## 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: | 30.00 | (dBm) |
| Maximum peak output power at antenna input terminal: | 1000 | (mW) |
| Antenna gain(maximum): | 12 | (dBi) |
| Maximum antenna gain: | 15.84893192 | (numeric) |
| Time Averaging: | 100 | (%) |
| Prediction distance: | 50 | (cm) |
| Prediction frequency: | 851 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 0.567 | (mW/cm^2) |
| Power density at prediction frequency: | 0.504487 | (mW/cm^2) |
| Margin of compliance: | -0.5 | (dB) |
| This equates to: | 5.044871717 | W/m^2 |