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:	22.89	(dBm)
Cable and Jumper loss	0.0	(dB)
Maximum peak output power at antenna input terminal:	22.89	(dBm)
Maximum peak output power at antenna input terminal:	194.5360082	(mW)
Antenna gain:	12	(dBi)
Maximum antenna gain:	15.84893192	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5745	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)
Power density at prediction frequency:	0.613381	(mW/cm^2)
	6.133808	(W/m^2)
Tx On time:	1.000000	
Tx period time:	1.000000	
Average Factor:	100.000000	
Average Power density at prediction frequency:	6.133808	(W/m^2)
Maximum allowable antenna gain:	14.12269855	(dBi)
Margin of Compliance:	2.122698554	dB