Mikrotik	Model: RB962UiGS-5HacT2HnT-US		Test Number:	160514b		
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)	2.7
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	2437	Maximum (Watts)	0.581000		Antenna Gain (dBd)	0.53
Cable Loss (dB)	0.0	(dBm)	27.6		Antenna minus cable (dBi)	2.70
	Calculated ERP (mw)	656.411		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	1081.873			Radiated (EIRP) dBm	30.342
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	28.172

Power density (S)

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

EIRP (mW), r (cm)

	Occupational Limit	FCC radio frequency radiation exposure limits per 1.1310		
5	mW/cm^2	Frequency (MHz)	Occupational Limit (mW/cm^2)	Public Limit (mW/cm^2)
50	W/m^2	300-1,500	f/300	f/1500
	General Public Limit	1,500-10,000	5	1
1	mW/cm^2			
10	W/m^2			

	Occupational Limit	IC radio frequency radiation exposure limits per RSS-102		
$0.6455f^{0.5}$	W/m^2	Frequency (MHz)	Occupational Limit (W/m^2)	Public Limit (W/m^2)
31.86574	W/m^2	100-6,000	$0.6455f^{0.5}$	
	General Public Limit	6,000-15,000	50	
$0.02619f^{0.6834}$	W/m^2	48-300		1.291
5.40397	W/m^2	300-6,000		$0.02619f^{0.6834}$
		6,000-15,000	50	10

EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm^2	W/m^2	cm	meter	inches	Feet
1081.873	0.01063	0.10629	90.00	0.90	35.43	2.95
1081.873	0.01345	0.13452	80.00	0.80	31.50	2.62
1081.873	0.01757	0.17570	70.00	0.70	27.56	2.30
1081.873	0.02391	0.23915	60.00	0.60	23.62	1.97
1081.873	0.03444	0.34437	50.00	0.50	19.69	1.64
1081.873	0.05381	0.53808	40.00	0.40	15.75	1.31
1081.873	0.09566	0.95659	30.00	0.30	11.81	0.98
1081.873	0.21523	2.15232	20.00	0.20	7.87	0.66
1081.873	0.50942	5.09424	13.00	0.13	5.12	0.43
1081.873	1.34520	13.45198	8.00	0.08	3.15	0.26
1081.873	2.39146	23.91464	6.00	0.060	2.36	0.20
1081.873	2.84604	28.46039	5.50	0.055	2.17	0.18
1081.873	3.44371	34.43708	5.00	0.050	1.97	0.16
1081.873	5.38079	53.80793	4.00	0.040	1.57	0.13
1081.873	9.56585	95.65854	3.00	0.030	1.18	0.10
1081.873	21.52317	215.23172	2.00	0.020	0.79	0.07
1081.873	86.09269	860.92688	1.00	0.010	0.39	0.03

Frequency (MHz)	Occupational Limit minimum Distance (meters)	Public Limit minimum distance (meters)
47CFR 1.1310	0.20	0.20
RSS-102	0.20	0.20

Mikrotik	Model: RB962UiGS-5HacT2HnT-US		Test Number:	160514b		
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)	2.7
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	5785	Maximum (Watts)	0.046000		Antenna Gain (dBd)	0.53
Cable Loss (dB)	0.0	(dBm)	16.6		Antenna minus cable (dBi)	2.70
	Calculated ERP (mw)	51.971		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	85.656			Radiated (EIRP) dBm	19.328
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	17.158

Power density (S)

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

EIRP (mW), r (cm)

	Occupational Limit	FCC radio frequency radiation exposure limits per 1.1310		
5	mW/cm^2	Frequency (MHz)	Occupational Limit (mW/cm^2)	Public Limit (mW/cm^2)
50	W/m^2	300-1,500	f/300	f/1500
	General Public Limit	1,500-10,000	5	1
1	mW/cm^2			
10	W/m^2			

	Occupational Limit	IC radio frequency radiation exposure limits per RSS-102		
$0.6455f^{0.5}$	W/m^2	Frequency (MHz)	Occupational Limit (W/m^2)	Public Limit (W/m^2)
49.09621	W/m^2	100-6,000	$0.6455f^{0.5}$	
	General Public Limit	6,000-15,000	50	
$0.02619f^{0.6834}$	W/m^2	48-300		1.291
9.75649	W/m^2	300-6,000		$0.02619f^{0.6834}$
		6,000-15,000	50	10

EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm^2	W/m^2	cm	meter	inches	Feet
85.656	0.00084	0.00842	90.00	0.90	35.43	2.95
85.656	0.00107	0.01065	80.00	0.80	31.50	2.62
85.656	0.00139	0.01391	70.00	0.70	27.56	2.30
85.656	0.00189	0.01893	60.00	0.60	23.62	1.97
85.656	0.00273	0.02727	50.00	0.50	19.69	1.64
85.656	0.00426	0.04260	40.00	0.40	15.75	1.31
85.656	0.00757	0.07574	30.00	0.30	11.81	0.98
85.656	0.01704	0.17041	20.00	0.20	7.87	0.66
85.656	0.04033	0.40333	13.00	0.13	5.12	0.43
85.656	0.10650	1.06505	8.00	0.08	3.15	0.26
85.656	0.18934	1.89341	6.00	0.060	2.36	0.20
85.656	0.22533	2.25332	5.50	0.055	2.17	0.18
85.656	0.27265	2.72652	5.00	0.050	1.97	0.16
85.656	0.42602	4.26018	4.00	0.040	1.57	0.13
85.656	0.75737	7.57365	3.00	0.030	1.18	0.10
85.656	1.70407	17.04072	2.00	0.020	0.79	0.07
85.656	6.81629	68.16289	1.00	0.010	0.39	0.03

Frequency (MHz)	Occupational Limit minimum Distance (meters)	Public Limit minimum distance (meters)
47CFR 1.1310	0.20	0.20
RSS-102	0.20	0.20