Mikrotik	Model: RB952ui 5ac2nD		Test Number:	160104d		
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)	0.116177		Antenna Gain (dBd)	0.53
Cable Loss (dB)	0.0	(dBm)	20.7		Antenna minus cable (dBi)	2.70
	Calculated ERP (mw)	131.257		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	216.332			Radiated (EIRP) dBm	23.351
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	21.181

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)
0.95332	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
216.332	0.00213	0.02125	90.00	0.90	35.43	2.95
216.332	0.00269	0.02690	80.00	0.80	31.50	2.62
216.332	0.00351	0.03513	70.00	0.70	27.56	2.30
216.332	0.00478	0.04782	60.00	0.60	23.62	1.97
216.332	0.00689	0.06886	50.00	0.50	19.69	1.64
216.332	0.01076	0.10759	40.00	0.40	15.75	1.31
216.332	0.01913	0.19128	30.00	0.30	11.81	0.98
216.332	0.04304	0.43038	20.00	0.20	7.87	0.66
216.332	0.08783	0.87833	14.00	0.14	5.51	0.46
216.332	0.26899	2.68987	8.00	0.08	3.15	0.26
216.332	0.47820	4.78199	6.00	0.060	2.36	0.20
216.332	0.52986	5.29861	5.70	0.057	2.24	0.19
216.332	0.68861	6.88607	5.00	0.050	1.97	0.16
216.332	0.97592	9.75917	4.20	0.042	1.65	0.14
216.332	1.91280	19.12797	3.00	0.030	1.18	0.10
216.332	4.30379	43.03793	2.00	0.020	0.79	0.07
216.332	17.21517	172.15173	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: RB952ui 5ac2nD		Test Number:	160104d		
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)	5725	Maximum (Watts)	0.008652		Antenna Gain (dBd)	0.53
Cable Loss (dB)	0.0	(dBm)	9.4		Antenna minus cable (dBi)	2.70
	Calculated ERP (mw)	9.775		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	16.111			Radiated (EIRP) dBm	12.071
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	9.901

Power density (S)

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

EIRP (mW), r (cm)

		FCC radio frequency radiation exposure limits per 1.1310		
	Occupational Limit			
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			

		IC radio frequency radiation exposure limits per RSS-102		
	Occupational Limit			
$0.6455f^{0.5}$	W/m^2	Frequency (MHz)	Occupational Limit (W/m^2)	Public Limit (W/m^2)
0.99491	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
9.68722	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
16.111	0.00016	0.00158	90.00	0.90	35.43	2.95
16.111	0.00020	0.00200	80.00	0.80	31.50	2.62
16.111	0.00026	0.00262	70.00	0.70	27.56	2.30
16.111	0.00036	0.00356	60.00	0.60	23.62	1.97
16.111	0.00051	0.00513	50.00	0.50	19.69	1.64
16.111	0.00080	0.00801	40.00	0.40	15.75	1.31
16.111	0.00142	0.01425	30.00	0.30	11.81	0.98
16.111	0.00321	0.03205	20.00	0.20	7.87	0.66
16.111	0.00654	0.06541	14.00	0.14	5.51	0.46
16.111	0.02003	0.20032	8.00	0.08	3.15	0.26
16.111	0.03561	0.35613	6.00	0.060	2.36	0.20
16.111	0.03946	0.39460	5.70	0.057	2.24	0.19
16.111	0.05128	0.51283	5.00	0.050	1.97	0.16
16.111	0.07268	0.72680	4.20	0.042	1.65	0.14
16.111	0.14245	1.42452	3.00	0.030	1.18	0.10
16.111	0.32052	3.20517	2.00	0.020	0.79	0.07
16.111	0.56981	5.69808	1.50	0.015	0.59	0.05

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