

Deliberant Model: DLB2100  
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) **26**  
dBi to dBd 2.2  
Tx Frequency (MHz) **2442** Output Power Average (Watts) **0.2500** dBd + 2.17 = dBi  
Antenna Gain (dBd) **23.83**  
Cable Loss (dB) **0.0** (dBm) 23.98 Antenna minus cable (dBi) 26.00  
Calculated ERP (mw) 60386.521  
Calculated EIRP (mw) 99526.793  
ERP = Po(dBm) + Gain (dB)  
Radiated (EIRP) dBm 49.979  
ERP = EIRP - 2.17 dB  
Radiated (ERP) dBm 47.809

**Occupational Limit**  
**5.00000** mW/cm<sup>2</sup>  
**General Public Limit**  
**1.00000** mW/cm<sup>2</sup>

Power density (S)  
EIRP  
----- = mW/cm<sup>2</sup>  
4 π r<sup>2</sup>  
r (cm) EIRP (mW)

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	Distance
milliwatts	cm	inches	mW/cm <sup>2</sup>	Feet
99526.793	350.00	137.80	0.06465	11.48293963
99526.793	300.00	118.11	0.08800	9.842519685
99526.793	275.00	108.27	0.10473	9.022309711
99526.793	250.00	98.43	0.12672	8.202099738
99526.793	225.00	88.58	0.15645	7.381889764
99526.793	200.00	78.74	0.19800	6.56167979
99526.793	175.00	68.90	0.25862	5.741469816
99526.793	170.00	66.93	0.27405	5.577427822
99526.793	160.00	62.99	0.30938	5.249343832
99526.793	150.00	59.06	0.35200	4.921259843
99526.793	140.00	55.12	0.40409	4.593175853
99526.793	130.00	51.18	0.46864	4.265091864
99526.793	120.00	47.24	0.55001	3.937007874
99526.793	110.00	43.31	0.65455	3.608923885
99526.793	100.00	39.37	0.79201	3.280839895
99526.793	90.00	35.43	0.97779	2.952755906
99526.793	85.00	33.46	1.09621	2.788713911
99526.793	80.00	31.50	1.23751	2.624671916
99526.793	75.00	29.53	1.40802	2.460629921
99526.793	70.00	27.56	1.61635	2.296587927
99526.793	60.00	23.62	2.20003	1.968503937
99526.793	50.00	19.69	3.16804	1.640419948
99526.793	40.00	15.75	4.95006	1.312335958
99526.793	39.00	15.35	5.20716	1.279527559
99526.793	38.00	14.96	5.48483	1.24671916
99526.793	35.00	13.78	6.46538	1.148293963
99526.793	30.00	11.81	8.80010	0.984251969
99526.793	25.00	9.84	12.67214	0.820209974
99526.793	20.00	7.87	19.80023	0.656167979
99526.793	18.00	7.09	24.44472	0.590551181
99526.793	17.00	6.69	27.40516	0.557742782

Frequency (MHz)	Occupational Limit minimum Distance (feet)	Public Limit minimum distance (feet)
300-1,500	N/A	N/A
1,500-10,000	1.30	3.00

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Deliberant LLC  
MODEL: DLB21xx  
Test #: 070609  
Test to: FCC Parts 2, 15c, IC

FCC ID#: UB8-DLB2100  
IC:6607A-DLB2100