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:	3.10	(dBm)
Source-Based Time Averaging	100.00	(%)
Corrected max peak output power:	3.10	(dBm)
Maximum peak output power at antenna input terminal:	2.041738	(mW)
Antenna gain(typical):	2	(dBi)
Maximum antenna gain:	1.584893	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	2440	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)

Power density at prediction frequency: 0.000644 (mW/cm^2)