



### 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: 17.90 (dBm)

Maximum peak output power at antenna input terminal: 0.062 (W)

Maximum antenna gain: 4.00 (dBi)

Maximum antenna gain: 2.512 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 2412 (MHz)

Time Averaged Duty Cycle 100 %

MPE limit for uncontrolled exposure at prediction frequency: 10.00 (W/m^2)

Power density at prediction frequency: 0.0308 (mW/cm^2)

Power density at prediction frequency: 0.308 (W/m^2)

Maximum allowable antenna gain: 19.11 (dBi)

Margin of Compliance: 15.11 (dB)