

5 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

5.1 Applicable Standard

According to subpart §1.1310, 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.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1093)

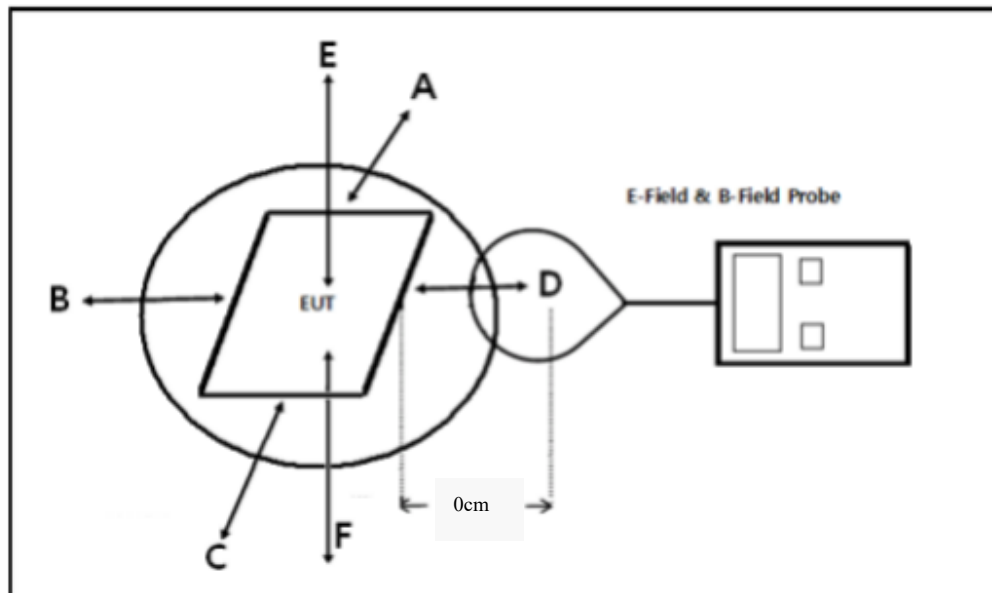
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
|---|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| Frequency Range (MHz) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm ²) | Averaging Time (minutes) |
| 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;

According with 680106 D01 Wireless Power Transfer v04 clause 3.2

Accordingly, 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. For § 2.1093-Portable devices below 4 MHz and down to 100 kHz, the MPE limits in § 1.1310 (with the 300 kHz limit applicable all the way down to 100 kHz) can be used for the purpose of equipment authorization in lieu of SAR evaluations.

5.2 Block Diagram of Test Setup



5.3 Test Procedures

- 1) Perform H-field and E-field measurements for each all sides of the EUT at 0cm, along all the principal axes defined with respect to the orientation of the transmitting element(e.g., coil or antenna).
- 2) The highest emission level was recorded and compared with limit.
- 3) The EUT was measured according to 680106 D01 Wireless Power Transfer v04

5.3 Test Data:

| | | | |
|----------------|----------------|--------------|--------------|
| Serial Number: | 2CGM-2, 2CGM-6 | Test Date: | 2024/01/04 |
| Test Site: | RF | Test Mode: | Transmitting |
| Tester: | David Huang | Test Result: | Pass |

Environmental Conditions:

| | | | | | |
|----------------------|------|---------------------------|----|---------------------------|-------|
| Temperature: (°C) | 24.2 | Relative Humidity: (%) | 32 | ATM Pressure: (kPa) | 101.5 |
|----------------------|------|---------------------------|----|---------------------------|-------|

Test Equipment List and Details:

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|--------------|-------------------------|----------------|---------------|------------------|----------------------|
| Speag | Probe | MAGPY-8H3D+E3D | 3081 | 2023/09/15 | 2024/09/14 |
| Speag | Data Acquisition System | MAPGPY-DAS | 1018 | 2023/09/15 | 2024/09/14 |

* **Statement of Traceability:** China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

For Serial Number: 2CGM-2

H-Field Strength:

| Frequency Range (kHz) | Position A (A/m) | Position B (A/m) | Position C (A/m) | Position D (A/m) | Position E (A/m) | Position F (A/m) | Limit (A/m) |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 115.51 | 0.18 | 1.53 | 0.2 | 1.45 | 1.26 | 0.48 | 1.63 |

E-Field Strength:

| Frequency Range (kHz) | Position A (V/m) | Position B (V/m) | Position C (V/m) | Position D (V/m) | Position E (V/m) | Position F (V/m) | Limit (V/m) |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 115.51 | 1.1 | 1.88 | 1.34 | 1.44 | 4.55 | 1.85 | 614 |

Note: Test with 0cm distance.

For Serial Number: 2CGM-6

H-Field Strength:

| Frequency Range (kHz) | Position A (A/m) | Position B (A/m) | Position C (A/m) | Position D (A/m) | Position E (A/m) | Position F (A/m) | Limit (A/m) |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 115.51 | 0.31 | 1.48 | 0.45 | 1.51 | 0.72 | 0.99 | 1.63 |

E-Field Strength:

| Frequency Range (kHz) | Position A (V/m) | Position B (V/m) | Position C (V/m) | Position D (V/m) | Position E (V/m) | Position F (V/m) | Limit (V/m) |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 115.51 | 1.94 | 1.79 | 1.52 | 1.23 | 2.73 | 1.86 | 614 |

Note: Test with 0cm distance.