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 the antenna terminal:	18.65	(dBm)
Maximum peak output power at the antenna terminal:	73.28245331	(mW)
Antenna gain(typical):	45	(dBi)
Maximum antenna gain:	31622.7766	(numeric)
Prediction distance:	430	(cm)
Prediction frequency:	79500	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)

Power density at prediction frequency: 0.997363 (mW/cm^2)