Wilibox Deliberant Group   Model: WMR500   Test Number: 080119

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)	32.5
	Output Power	dBd + 2.17 = dBi dBi to dBd	2.2
Tx Frequency (MHz) 5785	Maximum (Watts) 0.5000	Antenna Gain (dBd)	30.33

Cable Loss (dB) 0.0	(dBm) 26.99	Antenna minus cable (dBi) 32.50

Calculated ERP (mw) 539473.361

Calculated EIRP (mw) 889139.705

EIRP = Po(dBM) + Gain (dB)

Radiated (EIRP) dBm   59.490

ERP = EIRP - 2.17 dB

Radiated (ERP) dBm   57.320

Occupational Limit

5.00000 mW/cm²

General Public Limit

1.00000 mW/cm²

Power density (S)

EIRP

------- = mW/cm^2

4 π r^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	19.28333333	3.856666667
1,500-10,000	5	1

EIRP	Distance	Distance	S	Distance
milliwatts	cm	inches	mW/cm²	Feet
889139.705	350.00	137.80	0.57760	11.48
889139.705	300.00	118.11	0.78617	9.84
889139.705	275.00	108.27	0.93561	9.02
889139.705	270.00	106.30	0.97058	8.86
889139.705	265.00	104.33	1.00755	8.69
889139.705	260.00	102.36	1.04668	8.53
889139.705	250.00	98.43	1.13209	8.20
889139.705	240.00	94.49	1.22839	7.87
889139.705	230.00	90.55	1.33753	7.55
889139.705	220.00	86.61	1.46189	7.22
889139.705	210.00	82.68	1.60443	6.89
889139.705	200.00	78.74	1.76889	6.56
889139.705	190.00	74.80	1.95999	6.23
889139.705	180.00	70.87	2.18381	5.91
889139.705	170.00	66.93	2.44829	5.58
889139.705	160.00	62.99	2.76389	5.25
889139.705	150.00	59.06	3.14469	4.92
889139.705	140.00	55.12	3.60997	4.59
889139.705	130.00	51.18	4.18672	4.27
889139.705	129.00	50.79	4.25188	4.23
889139.705	128.00	50.39	4.31857	4.20
889139.705	127.00	50.00	4.38685	4.17
889139.705	126.00	49.61	4.45676	4.13
889139.705	125.00	49.21	4.52835	4.10
889139.705	124.00	48.82	4.60168	4.07
889139.705	123.00	48.43	4.67681	4.04
889139.705	122.00	48.03	4.75380	4.00
889139.705	121.00	47.64	4.83270	3.97
889139.705	120.00	47.24	4.91358	3.94
889139.705	119.00	46.85	4.99650	3.90
889139.705	115.00	45.28	5.35013	3.77

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	119 / 47	265 / 104