Mikrotik		Model: Metal 5SHPn		Test Number: 120416M		
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)	1.000000		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
				ERP = EIRP - 2.17 dB		
	Occupational Limit				Radiated (ERP) dBm	59.830
5.00000	mW/cm^2					
50.00000	W/m^2					
	General Public Limit					
1.00000	mW/cm^2					
10.00000	W/m^2					

Power density (S)

EIRP
------- = mW/cm^2
4 p r^2

r (cm) EIRP (mW)

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)	19.28333333	3.856666667
300-1,500 (W/m2)	192.8333333	38.56666667
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
1584893.192	0.82920	8.29203	390.00	3.90	153.54	0.33
1584893.192	0.87342	8.73420	380.00	3.80	149.61	0.32
1584893.192	0.92127	9.21269	370.00	3.70	145.67	0.31
1584893.192	0.97316	9.73162	360.00	3.60	141.73	0.30
1584893.192	1.02957	10.29566	350.00	3.50	137.80	0.29
1584893.192	1.09102	10.91019	340.00	3.40	133.86	0.28
1584893.192	1.15814	11.58143	330.00	3.30	129.92	0.28
1584893.192	1.23166	12.31658	320.00	3.20	125.98	0.27
1584893.192	1.31240	13.12402	310.00	3.10	122.05	0.26
1584893.192	1.40135	14.01353	300.00	3.00	118.11	0.25
1584893.192	1.66773	16.67726	275.00	2.75	108.27	0.23
1584893.192	2.01795	20.17949	250.00	2.50	98.43	0.21
1584893.192	2.49129	24.91295	225.00	2.25	88.58	0.19
1584893.192	3.15304	31.53045	200.00	2.00	78.74	0.17
1584893.192	4.11826	41.18263	175.00	1.75	68.90	0.15
1584893.192	4.92663	49.26633	160.00	1.60	62.99	0.13
1584893.192	5.60541	56.05413	150.00	1.50	59.06	0.13

Frequency (MHz)	Occupational Limit minimum Distance (meters)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (meters)	Public Limit minimum distance (cm / inches)
300-1,500	N/A	N/A	N/A	N/A
1,500-10,000	1.60	160 / 63	3.50	350 / 138