



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

Maximum peak output power at antenna input terminal: 3.51 (dBm)

Maximum peak output power at antenna input terminal: 0.00224 (W)

Maximum antenna gain: 6.90 (dBi)

Maximum antenna gain: 4.898 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 2440 (MHz)

Time Averaged Duty Cycle 100 %

MPE limit for uncontrolled exposure at prediction frequency: 10.00 (W/m²)

Power density at prediction frequency: 0.0022 (mW/cm²)

Power density at prediction frequency: 0.022 (W/m²)

Maximum allowable antenna gain: 33.50 (dBi)

Margin of Compliance: 26.60 (dB)