



RF Exposure Report

For

Applicant Name: ShenZhen Zhongyi Technology CO., Ltd.
Room 401, No.4 Road One, Shangxue Science and Technology
Address: City, Xinxue Community, Bantian Street, Longgang District,
Shenzhen, China
EUT Name: Storage wireless charger box
Brand Name: /
Model Number: M1036Q

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park,
Address: Tantou Community, Songgang Street, Bao'an District, Shenzhen,
China

Report Number: BTF230814R00602
Test Standards: 47 CFR Part 1 Subpart I Section 1.1310
FCC ID: 2A9Q9-M1036Q
Test Conclusion: Pass
Test Date: 2023-08-07 to 2023-08-25
Date of Issue: 2023-11-25

Prepared By:

Chris Liu

Date:

Chris Liu, Project Engineer
2023-11-25

Approved By:

Ryan.CJ

Date:

Ryan.CJ / EMC Manager
2023-11-25

Note: All the test results in this report only related to the testing samples. Which can be duplicated completely for the legal use with approval of applicant; it shall not be reproduced except in full without the written approval of BTF Testing Lab (Shenzhen) Co., Ltd., All the objections should be raised within thirty days from the date of issue. To validate the report, you can contact us.

| Revision History | | |
|------------------|---|-------------------|
| Version | Issue Date | Revisions Content |
| R_V0 | 2023-11-25 | Original |
| | | |
| <i>Note:</i> | <i>Once the revision has been made, then previous versions reports are invalid.</i> | |

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1. Introduction

1.1 Identification of Testing Laboratory

| | |
|---------------|---|
| Company Name: | BTF Testing Lab (Shenzhen) Co., Ltd. |
| Address: | F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China |
| Phone Number: | +86-0755-23146130 |
| Fax Number: | +86-0755-23146130 |

1.2 Identification of the Responsible Testing Location

| | |
|--------------------------|---|
| Test Location: | BTF Testing Lab (Shenzhen) Co., Ltd. |
| Address: | F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China |
| Description: | All measurement facilities used to collect the measurement data are located at F101,201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China |
| FCC Registration Number: | 518915 |
| Designation Number: | CN1330 |

1.3 Laboratory Condition

| | |
|----------------------------|--------------------|
| Ambient Temperature: | 20°C to 25°C |
| Ambient Relative Humidity: | 45% to 55% |
| Ambient Pressure: | 100 kPa to 102 kPa |

1.4 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2. Product Information

2.1 Application Information

| | |
|---------------|---|
| Company Name: | ShenZhen Zhongyi Technology CO., Ltd. |
| Address: | Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community, Bantian Street, Longgang District, Shenzhen, China |

2.2 Manufacturer Information

| | |
|---------------|---|
| Company Name: | ShenZhen Zhongyi Technology CO., Ltd. |
| Address: | Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community, Bantian Street, Longgang District, Shenzhen, China |

2.3 Factory Information

| | |
|---------------|---|
| Company Name: | ShenZhen Zhongyi Technology CO., Ltd. |
| Address: | Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community, Bantian Street, Longgang District, Shenzhen, China |

2.4 General Description of Equipment under Test (EUT)

| | |
|---|------------------------------|
| EUT Name | Storage wireless charger box |
| Under Test Model Name | M1036Q |
| Series Model Name | / |
| Description of Model name differentiation | N/A |
| Hardware Version | V1.0 |
| Software and Firmware Version | V1.0 |

2.5 Technical Information

| | |
|----------------------|--|
| Modulation Type: | ASK |
| Operation Frequency: | Wireless charging Output:110kHz-205kHz, |
| Ratings: | Type-c Input: DC 5V/2A, 9V/2A Wireless charging Output (Phone):5W, 7.5W, 10W, 15W |
| Antenna Type: | Coil ANT |

3. Test Requirement

KDB 680106 D01 RF Exposure Wireless Charging App v03

According to the item 5.2 of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

- a) Power transfer frequency is less than 1 MHz.
Yes, the device operate in the frequency range from 110-205KHz
- b) Output power from each primary coil is less than or equal to 15 watts.
YES, the maximum output power of the primary coil is 15W.
- c) 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
Yes, the transfer system includes only single primary coils.
- d) Client device is placed directly in contact with the transmitter.
Yes, client device is placed directly in contact with the transmitter.
- e) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
Yes, the EUT is a Wireless Charging mobile.
- f) 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.
Yes, the EUT field strength levels are 50% X MPE limit.

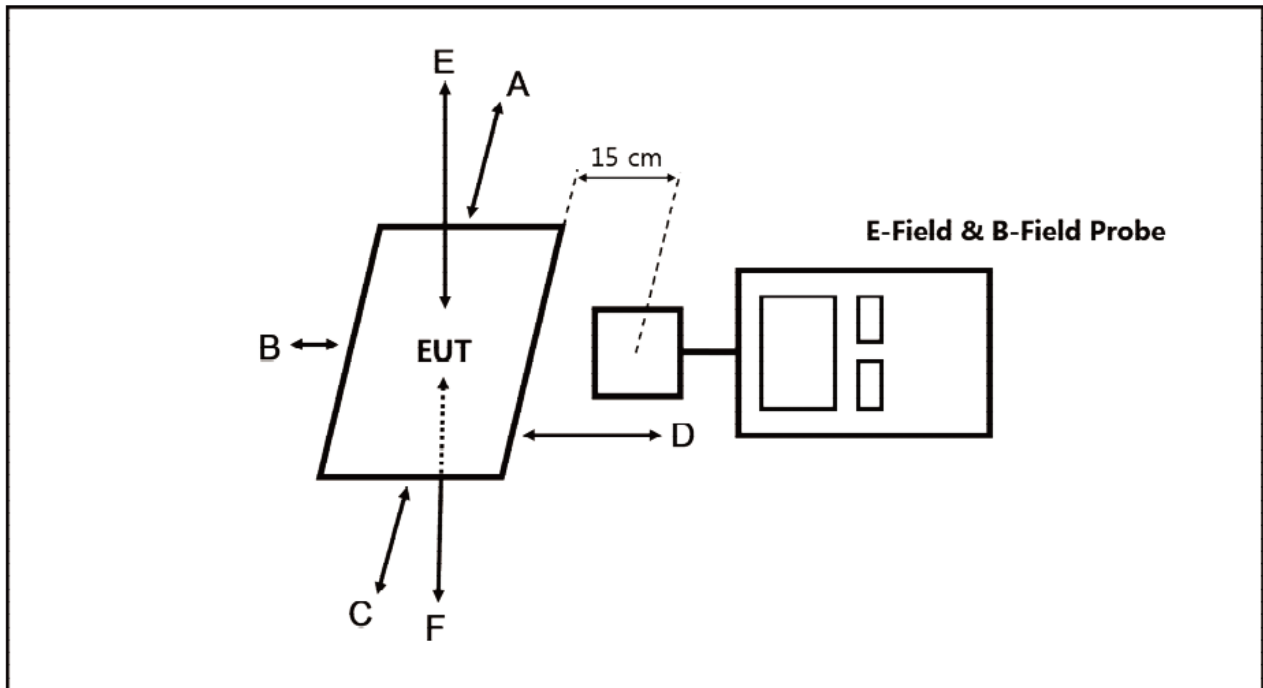
TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| 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 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 |
| 300-1,500 | | | f/300 | 6 |
| 1,500-100,000 | | | 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 |
| 300-1,500 | | | f/1500 | 30 |
| 1,500-100,000 | | | 1.0 | 30 |

f = frequency in MHz * = Plane-wave equivalent power density

Test Equipment List

| Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. (mm-dd-yy) | Next Cal. (mm-dd-yy) |
|--------------------------------------|--------------|-----------|------------|----------------------|----------------------|
| Electric and Magnetic Field Analyzer | Narda | EHP-200A | 180ZX11001 | 2023.3.29 | 2024.3.28 |

Test Setup

Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15cm measured from the center of the probe(s) to the edge of the device.

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (15cm) 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, F) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

3.1 Test Modes

| No. | Description | Recorded |
|-----|------------------------|-------------------------------------|
| TM1 | Wireless charging 5W | <input type="checkbox"/> |
| TM2 | Wireless charging 7.5W | <input type="checkbox"/> |
| TM3 | Wireless charging 10W | <input type="checkbox"/> |
| TM4 | Wireless charging 15W | <input checked="" type="checkbox"/> |

Note: All test modes were pre-tested, but we only recorded the worst case in this report.

3.2 Test Auxiliary Equipment

| Description | Manufacturer | Model | Serial No. | Length | Description | Use |
|--------------|--------------|-----------|------------|--------|--------------------------------|-------------------------------------|
| Adapter | PISEN | TS-C137 | / | / | / | <input checked="" type="checkbox"/> |
| Mobile Phone | Huawei | TEL-ANOOa | / | / | / | <input checked="" type="checkbox"/> |
| USB Cable | / | / | / | 100cm | Unshielded/ Without Ferrite | <input checked="" type="checkbox"/> |

3.3 Assessment Result

Passed

Not Applicable

< 10% Battery

| Magnetic Field Emissions | | | |
|--------------------------|---------------------|-----------------|------------|
| Test Position | Measure Value (A/m) | 50% Limits(A/m) | Limit(A/m) |
| | Max. Value | | |
| Top | 0.084 | 0.815 | 1.63 |
| Bottom | 0.031 | 0.815 | 1.63 |
| Front | 0.087 | 0.815 | 1.63 |
| Rear | 0.062 | 0.815 | 1.63 |
| Left | 0.081 | 0.815 | 1.63 |
| Right | 0.102 | 0.815 | 1.63 |

50% Battery

| Magnetic Field Emissions | | | |
|--------------------------|---------------------|-----------------|------------|
| Test Position | Measure Value (A/m) | 50% Limits(A/m) | Limit(A/m) |
| | Max. Value | | |
| Top | 0.085 | 0.815 | 1.63 |
| Bottom | 0.034 | 0.815 | 1.63 |
| Front | 0.091 | 0.815 | 1.63 |
| Rear | 0.066 | 0.815 | 1.63 |
| Left | 0.084 | 0.815 | 1.63 |
| Right | 0.104 | 0.815 | 1.63 |

> 90% Battery

| Magnetic Field Emissions | | | |
|--------------------------|---------------------|-----------------|------------|
| Test Position | Measure Value (A/m) | 50% Limits(A/m) | Limit(A/m) |
| | Max. Value | | |
| Top | 0.078 | 0.815 | 1.63 |
| Bottom | 0.030 | 0.815 | 1.63 |
| Front | 0.084 | 0.815 | 1.63 |
| Rear | 0.063 | 0.815 | 1.63 |
| Left | 0.075 | 0.815 | 1.63 |
| Right | 0.092 | 0.815 | 1.63 |

According to October 2018 TCB workshop. Only H-field required.

3.4 Test Set-up Photo





Test Report Number: BTF230814R00602



BTF Testing Lab (Shenzhen) Co., Ltd.

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--END OF REPORT--