

<u>APPLICANT</u>	<u>MANUFACTURER</u>
X-10 USA, Inc. 91 Ruckman Road Closter, NJ 07624	X-10 Electronics Shenzhen Co. Ltd. X-10 Building Labour Industrial District Shenzhen, Xixiang, Bao An Guang Dong, China, 518102

TEST SPECIFICATION: FCC Rules and Regulations Part 15, Subpart C

TEST PROCEDURE: ANSI C63.4:1992

TEST SAMPLE DESCRIPTION

BRANDNAME: X-10

MODEL: AT11A FCC ID: B4SAT11A

TYPE: Wireless Audio Sender

FREQUENCY RANGE: 2.4 GHz to 2.4835 GHz

POWER REQUIREMENTS: 12 VDC derived from AC Adapter

TESTS PERFORMED

- 15.249(a) Radiated Emissions, Fundamental and Harmonics
- 15.294(c) Occupied Bandwidth
- 15.249(c)/15.209 Radiated Emissions, Spurious Case
- 15.207(a) Conducted Emissions

REPORT OF MEASUREMENTS

Applicant: X-10 (USA), Inc.
Device: 2.4 GHz Transmitter
FCC ID: B4SAT11A
Power Requirements: 12 VDC derived from AC Adapter
Applicable Rule Section: Part 15, Subpart C, Section 15.249

TEST RESULTS

- 15.207(a): The radio frequency voltage that was conducted back on to the AC power line on any frequency/frequencies within the bandwidth of 450kHz to 30MHz did not exceed 250 microvolts.
- 15.249(a): The unit operates in the 2.4 GHz –2.4835 GHz band at 4 frequencies as follows:
1) 2.41 GHz 2) 2.43 GHz
3) 2.45 GHz 4) 2.47 GHz
Field strength readings were taken at 3 frequencies (low, middle and high) because the device operates over a range greater than 10 MHz
The field strength of the fundamental did not exceed 50mV/M AVERAGE. The field strength of the harmonics did not exceed 500 V/M AVERAGE.
- 15.249(b): Field strength readings were taken at three meters unless otherwise noted.
- 15.249(c): Emissions radiated outside band edges are greater than 50 dB below the specified the level of the fundamental.
- 15.249(d): The peak field strength of any emission did not exceed the maximum permitted average field strength by more than 20dB under any condition of modulation.

EXHIBIT 4

Radiated Emissions, Fundamental & Harmonics

Para. 15.249(a)

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		X-10 (USA)			Job No.		R-8677-1
Test Sample:		Wireless Audio Sender			Paragraph:		15.249
Model No.:		AT11A			FCC ID:		B4SAT11A
Operating Mode:		Continuously Transmitting a 2410 MHz Signal					
Technician:		Peter Lananna			Date:		November 16, 2000
Notes:	Test Distance: 3 Meters						
	Detector: Peak, Unless otherwise specified Channel A						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit
MHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2410	H / 2.0	X	72.3	3.0	75.3	5821.0	50000
	H / 2.3	Y	65.5	3.0	68.5	2660.7	
	H / 2.0	Z	69.9	3.0	72.9	4415.7	
	V / 2.5	X	64.5	3.0	67.5	2371.4	
	V / 2.0	Y	65.6	3.0	68.6	2691.5	
2410	V / 1.3	Z	69.3	3.0	72.3	4121.0	50000
4820	H / 2.3	X	46.4	-4.1	42.3	130.3	500
	H / 1.8	Y	51.1	-4.1	47.0	223.9	
	H / 2.0	Z	48.2	-4.1	44.1	160.3	
	V / 1.3	X	50.7	-4.1	46.6	213.8	
	V / 1.3	Y	49.2	-4.1	45.1	179.9	
4820	V / 1.3	Z	51.1	-4.1	47.0	223.9	500
7230	H / 1.0	X	32.0	-2.0	32.0	39.8*	500
	H / 1.0	Y	32.0	-2.0	30.0	31.6*	
	H / 1.0	Z	32.0	-2.0	30.0	31.6*	
	V / 1.0	X	32.0	-2.0	30.0	31.6*	
	V / 1.0	Y	32.0	-2.0	30.0	31.6*	
7230	V / 1.0	Z	32.0	-2.0	30.0	31.6*	500
9640	H / 1.0	X	33.0	-1.9	31.1	35.9*	500
	H / 1.0	Y	33.0	-1.9	31.1	35.9*	
	H / 1.0	Z	33.0	-1.9	31.1	35.9*	
	V / 1.0	X	33.0	-1.9	31.1	35.9*	
	V / 1.0	Y	33.0	-1.9	31.1	35.9*	
9640	V / 1.0	Z	33.0	-1.9	31.1	35.9*	500
12050	H / 1.0	X	33.0	3.8	36.8	69.2*	500
	H / 1.0	Y	33.0	3.8	36.8	69.2*	
	H / 1.0	Z	33.0	3.8	36.8	69.2*	
	V / 1.0	X	33.0	3.8	36.8	69.2*	
	V / 1.0	Y	33.0	3.8	36.8	69.2*	
12050	V / 1.0	Z	33.0	3.8	36.8	69.2*	500
	The frequency range was scanned from 30 MHz to 25 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)						

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions						
Customer:		X-10 (USA)			Job No.		R-8677-1	
Test Sample:		Wireless Audio Sender			Paragraph:		15.249	
Model No.:		AT11A			FCC ID:		B4SAT11A	
Operating Mode:		Continuously Transmitting a 2410 MHz Signal						
Technician:		Peter Lananna			Date:		November 16, 2000	
Notes:		Test Distance: 3 Meters **=Readings taken @ 1 meter, correction factors includes test distance correction. Detector: Peak, Unless otherwise specified Channel A						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit	
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
14460	H / 1.0	X	33.0	10.8	43.8	154.9*	500	
	H / 1.0	Y	33.0	10.8	43.8	154.9*		
	H / 1.0	Z	33.0	10.8	43.8	154.9*		
	V / 1.0	X	33.0	10.8	43.8	154.9*		
	V / 1.0	Y	33.0	10.8	43.8	154.9*		
14460	V / 1.0	Z	33.0	10.8	43.8	154.9*	500	
16870	H / 1.0	X	33.0	15.5	48.5	266.1*	500	
	H / 1.0	Y	33.0	15.5	48.5	266.1*		
	H / 1.0	Z	33.0	15.5	48.5	266.1*		
	V / 1.0	X	33.0	15.5	48.5	266.1*		
	V / 1.0	Y	33.0	15.5	48.5	266.1*		
16870	V / 1.0	Z	33.0	15.5	48.5	266.1*	500	
19280	H / 1.0	X	30.0	22.9	52.9	441.6**	500	
	H / 1.0	Y	30.0	22.9	52.9	441.6**		
	H / 1.0	Z	30.0	22.9	52.9	441.6**		
	V / 1.0	X	30.0	22.9	52.9	441.6**		
	V / 1.0	Y	30.0	22.9	52.9	441.6**		
19280	V / 1.0	Z	30.0	22.9	52.9	441.6**	500	
21690	H / 1.0	X	30.0	23.2	53.2	457.1**	500	
	H / 1.0	Y	30.0	23.2	53.2	457.1**		
	H / 1.0	Z	30.0	23.2	53.2	457.1**		
	V / 1.0	X	30.0	23.2	53.2	457.1**		
	V / 1.0	Y	30.0	23.2	53.2	457.1**		
21690	V / 1.0	Z	30.0	23.2	53.2	457.1**	500	
24100	H / 1.0	X	30.0	23.4	53.4	467.7**	500	
	H / 1.0	Y	30.0	23.4	53.4	467.7**		
	H / 1.0	Z	30.0	23.4	53.4	467.7**		
	V / 1.0	X	30.0	23.4	53.4	467.7**		
	V / 1.0	Y	30.0	23.4	53.4	467.7**		
24100	V / 1.0	Z	30.0	23.4	53.4	467.7**	500	
	The frequency range was scanned from 30 MHz to 25 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)							

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		X-10 (USA)			Job No.	R-8677-1	
Test Sample:		Wireless Audio Sender			Paragraph:	15.249	
Model No.:		AT11A			FCC ID:	B4SAT11A	
Operating Mode:		Continuously Transmitting a 2452 MHz Signal					
Technician:		Peter Lananna			Date:	November 16, 2000	
Notes:	Test Distance: 3 Meters						
	Detector: Peak, Unless otherwise specified						
	Channel C						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit
MHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2452	H / 1.8	X	66.0	3.0	69.0	2818.4	50000
	H / 2.0	Y	67.4	3.0	70.4	3311.3	
	H / 3.0	Z	69.7	3.0	72.7	4315.2	
	V / 2.0	X	66.8	3.0	69.8	3090.3	
	V / 2.0	Y	61.4	3.0	64.4	1659.6	
2452	V / 2.0	Z	61.7	3.0	64.7	1717.9	50000
4904	H / 1.5	X	55.4	-4.1	51.3	367.3	500
	H / 1.8	Y	50.8	-4.1	46.7	216.3	
	H / 2.8	Z	46.3	-4.1	42.2	128.8	
	V / 1.5	X	55.4	-4.1	51.3	367.3	
	V / 1.8	Y	53.2	-4.1	49.1	285.1	
4904	V / 1.8	Z	53.4	-4.1	49.3	291.7	500
7356	H / 1.0	X	32.0	-2.0	32.0	39.8*	500
	H / 1.0	Y	32.0	-2.0	30.0	31.6*	
	H / 1.0	Z	32.0	-2.0	30.0	31.6*	
	V / 1.0	X	32.0	-2.0	30.0	31.6*	
	V / 1.0	Y	32.0	-2.0	30.0	31.6*	
7356	V / 1.0	Z	32.0	-2.0	30.0	31.6*	500
9808	H / 1.0	X	33.0	-1.9	31.1	35.9*	500
	H / 1.0	Y	33.0	-1.9	31.1	35.9*	
	H / 1.0	Z	33.0	-1.9	31.1	35.9*	
	V / 1.0	X	33.0	-1.9	31.1	35.9*	
	V / 1.0	Y	33.0	-1.9	31.1	35.9*	
9808	V / 1.0	Z	33.0	-1.9	31.1	35.9*	500
12260	H / 1.0	X	33.0	3.8	36.8	69.2*	500
	H / 1.0	Y	33.0	3.8	36.8	69.2*	
	H / 1.0	Z	33.0	3.8	36.8	69.2*	
	V / 1.0	X	33.0	3.8	36.8	69.2*	
	V / 1.0	Y	33.0	3.8	36.8	69.2*	
12260	V / 1.0	Z	33.0	3.8	36.8	69.2*	500
	The frequency range was scanned from 30 MHz to 25 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)						

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		X-10 (USA)			Job No.		R-8677-1
Test Sample:		Wireless Audio Sender			Paragraph:		15.249
Model No.:		AT11A			FCC ID:		B4SAT11A
Operating Mode:		Continuously Transmitting a 2452 MHz Signal					
Technician:		Peter Lananna			Date:		November 16, 2000
Notes:		Test Distance: 3 Meters **=Readings taken @ 1 meter, correction factors includes test distance correction. Detector: Peak, Unless otherwise specified Channel C					
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
14712	H / 1.0	X	33.0	10.8	43.8	154.9*	500
	H / 1.0	Y	33.0	10.8	43.8	154.9*	
	H / 1.0	Z	33.0	10.8	43.8	154.9*	
	V / 1.0	X	33.0	10.8	43.8	154.9*	
	V / 1.0	Y	33.0	10.8	43.8	154.9*	
14712	V / 1.0	Z	33.0	10.8	43.8	154.9*	500
17164	H / 1.0	X	33.0	15.5	48.5	266.1*	500
	H / 1.0	Y	33.0	15.5	48.5	266.1*	
	H / 1.0	Z	33.0	15.5	48.5	266.1*	
	V / 1.0	X	33.0	15.5	48.5	266.1*	
	V / 1.0	Y	33.0	15.5	48.5	266.1*	
17164	V / 1.0	Z	33.0	15.5	48.5	266.1*	500
19616	H / 1.0	X	30.0	22.9	52.9	441.6**	500
	H / 1.0	Y	30.0	22.9	52.9	441.6**	
	H / 1.0	Z	30.0	22.9	52.9	441.6**	
	V / 1.0	X	30.0	22.9	52.9	441.6**	
	V / 1.0	Y	30.0	22.9	52.9	441.6**	
19616	V / 1.0	Z	30.0	22.9	52.9	441.6**	500
22068	H / 1.0	X	30.0	23.2	53.2	457.1**	500
	H / 1.0	Y	30.0	23.2	53.2	457.1**	
	H / 1.0	Z	30.0	23.2	53.2	457.1**	
	V / 1.0	X	30.0	23.2	53.2	457.1**	
	V / 1.0	Y	30.0	23.2	53.2	457.1**	
22068	V / 1.0	Z	30.0	23.2	53.2	457.1**	500
24520	H / 1.0	X	30.0	23.4	53.4	467.7**	500
	H / 1.0	Y	30.0	23.4	53.4	467.7**	
	H / 1.0	Z	30.0	23.4	53.4	467.7**	
	V / 1.0	X	30.0	23.4	53.4	467.7**	
	V / 1.0	Y	30.0	23.4	53.4	467.7**	
24520	V / 1.0	Z	30.0	23.4	53.4	467.7**	500
	The frequency range was scanned from 30 MHz to 25 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)						

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		X-10 (USA)			Job No.		R-8677-1
Test Sample:		Wireless Audio Sender			Paragraph:		15.249
Model No.:		AT11A			FCC ID:		B4SAT11A
Operating Mode:		Continuously Transmitting a 2472 MHz Signal					
Technician:		Peter Lananna			Date:		November 16, 2000
Notes:	Test Distance: 3 Meters						
	Detector: Peak, Unless otherwise specified						
	Channel D						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit
MHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2472	H / 1.8	X	67.4	3.0	70.4	3311.3	50000
	H / 3.0	Y	62.4	3.0	65.4	1862.1	
	H / 2.0	Z	68.1	3.0	71.1	3589.2	
	V / 1.0	X	67.8	3.0	70.8	3467.4	
	V / 1.8	Y	60.2	3.0	63.2	1445.4	
2472	V / 2.3	Z	56.2	3.0	59.2	912.0	50000
4944	H / 1.5	X	53.7	-4.1	49.6	302.0	500
	H / 1.8	Y	50.0	-4.1	45.9	197.2	
	H / 28	Z	49.6	-4.1	45.5	188.4	
	V / 1.5	X	47.8	-4.1	43.7	153.1	
	V / 1.5	Y	52.4	-4.1	48.3	260.0	
4944	V / 1.5	Z	47.9	-4.1	43.8	154.9	500
7416	H / 1.0	X	32.0	-2.0	32.0	39.8*	500
	H / 1.0	Y	32.0	-2.0	30.0	31.6*	
	H / 1.0	Z	32.0	-2.0	30.0	31.6*	
	V / 1.0	X	32.0	-2.0	30.0	31.6*	
	V / 1.0	Y	32.0	-2.0	30.0	31.6*	
7416	V/1.0	Z	32.0	-2.0	30.0	31.6*	500
9888	H / 1.0	X	33.0	-1.9	31.1	35.9*	500
	H / 1.0	Y	33.0	-1.9	31.1	35.9*	
	H / 1.0	Z	33.0	-1.9	31.1	35.9*	
	V / 1.0	X	33.0	-1.9	31.1	35.9*	
	V / 1.0	Y	33.0	-1.9	31.1	35.9*	
9888	V/1.0	Z	33.0	-1.9	31.1	35.9*	500
12360	H / 1.0	X	33.0	3.8	36.8	69.2*	500
	H / 1.0	Y	33.0	3.8	36.8	69.2*	
	H / 1.0	Z	33.0	3.8	36.8	69.2*	
	V / 1.0	X	33.0	3.8	36.8	69.2*	
	V / 1.0	Y	33.0	3.8	36.8	69.2*	
12360	V/1.0	Z	33.0	3.8	36.8	69.2*	500
	The frequency range was scanned from 30 MHz to 25 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)						

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions						
Customer:		X-10 (USA)			Job No.		R-8677-1	
Test Sample:		Wireless Audio Sender			Paragraph:		15.249	
Model No.:		AT11A			FCC ID:		B4SAT11A	
Operating Mode:		Continuously Transmitting a 2472 MHz Signal						
Technician:		Peter Lananna			Date:		November 16, 2000	
Notes:		Test Distance: 3 Meters **=Readings taken @ 1 meter, correction factors includes test distance correction. Detector: Peak, Unless otherwise specified Channel D						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit	
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
14832	H / 1.0	X	33.0	10.8	43.8	154.9*	500	
	H / 1.0	Y	33.0	10.8	43.8	154.9*		
	H / 1.0	Z	33.0	10.8	43.8	154.9*		
	V / 1.0	X	33.0	10.8	43.8	154.9*		
	V / 1.0	Y	33.0	10.8	43.8	154.9*		
14832	V / 1.0	Z	33.0	10.8	43.8	154.9*	500	
17304	H / 1.0	X	33.0	15.5	48.5	266.1*	500	
	H / 1.0	Y	33.0	15.5	48.5	266.1*		
	H / 1.0	Z	33.0	15.5	48.5	266.1*		
	V / 1.0	X	33.0	15.5	48.5	266.1*		
	V / 1.0	Y	33.0	15.5	48.5	266.1*		
17304	V / 1.0	Z	33.0	15.5	48.5	266.1*	500	
19776	H / 1.0	X	30.0	22.9	52.9	441.6**	500	
	H / 1.0	Y	30.0	22.9	52.9	441.6**		
	H / 1.0	Z	30.0	22.9	52.9	441.6**		
	V / 1.0	X	30.0	22.9	52.9	441.6**		
	V / 1.0	Y	30.0	22.9	52.9	441.6**		
19776	V / 1.0	Z	30.0	22.9	52.9	441.6**	500	
22248	H / 1.0	X	30.0	23.2	53.2	457.1**	500	
	H / 1.0	Y	30.0	23.2	53.2	457.1**		
	H / 1.0	Z	30.0	23.2	53.2	457.1**		
	V / 1.0	X	30.0	23.2	53.2	457.1**		
	V / 1.0	Y	30.0	23.2	53.2	457.1**		
22248	V / 1.0	Z	30.0	23.2	53.2	457.1**	500	
24720	H / 1.0	X	30.0	23.4	53.4	467.7**	500	
	H / 1.0	Y	30.0	23.4	53.4	467.7**		
	H / 1.0	Z	30.0	23.4	53.4	467.7**		
	V / 1.0	X	30.0	23.4	53.4	467.7**		
	V / 1.0	Y	30.0	23.4	53.4	467.7**		
24720	V / 1.0	Z	30.0	23.4	53.4	467.7**	500	
	The frequency range was scanned from 30 MHz to 25 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)							

EXHIBIT 4

Spurious Emissions

Para. 15.249(c)

Test Method:	FCC Part 15 Subpart C, Spurious Case Radiated Emissions, Paragraph 15.209(a)						
Customer:	X-10 (USA)				Job No.	R-8677-1	
Test Sample:	Wireless Audio Sender				FCC ID.	B4SAT11A	
Model No.:	AT11A				Serial No.	N/A	
Operating Mode:	Continuously Transmitting a 2410 MHz Signal						
Technician:	Peter Lananna				Date:	November 16, 2000	
Notes:	Test Distance: 3 Meters Temp:19C Humidity:46% Detector: Quasi-Peak Below 30 MHz to 1 GHz, Peak above 1 GHz						
Test Freq.	Antenna Position	EUT Orientation	Meter Readings	Correction Factor	Corrected Reading	Converted Reading	<u>LIMIT</u>
MHz	(V/H) /	Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
30.00							100
1							
88.00							100
88.00							150
1							
No emissions observed at specified test distance							
216.00							150
216.00							200
1							
960.00							200
960.00							500
1							
1							
1000.0							500
	The EUT was scanned from 30 MHz to 25 GHz						
	The emissions observed from the EUT do not exceed the specified limits. Emissions not recorded were more than 10dB under the specified limit						

Test Method:	FCC Part 15 Subpart C, Spurious Case Radiated Emissions, Paragraph 15.209(a)						
Customer:	X-10 (USA)				Job No.	R-8677-1	
Test Sample:	Wireless Audio Sender				FCC ID.	B4SAT11A	
Model No.:	AT11A				Serial No.	N/A	
Operating Mode:	Continuously Transmitting a 2452 MHz Signal						
Technician:	Peter Lananna				Date:	November 16, 2000	
Notes:	Test Distance: 3 Meters Temp:19C Humidity:46% Detector: Quasi-Peak Below 30 MHz to 1 GHz, Peak above 1 GHz						
Test Freq.	Antenna Position	EUT Orientation	Meter Readings	Correction Factor	Corrected Reading	Converted Reading	<u>LIMIT</u>
MHz	(V/H) / Meters	Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
30.00							100
1							
88.00							100
88.00							150
1							
No emissions observed at specified test distance							
216.00							150
216.00							200
1							
960.00							200
960.00							500
1							
1							
1000.0							500
	The EUT was scanned from 30 MHz to 25 GHz						
	The emissions observed from the EUT do not exceed the specified limits. Emissions not recorded						
	were more than 10dB under the specified limit						

Test Method:	FCC Part 15 Subpart C, Spurious Case Radiated Emissions, Paragraph 15.209(a)						
Customer:	X-10 (USA)				Job No.	R-8677-1	
Test Sample:	Wireless Audio Sender				FCC ID.	B4SAT11A	
Model No.:	AT11A				Serial No.	N/A	
Operating Mode:	Continuously Transmitting a 2472 MHz Signal						
Technician:	Peter Lananna				Date:	November 16, 2000	
Notes:	Test Distance: 3 Meters Temp:19C Humidity:46% Detector: Quasi-Peak Below 30 MHz to 1 GHz, Peak above 1 GHz						
Test Freq.	Antenna Position	EUT Orientation	Meter Readings	Correction Factor	Corrected Reading	Converted Reading	<u>LIMIT</u>
MHz	(V/H) / Meters	Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
30.00							100
1							
88.00							100
88.00							150
1							
No emissions observed at specified test distance							
216.00							150
216.00							200
1							
960.00							200
960.00							500
1							
1							
1000.0							500
	The EUT was scanned from 30 MHz to 25 GHz						
	The emissions observed from the EUT do not exceed the specified limits. Emissions not recorded						
	were more than 10dB under the specified limit						

EXHIBIT 4

Occupied Bandwidth

Para. 15.249(c)

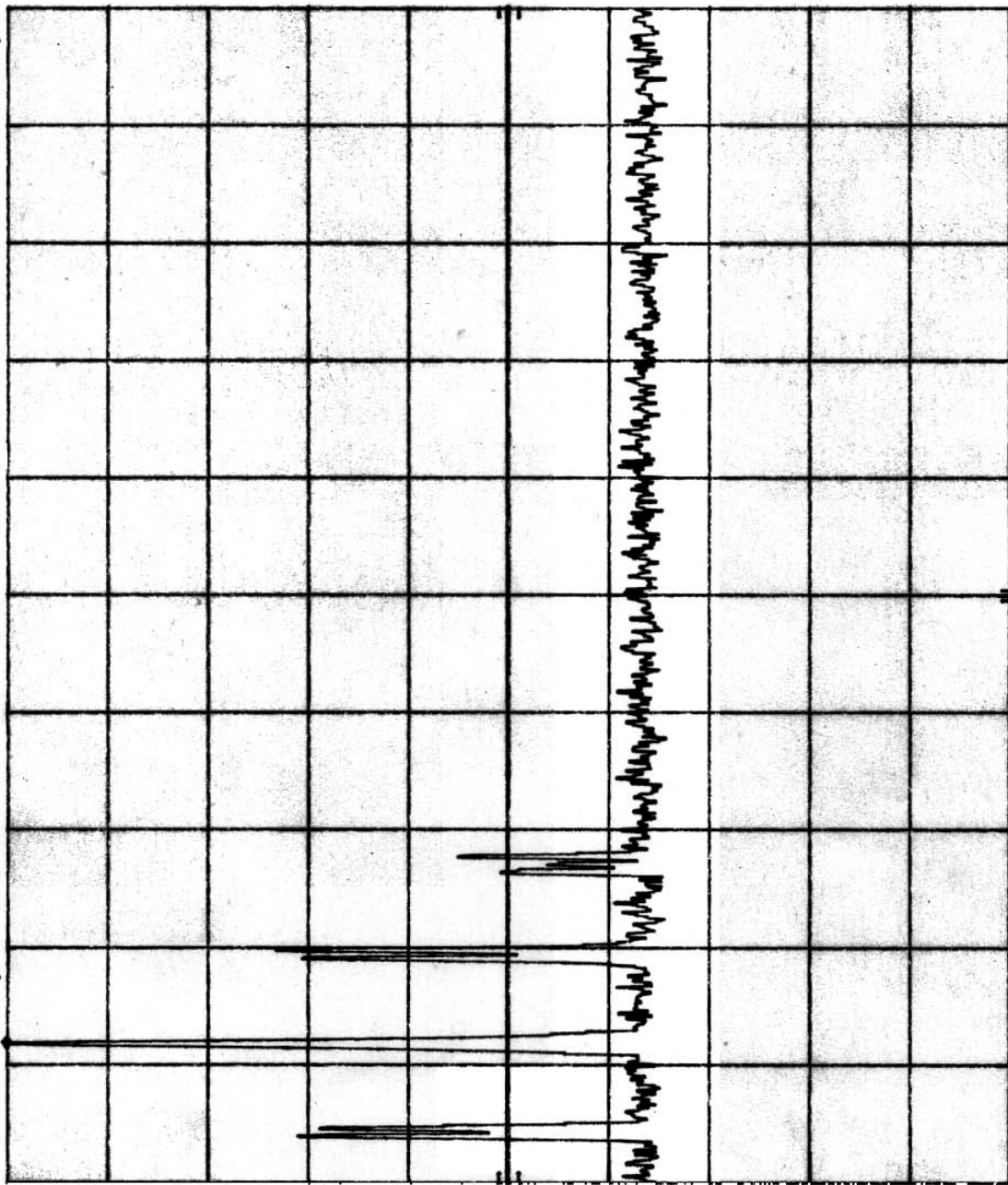
(See separate e-file attachment named Occbw.pdf)

R-8677 X-10 AT11A Occupied Bandwidth 11/20MKR 2.409 85 GHz
 REF 81.7 dBμV ATTEN 0 dB

hp

10 dB/

DL
 31.8
 dBμV



START 2.400 0 GHz RES BW 100 KHz
 STOP 2.483 5 GHz SWP 25.1 msec
 VBW 300 KHz

Customer:	X-10 (USA)
Test Sample:	2.4GHz FM Transmitter
Model No:	AT11A FCC ID: B4S B4SAT11A
Test Method:	FCC15.249(c) Occupied Bandwidth, 2.4-2.4835GHz
Notes:	Channel
	Emissions outside the specified band are attenuated at least 50dB below the level of the fundamental frequency.
Date:	November
Tech:	Peter Lananna
Sheet	1 of 1



Retlif Testing Laboratories

Report No. R-8677-1

