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

PWR in dBm →	Maximum peak output power at antenna input terminal:	39.2	dBm
	Maximum peak output power at antenna input terminal:	8336.8	mW
Ant. gain in dBi →	Antenna gain(maximum):	20.9	dBi
	Maximum antenna gain:	123.0	numeric
Use the duty cycle from test report or 100% →	Time Averaging:	100	%
Separation distance from antenna to user in cm. →	Prediction distance:	200	cm
Freq. in MHz →	Prediction frequency:	2593	MHz
	FCC MPE limit for uncontrolled exposure at prediction frequency:	1.00	mW/cm^2
	IC MPE limit for uncontrolled exposure at prediction frequency:	5.64	W/m^2
	Power density at prediction frequency:	2.04	mW/cm^2
	This equates to:	20.40	W/m^2

Frequency(MHz)	Limit(mW/cm^2)
299.999	0.20
300	0.20
350	0.23
375	0.25
400	0.27
450	0.30
460	0.31
475	0.32
500	0.33
525	0.35
540	0.36
550	0.37
600	0.40
625	0.42
650	0.43
700	0.47
800	0.53
900	0.60
1000	0.67
1100	0.73
1200	0.80
1300	0.87
1400	0.93
1500	1.00
100000	1.00