

LigoWave		Model:	MWR200	Test Number:	080824		
MPE Calculator	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)	24	
		Output Power		dBd + 2.17 =dBt to dBd		2.2	
Tx Frequency (MHz)	2442	Maximum (Watts)	0.4950	Antenna Gain (dBd)		21.83	
Cable Loss (dB)	0.0	(dBm)	26.95	tenna minus cable (dBt)		24.00	
Calculated ERP (mw)	75440.611	EIRP = Po(dBM) + Gain (dB)		Radiated (EIRP) dBm		50.946	
Calculated EIRP (mw)	124338.378	ERP = EIRP - 2.17 dB		Radiated (ERP) dBm		48.776	
Occupational Limit	Power density (S) EIRP $\frac{4 \pi r^2}{r} = \text{mW}/\text{cm}^2$ r (cm)    EIRP (mW)						
5.00000	mW/cm <sup>2</sup>						
General Public Limit							
1.00000	mW/cm <sup>2</sup>						
<b>FCC radio frequency radiation exposure limits per 1.1310</b>							
	Frequency (MHz)	Occupational Limit	Public Limit				
	300-1,500	f/300	f/1500				
	1,500-10,000	5	1				
<b>FCC radio frequency radiation exposure limits per 1.1310</b>							
	Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm²)	Public Limit @ Tx Freq (mW/cm²)				
	300-1,500	8.14	1.628				
	1,500-10,000	5	1				
	EIRP	Distance	Distance	S	Distance		
	milliwatts	cm	inches	mW/cm²	Feet		
	124338.378	400.00	157.48	0.06184	13.12		
	124338.378	300.00	118.11	0.10994	9.84		
	124338.378	235.00	92.52	0.17917	7.71		
	124338.378	200.00	78.74	0.24736	6.56		
	124338.378	150.00	59.06	0.43976	4.92		
	124338.378	140.00	55.12	0.50482	4.59		
	124338.378	130.00	51.18	0.58548	4.27		
	124338.378	120.00	47.24	0.68712	3.94		
	124338.378	110.00	43.31	0.81773	3.61		
	124338.378	105.00	41.34	0.89746	3.44		
	124338.378	100.00	39.37	0.98945	3.28		
	124338.378	90.00	35.43	1.22155	2.95		
	124338.378	80.00	31.50	1.54602	2.62		
	124338.378	50.00	19.69	3.95781	1.64		
	124338.378	45.00	17.72	4.88619	1.48		
	124338.378	15.00	5.91	43.97571	0.49		
	124338.378	11.00	4.33	81.77301	0.36		
	Frequency (MHz)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (cm / inches)				
	300-1,500	N/A	N/A				
	1,500-10,000	45 / 17.7	100 / 39.4				