

Mikrotik	Model:RBLDF-2nD	Test Number:	180702			
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)	25	
		Maximum (Watts)	0.032700	dBi to dBd	2.2	
Tx Frequency (MHz)	2437			Antenna Gain (dBd)	22.83	
Cable Loss (dB)	0.0	(dBm)	15.1	Antenna minus cable (dBd)	25.00	
	Calculated ERP (mw)	6274.047	EIRP = Po(dBm) + Gain (dB)			
	Calculated EIRP (mw)	10340.648		Radiated (EIRP) dBm	40.145	
		Power density (S)	EIRP = EIRP - 2.17 dB	Radiated (ERP) dBm	37.975	
		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 ^{0.6834}	W/m ²	48-300		1.291	
	5.40397	W/m ²	300-6,000		0.02619 ^{0.6834}	
			6,000-15,000	50	10	
EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm ²	W/m ²	cm	meter	inches	Feet
10340.648	0.08229	0.823	100.00	1.00	39.37	3.28
10340.648	0.10159	1.016	90.00	0.90	35.43	2.95
10340.648	0.12858	1.286	80.00	0.80	31.50	2.62
10340.648	0.16794	1.679	70.00	0.70	27.56	2.30
10340.648	0.22858	2.286	60.00	0.60	23.62	1.97
10340.648	0.32915	3.292	50.00	0.50	19.69	1.64
10340.648	0.51430	5.143	40.00	0.40	15.75	1.31
10340.648	0.91431	9.143	30.00	0.30	11.81	0.98
10340.648	2.05721	20.572	20.00	0.20	7.87	0.66
10340.648	8.22883	82.288	10.00	0.10	3.94	0.33
10340.648	10.15904	101.590	9.00	0.090	3.54	0.30
10340.648	12.85754	128.575	8.00	0.080	3.15	0.26
10340.648	16.79352	167.935	7.00	0.070	2.76	0.23
10340.648	22.85785	228.579	6.00	0.060	2.36	0.20
10340.648	32.91530	329.153	5.00	0.050	1.97	0.16
10340.648	51.43016	514.302	4.00	0.040	1.57	0.13
10340.648	91.43140	914.314	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
Model: RBLDF-2nD
Test #: 180330
Test to: 47 CFR 15.247, RSS-247
File: RBLDF2 C2PC RFEExp

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