

Mikrotik		Model: R5H	Test Number:	080910		
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)	32	
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	5785	Maximum (Watts)	1.0000	Antenna Gain (dBd)	29.83	
Cable Loss (dB)	0.0	(dBm)	30.00	Antenna minus cable (dBi)	32.00	
	Calculated ERP (mw)	961612.278		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	1584893.192		Radiated (EIRP) dBm	62.000	
		Power density (S) EIRP ----- = mW/cm² 4 π r² r (cm) EIRP (mW)		ERP = EIRP - 2.17 dB		
	Occupational Limit			Radiated (ERP) dBm	59.830	
	5.00000 mW/cm²					
	General Public Limit					
	1.00000 mW/cm²					
		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	19.28333333	3.856666667		
		1,500-10,000	5	1		
		EIRP	Distance	Distance	S	Distance
		milliwatts	cm	inches	mW/cm ²	Feet
		1584893.192	400.00	157.48	0.78826	13.12
		1584893.192	375.00	147.64	0.89687	12.30
		1584893.192	350.00	137.80	1.02957	11.48
		1584893.192	325.00	127.95	1.19405	10.66
		1584893.192	300.00	118.11	1.40135	9.84
		1584893.192	275.00	108.27	1.66773	9.02
		1584893.192	250.00	98.43	2.01795	8.20
		1584893.192	225.00	88.58	2.49129	7.38
		1584893.192	200.00	78.74	3.15304	6.56
		1584893.192	175.00	68.90	4.11826	5.74
		1584893.192	160.00	62.99	4.92663	5.25
		1584893.192	150.00	59.06	5.60541	4.92
		1584893.192	140.00	55.12	6.43479	4.59
		1584893.192	130.00	51.18	7.46283	4.27
		1584893.192	120.00	47.24	8.75846	3.94
		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	160 / 63	350 / 138		