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 device output terminal: 16.58 (dBm)
Cable and Jumper loss 0.0 (dB)
Maximum peak output power at antenna input terminal: 16.58 (dBm)
Maximum peak output power at antenna input terminal: 45.49880602 (mW)
Antenna gain(typical): 12 (dBi)
Maximum antenna gain: 15.84893192 (numeric)
Prediction distance: 20 (cm)
Prediction frequency: 5570 (MHz)
MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm^2)

Power density at prediction frequency: 0.143460 (mW/cm^2)
1.434598 (W/m^2)
Tx On time: 1.000000
Tx period time: 1.000000
Average Factor: 100.000000
Average Power density at prediction frequency: 1.434598 (W/m^2)
Maximum allowable antenna gain: 20.43269855 (dBi)

Margin of Compliance: 8.432698554 dB