

Mikrotikls Sia
MPE Calculator

Model: CRD (Crossroads)
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/cm²

Output Power Average (Watts) **0.4000** dBi to dBd **2.2** Antenna Gain (dBi) **24**
 Tx Frequency (MHz) **2442** Antenna Gain (dBd) **21.83**
 Cable Loss (dB) **0.0** (dBm) 26.02 Antenna minus cable (dBi) 24.00
 Calculated ERP (mw) 60962.110 EIRP = Po(dBm) + Gain (dB)
 Calculated EIRP (mw) 100475.457 Radiated (EIRP) dBm 50.021
 ERP = EIRP - 2.17 dB
 Radiated (ERP) dBm 47.851

Occupational Limit
5.00000 mW/cm²
General Public Limit
1.00000 mW/cm²

Power density (S)
 EIRP
 ----- = mW/cm²
 4 π r²
 r (cm) EIRP (mW)

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit	Public Limit
300-1,500	1/300	1/1500
1,500-10,000	5	1

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm ²)	Public Limit @ Tx Freq (mW/cm ²)
300-1,500	8.14	1.628
1,500-10,000	5	1

EIRP	Distance	Distance	S	Distance
milliwatts	cm	inches	mW/cm ²	Feet
100475.457	350.00	137.80	0.06527	11.48293963
100475.457	300.00	118.11	0.08884	9.842519685
100475.457	275.00	108.27	0.10573	9.022309711
100475.457	250.00	98.43	0.12793	8.202099738
100475.457	225.00	88.58	0.15794	7.381889764
100475.457	200.00	78.74	0.19989	6.56167979
100475.457	175.00	68.90	0.26108	5.741469816
100475.457	170.00	66.93	0.27666	5.577427822
100475.457	160.00	62.99	0.31233	5.249343832
100475.457	150.00	59.06	0.35536	4.921259843
100475.457	140.00	55.12	0.40794	4.593175853
100475.457	130.00	51.18	0.47311	4.265091864
100475.457	120.00	47.24	0.55525	3.937007874
100475.457	110.00	43.31	0.66079	3.608923885
100475.457	100.00	39.37	0.79956	3.280839895
100475.457	90.00	35.43	0.98711	2.952755906
100475.457	85.00	33.46	1.10666	2.788713911
100475.457	80.00	31.50	1.24931	2.624671916
100475.457	75.00	29.53	1.42144	2.460629921
100475.457	70.00	27.56	1.63175	2.296587927
100475.457	60.00	23.62	2.22100	1.968503937
100475.457	50.00	19.69	3.19823	1.640419948
100475.457	40.00	15.75	4.99724	1.312335958
100475.457	39.00	15.35	5.25679	1.279527559
100475.457	38.00	14.96	5.53711	1.24671916
100475.457	35.00	13.78	6.52701	1.148293963
100475.457	30.00	11.81	8.88398	0.984251969
100475.457	25.00	9.84	12.79293	0.820209974
100475.457	20.00	7.87	19.98896	0.656167979
100475.457	18.00	7.09	24.67772	0.590551181
100475.457	17.00	6.69	27.66638	0.557742782

Frequency (MHz)	Occupational Limit minimum Distance (feet)	Public Limit minimum distance (feet)
300-1,500	N/A	N/A
1,500-10,000	1.31	3.00

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Mikrotikls Sia
 MODEL: CRD
 Test #: 070626
 Test to: FCC (15.247)

FCC ID#: TV7-CRD

SN: ENGL
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