Dbii		Model: F20	Test Number:	080721		
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 = dBi	dBi 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		Antenna minus cable (dBi)	24.00
	Calculated ERP (mw)	75440.611		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	124338.378			Radiated (EIRP) dBm	50.946
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	48.776

Occupational Limit

5.00000 **mW/cm^2**

General Public Limit

1.00000 **mW/cm^2**

Power density (S)

$$\frac{EIRP}{4\pi r^2} = mW/cm^2$$

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	8.14	1.628
1,500-10,000	5	1

EIRP	Distance	Distance	S	Distance
milliwatts	cm	inches	mW/cm^2	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