

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

S = power density

P = output power

G = antenna gain

R = distance

		22H		24E	
	Output Power	24.74	(dBm)	24.37	(dBm)
	Output Power	298	(mW)	274	(mW)
	Antenna Gain	5.12	(dBi)	6.12	(dBi)
	Antenna Gain	3.25	(numeric)	4.09	(numeric)
	Distance	20	(cm)	20	(cm)
	Duty Cycle:	100	(%)	100	(%)
	Frequency	825	(MHz)	1900	(MHz)
MPE Limit General Public		0.550	(mW/cm^2)	1.000	(mW/cm^2)
	Power Density	0.193	(mW/cm^2)	0.223	(mW/cm^2)
	Margin	4.56	(dB)	6.52	(dB)
2.1091	EIRP	29.86	(dBm)	30.49	(dBm)
	ERP	27.72	(dBm)	28.35	(dBm)
	ERP	0.59	(W)	0.68	(W)
	ERP Limit	1.5	(W)	3	(W)
	Margin	4.04	(dB)	6.42	(dB)
22.913	ERP Limit	7	(W)		
	ERP	0.59	(W)		
24.232	EIRP Limit			2	(W)
	EIRP			1.12	(W)
	Margin	10.73	(dB)	2.520	(dB)