

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	29.40	(dBm)	26.97	(dBm)
	Output Power	871	(mW)	498	(mW)
	Antenna Gain	2	(dBi)	3	(dBi)
	Antenna Gain	1.58	(numeric)	2.00	(numeric)
	Distance	20	(cm)	20	(cm)
	Duty Cycle:	100	(%)	100	(%)
	Frequency	824.7	(MHz)	1851.25	(MHz)
MPE Limit General Public		0.550	(mW/cm^2)	1.000	(mW/cm^2)
	Power Density	0.275	(mW/cm^2)	0.198	(mW/cm^2)
	Margin	3.01	(dB)	7.04	(dB)
2.1091	EIRP	31.40	(dBm)	29.97	(dBm)
	ERP	29.26	(dBm)	27.83	(dBm)
	ERP	0.84	(W)	0.61	(W)
	ERP Limit	1.5	(W)	3	(W)
	Margin	2.50	(dB)	6.94	(dB)
22.913	ERP Limit	7	(W)		
	ERP	0.84	(W)		
24.232	EIRP Limit			2	(W)
	EIRP			0.99	(W)
	Margin	9.19	(dB)	3.040	(dB)