

## 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     |