Mikrotik		Model: RB922UAGS 5HPacT		Test Number: 140611			
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
			Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	5785		Maximum (Watts)	0.990000		Antenna Gain (dBd)	29.83
Cable Loss (dB)	0.0		(dBm)	29.96		Antenna minus cable (dBi)	32.00

Calculated ERP (mw)	951996.156		EIRP = Po(dBM) + Gain (dB)		
Calculated EIRP (mw)	1569044.261			Radiated (EIRP) dBm	61.956
			ERP = EIRP - 2.17 dB		
Occupational Limit				Radiated (ERP) dBm	59.786

Power density (S)

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

r (cm)   EIRP (mW)

Occupational Limit
5.00000 mW/cm^2
50.00000 W/m^2

General Public Limit
1.00000 mW/cm^2
10.00000 W/m^2

FCC radio frequency radiation exposure limits per 1.1310 (mW/cm2)		
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	Public Limit
300-1,500 (mW/cm2)	19.28333333	3.856666667
300-1,500 (W/m2)	192.8333333	38.56666667
1,500-10,000 (mW/cm2)	5	1
1,500-10,000 (W/m2)	50	10

EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm^2	W/m^2	cm	meter	inches	Feet
1569044.261	0.49944	4.99442	500.00	5.00	196.85	0.42
1569044.261	0.78038	7.80379	400.00	4.00	157.48	0.33
1569044.261	0.88790	8.87897	375.00	3.75	147.64	0.31
1569044.261	0.99076	9.90760	355.00	3.55	139.76	0.30
1569044.261	1.01927	10.19270	350.00	3.50	137.80	0.29
1569044.261	1.38734	13.87340	300.00	3.00	118.11	0.25
1569044.261	1.65105	16.51049	275.00	2.75	108.27	0.23
1569044.261	1.99777	19.97769	250.00	2.50	98.43	0.21
1569044.261	2.46638	24.66382	225.00	2.25	88.58	0.19
1569044.261	3.12151	31.21514	200.00	2.00	78.74	0.17
1569044.261	4.07708	40.77080	175.00	1.75	68.90	0.15
1569044.261	4.87737	48.77366	160.00	1.60	62.99	0.13
1569044.261	5.54936	55.49359	150.00	1.50	59.06	0.13
1569044.261	7.99108	79.91077	125.00	1.25	49.21	0.10
1569044.261	12.48606	124.86057	100.00	1.00	39.37	0.08
1569044.261	22.19744	221.97436	75.00	0.75	29.53	0.06
1569044.261	49.94423	499.44230	50.00	0.50	19.69	0.04

		Frequency (MHz)	Occupational Limit minimum Distance (meters)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (meters)	Public Limit minimum distance (cm / inches)
		300-1,500	N/A	N/A	N/A	N/A
		1,500-10,000	1.60	160 / 63	3.55	355 / 140