

# TEST REPORT

Report No.: BCTC2410589363-2E

Applicant: Hoco technology development (SHENZHEN)  
co.,Ltd

Product Name: Wireless Charging

Test Model: CW61

Tested Date: 2024-10-21 to 2024-11-11

Issued Date: 2024-11-11

**Shenzhen BCTC Testing Co., Ltd.**



**FCC ID: 2AX2T-WXC**

Product Name: Wireless Charging

Trademark: **hoco.**

Model/Type Reference: CW61  
HW23, HW28, HW29, HW32, HW33, HW34, HW35, HW36, HW37, CW70, CQ3,  
CQ12, CQ13, CQ16, CQ17, CQ18, CQ19, CQ20, HB53

Prepared For: Hoco technology development (SHENZHEN) co.,Ltd

Address: Rm 408, Block A, Weidonglong Business Building, 2125 Meilong Road, Tsinghua  
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Manufacturer: Hoco technology development (SHENZHEN) co.,Ltd

Address: Rm 408, Block A, Weidonglong Business Building, 2125 Meilong Road, Tsinghua  
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Prepared By: Shenzhen BCTC Testing Co., Ltd.

Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road,  
Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Sample Received Date: 2024-10-21

Sample Tested Date: 2024-10-21 to 2024-11-11

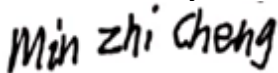
Issue Date: 2024-11-11

Report No.: BCTC2410589363-2E

Test Standards: FCC CFR 47 part1, 1.1307(b), 1.1310

Test Results: PASS

Tested by:



Shanshan. Zhang / Project Handler

Approved by:



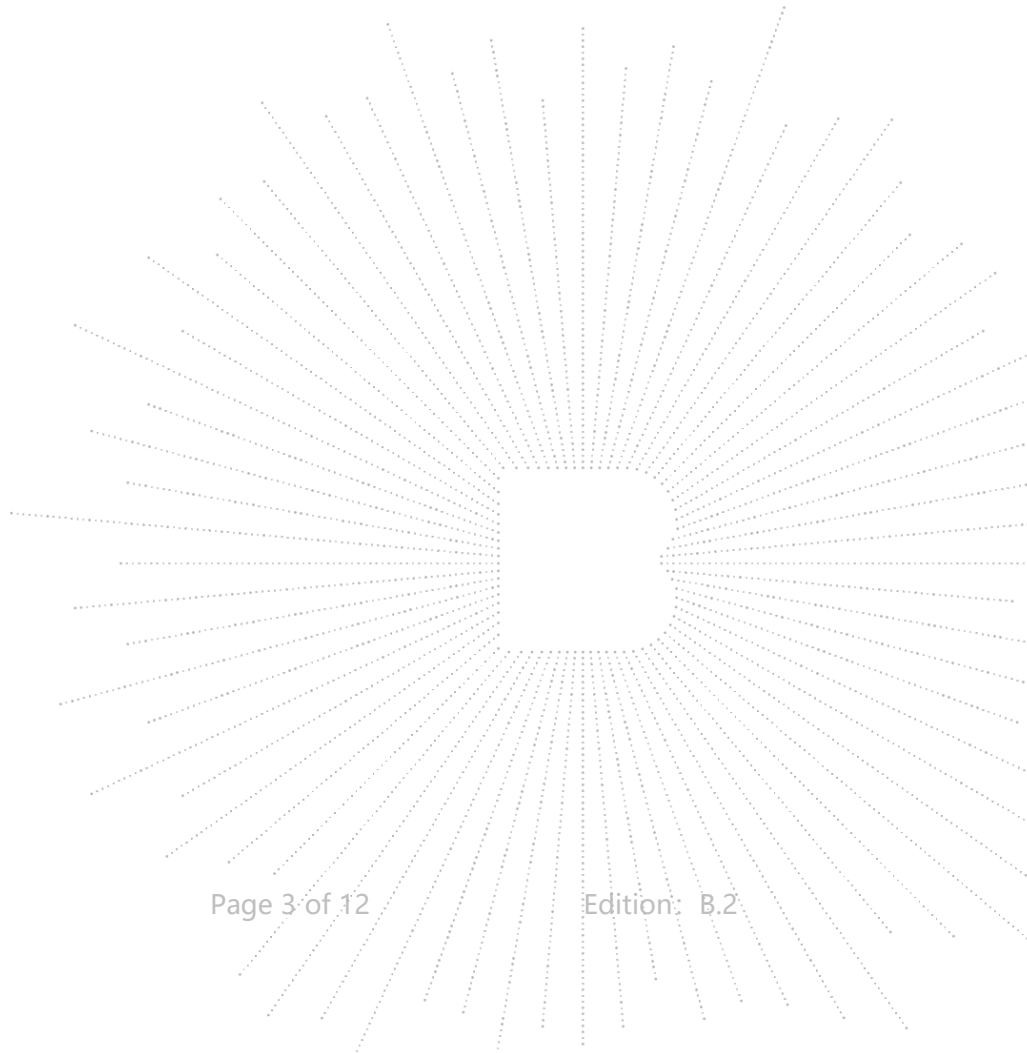
Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

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(Note: N/A Means Not Applicable)



**1. Version**

| Report No.        | Issue Date | Description | Approved |
|-------------------|------------|-------------|----------|
| BCTC2410589363-2E | 2024-11-11 | Original    | Valid    |
|                   |            |             |          |

## 2. Product Information

### 2.1 Product Information

Model/Type Reference: CW61  
HW23, HW28, HW29, HW32, HW33, HW34, HW35, HW36, HW37, CW70, CQ3,  
CQ12, CQ13, CQ16, CQ17, CQ18, CQ19, CQ20, HB53

Model Differences: All the model are the same circuit and RF module, except model names and appearance color.

Hardware Version: N/A

Software Version: N/A

Operation Frequency: 115kHz-205kHz

Type of Modulation: ASK

Antenna installation: loop coil antenna

Ratings: Input: DC 5V2A, 9V2A  
Wireless Output: 5W, 7.5W, 10W, 15W

### 2.2 Support Equipment

| No. | Device Type       | Brand        | Model | Series No. | Note      |
|-----|-------------------|--------------|-------|------------|-----------|
| E-1 | Wireless Charging | <b>hoco.</b> | CW61  | N/A        | EUT       |
| E-2 | Adapter           | UGREEN       | CD122 | N/A        | Auxiliary |
| E-3 | Dummy load        | N/A          | DL01  | N/A        | Auxiliary |

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

### 2.3 Test Mode

|             |               |
|-------------|---------------|
| Test Mode 1 | Wireless 5W   |
| Test Mode 2 | Wireless 7.5W |
| Test Mode 3 | Wireless 10W  |
| Test Mode 4 | Wireless 15W  |

Note:

All test mode were tested and passed, only shows the worst case mode which were recorded in this report.

### 3. Test Facility And Test Instrument Used

#### 3.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

ISED CAB identifier: CN0017

#### 3.2 Test Instrument Used

| EMF Test                                 |              |         |                |              |              |
|------------------------------------------|--------------|---------|----------------|--------------|--------------|
| Equipment                                | Manufacturer | Model#  | Serial#        | Last Cal.    | Next Cal.    |
| Electromagnet<br>-ic radiation<br>tester | Wavecontrol  | SMP160  | 19SN0980       | May 25, 2024 | May 24, 2025 |
| Electromagnet<br>-ic field probe         | Wavecontrol  | WP400-3 | 20WP120082     | May 16, 2024 | May 15, 2025 |
| Software                                 | Frad         | EZ-EMC  | EMC-CON<br>3A1 | \            | \            |

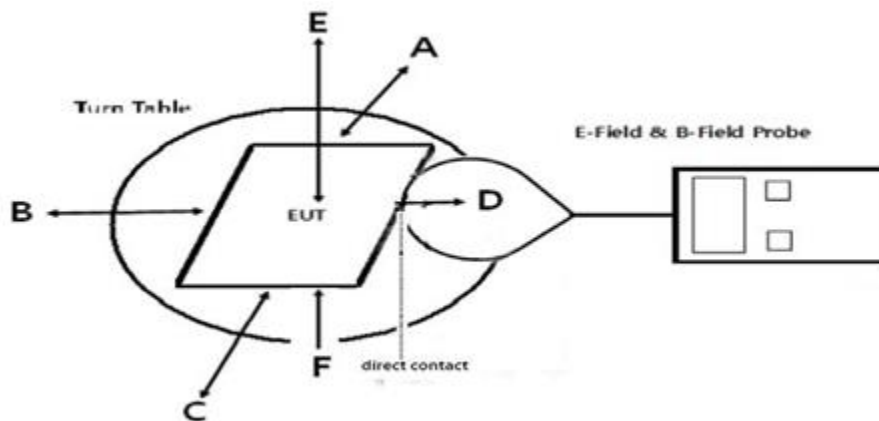
## 4. Method Of Measurement

### 4.1 Applicable Standard

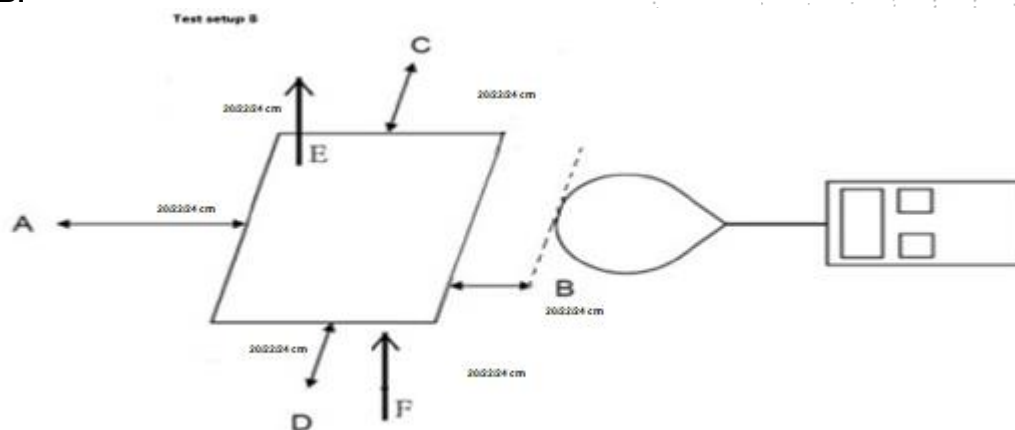
According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. According to §1.1310 and §2.1091 RF exposure is calculated. According KDB680106 D01v04: RF Exposure Wireless Charging Apps v04.

### 4.2 Block Diagram Of Test Setup

A:



B:



#### 4.3 Limit

| Limits for Occupational / Controlled Exposure |                                   |                                   |                                          |                                                                  |
|-----------------------------------------------|-----------------------------------|-----------------------------------|------------------------------------------|------------------------------------------------------------------|
| Frequency Range (MHz)                         | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes) |
| 0.3-3.0                                       | 614                               | 1.63                              | (100)*                                   | 6                                                                |
| 3.0-30                                        | 1842 / f                          | 4.89 / f                          | (900 / f)*                               | 6                                                                |
| 30-300                                        | 61.4                              | 0.163                             | 1.0                                      | 6                                                                |
| 300-1500                                      |                                   |                                   | F/300                                    | 6                                                                |
| 1500-100,000                                  |                                   |                                   | 5                                        | 6                                                                |

| Limits for General Population / Uncontrolled Exposure |                                   |                                   |                                          |                                                                  |
|-------------------------------------------------------|-----------------------------------|-----------------------------------|------------------------------------------|------------------------------------------------------------------|
| Frequency Range (MHz)                                 | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes) |
| 0.3-1.34                                              | 614                               | 1.63                              | (100)*                                   | 30                                                               |
| 1.34-30                                               | 824/f                             | 2.19/f                            | (180 / f)*                               | 30                                                               |
| 30-300                                                | 27.5                              | 0.073                             | 0.2                                      | 30                                                               |
| 300-1500                                              |                                   |                                   | F/1500                                   | 30                                                               |
| 1500-100,000                                          |                                   |                                   | 1                                        | 30                                                               |

#### 4.4 Test procedure

- a)The RF exposure test was performed in anechoic chamber.
- b)The measurement probe was placed at 0 cm surrounding the device for test setup A; and the measurement Probe was placed at 20/22/24 cm for the test setup B.
- c)The highest emission level was recorded and compared with limit as soon as measurement of each
- d)The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- d)The EUT was measured according to the dictates of KDB680106 D01v04.
- f)Remark:The EUT's test position A, B, C, D , E and F is valid for the E and H field measurements.



#### 4.5 Equipment Approval Considerations

The EUT does comply with item 5(b) of KDB680106 D01v04

1) Power transfer frequency is less than 1MHz

Yes, the device operate in the frequency range from 115-205kHz

2) 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.

3) A client device providing the maximum permitted load is placed in physical contact with the transmitter.

Yes, client device is placed directly in contact with the transmitter.

4) Only § 2.1091-Mobile exposure conditions apply

Yes, the EUT is Mobile condition assessment.

5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1.

Yes, Conform to

6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time.

Yes, confirm.

#### 4.6 E and H field Strength

We measured the H-Field Strength of 20cm, 22cm and 24cm, and recorded the test data of the worst 20cm.

Mobile: Test Mode 4 (the worst mode)

H-Field Strength at 20 cm surrounding the EUT and 20cm above the top surface of the EUT

| Frequency Range (MHz) | Test Position A(uT) | Test Position B(uT) | Test Position C(uT) | Test Position D(uT) | Test Position E(uT) | Test Position Top(uT) |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|
| 0.115-0.205           | 0.1328              | 0.1495              | 0.1457              | 0.1303              | 0.1345              | 0.1302                |

| Frequency Range (MHz) | Test Position A(A/m) | Test Position B(A/m) | Test Position C(A/m) | Test Position D(A/m) | Test Position E(A/m) | Test Position Top(A/m) | 50% Limits Test (A/m) | Limits Test (A/m) |
|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|-----------------------|-------------------|
| 0.115-0.205           | 0.1063               | 0.1196               | 0.1166               | 0.1043               | 0.1076               | 0.1042                 | 0.815                 | 1.63              |

Note:  $A/m = uT \div 1.25$

## 5. Photographs Of Test Set-Up

Test Mode 1-4



**STATEMENT**

1. The equipment lists are traceable to the national reference standards.
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without the "special seal for inspection and testing".
4. The test report is invalid without the signature of the approver.
5. The test process and test result is only related to the Unit Under Test.
6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
7. The quality system of our laboratory is in accordance with ISO/IEC17025.
8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

**Address:**

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