

Mikrotik	Model:RB911G-2HPnD-12S	Test Number:	180509			
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	dBd + 2.17 = dBi	Antenna Gain (dBi)	15	
		Maximum (Watts)	0.250000	dBi to dBd	2.2	
Tx Frequency (MHz)	2437			Antenna Gain (dBd)	12.83	
Cable Loss (dB)	0.0	(dBm)	24.0	Antenna minus cable (dBd)	15.00	
	Calculated ERP (mw)	4796.672	EIRP = Po(dBm) + Gain (dB)			
	Calculated EIRP (mw)	7905.694		Radiated (EIRP) dBm	38.979	
		Power density (S)	EIRP = EIRP - 2.17 dB	Radiated (ERP) dBm	36.809	
		EIRP = mW/cm ² 4 π r ²				
		EIRP (mW), r (cm)				
	Occupational Limit	FCC radio frequency radiation exposure limits per 1.1310				
	5	mW/cm ²	Frequency (MHz)	Occupational Limit (mW/cm ²)	Public Limit (mW/cm ²)	
	50	W/m ²	300-1,500	ƒ300	ƒ1500	
		General Public Limit	1,500-10,000	5	1	
	1	mW/cm ²				
	10	W/m ²				
		Occupational Limit	IC radio frequency radiation exposure limits per RSS-102			
	0.6455 ^{0.5}	W/m ²	Frequency (MHz)	Occupational Limit (W/m ²)	Public Limit (W/m ²)	
	31.86574	W/m ²	100-6,000	0.6455 ^{0.5}		
		General Public Limit	6,000-15,000	50		
	0.02619 ^{0.8834}	W/m ²	48-300		1.291	
	5.40397	W/m ²	300-6,000		0.02619 ^{0.8834}	
			6,000-15,000	50	10	
EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm ²	W/m ²	cm	meter	inches	Feet
7905.694	0.06291	0.629	100.00	1.00	39.37	3.28
7905.694	0.07767	0.777	90.00	0.90	35.43	2.95
7905.694	0.09830	0.983	80.00	0.80	31.50	2.62
7905.694	0.12839	1.284	70.00	0.70	27.56	2.30
7905.694	0.17475	1.748	60.00	0.60	23.62	1.97
7905.694	0.25165	2.516	50.00	0.50	19.69	1.64
7905.694	0.39320	3.932	40.00	0.40	15.75	1.31
7905.694	0.69902	6.990	30.00	0.30	11.81	0.98
7905.694	1.57279	15.728	20.00	0.20	7.87	0.66
7905.694	6.29115	62.912	10.00	0.10	3.94	0.33
7905.694	7.76685	77.669	9.00	0.090	3.54	0.30
7905.694	9.82992	98.299	8.00	0.080	3.15	0.26
7905.694	12.83908	128.391	7.00	0.070	2.76	0.23
7905.694	17.47542	174.754	6.00	0.060	2.36	0.20
7905.694	25.16461	251.646	5.00	0.050	1.97	0.16
7905.694	39.31970	393.197	4.00	0.040	1.57	0.13
7905.694	69.90168	699.017	3.00	0.030	1.18	0.10
			Frequency (MHz)	Occupational Limit minimum Distance (meters)	Public Limit minimum distance (meters)	
			47CFR 1.1310	N/A	0.20	
			RSS-102	N/A	0.20	

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Revision 1

Mikrotik SIA S/N: 84AD08CAE425, 84AD08300865
Model: RB911G-2HPnD-12S
Test #: 180509
Test to: 47CFR 15.247, RSS-247
File: RB911G2HPND12S RFExp

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IC: 7442A-911G2HPND
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