

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

-7.30 (dBm)	Maximum peak output power at antenna input terminal:
0.000186 (W)	Maximum peak output power at antenna input terminal:
-7.30 (dBi)	Maximum antenna gain:
0.186 (numeric)	Maximum antenna gain:
20 (cm)	Prediction distance:
0.1342 (MHz)	Prediction frequency:
<u>100</u> %	Time Averaged Duty Cycle
1000.00 (W/m^2)	MPE limit for uncontrolled exposure at prediction frequency:
0.0000069 (mW/cm^2)	Power density at prediction frequency:
0.000069 (W/m^2)	Power density at prediction frequency:
64.31 (dBi)	Maximum allowable antenna gain:
71.61 (dB)	Margin of Compliance: