# RF Exposure REPORT

**FCC ID: 2AQT6-38568**

**Product: CHARGING PAD**

**Model No.: 38568**

**Additional Model: N/A**

**Trade Mark: N/A**

**Report No.: TCT180928E030**

**Issued Date: Oct. 11, 2018**

**Issued for:**

**Gartner Studios LLC**

**220 East Myrtle Street, Stillwater, MN 55082, United States**

**Issued By:**

**Shenzhen Tongce Testing Lab.**

**1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China**

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# 1. Test Certification

| | |
|---|---|
| **Product:** | CHARGING PAD |
| **Model No.:** | 38568 |
| **Additional Model No.:** | N/A |
| **Trade Mark:** | **N/A** |
| **Applicant:** | Gartner Studios LLC |
| **Address:** | 220 East Myrtle Street, Stillwater, MN 55082, United States |
| **Manufacturer:** | Gartner Studios LLC |
| **Address:** | 220 East Myrtle Street, Stillwater, MN 55082, United States |
| **Date of Test:** | Sep. 29, 2018 - Oct. 10, 2018 |
| **Applicable Standards:** | KDB 680106 D01 RF Exposure Wireless Charging App v03 |

*The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.*

| | | | |
|---|---|---|---|
| ***Tested By:*** | Brews Xu | ***Date:*** | ***Oct. 10, 2018*** |
| | ***Brews Xu*** | | |
| ***Reviewed By:*** | Beryl Zhao | ***Date:*** | ***Oct. 11, 2018*** |
| | ***Beryl Zhao*** | | |
| ***Approved By:*** | Tomsin | ***Date:*** | ***Oct. 11, 2018*** |
| | ***Tomsin*** | | |



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## 2. EUT Description

| | |
|---|---|
| **Product:** | CHARGING PAD |
| **Model No.:** | 38568 |
| **Additional Model No.:** | N/A |
| **Trade Mark:** | **N/A** |
| **Operation Frequency:** | 125.2-168.4KHz |
| **Modulation Technology:** | Load modulation |
| **Antenna Type:** | Coil antenna |
| **Power Supply:** | DC 5V, 2A / 9V, 1.7A via adapter |



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# 3. Facilities and Accreditations

## 3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

  Shenzhen Tongce Testing Lab

  The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

  The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

## 3.2. Location

Shenzhen Tongce Testing Lab

Address: 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China

TEL: +86-755-27673339

# 4. Technical Requirements Specification

## 4.1. Requirements

According to the item 5.2 of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

1. Power transfer frequency is less that 1 MHz
2. Output power from each primary coil is less than or equal to 15 watts
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
4. Client device is inserted in or placed directly in contact with the transmitter
5. Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
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.

**Limits For Maximum Permissible Exposure (MPE)**

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density ($mW/cm^2$) | Averaging time (minutes) |
|---|---|---|---|---|
| **(A) Limits for Occupational/Controlled Exposures** | | | | |
| 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 |
| 300-1500 | / | / | f/300 | 6 |
| 1500-100,000 | / | / | 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 |
| 1500-100,000 | / | / | 1.0 | 30 |

F=frequency in MHz
*=Plane-wave equivalent power density
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).



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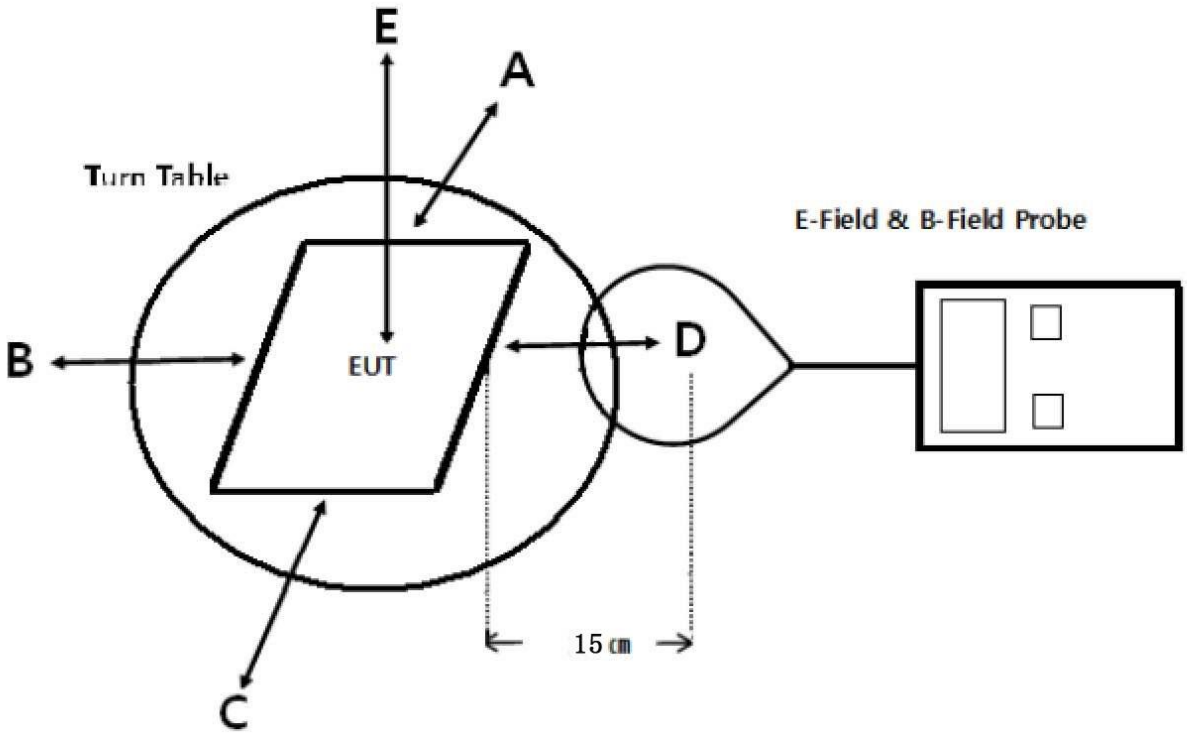
## 4.2. Test Setup




Note: Measurements should be made from all sides and the top of the primary/client pair, with the 10cm measured from the center of the probe(s) to the edge of the device.

## 4.3. Test Procedure

1. The RF exposure test was performed in anechoic chamber.
2. The measurement probe was placed at test distance 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 and E is valid for the E and H field measurements.

## 4.4. Test Equipment List

| Equipment | Manufacturer | Model No. | Calibration Due |
|---|---|---|---|
| Magnetic field meter | NARDA | ELT-400 | Aug. 27, 2019 |

## 4.5. Test Result

**E-Filed Strength from the edges surrounding the EUT (V/m)**

| Frequency Range (KHz) | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | Limits Test (V/m) |
|---|---|---|---|---|---|---|
| 125.2-168.4 | 1.41 | 1.62 | 1.30 | 1.43 | 1.56 | 614 |

**H-Filed Strength from the edges surrounding the EUT (A/m)**

| Frequency Range (KHz) | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | Limits Test (A/m) |
|---|---|---|---|---|---|---|
| 125.2-168.4 | 0.186 | 0.188 | 0.189 | 0.186 | 0.187 | 1.63 |

## 4.6. Test Set-up Photo

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



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