



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

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|--|--------------------|------------------------|
| Maximum peak output power at antenna input terminal: | <u>31,00</u> | (dBm) |
| Maximum peak output power at antenna input terminal: | <u>1258,925412</u> | (mW) |
| Antenna gain(maximum): | <u>20</u> | (dBi) |
| Maximum antenna gain: | <u>100</u> | (numeric) |
| Time Averaging: | <u>100</u> | (%) |
| Prediction distance: | <u>100</u> | (cm) |
| Prediction frequency: | <u>2690</u> | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | <u>1,000</u> | (mW/cm ²) |
| Power density at prediction frequency: | 1,001821 | (mW/cm ²) |
| Margin of compliance: | 0,0 | (dB) |
| This equates to: | 10,01821011 | W/m² |