



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: 30.80 (dBm)

Maximum peak output power at antenna input terminal: 1202.264435 (mW)

Antenna gain(typical): 5.5 (dBi)

Maximum antenna gain: 3.548133892 (numeric)

Time Averaging: 100 (%)

Prediction distance: 20 (cm)

Prediction frequency: 4970 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at prediction frequency: 0.848653 (mW/cm²)

Margin of compliance: -0.7 (dB)

The MPE was done at 50% which is the operational duty cycle of this unit.