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

Maximum peak output power at antenna input terminal:	20.95	(dBm)
Maximum peak output power at antenna input terminal:	124.5	(mW)
Antenna gain(typical):	30	(dBi)
Maximum antenna gain:	1000.000	(numeric)
Prediction distance:	110	(cm)
Sourse Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	5745	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm^2)
Power density at prediction frequency:	0.81847	(mW/cm^2)
Power density at prediction frequency:	8.1847	(W/m^2)
Margin of Compliance:	0.87	(dB)