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