Mikrotik		Model: OmniTik U-5HnD		Test Number: 110518		
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)	3
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	5785	Maximum (Watts)	0.661000		Antenna Gain (dBd)	0.83
Cable Loss (dB)	0.0	(dBm)	28.20		Antenna minus cable (dBi)	3.00
Calculated ERP (mw)		800.205		EIRP = Po(dBM) + Gain (dB)		
Calculated EIRP (mw)		1318.868			Radiated (EIRP) dBm	31.202
				ERP = EIRP - 2.17 dB		
Occupational Limit					Radiated (ERP) dBm	29.032
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
1318.868	0.00042	0.00420	500.00	5.00	196.85	0.42
1318.868	0.00066	0.00656	400.00	4.00	157.48	0.33
1318.868	0.00117	0.01166	300.00	3.00	118.11	0.25
1318.868	0.00262	0.02624	200.00	2.00	78.74	0.17
1318.868	0.01050	0.10495	100.00	1.00	39.37	0.08
1318.868	0.04198	0.41981	50.00	0.50	19.69	0.04
1318.868	0.06560	0.65595	40.00	0.40	15.75	0.03
1318.868	0.11661	1.16614	30.00	0.30	11.81	0.03
1318.868	0.26238	2.62381	20.00	0.20	7.87	0.02
1318.868	1.04952	10.49522	10.00	0.10	3.94	0.01
1318.868	1.29571	12.95706	9.00	0.09	3.54	0.01
1318.868	1.63988	16.39878	8.00	0.08	3.15	0.01
1318.868	2.14188	21.41882	7.00	0.07	2.76	0.01
1318.868	2.91534	29.15339	6.00	0.06	2.36	0.01
1318.868	4.19809	41.98088	5.00	0.05	1.97	0.00
1318.868	6.55951	65.59513	4.00	0.04	1.57	0.00
1318.868	11.66136	116.61357	3.00	0.03	1.18	0.00

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	0.05	5.0 / 2.0	0.10	10 / 4.0