Mikrotik		Model: R2n	Test Number:	090218		
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)	2
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	2437	Maximum (Watts)	0.1000		Antenna Gain (dBd)	-0.17
Cable Loss (dB)	0.0	(dBm)	20.00		Antenna minus cable (dBi)	2.00
	Calculated ERP (mw)	96.161		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	158.489			Radiated (EIRP) dBm	22.000
				ERP = EIRP - 2.17 dB		
	Occupational Limit				Radiated (ERP) dBm	19.830
	5.00000 mW/cm^2					
	General Public Limit					
	1.00000 mW/cm^2					

Power density (S)

EIRP
------- = mW/cm^2
4 π r^2

r (cm) EIRP (mW)

FCC radio frequency radiation exposure limits per 1.1310		
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 @ Tx Freq (mW/cm^2)	Public Limit @ Tx Freq (mW/cm^2)
300-1,500	8.123333333	1.624666667
1,500-10,000	5	1

EIRP	Distance	Distance	S	Distance
milliwatts	cm	inches	mW/cm^2	Feet
158.489	100.00	39.37	0.00126	3.28
158.489	90.00	35.43	0.00156	2.95
158.489	80.00	31.50	0.00197	2.62
158.489	70.00	27.56	0.00257	2.30
158.489	60.00	23.62	0.00350	1.97
158.489	50.00	19.69	0.00504	1.64
158.489	25.00	9.84	0.02018	0.82
158.489	20.00	7.87	0.03153	0.66
158.489	15.00	5.91	0.05605	0.49
158.489	10.00	3.94	0.12612	0.33
158.489	5.00	1.97	0.50449	0.16
158.489	4.00	1.57	0.78826	0.13
158.489	3.60	1.42	0.97316	0.12
158.489	3.00	1.18	1.40135	0.10
158.489	1.60	0.63	4.92663	0.05

Frequency (MHz)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (cm / inches)
300-1,500	N/A	N/A
1,500-10,000	1.6 / 0.6	3.6 / 1.4