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Report Template Version: V05
Report Template Revision Date: 2021-11-03

# RF Exposure Evaluation Report

| | |
|---|---|
| **Report No.:** | CQASZ20250100072E-02 |
| **Applicant:** | C-SMARTLINK INFORMATION TECHNOLOGY CO., LIMITED |
| **Address of Applicant:** | 101 to 501,Factory Building 1,No.91 Hengping Road,Baoan Community,Yuanshan Street,Longgang District,Shenzhen,China |
| **Equipment Under Test (EUT):** | |
| **Product:** | Power Bank |
| **Model No.:** | PB0605,MOPB0605,SEPB0605,VIPB0605,SKPB0605,LIPB0605,KAPB0605,HOPB0605,HSPB0605,GMPB0605,FAPB0605,EXPB0605,AIPB0605,USPB0605,XFPB0605 |
| **Test Model No.:** | PB0605 |
| **Brand Name:** | N/A |
| **FCC ID:** | 2ACFF-PB0605 |
| **Standards:** | 47 CFR Part 1.1307<br>47 CFR Part 1.1310<br>KDB 680106 D01 RF Exposure Wireless Charging Base App v04r01 |
| **Date of Receipt**: | 2025-1-9 |
| **Date of Test:** | 2025-1-9 to 2025-1-20 |
| **Date of Issue:** | 2025-1-23 |
| **Test Result :** | **PASS*** |

***In the configuration tested, the EUT complied with the standards specified above**

***Tested By:*** _____
***( Joe Wang )***

***Reviewed By:*** _____
***( Timo Lei )***

***Approved By:*** _____
***( Jack Ai )***

# 1 Version

**Revision History Of Report**

| Report No. | Version | Description | Issue Date |
|---|---|---|---|
| CQASZ20250100072E-02 | Rev.01 | Initial report | 2025-1-23 |

# 2 Contents

# 3 General Information

## 3.1 Client Information

| | |
|---|---|
| Applicant: | C-SMARTLINK INFORMATION TECHNOLOGY CO., LIMITED |
| Address of Applicant: | 101 to 501,Factory Building 1,No.91 Hengping Road,Baoan Community,Yuanshan Street,Longgang District,Shenzhen,China |
| Manufacturer: | C-Smartlink Information Technology Co., Ltd. |
| Address of Manufacturer: | 101 to 501,Factory Building 1,No.91 Hengping Road,Baoan Community,Yuanshan Street,Longgang District,Shenzhen,China |
| Factory: | C-Smartlink Information Technology Co., Ltd. |
| Address of Factory: | 101 to 501,Factory Building 1,No.91 Hengping Road,Baoan Community,Yuanshan Street,Longgang District,Shenzhen,China |
| Factory: | HUNAN C-SMARTLINK TECHNOLOGY CO.,LTD |
| Address of Factory: | Building 5-6-7-8, Chengnan Electronic Information Industrial Park, Chenxi Industrial Development Zone, Chenxi County, Huaihua, Hunan Province |

## 3.2 General Description of EUT

| | |
|---|---|
| Product Name: | Power Bank |
| Model No.: | PB0605,MOPB0605,SEPB0605,VIPB0605,SKPB0605,LIPB0605, KAPB0605,HOPB0605,HSPB0605,GMPB0605,FAPB0605,EXPB0605, AIPB0605,USPB0605,XFPB0605 |
| Test Model No.: | PB0605 |
| Brand Name: | N/A |
| Software Version: | V1.7 |
| Hardware Version: | V1.3 |
| EUT Power Supply: | Battery: 5000mAh(19.25Wh/3.85V)<br>Charging by Adapter DC 5V⎓3A/ 9V⎓2.22A/12V⎓1.67A |

## 3.3 Product Specification subjective to this standard

| | |
|---|---|
| Equipment Category: | Non-ISM frequency |
| Operation Frequency range: | 115kHz~360kHz |
| Modulation Type: | ASK |
| Antenna Type: | Induction coil |
| Antenna Gain: | 0dBi |

Note:

1. In section 15.31(m), regards to the operating frequency range less 1 MHz.

## 3.4 Test Environment

| | |
|---|---|
| **Operating Environment:** | |
| Temperature: | 25.5 °C |
| Humidity: | 53 % RH |
| Atmospheric Pressure: | 100.9 mbar |
| **Test Mode:** | |
| Mode a: | Keep the EUT Wireless Charging load Out Put for Phone 5W |
| Mode b: | Keep the EUT Wireless Charging load Out Put for Phone 7.5W |
| Mode c: | Keep the EUT Wireless Charging load Out Put for Phone 10W |
| Mode d: | Keep the EUT Wireless Charging load Out Put for Phone 15W (Max) |
| Mode e: | Keep the EUT Charging+Wireless Charging load Out Put for Phone 5W |
| Mode f: | Keep the EUT Charging+Wireless Charging load Out Put for Phone 7.5W |
| Mode g: | Keep the EUT Charging+Wireless Charging load Out Put for Phone 10W |
| Mode h: | Keep the EUT Charging+Wireless Charging load Out Put for Phone 15W(Max) |
| Note: The above test modes all include full load,empty load,and half load, The worst-case state reflected in this report is the fully loaded state | |

## 3.5 Description of Support Units

The EUT has been tested with associated equipment below.

1）Support equipment

| Description | Manufacturer | Model No. | Certification | Supplied by |
|---|---|---|---|---|
| Adapter | XIAOMI | / | / | CQA |
| Wireless charge load | / | / | / | CQA |

2) Cable

| Cable No. | Description | Manufacturer | Cable Type/Length | Supplied by |
|---|---|---|---|---|
| / | / | / | / | / |

## 3.6 Test Location

Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

## 3.7 Test Facility

• **A2LA (Certificate No. 4742.01)**
Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

• **FCC Registration No.: 522263**
Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory has been registered 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.:522263

## 3.8 Equipment List

| Test Equipment | Manufacturer | Model No. | Instrument No. | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| Magnetic Amplitude and Gradient Probe System | Schmid & Partner Engineering AG | MAGPy-8H3D+E3D | 3096 | 2024/3/12 | 2025/3/12 |
| Magnetic Amplitude and Gradient Probe System | Schmid & Partner Engineering AG | MAGPy-DAS | 3093 | 2024/3/12 | 2025/3/12 |

## 3.9 Test Software

| Software name | Manufacturer | Model | Version |
|---|---|---|---|
| MAGPy V2.0 | Schmid & Partner Engineering AG | MAGPy V2.0 | V2.0 |

3.10

# 4 RF Exposure Evaluation

## 4.1 RF Exposure Compliance Requirement

### 4.1.1 Limits

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| 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 Exposures** | | | | |
| 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 |
| 300–1500 | ..... | ..... | f/300 | 6 |
| 1500–100,000 | ..... | ..... | 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 |
| 1500–100,000 | ..... | ..... | 1.0 | 30 |

Note 1: f = frequency in MHz ; *Plane-wave equivalent power density

Note 2: For the applicable limit, see FCC 1.1310, 680106 D01 RF Exposure Wireless Charging Apps v04

Note 3: Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

Note 4: The aggregate H-field strengths  20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit .

### 4.1.2 Test Procedure

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.

d.The EUT was measured according to the dictates of TCB Workshop "41-Part-18-&-Wireless-Power-Transfer - April 27,2022”

Equipment Approval Considerations item 5 b) of KDB 680106 D01 Wireless Power Transfer v04

| Requirement | Device |
|---|---|
| 1.Power transfer frequency is less than 1 MHz | Yes. The operating frequencies are.Operating Frequency: 115 kHz - 360 kHz |
| 2. Output power from each primary coil is less than or equal to 15 watts. | Yes. The maximum output power is:Wireless Output: 15W(Max) |
| 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 sametime. | Yes. EUT has two coils that can work simultaneously |
| 4. Client device is placed directly in contact with the transmitter. | Yes. The client device is placed directly in contact with the transmitter. |
| 5.Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion) | No, This EUT is mounted under a desk/table and the user's legs may be in direct contact with the device for long periods of time, so this device was evaluated as a portable WPT |
| 6. The aggregate H-field strengths anywhere at or beyond 20 cm surrounding the device, and 20cm 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. | Yes, The H-field measurements for each edge/top surface of the host/client pair at every 2cm, starting from as close as possible out to 20cm were also evaluated for portable usecondition. |

### 4.1.3 Test Result

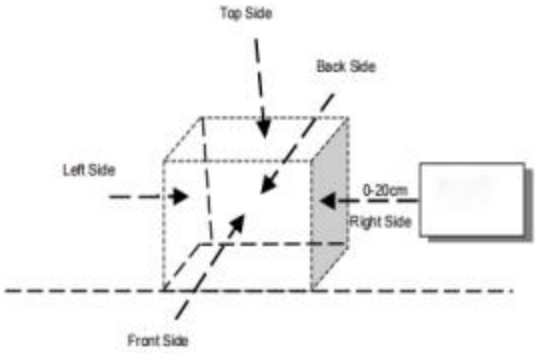
For portable exposure condition:

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 3 operating mode with client device (1 % battery status of client device) -test distance: 0cm

### 4.1.4 Test Setup




Note: 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

### 4.1.5 Test Results

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 3 operating mode with client device (1 % battery status of client device) -test distance: 0cm

Test Mode: Mode d

H-field strength test result:

test distance: 0cm

Measurement results directly tested using MAGPy.

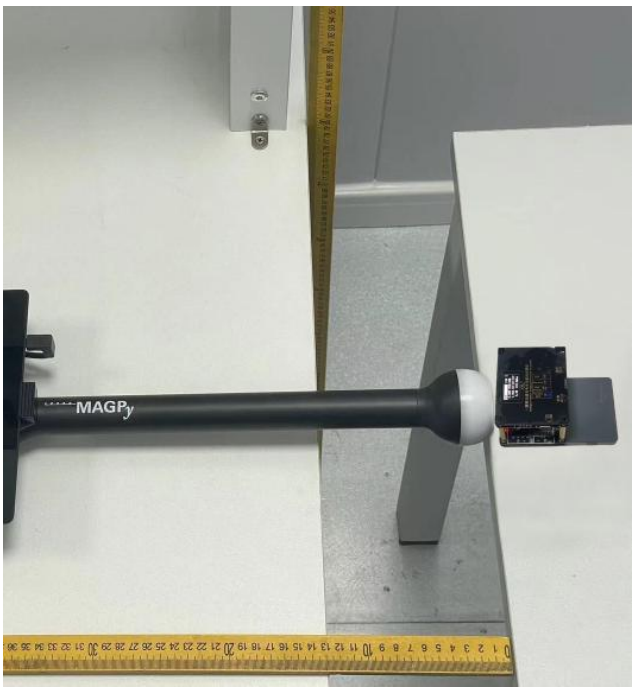
| Maximum permissible Exposure | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E -field(V/m) | H-field(A/m) |
| <1% | Top | 0 | 18.6 | 0.07 |
| <1% | Left | 0 | 14.2 | 0.10 |
| <1% | Right | 0 | 12.3 | 0.16 |
| <1% | Front | 0 | 40.1 | 0.16 |
| <1% | Back | 0 | 43.2 | 0.19 |
| <1% | Bottom | 0 | 56.4 | 0.21 |
| Limit | | | 307 | 0.815 |
| test result | | | PASS | PASS |

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

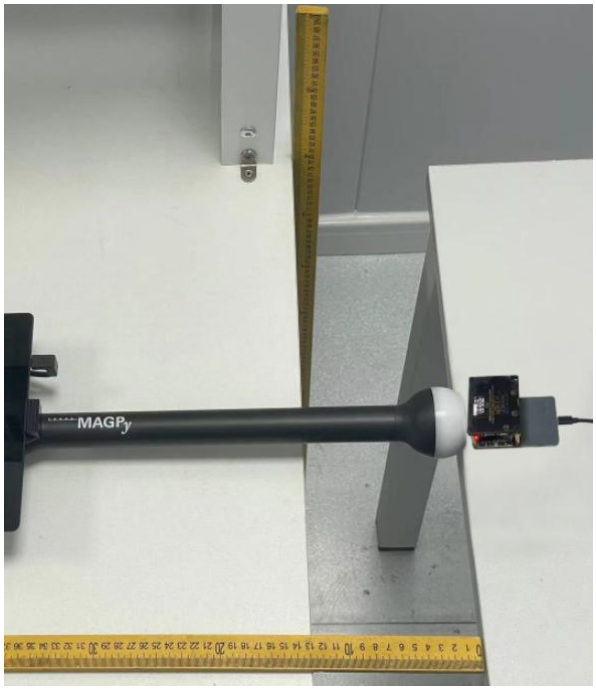
| Maximum permissible Exposure | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E -field(V/m) | H-field(A/m) |
| <1% | Top | 0 | 23.2 | 0.20 |
| <1% | Left | 0 | 17.1 | 0.14 |
| <1% | Right | 0 | 16.1 | 0.12 |
| <1% | Front | 0 | 51.2 | 0.31 |
| <1% | Back | 0 | 46.3 | 0.23 |
| <1% | Bottom | 0 | 51.4 | 0.46 |
| Limit | | | 307 | 0.815 |
| test result | | | PASS | PASS |

# APPENDIX A: PHOTOGRAPHS OF TEST SETUP

DC




AC

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