

### 13.3 Vee antenna module.

The following MPE calculations are based on the Vee antenna, with a measured ERP of 119.8dBμV/m, at 3 meters and conducted RF power of +19.6 dBm as presented to the antenna. The calculated gain of this antenna, based on the ERP measurements is 5.0 dB.

<u>Prediction of MPE limit at a given distance</u>			
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:	19.60	(dBm)	
Maximum peak output power at antenna input terminal:	91.201	(mW)	
Antenna gain(typical):	5	(dBi)	
Maximum antenna gain:	3.162	(numeric)	
Prediction distance:	20	(cm)	
Prediction frequency:	900	(MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	0.6	(mW/cm <sup>2</sup> )	
Power density at prediction frequency:	0.057376	(mW/cm <sup>2</sup> )	
Maximum allowable antenna gain:	15.2	(dBi)	
Margin of Compliance at	20	cm =	10.2 dB