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:	47.60	(dBm)	(*) Equipment transmi
Maximum peak output power at antenna input terminal:	57543.99373	(mW)	
Antenna gain(typical):	8	(dBi)	
Maximum antenna gain:	6.309573445	(numeric)	
Prediction distance:	225.27271	(cm)	
Prediction frequency:	854.0125	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	0.569341667	(mW/cm^2)	5693.4
Power density at prediction frequency:	0.569342	(mW/cm^2)	
Maximum allowable antenna gain:	7.999999995	(dBi)	
Margin of Compliance:	-4.56948E-09		

(*) Equipment transmits two carrier at the same time so the power was increased of 3 dB