MPE Calculator	Ligowave		Test Number	090528	
MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.					
	dBi = dB gain compared to an isotropic radiator.				
	S = power density in mW/cm^2			Antenna Gain (dBi)	40
		Output Power	dBd + 2.17 = dBi	dBi to dBd	2.17
Tx Frequency (MHz)	24146.5	(Watts)	0.010998		37.83
				Antenna minus cable (dBi)	40.00
Cable Loss (dB)	0.0	(dBm)	10.41		
	Calculated ERP (mw)	66730.363		Radiated (EIRP) dBm	50.413
	Calculated EIRP (mw)	109982.474			
				Radiated (ERP) dBm	48.243

Occupational Limit

5.00000 **mW/cm^2**

General Public Limit

1.00000 **mW/cm^2**

Power density (S) = EIRP / ($4 \pi r^2$) = mW/cm^2
[r (cm), EIRP (mW)]

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit	Public Limit
300-1,500	f/300	f/1500
1,500-10,000	5	1

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm^2)	Public Limit @ Tx Freq (mW/cm^2)
300-1,500	80.48833333	16.09766667
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm^2
109982.474	100.00	39.37	0.87521
109982.474	95.00	37.40	0.96976
109982.474	93.00	36.61	1.01192
109982.474	90.00	35.43	1.08051
109982.474	80.00	31.50	1.36752
109982.474	70.00	27.56	1.78615
109982.474	60.00	23.62	2.43115
109982.474	50.00	19.69	3.50085
109982.474	45.00	17.72	4.32204
109982.474	44.00	17.32	4.52073
109982.474	43.00	16.93	4.73344
109982.474	42.00	16.54	4.96152
109982.474	41.00	16.14	5.20650
109982.474	40.00	15.75	5.47008
109982.474	30.00	11.81	9.72459

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	N/A	N/A
1,500-10,000	42.00	93.00