Prediction of MPE limit at a given distance

This prediction is based on the RF Safety Installation Guideline of 1640W E.I.R.P

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:	45.00	(dBm)
Maximum peak output power at antenna input terminal:	31622.7766	(mW)
Antenna gain(typical):	17	(dBi)
Maximum antenna gain:	50.11872336	(numeric)
Prediction distance:	1000	(cm)
Prediction frequency:	136-174	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.2	(mW/cm^2)

Power density at prediction frequency:	0.126122	(mW/cm^2)
Maximum allowable antenna gain:	19.0023986	(dBi)
Margin of Compliance:	2.002398597	