

Mikrotik	Model: Groove-2Hn	Test Number: 110915G				
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	2.2	
Tx Frequency (MHz)	2437	Maximum (Watts)	0.516400	Antenna Gain (dBd)	21.83	
Cable Loss (dB)	0.0	(dBm)	27.13	Antenna minus cable (dBi)	24.00	
	Calculated ERP (mw)	78702.084		EIRP = Po(dBm) + Gain (dB)		
	Calculated EIRP (mw)	129713.815		Radiated (EIRP) dBm	51.130	
				EIRP = EIRP - 2.17 dB		
				Radiated (ERP) dBm	48.960	
<b>Occupational Limit</b>	Power density (S)	<div style="border: 1px solid black; padding: 5px;">           EIRP            ----- = mW/cm^2            4 p r^2            r (cm) EIRP (mW)         </div>				
5.00000 mW/cm^2						
50.00000 W/m^2						
<b>General Public Limit</b>						
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)	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
129713.815	0.04129	0.41289	500.00	5.00	196.85	0.42
129713.815	0.06451	0.64514	400.00	4.00	157.48	0.33
129713.815	0.11469	1.14692	300.00	3.00	118.11	0.25
129713.815	0.25806	2.58057	200.00	2.00	78.74	0.17
129713.815	0.33705	3.37055	175.00	1.75	68.90	0.15
129713.815	0.45877	4.58769	150.00	1.50	59.06	0.13
129713.815	0.66063	6.60627	125.00	1.25	49.21	0.10
129713.815	0.78051	7.80514	115.00	1.15	45.28	0.10
129713.815	0.85308	8.53082	110.00	1.10	43.31	0.09
129713.815	0.88497	8.84971	108.00	1.08	42.52	0.09
129713.815	0.93626	9.36263	105.00	1.05	41.34	0.09
129713.815	0.99215	9.92147	102.00	1.02	40.16	0.09
129713.815	1.03223	10.32230	100.00	1.00	39.37	0.08
129713.815	1.83508	18.35075	75.00	0.75	29.53	0.06
129713.815	6.45144	64.51436	40.00	0.40	15.75	0.03
129713.815	10.08037	100.80369	32.00	0.32	12.60	0.03
129713.815	11.46922	114.69219	30.00	0.30	11.81	0.03
			Occupational Limit minimum Distance (meters)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (meters)	Public Limit minimum distance (cm / inches)
			Frequency (MHz)			
			300-1,500	N/A	N/A	N/A
			1,500-10,000	0.32	1.00	100 / 39.4

Rogers Labs, Inc.  
 4405 W. 259th Terrace  
 Louisburg, KS 66053  
 Phone/Fax: (913) 837-3214  
 Revision 1

MIKROTIK  
 Model: Groove-2Hn  
 Test #: 110915G  
 Test to: FCC (15.247)  
 File: RFExp Groove2Hn

FCC ID#: TV7GROOVE-2HN  
 SN: 30F501538185  
 Date: November 14, 2011  
 Page 1 of 1