

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)	1	
		Output Power		dBd + 2.17 = dBi	2.2	
Tx Frequency (MHz)	2437	Maximum (Watts)	0.826269	Antenna Gain (dBd)	-1.17	
Cable Loss (dB)	0.0	(dBm)	29.17	Antenna minus cable (dBi)	1.00	
	Calculated ERP (mw)	631.134		EIRP = Po(dBm) + Gain (dB)		
	Calculated EIRP (mw)	1040.211		Radiated (EIRP) dBm	30.171	
				ERP = EIRP - 2.17 dB		
	Occupational Limit			Radiated (ERP) dBm	28.001	
	5.00000 mW/cm ²	<div style="border: 1px solid black; padding: 5px;"> Power density (S) EIRP ----- = mW/cm² $4 \pi r^2$ r (cm) EIRP (mW) </div>				
	50.00000 W/m ²					
	General Public Limit					
	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
1040.211	0.00033	0.00331	500.00	5.00	196.85	0.42
1040.211	0.00052	0.00517	400.00	4.00	157.48	0.33
1040.211	0.00092	0.00920	300.00	3.00	118.11	0.25
1040.211	0.00207	0.02069	200.00	2.00	78.74	0.17
1040.211	0.00270	0.02703	175.00	1.75	68.90	0.15
1040.211	0.00368	0.03679	150.00	1.50	59.06	0.13
1040.211	0.00530	0.05298	125.00	1.25	49.21	0.10
1040.211	0.00828	0.08278	100.00	1.00	39.37	0.08
1040.211	0.01022	0.10219	90.00	0.90	35.43	0.08
1040.211	0.01293	0.12934	80.00	0.80	31.50	0.07
1040.211	0.01689	0.16893	70.00	0.70	27.56	0.06
1040.211	0.02299	0.22994	60.00	0.60	23.62	0.05
1040.211	0.03311	0.33111	50.00	0.50	19.69	0.04
1040.211	0.05174	0.51736	40.00	0.40	15.75	0.03
1040.211	0.09197	0.91975	30.00	0.30	11.81	0.03
1040.211	0.20694	2.06943	20.00	0.20	7.87	0.02
1040.211	0.82777	8.27773	10.00	0.10	3.94	0.01
			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	N/A
		1,500-10,000			0.10	10 / 4.0

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 Revision 1

Mikrotikls SIA
 Model: RB951Ui-2HnD
 Test #: 130317
 Test to: CFR47 (15.247)
 File: RFExp RB951U2HND

SN: 42B901DDA60
 FCC ID#: TV7RB951U-2HND
 Date: September 3, 2013
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