

Prediction of Distance for a specific MPE Limit

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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 centre of radiation of the antenna

Max input to antenna terminal
Antenna gain
Prediction Freq
MPE limit for uncontrolled exposure at prediction frequency

2	dBm	1.58
1	dBi	1.26
2.405	GHz	2.405E+09
1	mW/cm ²	

Permitted distance at MPE limit (1 mW/cm2) in cm 0.398