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:	20.90	(dBm)	
Cable and Jumper loss	0.0	(dB)	
Maximum peak output power at antenna input terminal:	20.90	(dBm)	
Maximum peak output power at antenna input terminal:	123.0268771	(mW)	
Single Antenna gain(typical):	12	(dBi)	See note below
Number of Antennae	2		
Total Antenna gain(typical):	15.01029996	(dBi)	
Maximum antenna gain:	31.69786385	(numeric)	
Prediction distance:	25	(cm)	
Prediction frequency:	5785	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)	

Power density at prediction frequency:	0.496524	(mW/cm^2)
	4.965239	(W/m^2)
Tx On time:	1.000000	
Tx period time:	1.000000	
Average Factor:	100.000000	
Average Power density at prediction frequency:	4.965239	(W/m^2)
Maximum allowable antenna gain:	18.05089881	(dBi)

Margin of Compliance: 3.040598857 dB

Note: Antenna gain: 12 dBi + 10 × log10 (2) dB = 15 dBi