

LigoWave	Model: WBD-500	Test Number: 080731		
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 <sup>2</sup>			
			Antenna Gain (dBi) 24	
		Output Power	dBd + 2.17 = dBi	dBi to dBd 2.2
Tx Frequency (MHz)	2442	Maximum (Watts) 0.5407		Antenna Gain (dBd) 21.83
Cable Loss (dB)	0.0	(dBm) 27.33	Antenna minus cable (dBi) 24.00	
Calculated ERP (mw)	82405.532		EIRP = Po(dBM) + Gain (dB)	
Calculated EIRP (mw)	135817.699		Radiated (EIRP) dBm 51.330	
Occupational Limit	5.00000 mW/cm <sup>2</sup>	Power density (S) EIRP ----- = mW/cm <sup>2</sup> 4 π r <sup>2</sup> r (cm) EIRP (mW)		Radiated (ERP) dBm 49.160
General Public Limit	1.00000 mW/cm <sup>2</sup>			
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 <sup>2</sup> )	Public Limit @ Tx Freq (mW/cm <sup>2</sup> )	
	300-1,500	8.14	1.628	
	1,500-10,000	5	1	
	EIRP	Distance	Distance	S
	milliwatts	cm	inches	mW/cm <sup>2</sup>
	135817.699	400.00	157.48	0.06755
	135817.699	300.00	118.11	0.12009
	135817.699	235.00	92.52	0.19571
	135817.699	200.00	78.74	0.27020
	135817.699	150.00	59.06	0.48036
	135817.699	140.00	55.12	0.55143
	135817.699	130.00	51.18	0.63953
	135817.699	120.00	47.24	0.75056
	135817.699	110.00	43.31	0.89323
	135817.699	105.00	41.34	0.98032
	135817.699	104.00	40.94	0.99926
	135817.699	103.00	40.55	1.01876
	135817.699	100.00	39.37	1.08080
	135817.699	50.00	19.69	4.32321
	135817.699	47.00	18.50	4.89272
	135817.699	15.00	5.91	48.03568
	135817.699	11.00	4.33	89.32255
				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	47 / 18.5	104 / 41	

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LigoWave  
Model: WBD-500  
Test #: 080731  
Test to: FCC Parts 2, 15c, IC  
File: RFExp WBD500

FCC ID#: V2V-WBD500  
IC: 7607A-WBD500