

Technical Information

APPLICANT	MANUFACTURER
Name: X10 (USA), Inc.	Name: X-10 Electronics (Shenzhen) Co. Ltd.
Blackriver Corporate Park	Together Rich Industrial Park B
Address: 620 Naches Ave SW, Building A	Sanwei Industrial District,
City, State, Zip: Renton, WA 98057	Address: Xixiang Town
	Baoan County,
	City, State, Zip: Shenzhen, China

TEST SPECIFICATION: FCC Rules and Regulations Part 15, Subpart C, Section 15.249

TEST PROCEDURE: ANSI C63.4:2003

Test Sample Description

Test Sample:	5.8 GHz Wireless Audio/Video Sender
Brandname(s):	X10 (USA)
Model(s):	VT50A
FCC ID:	B4SVT50A
Type:	Frequency Modulated Transceiver
Power Requirements:	6 VDC, 300 mA derived from external AC Adapter
Frequency Of Operation:	5.75 GHz to 5.81 GHz
Applicable Rule Section:	Part 15, Subpart C, Section 15.249

Tests Performed

Transmitter:

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

Test Results

Transmitter:

- 15.203: The intentional radiator is designed to ensure that no antenna other than that furnished by the applicant can be used with the device.
- 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 150 kHz to 30 MHz did not exceed Class B limits as specified in CISPR 22.
- 15.249 (a): The unit operates in 5725 GHz to 5875 GHz band.
The field strength of the fundamental did not exceed 50 mV/M average.
The field strength of the harmonics did not exceed 500 μ V/M averages.
- 15.249 (b): Field strength readings were taken at 3 meters unless otherwise noted.
- 15.249 (c): Emissions radiated outside the specified frequency band were attenuated in accordance with the general radiated emissions limits of 5.209.
- 15.249 (d): The peak field strength of any emission did not exceed the maximum permitted average field strength by more than 20 dB.

Spectrum Analyzer Desensitization Considerations

General Notes

1. The AC input was varied from 85% to 115% of the rated input. Field strength measurements were taken with the AC input adjusted to produce maximum emissions.
2. All user accessible controls were adjusted to produce maximum emissions.
3. The device was tested with the following external accessories:
 - AC switching power supply Model Number: S002CU0720020.
 - IR extender Cable - 4.0 meters long.
 - Audio/Video Cable - 1.5 meters long.
 - 2 S-Video Cables - 1.5 meters long.
 - Panasonic VCR Model Number: PV-V4020.
4. Measurements of Conducted Emissions were performed utilizing a 50 ohm / 50 µhenry Line Impedance Stabilization Network (LISN).
5. The frequency range was scanned from 30 MHz to 40 GHz. All emissions not reported were more than 20 dB over the specified limit.
7. The unit operates at the following frequencies: The unit was tested at the following frequencies:

	Channel A	Channel B	Channel C	Channel D
5.75 GHz	5.77 GHz	5.79 GHz	5.81 GHz	
5.75 GHz	-	5.79 GHz	5.81 GHz	

Certification and Signatures

We certify that this report is a true representation of the results obtained from the tests of the equipment stated. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.



Donald C. Lerner
EMC Test Engineer



Nicholas Dragotta
Laboratory Supervisor

Non-Warranty Provision

The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

Non-Endorsement

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

**Equipment List
Transmitter**

FCC Part 15, Subpart C, Conducted Emissions, 150 kHz to 30 MHz

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due
078	LISN	Solar Electronics	10 kHz - 30 MHz	8028-50-TS24BNC	7/5/2007	7/5/2008
079	LISN	Solar Electronics	10 kHz - 30 MHz	8028-50-TS24BNC	7/5/2007	7/5/2008
333	Attenuator	Narda	DC - 11 GHz	768-10	8/10/2007	8/10/2008
456	LISN	Solar Electronics	DC - 60 Hz	9409-50-R-24	12/4/2006	12/4/2007
7016	EMC Analyzer	Hewlett Packard	9 kHz - 1.8GHz	8591EM	7/25/2007	7/25/2008
762	AM/FM Signal Generator	Marconi Instru.	10 kHz - 1.2 GHz	2023	7/24/2007	7/24/2008

FCC Part 15, Subpart C, Occupied Bandwidth

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
067	Open Area Test Site	Retlif	3/10 Meter	RNY	9/12/2006	9/12/2009
128	Double Ridged Guide	Electro-Mechanics	1 GHz - 18 GHz	3105	3/27/2007	3/27/2008
141	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	4/27/2007	4/27/2008
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	4/27/2007	4/27/2008
512	Graphics Plotter	Hewlett Packard	N/A	7470A	10/19/2007	10/19/2008
723	H.P. Filter	Mini-Circuits	1 GHz	BHP-1000	8/13/2007	8/13/2008

FCC Part 15, Subpart C, Spurious Case Radiated Emissions

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
066	High Gain Horn Antenna	Microlab/FXR	8.2 GHz - 12.4 GHz	X638A	8/30/2007	8/30/2008
067	Open Area Test Site	Retlif	3/10 Meter	RNY	9/12/2006	9/12/2009
128	Double Ridged Guide	Electro-Mechanics	1 GHz - 18 GHz	3105	3/27/2007	3/27/2008
129D	High Gain Horn Antenna	Microlab/FXR	12.4 GHz - 18 GHz	Y638A	8/30/2007	8/30/2008
129F	High Gain Horn Antenna	Microlab/FXR	18 GHz - 26.5 GHz	K638A	8/30/2007	8/30/2008
129G	High Gain Horn Antenna	Microlab/FXR	26.5 GHz - 40 GHz	U638A	8/30/2007	8/30/2008
141	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	4/27/2007	4/27/2008
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	4/27/2007	4/27/2008
420	Amplifier	Hewlett Packard	2.0 GHz - 18 GHz	11975A	11/14/2006	12/12/2007
421	Harmonic Mixer	Hewlett Packard	18 GHz - 26.5 GHz	11970K	10/3/2006	10/3/2009
421A	Harmonic Mixer	Hewlett Packard	26.5 GHz - 40 GHz	11970A	10/3/2006	10/3/2009
512	Graphics Plotter	Hewlett Packard	N/A	7470A	10/19/2007	10/19/2008
523	Biconilog	Electro-Mechanics	26 - 2000 MHz	3142B	10/24/2007	10/24/2008
543	Preamplifier	Hewlett Packard	1.0 GHz - 26.5 GHz	8449B	9/26/2007	9/26/2008
617	Interference Analyzer	Electro-Metrics	10 kHz - 1 GHz	EMC-30	10/24/2007	10/24/2008
723	H.P. Filter	Mini-Circuits	1 GHz	BHP-1000	8/13/2007	8/13/2008

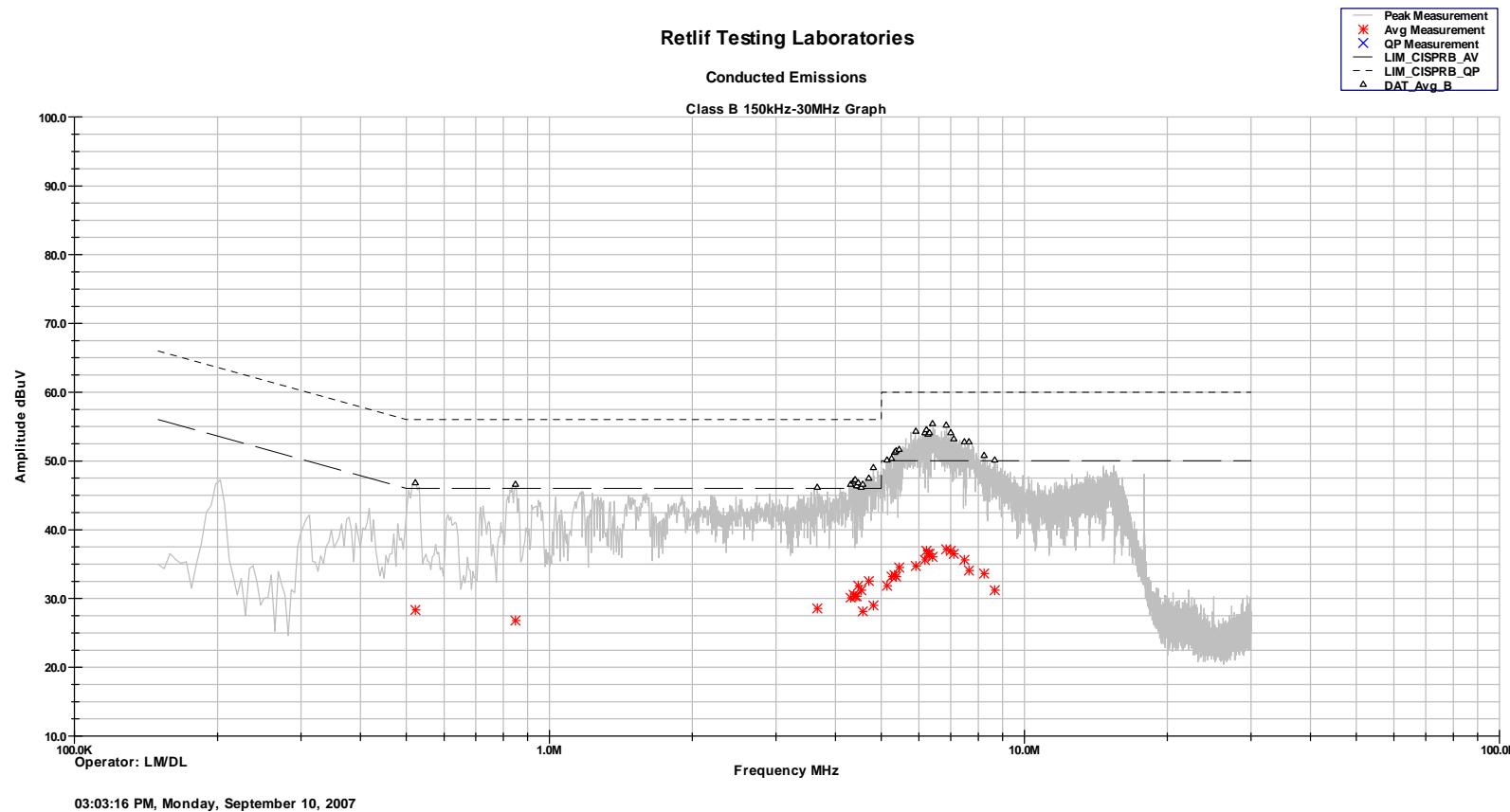
FCC Part 15, Subpart C, Radiated Emissions, Fundamental and Harmonics

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
066	High Gain Horn Antenna	Microlab/FXR	8.2 GHz - 12.4 GHz	X638A	8/30/2007	8/30/2008
067	Open Area Test Site	Retlif	3/10 Meter	RNY	9/12/2006	9/12/2009
128	Double Ridged Guide	Electro-Mechanics	1 GHz - 18 GHz	3105	3/27/2007	3/27/2008
129D	High Gain Horn Antenna	Microlab/FXR	12.4 GHz - 18 GHz	Y638A	8/30/2007	8/30/2008
129F	High Gain Horn Antenna	Microlab/FXR	18 GHz - 26.5 GHz	K638A	8/30/2007	8/30/2008
129G	High Gain Horn Antenna	Microlab/FXR	26.5 GHz - 40 GHz	U638A	8/30/2007	8/30/2008
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421A	Harmonic Mixer	Hewlett Packard	26.5 GHz - 40 GHz	11970A	10/3/2006	10/3/2009
512	Graphics Plotter	Hewlett Packard	N/A	7470A	10/19/2007	10/19/2008
523	Biconilog	Electro-Mechanics	26 - 2000 MHz	3142B	10/24/2007	10/24/2008
543	Preamplifier	Hewlett Packard	1.0 GHz - 26.5 GHz	8449B	9/26/2007	9/26/2008
617	Interference Analyzer	Electro-Metrics	10 kHz - 1 GHz	EMC-30	10/24/2007	10/24/2008
723	H.P. Filter	Mini-Circuits	1 GHz	BHP-1000	8/13/2007	8/13/2008

**FCC Part 15, Subpart C, Section 15.207(a), Conducted Emissions, Power Leads,
150 kHz to 30 MHz
Test Data
Transmit Mode**

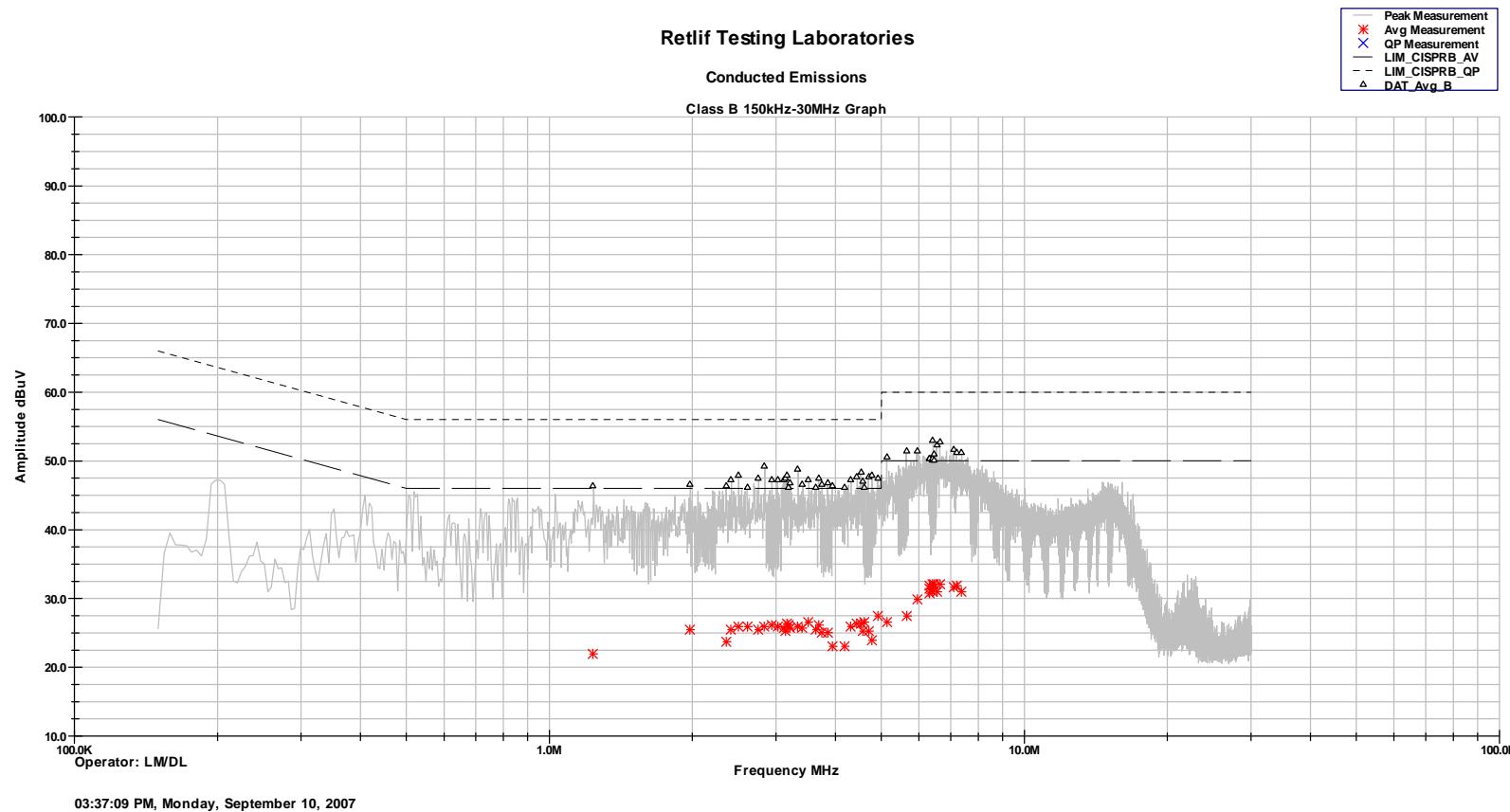
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Customer: X10 (USA), Inc.
Test Sample: 5.8 GHz Wireless Audio/Video Sender with/IR Extender Feature
Model Number: VT50A
FCC ID: B4SVT50A
Test Specification: FCC Part 15 Subpart C, 15.207(a)
Mode of Operation: Continuously transmitting a 5.758 GHz FM signal, channel A.
Lead Tested: 120 VAC / 60 Hz hot input to AC adapter.
Technician / Date: M. Kubik/ September 10, 2007.
Detector / Note: Peak / Peak emissions passed Quasi-peak limit. Average detector required.
Detector / Note: Average / Average emissions passed average limit.



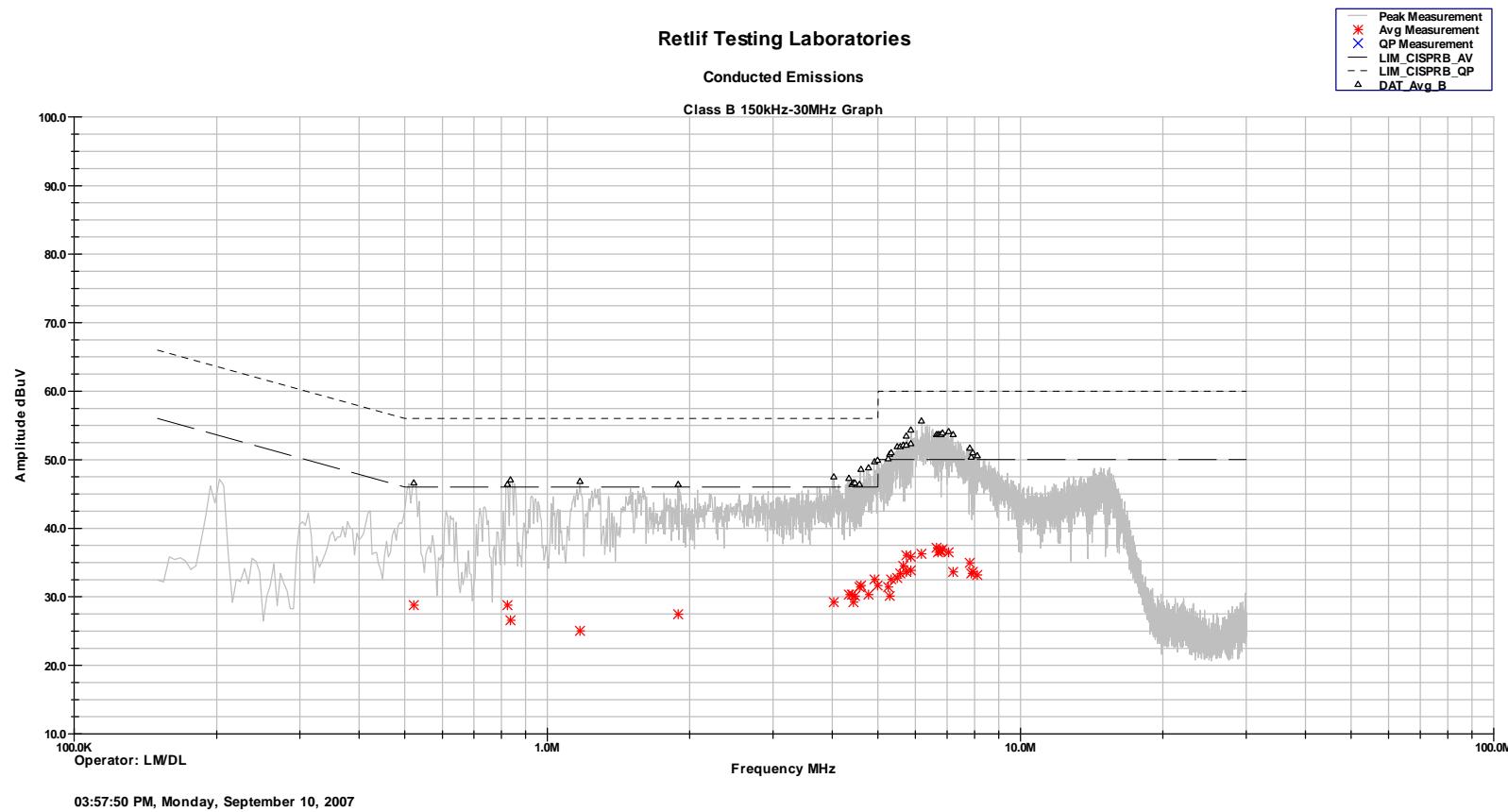
FCC Part 15 Subpart C, Conducted Emissions, 150 kHz to 30 MHz.

Customer: X10 (USA), Inc.
Test Sample: 5.8 GHz Wireless Audio/Video Sender with/IR Extender Feature
Model Number: VT50A
FCC ID: B4SVT50A
Test Specification: FCC Part 15 Subpart C, 15.207(a)
Mode of Operation: Continuously transmitting a 5.758 GHz FM signal, channel A.
Lead Tested: 120 VAC / 60 Hz neutral input to AC adapter.
Technician / Date: M. Kubik/ September 10, 2007.
Detector / Note: Peak / Peak emissions passed Quasi-peak limit. Average detector required.
Detector / Note: Average / Average emissions passed average limit.



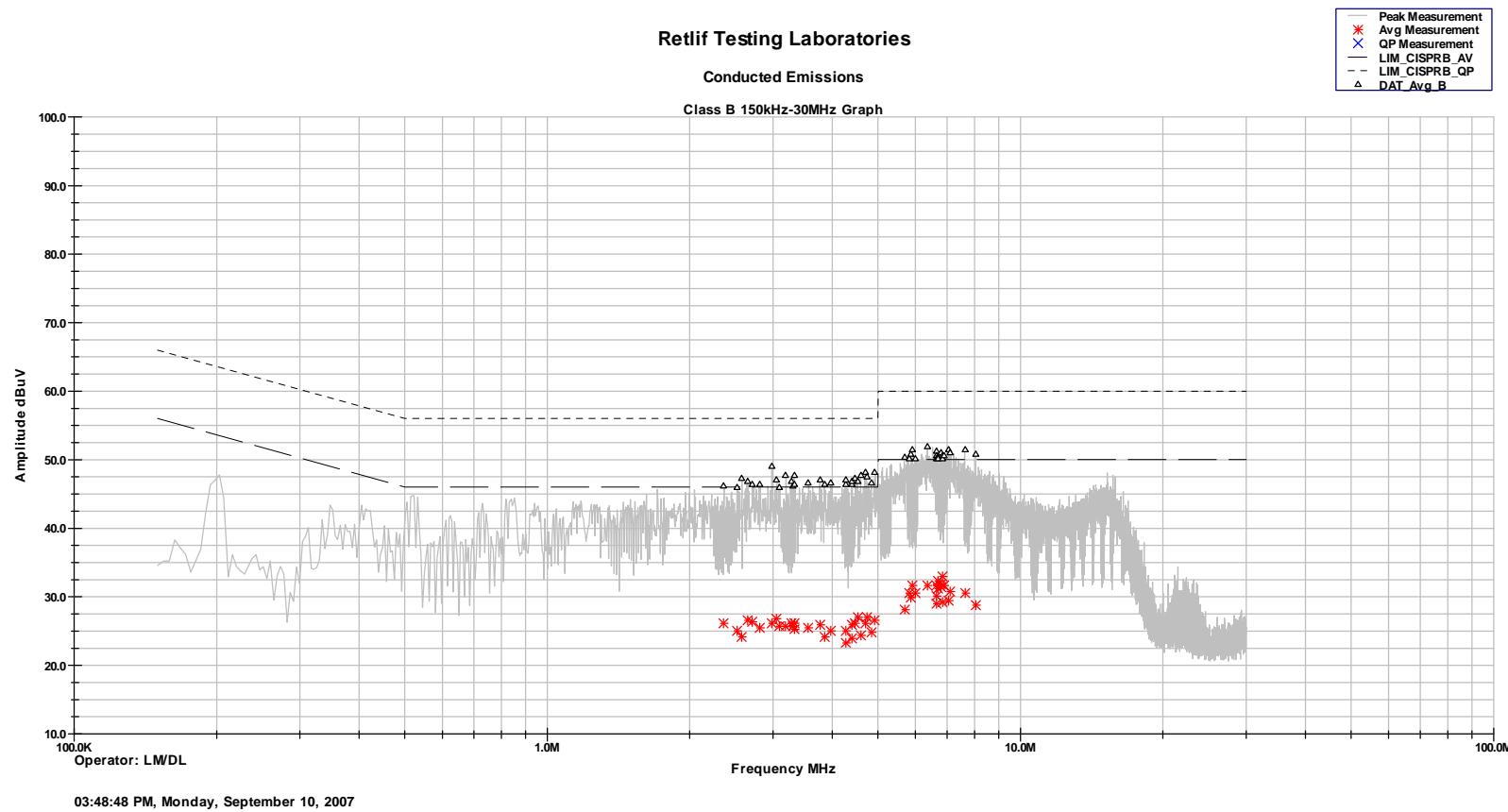
FCC Part 15 Subpart C, Conducted Emissions, 150 kHz to 30 MHz.

Customer: X10 (USA), Inc.
Test Sample: 5.8 GHz Wireless Audio/Video Sender with/IR Extender Feature
Model Number: VT50A
FCC ID: B4SVT50A
Test Specification: FCC Part 15 Subpart C, 15.207(a)
Mode of Operation: Continuously transmitting a 5.793 GHz FM signal, channel C.
Lead Tested: 120 VAC / 60 Hz hot input to AC adapter.
Technician / Date: M. Kubik/ September 10, 2007.
Detector / Note: Peak / Peak emissions passed Quasi-peak limit. Average detector required.
Detector / Note: Average / Average emissions passed average limit.



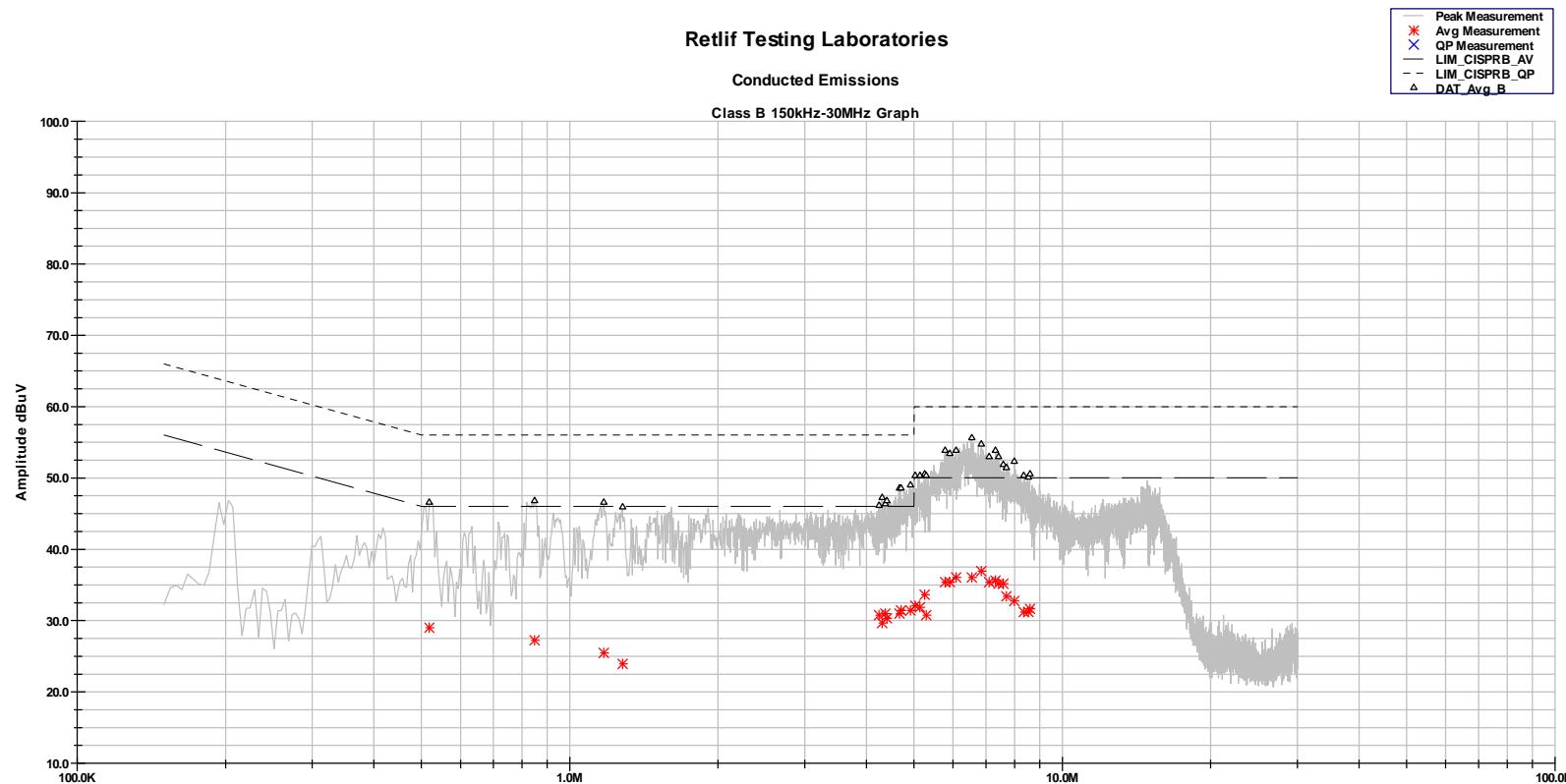
FCC Part 15 Subpart C, Conducted Emissions, 150 kHz to 30 MHz.

Customer: X10 (USA), Inc.
Test Sample: 5.8 GHz Wireless Audio/Video Sender with/IR Extender Feature
Model Number: VT50A
FCC ID: B4SVT50A
Test Specification: FCC Part 15 Subpart C, 15.207(a)
Mode of Operation: Continuously transmitting a 5.793 GHz FM signal, channel C.
Lead Tested: 120 VAC / 60 Hz neutral input to AC adapter.
Technician / Date: M. Kubik/ September 10, 2007.
Detector / Note: Peak / Peak emissions passed Quasi-peak limit. Average detector required.
Detector / Note: Average / Average emissions passed average limit.



FCC Part 15 Subpart C, Conducted Emissions, 150 kHz to 30 MHz.

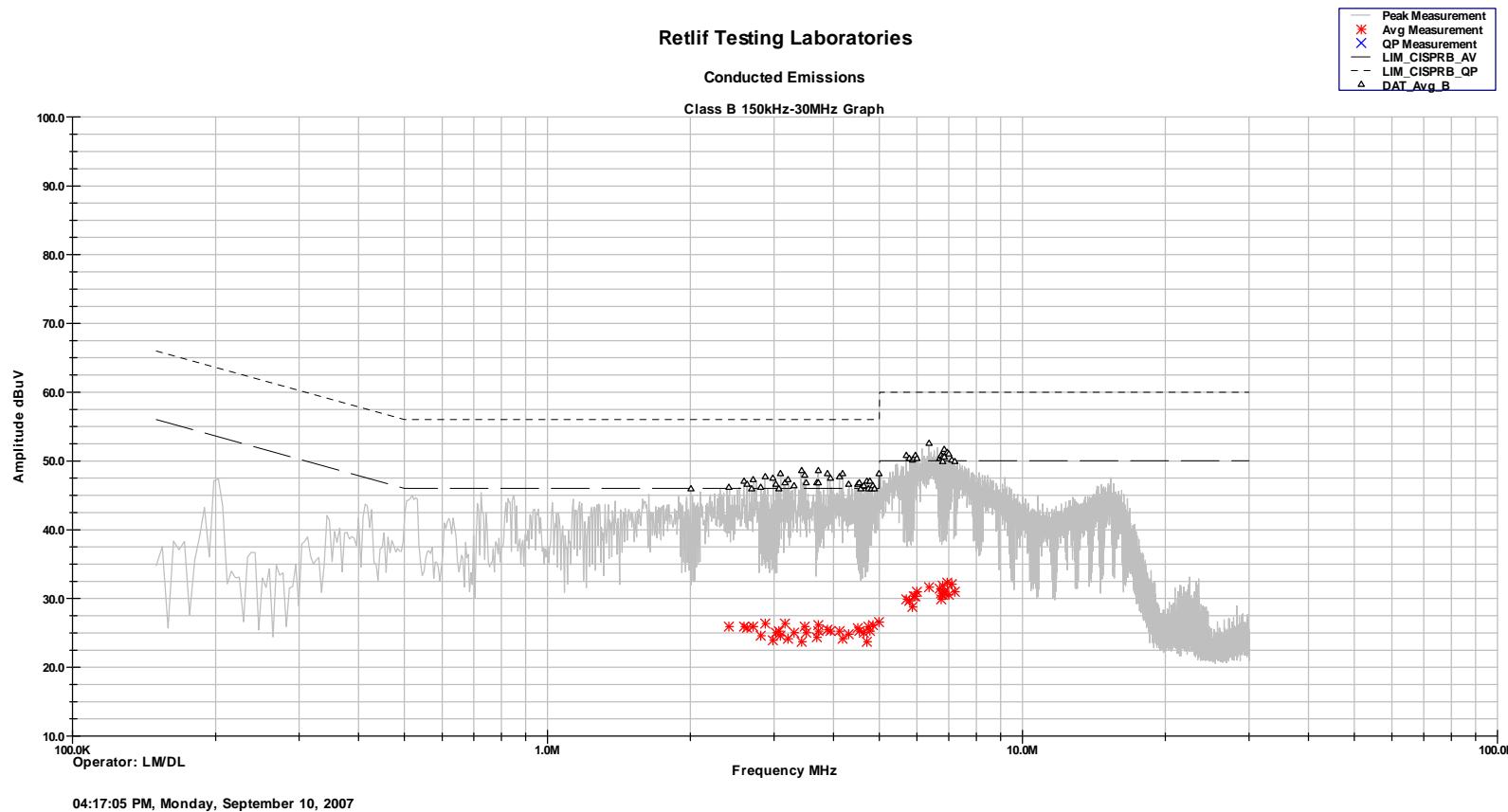
Customer: X10 (USA), Inc.
Test Sample: 5.8 GHz Wireless Audio/Video Sender with/IR Extender Feature
Model Number: VT50A
FCC ID: B4SVT50A
Test Specification: FCC Part 15 Subpart C, 15.207(a)
Mode of Operation: Continuously transmitting a 5.811 GHz FM signal, channel D.
Lead Tested: 120 VAC / 60 Hz hot input to AC adapter.
Technician / Date: M. Kubik/ September 10, 2007.
Detector / Note: Peak / Peak emissions passed Quasi-peak limit. Average detector required.
Detector / Note: Average / Average emissions passed average limit.



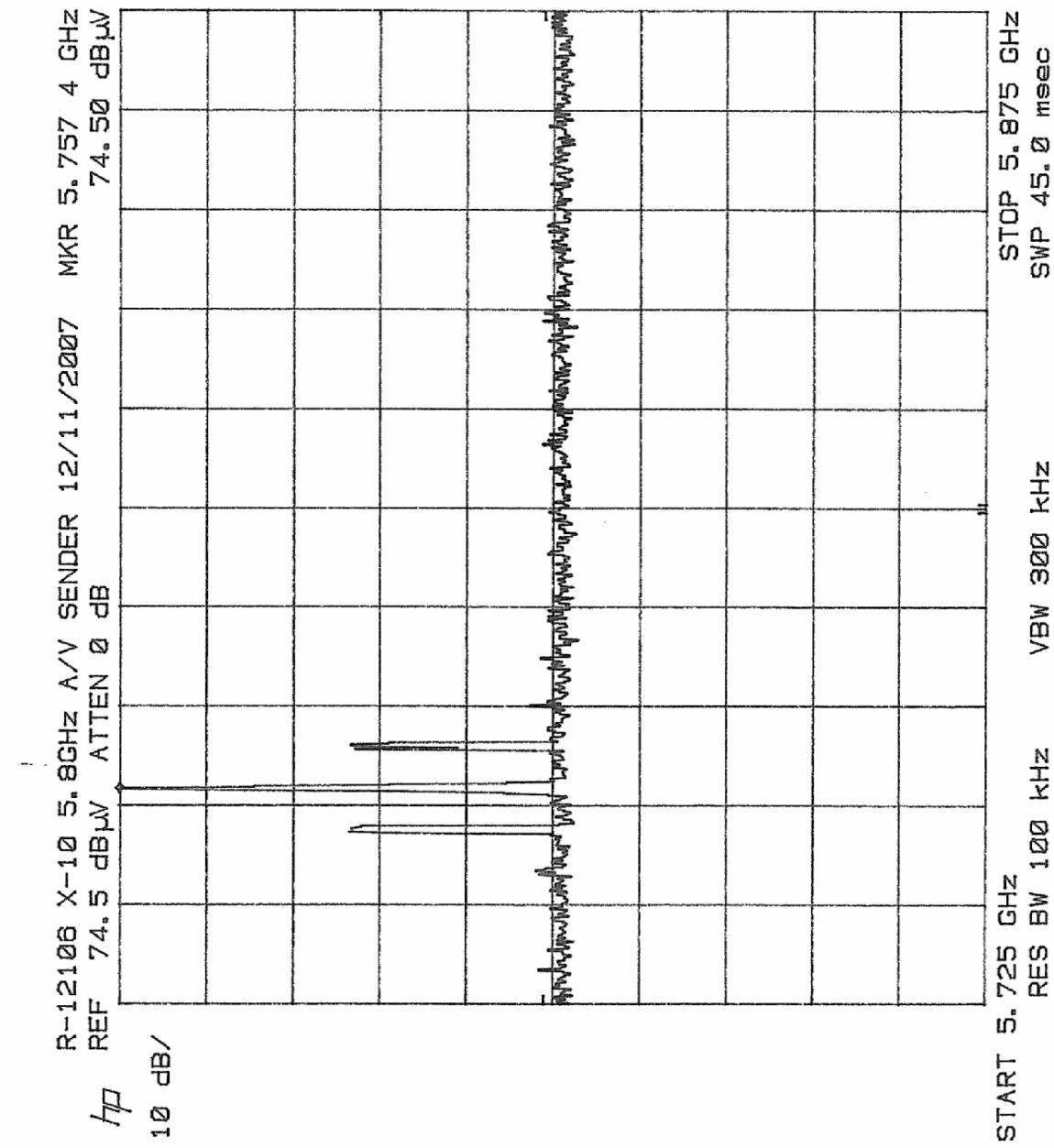
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FCC Part 15 Subpart C, Conducted Emissions, 150 kHz to 30 MHz.

Customer: X10 (USA), Inc.
Test Sample: 5.8 GHz Wireless Audio/Video Sender with/IR Extender Feature
Model Number: VT50A
FCC ID: B4SVT50A
Test Specification: FCC Part 15 Subpart C, 15.207(a)
Mode of Operation: Continuously transmitting a 5.811 GHz FM signal, channel D.
Lead Tested: 120 VAC / 60 Hz neutral input to AC adapter.
Technician / Date: M. Kubik/ September 10, 2007.
Detector / Note: Peak / Peak emissions passed Quasi-peak limit. Average detector required.
Detector / Note: Average / Average emissions passed average limit.



**FCC Part 15, Subpart C, 15.249(a) Occupied Bandwidth, 5.725 to 5.875 GHz Band
Test Data**



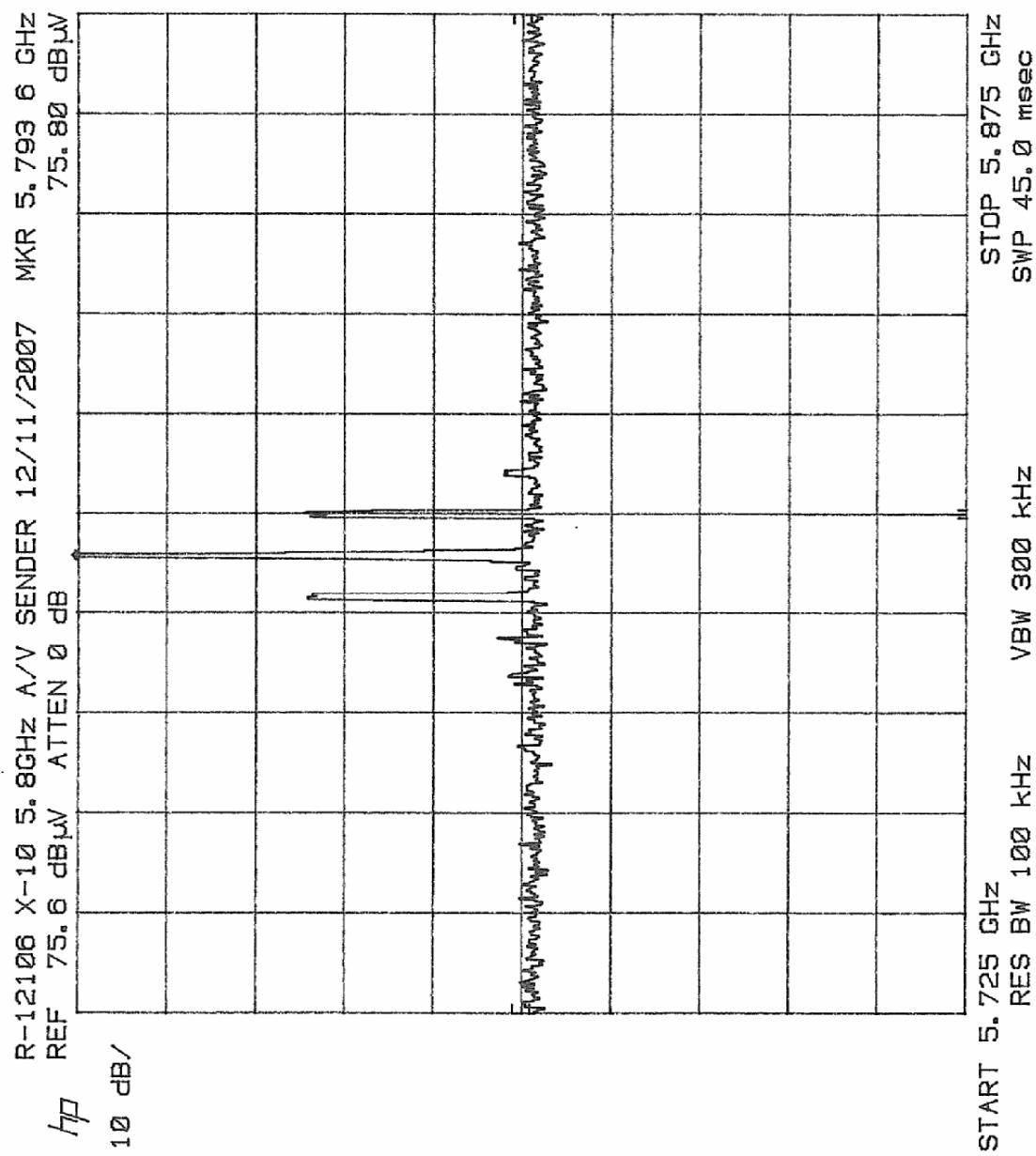
FCC Part 15, Subpart C, 15.249(a) Occupied Bandwidth, 5.725 to 5.875 GHz Band

Note: EUT transmitting on channel A, a 5.759 GHz signal.

Note: The emissions radiating outside the band are attenuated by >50dB.

FCC ID: B4SVT50A

Customer	X-10 (USA), Inc.	
Test Sample	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.	
Model No.:	VT50A	
Date: 12-11-2007	Tech: R. S	Sheet 1 of 3



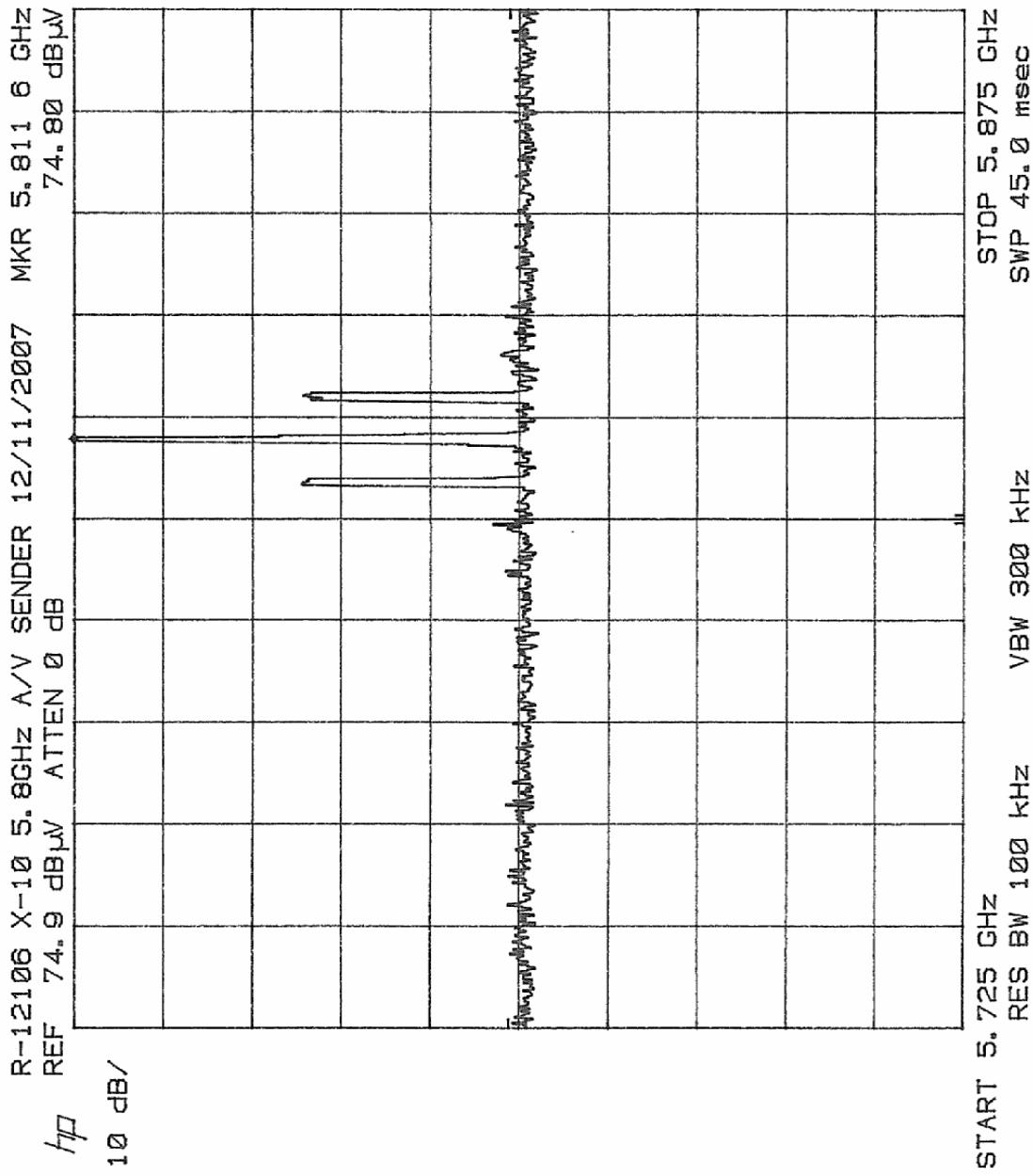
FCC Part 15, Subpart C, 15.249(a) Occupied Bandwidth, 5.725 to 5.875 GHz Band

Note: EUT transmitting on channel C, a 5.793 GHz signal.

Note: The emissions radiating outside the band are attenuated by >50dB.

FCC ID: B4SVT50A

Customer	X-10 (USA), Inc.	
Test Sample	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.	
Model No.:	VT50A	
Date: 12-11-2007	Tech: R. S	Sheet 2 of 3



FCC Part 15, Subpart C, 15.249(a) Occupied Bandwidth, 5.725 to 5.875 GHz Band

Note: EUT transmitting on channel D, a 5.811 GHz signal.

Note: The emissions radiating outside the band are attenuated by >50dB.

FCC ID: B4SVT50A

Customer	X-10 (USA), Inc.	
Test Sample	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.	
Model No.:	VT50A	
Date: 12-11-2007	Tech: R. S	Sheet 3 of 3

**FCC Part 15 Subpart C, Spurious Case Radiated Emissions,
Paragraph 15.249(c)
Test Data**

Test Method:	FCC Part 15, Subpart C, Spurious Case, Radiated Emissions, Paragraph 15.249(c)						
Customer:	X-10 (USA), Inc.				Job No.	R-12106-1	
Test Sample:	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:	VT50A				FCC ID:	B4SVT50A	
Operating Mode:	Continuously transmitting a 5.758 GHz FM signal, channel A.						
Technician:	R. Soodoo				Date:	December 11, 2007	
Notes:	Test Distance: 3 Meters			Temp:13.7 °C		Humidity:41.0%	
	Detector: Quasi-Peak from 30 MHz to 1 GHz, Peak above 1 GHz						
Frequency	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
*35.0	V / 1.0	0.0	26.0	-3.6	22.4	13.2	
88.00							100
88.00							150
*110.0	V / 1.0	0.0	20.5	-10.2	10.3	3.3	
*195.0	V / 1.0	0.0	30.7	-7.7	23.0	14.1	
*205.0	V / 1.0	0.0	19.4	-7.7	11.7	3.8	
216.0							150
216.0							200
*600.0	V / 1.0	0.0	20.1	4.0	24.1	16.0	
960.0							200
960.0							500
*995.0	V / 1.0	0.0	18.1	11.3	29.4	29.5	
*1.050	V / 1.0	0.0	40.2	2.0	42.3	128.8	
*20000.0	V / 1.0	0.0	14.0	32.9	46.9	221.3	
*39995.0	V / 1.0	0.0	12.7	26.8	39.5	94.4	
40000.0							500
The frequency range was scanned from 30 MHz to 40 GHz.							
The emissions observed from the EUT do not exceed the specified limits.							
Emissions not recorded were more than 20dB under the specified limit.							
*This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).							

Page 1 of 3

Test Method:	FCC Part 15, Subpart C, Spurious Case, Radiated Emissions, Paragraph 15.249(c)						
Customer:	X-10 (USA), Inc.				Job No.	R-12106-1	
Test Sample:	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:	VT50A				FCC ID:	B4SVT50A	
Operating Mode:	Continuously transmitting a 5.793 GHz FM signal, channel C.						
Technician:	R. Soodoo				Date:	December 11, 2007	
Notes:	Test Distance: 3 Meters			Temp:13.7 °C		Humidity:41.0%	
	Detector: Quasi-Peak from 30 MHz to 1 GHz, Peak above 1 GHz						
Frequency	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
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*195.0	V / 1.0	0.0	30.7	-7.7	23.0	14.1	
*205.0	V / 1.0	0.0	19.4	-7.7	11.7	3.8	
216.0							150
216.0							200
*600.0	V / 1.0	0.0	20.1	4.0	24.1	16.0	
960.0							200
960.0							500
*995.0	V / 1.0	0.0	18.1	11.3	29.4	29.5	
*1.050	V / 1.0	0.0	40.2	2.0	42.3	128.8	
*20000.0	V / 1.0	0.0	14.0	32.9	46.9	221.3	
*39995.0	V / 1.0	0.0	12.7	26.8	39.5	94.4	
40000.0							500
The frequency range was scanned from 30 MHz to 40 GHz.							
The emissions observed from the EUT do not exceed the specified limits.							
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Test Method:	FCC Part 15, Subpart C, Spurious Case, Radiated Emissions, Paragraph 15.249(c)						
Customer:	X-10 (USA), Inc.				Job No.	R-12106-1	
Test Sample:	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:	VT50A				FCC ID:	B4SVT50A	
Operating Mode:	Continuously transmitting a 5.811 GHz FM signal, channel D.						
Technician:	R. Soodoo				Date:	December 11, 2007	
Notes:	Test Distance: 3 Meters			Temp:13.7 °C		Humidity:41.0%	
	Detector: Quasi-Peak from 30 MHz to 1 GHz, Peak above 1 GHz						
Frequency	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
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*205.0	V / 1.0	0.0	19.4	-7.7	11.7	3.8	
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The frequency range was scanned from 30 MHz to 40 GHz.							
The emissions observed from the EUT do not exceed the specified limits.							
Emissions not recorded were more than 20dB under the specified limit.							
*This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).							

Page 3 of 3

**FCC Part 15 Subpart C, Radiated Emissions,
Fundamental and Harmonics
Paragraphs 15.249(a).**
EUT transmitting at the Fundamental signal of 5.758 GHz

Test Method:	FCC Part 15, Subpart C, Radiated Emissions, Harmonics Emissions para.15.247(a)						
Customer:	X-10 (USA), Inc.			Job No.	R-12106-1		
Test Sample:	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:	VT50A			FCC ID:	B4SVT50A		
Operating Mode:	Continuously transmitting a 5.758 GHz FM signal, channel A.						
Technician:	R. Soodoo			Date:	December 10, 2007		
Notes:	Test Distance: 3 Meters Detector: Peak						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
GHz	(V/H)/Meters	X / Y / Z	dB μ V	dB	dB μ V/m	uV/m	uV/m
5.758	V / 1.2	X	71.5	17.5	89.0	28183.8	500000.0
	V / 1.3	Y	61.6	17.5	79.1	9015.7	
	V / 1.1	Z	61.0	17.5	78.5	8414.0	
	H / 1.0	X	56.9	17.5	74.4	5248.1	
	H / 1.2	Y	73.3	17.5	90.8	34673.7	
5.758	H / 1.2	Z	62.9	17.5	80.4	10471.3	500000.0
11.516	V / 1.0	X	44.0	-3.6	40.4	*104.7	5000.0
	V / 1.0	Y	44.0	-3.6	40.4	*104.7	
	V / 1.0	Z	44.0	-3.6	40.4	*104.7	
	H / 1.0	X	44.0	-3.6	40.4	*104.7	
	H / 1.0	Y	44.0	-3.6	40.4	*104.7	
11.516	H / 1.0	Z	44.0	-3.6	40.4	*104.7	5000.0
17.274	V / 1.0	X	45.5	-2.9	42.6	*134.9	5000.0
	V / 1.0	Y	45.5	-2.9	42.6	*134.9	
	V / 1.0	Z	45.5	-2.9	42.6	*134.9	
	H / 1.0	X	45.5	-2.9	42.6	*134.9	
	H / 1.0	Y	45.5	-2.9	42.6	*134.9	
17.274	H / 1.0	Z	45.5	-2.9	42.6	*134.9	5000.0
23.032	V / 1.0	X	24.0	32.9	56.9	*699.8	5000.0
	V / 1.0	Y	24.0	32.9	56.9	*699.8	
	V / 1.0	Z	24.0	32.9	56.9	*699.8	
	H / 1.0	X	24.0	32.9	56.9	*699.8	
	H / 1.0	Y	24.0	32.9	56.9	*699.8	
23.032	H / 1.0	Z	24.0	32.9	56.9	*699.8	5000.0
28.790	V / 1.0	X	25.3	35.5	60.8	*1096.5	5000.0
	V / 1.0	Y	25.3	35.5	60.8	*1096.5	
	V / 1.0	Z	25.3	35.5	60.8	*1096.5	
	H / 1.0	X	25.3	35.5	60.8	*1096.5	
	H / 1.0	Y	25.3	35.5	60.8	*1096.5	
28.790	H / 1.0	Z	25.3	35.5	60.8	*1096.5	5000.0
	The frequency range was scanned from 30 MHz to 40.0 GHz. All emissions not recorded were more than 20 dB below the specified limit. Emissions from the EUT do not exceed the specified limits.						
	*= Noise Floor Measurements (minimum sensitivity).						

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Test Method:		FCC Part 15, Subpart C, Radiated Emissions, Harmonics Emissions para.15.247(a)						
Customer:		X-10 (USA), Inc.				Job No.	R-12106-1	
Test Sample:		5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:		VT50A				FCC ID:	B4SVT50A	
Operating Mode:		Continuously transmitting a 5.758 GHz FM signal, channel A.						
Technician:		R. Soodoo				Date:	December 10, 2007	
Notes: Test Distance: 3 Meters Detector: Average								
Test Freq.	Antenna Pol./Height	EUT Orientation	Average Reading	Correction Factor	Corrected Reading	Converted Reading		Avg. Limit
GHz	(V/H)-	X / Y / Z	dB μ V	dB	dB μ V/m	uV/m		uV/m
5.758	V / 1.2	X	71.3	17.5	88.8	27542.3		50000.0
	V / 1.3	Y	61.1	17.5	78.6	8511.4		
	V / 1.1	Z	59.9	17.5	77.4	7413.1		
	H / 1.0	X	55.9	17.5	73.4	4677.4		
	H / 1.2	Y	73.0	17.5	90.5	33496.5		
5.758	H / 1.2	Z	62.6	17.5	80.1	10115.8		50000.0
11.516	V / 1.0	X	33.6	-3.6	30.0	*31.6		500.0
	V / 1.0	Y	33.6	-3.6	30.0	*31.6		
	V / 1.0	Z	33.6	-3.6	30.0	*31.6		
	H / 1.0	X	33.6	-3.6	30.0	*31.6		
	H / 1.0	Y	33.6	-3.6	30.0	*31.6		
11.516	H / 1.0	Z	33.6	-3.6	30.0	*31.6		500.0
17.274	V / 1.0	X	34.5	-2.9	31.6	*38.0		500.0
	V / 1.0	Y	34.5	-2.9	31.6	*38.0		
	V / 1.0	Z	34.5	-2.9	31.6	*38.0		
	H / 1.0	X	34.5	-2.9	31.6	*38.0		
	H / 1.0	Y	34.5	-2.9	31.6	*38.0		
17.274	H / 1.0	Z	34.5	-2.9	31.6	*38.0		500.0
23.032	V / 1.0	X	14.0	32.9	46.9	*221.3		500.0
	V / 1.0	Y	14.0	32.9	46.9	*221.3		
	V / 1.0	Z	14.0	32.9	46.9	*221.3		
	H / 1.0	X	14.0	32.9	46.9	*221.3		
	H / 1.0	Y	14.0	32.9	46.9	*221.3		
23.032	H / 1.0	Z	14.0	32.9	46.9	*221.3		500.0
28.790	V / 1.0	X	12.0	35.5	47.5	*237.1		500.0
	V / 1.0	Y	12.0	35.5	47.5	*237.1		
	V / 1.0	Z	12.0	35.5	47.5	*237.1		
	H / 1.0	X	12.0	35.5	47.5	*237.1		
	H / 1.0	Y	12.0	35.5	47.5	*237.1		
28.790	H / 1.0	Z	12.0	35.5	47.5	*237.1		500.0
	The frequency range was scanned from 30 MHz to 40.0 GHz. All emissions not recorded were more than 20 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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**FCC Part 15 Subpart C, Radiated Emissions,
Fundamental and Harmonics
Paragraphs 15.249(a).**

EUT transmitting at the Fundamental signal of 5.793 GHz

Test Method:	FCC Part 15 Subpart C, Radiated Emissions, Harmonics Emissions para.15.247(a)						
Customer:	X-10 (USA), Inc.			Job No.	R-12106-1		
Test Sample:	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:	VT50A			FCC ID:	B4SVT50A		
Operating Mode:	Continuously transmitting a 5.793 GHz FM signal, channel C.						
Technician:	R. Soodoo			Date:	December 11, 2007		
Notes:	Test Distance: 3 Meters Detector: Peak						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
GHz	(V/H)/Meters	X / Y / Z	dB μ V	dB	dB μ V/m	uV/m	uV/m
5.793	V / 1.2	X	69.9	17.5	87.4	23442.3	500000.0
	V / 1.0	Y	59.9	17.5	77.4	7413.1	
	V / 1.0	Z	61.0	17.5	78.5	8414.0	
	H / 1.0	X	56.1	17.5	73.6	4786.3	
	H / 1.2	Y	72.5	17.5	90.0	31622.8	
5.793	H / 1.2	Z	61.6	17.5	79.1	9015.7	500000.0
11.586	V / 1.0	X	44.0	-3.6	40.4	*104.7	5000.0
	V / 1.0	Y	44.0	-3.6	40.4	*104.7	
	V / 1.0	Z	44.0	-3.6	40.4	*104.7	
	H / 1.0	X	44.0	-3.6	40.4	*104.7	
	H / 1.0	Y	44.0	-3.6	40.4	*104.7	
11.586	H / 1.0	Z	44.0	-3.6	40.4	*104.7	5000.0
17.379	V / 1.0	X	45.5	-2.9	42.6	*134.9	5000.0
	V / 1.0	Y	45.5	-2.9	42.6	*134.9	
	V / 1.0	Z	45.5	-2.9	42.6	*134.9	
	H / 1.0	X	45.5	-2.9	42.6	*134.9	
	H / 1.0	Y	45.5	-2.9	42.6	*134.9	
17.379	H / 1.0	Z	45.5	-2.9	42.6	*134.9	5000.0
23.172	V / 1.0	X	24.0	32.9	56.9	*699.8	5000.0
	V / 1.0	Y	24.0	32.9	56.9	*699.8	
	V / 1.0	Z	24.0	32.9	56.9	*699.8	
	H / 1.0	X	24.0	32.9	56.9	*699.8	
	H / 1.0	Y	24.0	32.9	56.9	*699.8	
23.172	H / 1.0	Z	24.0	32.9	56.9	*699.8	5000.0
28.965	V / 1.0	X	25.3	35.5	60.8	*1096.5	5000.0
	V / 1.0	Y	25.3	35.5	60.8	*1096.5	
	V / 1.0	Z	25.3	35.5	60.8	*1096.5	
	H / 1.0	X	25.3	35.5	60.8	*1096.5	
	H / 1.0	Y	25.3	35.5	60.8	*1096.5	
28.965	H / 1.0	Z	25.3	35.5	60.8	*1096.5	5000.0
	The frequency range was scanned from 30 MHz to 40.0 GHz. All emissions not recorded were more than 20 dB below the specified limit. Emissions from the EUT do not exceed the specified limits.						
	*= Noise Floor Measurements (minimum sensitivity).						

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Test Method:		FCC Part 15, Subpart C, Radiated Emissions, Harmonics Emissions para.15.247(a)						
Customer:		X-10 (USA), Inc.				Job No.	R-12106-1	
Test Sample:		5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:		VT50A				FCC ID:	B4SVT50A	
Operating Mode:		Continuously transmitting a 5.793 GHz FM signal, channel C.						
Technician:		R. Soodoo				Date:	December 11, 2007	
Notes: Test Distance: 3 Meters Detector: Average								
Test Freq.	Antenna Pol./Height	EUT Orientation	Average Reading	Correction Factor	Corrected Reading	Converted Reading		Avg. Limit
GHz	(V/H)-	X / Y / Z	dB μ V	dB	dB μ V/m	uV/m		uV/m
5.793	V / 1.2	X	69.4	17.5	86.9	22130.9		50000.0
	V / 1.0	Y	58.9	17.5	76.4	6606.9		
	V / 1.0	Z	60.2	17.5	77.7	7673.6		
	H / 1.0	X	53.9	17.5	71.4	3715.4		
	H / 1.2	Y	72.5	17.5	90.0	31622.8		
5.793	H / 1.2	Z	61.3	17.5	78.8	8709.6		50000.0
11.586	V / 1.0	X	33.6	-3.6	30.0	*31.6		500.0
	V / 1.0	Y	33.6	-3.6	30.0	*31.6		
	V / 1.0	Z	33.6	-3.6	30.0	*31.6		
	H / 1.0	X	33.6	-3.6	30.0	*31.6		
	H / 1.0	Y	33.6	-3.6	30.0	*31.6		
11.586	H / 1.0	Z	33.6	-3.6	30.0	*31.6		500.0
17.379	V / 1.0	X	34.5	-2.9	31.6	*38.0		500.0
	V / 1.0	Y	34.5	-2.9	31.6	*38.0		
	V / 1.0	Z	34.5	-2.9	31.6	*38.0		
	H / 1.0	X	34.5	-2.9	31.6	*38.0		
	H / 1.0	Y	34.5	-2.9	31.6	*38.0		
17.379	H / 1.0	Z	34.5	-2.9	31.6	*38.0		500.0
23.172	V / 1.0	X	14.0	32.9	46.9	*221.3		500.0
	V / 1.0	Y	14.0	32.9	46.9	*221.3		
	V / 1.0	Z	14.0	32.9	46.9	*221.3		
	H / 1.0	X	14.0	32.9	46.9	*221.3		
	H / 1.0	Y	14.0	32.9	46.9	*221.3		
23.172	H / 1.0	Z	14.0	32.9	46.9	*221.3		500.0
28.965	V / 1.0	X	12.0	35.5	47.5	*237.1		500.0
	V / 1.0	Y	12.0	35.5	47.5	*237.1		
	V / 1.0	Z	12.0	35.5	47.5	*237.1		
	H / 1.0	X	12.0	35.5	47.5	*237.1		
	H / 1.0	Y	12.0	35.5	47.5	*237.1		
28.965	H / 1.0	Z	12.0	35.5	47.5	*237.1		500.0
	The frequency range was scanned from 30 MHz to 40.0 GHz. All emissions not recorded were more than 20 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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**FCC Part 15 Subpart C, Radiated Emissions,
Fundamental and Harmonics
Paragraphs 15.249(a).**

EUT transmitting at the Fundamental signal of 5.811 GHz

Test Method:	FCC Part 15 Subpart C, Radiated Emissions, Harmonics Emissions para.15.247(a)						
Customer:	X-10 (USA), Inc.			Job No.	R-12106-1		
Test Sample:	5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:	VT50A			FCC ID:	B4SVT50A		
Operating Mode:	Continuously transmitting a 5.811 GHz FM signal, channel D.						
Technician:	R. Soodoo			Date:	December 11, 2007		
Notes:	Test Distance: 3 Meters Detector: Peak						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
GHz	(V/H)/Meters	X / Y / Z	dB μ V	dB	dB μ V/m	uV/m	uV/m
5.811	V / 1.1	X	73.3	17.5	90.8	34673.7	500000.0
	V / 1.0	Y	63.0	17.5	80.5	10592.5	
	V / 1.0	Z	62.9	17.5	80.4	10471.3	
	H / 1.0	X	55.9	17.5	73.4	4677.4	
	H / 1.2	Y	74.5	17.5	92.0	39810.7	
5.811	H / 1.1	Z	64.3	17.5	81.8	12302.7	500000.0
11.622	V / 1.0	X	44.0	-3.6	40.4	*104.7	5000.0
	V / 1.0	Y	44.0	-3.6	40.4	*104.7	
	V / 1.0	Z	44.0	-3.6	40.4	*104.7	
	H / 1.0	X	44.0	-3.6	40.4	*104.7	
	H / 1.0	Y	44.0	-3.6	40.4	*104.7	
11.622	H / 1.0	Z	44.0	-3.6	40.4	*104.7	5000.0
17.433	V / 1.0	X	45.5	-2.9	42.6	*134.9	5000.0
	V / 1.0	Y	45.5	-2.9	42.6	*134.9	
	V / 1.0	Z	45.5	-2.9	42.6	*134.9	
	H / 1.0	X	45.5	-2.9	42.6	*134.9	
	H / 1.0	Y	45.5	-2.9	42.6	*134.9	
17.433	H / 1.0	Z	45.5	-2.9	42.6	*134.9	5000.0
23.244	V / 1.0	X	24.0	32.9	56.9	*699.8	5000.0
	V / 1.0	Y	24.0	32.9	56.9	*699.8	
	V / 1.0	Z	24.0	32.9	56.9	*699.8	
	H / 1.0	X	24.0	32.9	56.9	*699.8	
	H / 1.0	Y	24.0	32.9	56.9	*699.8	
23.244	H / 1.0	Z	24.0	32.9	56.9	*699.8	5000.0
29.055	V / 1.0	X	25.3	35.5	60.8	*1096.5	5000.0
	V / 1.0	Y	25.3	35.5	60.8	*1096.5	
	V / 1.0	Z	25.3	35.5	60.8	*1096.5	
	H / 1.0	X	25.3	35.5	60.8	*1096.5	
	H / 1.0	Y	25.3	35.5	60.8	*1096.5	
29.055	H / 1.0	Z	25.3	35.5	60.8	*1096.5	5000.0
	The frequency range was scanned from 30 MHz to 40.0 GHz. All emissions not recorded were more than 20 dB below the specified limit. Emissions from the EUT do not exceed the specified limits.						
	*= Noise Floor Measurements (minimum sensitivity).						

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Test Method:		FCC Part 15, Subpart C, Radiated Emissions, Harmonics Emissions para.15.247(a)						
Customer:		X-10 (USA), Inc.				Job No.	R-12106-1	
Test Sample:		5.8 GHz Wireless Audio/Video Sender with / IR Extender Feature.						
Model No.:		VT50A				FCC ID:	B4SVT50A	
Operating Mode:		Continuously transmitting a 5.811 GHz FM signal, channel D.						
Technician:		R. Soodoo				Date:	December 11, 2007	
Notes: Test Distance: 3 Meters Detector: Average								
Test Freq.	Antenna Pol./Height	EUT Orientation	Average Reading	Correction Factor	Corrected Reading	Converted Reading		Avg. Limit
GHz	(V/H)-	X / Y / Z	dB μ V	dB	dB μ V/m	uV/m		uV/m
5.811	V / 1.1	X	72.9	17.5	90.4	33113.1		50000.0
	V / 1.0	Y	62.3	17.5	79.8	9772.4		
	V / 1.0	Z	61.9	17.5	79.4	9332.5		
	H / 1.0	X	52.7	17.5	70.2	3235.9		
	H / 1.2	Y	74.5	17.5	92.0	39810.7		
5.811	H / 1.1	Z	63.7	17.5	81.2	11481.5		50000.0
11.622	V / 1.0	X	33.6	-3.6	30.0	*31.6		500.0
	V / 1.0	Y	33.6	-3.6	30.0	*31.6		
	V / 1.0	Z	33.6	-3.6	30.0	*31.6		
	H / 1.0	X	33.6	-3.6	30.0	*31.6		
	H / 1.0	Y	33.6	-3.6	30.0	*31.6		
11.622	H / 1.0	Z	33.6	-3.6	30.0	*31.6		500.0
17.433	V / 1.0	X	34.5	-2.9	31.6	*38.0		500.0
	V / 1.0	Y	34.5	-2.9	31.6	*38.0		
	V / 1.0	Z	34.5	-2.9	31.6	*38.0		
	H / 1.0	X	34.5	-2.9	31.6	*38.0		
	H / 1.0	Y	34.5	-2.9	31.6	*38.0		
17.433	H / 1.0	Z	34.5	-2.9	31.6	*38.0		500.0
23.244	V / 1.0	X	14.0	32.9	46.9	*221.3		500.0
	V / 1.0	Y	14.0	32.9	46.9	*221.3		
	V / 1.0	Z	14.0	32.9	46.9	*221.3		
	H / 1.0	X	14.0	32.9	46.9	*221.3		
	H / 1.0	Y	14.0	32.9	46.9	*221.3		
23.244	H / 1.0	Z	14.0	32.9	46.9	*221.3		500.0
29.055	V / 1.0	X	12.0	35.5	47.5	*237.1		500.0
	V / 1.0	Y	12.0	35.5	47.5	*237.1		
	V / 1.0	Z	12.0	35.5	47.5	*237.1		
	H / 1.0	X	12.0	35.5	47.5	*237.1		
	H / 1.0	Y	12.0	35.5	47.5	*237.1		
29.055	H / 1.0	Z	12.0	35.5	47.5	*237.1		500.0
	The frequency range was scanned from 30 MHz to 40.0 GHz. All emissions not recorded were more than 20 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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