

Mikrotik	Model: RB711UA-5HnD		Test Number: 110610A			
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					
		Output Power		Antenna Gain (dBi)		38
				dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	5785	Maximum (Watts)	0.400000	Antenna Gain (dBd)		35.83
Cable Loss (dB)	0.0	(dBm)	26.02	Antenna minus cable (dBi)		38.00
	Calculated ERP (mw)	1531298.973		EIRP = Po(dBm) + Gain (dB)		
	Calculated EIRP (mw)	2523829.378			Radiated (EIRP) dBm	64.021
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	61.851
	Occupational Limit	<div>Power density (S)</div> <div>EIRP</div> <div>----- = mW/cm^2</div> <div>4 p r^2</div> <div>r (cm) EIRP (mW)</div>				
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
2523829.378	0.31381	3.13812	800.00	8.00	314.96	0.67
2523829.378	0.40988	4.09877	700.00	7.00	275.59	0.58
2523829.378	0.55789	5.57889	600.00	6.00	236.22	0.50
2523829.378	0.80336	8.03360	500.00	5.00	196.85	0.42
2523829.378	0.89015	8.90149	475.00	4.75	187.01	0.40
2523829.378	0.99180	9.91802	450.00	4.50	177.17	0.38
2523829.378	1.08621	10.86209	430.00	4.30	169.29	0.36
2523829.378	1.25525	12.55250	400.00	4.00	157.48	0.33
2523829.378	1.63951	16.39510	350.00	3.50	137.80	0.29
2523829.378	2.23156	22.31555	300.00	3.00	118.11	0.25
2523829.378	3.21344	32.13439	250.00	2.50	98.43	0.21
2523829.378	5.02100	50.20999	200.00	2.00	78.74	0.17
2523829.378	6.55804	65.58040	175.00	1.75	68.90	0.15
2523829.378	8.92622	89.26220	150.00	1.50	59.06	0.13
2523829.378	20.08400	200.83996	100.00	1.00	39.37	0.08
2523829.378	24.79506	247.95057	90.00	0.90	35.43	0.08
2523829.378	31.38124	313.81244	80.00	0.80	31.50	0.07
			Occupational Limit minimum	Occupational Limit minimum	Public Limit	Public Limit
			Distance	Distance	minimum	minimum distance
		Frequency (MHz)	(meters)	(cm / inches)	distance (meters)	(cm / inches)
		300-1,500	N/A	N/A	N/A	N/A
		1,500-10,000	2.00	200 / 78.7	4.30	430 / 169.3