
Maximum Permissible Exposure (MPE)

The modular use shall be at least 20cm distance away from human body.

MPE Calculation Method:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density} = Pd(mW/cm^2) = \frac{E^2}{3770}$$

Combine these two formulas can be changed to:

$$Pd = \frac{30 \times P \times G}{3770 \times d^2}$$

Note:

1. "E" means Electric field (V/m)
2. "P" means Peak RF output power (W)
3. "G" means EUT Antenna numeric gain (numeric)
4. "d" means the minimum mobile separation distance is 0.2m between radiator and human body.

Antenna Gain

Antenna Gain: The maximum Gain is 0.44 dBi.

| ANT | Modulation Type | Channel | Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (mW/cm ²) | Limit of Power Density (mW/cm ²) |
|-----|-----------------|---------|-----------------|-------------------------------|-------------------------------------|--|
| | 802.11b | 01 | 2412 | 16.5 | 0.0039 | < 1 |
| | | 06 | 2437 | 17.6 | 0.0050 | |
| | | 11 | 2462 | 17.8 | 0.0053 | |
| | 802.11g | 01 | 2412 | 14.2 | 0.0023 | < 1 |
| | | 06 | 2437 | 15.4 | 0.0030 | |
| | | 11 | 2462 | 15.9 | 0.0034 | |