Mikrotik		Model: RB711UA-2HnD	Test Number: 110610			
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)	27
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	2437	Maximum (Watts)	0.760000		Antenna Gain (dBd)	24.83
Cable Loss (dB)	0.0	(dBm)	28.81		Antenna minus cable (dBi)	27.00
	Calculated ERP (mw)	231107.262		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	380902.298			Radiated (EIRP) dBm	55.808
				ERP = EIRP - 2.17 dB		
	Occupational Limit				Radiated (ERP) dBm	53.638
5.00000	mW/cm^2					
50.00000	W/m^2					
	General Public Limit					
1.00000	mW/cm^2					
10.00000	W/m^2					

Power density (S)

EIRP
------- = mW/cm^2
4 p r^2

r (cm) EIRP (mW)

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)	8.123333333	1.624666667
300-1,500 (W/m2)	81.23333333	16.24666667
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
380902.298	0.12124	1.21245	500.00	5.00	196.85	0.42
380902.298	0.18945	1.89445	400.00	4.00	157.48	0.33
380902.298	0.33679	3.36792	300.00	3.00	118.11	0.25
380902.298	0.75778	7.57781	200.00	2.00	78.74	0.17
380902.298	0.93553	9.35532	180.00	1.80	70.87	0.15
380902.298	0.98975	9.89755	175.00	1.75	68.90	0.15
380902.298	1.04883	10.48832	170.00	1.70	66.93	0.14
380902.298	1.34717	13.47166	150.00	1.50	59.06	0.13
380902.298	1.79356	17.93565	130.00	1.30	51.18	0.11
380902.298	2.10495	21.04947	120.00	1.20	47.24	0.10
380902.298	2.50506	25.05061	110.00	1.10	43.31	0.09
380902.298	3.03112	30.31124	100.00	1.00	39.37	0.08
380902.298	3.74213	37.42129	90.00	0.90	35.43	0.08
380902.298	4.73613	47.36132	80.00	0.80	31.50	0.07
380902.298	4.98212	49.82124	78.00	0.78	30.71	0.07
380902.298	5.38867	53.88665	75.00	0.75	29.53	0.06
380902.298	6.18597	61.85968	70.00	0.70	27.56	0.06

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	0.78	78 / 30.7	1.70	170 / 66.9