## Prediction of MPE limit at a given distance

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

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
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
Valid for frequencies from 100 to 300.000 MHz

| | | |
|---|---|---|
| Maximum peak output power at antenna input terminal: | 19.70 | (dBm) |
| Maximum peak output power at antenna input terminal: | 0.093 | (W) |
| Antenna gain(typical): | 0.60 | (dBi) |
| Maximum antenna gain: | 1.148 | (numeric) |
| Prediction distance: | 20 | (cm) |
| Prediction frequency: | 1925 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 10.00 | (W/m^2) |
| MPE limit for controlled exposure at prediction frequency: | 50.00 | (W/m^2) |

**Uncontrolled Exposure:**

| | | |
|---|---|---|
| Power density at prediction frequency: | 0.213172 | (W/m^2) |
| Maximum allowable antenna gain: | 17.31 | (dBi) |
| Margin of Compliance: | 16.71 | (dB) |

**Controlled Exposure:**