# RF EXPOSURE Test Report

**Product:** Magnetic Wireless Charger

**Trade Mark:** THREEKEY

**Model Number:** TK-CW305

**FCC ID:** 2BLPO-TK-CW305

**Prepared for**

Shenzhen Suiqi Innovation Technology Co.,Ltd.

The 37th Floor, the east tower building of Galaxy twin towers, COCO PARK WORLD, NO.8 Yaxing road, Bantian street, Longgang district, Shenzhen

**Prepared by**

Shenzhen HongBiao Certification& Testing Co., Ltd

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# TEST RESULT CERTIFICATION

| | | |
|---|---|---|
| **Applicant's Name** | : | Shenzhen Suiqi Innovation Technology Co.,Ltd. |
| Address | : | The 37th Floor, the east tower building of Galaxy twin towers, COCO PARK WORLD, NO.8 Yaxing road, Bantian street, Longgang district, Shenzhen |
| **Manufacturer's Name** | : | Shenzhen Suiqi Innovation Technology Co.,Ltd. |
| Address | : | The 37th Floor, the east tower building of Galaxy twin towers, COCO PARK WORLD, NO.8 Yaxing road, Bantian street, Longgang district, Shenzhen |

**Product description**

| | | |
|---|---|---|
| Product name | : | Magnetic Wireless Charger |
| Model Number | : | TK-CW305 |
| **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 .....: June 23, 2025~ July 21, 2025

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 )**

## Revision History

| Revised No. | Date of Issue | Description |
|---|---|---|
| 01 | July 21, 2025 | Original |
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# 1 General Description

## 1.1 Description of EUT

| | |
|---|---|
| Product name: | Magnetic Wireless Charger |
| Model name: | TK-CW305 |
| Series Model: | N/A |
| Different of series model: | N/A |
| Operation frequency: | 112kHz-205kHz, 360kHz |
| Operational mode: | Wireless charging |
| Modulation type: | ASK |
| Antenna type: | Coil Antenna |
| Input: | DC 15V/2.33A |
| Battery: | N/A |
| Power supply: | Input: DC 15V/2.33A<br>Wireless Output: 25W Max |
| Adapter information: | N/A |

## 1.2 Test Mode

| Pretest Test Mode | Description of Mode |
|---|---|
| 1 | AC/DC adapter + Wireless Output: 5W |
| 2 | AC/DC adapter + Wireless Output: 7.5W |
| 3 | AC/DC adapter + Wireless Output: 10W |
| 4 | AC/DC adapter + Wireless Output: 15W |
| 5 | AC/DC adapter + Wireless Output: 25W |

## 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 |
|---|---|---|---|
| Adapter | CD289 | 35810 | Ugreen Group Limited |
| Phone | iPhone 16 pro Max | LF322004M4 | Apple Inc. |
| | | | |

# 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: | 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 | ± 1.06 dB | |
| H-field | ± 0.7 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 | 2025-05-10 | 2026-05-09 |

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

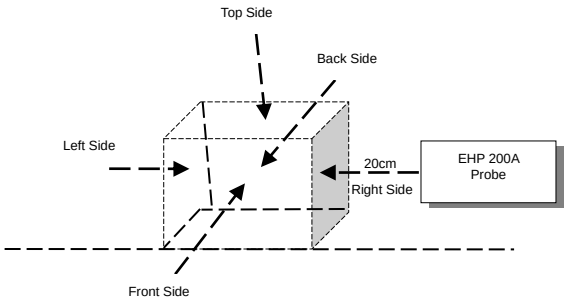
### 4.1.1. Limit

| 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

E and H-field measurements should be made with the center of the probe at a distance of 20 cm surrounding the device and 20 cm above the top surface of the primary/client pair.
These measurements should be repeated for three different client battery levels, 1%, 50%, and 99%.
Record the test results.

### 4.1.3. Test Setup




### 4.1.4. Test Result

Test condition: Mode 3 operating mode with client device (1 %, 50%, 99% battery status of client device)

| Maximum permissible Exposure(112kHz-205kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <1% | Top | 20 | 4.5657 | 0.0928 |
| <1% | Left | 20 | 2.6192 | 0.0538 |
| <1% | Right | 20 | 3.7418 | 0.0486 |
| <1% | Front | 20 | 3.2478 | 0.0501 |
| <1% | Back | 20 | 1.9846 | 0.0562 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 0.74% | 5.69% |

| Maximum permissible Exposure(112kHz-205kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <50% | Top | 20 | 4.5652 | 0.0923 |
| <50% | Left | 20 | 2.6195 | 0.0532 |
| <50% | Right | 20 | 3.7411 | 0.0481 |
| <50% | Front | 20 | 3.2470 | 0.0495 |
| <50% | Back | 20 | 1.9841 | 0.0557 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 0.74% | 5.66% |

| Maximum permissible Exposure(112kHz-205kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <99% | Top | 20 | 4.5646 | 0.0914 |
| <99% | Left | 20 | 2.6183 | 0.0527 |
| <99% | Right | 20 | 3.7407 | 0.0476 |
| <99% | Front | 20 | 3.2464 | 0.0483 |
| <99% | Back | 20 | 1.9835 | 0.0550 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 0.74% | 5.61% |

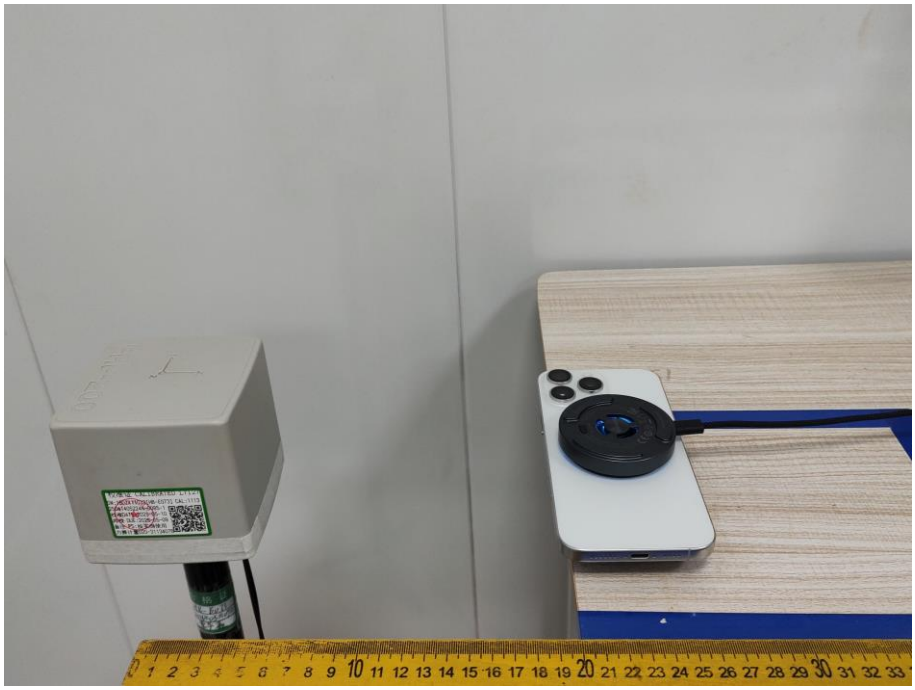
Test condition: Mode 5 operating mode with client device (1 %, 50%, 99% battery status of client device)

| Maximum permissible Exposure(360kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <1% | Top | 20 | 3.8803 | 0.0575 |
| <1% | Left | 20 | 1.8163 | 0.0454 |
| <1% | Right | 20 | 2.4852 | 0.0470 |
| <1% | Front | 20 | 2.1094 | 0.0470 |
| <1% | Back | 20 | 1.7068 | 0.0470 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 0.63% | 3.53% |

| Maximum permissible Exposure(360kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <50% | Top | 20 | 3.8797 | 0.0567 |
| <50% | Left | 20 | 1.8156 | 0.0446 |
| <50% | Right | 20 | 2.4845 | 0.0463 |
| <50% | Front | 20 | 2.1087 | 0.0462 |
| <50% | Back | 20 | 1.7060 | 0.0463 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 0.63% | 3.48% |

| Maximum permissible Exposure(360kHz) | | | | |
|---|---|---|---|---|
| Battery levels | Test sides | Test distance(cm) | E –field(V/m) | H–field(A/m) |
| <99% | Top | 20 | 3.8790 | 0.0560 |
| <99% | Left | 20 | 1.8149 | 0.0439 |
| <99% | Right | 20 | 2.4837 | 0.0457 |
| <99% | Front | 20 | 2.1080 | 0.0455 |
| <99% | Back | 20 | 1.7052 | 0.0456 |
| Limit | | | 614 | 1.63 |
| Margin Limit (%) | | | 0.63% | 3.44% |

# 5 Photographs of the Test Setup

| MPE |
| --- |
|  |

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