

## 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: 37.00 (dBm)

Maximum peak output power at antenna input terminal: 5011.872336 (mW)

Antenna gain(maximum): 9 (dBi)

Maximum antenna gain: 7.943282347 (numeric)

Time Averaging: 100 (%)

Prediction distance: 100 (cm)
Prediction frequency: 941 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.627 (mW/cm^2)

Power density at prediction frequency: 0.316804 (mW/cm^2)

Margin of compliance: -3.0 (dB)

This equates to: 3.168036204 W/m^2