

## 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: 47.67 (dBm) (\*) Equipment transmi  
Maximum peak output power at antenna input terminal: 58452.08404 (mW)

Antenna gain(typical): 7 (dBi)

Maximum antenna gain: 5.011872336 (numeric)

Prediction distance: 272.76 (cm)

Prediction frequency: 469.9875 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.313325 (mW/cm<sup>2</sup>)

Power density at prediction frequency: 0.313349 (mW/cm<sup>2</sup>)

Maximum allowable antenna gain: 6.999662759 (dBi)

Margin of Compliance: -0.000337241