

### 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:         | <b>28.80</b>   | (dBm)                 |
| Maximum peak output power at antenna input terminal:         | <b>758.6</b>   | (mW)                  |
| Antenna gain(typical):                                       | <b>0</b>       | (dBi)                 |
| Maximum antenna gain:  | <b>1.000</b>   | (numeric)             |
| Prediction distance:   | <b>20</b>      | (cm)                  |
| Source Based Time Average Duty Cycle:                        | <b>100</b>     | (%)                   |
| Prediction frequency:  | <b>1909.8</b>  | (MHz)                 |
| MPE limit for uncontrolled exposure at prediction frequency: | <b>1.000</b>   | (mW/cm <sup>2</sup> ) |
| Power density at prediction frequency:                       | <b>0.15091</b> | (mW/cm <sup>2</sup> ) |
| Power density at prediction frequency:                       | <b>1.5091</b>  | (W/m <sup>2</sup> )   |
| Margin of Compliance:  | <b>8.21</b>    | (dB)                  |