

Test Method:	FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions						
Customer:	X-10 Wireless Technologies, Inc.				Job No.	R-9881-1	
Test Sample:	Handheld 433 MHz Pulsed RF Transmitter				Paragraph:	15.231 (b)	
Model No.:	20016398				FCC ID:	B4S20016398	
Operating Mode:	Continuously Transmitting a 433.94 MHz Signal						
Technician:	J. Kabacinski				Date:	April 22nd, 2003	
Notes:	Test Distance: 3 Meters Detector: Peak, unless otherwise specified Temperature: 13.0 °C Humidity: 80.0 %						
Frequency	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
433.94	H / 2.0	X	77.0	-0.7	76.3	6531.3	109660
	H / 1.75	Y	78.5	-0.7	77.8	7762.5	
	H / 2.0	Z	68.9	-0.7	68.2	2570.4	
	V / 1.25	X	75.0	-0.7	74.3	5188.0	
	V / 2.25	Y	72.5	-0.7	71.8	3890.5	
433.94	V / 1.0	Z	81.4	-0.7	80.7	10839.3	109660
867.88	H / 1.0	X	38.2	+8.0	46.2	204.2	10966
	H / 1.0	Y	35.8	+8.0	43.8	154.9	
	H / 1.75	Z	37.6	+8.0	45.6	190.5	
	V / 1.0	X	42.4	+8.0	50.4	331.1	
	V / 1.0	Y	39.0	+8.0	47.0	223.9	
867.88	V / 1.0	Z	36.9	+8.0	44.9	175.8	10966
1301.82	H / 1.0	X	41.0	-0.6	40.4	104.7	5000
	H / 1.0	Y	41.1	-0.6	40.5	105.9	
	H / 1.5	Z	41.7	-0.6	41.1	113.5	
	V / 1.25	X	44.0	-0.6	43.4	147.9	
	V / 1.0	Y	42.5	-0.6	41.9	124.5	
1301.82	V / 1.0	Z	44.1	-0.6	43.5	149.6	5000
1735.76	H / 1.0	X	40.0	+4.1	44.1	160.3	10966
	H / 1.0	Y	40.0	+4.1	44.1	160.3	
	H / 1.25	Z	43.6	+4.1	47.7	242.7	
	V / 1.0	X	40.0	+4.1	44.1	160.3	
	V / 1.0	Y	40.0	+4.1	44.1	160.3	
1735.76	V / 1.0	Z	42.0	+4.1	46.1	201.8	10966
2169.70	H / 1.0	X	38.0	-2.4	35.6	60.3	10966
	H / 1.0	Y	38.0	-2.4	35.6	60.3	
	H / 1.5	Z	41.5	-2.4	39.1	90.2	
	V / 1.0	X	38.0	-2.4	35.6	60.3	
	V / 1.0	Y	38.0	-2.4	35.6	60.3	
2169.70	V / 1.0	Z	38.0	-2.4	35.6	60.3	10966
The frequency range was scanned from 30 MHz to 4.33 GHz.							
All emissions not recorded were more than 10 dB below the specified limit.							
Emissions from the EUT do not exceed the specified limits.							
*=Noise Floor Measurements (minimum system sensitivity).							



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Technician:	J. Kabacinski				Date:	April 22nd, 2003	
Notes:	Test Distance: 3 Meters Detector: Peak, unless otherwise specified				Temperature: 13.0 °C Humidity: 80.0 %		
Frequency	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2603.64	H / 1.0	X	44.0	-1.0	43.0	141.3	10966
	H / 1.0	Y	43.0	-1.0	42.0	125.9	
	H / 1.25	Z	45.7	-1.0	44.7	171.8	
	V / 1.0	X	43.0	-1.0	42.0	125.9	
	V / 1.0	Y	43.0	-1.0	42.0	125.9	
2603.64	V / 1.0	Z	45.6	-1.0	44.6	169.8	10966
3037.58	H / 1.0	X	41.0	+0.8	41.8	123.0	10966
	H / 1.0	Y	41.0	+0.8	41.8	123.0	
	H / 1.0	Z	41.0	+0.8	41.8	123.0	
	V / 1.0	X	41.0	+0.8	41.8	123.0	
	V / 1.0	Y	41.0	+0.8	41.8	123.0	
3037.58	V / 1.0	Z	41.0	+0.8	41.8	123.0	10966
3471.52	H / 1.0	X	41.0	+0.8	41.8	123.0	10966
	H / 1.0	Y	41.0	+0.8	41.8	123.0	
	H / 1.0	Z	41.0	+0.8	41.8	123.0	
	V / 1.0	X	41.0	+0.8	41.8	123.0	
	V / 1.0	Y	41.0	+0.8	41.8	123.0	
3471.52	V / 1.0	Z	41.0	+0.8	41.8	123.0	10966
3905.46	H / 1.0	X	40.0	+2.7	42.7	136.5	5000
	H / 1.0	Y	40.0	+2.7	42.7	136.5	
	H / 1.0	Z	40.0	+2.7	42.7	136.5	
	V / 1.0	X	40.0	+2.7	42.7	136.5	
	V / 1.0	Y	40.0	+2.7	42.7	136.5	
3905.46	V / 1.0	Z	40.0	+2.7	42.7	136.5	5000
4339.40	H / 1.0	X	40.0	+2.3	42.3	130.3	5000
	H / 1.0	Y	40.0	+2.3	42.3	130.3	
	H / 1.0	Z	40.0	+2.3	42.3	130.3	
	V / 1.0	X	40.0	+2.3	42.3	130.3	
	V / 1.0	Y	40.0	+2.3	42.3	130.3	
4339.40	V / 1.0	Z	40.0	+2.3	42.3	130.3	5000
	The frequency range was scanned from 30 MHz to 4.33 GHz.						
	All emissions not recorded were more than 10 dB below the specified limit.						
	Emissions from the EUT do not exceed the specified limits.						
	*=Noise Floor Measurements (minimum system sensitivity).						



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Technician:	J. Kabacinski				Date:	April 22nd, 2003	
Notes:	Test Distance: 3 Meters				Duty Cycle: 33.6 %		
	Detector: Peak, unless otherwise specified				Duty Cycle Correction: -9.47 dB		
Frequency	Antenna Pol./Height	EUT Orientation	Peak Reading	Correction Factor	Corrected Reading	Converted Reading	Avg. Limit
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
433.94	H / 2.0	X	76.30	-9.47	66.8	2195.3	10966.0
	H / 1.75	Y	77.80	-9.47	68.3	2609.2	
	H / 2.0	Z	68.20	-9.47	58.7	864.0	
	V / 1.25	X	74.30	-9.47	64.8	1743.8	
	V / 2.25	Y	71.80	-9.47	62.3	1307.7	
433.94	V / 1.0	Z	80.70	-9.47	71.2	3643.3	10966.0
867.88	H / 1.0	X	46.20	-9.47	36.7	68.6	1096.6
	H / 1.0	Y	43.80	-9.47	34.3	52.1	
	H / 1.75	Z	45.60	-9.47	36.1	64.0	
	V / 1.0	X	50.40	-9.47	40.9	111.3	
	V / 1.0	Y	47.00	-9.47	37.5	75.2	
867.88	V / 1.0	Z	44.90	-9.47	35.4	59.1	1096.6
1301.82	H / 1.0	X	40.40	-9.47	30.9	35.2	500
	H / 1.0	Y	40.50	-9.47	31.0	35.6	
	H / 1.5	Z	41.10	-9.47	31.6	38.2	
	V / 1.25	X	43.40	-9.47	33.9	49.7	
	V / 1.0	Y	41.90	-9.47	32.4	41.8	
1301.82	V / 1.0	Z	43.50	-9.47	34.0	50.3	500
1735.76	H / 1.0	X	44.10	-9.47	34.6	53.9	1096.6
	H / 1.0	Y	44.10	-9.47	34.6	53.9	
	H / 1.25	Z	47.70	-9.47	38.2	81.6	
	V / 1.0	X	44.10	-9.47	34.6	53.9	
	V / 1.0	Y	44.10	-9.47	34.6	53.9	
1735.76	V / 1.0	Z	46.10	-9.47	36.6	67.8	1096.6
2169.70	H / 1.0	X	35.60	-9.47	26.1	20.3	1096.6
	H / 1.0	Y	35.60	-9.47	26.1	20.3	
	H / 1.5	Z	39.10	-9.47	29.6	30.3	
	V / 1.0	X	35.60	-9.47	26.1	20.3	
	V / 1.0	Y	35.60	-9.47	26.1	20.3	
2169.70	V / 1.0	Z	35.60	-9.47	26.1	20.3	1096.6
	The frequency range was scanned from 30 MHz to 4.33 GHz.						
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	*=Noise Floor Measurements (minimum system sensitivity).						



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		Detector: Peak, unless otherwise specified			Duty Cycle Correction: -9.47 dB		
Frequency	Antenna Pol./Height	EUT Orientation	Peak Reading	Correction Factor	Corrected Reading	Converted Reading	Avg. Limit
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2603.64	H / 1.0	X	43.00	-9.47	33.5	47.5	1096.6
	H / 1.0	Y	42.00	-9.47	32.5	42.3	
	H / 1.25	Z	44.70	-9.47	35.2	57.7	
	V / 1.0	X	42.00	-9.47	32.5	42.3	
	V / 1.0	Y	42.00	-9.47	32.5	42.3	
2603.64	V / 1.0	Z	44.60	-9.47	35.1	57.1	1096.6
3037.58	H / 1.0	X	41.80	-9.47	32.3	41.4	1096.6
	H / 1.0	Y	41.80	-9.47	32.3	41.4	
	H / 1.0	Z	41.80	-9.47	32.3	41.4	
	V / 1.0	X	41.80	-9.47	32.3	41.4	
	V / 1.0	Y	41.80	-9.47	32.3	41.4	
3037.58	V / 1.0	Z	41.80	-9.47	32.3	41.4	1096.6
3471.52	H / 1.0	X	41.80	-9.47	32.3	41.4	1096.6
	H / 1.0	Y	41.80	-9.47	32.3	41.4	
	H / 1.0	Z	41.80	-9.47	32.3	41.4	
	V / 1.0	X	41.80	-9.47	32.3	41.4	
	V / 1.0	Y	41.80	-9.47	32.3	41.4	
3471.52	V / 1.0	Z	41.80	-9.47	32.3	41.4	1096.6
3905.46	H / 1.0	X	42.70	-9.47	33.2	45.9	500
	H / 1.0	Y	42.70	-9.47	33.2	45.9	
	H / 1.0	Z	42.70	-9.47	33.2	45.9	
	V / 1.0	X	42.70	-9.47	33.2	45.9	
	V / 1.0	Y	42.70	-9.47	33.2	45.9	
3905.46	V / 1.0	Z	42.70	-9.47	33.2	45.9	500
4339.40	H / 1.0	X	42.30	-9.47	32.8	43.8	500
	H / 1.0	Y	42.30	-9.47	32.8	43.8	
	H / 1.0	Z	42.30	-9.47	32.8	43.8	
	V / 1.0	X	42.30	-9.47	32.8	43.8	
	V / 1.0	Y	42.30	-9.47	32.8	43.8	
4339.40	V / 1.0	Z	42.30	-9.47	32.8	43.8	500
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