

# TEST REPORT

|                                                                                                                                                                                                                                 |                                                          |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--|
|  <b>CTK Co., Ltd.</b><br>(Ho-dong), 113, Yejik-ro, Cheoin-gu,<br>Yongin-si, Gyeonggi-do, Korea<br>Tel: +82-31-339-9970<br>Fax: +82-31-624-9501 | Report No.:<br>CTK-2024-03386-1<br>Page (1) / (10) Pages |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--|

## 1. Applicant

- Name : Chaigraphics Co Ltd
- Address : 26-20, Hannam-daero 27ga-gil, Yongsan-gu, Seoul, Republic of Korea
- Date of Receipt : 2024-11-15

## 2. Manufacturer

- Name : Chaigraphics Co Ltd
- Address : 26-20, Hannam-daero 27ga-gil, Yongsan-gu, Seoul, Republic of Korea

## 3. Use of Report : For FCC Certification

## 4. Test Sample / Model : GDS TX S-Pen Cradle / GDS TX S-Pen Cradle

## 5. Date of Test : 2024-12-06

## 6. Test Standard(method) used : FCC 47 CFR part 1 subpart I 1.1310

## 7. Testing Environment: Temp.: (21 ± 1) °C, Humidity: (41 ± 3) % R.H

## 8. Test Results : Compliance

## 9. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing (Address : 5, Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This report cannot be reproduced or copied without the written consent of CTK.

|          |                                                                                                                            |                                                                                                                                        |
|----------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Approval | Tested by<br>Gwanyong Kim: (Signature)  | Technical Manager<br>Young-taek Lee: (Signature)  |
|----------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|

2024-12-23

**CTK Co., Ltd.**

## REPORT REVISION HISTORY

| Date       | Revision                                           | Page No |
|------------|----------------------------------------------------|---------|
| 2024-12-10 | Issued (CTK-2024-03386)                            | all     |
| 2024-12-23 | Issued (CTK-2024-03386-1)<br>(Change grantee code) | 4       |
|            |                                                    |         |

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# 1. General Description

## 1.1 Client Information

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| <b>Company</b>        | Chaigraphics Co Ltd                                                |
| <b>Contact Point</b>  | 26-20, Hannam-daero 27ga-gil, Yongsan-gu, Seoul, Republic of Korea |
| <b>Contact Person</b> | Name : Sungkeun Yoon<br>E-mail : sungkeun.yoon@chaigraphics.com    |

## 1.2 Product Information

|                            |                                                                                                                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FCC ID</b>              | 2BMWE-SPENCRADLE                                                                                                                                                                                    |
| <b>Product Description</b> | GDS TX S-Pen Cradle                                                                                                                                                                                 |
| <b>Model name</b>          | GDS TX S-Pen Cradle                                                                                                                                                                                 |
| <b>Variant Model name</b>  | PreGDS TX S-Pen Cradle, GDS Replacement Standard Part,<br>GDS Replacement Flat Part, PreGDS Tablet Flat Display w/S-Pen<br>(There is no difference from the basic model except for the model name.) |
| <b>Charging Frequency</b>  | 535.2 kHz                                                                                                                                                                                           |
| <b>Charging Power</b>      | 0.4 W                                                                                                                                                                                               |
| <b>Power Source</b>        | DC 5 V                                                                                                                                                                                              |

## 2. Accreditations

### 2.1 Laboratory Accreditations and Listings

| Country | Agency | Registration Number           |
|---------|--------|-------------------------------|
| USA     | FCC    | 805871                        |
| CANADA  | ISED   | CN : 8737A<br>CAB ID : KR0025 |
| KOREA   | NRRA   | KR0025                        |

### 2.2 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.

### 3. RF Exposure Assessment

#### 3.1 Maximum Permissible Exposure

##### Limit

| 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> |                               |                               |                                     |                          |
| <b>0.3-1.34</b>                                                | <b>614</b>                    | <b>1.63</b>                   | *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                       |

Note 1 : f = frequency in MHz; \*Plane-wave equivalent power density  
 Note 2 : For the applicable limit, see FCC 1.1310

##### Test method

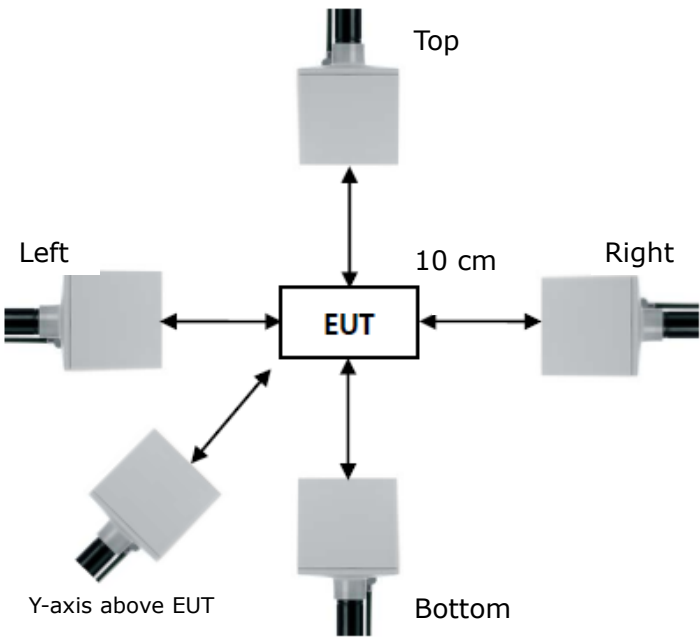
- Performed aggregate both leakage E-field and H-field at surrounding the device from all simultaneous transmitting coils.
- During testing, the EUT was placed on a non-conductive table top and the ancillary equipment (e.g., WPT Load) was placed on the EUT for charging. Maximum E-field and H-field measurement were tested 10 cm from each side of the EUT. Along the side of the EUT to side of E-field probe and H-field probe were positioned at the location to search maximum field strength.

Peripheral Devices

| No. | Device   | Manufacturer | Model No. | Serial No. |
|-----|----------|--------------|-----------|------------|
| 1   | WPT Load | -            | -         | -          |

Note : WPT load was provided by manufacturer.

Test Setup



## Equipment approval considerations item 5.b) of KDB 680106 D01 v03r01

### ※ Equipment approval considerations

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

- Meet the requirements.

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

- Meet the requirements.

(3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.

- Meet the requirements.

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

- Meet the requirements.

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

- Not Applicable.

(6) The aggregate H-field strengths anywhere at or beyond 15 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.

- Meet the requirements.



## Test results

| Maximum Permissible Exposure |               |               |
|------------------------------|---------------|---------------|
| Probe from EUT Side          | E-field (V/m) | H-field (A/m) |
| Bottom                       | 0.388 7       | 0.018 2       |
| Left                         | 0.388 7       | 0.027 7       |
| Top                          | 0.405 9       | 0.019 3       |
| Right                        | 0.390 6       | 0.022 2       |
| Y-axis above EUT             | 0.405 9       | 0.032 8       |
| <b>Limit</b>                 | <b>614</b>    | <b>1.63</b>   |

## Measurement Uncertainty

The value of the measurement uncertainty for the measurement of each parameter.  
 Coverage factor  $k = 2$ , Confidence levels of 95 %

| item    | Uncertainty                          |
|---------|--------------------------------------|
| H-field | 15 % (C.L. : Approx. 95 %, $k = 2$ ) |
| E-field | 15 % (C.L. : Approx. 95 %, $k = 2$ ) |

## APPENDIX A – Test Equipment Used For Tests

| No. | Name of Equipment                    | Manufacturer | Model No.  | Serial No.  | Date of Calibration | Due Date   |
|-----|--------------------------------------|--------------|------------|-------------|---------------------|------------|
| 1   | Electric and Magnetic Field Analyzer | Narda        | EHP-200AC  | 170WX91010  | 2024-10-15          | 2025-10-15 |
| 2   | EHP200-TS Software                   | Narda        | EHP200-TS  | 650.000.207 | -                   | -          |
| 3   | Note Computer                        | HP           | 15-bs563TU | CND7253QRM  | -                   | -          |

-END-