

## **FCC §18.313, §1.1310, §2.1091- MAXIMUM PERMISSIBLE EXPOSURE**

### **Applicable Standard**

According to §1.1310, radio frequency devices shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Table 1 to § 1.1310(e)(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>(i) 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>(ii) 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                      |
| 300–1,500                                                       |                               |                               | f/1500                              | <30                      |
| 1,500–100,000                                                   |                               |                               | 1.0                                 | <30                      |

f = frequency in MHz. \* = Plane-wave equivalent power density.

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

## Measurement

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 25 °C     |
| Relative Humidity: | 50 %      |
| ATM Pressure:      | 100.2 kPa |

*The testing was performed by Nico Wu on 2026-04-12.*

Radiation leakage was measured in the as-received condition with the oven door closed using a microwave leakage meter.

A 275 mL water load was placed in the center of the oven and the oven was operated at maximum output power.

☒ There was no microwave leakage exceeding a power level of 0.11mW/cm<sup>2</sup> observed at any point 5 cm or more from the external surface of the oven.

A maximum of 1.0 mW/cm<sup>2</sup> is allowed in accordance with the applicable Federal Standards. Hence, microwave leakage in the as-received condition with the oven door closed was below the maximum allowed.

Result: Complied.