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

5G Tx :TMB-WAN2000

Fundamental transmit (prediction) frequency:	5735	MHz
Maximum measured conducted peak output power:	29.30	dBm
Cable and/or jumper loss:	0.0	dB
Maximum peak power at antenna input terminal:	29.30	dBm
Tx On time:	1.000	ms
Tx period time:	1.000	ms
Average factor:	100	%
Maximum calculated average power at antenna input terminal:	851.138	mW
Single Antenna gain (typical):	16.5	dBi
Number of antennae:	1	
Total system gain (typical):	16.500	dBi
MPE limit for uncontrolled exposure at prediction frequency:	1	mW/cm^2
	10	W/m^2
Minimum calculated prediction distance for compliance:	55	cm
Typical (declared) distance:	60	cm
Average power density at prediction frequency:	**0.840403**	mW/cm^2
	8.40403	W/m^2
Margin of Compliance:	**0.75512**	**dB**
Maximum allowable antenna gain:	17.25512	dBi
% to limit:	84.04030797	**%**