



### 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

|  |                    |                       |
|--|--------------------|-----------------------|
| Maximum peak output power at antenna input terminal:         | <u>14.37</u>       | (dBm)                 |
| Maximum peak output power at antenna input terminal:         | <u>27.35268726</u> | (mW)                  |
| Antenna gain(typical):                                       | <u>2</u>           | (dBi)                 |
| Maximum antenna gain:  | <u>1.584893192</u> | (numeric)             |
| Prediction distance:   | <u>20</u>          | (cm)                  |
| Prediction frequency:  | <u>915</u>         | (MHz)                 |
| MPE limit for uncontrolled exposure at prediction frequency: | <u>0.61</u>        | (mW/cm <sup>2</sup> ) |
| Power density at prediction frequency:                       | 0.008624           | (mW/cm <sup>2</sup> ) |
|  | 0.086244           | (W/m <sup>2</sup> )   |
| Maximum allowable antenna gain:                              | 20.4959969         | (dBi)                 |
| Margin of Compliance:  | 18.4959969         | dB                    |