

**Prediction of MPE limit at a given distance**

Exposure limit according to FCC CFR 47part 1, §1.1307, §1.1310  
Equation 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

Maximum peak output power at antenna input terminal: 23.30 (dBm)

Maximum peak output power at antenna input terminal: 213.796209 (mW)

Antenna gain(typical): -12.2 (dBi)

Maximum antenna gain: 0.060255959 (numeric)

Time Averaging: 100 (%)

Prediction distance: 10 (cm)

Prediction frequency: 900 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.6 (mW/cm<sup>2</sup>)

Power density at prediction frequency: 0.010252 (mW/cm<sup>2</sup>)

Margin of compliance: -17.7 (dB)

This equates to 0.102515642 W/m<sup>2</sup> PASS

For information This equates to 6.216783497 V/m