

## RF EXPOSURE REPORT

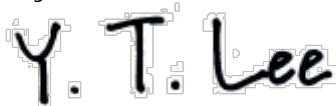
According to : FCC 47CFR part 1 subpart I and part 2 subpart J

**KDB Inquiry : Tracking Number 597533**

Test Report No. : CTK-2017-00487  
Date of Issue : March 21, 2017  
FCC ID : 2ALH5-PRESTO-A300FT  
Model/Type No. : RT-A300FT  
Kind of Product : Wireless Charging Pad  
Applicant : RT Tech Co., Ltd.  
Applicant Address : 1104, 271, Digital-ro, Guro-gu, Seoul  
Manufacturer : RT Tech Co., Ltd.  
Manufacturer Address : 1104, 271, Digital-ro, Guro-gu, Seoul  
Contact Person : Winfred Shin (Director)  
Telephone : +82-2-830-8660  
Received Date : March 14, 2017  
Test period : Start : March 20, 2017 End : March 21, 2017  
Test Results :  In Compliance  Not in Compliance

The test results presented in this report relate only to the object tested.

Tested by



Young-taek Lee  
Test Engineer  
Date: March 21, 2017

Reviewed by



Young-Joon, Park  
Technical Manager  
Date: March 21, 2017



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## REPORT REVISION HISTORY

| Date           | Revision                | Page No |
|----------------|-------------------------|---------|
| March 21, 2017 | Issued (CTK-2017-00487) | All     |
|                |                         |         |
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## TABLE OF CONTENTS

|   |    |
|---|----|
| REPORT REVISION HISTORY .....                                   | 2  |
| 1.0 General Product Description .....                           | 4  |
| 1.1 Model Differences .....                                     | 4  |
| 1.2 Device Modifications .....                                  | 4  |
| 1.3 Peripheral Devices .....                                    | 4  |
| 1.4 EUT Operating Modes .....                                   | 4  |
| 1.5 Calibration Details of Equipment Used for Measurement ..... | 5  |
| 1.6 Test Facility .....   | 5  |
| 1.7 Laboratory Accreditations and Listings .....                | 5  |
| 2.0 Summary of tests .....                                      | 6  |
| 2.1 Test Setup .....  | 7  |
| 2.2 Radio frequency radiation exposure limits .....             | 8  |
| 2.3 Test Results .....  | 9  |
| APPENDIX A – Test Equipment Used For Tests .....                | 10 |
| APPENDIX B – Test Setup Photos .....                            | 11 |



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## 1.0 General Product Description

|                      |                       |
|----------------------|-----------------------|
| Type of equipment    | Wireless Charging Pad |
| Equipment model name | RT-A300FT             |
| Frequency Range      | 6.78 MHz              |
| Power Source         | Input : DC 36 V       |

### 1.1 Model Differences

Not applicable

### 1.2 Device Modifications

The following modifications were necessary for compliance:

Not applicable

### 1.3 Peripheral Devices

| Device        | Manufacturer                 | Model No.   | Serial No. |
|---------------|------------------------------|-------------|------------|
| AC/DC Adapter | HON-KWANG I.T.E POWER SUPPLY | HK-X145-A36 | -          |
| TEST Jig      | RT Tech Co., Ltd.            | -           | -          |

### 1.4 EUT Operating Modes

Equipment under test was operated during the measurement under the following conditions:

maximum power transfer condition



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## 1.5 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less. All test equipment calibrations are traceable to the Korea Research Institute of Standards and Science (KRISS), therefore, all test data recorded in this report is traceable to KRISS.

## 1.6 Test Facility

The measurement facility is located at (Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea.

## 1.7 Laboratory Accreditations and Listings

| Country | Agency | Scope of Accreditation   | Registration Number                | Logo  |
|---------|--------|--|------------------------------------|---|
| USA     | FCC    | FCC Part 15 & 18<br>EMI (Electromagnetic Interference / Emission)                                | 805871                             |   |
| JAPAN   | VCCI   | VCCI V-3<br>EMI (Electromagnetic Interference / Emission)  | C-986<br>T-1843<br>R-3627<br>G-387 |  |
| KOREA   | MSIP   | EMI (Electromagnetic Interference / Emission)<br>EMS (Electromagnetic Susceptibility / Immunity) | KR0025                             |  |



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## 2.0 Summary of tests

| FCC Part Section(s) | Parameter                                 | Status (note 1) |
|---------------------|---|-----------------|
| 1.1307(b), 1.1310   | Radio frequency radiation exposure limits | Complies        |

## 2.1 Test Setup

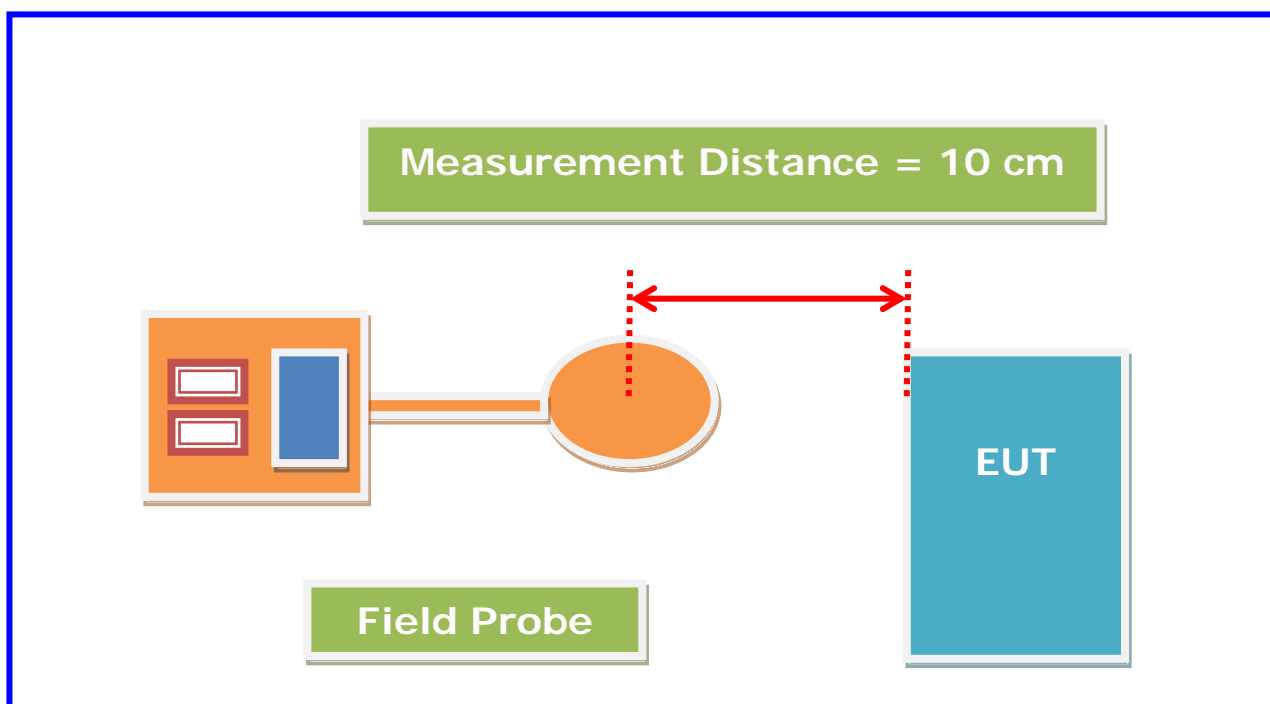
### Test Location

Anechoic Chamber

### Measurement distance information

Measurement distance = 10 cm

From EUT edge to the center of probe.



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



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## 2.2 Radio frequency radiation exposure limits

§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

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 Exposures</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                        |
| 300–1500 .....   | .....                         | .....                         | f/300                               | 6                        |
| 1500–100,000 .....   | .....                         | .....                         | 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                       |
| 300–1500 .....   | .....                         | .....                         | f/1500                              | 30                       |
| 1500–100,000 .....   | .....                         | .....                         | 1.0                                 | 30                       |

f = frequency in MHz

\* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.





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## 2.3 Test Results

|                 |                       |           |           |
|-----------------|-----------------------|-----------|-----------|
| EUT             | Wireless Charging Pad | Model     | RT-A300FT |
| Frequency Range | 6.78 MHz              | Test mode | TX        |

The requirements are:

Complies

### Test Data (E-Field)

| EUT Side            | Top   | Bottom | Left  | Right | Z-Axis(above) |
|---------------------|-------|--------|-------|-------|---------------|
| Max E-field (V/m)   | 2.9   | 3.8    | 9.7   | 9.2   | 2.8           |
| Limit $824/f$ (V/m) | 121.5 | 121.5  | 121.5 | 121.5 | 121.5         |
| Margin (V/m)        | 118.6 | 117.7  | 111.7 | 112.3 | 118.7         |

### Test Data (H-Field)

| EUT Side             | Top   | Bottom | Left  | Right | Z-Axis(above) |
|----------------------|-------|--------|-------|-------|---------------|
| Max H-field (A/m)    | 0.278 | 0.264  | 0.139 | 0.145 | 0.247         |
| Limit $2.19/f$ (A/m) | 0.323 | 0.323  | 0.323 | 0.323 | 0.323         |
| Margin (A/m)         | 0.045 | 0.059  | 0.184 | 0.178 | 0.076         |

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

The highest emission level was recorded.



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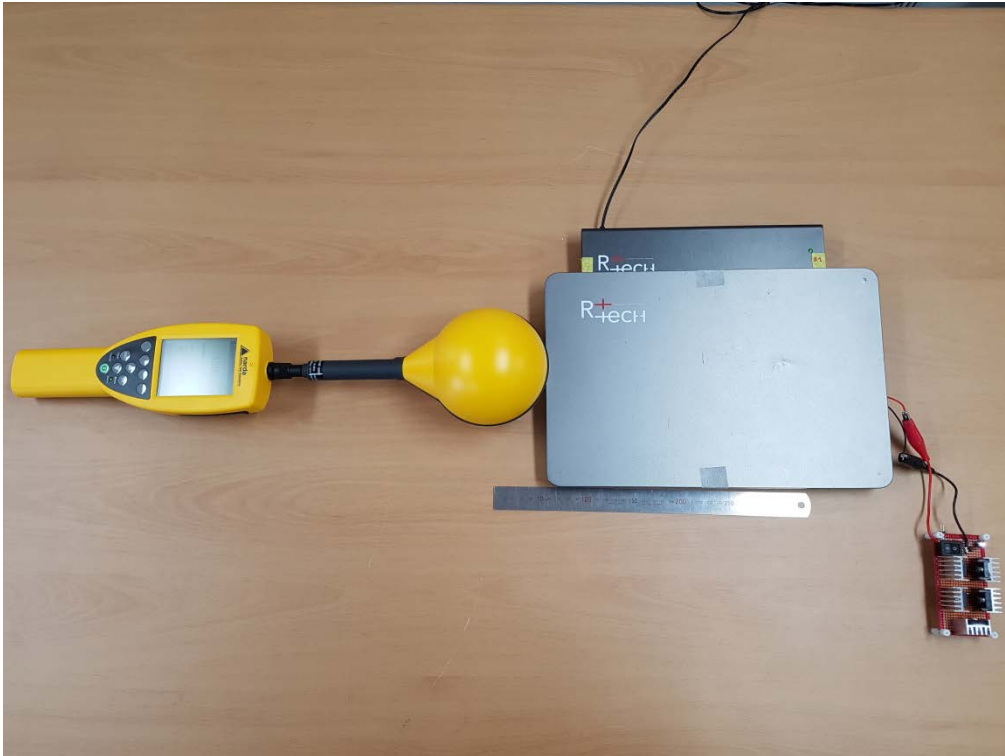
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### APPENDIX A – Test Equipment Used For Tests

|   | Name of Equipment     | Manufacturer | Model No.  | Serial No. | Due Date   |
|---|-----------------------|--------------|------------|------------|------------|
| 1 | E-Field Probe         | Schaffner    | 2244/90.20 | R-0029     | 2017-07-30 |
| 2 | EM Radiation Meter    | Schaffner    | EMC-20     | R-0029     | 2017-07-30 |
| 3 | Magnetic Probe        | NARDA        | HF3061     | D-0477     | 2017-04-06 |
| 4 | Broadband Field Meter | NARDA        | NBM-550    | G-0500     | 2017-04-07 |

## APPENDIX B – Test Setup Photos

H-Field



E-Field

