Prediction of MPE limit at a given distance

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:
 28.41 (dBm)

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

 Antenna gain(typical):
 7.94 (dBi)

 Maximum antenna gain:
 6.223 (numeric)

 Prediction distance:
 20 (cm)

 Prediction frequency:
 924 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm^2)

Power density at prediction frequency: 0.858480 (mW/cm²)

Maximum allowable antenna gain: 8.6 (dBi)

Margin of Compliance at 20 cm = 0.7 dB