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: 34.77 (dBm)
Maximum peak output power at antenna input terminal: 2998.748198 (mW)
Antenna gain(typical):   2 (dBi)
Maximum antenna gain: 1.584893192 (numeric)
Prediction distance: 20 (cm)
Prediction frequency: 1930 (MHz)
MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm^2)

Power density at prediction frequency: 0.945519 (mW/cm^2)

Maximum allowable antenna gain: 2.243298554 (dBi)

Margin of Compliance: 0.243298554