

MPE CALCULATIONS

The following MPE calculations are based on a measured ERP of 108.2.1 dBμV/m at 3m and conducted RF power of +11.2 dBm as presented to the antenna. The calculated gain of this antenna, based on the ERP measurements (over a conducting ground plane) is 1.77 dBi.

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:	11.20	(dBm)	
Maximum peak output power at antenna input terminal:	13.183	(mW)	
Antenna gain(typical):	1.77	(dBi)	
Maximum antenna gain:	1.503	(numeric)	
Prediction distance:	20	(cm)	
Prediction frequency:	915	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	0.6	(mW/cm ²)	
Power density at prediction frequency:	0.003942	(mW/cm ²)	
Margin of Compliance at	20	cm =	21.8 dB