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 radia
         R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: 17.80 (dBm)
Maximum peak output power at antenna input terminal: 60.25595861 (mW)
Antenna gain(typical):   2 (dBi)
Maximum antenna gain: 1.584893192 (numeric)
Time Averaging: 100 (%)
Prediction distance: 5 (cm)
Prediction frequency: 2480 (MHz)
MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm^2)

Power density at prediction frequency: 0.303984 (mW/cm^2)

Margin of compliance: -5.2 (dB)
This equates to   3.039835814 W/m^2   PASS
For information   This equates to   33.85288912 V/m