

### 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 isotropic

R = distance to the center of radiation of the antenna

|  |         |            |
|--|---------|------------|
| Maximum peak output power at antenna input terminal:         | 27.61   | (dBm EIRP) |
| Maximum peak output power at antenna input terminal:         | 576.8   | (mW)       |
| Antenna gain(typical):                                       | 0       | (dBi)      |
| Maximum antenna gain:  | 1.000   | (numeric)  |
| Prediction distance:   | 20      | (cm)       |
| Source Based Time Average Duty Cycle:                        | 100     | (%)        |
| Prediction frequency:  | 5590    | (MHz)      |
| MPE limit for uncontrolled exposure at prediction frequency: | 1       | (mW/cm^2)  |
| Power density at prediction frequency:                       | 0.11474 | (mW/cm^2)  |
| Power density at prediction frequency:                       | 1.1474  | (W/m^2)    |
| Margin of Compliance:  | 9.4     | (dB)       |