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 isotropic radiator
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	9.1	dBm
Maximum peak output power at antenna input terminal:	8.1	mW
Antenna gain(maximum):	2	dBi
Maximum antenna gain:	1.6	numeric
Time Averaging:	100	%
Prediction distance:	20	cm
Prediction frequency:	2450	MHz
FCC MPE limit for uncontrolled exposure at prediction frequency:	1.00	mW/cm^2
IC MPE limit for uncontrolled exposure at prediction frequency:	5.42	W/m^2
Power density at prediction frequency:	0.00	mW/cm^2
This equates to:	0.03	W/m^2