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: \overline{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:	<u>9.76</u> (dBm)
Cable and Jumper loss	<u>0.0</u> (dB)
Maximum peak output power at antenna input terminal:	<u>9.76</u> (dBm)
Maximum peak output power at antenna input terminal:	9.462371614 (mW)
Single Antenna gain(typical):	0.5 (dBi)
Number of Antennae	1
Total Antenna gain(typical):	0.5 (dBi)
Maximum antenna gain:	1.122018454 (numeric)
Prediction distance:	<u>20</u> (cm)
Prediction frequency:	<u>927</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>0.618</u> (mW/cm^2)
Power density at prediction frequency:	0.002112 (mW/cm^2)
	0.021122 (W/m^2)
Tx On time:	1.000000
Tx period time:	1.000000
Average Factor:	100.000000
Average Power density at prediction frequency:	0.021122 (W/m^2)
Maximum allowable antenna gain:	25.1625833 (dBi)
Margin of Compliance:	24.6625833 dB