Mikrotik		Model: Groove A-5Hn		Test Number: 110428			
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)	0.207491			Antenna Gain (dBd)	29.83
Cable Loss (dB)	0.0	(dBm)	23.17			Antenna minus cable (dBi)	32.00

Calculated ERP (mw) 199526.231   EIRP = Po(dBM) + Gain (dB)

Calculated EIRP (mw) 328851.631   Radiated (EIRP) dBm 55.170

Occupational Limit

5.00000 mW/cm^2

50.00000 W/m^2

ERP = EIRP - 2.17 dB

Radiated (ERP) dBm 53.000

Power density (S)

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

r (cm)   EIRP (mW)

General Public Limit

1.00000 mW/cm^2

10.00000 W/m^2

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	Public Limit @ Tx Freq (mW/cm^2)
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
328851.631	0.10468	1.04677	500.00	5.00	196.85	0.42
328851.631	0.16356	1.63557	400.00	4.00	157.48	0.33
328851.631	0.29077	2.90769	300.00	3.00	118.11	0.25
328851.631	0.41871	4.18707	250.00	2.50	98.43	0.21
328851.631	0.65423	6.54230	200.00	2.00	78.74	0.17
328851.631	0.85450	8.54504	175.00	1.75	68.90	0.15
328851.631	1.00957	10.09575	161.00	1.61	63.39	0.13
328851.631	1.16307	11.63075	150.00	1.50	59.06	0.13
328851.631	2.61692	26.16918	100.00	1.00	39.37	0.08
328851.631	3.23076	32.30763	90.00	0.90	35.43	0.08
328851.631	4.08893	40.88935	80.00	0.80	31.50	0.07
328851.631	4.65230	46.52299	75.00	0.75	29.53	0.06
328851.631	4.77889	47.78886	74.00	0.74	29.13	0.06
328851.631	4.91071	49.10711	73.00	0.73	28.74	0.06
328851.631	5.04807	50.48067	72.00	0.72	28.35	0.06
328851.631	5.19127	51.91268	71.00	0.71	27.95	0.06
328851.631	5.34065	53.40649	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	0.72	72 / 28.35	1.61	161 / 63.39

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Revision 1

MIKROTIK

Model: Groove A-5Hn

Test #: 110428

Test to: FCC (15.247)

File: RFExp Groove A5Hn

FCC ID#: TV7GROOVE-5HN

SN: 2B9F015525F7

Date: May 12, 2011