

<u>APPLICANT</u>	<u>MANUFACTURER</u>
X-10 USA, Inc. 400 Forge Way, Suite 412 Rockaway, NJ 07866	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: VT39A FCC ID: B4SVT39A

TYPE: 2.4 GHz FM Transmitter

FREQUENCY RANGE: 2410 to 2472 MHZ

POWER REQUIREMENTS: 12 VDC derived from an AC Adapter, Model PT30A

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: B4SVT39A

Power Requirements: 12 VDC derived from an AC Adapter, Model PT30A

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 to 2.4835 GHz band at 4 frequencies as follows:
1) 2.410 GHz 2) 2.432 GHz
3) 2.452 GHz 4) 2.472 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 50 milliV/M AVERAGE. The field strength of the harmonics did not exceed 500 microV/M AVERAGE.
- 15.249(b): Field strength readings were taken at three meters unless otherwise noted.
- 15.249(c): Emissions radiated outside band edges were greater than 50 dB below the specified the level of the fundamental or met the general radiated emission requirements of 15.209(a), whichever provided the lesser attenuation.
- 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)

(Please see separate e-file attachment named Refundharm.pdf)

EXHIBIT 4

Spurious Emissions
Para. 15.249(c)

(Please see separate e-file attachment named Respur.pdf)

EXHIBIT 4

Occupied Bandwidth
Para. 15.249(c)

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

EXHIBIT 4

Conducted Emissions
Para. 15.207(a)

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

EQUIPMENT LIST

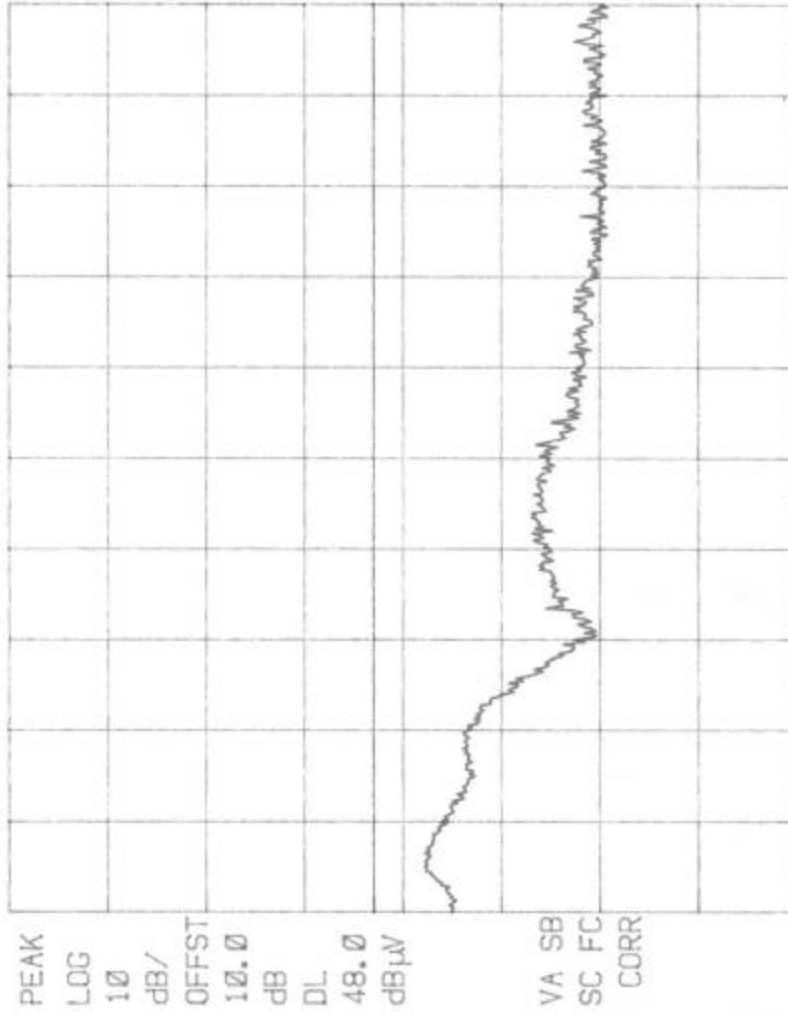
FCC15.249 Compliance Testing

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
062	High Gain Horn Antenna	Microlab/FXR	1.7 GHz - 2.6 GHz	R638A	10/11/00	10/11/01
067	Open Area Test Site	Retlif	3 Meter	RNY	9/20/00	9/20/03
077	LISN	Solar Electronics	10 kHz - 30 MHz	8028-50-TS24BNC	2/9/01	2/9/02
079	LISN	Solar Electronics	10 kHz - 30 MHz	8028-50-TS24BNC	5/2/01	5/2/02
091	Shielded Enclosure	Retlif	10 kHz - 1 GHz	Room 6	8/20/01	8/20/02
128C	Double Ridge Guide	Eaton Corporation	1 GHz - 18 GHz	96001	9/18/00	9/18/01
129E	High Gain Horn Antenna	Microlab/FXR	18 GHz - 26.5 GHz	K638A	9/18/00	9/18/01
133	Broadband Pre-Amplifier	Electro-Metrics	10 kHz - 1 GHz, 26dB	BPA-1000	6/13/01	6/13/02
141	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	7/2/01	1/2/02
141A	Graphics Plotter	Hewlett Packard	N/A	7470A	3/5/01	3/5/02
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	2/20/01	1/2/02
206B	6.0 dB Attenuator	Texscan	0 - 1.0 GHz	FP-50 - 6 dB	6/13/01	6/13/02
420	Amplifier	Hewlett Packard	2.0 GHz - 18 GHz	11975A	9/29/00	9/29/01
421	Harmonic Mixer	Hewlett Packard	18 GHz - 26.5 GHz	11970K	9/29/00	9/29/01
512	Graphics Plotter	Hewlett Packard	N/A	7470A	11/13/00	11/13/01
523	Biconilog	Electro-Mechanics	26 - 2000 MHz	3142B	6/8/00	9/8/01
543	Preamplifier	Hewlett Packard	1.0 GHz - 26.5 GHz	8449B	6/27/01	6/27/02
617	Interference Analyzer	Electro-Metrics	10 kHz - 1 GHz	EMC-30	2/27/01	2/27/02
7016	EMC Analyzer	Hewlett Packard	9kHz - 1.8GHz	8591EM	3/6/01	3/6/02
7017	Transient Limiter	Hewlett Packard	9kHz - 200MHz	11947A	4/9/01	4/9/02

Test Setup Photographs



15:27:33 AUG 31, 2001
 R-9148-1 X-10 Thomson VS540 Cond. Emiss. Lead: Hot
 REF 85.0 dBμV AT 10 dB



START 450 kHz STOP 1.705 MHz
 #RES BW 10 kHz #VBW 30 kHz #SWP 20.0 sec

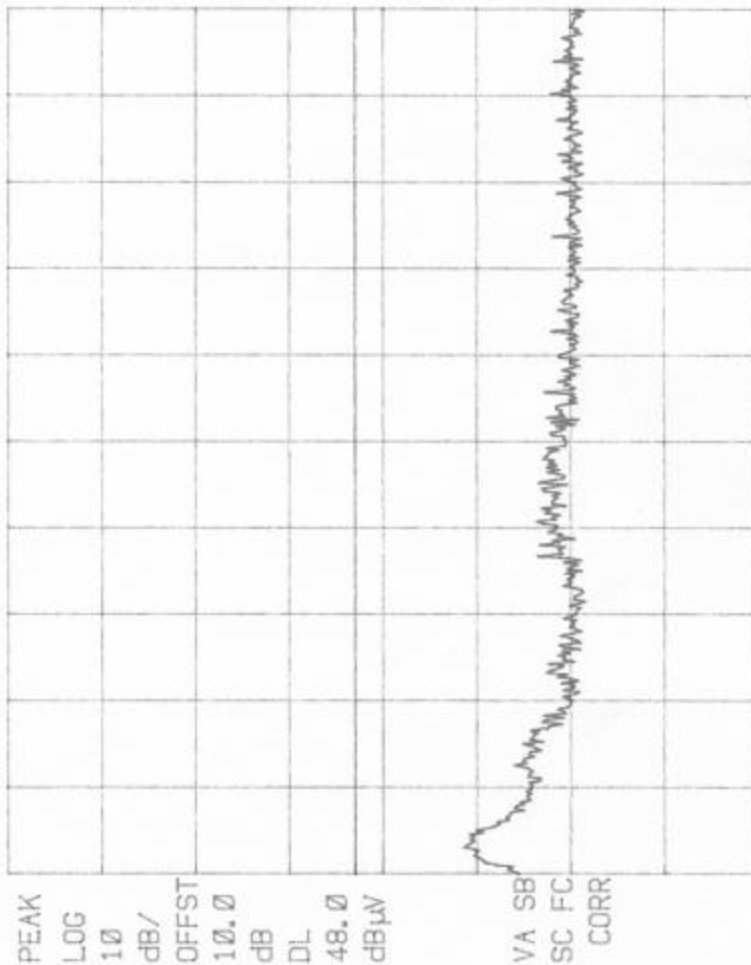
Customer:	X-10 (Thomson)		
Test Sample:	2.4 GHz Video Transmitter		
Model No.:	VS540 (VT-39A) <i>[Signature]</i>		
Test Method:	FCC 15.107(a) Conducted Emissions, Class C (450 KHz - 30 MHz)		
Notes:	Lead Tested: Hot		
	Detector Function: Peak		
Date:	August 31, 2001	Tech:	N. Dragotta <i>[Signature]</i>
		Sheet:	1 of 6



Retlif Testing Laboratories

Report No. R-9148-1

15:35:22 AUG 31, 2001
 R-9148-1 X-10 Thomson VS540 Cond. Emiss. Lead- Neutral
 REF 85.0 dBμV AT 10 dB



START 450 kHz #RES BW 10 kHz
 STOP 1.705 MHz #SWP 20.0 sec

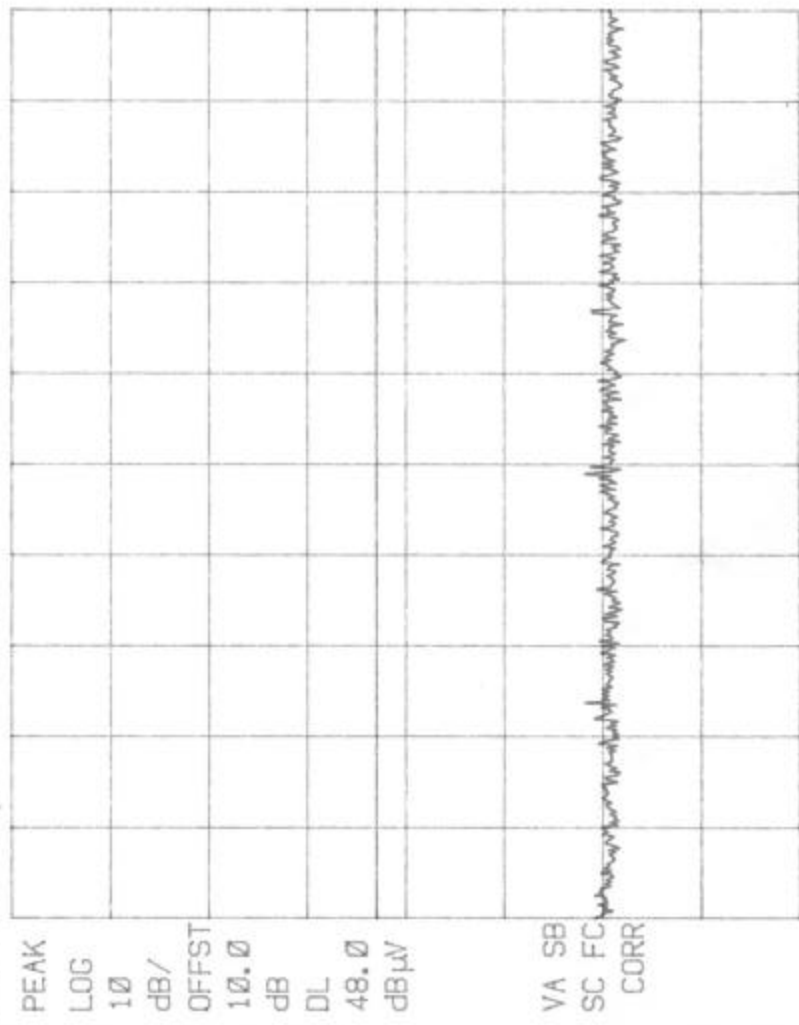
Customer: X-10 (Thomson)
 Test Sample: 2.4 GHz Video Transmitter
 Model No.: VS540 (VT39A)
 Test Method: FCC 15.107(a) Conducted Emissions, Class C (450 KHz - 30 MHz)
 Notes: Lead Tested: Neutral
 Detector Function: Peak
 Date: August 31, 2001 Tech: N. Dragotta Sheet: 2 of 6



Retlif Testing Laboratories

Report No. R-9148-1

15:43:11 AUG 31, 2001
 R-9148-1 X-10 Thomson VS540 Cond. Emiss. Lead-- Hot
 REF 85.0 dBμV AT 10 dB



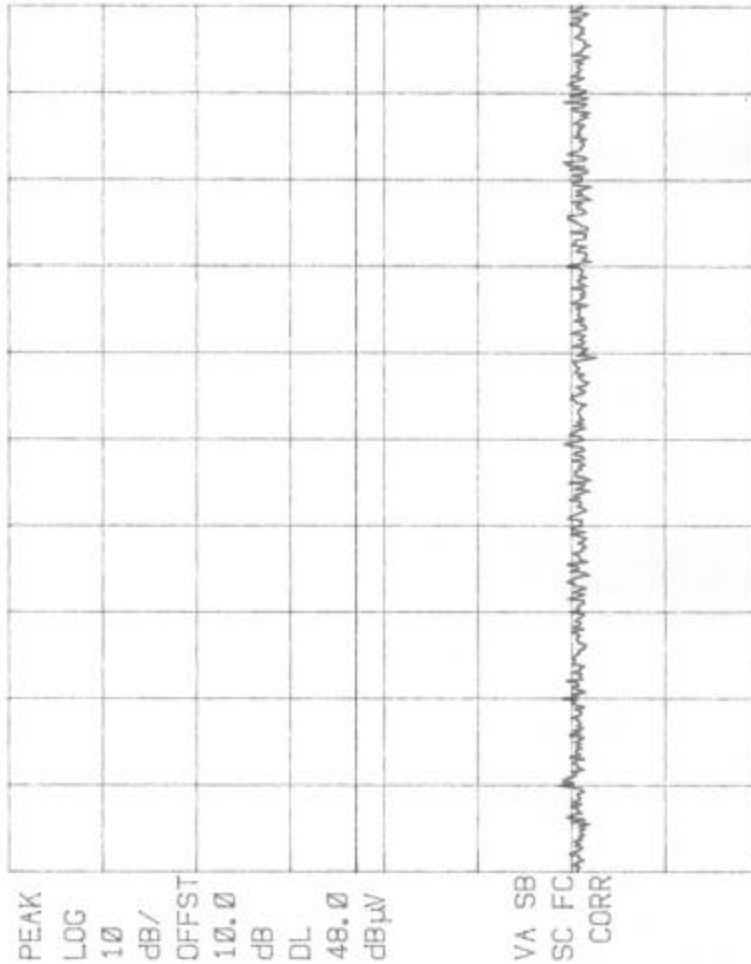
START 1.705 MHz STOP 5.000 MHz
 #RES BW 10 kHz #VBW 30 kHz #SWP 20.0 sec

Customer:	X-10 (Thomson)
Test Sample:	2.4 GHz Video Transmitter
Model No.:	VS540
Test Method:	FCC 15.107(a) Conducted Emissions, Class C (450 KHz - 30 MHz)
Notes:	Lead Tested: Hot Detector Function: Peak
Date:	August 31, 2001
Tech:	N. Dragotta
Sheet:	3 of 6



Retlif Testing Laboratories
 Report No. R-9148-1

15:39:21 AUG 31, 2001
 R-9148-1 X-10 Thomson VS540 Cond. Emiss. Lead-Neutral
 REF 85.0 dB μ V AT 10 dB



START 1.705 MHz STOP 5.000 MHz
 #RES BW 10 kHz #VBW 30 kHz #SWP 20.0 sec

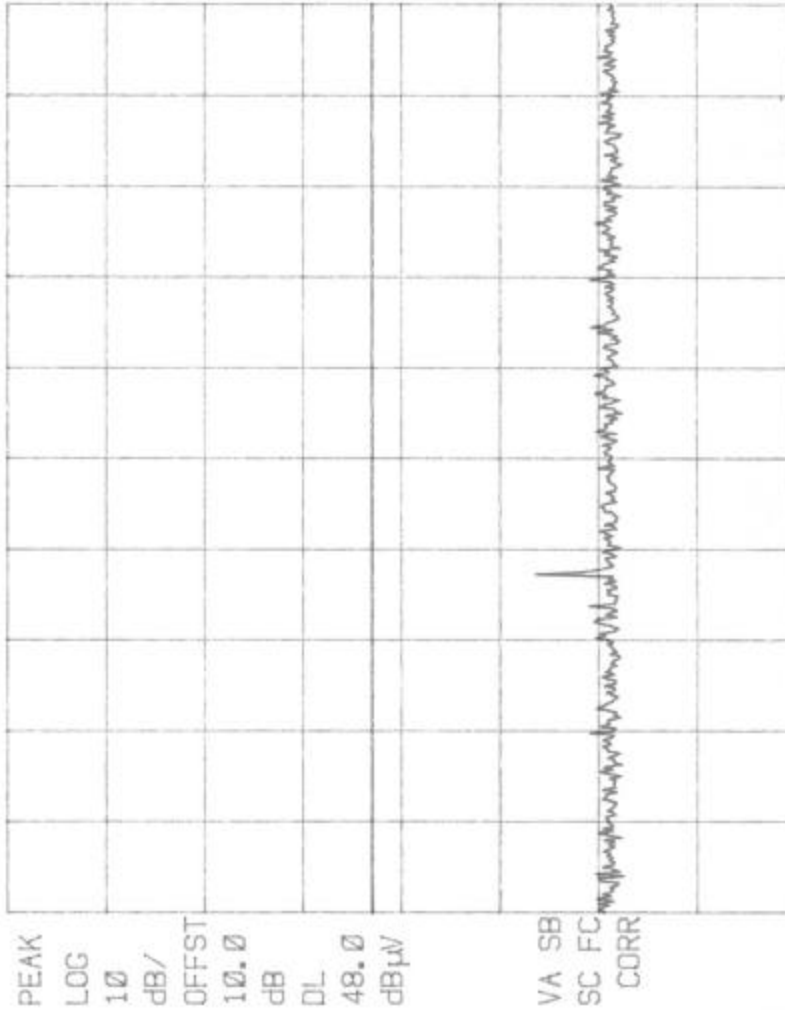
Customer: X-10 (Thomson)
 Test Sample: 2.4 GHz Video Transmitter
 Model No.: VS540 (VT39A)
 Test Method: FCC 15.107(a) Conducted Emissions, Class C (450 KHz - 30 MHz)
 Notes: Lead Tested: Neutral
 Detector Function: Peak
 Date: August 31, 2001 Tech: N. DiGotta Sheet 4 of 6



Retlif Testing Laboratories

Report No. R-9148-1

15:47:50 AUG 31, 2001
 R-9148-1 X-10 Thomson VS540 Cond. Emiss. Lead- Ho7
 REF 85.0 dBμV AT 10 dB



START 5.00 MHz STOP 30.00 MHz
 #RES BW 10 kHz #VBW 30 kHz #SWP 20.0 sec

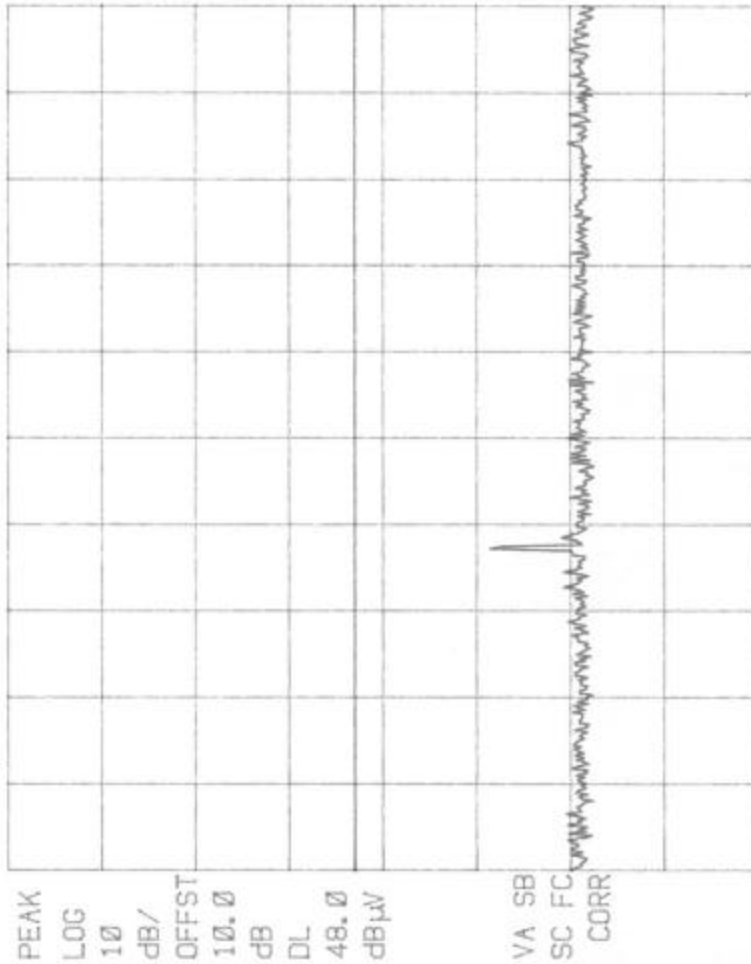
Customer:	X-10 (Thomson)		
Test Sample:	2.4 GHz Video Transmitter		
Model No.:	VS540 (VT 39A) 		
Test Method:	FCC 15.107(a) Conducted Emissions, Class C (450 KHz - 30 MHz)		
Notes:	Lead Tested: Hot		
	Detector Function: Peak		
Date:	August 31, 2001	Tech:	N. Dragotta
	Sheet:	5	of 6



Retlif Testing Laboratories

Report No. R-9148-1

15:53:19 AUG 31, 2001
 R-9148-1 X-10 Thomson VS540 Cond. Emiss. Lead- Neutral
 REF 85.0 dBμV AT 10 dB



START 5.00 MHz STOP 30.00 MHz
 #RES BW 10 kHz #VBW 30 kHz #SWP 20.0 sec

Customer:	X-10 (Thomson)		
Test Sample:	2.4 GHz Video Transmitter		
Model No.:	VS540 (VT 37A) <i>h</i>		
Test Method:	FCC 15.107(a) Conducted Emissions, Class C (450 kHz - 30 MHz)		
Notes:	Lead Tested: Neutral		
	Detector Function: Peak		
Date:	August 31, 2001	Tech:	N. Dragotta
	Sheet	6	of 6



Retlif Testing Laboratories

Report No. R-9148-1

Customer:	X-10 (USA) Inc.
Test Sample:	2.4GHz FM Transmitter
Model No.:	VT39A
Test Method:	FCC15.24B(c) Occupied Bandwidth
Notes:	Channel=A Emissions more than 50dB(c) at the band edges.
Date:	August 27, 2001
Tech:	Peter Lanning
Sheet:	1 of 6

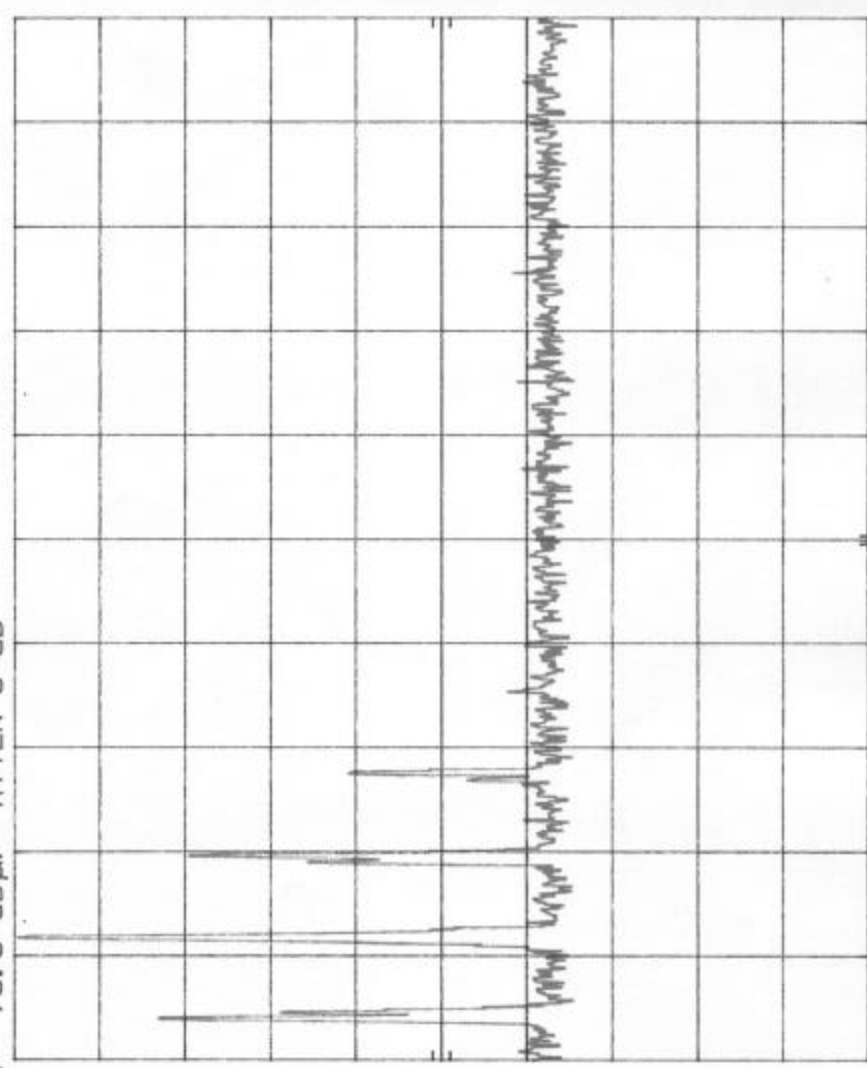


Retlif Testing Laboratories
Report No. R-9148-1

R-9148 X-10 VT39A Occ.Bw. 8/27/01 PL
REF 79.8 dBμV ATTEN 0 dB

70
10 dB/

DL
29.8
dBμV



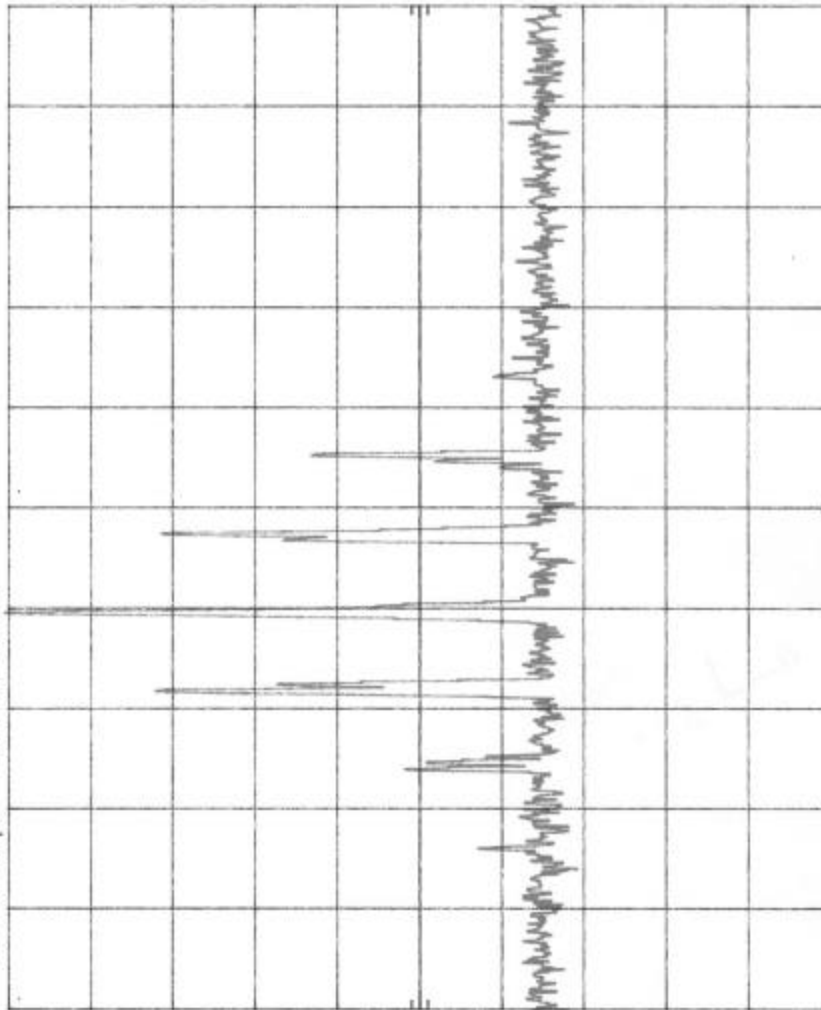
START 2.400 0 GHz
RES BW 100 kHz
STOP 2.483 5 GHz
SWP 25.1 msec
VBW 300 kHz

R-9148 X-10 VT39A Occ.Bw. 8/27/01 PL
 REF 82.4 dBμV ATTN 0 dB

hp

10 dB/

DL
 32.4
 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) Inc.
Test Sample:	2.4GHz FM Transmitter
Model No.:	VT39A
Test Method:	FCC15.249(c) Occupied Bandwidth
Notes:	Channel=8 Emissions more than 50dB(c) at the band edges.
Date:	August 27, 2001
Tech:	Peter Lianina
Sheet:	2 of 6



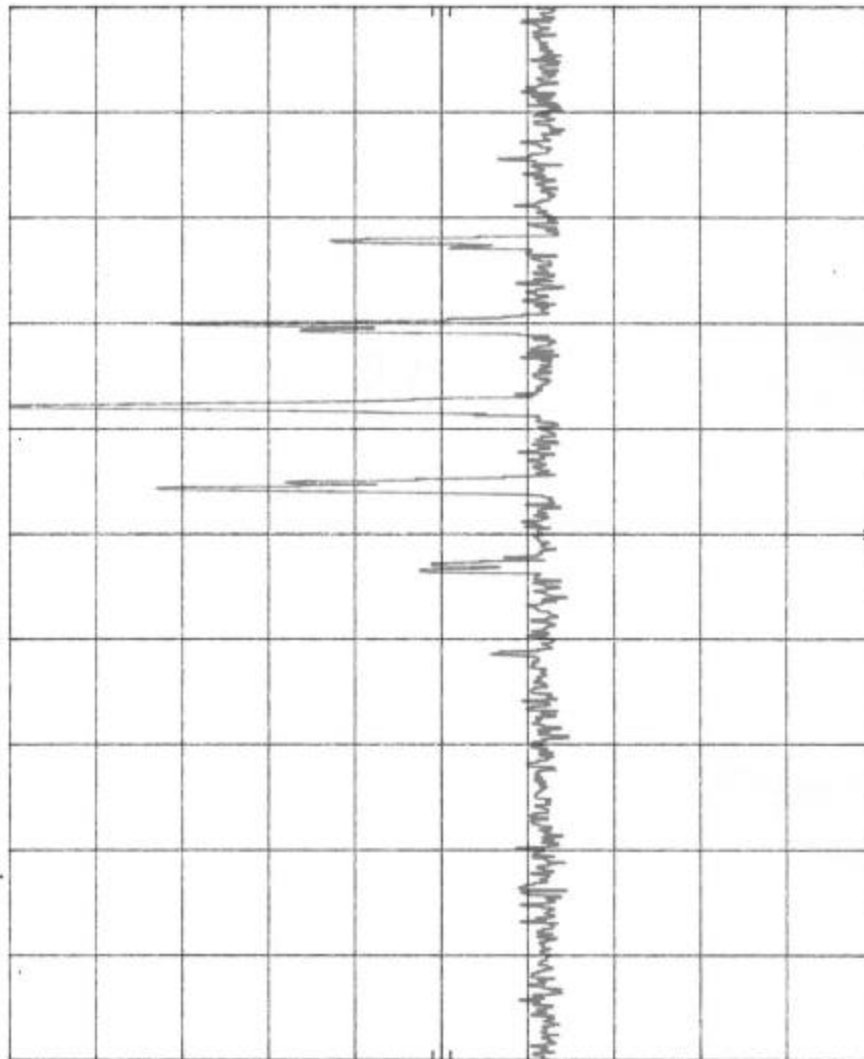
Retlif Testing Laboratories

Report No. R-9148-1

R-9148 X-10 VT39A Occ.Bw. 8/27/01 PL
REF 79.4 dB μ V ATTN 0 dB

hp
10 dB/

DL
29.4
dB μ V



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) Inc.
Test Sample:	2.4GHz FM Transmitter
Model No.:	VT39A
Test Method:	FCC15.249(c) Occupied Bandwidth
Notes:	Channel=C Emissions more than 50dB(c) at the band edges.
Date:	August 27, 2001
Tech:	Peter Lannina
Sheet:	3 of 6



Retlif Testing Laboratories

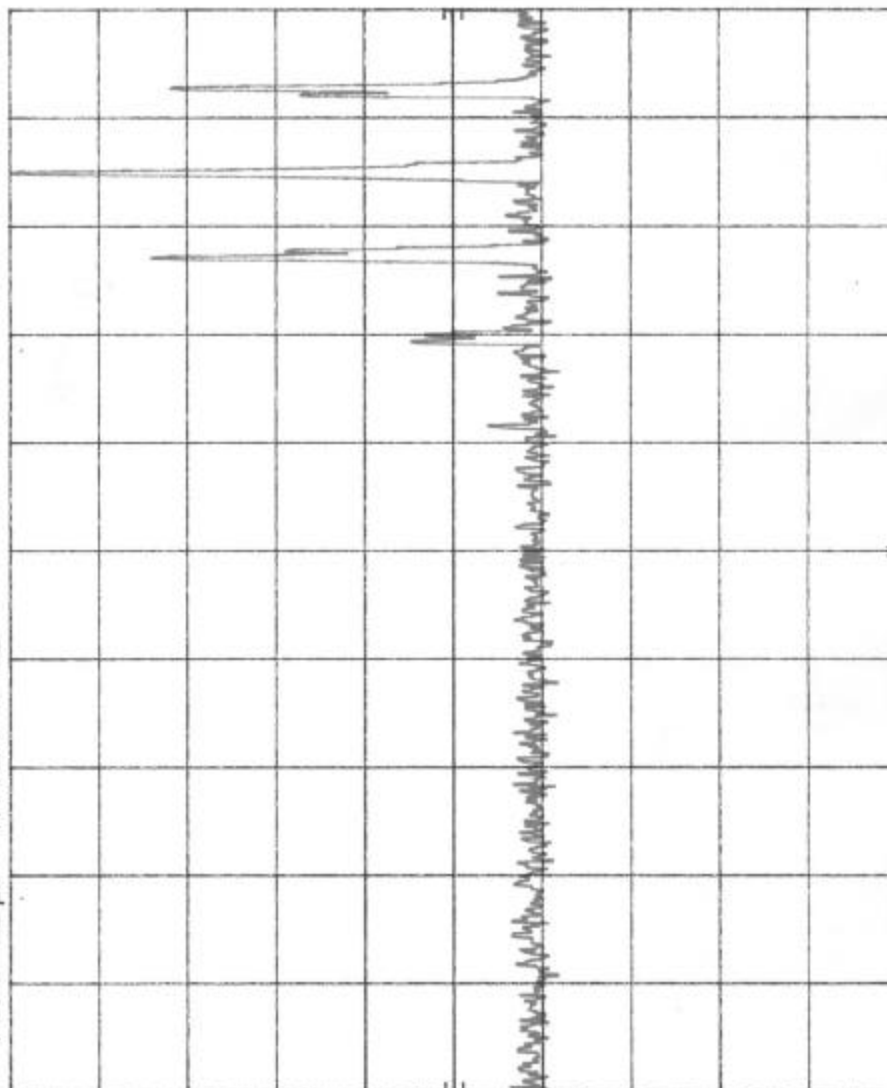
Report No. R-9148-1

R-9148 X-10 VT39A Occ.Bw. 8/27/01 PL
REF 76.8 dB μ W ATTN 0 dB

hp

10 dB/

DL
26.8
dB μ W



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) Inc.
Test Sample:	2.4GHz FM Transmitter
Model No.:	VT39A
Test Method:	FCC15.249(c) Occupied Bandwidth
Notes:	Channel=D
	Emissions not greater than 50dB(c) at the band edges.
	See FCC15.209 Sheet.
Date:	August 27, 2001
Tech:	Peter Lananna
Sheet:	4 of 5



Retlif Testing Laboratories

Report No. R-9148-1

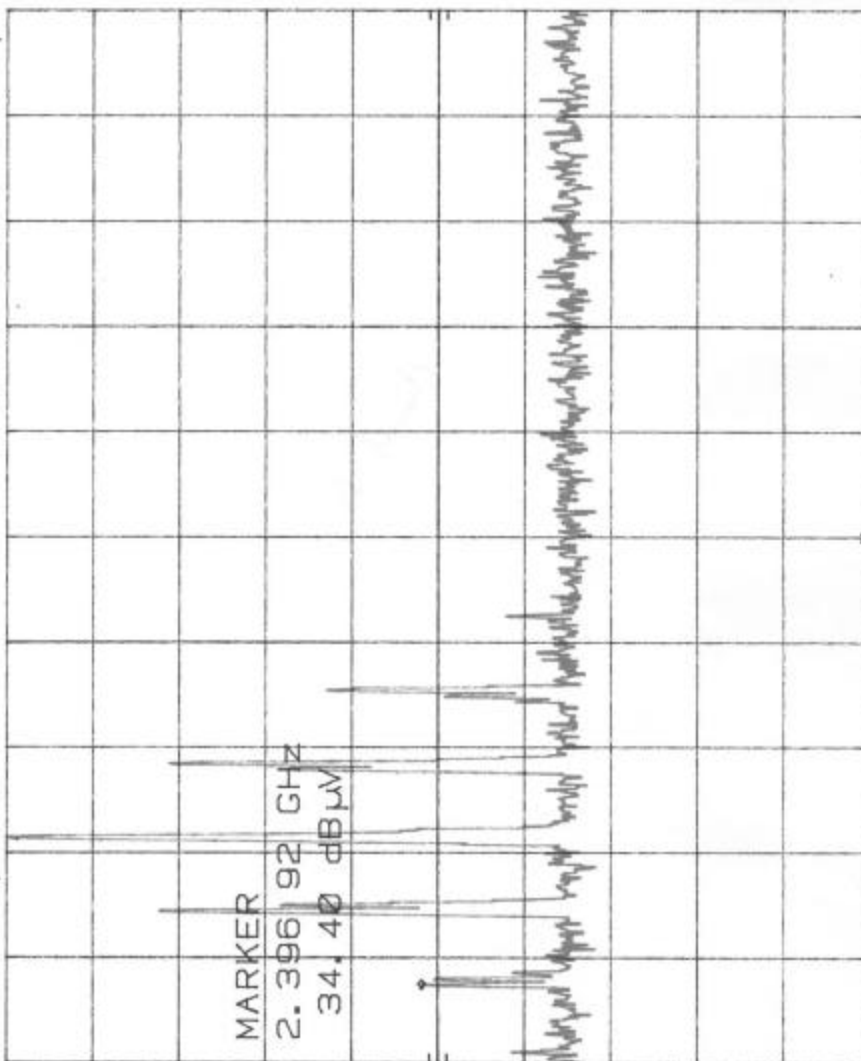
Customer:	X-10 (USA) Inc.
Test Sample:	2.4GHz FM Transmitter
Model No.:	VT39A
Test Method:	FCC15.249(c) Occupied Bandwidth
Notes:	Channel=A Emissions not greater than 50dB(c) outside the band. See FCC15.209 Sheet.
Date:	August 27, 2001
Tech:	Peter Laranina
Sheet:	5 of 6



Retlif Testing Laboratories

Report No. R-9148-1

R-9148 X-10 VT39A Occ.Bw. 8/27/01 PL MKR 2.396 92 GHz
 REF 82.5 dBμV ATTN 0 dB 34.40 dBμV



h
 10 dB/

DL
 32.5
 dBμV

START 2.390 0 GHz RES BW 100 kHz VBW 300 kHz STOP 2.483 5 GHz
 SWP 28.1 msec

Customer:	X-10 (USA) Inc.
Test Sample:	2.4GHz FM Transmitter
Model No.:	VT39A
Test Method:	FCC15.240(c) Occupied Bandwidth
Notes:	Channel=D Emissions not greater than 50dB(c) at the band edges. See FCC15.209 Sheet.
Date:	August 27, 2001
Tech:	Peter Lannina
Sheet:	5 of 6



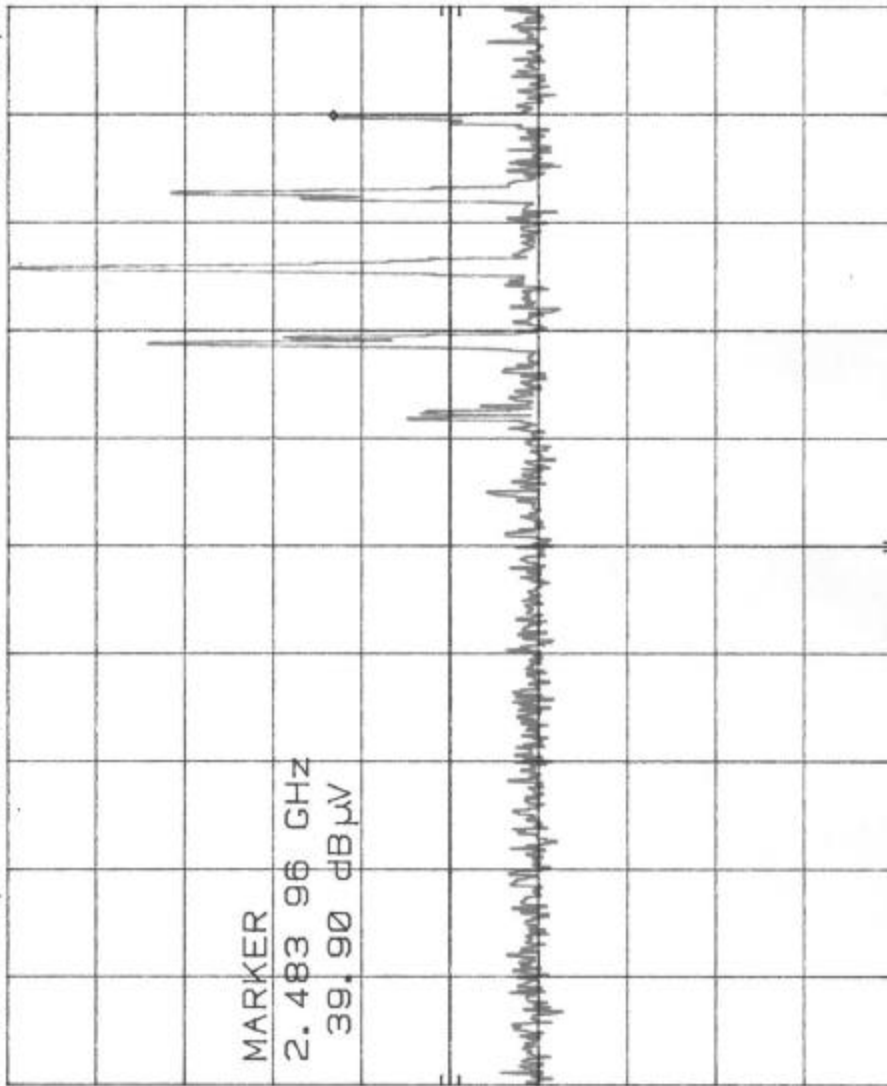
Retlif Testing Laboratories

Report No. R-9148-1

R-9148 X-10 VT39A Occ.Bw. 8/27/01 PL MKR 2.483 96 GHz
REF 76.7 dBμV ATTN 0 dB 39.90 dBμV

hp
10 dB/

MARKER
2.483 96 GHz
39.90 dBμV
DL
26.7
dBμV



START 2.400 0 GHz RES BW 100 kHz STOP 2.493 5 GHz
VBW 300 kHz SWP 28.1 msec

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		X-10 USA			Job No.		R-9148-1
Test Sample:		2.4GHz FM Transmitter			Paragraph:		15.249
Model No.:		VT39A			FCC ID:		B4SVT39A
Operating Mode:		Continuously Transmitting a 2.410GHz Signal					
Technician:		Peter Lananna			Date:		August 27, 2001
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
GHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2.410	H / 1.5	X	57.9	28.9	86.8	21877.6	50000
	H / 2.3	Y	54.7	28.9	83.6	15135.6	
	H / 2.0	Z	53.2	28.9	82.1	12735.0	
	V / 1.0	X	51.8	28.9	80.7	10839.3	
	V / 1.8	Y	54.6	28.9	83.5	14962.4	
2.410	V / 2.0	Z	49.8	28.9	78.7	8609.9	50000
4.820	H / 1.0	X	32.0	-4.1	27.9	24.8*	500
	H / 1.0	Y	32.0	-4.1	27.9	24.8*	
	H / 1.0	Z	32.0	-4.1	27.9	24.8*	
	V / 1.0	X	32.0	-4.1	27.9	24.8*	
	V / 1.0	Y	32.0	-4.1	27.9	24.8*	
4.820	V / 1.0	Z	32.0	-4.1	27.9	24.8*	500
7.230	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*	
7.230	V / 1.0	Z	32.0	-2.0	30.0	31.6*	500
9.640	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*	
9.640	V / 1.0	Z	33.0	-1.9	31.1	35.9*	500
12.05	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*	
12.05	V / 1.0	Z	33.0	3.8	36.8	69.2*	500
	The frequency range was scanned from 30 MHz to25GHz. 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)						



Retlif Testing Laboratories

Retlif Job Number R-9148-1

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions						
Customer:		X-10 USA			Job No.		R-9148-1	
Test Sample:		2.4GHz FM Transmitter			Paragraph:		15.249	
Model No.:		VT39A			FCC ID:		B4SVT39A	
Operating Mode:		Continuously Transmitting a 2.410GHz Signal						
Technician:		Peter Lananna			Date:		August 27, 2001	
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	
GHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
14.46	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*		
14.46	V / 1.0	Z	33.0	10.8	43.8	154.9*	500	
16.87	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*		
16.87	V / 1.0	Z	33.0	15.5	48.5	266.1*	500	
19.28	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**		
19.28	V / 1.0	Z	30.0	22.9	52.9	441.6**	500	
21.69	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**		
21.69	V / 1.0	Z	30.0	23.2	53.2	457.1**	500	
24.10	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**		
24.10	V / 1.0	Z	30.0	23.4	53.4	467.7**	500	
	The frequency range was scanned from 30 MHz to 25GHz. 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)							



Retlif Testing Laboratories

Retlif Job Number R-9148-1

Test Method:	FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions						
Customer:	X-10 USA				Job No.	R-9148-1	
Test Sample:	2.4GHz FM Transmitter				Paragraph:	15.249	
Model No.:	VT39A				FCC ID:	B4SVT39A	
Operating Mode:	Continuously Transmitting a 2.433GHz Signal						
Technician:	Peter Lananna				Date:	September 5, 2001	
Notes:	Test Distance: 3 Meters						
	Detector: Peak, Unless otherwise specified				Channel B		
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit
GHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2.433	H /	X	56.9	28.9	85.8	19498.4	50000
	H /	Y	60.5	28.9	89.4	29512.1	
	H /	Z	59.1	28.9	88.0	25118.9	
	V /	X	54.3	28.9	83.2	14454.4	
	V /	Y	56.2	28.9	85.1	17988.7	
2.433	V /	Z	57.7	28.9	86.6	21379.6	50000
4866	H / 1.0	X	32.0	-4.1	27.9	24.8*	500
	H / 1.0	Y	32.0	-4.1	27.9	24.8*	
	H / 1.0	Z	32.0	-4.1	27.9	24.8*	
	V / 1.0	X	32.0	-4.1	27.9	24.8*	
	V / 1.0	Y	32.0	-4.1	27.9	24.8*	
4.866	V / 1.0	Z	32.0	-4.1	27.9	24.8*	500
7.299	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*	
7.299	V / 1.0	Z	32.0	-2.0	30.0	31.6*	500
9.732	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*	
9.732	V / 1.0	Z	33.0	-1.9	31.1	35.9*	500
12.17	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*	
12.17	V / 1.0	Z	33.0	3.8	36.8	69.2*	500
	The frequency range was scanned from 30 MHz to 25GHz. 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)						



Retlif Testing Laboratories

Retlif Job Number R-9148-1

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		X-10 USA			Job No.		R-9148-1
Test Sample:		2.4GHz FM Transmitter			Paragraph:		15.249
Model No.:		VT39A			FCC ID:		B4SVT39A
Operating Mode:		Continuously Transmitting a 2.433GHz Signal					
Technician:		Peter Lananna			Date:		September 5, 2001
Notes:		Test Distance: 3 Meters **=Readings taken @ 1 meter, correction factors includes test distance correction. Detector: Peak, Unless otherwise specified Channel B					
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Average Limit
GHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
14.60	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*	
14.60	V / 1.0	Z	33.0	10.8	43.8	154.9*	500
17.03	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*	
17.03	V / 1.0	Z	33.0	15.5	48.5	266.1*	500
19.46	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**	
19.46	V / 1.0	Z	30.0	22.9	52.9	441.6**	500
21.90	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**	
21.90	V / 1.0	Z	30.0	23.2	53.2	457.1**	500
24.33	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**	
24.33	V / 1.0	Z	30.0	23.4	53.4	467.7**	500
	The frequency range was scanned from 30 MHz to 25GHz. 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)						



Retlif Testing Laboratories

Retlif Job Number R-9148-1

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		X-10 USA			Job No.		R-9148-1
Test Sample:		2.4GHz FM Transmitter			Paragraph:		15.249
Model No.:		VT39A			FCC ID:		B4SVT39A
Operating Mode:		Continuously Transmitting a 2.472GHz Signal					
Technician:		Peter Lananna			Date:		August 27, 2001
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
GHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
2.472	H /	X	51.3	28.9	80.2	10232.9	50000
	H /	Y	54.9	28.9	83.8	15488.2	
	H /	Z	50.6	28.9	79.5	9440.6	
	V /	X	47.7	28.9	76.6	6760.8	
	V /	Y	53.4	28.9	82.3	13031.7	
2.472	V /	Z	46.6	28.9	75.5	5956.6	50000
4944	H / 1.0	X	32.0	-4.1	27.9	24.8*	500
	H / 1.0	Y	32.0	-4.1	27.9	24.8*	
	H / 1.0	Z	32.0	-4.1	27.9	24.8*	
	V / 1.0	X	32.0	-4.1	27.9	24.8*	
	V / 1.0	Y	32.0	-4.1	27.9	24.8*	
4.944	V / 1.0	Z	32.0	-4.1	27.9	24.8*	500
7.416	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*	
7.416	V / 1.0	Z	32.0	-2.0	30.0	31.6*	500
9.888	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*	
9.888	V / 1.0	Z	33.0	-1.9	31.1	35.9*	500
12.36	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*	
12.36	V / 1.0	Z	33.0	3.8	36.8	69.2*	500
	The frequency range was scanned from 30 MHz to25GHz. 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)						



Retlif Testing Laboratories

Retlif Job Number R-9148-1

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions						
Customer:		X-10 USA			Job No.		R-9148-2	
Test Sample:		2.4GHz FM Transmitter			Paragraph:		15.249	
Model No.:		VT39A			FCC ID:		B4SVT39A	
Operating Mode:		Continuously Transmitting a 2.472GHz Signal						
Technician:		Peter Lananna			Date:		August 27, 2001	
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	
GHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
14.83	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*		
14.83	V / 1.0	Z	33.0	10.8	43.8	154.9*	500	
17.30	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*		
17.30	V / 1.0	Z	33.0	15.5	48.5	266.1*	500	
19.78	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**		
19.78	V / 1.0	Z	30.0	22.9	52.9	441.6**	500	
22.25	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**		
22.25	V / 1.0	Z	30.0	23.2	53.2	457.1**	500	
24.72	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**		
24.72	V / 1.0	Z	30.0	23.4	53.4	467.7**	500	
	The frequency range was scanned from 30 MHz to 25GHz. 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)							



Retlif Testing Laboratories

Retlif Job Number R-9148-1



Retlif Job Number R-9148-1

Test Method:	FCC Part 15 Subpart C, Spurious Case Radiated Emissions, Paragraph 15.209(a)						
Customer:	X-10 USA				Job No.	R-9148-1	
Test Sample:	2.4GHz FM Transmitter						
Model No.:	VT39A				Serial No.	N/A	
Operating Mode:	Continuously Transmitting a 2.433GHz Signal.						
Technician:	Peter Lananna				Date:	September 5, 2001	
Notes:	Test Distance: 3 Meters Temp:28C Humidity:33% Channel B 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	LIMIT
MHz	(V/H) / Meters	Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
30.00							100
88.00							100
88.00							150
216.00							150
216.00							200
960.00							200
960.00							500
1217.4	V/1.5	112	53.4	-3.5	49.9	312.6	
25000.0							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						
	*=Noise Floor Measurements(minimum system sensitivity)						



Retlif Testing Laboratories

Retlif Job Number R-9148-1

Test Method:	FCC Part 15 Subpart C, Spurious Case Radiated Emissions, Paragraph 15.209(a)						
Customer:	X-10 USA				Job No.	R-9148-1	
Test Sample:	2.4GHz FM Transmitter						
Model No.:	VT39A				Serial No.	N/A	
Operating Mode:	Continuously Transmitting a 2.472GHz Signal.						
Technician:	Peter Lananna				Date:	September 5, 2001	
Notes:	Test Distance: 3 Meters Temp:28C Humidity:33% Channel D 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	LIMIT
MHz	(V/H) / Meters	Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
30.00							100
88.00							100
88.00							150
216.00							150
216.00							200
960.00							200
960.00							500
1235.3	V/2.0	022	56.0	-3.5	52.5	421.7	
2484.0	V/1.0	180	33.5	-7.9	25.6	19.1*	
25000.0							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						
	*=Noise Floor Measurements(minimum system sensitivity)						



Retlif Testing Laboratories

Retlif Job Number R-9148-1