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 the antenna terminal:	20.04	(dBm)	Worst case antenna gain
Maximum peak output power at the antenna terminal:	100.9950294	(mW)	used at 5GHz channel
Antenna gain(typical):	5	(dBi)	Worst case power used from
Maximum antenna gain:	3.16227766	(numeric)	FCC ID: NKRCM9
Prediction distance:	20	(cm)	
Prediction frequency:	5805	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)	

Power density at prediction frequency: 0.063538 (mW/cm^2)

Maximum allowable antenna gain: 16.96969855 (dBi)