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 radi
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	18.8	(dBm)	
Maximum peak output power at antenna input terminal:	75.9	(mW)	
Antenna gain(typical):	2.0	(dBi)	
Maximum antenna gain:	1.6	(numeric)	
Time Averaging (Duty Cycle):	25.0	(%)	
Prediction distance:	2.0	(cm)	
Prediction frequency:	2480.0	(MHz)	
Power output (Duty cycle corrected)	19.0	(mW)	
Power output (Duty cycle corrected)	12.8	(dBm)	
MPE limit for uncontrolled exposure at prediction frequency:	1.0	(mW/cm^2)	
Power density at prediction frequency:	0.597957	(mW/cm^2)	
Margin of compliance:	-2.2	(dB)	
This equates to	5.97957274	W/m^2	PASS
For information This equates to	47.4794579	V/m	

Note: This device does not exceed the 60 / f (GHz) in mW limit as per FCC KDB 447498 2(a)(i), so it is allowable to be used in portable exposure conditions with no restrictions on host platforms Although the device duty cycle measured was 1% a worst case duty cycle of 25% was applied