

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

Valid for frequencies from 30 to 100.000 MHz

Maximum peak output power at antenna input terminal: 18.20 (dBm)

Maximum peak output power at antenna input terminal: 66.0693448 (mW)

Antenna gain(typical): 3.50 (dBi)

Maximum antenna gain: 2.238721139 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 1925 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1.00 (mW/cm²)

Power density at prediction frequency: **0.029426** (mW/cm²)

Maximum allowable antenna gain: **18.81** (dBi)

Margin of Compliance: **15.31** (dB)