



## **RF EXPOSURE REPORT**

### **FOR**

**Fast Wireless Charger**

**Model: WP-5210**

**Trade Mark: Gigastone**

**Issued to**

**Gigastone Corporation.**  
**12F, No. 480, Rueiguang Road Neihu District, Taipei 114, Taiwan, R.O.C.**

**Issued by**

**WH Technology Corp.**

|                                                      |                             |                                                                                           |
|------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------|
| <b>Open Site</b>                                     |                             | <b>No.120, Ln. 5, Hudong St., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)</b>       |
| <b>EMC Test Site</b>                                 | <b>Xizhi Office and Lab</b> | <b>7F., No.262, Sec. 3, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)</b> |
| <b>Tel.: +886-2-7729-7707 Fax: +886-2- 8648-1311</b> |                             |                                                                                           |

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**TEST SETUP PHOTOS**



## 1. GENERAL INFORMATION

**Applicant** : Gigastone Corporation.

**Address** : 12F, No. 480, Rueiguang Road Neihu Distrist, Taipei 114, Taiwan, R.O.C.

**Manufacturer** : Gigastone Corporation.

**Address** : 12F, No. 480, Rueiguang Road Neihu Distrist, Taipei 114, Taiwan, R.O.C.

**EUT** : Fast Wireless Charger

**Model Name** : WP-5210

**Model Differences** : N/A

**Standard** : FCC Part 1 (Section 1.1307(b), 1.1310)

Receipt Date: 12/27/2019

Final Test Date: 01/15/2020

**Tested by:**

Bing Chang/ Engineer

**Reviewed by:**

Bell Wei / Manager

Designation Number: TW2954



## **1.1 TEST MODE:**

115kHz

## **1.2 DESCRIPTION OF THE TESTED SAMPLES**

|                   |                                                                   |
|-------------------|-------------------------------------------------------------------|
| EUT Name          | : Fast Wireless Charger                                           |
| Model Number      | :: WP-5210                                                        |
| FCC ID Number     | PLE-WP-5210                                                       |
| Receipt Date      | : 12/27/2019                                                      |
| Input Voltage     | : I/P: 5Vdc, 2A; 9Vdc, 2A<br>O/P: 5Vdc, 1.5A; 9Vdc, 1.12A 10W Max |
| Operate Frequency | : 110KHz-205KHz                                                   |
| Antenna Type      | : Coil Antenna                                                    |



## 2. LIST OF TEST AND MEASUREMENT INSTRUMENTS

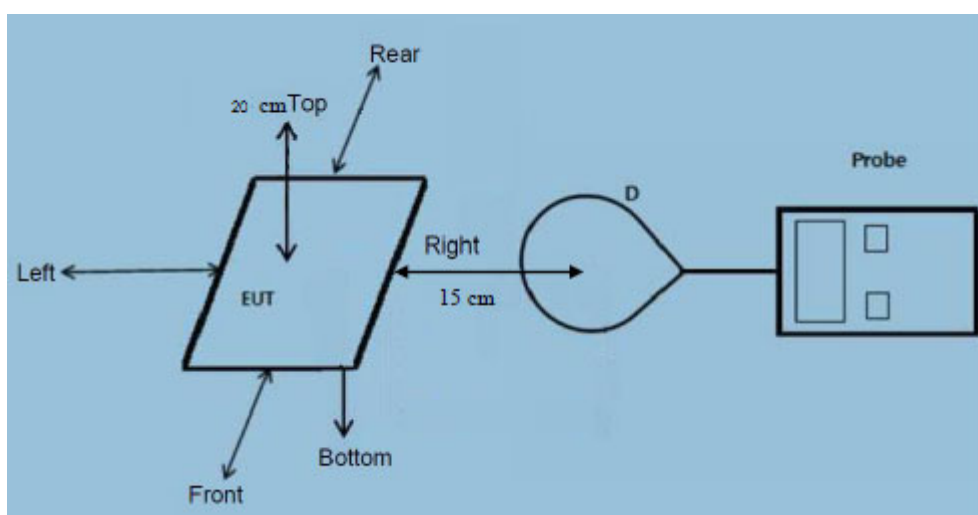
| Equipment     | Model   | Manufacture                 | Last Cal.     | Next Cal.     |
|---------------|---------|-----------------------------|---------------|---------------|
| EMF Meter     | ELT-400 | NARDA                       | Oct. 22, 2019 | Oct. 21, 2020 |
| Probe E-Field | EF0691  | Narda Safety Test Solutions | Jul. 13, 2019 | Jul. 12, 2020 |

## 3. METHOD OF MEASUREMENT

### 3.1 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 §2.1093 RF exposure is calculated. According KDB680106 D01 RF Exposure Wireless Charging Apps v03.

### 3.2 TEST SETUP



### 3.3 TEST PROCEDURE:

- For devices designed for typical desktop applications, such as wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance 20 cm from the top, and 15 cm from other directions (Left, Right, Front, Rear, Bottom). E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device.



### 3.4 EQUIPMENT APPROVAL CONSIDERATIONS:

The EUT does comply with item 5 of KDB 680106 D01v03

(1) Power transfer frequency is less than 1 MHz.

(Conform)

(2) Output power from each primary coil is less than or equal to 15 watts.

(Conform)

(3) 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.

(Conform)

(4) Client device is placed directly in contact with the transmitter.

(Conform)

(5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

(Intended for desk top use)

(6) 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.

## 4. TEST DATA

| E-Filed Strength |                     |                    |                        |                        |                      |                   |        |
|------------------|---------------------|--------------------|------------------------|------------------------|----------------------|-------------------|--------|
| Charging         | Probe from EUT Side | Test Distance (cm) | Calculated Value (A/m) | Calculated Value (V/m) | 50% Limits Test(V/m) | Limits Test (V/m) | Result |
| < 1% Battery     | Front               | 15                 | 0.111                  | 0.463                  | 307                  | 614               | PASS   |
| < 1% Battery     | Rear                | 15                 | 0.118                  | 0.413                  |                      |                   | PASS   |
| < 1% Battery     | Left                | 15                 | 0.122                  | 0.421                  |                      |                   | PASS   |
| < 1% Battery     | Right               | 15                 | 0.131                  | 0.412                  |                      |                   | PASS   |
| < 1% Battery     | Bottom              | 15                 | 0.134                  | 0.243                  |                      |                   | PASS   |
| < 1% Battery     | Top                 | 20                 | 0.105                  | 0.430                  |                      |                   | PASS   |
| H-Filed Strength |                     |                    |                        |                        |                      |                   |        |
| Charging         | Probe from EUT Side | Test Distance (cm) | Measured Value(uT)     | Calculated Value (A/m) | 50% Limits Test(A/m) | Limits Test (A/m) | Result |
| < 1% Battery     | Front               | 15                 | 0.142                  | 0.117                  | 0.815                | 1.63              | PASS   |
| < 1% Battery     | Rear                | 15                 | 0.145                  | 0.112                  |                      |                   | PASS   |
| < 1% Battery     | Left                | 15                 | 0.150                  | 0.125                  |                      |                   | PASS   |
| < 1% Battery     | Right               | 15                 | 0.141                  | 0.111                  |                      |                   | PASS   |
| < 1% Battery     | Bottom              | 15                 | 0.162                  | 0.132                  |                      |                   | PASS   |
| < 1% Battery     | Top                 | 20                 | 0.153                  | 0.133                  |                      |                   | PASS   |

Note: The aggregate H-filed strengths at 15cm surrounding the device and 20cm above the top surface.  
 $A/m = uT/1.25$



| E-Filed Strength |                     |                    |                        |                        |                      |                   |        |
|------------------|---------------------|--------------------|------------------------|------------------------|----------------------|-------------------|--------|
| Charging         | Probe from EUT Side | Test Distance (cm) | Calculated Value (A/m) | Calculated Value (V/m) | 50% Limits Test(V/m) | Limits Test (V/m) | Result |
| 50% Battery      | Front               | 15                 | 0.113                  | 0.441                  | 307                  | 614               | PASS   |
| 50% Battery      | Rear                | 15                 | 0.122                  | 0.416                  |                      |                   | PASS   |
| 50% Battery      | Left                | 15                 | 0.111                  | 0.422                  |                      |                   | PASS   |
| 50% Battery      | Right               | 15                 | 0.125                  | 0.402                  |                      |                   | PASS   |
| 50% Battery      | Bottom              | 15                 | 0.118                  | 0.401                  |                      |                   | PASS   |
| 50% Battery      | Top                 | 20                 | 0.120                  | 0.421                  |                      |                   | PASS   |
| H-Filed Strength |                     |                    |                        |                        |                      |                   |        |
| Charging         | Probe from EUT Side | Test Distance (cm) | Measured Value(uT)     | Calculated Value (A/m) | 50% Limits Test(A/m) | Limits Test (A/m) | Result |
| 50% Battery      | Front               | 15                 | 0.123                  | 0.112                  | 0.815                | 1.63              | PASS   |
| 50% Battery      | Rear                | 15                 | 0.150                  | 0.120                  |                      |                   | PASS   |
| 50% Battery      | Left                | 15                 | 0.140                  | 0.121                  |                      |                   | PASS   |
| 50% Battery      | Right               | 15                 | 0.142                  | 0.110                  |                      |                   | PASS   |
| 50% Battery      | Bottom              | 15                 | 0.132                  | 0.112                  |                      |                   | PASS   |
| 50% Battery      | Top                 | 20                 | 0.142                  | 0.140                  |                      |                   | PASS   |

Note: The aggregate H-filed strengths at 15cm surrounding the device and 20cm above the top surface.  
A/m=uT/1.25

| E-Filed Strength |                     |                    |                        |                        |                      |                   |        |
|------------------|---------------------|--------------------|------------------------|------------------------|----------------------|-------------------|--------|
| Charging         | Probe from EUT Side | Test Distance (cm) | Calculated Value (A/m) | Calculated Value (V/m) | 50% Limits Test(V/m) | Limits Test (V/m) | Result |
| >99% Battery     | Front               | 15                 | 0.130                  | 0.445                  | 307                  | 614               | PASS   |
| >99% Battery     | Rear                | 15                 | 0.120                  | 0.425                  |                      |                   | PASS   |
| >99% Battery     | Left                | 15                 | 0.110                  | 0.423                  |                      |                   | PASS   |
| >99% Battery     | Right               | 15                 | 0.115                  | 0.418                  |                      |                   | PASS   |
| >99% Battery     | Bottom              | 15                 | 0.117                  | 0.425                  |                      |                   | PASS   |
| >99% Battery     | Top                 | 20                 | 0.112                  | 0.453                  |                      |                   | PASS   |
| H-Filed Strength |                     |                    |                        |                        |                      |                   |        |
| Charging         | Probe from EUT Side | Test Distance (cm) | Measured Value(uT)     | Calculated Value (A/m) | 50% Limits Test(A/m) | Limits Test (A/m) | Result |
| >99% Battery     | Front               | 15                 | 0.147                  | 0.115                  | 0.815                | 1.63              | PASS   |
| >99% Battery     | Rear                | 15                 | 0.125                  | 0.110                  |                      |                   | PASS   |
| >99% Battery     | Left                | 15                 | 0.135                  | 0.121                  |                      |                   | PASS   |
| >99% Battery     | Right               | 15                 | 0.140                  | 0.105                  |                      |                   | PASS   |
| >99% Battery     | Bottom              | 15                 | 0.131                  | 0.120                  |                      |                   | PASS   |
| >99% Battery     | Top                 | 20                 | 0.125                  | 0.105                  |                      |                   | PASS   |

Note: The aggregate H-filed strengths at 15cm surrounding the device and 20cm above the top surface.  
A/m=uT/1.25



## Test Setup Photos

