	APF	PLICANT			MANUFACTURER
Name:	>	<10 (USA), Inc.	Name:	X-1(	0 Electronics (Shenzhen) Co. Ltd.
Address:	198	23 58 <sup>th</sup> Place South	Address:		Together Rich Industrial Park B wei Industrial District, Xixiang Town
City, State	e, Zip:	Kent, WA 98032	City, State	, Zip:	Baoan County, Shenzhen, China

TEST SPECIFICATION: FCC Rules and Regulations Part 15, Subpart C, Para. 15.231 TEST PROCEDURE: ANSI C63.4:2003

#### **TEST SAMPLE DESCRIPTION**

BRANDNAME(s):	X10 (USA)	
MODEL(s):	KR34A	
FCC ID:	B4SKR34A	
TYPE:	Pulsed Transm	itter
POWER REQUIRE	MENTS:	3 VDC derived from CR2025 Lithium Battery
FREQUENCY OF	OPERATION:	310 MHz
APPLICABLE RUL	E SECTION:	Part 15, Subpart C, Section 15.231

#### **TESTS PERFORMED**

- Para. 15.231(a), Radiated Emissions, Fundamental and Harmonics
- Para. 15.231(b), Radiated Emissions, Spurious Case
- Para. 15.231(b), Duty Cycle Determination
- Para. 15.231(c), Occupied Bandwidth

#### TEST RESULTS

- 15.231 (a)(1) The transmitter is manually operated. Transmission ends within 5 seconds of deactivation.
- 15.231 (a)(3): The transmitter does not perform periodic transmissions or the transmitter performs periodic transmissions at predetermined intervals greater than 1 hour apart and are shorter than 1 second in duration.
- 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 583.3 μV/M (AVERAGE).
- 15.231 (c) The Bandwidth of the emission was no wider than 0.25% of the center frequency (775 kHz) as measured 20 db down from the modulated carrier.

#### DETERMINATION OF FIELD STRENGTH LIMITS

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

Frec	luency	Limit	t
F1 =	260	3750 =	L1
Fo =	310 MHz	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 =25.1milliseconds (maximum per cycle)Transmitter Cycle Time =112milliseconds (100 ms maximum)Transmitter Duty Cycle =25.1%

## CALCULATION

				1 L	arge Pulse	) =	8.6	milliseconds
1	х	8.6	ms	(lar	rge pulses)	) =	8.6	milliseconds
				1 S	mall Pulse	€ =	0.50	milliseconds
33	х	0.50	ms	(sm	nall pulses)	) =	16.5	milliseconds
		8.6	ms	+	16.5 ms	=	25.1	milliseconds
		Duty	/ Cycl	le (2	25.1 / 100)	=	25.1	%
Corre	ectio	n Factor	=20 lo	рg	(0.251)	=	-12.0	dB

## 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

0.5 milliseconds yields a minimum required bandwidth of 1333 Hz. FCC specified bandwidths of 100 kHz and 1 MHz 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 3.10 GHz. All emissions not reported were more than 20 dB below the specified limit.

Para. 15.231(a), Radiated Emissions, Fundamental and Harmonics Test Data

Test Method: Customer:	X-10 (US	15, Subpart C, Rac			Job No.	R-11238-1		
•		Ised 310MHz Transmitter			Paragraph:	15.231		
Model No.:	KR34A				FCC ID:	D: B4SKR34A		
Operating Mo		usly Transmitting a	oulsed 310 MHz s	ignal.				
Technician:	R. Soodo	0		Date:	December 02,	2005 & December 5,	2005.	
Notes:	Test Distance: 3 Mete	rs						
	Detector: Peak, Unles	s otherwise specifie	d					
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Lim	
MHz	(V/H)/Meters	X/Y/Z	dBuV	dB	dBuV/m	uV/m	uV/m	
310.0	V / 1.0	Х	56.8	-12.7	44.1	160.3	58330	
1	V / 1.5	Y	72.7	-12.7	60.0	1000.0	00000	
I	V / 1.5	Z	74.5	-12.7	61.8	1230.3		
I	H / 1.0	X	74.3	-12.7	59.7	966.1		
I	H / 2.0	Y	67.3	-12.7	54.6	537.0		
310.0	H / 2.0	Z	66.8	-12.7	54.1	507.0	58330	
	,							
620.0	V / 1.0	х	42.6	-11.7	30.9	35.1	5833	
	V / 2.0	Y	46.6	-11.7	34.9	55.6		
 	V / 1.0	Z	46.1	-11.7	34.4	52.5		
 	H / 1.0	Х	47.3	-11.7	35.6	60.3		
İ	H / 1.0	Y	42.5	-11.7	30.8	34.7		
620.0	H / 1.0	Z	37.8	-11.7	26.1	20.2	5833	
930.0	V / 1.0	Х	29.6	-9.5	20.1	10.1	5833	
	V / 1.0	Y	34.2	-9.5	24.7	17.2		
	V / 1.0	Z	36.8	-9.5	27.3	23.2		
	H / 1.0	Х	31.3	-9.5	21.8	12.3		
	H / 2.0	Y	28.5	-9.5	19.0	8.9		
930.0	H / 2.0	Z	27.4	-9.5	17.9	7.9	5833	
1240.0	V / 1.0	Х	42.4	-15.2	27.2	*22.9	5000	
	V / 1.0	Y	42.4	-15.2	27.2	*22.9		
·	V / 1.0	Z	42.4	-15.2	27.2	*22.9		
	H / 1.0	х	40.1	-15.2	24.9	*17.6		
	H / 1.0	Y	40.1	-15.2	24.9	*17.6		
1240.0	H / 1.0	Z	40.1	-15.2	24.9	*17.6	5000	
1550.0	V / 1.0	х	42.2	-15.2	27.0	*22.4	5000	
	V / 1.0	Y	42.2	-15.2	27.0	*22.4		
· · ·	V / 1.0	Z	42.2	-15.2	27.0	*22.4		
	H / 1.0	х	42.0	-15.2	26.8	*21.9		
	H / 1.0	Y	42.0	-15.2	26.8	*21.9		
1550.0	H / 1.0	Z	42.0	-15.2	26.8	*21.9	5000	
		e was scanned fron	n the first to the te	enth harmonic. All	•	ported herein are at I		
	*=Noise Floor Measu							

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Test Method:	FCC Part 1	5, Subpart C, Rad	liated Emissions,	Fundamental & Ha	rmonic Emissio	ns.		
Customer:	X-10 (USA	() Inc.			Job No.	R-11238-1		
Test Sample:	Pulsed 310	MHz Transmitter			Paragraph:	15.231		
Model No.:	KR34A			FCC ID: B4SKR34A				
Operating Mo	de: Continuous	sly Transmitting a p	oulsed 310 MHz	signal				
Technician:	chnician: R. Soodoo Da					, 2005 & December 5	, 2005.	
Notes:	Test Distance: 3 Meters	s Dete	ector: Peak, unle	ss otherwise specifi	ed			
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limi	
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
1860.0	V / 1.0	Х	42.2	-12.4	29.8	*30.9	5833	
1000.0	V / 1.0	Y	42.2	-12.4	29.8	*30.9	5055	
		Z						
I	V / 1.0	<u> </u>	42.2	-12.4	29.8	*30.9		
	H / 1.0		42.0	-12.4	29.6			
4000.0	H / 1.0	Y 7	42.0	-12.4	29.6	*30.2	5000	
1860.0	H / 1.0	Z	42.0	-12.4	29.6	*30.2	5833	
2170.0	V / 1.0	Х	42.2	-2.6	39.6	*95.5	5833	
	V / 1.0	Y	42.2	-2.6	39.6	*95.5		
I	V / 1.0	Z	42.2	-2.6	39.6	*95.5		
I	H / 1.0	X	42.0	-3.2	38.8	*87.1		
1	H / 1.0	Y	42.0	-3.2	38.8	*87.1		
2170.0	H / 1.0	Z	42.0	-3.2	38.8	*87.1	5833	
2480.0	V / 1.0	Х	42.2	-1.1	41.1	*113.5	5833	
	V / 1.0	Y	42.2	-1.1	41.1	*113.5		
	V / 1.0	Z	42.2	-1.1	41.1	*113.5		
	H / 1.0	Х	42.0	-1.5	40.5	*105.9		
	H / 1.0	Y	42.0	-1.5	40.5	*105.9		
2480.0	H / 1.0	Z	42.0	-1.5	40.5	*105.9	5833	
2790.0	V / 1.0	Х	43.8	0.0	43.8	*154.9	5000	
	V / 1.0	Y	43.8	0.0	43.8	*154.9		
	V / 1.0	Z	43.8	0.0	43.8	*154.9		
	H / 1.0	Х	43.8	-0.5	43.3	*146.2		
	H / 1.0	Y	43.8	-0.5	43.3	*146.2		
2790.0	H / 1.0	Z	43.8	-0.5	43.3	*146.2	5000	
3100.0	V / 1.0	Х	42.2	1.5	43.7	*153.1	5833	
	V / 1.0	Y	42.2	1.5	43.7	*153.1		
	V / 1.0	Z	42.2	1.5	43.7	*153.1		
	H / 1.0	Х	42.6	0.9	43.5	*149.6		
	H / 1.0	Y	42.6	0.9	43.5	*149.6		
3100.0	H / 1.0	Z	42.6	0.9	43.5	*149.6	5833	
	<ul> <li>The Frequency Range below the specified lim</li> <li>*=Noise Floor Measure</li> </ul>	was scanned fron it. The EUT comp	n the first to the to lies with the app	enth harmonic. All e licable limit.	•			

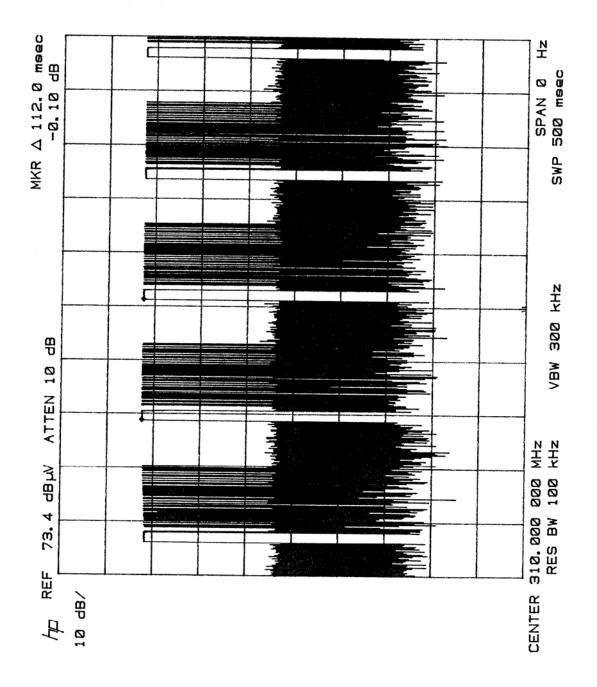
Test Method:			diated Emissions, I	Fundamental & Ha				
Customer:	X-10 (US	SA) Inc.			Job No.	R-11238-1		
Test Sample:	Pulsed 37	0MHz Transmitter			Paragraph:	15.231		
Model No.:	KR34A				FCC ID:	B4SKR34A		
Operating Mod	de: Continuo	usly Transmitting a	pulsed 310 MHz si	gnal	-			
Fechnician:	R. Soodo	0		Date:	December 02	, 2005 & December 5	5, 2005.	
Notes:	Test Distance: 3 Mete	rs		Du	uty Cycle: 25.1%			
	Detector: Peak, unles	s otherwise specifie	ed	Du	uty Cycle Correct	ion: -12dB		
Test Freq.	Antenna Pol./Height	EUT Orientation	Peak Reading	Correction Factor	Corrected Reading	Converted Reading	Avg. Lim	
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
310.0	V / 1.0	X	44.1	-12.0	32.1	40.3	5833	
	V /1.5	Y	60.0	-12.0	48.0	251.2		
<u> </u>	V / 1.5	Z	61.8	-12.0	49.8	309.0		
	H / 1.0	X	59.7	-12.0	47.7	242.7		
	H / 2.0	Y	54.6	-12.0	42.6	134.9		
310.0	H / 2.0	Z	54.1	-12.0	42.1	127.4	5833	
620.0	V / 1.0	х	30.9	-12.0	18.9	8.8	583	
	V / 2.0	Y	34.9	-12.0	22.9	14.0		
	V / 1.0	Z	34.4	-12.0	22.4	13.2		
	H / 1.0	Х	35.6	-12.0	23.6	15.1		
	H / 1.0	Y	30.8	-12.0	18.8	8.7		
620.0	H / 1.0	Z	26.1	-12.0	14.1	5.1	583	
							_	
930.0	V / 1.0	X	20.1	-12.0	8.1	2.5	583	
	V / 1.0	Y	24.7	-12.0	12.7	4.3		
	V / 1.0	Z	27.3	-12.0	15.3	5.8		
	H / 1.0	X	21.8	-12.0	9.8	3.1		
	H / 2.0	Y	19.0	-12.0	7.0	2.2		
930.0	H / 2.0	Z	17.9	-12.0	5.9	2.0	583	
1240.0	V / 1.0	х	27.2	-12.0	15.2	*5.8	500	
	V / 1.0	Y	27.2	-12.0	15.2	*5.8		
	V / 1.0	Z	27.2	-12.0	15.2	*5.8		
	H / 1.0	Х	24.9	-12.0	12.9	*4.4		
	H / 1.0	Y	24.9	-12.0	12.9	*4.4		
1240.0	H / 1.0	Z	24.9	-12.0	12.9	*4.4	500	
1550.0	V / 1.0	X	27.0	-12.0	15.0	*5.6	500	
10000	V / 1.0	Y	27.0	-12.0	15.0	*5.6	1	
I	V / 1.0	Z	27.0	-12.0	15.0	*5.6		
<u> </u>	H / 1.0	X	27.0	-12.0	14.8	*5.5		
I	H / 1.0	Y	26.8	-12.0	14.8	*5.5		
1550.0	H / 1.0	Z	26.8	-12.0	14.8	*5.5	500	
1000.0		•				eported herein are at l		
	below the specified li	mit. The EUT com	plies with the appli	cable limit.	emissions not re	eported nerein are at l	easi 20 0B	
		rements (Minimum						

Determination           Test Freq.           MHz           1860.0                       1	KR34A Continuou R. Soodor st Distance: 3 Mete tector: Peak, unless Antenna Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 V / 1.0 H / 1.0	0MHz Transmitter usly Transmitting a p rs s otherwise specifie EUT Orientation X / Y / Z X Y	Peak Reading	Date:	Job No. Paragraph: FCC ID: December 02, Ity Cycle: 25.1% Ity Cycle Correction Corrected Reading	R-11238-1           15.231           B4SKR34A           2005 & December 5           on: -12 dB           Converted Reading	5, 2005. Avg. Limi
Nodel No.: Derating Mode: Technician: Notes: Tes Dete Test Freq. MHz 1860.0 1 1860.0 1 1 1 1 1 1 1 1 1 1 1 1 1	KR34A Continuou R. Soodor st Distance: 3 Mete tector: Peak, unless Antenna Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 V / 1.0 H / 1.0	Isly Transmitting a portion rs otherwise specifie EUT Orientation X / Y / Z X Y	ed Peak Reading dBuV	Date: Du Du Correction Factor	FCC ID: December 02, uty Cycle: 25.1% uty Cycle Correction Corrected	B4SKR34A 2005 & December 5 on: -12 dB Converted	
Operating Mode:         Gechnician:         Iotes:       Tes         Deter         Test Freq.       MHz         MHz       Image: Comparison of the second sec	Continuou R. Soodor st Distance: 3 Mete tector: Peak, unless Antenna Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 V / 1.0 H / 1.0	s otherwise specific EUT Orientation X / Y / Z X Y	ed Peak Reading dBuV	Date: Du Du Correction Factor	December 02, uty Cycle: 25.1% uty Cycle Correcti Corrected	2005 & December 5 on: -12 dB Converted	
Gechnician:       Iotes:     Tes       Detr       Test Freq.       MHz       1860.0	R. Soodoo st Distance: 3 Mete tector: Peak, unless Antenna Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 H / 1.0	s otherwise specific EUT Orientation X / Y / Z X Y	ed Peak Reading dBuV	Date: Du Du Correction Factor	uty Cycle: 25.1% uty Cycle Correction Corrected	on: -12 dB Converted	
Iotes: Tes Dete Test Freq. MHz 1860.0   1860.0     	st Distance: 3 Mete tector: Peak, unless Antenna Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 H / 1.0	rs s otherwise specific EUT Orientation X / Y / Z X Y	Peak Reading	Du Du Correction Factor	uty Cycle: 25.1% uty Cycle Correction Corrected	on: -12 dB Converted	· 
Determination           Test Freq.           MHz           1860.0                       1	tector: Peak, unless Antenna Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 H / 1.0	EUT Orientation X / Y / Z X Y	Peak Reading	Du Correction Factor	uty Cycle Correction	Converted	Ava Lim
Test Freq. MHz  1860.0	Antenna Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 H / 1.0	EUT Orientation X/Y/Z X Y	Peak Reading	Correction Factor	Corrected	Converted	Avalim
MHz	Pol./Height (V/H)-Meters V / 1.0 V / 1.0 V / 1.0 H / 1.0	Orientation X / Y / Z X Y	dBuV	Factor			Ava Lim
1860.0	V / 1.0 V / 1.0 V / 1.0 H / 1.0	X Y		dB		1	,g. Lim
	V / 1.0 V / 1.0 H / 1.0	Y			dBuV/m	uV/m	uV/m
	V / 1.0 V / 1.0 H / 1.0	Y	00.0		17.0		
	V / 1.0 H / 1.0		29.8	-12.0	17.8	*7.8	583
	H / 1.0	_	29.8	-12.0	17.8	*7.8	
		Z	29.8	-12.0	17.8	*7.8	
		X	29.6	-12.0	17.6	*7.6	+
	H / 1.0	Y	29.6	-12.0	17.6	*7.6	
1860.0	H / 1.0	Z	29.6	-12.0	17.6	*7.6	583
2170.0	V / 1.0	х	39.6	-12.0	27.6	*24.0	583
	V / 1.0	Y	39.6	-12.0	27.6	*24.0	
	V / 1.0	Z	39.6	-12.0	27.6	*24.0	
	H / 1.0	Х	38.8	-12.0	26.8	*21.9	1
i i	H / 1.0	Y	38.8	-12.0	26.8	*21.9	1
2170.0	H / 1.0	Z	38.8	-12.0	26.8	*21.9	583
2480.0	V / 1.0	X	41.1	-12.0	29.1	*28.5	583
2400.0	V / 1.0	Y	41.1	-12.0	29.1	*28.5	
1	V / 1.0	Z	41.1	-12.0	29.1	*28.5	
1	H / 1.0	X	40.5	-12.0	28.5	*26.6	
	H / 1.0	Y	40.5	-12.0	28.5	*26.6	
2480.0	H / 1.0	Z	40.5	-12.0	28.5	*26.6	583
2790.0	V / 1.0	Х	43.8	-12.0	31.8	*38.9	500
	V / 1.0	Y	43.8	-12.0	31.8	*38.9	<u> </u>
	V / 1.0	Z	43.8	-12.0	31.8	*38.9	
	H / 1.0	X	43.3	-12.0	31.3	*36.7	
	H / 1.0	Y	43.3	-12.0	31.3	*36.7	
2790.0	H / 1.0	Z	43.3	-12.0	31.3	*36.7	500
3100.0	V / 1.0	Х	43.7	-12.0	31.7	*38.5	583
	V / 1.0	Y	43.7	-12.0	31.7	*38.5	
	V / 1.0	Z	43.7	-12.0	31.7	*38.5	
	H / 1.0	Х	43.5	-12.0	31.5	*37.6	
	H / 1.0	Y	43.5	-12.0	31.5	*37.6	
3100.0	H / 1.0	Z	43.5	-12.0	31.5	*37.6	583
			m the first to the ter plies with the applic		emissions not rep	ported herein are at l	east 20 dB

Para. 15.231(b), Radiated Emissions, Spurious Case Test Data

Test Method	d:	FCC	Part 15, Subpar	rt C, Spurious	Case Radiated	l Emis	sions, Paragrap	h 15.209(a)		
Customer:			(USA) Inc.				Job No.	R-11238-1		
Test Sample	e:	Pulsed 310MHz Transmitter FCC ID: B4SKR34A								
Model No.:		KR34	KR34A							
Operating N	lode:	Conti	nuously Transm	nitting a pulsed	d 310 MHz sign	al.				
Technician:		R. So		<u> </u>	<b>v</b>		Date:	December 5,	2005.	
Notes:	Test Dist					Temp	: 2°C Hu	midity: 81%		
			si-Peak from 30	MHz to 1 GHz		-		· · <b>· ·</b>		
	Anten		EUT	Meter	Correction		Corrected	Converted		
Frequency	Positi		Orientation	Readings	Factor		Reading	Reading	LIMIT	
MHz	(V/H) / N		Degrees	dBuV	dB		dBuV/m	uV/m	uV/m	
	(1,1,1,7,1		209.000							
30									100	
ĺ										
88									100	
88		Nc	Fmission	s Observ	ied at sne	cifie	ed test dist		150	
									150	
216									150	
216									200	
I										
I										
960						-			200	
960									500	
3100									500	
	The freq	uency r	range was scan	ned from 30 M	1Hz to 3.1 GHz					
	The emis	ssions	observed from t	he EUT do no	t exceed the sp	oecifie	d limits.			
	Emissior	ns not r	ecorded were m	nore than 20d	3 under the spe	ecified	limit.			

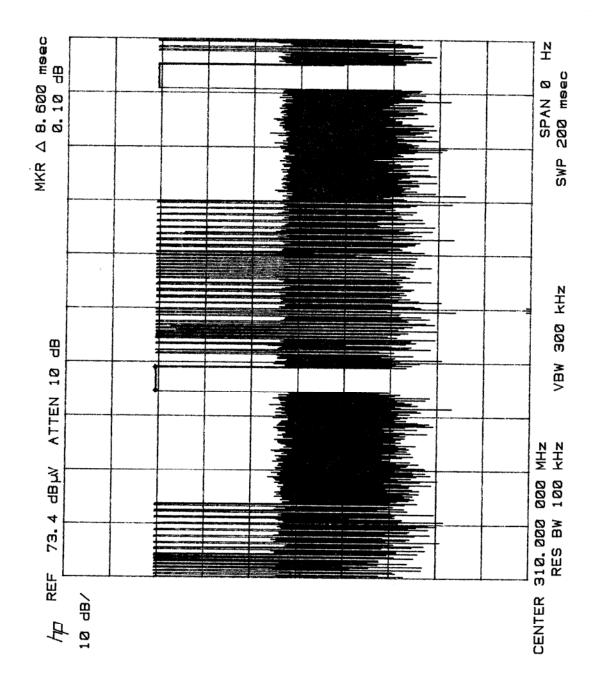
Para. 15.231(b), Duty Cycle Determination Test Data



**Test Method**: FCC Part 15.35, Duty Cycle Determination. **Notes**: Measurement of cycle time = 112 mSec.

Customer	X-10 (USA), Inc.				
Test Sample	Pulsed 310 MHz Transmitter				
Model Number	KR34A				
Date: December 2	2, 2005.	Tech: R. Soodoo	Sheet 1 of 4		

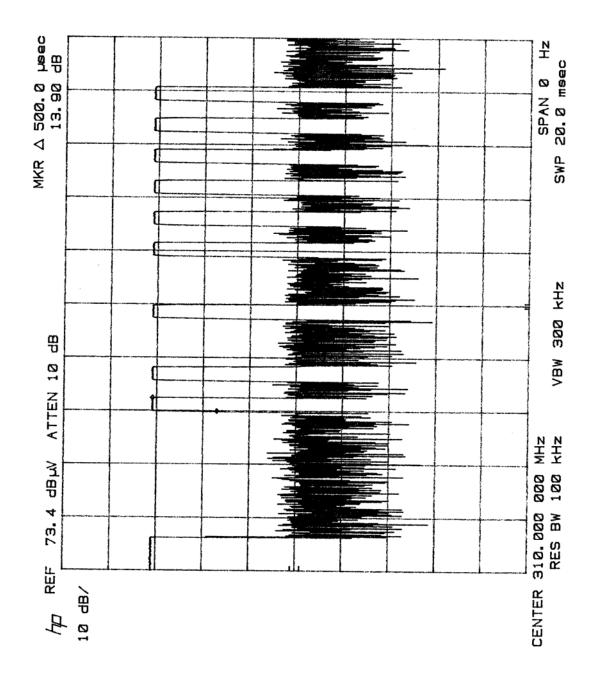
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**Test Method**: FCC Part 15.35, Duty Cycle Determination. **Notes**: Measurement of 1 large pulse = 8.6mSec.

Customer	X-10 (USA), Inc.					
Test Sample	Pulsed 310 MHz Transmitter					
Model Number	KR34A	KR34A				
Date: December 2	2, 2005.	Tech: R. Soodoo	Sheet 2 of 4			

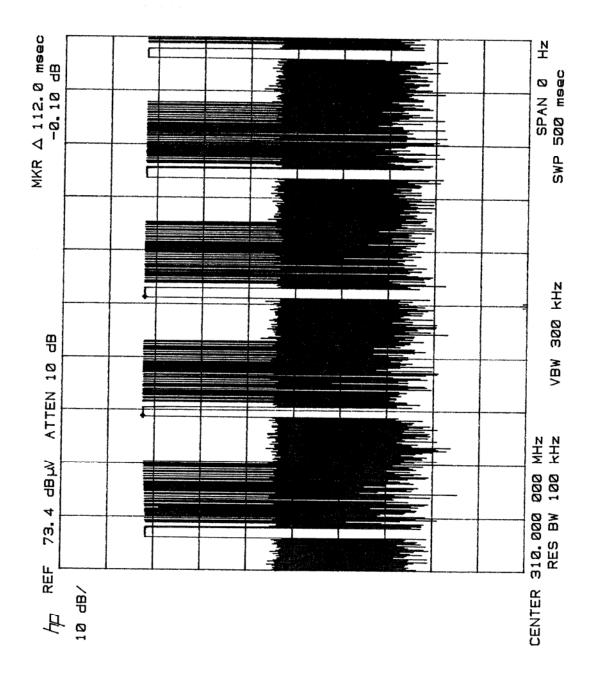
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Test Method: FCC Part 15.35, Duty Cycle Determination. Notes: Measurement of 1 small pulse =  $500\mu$ Sec. Measurements of 33 small pulses =  $33(500\mu$ Sec) = 16.5mSec.

Customer	X-10 (USA), Inc.		
Test Sample	Pulsed 310 MHz Transmitter		
Model Number	KR34A		
Date: December 2, 2005.		Tech: R. Soodoo	Sheet 3 of 4

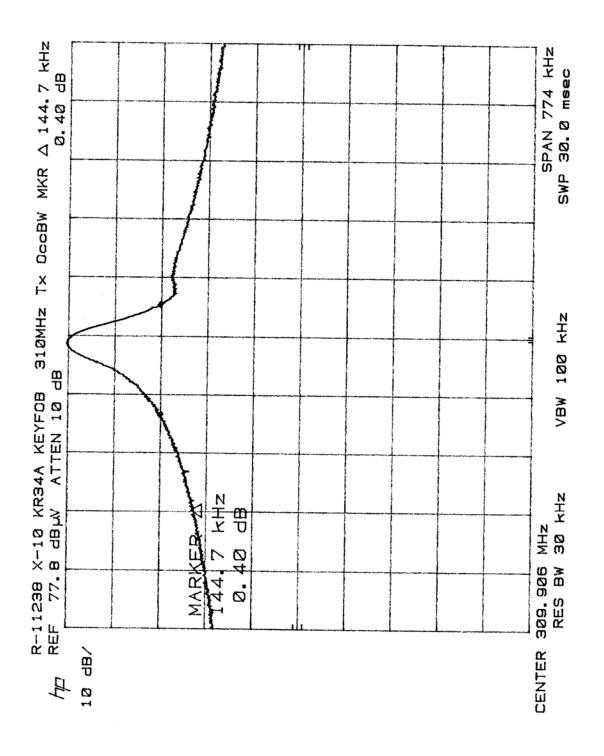
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**Test Method**: FCC Part 15.35, Duty Cycle Determination. **Notes**: Duty cycle = (1)(8.6mSec) + (33) (500µSec) = 0.251 = 25.1% = 20 log 0.251 = -12 dB

Customer	X-10 (USA), In	С.	
Test Sample	Pulsed 310 MHz Transmitter		
Model Number	KR34A		
Date: December 2, 2005.		Tech: R. Soodoo	Sheet 4 of 4

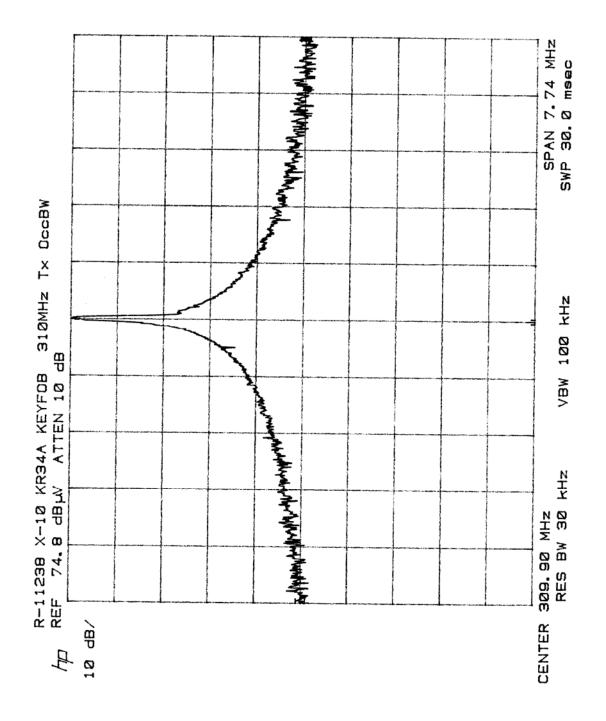
Retlif Testing Laboratories, Test Report R-11238-1, X-10 (USA), Inc., FCC ID: B4SKR34A Page 16 of 19 Para. 15.231(c), Occupied Bandwidth Test Data



**Test Method**: FCC Part 15, Subpart C, 15.231(c), Occupied Bandwidth. **Notes**: Bandwidth of 144.7 kHz does not exceed 0.25% of center frequency at the 20 dBc points (775 kHz)

Customer	X-10 (USA), Inc.		
Test Sample	Pulsed 310 MHz Transmitter		
Model Number	KR34A		
Date: December 2, 2005.		Tech: R. Soodoo	Sheet 1 of 2

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**Test Method**: FCC Part 15, Subpart C, 15.231(c), Occupied Bandwidth. **Notes**: Bandwidth does not exceed 0.25% of center frequency at the 20 dBc points (775 kHz)

Customer	X-10 (USA), Inc.		
Test Sample	Pulsed 310 MHz Transmitter		
Model Number	KR34A		
Date: December 2, 2005.		Tech: R. Soodoo	Sheet 2 of 2

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