# FCC TEST REPORT

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 levels in excess of the Commission's guidelines.
See § 1.1307(b)(1) of this Chapter.

**Limit**

Limits for general population/Uncontrolled exposure

| Frequency Range [MHz] | Electric Field Strength (E) [V/m] | Magnetic Field Strength (H) [A/m] | Power Density (S) [mW/cm$^2$] | Averaging Time $|E|^2$, $|H|^2$ or S [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 - 1 500 | -- | -- | f/1500 | 30 |
| 1 500 - 100 000 | -- | -- | 1.0 | 30 |

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

MPE Prediction

Predication of MPE limit at a given distance.

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where:  S = power density (in appropriate units, e.g. mW/cm$^2$)
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
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

| | | |
|---|---|---|
| Maximum peak output power at antenna input | : | 0.50 dBm (1.122 mW) |
| Prediction distance | : | 20 cm |
| Predication frequency | : | 2 402 MHz |
| Antenna gain(Max) | : | 0 dBi (1 numeric) |
| Power density at predication frequency at 20 cm | : | 0.000 223 22 mW/cm$^2$ |
| MPE Limit for | : | 1.0 mW/cm$^2$ |

**Test Result**

The power density level at 20 cm is **0.000 223 22 mW/cm$^2$**