

MPE Calculation for FCC Uncontrolled Environment

Formula 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

Source Based Time Averaged Duty Cycle is 100% in calculation below

(dBm)	9.30	Maximum peak output power at antenna input terminal:
(W)	0.009	Maximum peak output power at antenna input terminal:
(dBi)	0.00	Maximum antenna gain:
(numeric)	1.000	Maximum antenna gain:
(cm)	20	Prediction distance:
(MHz)	2402	Prediction frequency:
%	100	Time Averaged Duty Cycle
(W/m^2)	10.00	MPE limit for uncontrolled exposure at prediction frequency:
(mW/cm ²)	0.0017	Power density at prediction frequency:
(W/m^2)	0.017	Power density at prediction frequency:
(dBi)	27.71	Maximum allowable antenna gain:
(dB)	27.71	Margin of Compliance: