

# TEST REPORT

|                                |  |                      |   |
|--------------------------------|--|----------------------|---|
| Report No.                     | CHTEW2106020701  | Report verification: |  |
| Project No.                    | SHT2104017704EW  |                      |   |
| FCC ID                         | 2A2GZWXC-01  |                      |   |
| Applicant's name               | Dongguan SIMZO Electronic Technology Co., Ltd                                      |                      |   |
| Address                        | No.6,Zhangzhou Road,Daojiao Town,Dongguan City,Guangdong Province,523187,P.R.China |                      |   |
| Test item description          | 3 in 1 wireless charger  |                      |   |
| Trade Mark                     | -  |                      |   |
| Model/Type reference           | WXC-01   |                      |   |
| Listed Model(s)                | -  |                      |   |
| Standard                       | FCC CFR 47 Part 1.1307<br>FCC CFR 47 Part 1.1310                                   |                      |   |
| Date of receipt of test sample | May. 14, 2021  |                      |   |
| Date of testing                | May. 15, 2021- Jul. 07, 2021   |                      |   |
| Date of issue                  | Jul. 09, 2021  |                      |   |
| Result                         | Pass   |                      |   |

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Testing Laboratory Name : Shenzhen Huatongwei International Inspection Co., Ltd.

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The test report merely corresponds to the test sample.

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## 1. TEST STANDARDS AND REPORT VERSION

### 1.1. Test Standards

The tests were performed according to following standards:

Environmental evaluation and exposure limit according to FCC CFR 47 Part 1.1307 (c) and (d), 1.1310.  
According KDB680106 D01 RF Exposure Wireless Charging Apps v03

### 1.2. Report version information

| Revision No. | Date of issue | Description |
|--------------|---------------|-------------|
| N/A          | 2021-07-09    | Original    |
|              |               |             |
|              |               |             |
|              |               |             |
|              |               |             |

## 2. **SUMMARY**

### 2.1. Client Information

|               |  |
|---------------|--|
| Applicant:    | Dongguan SIMZO Electronic Technology Co., Ltd                                      |
| Address:      | No.6,Zhangzhou Road,Daojiao Town,Dongguan City,Guangdong Province,523187,P.R.China |
| Manufacturer: | Dongguan SIMZO Electronic Technology Co., Ltd                                      |
| Address:      | No.6,Zhangzhou Road,Daojiao Town,Dongguan City,Guangdong Province,523187,P.R.China |

### 2.2. Product Description

|                      |                         |
|----------------------|-------------------------|
| Name of EUT:         | 3 in 1 wireless charger |
| Trade Mark:          | -                       |
| Model No.:           | WXC-01                  |
| Listed Model(s)      | -                       |
| Power supply:        | DC 9.0V                 |
| Adapter information: | -                       |
| Operation Frequency: | 110kHz~300kHz           |
| Category:            | Consumer devices        |

### 2.3. EUT configuration

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

| Whether support unit is used?       |                   |            |           |        |            |
|-------------------------------------|-------------------|------------|-----------|--------|------------|
| <input checked="" type="checkbox"/> |                   |            |           |        |            |
| Item                                | Equipement        | Trade Name | Model No. | FCC ID | Power cord |
| 1                                   | Almighty receiver | -          | -         | -      | -          |
| 2                                   | -                 | -          | -         | -      | -          |

### 2.4. Modifications

No modifications were implemented to meet testing criteria.

### 3. **TEST ENVIRONMENT**

#### 3.1. Testing Laboratory Information

|                      |   |                      |
|----------------------|---|----------------------|
| Laboratory Name      | Shenzhen Huatongwei International Inspection Co., Ltd.  |                      |
| Laboratory Location  | 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China  |                      |
| Connect information: | Tel: 86-755-26715499<br>E-mail: <a href="mailto:cs@szhtw.com.cn">cs@szhtw.com.cn</a><br><a href="http://www.szhtw.com.cn">http://www.szhtw.com.cn</a> |                      |
| Qualifications       | Type  | Accreditation Number |
|                      | FCC   | 762235               |

#### 3.2. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

|                    |             |
|--------------------|-------------|
| Temperature:       | 15~35°C     |
| Relative Humidity: | 30~60 %     |
| Air Pressure:      | 950~1050mba |

#### 3.3. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. Shenzhen Huatongwei International Inspection Co., Ltd quality system acc to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

| Test    | Measurement Uncertainty | Notes |
|---------|-------------------------|-------|
| E-Field | 1.0 dB                  | (1)   |
| H-field | 1.0 dB                  | (1)   |

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2.0$

### 3.4. Equipments Used during the Test

| <b>● RF EXPOSURE</b> |                       |              |           |            |                           |                           |
|----------------------|-----------------------|--------------|-----------|------------|---------------------------|---------------------------|
| Used                 | Test Equipment        | Manufacturer | Model No. | Serial No. | Last Cal. Date (YY-MM-DD) | Next Cal. Date (YY-MM-DD) |
| ●                    | Exposure Level Tester | Narda        | ELT-400   | F-0010     | 2020/10/12                | 2021/10/11                |

## 4. RF EXPOSURE

### 4.1. Measuring Standard

KDB 680106 D01 RF Exposure Wireless Charging Apps v03

### 4.2. Requirements

According to the item 5(b) 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 110-300KHz

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.

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).

EUT application and mobile exposure condition only.

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.

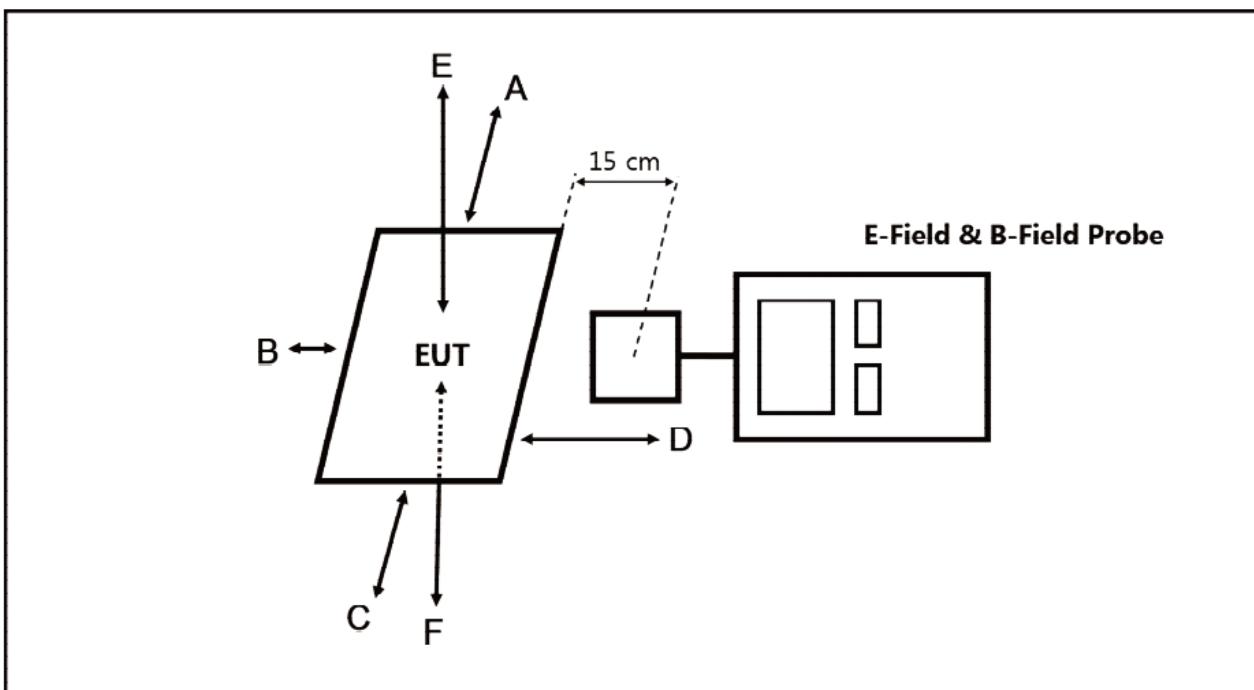
Yes, the EUT field strength levels are 50% X MPE limit.

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 <sup>2</sup> ) | Averaging time (minutes) |
|--|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| <b>(A) Limits for Occupational/Controlled Exposure</b>         |                               |                               |                                     |                          |
| 0.3-3.0  | 614                           | 1.63                          | *100                                | 6                        |
| 3.0-30   | 1842/f                        | 4.89/f                        | *900/f <sup>2</sup>                 | 6                        |
| 30-300   | 61.4                          | 0.163                         | 1.0                                 | 6                        |
| 300-1,500  |                               |                               | f/300                               | 6                        |
| 1,500-100,000  |                               |                               | 5                                   | 6                        |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                               |                               |                                     |                          |
| 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                       |
| 300-1,500  |                               |                               | f/1500                              | 30                       |
| 1,500-100,000  |                               |                               | 1.0                                 | 30                       |

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

### 4.3. Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the top is 20cm, other sides are 15cm from the edge of EUT to center of the probe.

### 4.4. Test Procedure

- 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) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

Remark:

The EUT's test position A, B, C, D, E is valid for the E and H field measurements

## 4.5. Test Result

### E-Field(15W full load)

| Test Side | E-Field<br>Measured(V/m) | MPE Limit(V/m) | Result |
|-----------|--------------------------|----------------|--------|
| Top       | 2.24                     | 614            | Pass   |
| Front     | 2.14                     | 614            | Pass   |
| Rear      | 2.36                     | 614            | Pass   |
| Left      | 2.18                     | 614            | Pass   |
| Right     | 2.08                     | 614            | Pass   |

### H-field(15W full load)

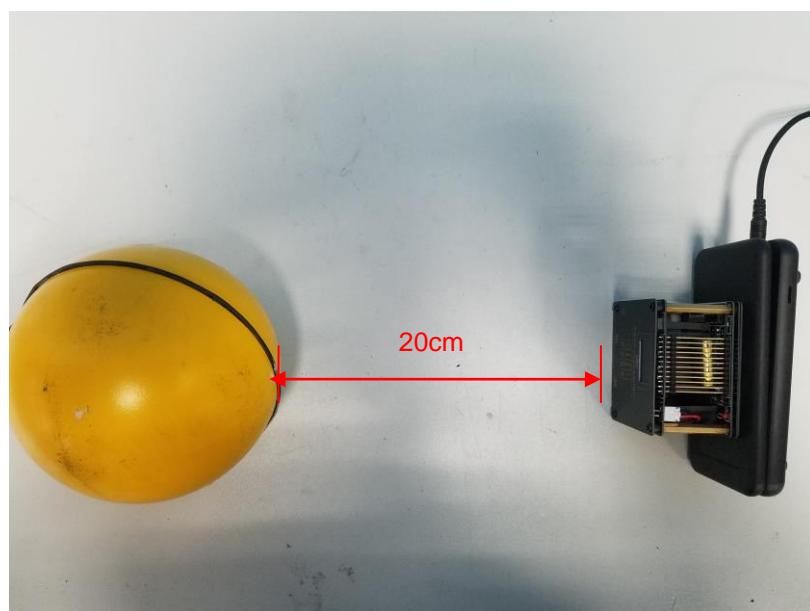
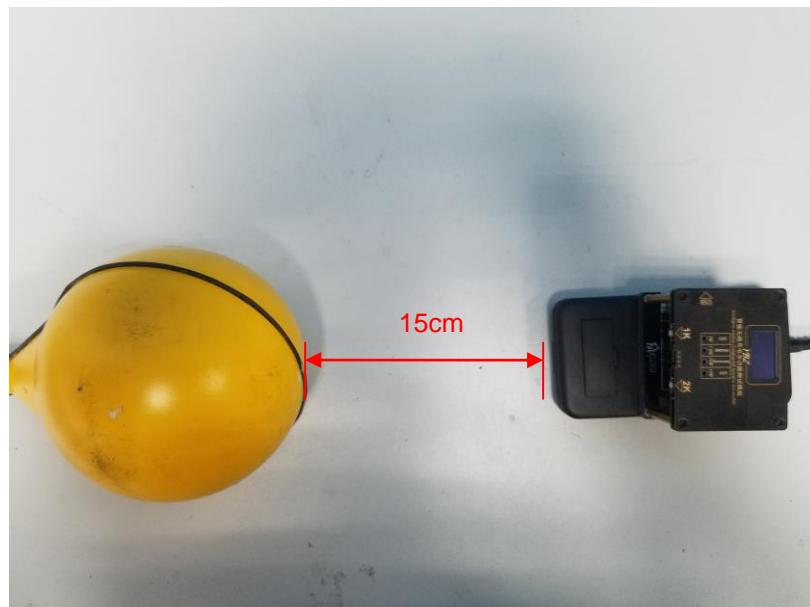
#### Magnetic Field Emissions

| Test Channel | H-field<br>( $\mu$ T) | Measure Value<br>(A/m) | 50% of the MPE<br>limit (A/m) | Limit(A/m) | Result |
|--------------|-----------------------|------------------------|-------------------------------|------------|--------|
| Top          | 0.045                 | 0.036                  | 0.815                         | 1.63       | Pass   |
| Front        | 0.035                 | 0.028                  | 0.815                         | 1.63       | Pass   |
| Rear         | 0.049                 | 0.0392                 | 0.815                         | 1.63       | Pass   |
| Left         | 0.065                 | 0.052                  | 0.815                         | 1.63       | Pass   |
| Right        | 0.074                 | 0.0592                 | 0.815                         | 1.63       | Pass   |

#### Remark:

1. H-field strength(A/m)=H-field( $\mu$ T)/1.25
2. According to October 2018 TCB workshop. Only H-field required.
3. 15W,5W,2.5W output are Tested, but only the worst data(15W full load) is recorded on the report.

## 5. TEST SETUP PHOTOS OF THE EUT



## 6. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Please refer report No. CHTEW21060207

-----End of Report-----