Evaluation 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

Contains
PD(WM3945ABG

Maximum peak output power --Conducted	12.97 dBm		18.5 dBm		25.02 dBm	
	0.020	(W)	0.071	(W)	0.318	(W)
Antenna gain(typical):	8.50	(dBi)	9.00	(dBi)	2.14	(dBi)
Maximum antenna gain:	7.08	(numeric)	7.94	(numeric)	1.64	(numeric)
Evaluation distance:	20.00	(cm)	20.00	(cm)	20.00	(cm)
Evaluation frequency:	920.00	(MHz)	2400.0	(MHz)	2400.0	(MHz)
Limit from table below:	0.613	(mW/cm^2)	1.0	(mW/cm^2)	1.0	(mW/cm^2)
Power density at Evaluation frequency:	0.028	(mW/cm^2)	0.112	(mW/cm^2)	0.103	(mW/cm^2)
	0.028 +		0.112 +		0.103	

=   0.243 < 1   EUT complies

(B)   Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f^2)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz   *Plane-wave equivalent power density

NOTE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.