



# MAXIMUM PERMISSIBLE EXPOSURE EVALUATION REPORT

**Applicant:** Foryou Multimedia Electronics Co., Ltd.

**Address:** No.1, North Shangxia Road, Dongjiang, Hi-tech Industry Park, Huizhou, Guangdong, China

**Product Name:** WIRELESS CHARGER

**FCC ID:** PUZ-WAB13W014B

**47 CFR §1.1310, 47 CFR §2.1091**

**Standard(s):** 447498 D01 General RF Exposure Guidance v06  
680106 D01 Wireless Power Transfer v04

**Report Number:** 2502S56509E-RF-00D

**Report Date:** 2025/5/19

The above device has been tested and found compliant with the requirement of the relative standards by Bay Area Compliance Laboratories Corp. (Dongguan).

**Reviewed By:** Pedro Yun

**Approved By:** Gavin Xu

Title: Project Engineer

Title: RF Supervisor

**Bay Area Compliance Laboratories Corp. (Dongguan)**  
No.12, Pulong East 1<sup>st</sup> Road, Tangxia Town, Dongguan, Guangdong, China

Tel: +86-769-86858888

Fax: +86-769-86858891

[www.baclcorp.com.cn](http://www.baclcorp.com.cn)

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**DOCUMENT REVISION HISTORY**

| Revision Number | Report Number      | Description of Revision | Date of Revision |
|-----------------|--------------------|-------------------------|------------------|
| 1.0             | 2502S56509E-RF-00D | Original Report         | 2025/5/19        |

## 1. GENERAL INFORMATION

### 1.1 General Description Of Equipment under Test

|                             |                  |
|-----------------------------|------------------|
| <b>EUT Name:</b>            | WIRELESS CHARGER |
| <b>EUT Model:</b>           | WAB13W014B       |
| <b>Rated Input Voltage:</b> | DC 8~16V         |
| <b>Serial Number:</b>       | 325X-1           |
| <b>EUT Received Date:</b>   | 2025/4/29        |
| <b>EUT Received Status:</b> | Good             |

## 2. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### 2.1 Applicable Standard

According to 1.1310, 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for Maximum Permissible Exposure (MPE)

| (B) Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                          |
|---|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| Frequency Range (MHz)                                   | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Averaging Time (minutes) |
| 0.3–1.34  | 614                           | 1.63                          | *(100)                              | 30                       |
| 1.34–30   | 824/f                         | 2.19/f                        | *(180/f <sup>2</sup> )              | 30                       |
| 30–300  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300–1500  | /                             | /                             | f/1500                              | 30                       |
| 1500–100,000  | /                             | /                             | 1.0                                 | 30                       |

f = frequency in MHz;

\* = Plane-wave equivalent power density;

According with KDB 680106 D01 Wireless Power Transfer v04 clause 3.2

The RF exposure limits, as set forth in § 1.1310, do not cover the frequency range below 100 kHz for Specific Absorption Rate (SAR) and below 300 kHz for Maximum Permitted Exposure (MPE). In addition, present limitations of RF exposure evaluation systems prevent an accurate evaluation of SAR below 4 MHz. For these reasons, a specific MPE-based RF Exposure compliance procedure for devices operating in the aforementioned low-frequency ranges has been set in place. This procedure is applicable to Equipment Authorization of all RF devices, thus including, but not limited to, Part 18 and WPT devices.

Accordingly, for § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively. For § 2.1093-Portable devices below 4 MHz and down to 100 kHz, the MPE limits in § 1.1310 (with the 300 kHz limit applicable all the way down to 100 kHz) can be used for the purpose of equipment authorization in lieu of SAR evaluations.

### 2.2 Calculation For Test Exclusion:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

### 2.3 MPE Test Procedure

- 1) Perform H-field and E-field measurements for each all sides of the EUT at 20cm, along all the principal axes defined with respect to the orientation of the transmitting element(e.g., coil or antenna).
- 2) The highest emission level was recorded and compared with limit.
- 3) The EUT was measured according to KDB 680106 D01 Wireless Power Transfer v04.

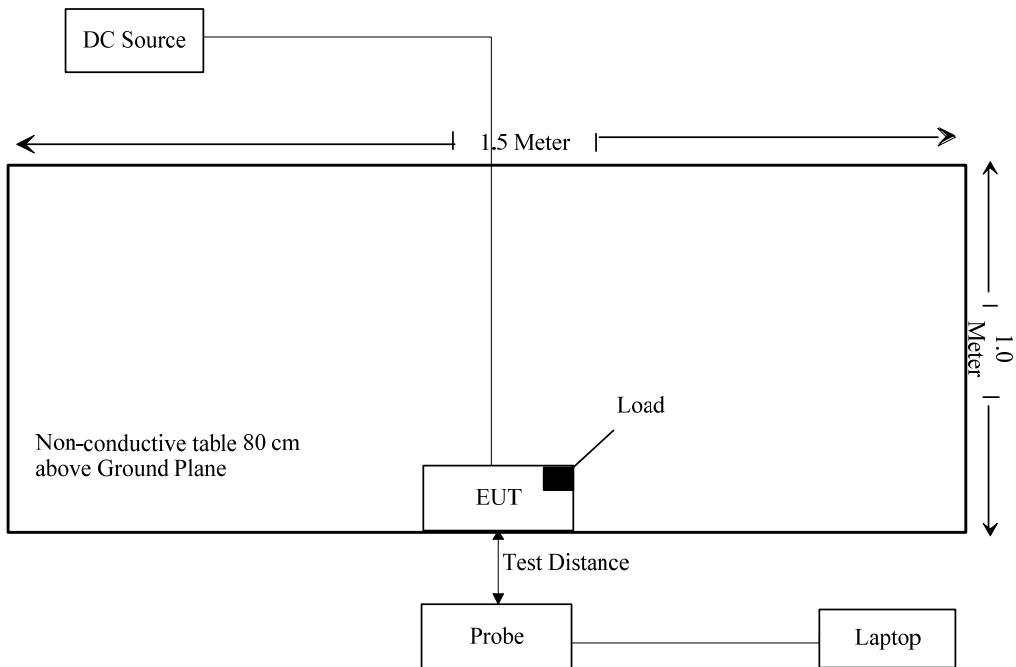
### 2.4 Support Equipment List and Details

| Manufacturer | Description | Model        | Serial Number |
|--------------|-------------|--------------|---------------|
| DK           | DC Source   | DK-60V50A    | T-08-EE140    |
| Unknown      | Load        | RX24-25W 40Ω | RX24-25W 40Ω  |

### 2.5 Support Cable List and Details

| Cable Description | Shielding Type | Ferrite Core | Length (m) | From Port | To  |
|-------------------|----------------|--------------|------------|-----------|-----|
| DC Power Cable    | NO             | Yes          | 2          | DC Source | EUT |

### 2.6 Block Diagram of Test Setup



## 2.7 Test Data:

### Test Information:

|                    |              |                     |              |
|--------------------|--------------|---------------------|--------------|
| <b>Serial No.:</b> | 325X-1       | <b>Test Date:</b>   | 2025/5/10    |
| <b>Test Site:</b>  | Chamber 10m  | <b>Test Mode:</b>   | Transmitting |
| <b>Tester:</b>     | Leesin Xiang | <b>Test Result:</b> | Pass         |

### Environmental Conditions:

|                              |      |                                  |    |                               |       |
|------------------------------|------|----------------------------------|----|-------------------------------|-------|
| <b>Temperature:</b><br>(°C): | 25.6 | <b>Relative Humidity:</b><br>(%) | 52 | <b>ATM Pressure:</b><br>(kPa) | 101.0 |
|------------------------------|------|----------------------------------|----|-------------------------------|-------|

### Test Equipment List and Details:

| Manufacturer | Description                                | Model     | Serial Number | Calibration Date | Calibration Due Date |
|--------------|--|-----------|---------------|------------------|----------------------|
| Narda        | Electric and Magnetic Field Probe-Analyzer | EHP-200AC | 180ZX10204    | 2023/9/1         | 2026/8/31            |

\* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

### Test Data:

#### For WPT:

##### Note:

1. The test used DC 12V voltage.
2. Test under the maximum power.
3. There are three Coil, per pretest, Middle Coil was the worst.

#### H-Field Strength

| Frequency (kHz) | Position A (A/m) | Position B (A/m) | Position C (A/m) | Position D (A/m) | Position E (A/m) | Limit (A/m) |
|-----------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 127.8           | 0.320            | 0.5086           | 0.2643           | 0.2694           | 0.5706           | 1.63        |

Note: Test with 20cm distance from the center of the probe(s) to the edge of the device.

#### E-Field Strength

| Frequency (kHz) | Position A (V/m) | Position B (V/m) | Position C (V/m) | Position D (V/m) | Position E (V/m) | Limit (V/m) |
|-----------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 127.8           | 0.4312           | 0.4552           | 0.6464           | 0.5855           | 1.1282           | 614         |

Note: Test with 20cm distance from the center of the probe(s) to the edge of the device.

**For NFC(13.56MHz):**

| Operation Modes | Frequency (MHz) | Antenna Gain |           | Conducted output power including Tune-up Tolerance |       | Evaluation Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | MPE Limit (mW/cm <sup>2</sup> ) |
|-----------------|-----------------|--------------|-----------|--|-------|--------------------------|-------------------------------------|---------------------------------|
|                 |                 | (dBi)        | (numeric) | (dBm)  | (mW)  |                          |                                     |                                 |
| NFC(13.56MHz)   | 13.56           | /            | /         | -20.43   | 0.009 | 20.00                    | <<0.0001                            | 0.98                            |

Note: NFC field strength is 74.77dB $\mu$ V/m @ 3m = -20.43 dBm(0.009mW) EIRP. That equal to antenna gain is 0dBi and used the EIRP value as conducted power.

Note:

The Conducted output power including Tune-up Tolerance provided by manufacturer.

For Simultaneous transmission, the result of NFC too low to calculated the Simultaneous transmission result.

**Result:** The device meet FCC MPE at 20 cm distance.

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## **EXHIBIT A - EUT PHOTOGRAPHS**

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Please refer to the attachment 2502S56509E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2502S56509E-RF-INP EUT INTERNAL PHOTOGRAPHS

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## **EXHIBIT B - TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2502S56509E-RF-00D-TSP test setup photographs.

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