

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: | 43,00 | (dBm) |
|--|-------------|-----------|
| Maximum peak output power at antenna input terminal: | 19952,62315 | (mW) |
| Antenna gain(maximum): | 11,5 | (dBi) |
| Maximum antenna gain: | 14,12537545 | (numeric) |
| Time Averaging: | 100 | (%) |
| Prediction distance: | 150 | (cm) |
| Prediction frequency: | 2690 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 1,000 | (mW/cm^2) |
| Power density at prediction frequency: | 0,996799 | (mW/cm^2) |
| Margin of compliance: | 0,0 | (dB) |
| This equates to: | 9,967990556 | W/m^2 |