Nemko

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

Maximum peak output power at antenna input terminal:	40.7	(dBm)	*
Maximum peak output power at antenna input terminal:	11749.0	(mW)	
Antenna gain(maximum):	4.15	(dBi)	*
Maximum antenna gain:	2.60	(numeric)	
Time Averaging:	100	(%)	*
Prediction distance:	100	(cm)	*
Prediction frequency:	450	(MHz)	*
MPE limit for uncontrolled exposure at prediction frequency:	0.300	(mW/cm^2)	
Power density at prediction frequency:	0.243	(mW/cm^2)	
This equates to:	2.43	W/m^2	

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

Maximum peak output power at antenna input terminal:	40.7	(dBm)	*
Maximum peak output power at antenna input terminal:	11749.0	(mW)	
Antenna gain(maximum):	6.65	(dBi)	*
Maximum antenna gain:	4.62	(numeric)	
Time Averaging:	100	(%)	*
Prediction distance:	125	(cm)	*
Prediction frequency:	450	(MHz)	*
MPE limit for uncontrolled exposure at prediction frequency:	0.300	(mW/cm^2)	
Power density at prediction frequency:	0.277	(mW/cm^2)	
This equates to:	2.77	W/m^2	

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

Maximum peak output power at antenna input terminal:	40.7	(dBm)	*
Maximum peak output power at antenna input terminal:	11749.0	(mW)	
Antenna gain(maximum):	12.15	(dBi)	*
Maximum antenna gain:	16.41	(numeric)	
Time Averaging:	100	(%)	*
Prediction distance:	250	(cm)	*
Prediction frequency:	450	(MHz)	*
MPE limit for uncontrolled exposure at prediction frequency:	0.300	(mW/cm^2)	
Power density at prediction frequency:	0.245	(mW/cm^2)	
This equates to:	2.45	W/m^2	