

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					
				Antenna Gain (dBi)		35
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	5785	Maximum (Watts)	0.200000	Antenna Gain (dBd)		32.83
Cable Loss (dB)	0.0	(dBm)	23.01	Antenna minus cable (dBi)		35.00
	Calculated ERP (mw)	383733.748		EIRP = Po(dBm) + Gain (dB)		
	Calculated EIRP (mw)	632455.532		Radiated (EIRP) dBm		58.010
				ERP = EIRP - 2.17 dB		
	Occupational Limit	Power density (S)		Radiated (ERP) dBm		55.840
	5.00000 mW/cm ²	EIRP				
	50.00000 W/m ²	----- = mW/cm ²				
	General Public Limit	4 p r ²				
	1.00000 mW/cm ²	r (cm) EIRP (mW)				
	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
632455.532	0.20132	2.01317	500.00	5.00	196.85	0.42
632455.532	0.31456	3.14558	400.00	4.00	157.48	0.33
632455.532	0.55921	5.59213	300.00	3.00	118.11	0.25
632455.532	0.66551	6.65510	275.00	2.75	108.27	0.23
632455.532	0.74451	7.44515	260.00	2.60	102.36	0.22
632455.532	0.80527	8.05267	250.00	2.50	98.43	0.21
632455.532	0.99416	9.94157	225.00	2.25	88.58	0.19
632455.532	1.25823	12.58230	200.00	2.00	78.74	0.17
632455.532	1.39416	13.94161	190.00	1.90	74.80	0.16
632455.532	2.23685	22.36854	150.00	1.50	59.06	0.13
632455.532	3.22107	32.21070	125.00	1.25	49.21	0.10
632455.532	5.03292	50.32921	100.00	1.00	39.37	0.08
632455.532	6.21348	62.13483	90.00	0.90	35.43	0.08
632455.532	7.86394	78.63939	80.00	0.80	31.50	0.07
632455.532	10.27127	102.71268	70.00	0.70	27.56	0.06
632455.532	13.98034	139.80337	60.00	0.60	23.62	0.05
632455.532	20.13168	201.31685	50.00	0.50	19.69	0.04
			Occupational Limit minimum	Occupational Limit minimum	Public Limit	Public Limit
	Frequency (MHz)		Distance (meters)	Distance (cm / inches)	minimum distance (meters)	minimum distance (cm / inches)
	300-1,500		N/A	N/A	N/A	N/A
	1,500-10,000		1.00	100 / 39.4	2.25	225 / 88.6

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Revision 1

Mikrotiks SIA
Model: RB711G-5HnD
Test #: 110628
Test to: CFR47 (15.247)
File: RFExp RB711G5HND

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