

RF Exposure Evaluation FCC ID:2BKV5-Q7-001

1 Measuring Standard

KDB 680106 Wireless Power Transfer D01 V04

2 Requirements

All requirements refer to Section 3 of KDB 680106 D01V04:

- 1.The devices may be considered to meet the § 2.1091-Mobile conditions ("generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the RF source's radiating structure(s) and [the nearest person]")
- 2. Devices Operating at Frequencies Below 4 MHz.
- 3.For § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively.

3 Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm²) | Averaging time (minutes) |
|--------------------------|----------------------------------|-------------------------------|---------------------------|--------------------------|
| | (A) Limits for Occ | cupational/Controlled Ex | posures | |
| 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 / | | 1 | f/300 | 6 |
| 1500-100,000 | 1 | 1 | 5 | 6 |
| 10 | (B) Limits for Genera | Population/Uncontrolle | d 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 | / | 1 | f/1500 | 30 |
| 1500-100,000 | / | 1 | 1.0 | 30 |

F=frequency in MHz

^{*=}Plane-wave equivalent power density

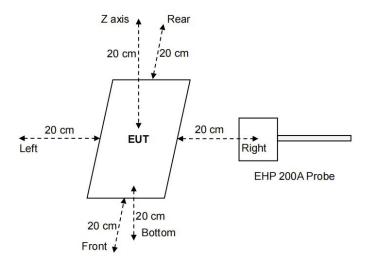
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).



4 MEASUREMENT UNCERTAINTY

| Parameter | Expanded Uncertainty |
|---|----------------------|
| Magentic fieid meansurements(9KHz~30MHz) | ±1.2% |
| Electrice field meansurements(9KHz~30MHz) | ±1.2% |

5 Test Setup



6 Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (20 cm from the top) 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 Wireless Power Transfer v04.

7 Equipment list

| Test Equipment | Manufacturer | Model No. | SN. | Last | Calibrated |
|----------------|--------------|-----------|--------|-------------|------------|
| | | | | calibration | until |
| Electric and | Narda | EHP-200A | N03565 | 2024/08/28 | 2025/08/27 |
| Magnetic | | | | | |
| field | | | | | |
| probe-Analyzer | | | | | |



8 Photo



9 Test mode

Mode 1 Phone(10W)

10 Necessary accessories

| Item | Equipment | Mfr/Brand | Model/Type No. | Serial No. | Note |
|------|-----------|-----------|----------------|------------|---|
| 1 | Phone | HW | Mate 20 | N/A | This phone is for testing only in report. |

11 Test Result

Mode 10(Worst)

E-Filed Strength at 20 cm from the edges surrounding the EUT (V/m)



| | | | | | | | 50%MP | |
|----------|-------------|------------|------------|------------|------------|--------|---------|--------|
| Battery | Frequency | Test | Test | Test | Test | Limits | E limit | Decult |
| power | Range(MHz) | Position A | Position B | Position C | Position D | (V/m) | (V/m) | Result |
| | | | | | | | | |
| 1% | 0.115-0.205 | 1.41 | 1.12 | 0.57 | 0.51 | 614 | 307 | PASS |
| 50% | 0.115-0.205 | 1.64 | 1.21 | 0.44 | 0.61 | 614 | 307 | PASS |
| 95% | 0.115-0.205 | 1.22 | 1.17 | 0.51 | 0.57 | 614 | 307 | PASS |
| Stand-by | 0.115-0.205 | 1.35 | 1.24 | 0.56 | 0.51 | 614 | 307 | PASS |
| Tes | st date | 2024/02/10 | 1 | | | | | |

E-Filed Strength at 20 cm from the top of the EUT (V/m)

| Battery power | Frequency Range(MHz) | Test Position E | Limits (V/m) | 50%MPE limit(V/m) | Result |
|---------------|-------------------------|--------------------|-----------------|----------------------|--------|
| 1% | 0.115-0.205 | 1.21 | 614 | 307 | PASS |
| 50% | 0.115-0.205 | 1.32 | 614 | 307 | PASS |
| 95% | 0.115-0.205 | 1.48 | 614 | 307 | PASS |
| Stand-by | 0.115-0.205 | 1.53 | 614 | 307 | PASS |
| Test date | | 2024/02/10 | | | |

H-Filed Strength at 20 cm from the edges surrounding the EUT (A/m)

| Battery power | Frequency Range(MHz) | Test Position A | Test Position B | Test Position C | Test Position D | Limits (A/m) | 50%M PE limit (A/m) | Result |
|------------------|-------------------------|--------------------|--------------------|--------------------|--------------------|-----------------|---------------------------|--------|
| 1% | 0.115-0.205 | 0.63 | 0.61 | 0.71 | 0.62 | 1.63 | 0.815 | PASS |
| 50% | 0.115-0.205 | 0.63 | 0.63 | 0.67 | 0.55 | 1.63 | 0.815 | PASS |
| 95% | 0.115-0.205 | 0.61 | 0.62 | 0.54 | 0.53 | 1.63 | 0.815 | PASS |
| Stand-by | 0.115-0.205 | 0.57 | 0.61 | 0.65 | 0.51 | 1.63 | 0.815 | PASS |
| Test date | | 2024/02/10 | | | | | | |

H-Filed Strength at 20 cm from the top of the EUT (A/m)



| Battery power | Frequency Range(MHz) | Test Position E | Limits (A/m) | 50%MPE limit (A/m) | Result |
|------------------|-------------------------|--------------------|-----------------|--------------------------|--------|
| 1% | 0.115-0.205 | 0.43 | 1.63 | 0.815 | PASS |
| 50% | 0.115-0.205 | 0.34 | 1.63 | 0.815 | PASS |
| 95% | 0.115-0.205 | 0.45 | 1.63 | 0.815 | PASS |
| Stand-by | 0.115-0.205 | 0.51 | 1.63 | 0.815 | PASS |
| Test date | 2024/02/10 | | | | |

Tested by:

/WE Dian

Reviewed by:

Jack Wang

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