

Mikrotik	Model: SXT r2 2nD	Test Number: 120913				
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)	9	
		Output Power	dBd + 2.17 = dBi	dBi to dBd	2.2	
Tx Frequency (MHz)	2437	Maximum (Watts)	0.252859	Antenna Gain (dBd)	6.83	
Cable Loss (dB)	0.0	(dBm)	24.03	Antenna minus cable (dBi)	9.00	
	Calculated ERP (mw)	1218.649		EIRP = Po(dBm) + Gain (dB)		
	Calculated EIRP (mw)	2008.532		Radiated (EIRP) dBm	33.029	
				ERP = EIRP - 2.17 dB		
	Occupational Limit	Power density (S)		Radiated (ERP) dBm	30.859	
	5.00000 mW/cm ²	EIRP				
	50.00000 W/m ²	----- = mW/cm ²				
	General Public Limit	4 p r ²				
	1.00000 mW/cm ²	r (cm) EIRP (mW)				
	10.00000 W/m ²					
FCC radio frequency radiation exposure limits per 1.1310 (mW/cm2)						
	Frequency (MHz)	Occupational Limit	Public Limit			
	300-1,500	ƒ/300	ƒ/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)	8.123333333	1.624666667			
	300-1,500 (W/m2)	81.233333333	16.246666667			
	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
2008.532	0.00064	0.00639	500.00	5.00	196.85	0.42
2008.532	0.00100	0.00999	400.00	4.00	157.48	0.33
2008.532	0.00178	0.01776	300.00	3.00	118.11	0.25
2008.532	0.00400	0.03996	200.00	2.00	78.74	0.17
2008.532	0.01598	0.15983	100.00	1.00	39.37	0.08
2008.532	0.01973	0.19733	90.00	0.90	35.43	0.08
2008.532	0.02497	0.24974	80.00	0.80	31.50	0.07
2008.532	0.03262	0.32619	70.00	0.70	27.56	0.06
2008.532	0.04440	0.44398	60.00	0.60	23.62	0.05
2008.532	0.06393	0.63934	50.00	0.50	19.69	0.04
2008.532	0.09990	0.99896	40.00	0.40	15.75	0.03
2008.532	0.17759	1.77593	30.00	0.30	11.81	0.03
2008.532	0.39958	3.99585	20.00	0.20	7.87	0.02
2008.532	0.94576	9.45763	13.00	0.13	5.12	0.01
2008.532	1.59834	15.98339	10.00	0.10	3.94	0.01
2008.532	4.43983	44.39830	6.00	0.06	2.36	0.01
2008.532	6.39336	63.93356	5.00	0.05	1.97	0.00
			Occupational Limit minimum	Occupational Limit minimum	Public Limit	Public Limit
			Distance	Distance	minimum	minimum
			(meters)	(cm / inches)	distance (meters)	distance (cm / inches)
			300-1,500	N/A	N/A	N/A
			1,500-10,000	0.06	0.13	13 / 5.1

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Revision 1

Mikrotiks SIA
Model: SXTr2 2nD
Test #: 120913
Test to: CFR47 (15.247)
File: RFExp SXT2nD

SN: 3AAE01DD0C13/236
FCC ID#: TV7SXT-2ND
Date: December 3, 2012
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