APPLICANT	MANUFACTURER
X-10 (USA), Inc. 400 Forge Way, Suite 412 Rockaway, NJ 07866-2033	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, Para. 15.231

TEST PROCEDURE: ANSI C63.4:1992

TEST SAMPLE DESCRIPTION

BRANDNAME: X-10 (USA), Inc. MODEL: VT38A

TYPE: Pulsed Transmitter

POWER REQUIREMENTS: 120 VAC, 60 Hz

FREQUENCY OF OPERATION: 310 MHz

TESTS PERFORMED

Para. 15.207(a),	Conducted Emissions
Para. 15.231(b)(1),	Radiated Emissions, Fundamental and Harmonics
Para. 15.231(b)(3),	Radiated Emissions, Spurious Case
Para. 15.35(b)(2),	Duty Cycle Determination
Para. 15.231(c),	Occupied Bandwidth

REPORT OF MEASUREMENTS

Applicant: X-10 (USA), Inc.

Device: Pulsed Transmitter

FCC ID: B4SVT38A

Power Requirements: 120 VAC, 60 Hz

Applicable Rule Section: Part 15, Subpart C, Section 15.231

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.

15.231 (a): This device is used as a security alarm transmitter, which transmits when activated by a motion sensor.

15.231 (a)(1) & 15.231(a)(2): The transmitter is automatically operated by the motion detector and ceases transmission within 5 seconds after the alarm condition ceases.

15.231 (a)(3): The transmitter does not perform periodic transmissions.

15.231 (b): The fundamental field strength did not exceed 5833 µV/M (Average) at a test distance of 3 meters. In addition, the requirements of section 15.35 for averaging pulsed emissions and for limiting peak emissions were met.

The field strength of harmonic and spurious emissions did not exceed 583 µV/M (AVERAGE).

DETERMINATION OF FIELD STRENGTH LIMITS

The field strength limits shown below are found in Section 15.231.

Frequency			Limit		
F1	=	260	3750	=	L1
Fo	=	312		Lo	
F2	=	470	12500	=	L2

The formula below was utilized to determine the limits:

Limit = L1 + [(Fo-F1)(L2-L1)/(F2-F1)]

Solving yields:

Fundamental Limit = 5833 µV/M (AVERAGE) @ 3 Meters

Harmonic Limit = 583 µV/M (AVERAGE) @ 3 Meters

DUTY CYCLE DETERMINATION

The unit's RF output was directly coupled to the input of the spectrum analyzer. The analyzer was set for a frequency span of 0Hz. The sweep time was then adjusted in order to display one full pulse train. The transmitter on time was then summed and compared to the time for one full cycle in order to obtain the duty cycle. (See plots for additional information)

Transmitter On Time	=	28.9 milliseconds
Transmitter Cycle Time	=	105.5 milliseconds
Transmitter Duty Cycle	=	28.9 %

CALCULATION:

1 Large Pulse	=	9.1 milliseconds
33 x 600 µs (small pulse)	=	19.8 milliseconds
10.5 + 19.8	=	28.9 milliseconds
Duty Cycle	=	28.9 %
Correction Factor = 20 log(0.288)	=	-10.8

SPECTRUM ANALYZER DESENSITIZATION CONSIDERATIONS

Due to the nature of the emissions being measured, care was taken to ensure that the resolution bandwidth of the spectrum analyzer was adequate to provide accurate measurements. The following formula was utilized:

Setting pulse desensitization equal to zero and utilizing the minimum observed pulse width of 600µs yields a minimum required bandwidth of 1.111 kHz. FCC specified bandwidths of 100kHz and 1MHz were utilized below and above 1GHz, respectively.

GENERAL NOTES

1. All readings were taken utilizing a peak detector function at a test distance of 3 meters.

2. The duty cycle was applied to the peak readings in order to determine the average value of the emissions.

3. The frequency range was scanned from 30 MHz to 3.1 GHz. All emissions not reported were more than 20 dB below the specified limit.

EQUIPMENT LIST

FCC Part 15 Subpart C 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

FCC 15.207(a)

CONDUCTED EMISSIONS

See separate e-file attachment named Cedata.pdf

FCC 15.231(b) and FCC 15.231(b)

RADIATED EMISSIONS, FUNDAMENTAL & SPURIOUS CASE

See separate e-file attachment named REfundharm.pdf and REspur.pdf

FCC 15.231(c)

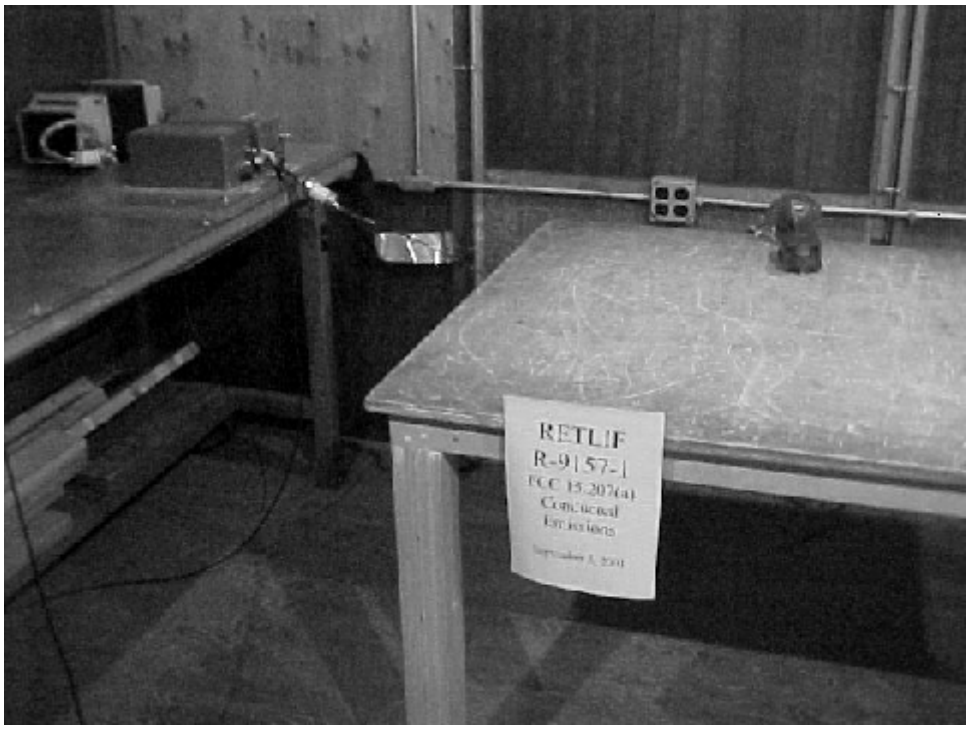
OCCUPIED BANDWIDTH

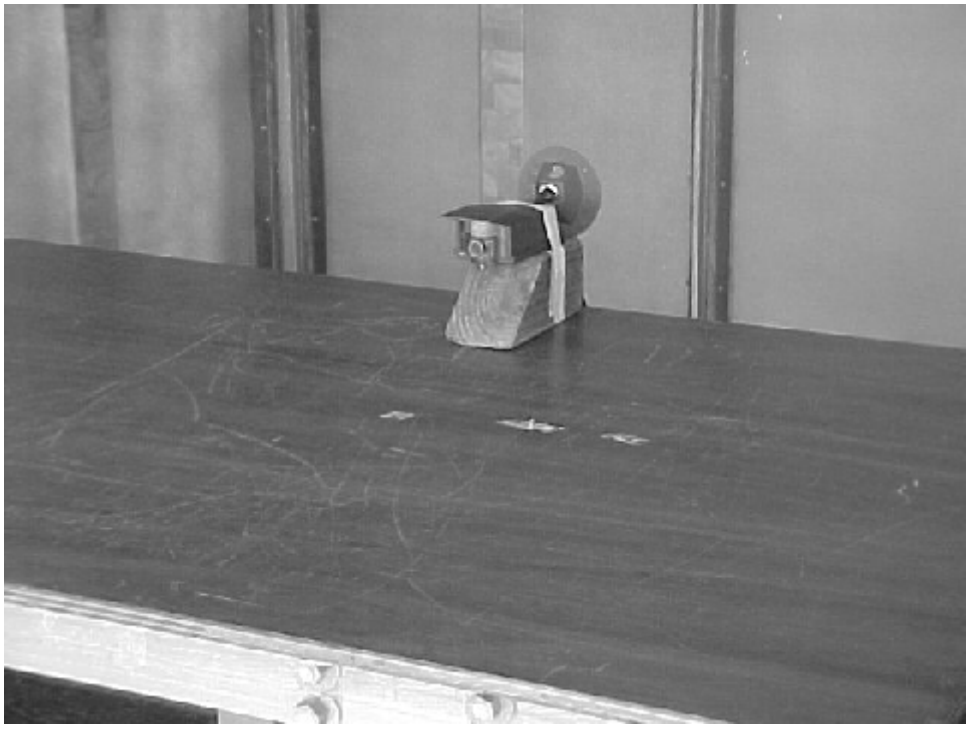
Please refer to separate electronic file named Occbw.pdf

FCC 15.35

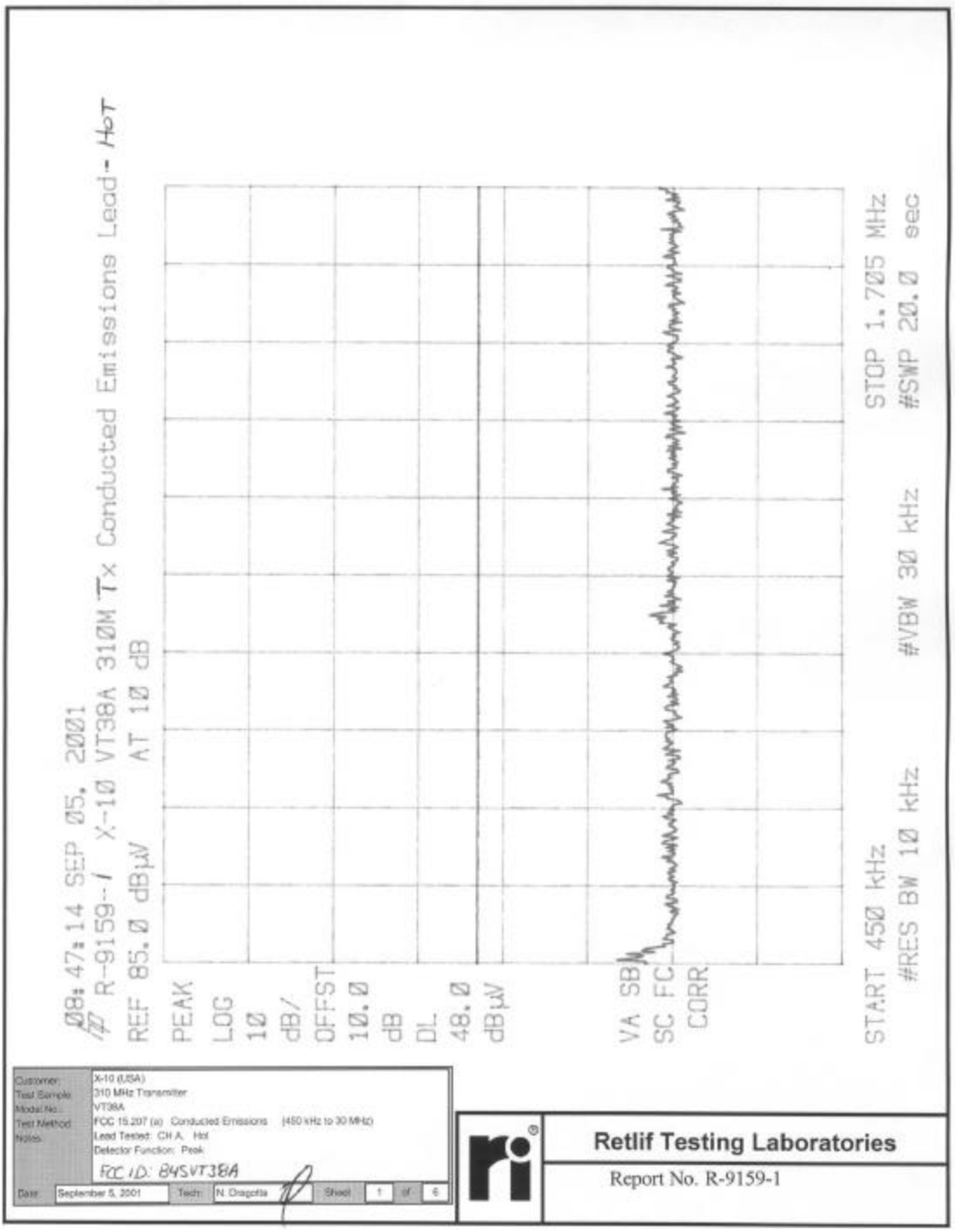
DUTY CYCLE

Please refer to separate electronic file named Dutycycle.pdf


RETLIF
R-9157-1
FCC 15.207(a)
Conducted
Emissions



Test Setup Photographs



Customer:	X-10 (USA)
Test Sample:	310 MHz Transmitter
Model No.:	VT38A
Test Method:	FCC 15.207 (a) Conducted Emissions (450 kHz to 30 MHz)
Notes:	Lead Tested: CH A. Hot Detector Function: Peak FCC ID: B4SVT38A
Date: September 5, 2001	Tech: N. Dragotta
Sheet: 1 of 6	

Retlif Testing Laboratories

Report No. R-9159-1

Customer:	X-10 (USA)
Test Sample:	310 MHz Transmitter
Model No.:	VT38A
Test Method:	FCC 15.207 (a) Conducted Emissions (450 kHz to 30 MHz)
Notes:	Lead Tested: CH A. Neutral
	Detector Function: Peak
	FCC ID: B45VT38A
Date: September 5, 2001	Tech: N. Dragotta
Sheet: 2 of 6	

Retlif Testing Laboratories

Report No. R-9159-1

Customer:	X-10 (USA)
Test Sample:	310 MHz Transmitter
Model No.:	VT38A
Test Method:	FCC 15.207 (a) Conducted Emissions (450 kHz to 30 MHz)
Notes:	Lead Tested: CH A, Hot Detector Function: Peak

FCC ID: 845 VT38A

Date:	September 5, 2001	Tech:	N. Dragoita	Sheet	3	of	6

Retlif Testing Laboratories

Report No. R-9159-1

09:00:36 SEP 05, 2001
#1 R-9159-1 X-10 VT38A 310M Tx Conducted Emissions Lead - Neutral
REF 85.0 dBµV AT 10 dB

PEAK
LOG
10
dB/
OFFST
10.0
dB
DL
48.0
dBµV

VA SB
SC FC
CORR

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

Customer:	X-10 (USA)
Test Sample:	310 MHz Transmitter
Model No.:	VT38A
Test Method:	FCC 15.207 (a) Conducted Emissions (450 kHz to 30 MHz)
Notes:	Lead Tested: CH A, Neutral Detector Function: Peak FCC ID: BSCVT38A
Date:	September 5, 2001
Tech:	N. Dragotta
Sheet	4 of 8

Retlif Testing Laboratories

Report No. R-9159-1

09:08:31 SEP 05, 2001
#7 R-9159-1 X-10 VT38A 310M Tx Conducted Emissions Lead - Hot
REF 85.0 dBµV AT 10 dB
PEAK
LOG
10
dB/
OFFST
10.0
dB
DL
48.0
dBµV
VA SB
SC FC
CORR
START 5.00 MHz
#RES BW 10 kHz
#VBW 30 kHz
STOP 30.00 MHz
#SWP 20.0 sec

Customer:	X-10 (USA)
Test Sample:	310 MHz Transmitter
Model No.:	VT38A
Test Method:	FCC 15.207 (a) Conducted Emissions (450 kHz to 30 MHz)
Notes:	Lead Tested: CH A, Hot Detector Function: Peak FCC ID: B45VT38A
Date: September 5, 2001	Tech: N. Dragotta Sheet: 5 of 6

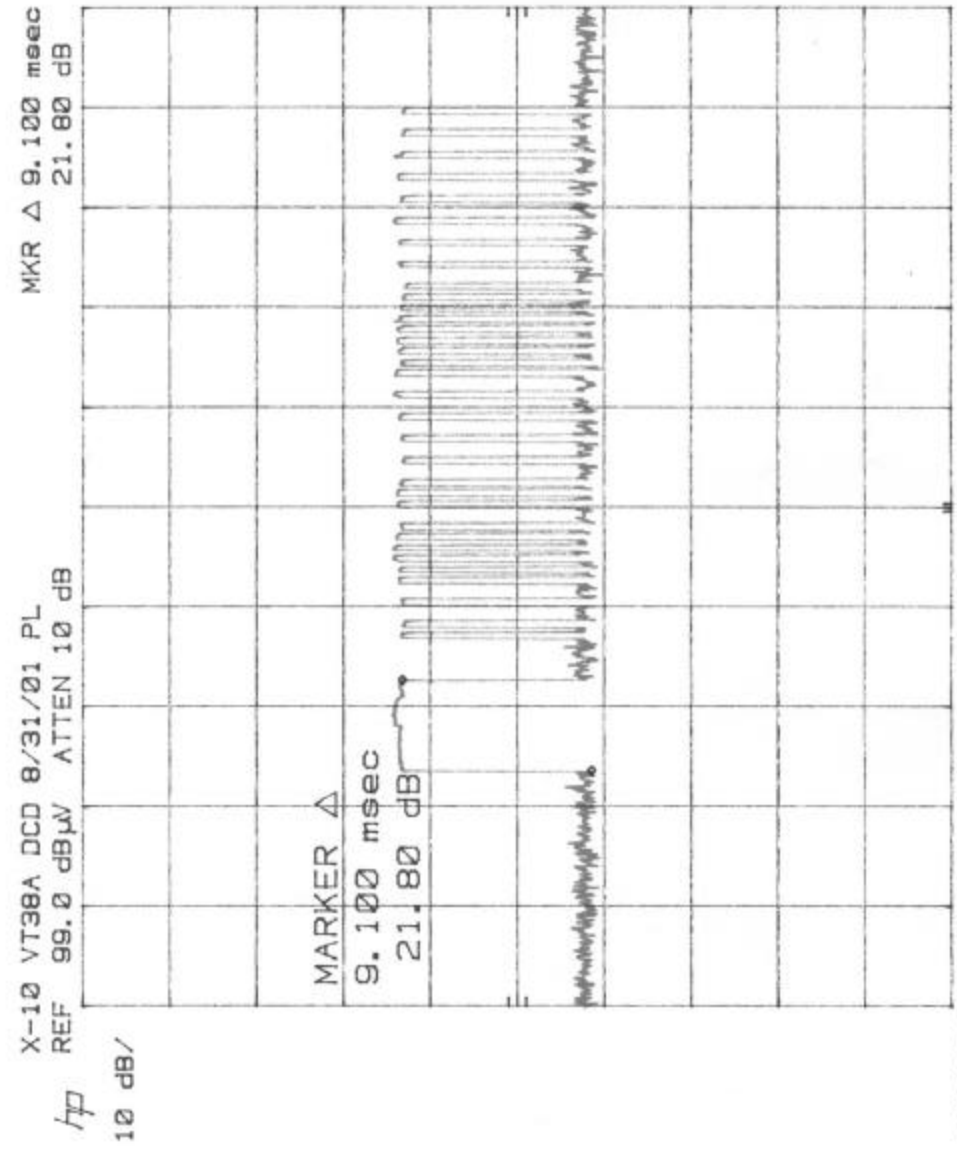
Retlif Testing Laboratories

Report No. R-9159-1

Customer:	X-10 (USA)
Test Sample:	310 MHz Transmitter
Model No.:	VT38A
Test Method:	FCC 15.207 (a) Conducted Emissions (450 kHz to 30 MHz)
Notes:	Lead Tested: CH A Neutral Detector Function: Peak FCC ID B4SVT38A
Date: September 5, 2001	Tech: N. Dragolia Sheet: 6 of 6

Retlif Testing Laboratories

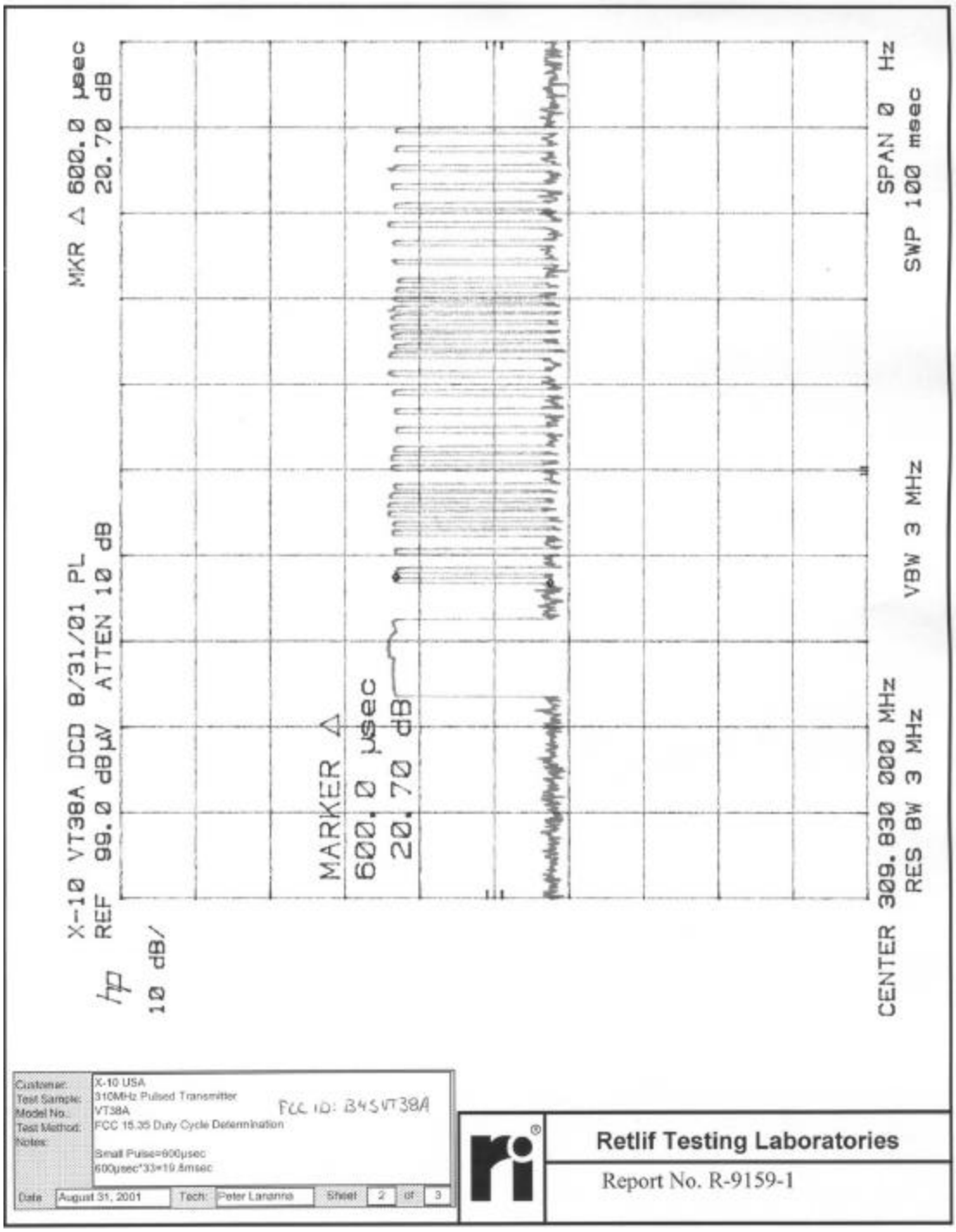
Report No. R-9159-1



Customer:	X-10 USA
Test Sample:	310MHz Pulsed Transmitter
Model No.:	VT38A FCC ID: BP5VT38A
Test Method:	FCC 15.35 Duty Cycle Determination
Notes:	Large Pulse=9.1msec
Date: August 31, 2001	Tech: Peter Lananna
Sheet: 1 of 3	

Retlif Testing Laboratories

Report No. R-9159-1



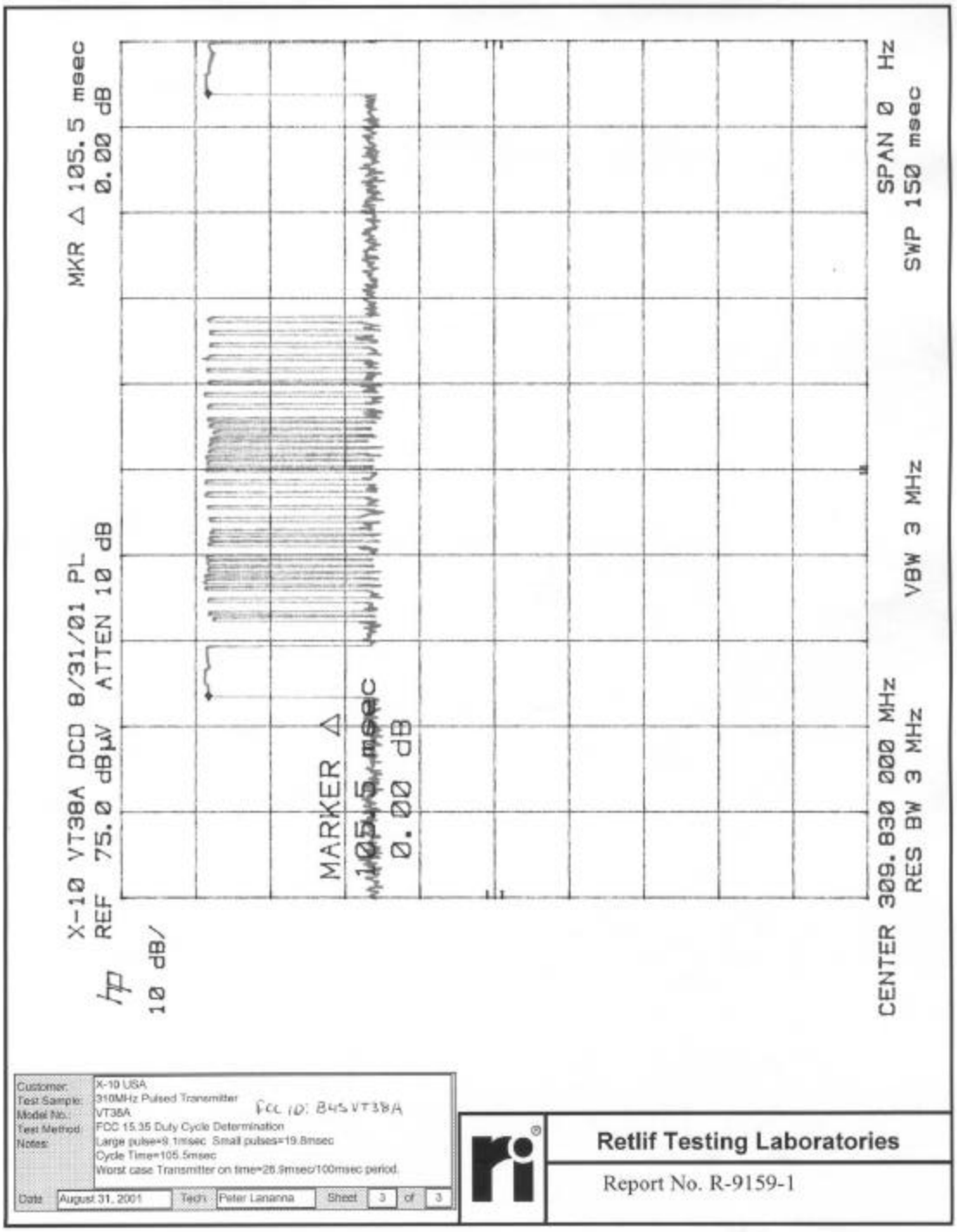
Customer:	X-10 USA
Test Sample:	310MHz Pulsed Transmitter
Model No.:	VT38A
Test Method:	FCC 15.35 Duty Cycle Determination
Notes:	Small Pulse=600µsec 600µsec*33=19.8msec

FCC ID: B4SVT38A

Date: August 31, 2001 Tech: Peter Lananna Sheet 2 of 3

Retlif Testing Laboratories

Report No. R-9159-1

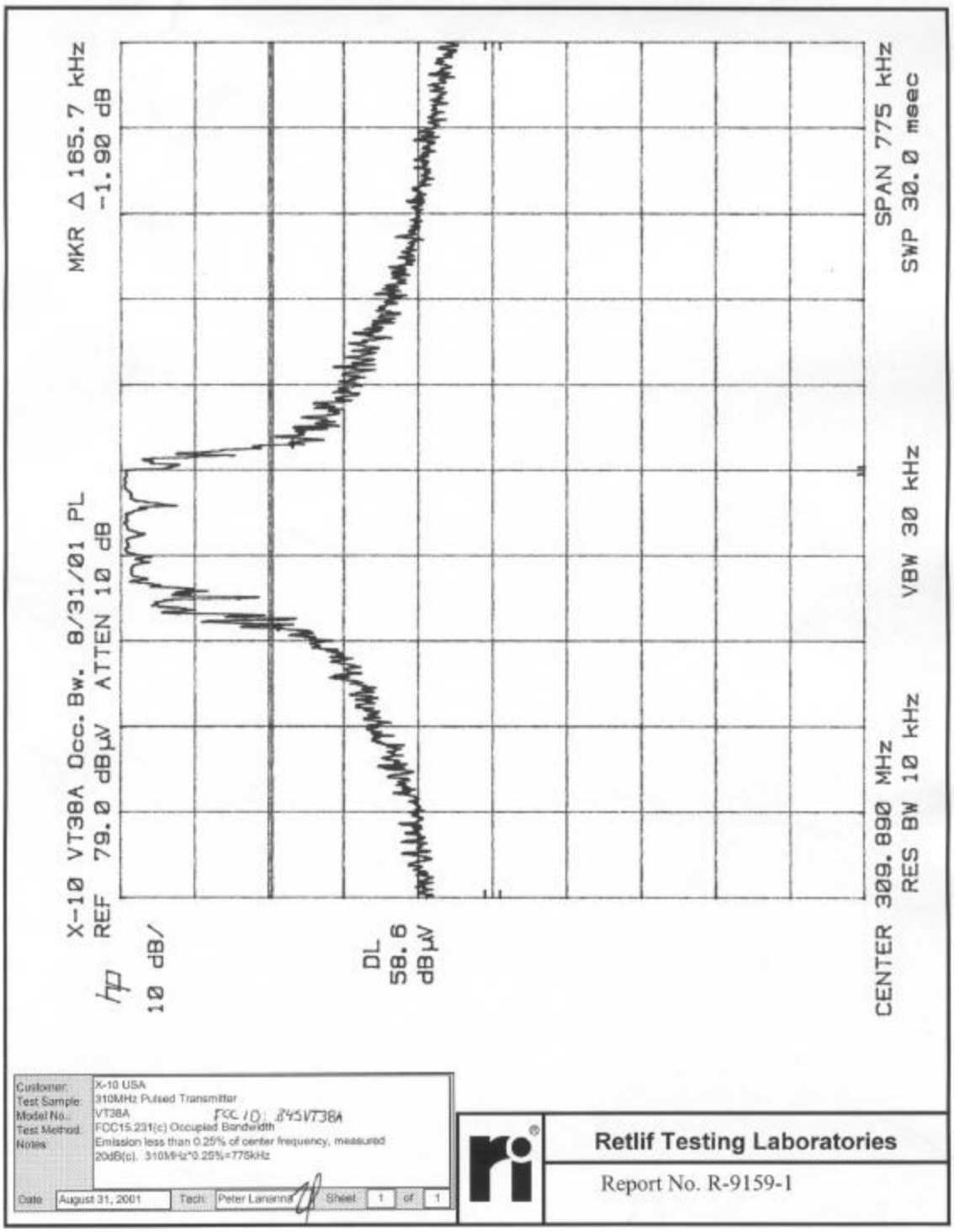


Customer:	X-10 USA
Test Sample:	310MHz Pulsed Transmitter
Model No.:	VT38A
Test Method:	FCC 15.35 Duty Cycle Determination
Notes:	Large pulse=9.1msec Small pulses=19.8msec Cycle Time=105.5msec Worst case Transmitter on time=26.9msec/100msec period.
Date:	August 31, 2001
Tech:	Peter Lananna
Sheet	3 of 3

FCC ID: B4SVT38A

Retlif Testing Laboratories

Report No. R-9159-1



Customer:	X-10 USA
Test Sample:	310MHz Pulsed Transmitter
Model No.:	VT38A FCC ID: BO45VT38A
Test Method:	FCC15.231(c) Occupied Bandwidth
Notes:	Emission less than 0.25% of center frequency, measured 20dB(c). 310MHz*0.25%=775kHz
Date:	August 31, 2001
Tech:	Peter Lansinna
Sheet:	1 of 1

Retlif Testing Laboratories

Report No. R-9159-1

Test Method:	FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions		
Customer:	X-10 (USA)	**Job No.**	R-9159-1
Test Sample:	RF remote	**Paragraph:**	15.231
Model No.:	VT38A	**FCC ID:**	B4SVT38A
Operating Mode:	Continuously Transmitting a 310 MHz Signal		
Technician:	Peter Lananna	**Date:**	September 5, 2001

Notes: Test Distance: 3 Meters
Detector: Peak, Unless otherwise specified

Test Freq.	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
310	H / 1.5	X	65.1	-4.0	61.1	1135.0	58300
|	H / 2.5	Y	64.5	-4.0	60.5	1059.3	|
|	H / 1.0	Z	70.8	-4.0	66.8	2187.8	|
|	V / 1.0	X	64.8	-4.0	60.8	1096.5	|
|	V / 1.0	Y	70.1	-4.0	66.1	2018.4	|
310	V / 2.0	Z	65.6	-4.0	61.6	1202.3	58300
620	H / 1.3	X	47.5	3.9	51.4	371.5	5830
|	H / 3.8	Y	45.7	3.9	49.6	302.0	|
|	H / 1.3	Z	51.9	3.9	55.8	616.6	|
|	V / 1.0	X	49.0	3.9	52.9	441.6	|
|	V / 1.5	Y	50.5	3.9	54.4	524.8	|
620	V / 1.5	Z	46.6	3.9	50.5	335.0	5830
930	H / 1.0	X	29.9	8.8	38.7	86.1*	5830
|	H / 1.0	Y	29.9	8.8	38.7	86.1*	|
|	H / 1.0	Z	29.9	8.8	38.7	86.1*	|
|	V /1.0	X	29.9	8.8	38.7	86.1*	|
|	V / 1.0	Y	29.9	8.8	38.7	86.1*	|
930	V / 1.0	Z	29.9	8.8	38.7	86.1*	5830
1240	H / 1.0	X	41.7	-2.8	38.9	88.1*	5000
|	H / 1.0	Y	41.7	-2.8	38.9	88.1*	|
|	H / 1.0	Z	41.7	-2.8	38.9	88.1*	|
|	V /1.0	X	41.7	-2.8	38.9	88.1*	|
|	V / 1.0	Y	41.7	-2.8	38.9	88.1*	|
1240	V / 1.0	Z	41.7	-2.8	38.9	88.1*	5000
1550	H / 1.0	X	39.7	0.9	40.6	107.2*	5000
|	H / 1.0	Y	39.7	0.9	40.6	107.2*	|
|	H / 1.0	Z	39.7	0.9	40.6	107.2*	|
|	V /1.0	X	39.7	0.9	40.6	107.2*	|
|	V / 1.0	Y	39.7	0.9	40.6	107.2*	|
1550	V / 1.0	Z	39.7	0.9	40.6	107.2*	5000
	The frequency range was scanned from 30 MHz to 3.1 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-9159-1
Test Sample:	RF remote	**Paragraph:**	15.231
Model No.:	VT38A	**FCC ID:**	B4SVT38A
Operating Mode:	Continuously Transmitting a 310 MHz Signal		
Technician:	Peter Lananna	**Date:**	September 5, 2001

Notes: Test Distance: 3 Meters

Detector: Peak, unless otherwise specified

Test Freq.	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
1860	H / 1.0	X	38.7	3.0	41.7	121.6*	5830
|	H / 1.0	Y	38.7	3.0	41.7	121.6*	|
|	H / 1.0	Z	38.7	3.0	41.7	121.6*	|
|	V /1.0	X	38.7	3.0	41.7	121.6*	|
|	V / 1.0	Y	38.7	3.0	41.7	121.6*	|
1860	V / 1.0	Z	38.7	3.0	41.7	121.6*	5830
2170	H / 1.0	X	39.2	0.4	39.6	95.5*	5830
|	H / 1.0	Y	39.2	0.4	39.6	95.5*	|
|	H / 1.0	Z	39.2	0.4	39.6	95.5*	|
|	V /1.0	X	39.2	0.4	39.6	95.5*	|
|	V / 1.0	Y	39.2	0.4	39.6	95.5*	|
2170	V / 1.0	Z	39.2	0.4	39.6	95.5*	5830
2480	H / 1.0	X	39.7	3.8	43.5	149.6*	5830
|	H / 1.0	Y	39.7	3.8	43.5	149.6*	|
|	H / 1.0	Z	39.7	3.8	43.5	149.6*	|
|	V /1.0	X	39.7	3.8	43.5	149.6*	|
|	V / 1.0	Y	39.7	3.8	43.5	149.6*	|
2480	V / 1.0	Z	39.7	3.8	43.5	149.6*	5830
2790	H / 1.0	X	38.2	5.8	44.0	158.5*	5000
|	H / 1.0	Y	38.2	5.8	44.0	158.5*	|
|	H / 1.0	Z	38.2	5.8	44.0	158.5*	|
|	V /1.0	X	38.2	5.8	44.0	158.5*	|
|	V / 1.0	Y	38.2	5.8	44.0	158.5*	|
2790	V / 1.0	Z	38.2	5.8	44.0	158.5*	5000
3100	H / 1.0	X	40.0	6.4	46.4	208.9*	5830
|	H / 1.0	Y	40.0	6.4	46.4	208.9*	|
|	H / 1.0	Z	40.0	6.4	46.4	208.9*	|
|	V /1.0	X	40.0	6.4	46.4	208.9*	|
|	V / 1.0	Y	40.0	6.4	46.4	208.9*	|
3100	V / 1.0	Z	40.0	6.4	46.4	208.9*	5830
	The frequency range was scanned from 30 MHz to 3.1 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-9159-1
Test Sample:	RF remote	**Paragraph:**	15.231
Model No.:	VT38A	**FCC ID:**	B4SVT38A
Operating Mode:	Continuously Transmitting a 310 MHz Signal		
Technician:	Peter Lananna	**Date:**	September 5, 2001

Notes: Test Distance: 3 Meters — Duty Cycle:28.9 %

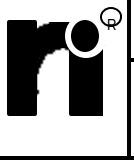
Detector: Peak, unless otherwise specified — Duty Cycle Correction: -10.8dB

Test Freq.	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
310	H / 1.5	X	61.1	-10.8	50.3	327.3	5830
|	H / 2.5	Y	60.5	-10.8	49.7	305.5	|
|	H / 1.0	Z	66.8	-10.8	56.0	631.0	|
|	V / 1.0	X	60.8	-10.8	50.0	316.2	|
|	V / 1.0	Y	66.1	-10.8	55.3	582.1	|
310	V / 2.0	Z	61.6	-10.8	50.8	346.7	5830
620	H / 1.3	X	51.4	-10.8	40.6	107.2	583
|	H / 3.8	Y	49.6	-10.8	38.8	87.1	|
|	H / 1.3	Z	55.8	-10.8	45.0	177.8	|
|	V / 1.0	X	52.9	-10.8	42.1	127.4	|
|	V / 1.5	Y	54.4	-10.8	43.5	149.6	|
620	V / 1.5	Z	50.5	-10.8	39.7	96.6	583
930	H / 2.0	X	38.7	-10.8	27.9	24.8*	583
|	H / 1.3	Y	38.7	-10.8	27.9	24.8*	|
|	H / 1.5	Z	38.7	-10.8	27.9	24.8*	|
|	V / 1.0	X	38.7	-10.8	27.9	24.8*	|
|	V / 1.5	Y	38.7	-10.8	27.9	24.8*	|
930	V / 1.5	Z	38.7	-10.8	27.9	24.8*	583
1240	H / 1.0	X	38.9	-10.8	28.1	25.4*	500
|	H / 1.0	Y	38.9	-10.8	28.1	25.4*	|
|	H / 1.0	Z	38.9	-10.8	28.1	25.4*	|
|	V /1.0	X	38.9	-10.8	28.1	25.4*	|
|	V / 1.0	Y	38.9	-10.8	28.1	25.4*	|
1240	V / 1.0	Z	38.9	-10.8	28.1	25.4*	500
1550	H / 1.0	X	40.6	-10.8	29.8	30.9*	500
|	H / 1.0	Y	40.6	-10.8	29.8	30.9*	|
|	H / 1.0	Z	40.6	-10.8	29.8	30.9*	|
|	V /1.0	X	40.6	-10.8	29.8	30.9*	|
|	V / 1.0	Y	40.6	-10.8	29.8	30.9*	|
1550	V / 1.0	Z	40.6	-10.8	29.8	30.9*	500

The frequency range was scanned from 30 MHz to 3.1 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)



Retlif Testing Laboratories

Retlif Job Number R-9159-1

Test Method:	FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions		
Customer:	X-10 (USA)	**Job No.**	R-9159-1
Test Sample:	RF remote	**Paragraph:**	15.231
Model No.:	VT38A	**FCC ID:**	B4SVT38A
Operating Mode:	Continuously Transmitting a 310 MHz Signal		
Technician:	Peter Lananna	**Date:**	September 5, 2001

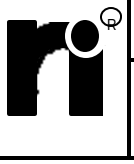
Notes: Test Distance: 3 Meters — Duty Cycle: 28.9%

Detector: Peak, unless otherwise specified — Duty Cycle Correction: -10.8dB

Test Freq.	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
1860	H / 1.0	X	41.7	-10.8	30.9	35.1*	583
|	H / 1.0	Y	41.7	-10.8	30.9	35.1*	|
|	H / 1.0	Z	41.7	-10.8	30.9	35.1*	|
|	V / 1.0	X	41.7	-10.8	30.9	35.1*	|
|	V / 1.0	Y	41.7	-10.8	30.9	35.1*	|
1860	V / 1.0	Z	41.7	-10.8	30.9	35.1*	583
2170	H / 1.0	X	39.6	-10.8	28.8	27.5*	583
|	H / 1.0	Y	39.6	-10.8	28.8	27.5*	|
|	H / 1.0	Z	39.6	-10.8	28.8	27.5*	|
|	V / 1.0	X	39.6	-10.8	28.8	27.5*	|
|	V / 1.0	Y	39.6	-10.8	28.8	27.5*	|
2170	V / 1.0	Z	39.6	-10.8	28.8	27.5*	583
2480	H / 1.0	X	43.5	-10.8	32.7	43.2*	583
|	H / 1.0	Y	43.5	-10.8	32.7	43.2*	|
|	H / 1.0	Z	43.5	-10.8	32.7	43.2*	|
|	V / 1.0	X	43.5	-10.8	32.7	43.2*	|
|	V / 1.0	Y	43.5	-10.8	32.7	43.2*	|
2480	V / 1.0	Z	43.5	-10.8	32.7	43.2*	583
2790	H / 1.0	X	44.0	-10.8	33.2	45.7*	500
|	H / 1.0	Y	44.0	-10.8	33.2	45.7*	|
|	H / 1.0	Z	44.0	-10.8	33.2	45.7*	|
|	V / 1.0	X	44.0	-10.8	33.2	45.7*	|
|	V / 1.0	Y	44.0	-10.8	33.2	45.7*	|
2790	V / 1.0	Z	44.0	-10.8	33.2	45.7*	500
3100	H / 1.0	X	46.4	-10.8	35.6	60.3*	583
|	H / 1.0	Y	46.4	-10.8	35.6	60.3*	|
|	H / 1.0	Z	46.4	-10.8	35.6	60.3*	|
|	V / 1.0	X	46.4	-10.8	35.6	60.3*	|
|	V / 1.0	Y	46.4	-10.8	35.6	60.3*	|
3100	V / 1.0	Z	46.4	-10.8	35.6	60.3*	583

The frequency range was scanned from 30 MHz to 3.1 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)



Retlif Testing Laboratories

Retlif Job Number R-9159-1

Test Method:	FCC Part 15 Subpart C, Spurious Case Radiated Emissions, Paragraph 15.209(a)		
Customer:	X-10 (USA)	**Job No.**	R-9159-1
Test Sample:	RF Remote		
Model No.:	VT38A	**FCC ID:**	B4SVT38A
Operating Mode:	Continuously transmitting a pulsed signal at 310MHz.		
Technician:	Peter Lananna	**Date:**	September 5, 2001

Notes: Test Distance: 3 Meters Temp:30C Humidity:18%
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

No emissions detected at specified test distance.

216.00							150
216.00							200
960.00							200
960.00							500
3100.0							500

The EUT was scanned from 30 MHz to 3.1 GHz

The emissions observed from the EUT do not exceed the specified limits. Emissions not recorded were more than 10dB under the specified limit

Retlif Testing Laboratories

Retlif Job Number R-9159-1