | 2026-05-11 | 2027-05-10 |

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/cm2) | 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 | | | | |

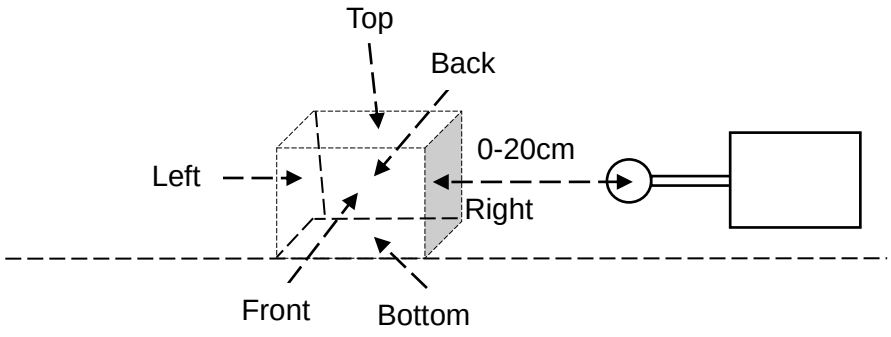
### 4.1.2. Test Procedures

a. The RF exposure test was performed in anechoic chamber.

b. 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.

c. The highest emission level was recorded and compared with limit.

### 4.1.3. Test Setup



### 4.1.4. Test Result

For portable exposure condition:

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).
Measurement results directly tested using MAGPy.

| Maximum permissible Exposure(115-205kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <1% | Top | 0 | 32.5 | 0.23 |
| <1% | Left | 0 | 17.7 | 0.91 |
| <1% | Right | 0 | 16.2 | 0.97 |
| <1% | Front | 0 | 23.8 | 0.35 |
| <1% | Back | 0 | 40.5 | 0.56 |
| <1% | Bottom | 0 | 67.4 | 0.73 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 10.98% | 59.5% |

When setting MAGPy to select compliance location as probe tip, the measured value is extrapolated to 0mm as the result.

| Maximum permissible Exposure(115-205kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <1% | Top | 0 | 48.5 | 0.54 |
| <1% | Left | 0 | 13.9 | 1.42 |
| <1% | Right | 0 | 15.3 | 1.33 |
| <1% | Front | 0 | 48.8 | 0.87 |
| <1% | Back | 0 | 47.4 | 0.79 |
| <1% | Bottom | 0 | 74.2 | 1.06 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 12.08% | 87.12% |

# 5 Photographs of the Test Setup

| MPE |
| --- |
|  |



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