

Prediction of MPE limit at a given distance

MW-CSR-ESMR-25W90-806-18, Outdoor Antenna

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: 34.00 (dBm)

Maximum peak output power at antenna input terminal: 2511.886432 (mW)

Antenna gain(typical): 10 (dBi)

Maximum antenna gain: 10 (numeric)

Prediction distance: 100 (cm)

Prediction frequency: 851 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.567333333 (mW/cm^2)

Power density at prediction frequency: 0.199890 (mW/cm^2)

Maximum allowable antenna gain: 14.53048165 (dBi)

Margin of Compliance: 4.530481651