

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	<u>33.10</u>	(dBm)	<u>30.30</u>	(dBm)
	Output Power	<u>2042</u>	(mW)	<u>1072</u>	(mW)
	Antenna Gain	<u>-1</u>	(dBi)	<u>-1</u>	(dBi)
	Antenna Gain	<u>0.79</u>	(numeric)	<u>0.79</u>	(numeric)
	Distance	<u>20</u>	(cm)	<u>20</u>	(cm)
	Duty Cycle:	<u>25</u>	(%)	<u>25</u>	(%)
	Frequency	<u>824.2</u>	(MHz)	<u>1851.25</u>	(MHz)
MPE Limit General Public		<u>0.549</u>	(mW/cm ²)	<u>1.0</u>	(mW/cm ²)
	Power Density	<u>0.08</u>	(mW/cm ²)	<u>0.04</u>	(mW/cm ²)
	Margin	8.33	(dB)	13.7	(dB)
2.1091	EIRP	32.10	(dBm)	29.30	(dBm)
	ERP	29.96	(dBm)	27.16	(dBm)
	Duty Cycle	25.00	(%)	25.00	(%)
	ERP	0.25	(W)	0.13	(W)
	ERP Limit	1.5	(W)	3	(W)
	Margin	7.82	(dB)	13.6	(dB)
22.913	ERP Limit	7	(W)		
	ERP	0.99	(W)		
24.232	EIRP Limit			2	(W)
	EIRP			0.85	(W)
	Margin	8.49	(dB)	3.71	(dB)