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:	15.76	(dBm)	
Cable and Jumper loss	0.0	(dB)	
Maximum peak output power at antenna input terminal:	15.76	(dBm)	
Maximum peak output power at antenna input terminal:	37.6703799	(mW)	
Single Antenna gain(typical):	7.2	(dBi)	See note below
Number of Antennae	1		
Total Antenna gain(typical):	7.2	(dBi)	
Maximum antenna gain:	5.248074602	(numeric)	
Prediction distance:	20	(cm)	
Prediction frequency:	5230	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)	

Power density at prediction frequency:	0.039331	(mW/cm^2)
	0.393306	(W/m^2)
Tx On time:	1.000000	
Tx period time:	1.000000	
Average Factor:	100.000000	
Average Power density at prediction frequency:	0.393306	(W/m^2)
Maximum allowable antenna gain:	21.25269855	(dBi)

Margin of Compliance: 14.05269855 dB

Note: (Directional gain for MIMO cross-polarized 2 × 2 is 7.2 dBi. No summation of gain is needed for cross-polarized antennas as per manufacturer's definition of the cross-polarized MIMO type.)