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:	21.09	dBm
Cable and Jumper loss:	1.5	dB
Maximum peak output power at antenna input terminal:	19.59	dBm
	90.99132726	mW
Single Antenna gain (typical):	14	dBi
Number of Antennae:	1	
Total Antenna gain (typical):	14	dBi
	25.11886432	(numeric)
Prediction distance:	20	cm
Prediction frequency:	5180	MHz
MPE limit for uncontrolled exposure at prediction frequency:	1	mW/cm^2

Power density at prediction frequency:	**0.454705**	**mW/cm^2**
	4.547054	W/m^2
Tx On time:	1.000000	ms
Tx period time:	1.000000	ms
Average Factor:	100.000000	%
Average Power density at prediction frequency:	4.547054	W/m^2
Maximum allowable antenna gain:	17.42269855	dBi
Margin of Compliance:	**3.422698554**	**dB**