



Retlif Testing Laboratories

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FCC COMPLIANCE TEST REPORT
ON
DETECTION SYSTEMS, INC.
304 MHz PULSED RF TRANSMITTER
MODEL: RF280THS
FCC ID: ESV-0407-4

CUSTOMER NAME: Detection Systems

CUSTOMER P.O.: 104421SKI

DATE OF REPORT: June 18, 1998

TEST REPORT NO.: R-7530-1

TEST START DATE: June 4, 1998

TEST FINISH DATE: June 5, 1998

TEST TECHNICIAN: D. Cortes

TEST ENGINEER: T. Schneider

SUPERVISOR: R.J. Reitz

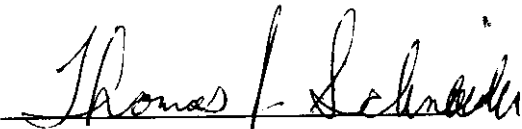
REPORT PREPARED BY: L. Anderson

GOVERNMENT SOURCE INSPECTION: Not Applicable

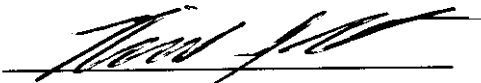
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CERTIFICATION AND SIGNATURES

We certify that this report is a true report 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.



Thomas J. Schneider
EMC Test Engineer
NVLAP Approved Signatory



Richard J. Reitz
Laboratory Manager
NVLAP Approved Signatory

NON-WARRANTY PROVISION

The testing services have been performed, findings obtained, and reports prepared in accordance with generally accepted testing laboratory principles and practices. This warranty is in lieu of all other warranties, either express 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 report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

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Test Report No. R-7530-1
FCC ID: ESV-0407-4

EXHIBIT 1

FCC ID Label


Para. 2.1033(b)(7)



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

DATE	SYM	REVISION RECORD	ECR#	DR	AUTH
4/9/98	A	PRELIMINARY DRAWING		SD	HZ


DETECTION SYSTEMS, INC.
 MADE IN U.S.A.
 RF280THS LOT XXX
 FCC ID: ESV-0407-4
 CANADA XXXXXXXXXXXXX

NOTES:
 Printed on DSI Label #22640.

PART NO. 36900A

DETECTION SYSTEMS, INC.



130 PERINTON PARKWAY
 FAIRPORT, NEW YORK, 14450-9099, USA
 (716) 223 4060, FAX (716) 223 9180

DRAWING TITLE
RF280THS General Product Label Info.

DATE DRAWN	4/9/98	DRAWN BY: SD	APPR BY: <i>HZ</i>
DRAWING NUMBER	A36900	SCALE	
		REV-A	SHEET 1 OF 1

EXHIBIT 2

Equipment Photographs

Para. 2.1033(b)(7)



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

EXHIBIT 6

Report of Measurements

Para. 2.1033(b)(6)



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

APPLICANT Detection Systems 130 Perinton Parkway Fairport, NY 14450	MANUFACTURER SAME
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TEST SPECIFICATION: FCC Rules and Regulations Part 15, Subpart C, Para. 15.231

TEST PROCEDURE: ANSI C63.4:1992

TEST SAMPLE DESCRIPTION

BRANDNAME: Detection Systems MODEL: RF280THS

TYPE: Pulsed RF Transmitter

POWER REQUIREMENTS: Two (2) 3 VDC Lithium Batteries


FREQUENCY OF OPERATION: 304 MHz


TESTS PERFORMED

- Para. 15.231(a), Radiated Emissions, Fundamental & Spurious
- Para. 15.231(c), Occupied Bandwidth
- Duty Cycle Determination

I HEREBY CERTIFY THAT: The measurements shown here were in accordance with the procedure indicated and that the energy emitted by this equipment was found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.

I FURTHER CERTIFY THAT: On the basis of the measurements made, the device tested is capable of operation in compliance with the requirements of Part 15 of the FCC Rules under normal use and maintenance.

SIGN 	PRINT Thomas J. Schneider	TITLE EMC Test Engineer
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	Retlif Testing Laboratories
	Test Report No. R-7530-1 FCC ID: ESV-0407-4

REPORT OF MEASUREMENTS

Applicant: Detection Systems
Device: 304 MHz Security Transmitter
FCC ID: ESV-0407-4
Power Requirements: Two (2) 3VDC Lithium Batteries
Applicable Rule Section: Part 15, Subpart C, Section 15.231

TEST RESULTS

- 15.231 (a) - The device is a Security Transmitter designed to transmit smoke detection/alarm information and system status information.
- 15.231 (a)(1) - The transmitter is automatically activated by a Photo Electric Sensor.
- 15.231 (a)(2) - The device transmits a maximum time of eight (8) packets of ≤ 20 ms with a time frame of 100 to 275 milliseconds between packets.
- 15.231 (a)(3) - The unit performs periodic transmissions at 65 minute intervals for system integrity and status purposes.
- 15.231 (a)(4) - The device is used for Fire/Alarm purposes.
- 15.231 (b) - The fundamental field strength did not exceed $5580 \mu\text{V/M}$ (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 $558 \mu\text{V/M}$ (AVERAGE).
- 15.231 (c) - The device operates at 304 MHz. The bandwidth of emissions did not exceed 0.25% of the operating frequency (760 kHz).



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

REPORT OF MEASUREMENTS (continued)

DETERMINATION OF FIELD STRENGTH LIMITS

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

<u>Frequency</u>		<u>Limit</u>	
F1	= 260	3750	= L1
Fo	= 304		Lo
F2	= 470	12500	= L2

The formula below was utilized to determine the limits:

$$\text{Limit} = L1 + [(Fo-F1)(L2-L1)/(F2-F1)]$$

Solving yields:

Fundamental Limit = 5580 μ V/M (AVERAGE) @ 3 Meters

Harmonic Limit = 558 μ V/M (AVERAGE) @ 3 Meters

DETERMINATION OF DUTY CYCLE AS PER DETECTION SYSTEMS:

The data is modulated using the Manchester on/off key encoding scheme with 50% duty cycle. The on-air format is defined with a "1" bit which is carrier turning on at the bit center and an "0" bit which is carrier turning off at the bit center. The packet consists of on-air bits that are transmitted to provide the system with the current status of the transmitter. A single message is comprised of up to 8 packets of the same data. Time between packets is defined as a pseudo-random time length between 100 milliseconds and 275 milliseconds.

Packet width of ≤ 20 ms with 50% duty cycle Manchester modulation makes the on-air time ≤ 10 ms. Therefore, no transmission has more than 10 ms of on time out of 100 ms.

Transmitter On Time = 10.0 milliseconds (maximum)

Transmitter Cycle Time = ≥ 100.0 milliseconds

Transmitter Duty Cycle = 10.0 %



Retlif Testing Laboratories

Test Report No. R-7530-1

FCC ID: ESV-0407-4

REPORT OF MEASUREMENTS (continued)

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:

$$\text{Pulse Desensitization} = 20 \text{ Log (PW * BW * 1.5)}$$

Setting pulse desensitization equal to zero and utilizing the minimum observed pulse width of 100 microseconds yields a minimum required bandwidth of 6666.7 Hz. 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. All measurements were made with two (2) new 3 VDC Duracell Lithium Batteries Model DL123A installed in the unit.
4. The frequency was scanned from 30 MHz to 3.1 GHz. All emissions not reported were more than 20 dB below the specified limit.



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

Exhibit 6

Report of Measurements

Radiated Emissions Data, Para. 15.231(b)



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

TEST METHOD:	FCC Part 15 Subpart C Radiated Emissions		
CUSTOMER:	Detections Systems, Inc.	JOB No.:	R-7530-1
TEST SAMPLE:	Pulsed RF Transmitter FCC ID: ESV-0407		
MODEL No.:	RF280THS	SERIAL No.:	N/A
TEST SPECIFICATION:	FCC Part 15 Subpart C PARAGRAPH: 15.231		
OPERATING MODE:	Continuously Transmitting 304 Mhz Signal		
TECHNICIAN:	Dennis Cortes	DATE:	June 4, 1998
NOTES:	Test Distance: 3 Meters Detector Function: Peak		

Test Frequency	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(H/V) / meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
304	H/1.8	X	83.5	-4.3	79.2	9120.1	55800
304	H/2.0	Y	81.8	-4.3	77.5	7498.9	55800
304	H/1.0	Z	92.6	-4.3	88.3	26001.6	55800
304	V/2.5	X	89.1	-4.3	84.8	17378.0	55800
304	V/1.4	Y	94.2	-4.3	89.9	31260.8	55800
304	V/2.3	Z	84.0	-4.3	79.7	9660.5	55800
608	H/1.0	X	44.0	2.4	46.4	208.9	5000
608	H/1.0	Y	46.6	2.4	49.0	281.8	5000
608	H/1.0	Z	47.3	2.4	49.7	305.5	5000
608	V/1.5	X	50.4	2.4	52.8	436.5	5000
608	V/1.2	Y	48.0	2.4	50.4	331.1	5000
608	V/1.4	Z	41.5	2.4	43.9	156.7	5000
912	H/1.1	X	42.0	8.3	50.3	327.3	5580
912	H/1.5	Y	41.6	8.3	49.9	312.6	5580
912	H/1.1	Z	38.5	8.3	46.8	218.8	5580
912	V/1.3	X	41.6	8.3	49.9	312.6	5580
912	V/1.5	Y	40.3	8.3	48.6	269.2	5580
912	V/1.3	Z	35.5	8.3	43.8	154.9	5580
1216	H/1.2	X	60.8	-6.3	54.5	530.9	5000
1216	H/1.4	Y	53.4	-6.3	47.1	226.5	5000
1216	H/1.5	Z	50.2	-6.3	43.9	156.7	5000
1216	V/1.3	X	61.4	-6.3	55.1	568.9	5000
1216	V/1.4	Y	50.2	-6.3	43.9	156.7	5000
1216	V/1.2	Z	49.7	-6.3	43.4	147.9	5000
1520	H/2.0	X	53.7	-4.8	48.9	278.6	5000
1520	H/1.5	Y	48.0	-4.8	43.2	144.5	5000
1520	H/1.7	Z	49.7	-4.8	44.9	175.8	5000
1520	V/2.1	X	54.1	-4.8	49.3	291.7	5000
1520	V/1.3	Y	50.0	-4.8	45.2	182.0	5000
1520	V/1.2	Z	49.9	-4.8	45.1	179.9	5000

The frequency range was scanned from 30 MHz to 3.1 GHz. All emissions not recorded were more than 20dB below the specified limit. Emissions from the EUT do not exceed the specified limits.

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

TEST METHOD:	FCC Part 15 Subpart C Radiated Emissions		
CUSTOMER:	Detections Systems, Inc.	JOB No.:	R-7530-1
TEST SAMPLE:	Pulsed RF Transmitter FCC ID: ESV-0407		
MODEL No.:	RF280THS	SERIAL No.:	N/A
TEST SPECIFICATION:	FCC Part 15 Subpart C		PARAGRAPH: 15.231
OPERATING MODE:	Continuously Transmitting 304 Mhz Signal		
TECHNICIAN:	Dennis Cortes	DATE:	June 4, 1998
NOTES:	Test Distance: 3 Meters Detector Function: Peak		

Test Frequency	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(H/V) / meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
1824	H/1.3	X	48.2	-2.7	45.5	188.4	5580
1824	H/1.3	Y	46.0	-2.7	43.3	146.2	5580
1824	H/1.3	Z	46.9	-2.7	44.2	162.2	5580
1824	V/1.4	X	48.5	-2.7	45.8	195.0	5580
1824	V/1.5	Y	45.6	-2.7	42.9	139.6	5580
1824	V/1.4	Z	46.5	-2.7	43.8	154.9	5580
2128	H/1.3	X	47.1	-1.3	45.8	195.0	5580
2128	H/1.3	Y	45.1	-1.3	43.8	154.9	5580
2128	H/1.4	Z	47.1	-1.3	45.8	195.0	5580
2128	V/1.5	X	44.5	-1.3	43.2	144.5	5580
2128	V/1.6	Y	47.9	-1.3	46.6	213.8	5580
2128	V/1.3	Z	48.0	-1.3	46.7	216.3	5580
2432	H/1.0	X	*43.4	-0.4	43.0	141.3	5580
2432	H/1.0	Y	*43.4	-0.4	43.0	141.3	5580
2432	H/1.0	Z	*43.4	-0.4	43.0	141.3	5580
2432	V/1.0	X	*43.4	-0.4	43.0	141.3	5580
2432	V/1.0	Y	*43.4	-0.4	43.0	141.3	5580
2432	V/1.0	Z	*43.4	-0.4	43.0	141.3	5580
2736	H/1.0	X	*42.6	1.1	43.7	153.1	5000
2736	H/1.0	Y	*42.6	1.1	43.7	153.1	5000
2736	H/1.0	Z	*42.6	1.1	43.7	153.1	5000
2736	V/1.0	X	*42.6	1.1	43.7	153.1	5000
2736	V/1.0	Y	*42.6	1.1	43.7	153.1	5000
2736	V/1.0	Z	*42.6	1.1	43.7	153.1	5000
3040	H/1.0	X	*43.0	3.1	46.1	201.8	5580
3040	H/1.0	Y	*43.0	3.1	46.1	201.8	5580
3040	H/1.0	Z	*43.0	3.1	46.1	201.8	5580
3040	V/1.0	X	*43.0	3.1	46.1	201.8	5580
3040	V/1.0	Y	*43.0	3.1	46.1	201.8	5580
3040	V/1.0	Z	*43.0	3.1	46.1	201.8	5580

The frequency range was scanned from 30 MHz to 3.1 GHz. All emissions not recorded were more than 20dB below the specified limit. Emissions from the EUT do not exceed the specified limits.

*=Noise Floor Measurements (Minimum System Sensitivity)

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

TEST METHOD:	FCC Part 15 Subpart C Radiated Emissions		
CUSTOMER:	Detections Systems, Inc.	JOB No.:	R-7530-1
TEST SAMPLE:	Pulsed RF Transmitter FCC ID: ESV-0407		
MODEL No.:	RF280THS	SERIAL No.:	June 4, 1998
TEST SPECIFICATION:	FCC Part 15 Subpart C PARAGRAPH: 15.231		
OPERATING MODE:	Continuously transmitting 304 Mhz Signal		
TECHNICIAN:	Dennis Cortes	DATE:	June 4, 1998
NOTES:	Test Distance: 3 Meters Detector Function: Peak Worst Case Duty Cycle: 10.0% (-20.0 dB Duty Cycle Correction Factor)		

Test Frequency	Antenna Pol./Height	EUT Orientation	Peak Corrected Reading	Duty Cycle Corr. Factor	Corrected Average	Converted Average	Average Limit
MHz	(H/V) / meters	X / Y / Z	dBuV/m	dB	dBuV/m	uV/m	uV/m
304	H/1.8	X	79.2	-20.0	59.2	912.0	5580
304	H/2.0	Y	77.5	-20.0	57.5	749.9	5580
304	H/1.0	Z	88.3	-20.0	68.3	2600.2	5580
304	V/2.5	X	84.8	-20.0	64.8	1737.8	5580
304	V/1.4	Y	89.9	-20.0	69.9	3126.1	5580
304	V/2.3	Z	79.7	-20.0	59.7	966.1	5580
608	H/1.0	X	46.4	-20.0	26.4	20.9	500
608	H/1.0	Y	49.0	-20.0	29.0	28.2	500
608	H/1.0	Z	49.7	-20.0	29.7	30.5	500
608	V/1.5	X	52.8	-20.0	32.8	43.7	500
608	V/1.2	Y	50.4	-20.0	30.4	33.1	500
608	V/1.4	Z	43.9	-20.0	23.9	15.7	500
912	H/1.1	X	50.3	-20.0	30.3	32.7	558
912	H/1.5	Y	49.9	-20.0	29.9	31.3	558
912	H/1.1	Z	46.8	-20.0	26.8	21.9	558
912	V/1.3	X	49.9	-20.0	29.9	31.3	558
912	V/1.5	Y	48.6	-20.0	28.6	26.9	558
912	V/1.3	Z	43.8	-20.0	23.8	15.5	558
1216	H/1.2	X	54.5	-20.0	34.5	53.1	500
1216	H/1.4	Y	47.1	-20.0	27.1	22.6	500
1216	H/1.5	Z	43.9	-20.0	23.9	15.7	500
1216	V/1.3	X	55.1	-20.0	35.1	56.9	500
1216	V/1.4	Y	43.9	-20.0	23.9	15.7	500
1216	V/1.2	Z	43.4	-20.0	23.4	14.8	500
1520	H/2.0	X	48.9	-20.0	28.9	27.9	500
1520	H/1.5	Y	43.2	-20.0	23.2	14.5	500
1520	H/1.7	Z	44.9	-20.0	24.9	17.6	500
1520	V/2.1	X	49.3	-20.0	29.3	29.2	500
1520	V/1.3	Y	45.2	-20.0	25.2	18.2	500
1520	V/1.2	Z	45.1	-20.0	25.1	18.0	500

The frequency range was scanned from 30 MHz to 3.1 GHz. All emissions not recorded were more than 20dB below the specified limit. Emissions from the EUT do not exceed the specified limits.

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

TEST METHOD:	FCC Part 15 Subpart C Radiated Emissions		
CUSTOMER:	Detections Systems, Inc.	JOB No.:	R-7530-1
TEST SAMPLE:	Pulsed RF Transmitter FCC ID: ESV-0407		
MODEL No.:	RF280THS	SERIAL No.:	N/A
TEST SPECIFICATION:	FCC Part 15 Subpart C PARAGRAPH: 15.231		
OPERATING MODE:	Continuously transmitting 304 Mhz Signal		
TECHNICIAN:	Dennis Cortes	DATE:	June 4, 1998
NOTES:	Test Distance: 3 Meters Detector Function: Peak Worst Case Duty Cycle: 10.0% (-20.0 dB Duty Cycle Correction Factor)		

Test Frequency	Antenna Poi./Height	EUT Orientation	Peak Corrected Reading	Duty Cycle Corr. Factor	Corrected Average	Converted Average	Average Limit
Mhz	(H/V) / meters	X / Y / Z	dBuV/m	dB	dBuV/m	uV/m	uV/m
1824	H/1.3	X	45.5	-20.0	25.5	18.8	558
1824	H/1.3	Y	43.3	-20.0	23.3	14.6	558
1824	H/1.3	Z	44.2	-20.0	24.2	16.2	558
1824	V/1.4	X	45.8	-20.0	25.8	19.5	558
1824	V/1.5	Y	42.9	-20.0	22.9	14.0	558
1824	V/1.4	Z	43.8	-20.0	23.8	15.5	558
2128	H/1.3	X	45.8	-20.0	25.8	19.5	558
2128	H/1.3	Y	43.8	-20.0	23.8	15.5	558
2128	H/1.4	Z	45.8	-20.0	25.8	19.5	558
2128	V/1.5	X	43.2	-20.0	23.2	14.5	558
2128	V/1.6	Y	46.6	-20.0	26.6	21.4	558
2128	V/1.3	Z	46.7	-20.0	26.7	21.6	558
2432	H/1.0	X	*43.0	-20.0	23.0	14.1	558
2432	H/1.0	Y	*43.0	-20.0	23.0	14.1	558
2432	H/1.0	Z	*43.0	-20.0	23.0	14.1	558
2432	V/1.0	X	*43.0	-20.0	23.0	14.1	558
2432	V/1.0	Y	*43.0	-20.0	23.0	14.1	558
2432	V/1.0	Z	*43.0	-20.0	23.0	14.1	558
2736	H/1.0	X	*43.7	-20.0	23.7	15.3	500
2736	H/1.0	Y	*43.7	-20.0	23.7	15.3	500
2736	H/1.0	Z	*43.7	-20.0	23.7	15.3	500
2736	V/1.0	X	*43.7	-20.0	23.7	15.3	500
2736	V/1.0	Y	*43.7	-20.0	23.7	15.3	500
2736	V/1.0	Z	*43.7	-20.0	23.7	15.3	500
3040	H/1.0	X	*46.1	-20.0	26.1	20.2	558
3040	H/1.0	Y	*46.1	-20.0	26.1	20.2	558
3040	H/1.0	Z	*46.1	-20.0	26.1	20.2	558
3040	V/1.0	X	*46.1	-20.0	26.1	20.2	558
3040	V/1.0	Y	*46.1	-20.0	26.1	20.2	558
3040	V/1.0	Z	*46.1	-20.0	26.1	20.2	558

The frequency range was scanned from 30 MHz to 3.1 GHz. All emissions not recorded were more than 20dB below the specified limit. Emissions from the EUT do not exceed the specified limits.

EQUIPMENT LIST

FCC Part 15 Subpart C Radiated Emissions

EN	Type	Manufacturer	Frequency Range	Model No.	Cal Date	Due Date
067	Open Area Test Site	Retlif	3 Meter	RNY	8/30/97	8/30/99
128C	Double Ridge Guide	Eaton Corporation	1 GHz - 18 GHz	96001	10/6/97	10/6/98
133	Broadband Pre-Amplifier	Electro-Metrics	10 kHz - 1 GHz, 26dB	BPA-1000	6/20/97	6/20/98
141	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	3/2/98	9/2/98
141A	Graphics Plotter	Hewlett Packard	N/A	7470A	3/4/98	3/4/99
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	3/3/98	9/3/98
206B	6.0 dB Attenuator	Texscan	0 - 1.0 GHz	FP-50 - 6 dB	6/20/97	6/20/98
523	Biconilog	Electro-Mechanics	26 MHz - 1100 MHz	3143	9/30/97	9/30/98
543	Preamplifier	Hewlett Packard	1.0 GHz - 26.5 GHz	8449B	8/12/97	8/12/98



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Test Report No. R-7530-1
FCC ID: ESV-0407-4

Exhibit 6

Report of Measurements

Occupied Bandwidth, Para. 15.231(c)



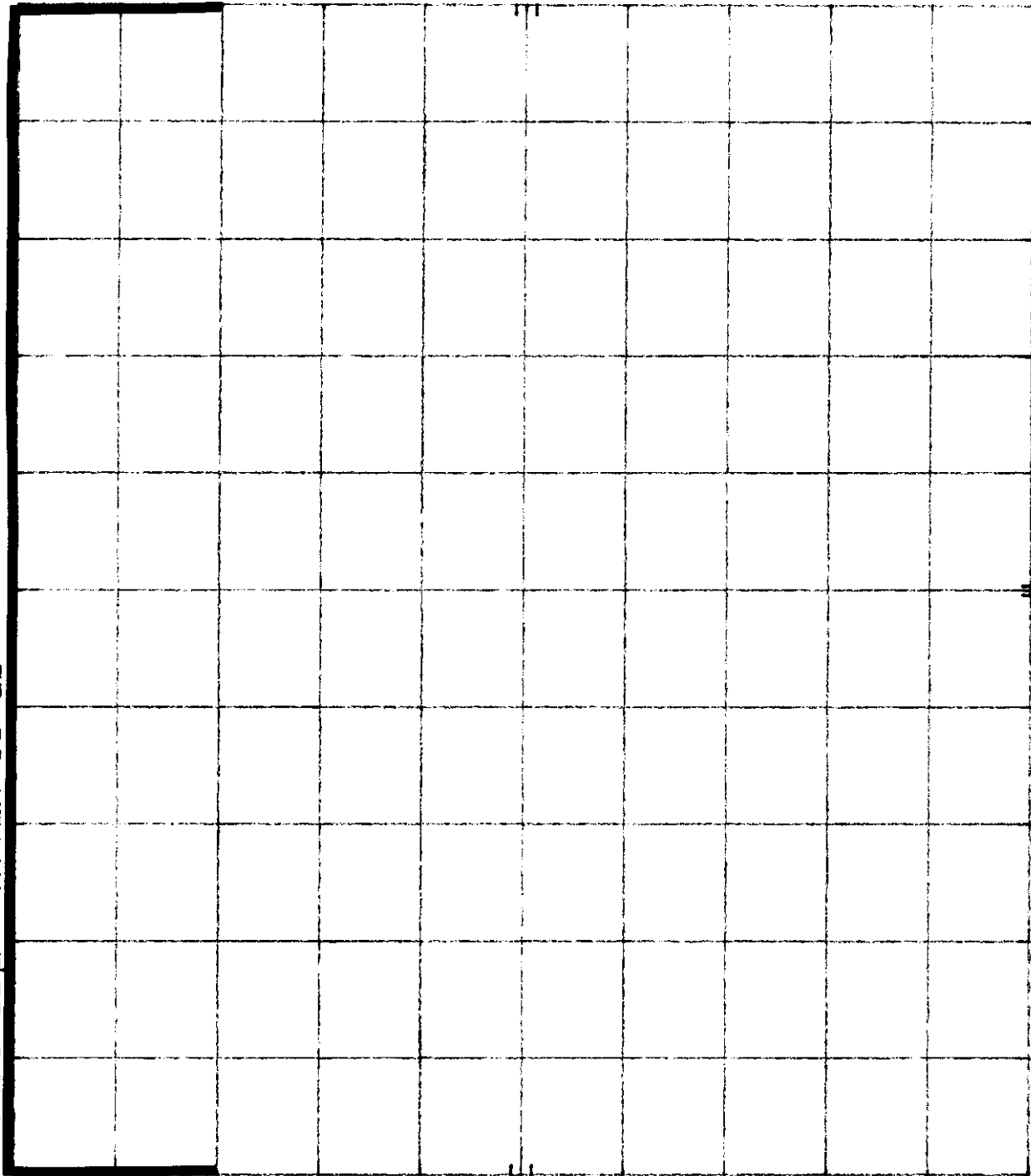
Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4

R-7530 RF280THS OCC BW 6/4/98
REF 79.1 dBμV ATTEN 10 dB

hp

10 dB/



CENTER 304.034 MHz
RES BW 10 kHz
SPAN 760 kHz
SWP 30.0 msec
VBW 30 kHz

Customer:	Detection Systems, Inc.
Test Sample:	304 Mhz Transmitter
Model No:	RF280THS FCC ID:ESV-0407-4
Test Method:	FCC 15.231 (c) Occupied Bandwidth
Notes:	The Bandwidth of the emission is not wider than .25% of the center frequency 20dB down from the modulated carrier
Date:	June 4 1998
Tech:	Dennis Cortes
Sheet:	1 of 2



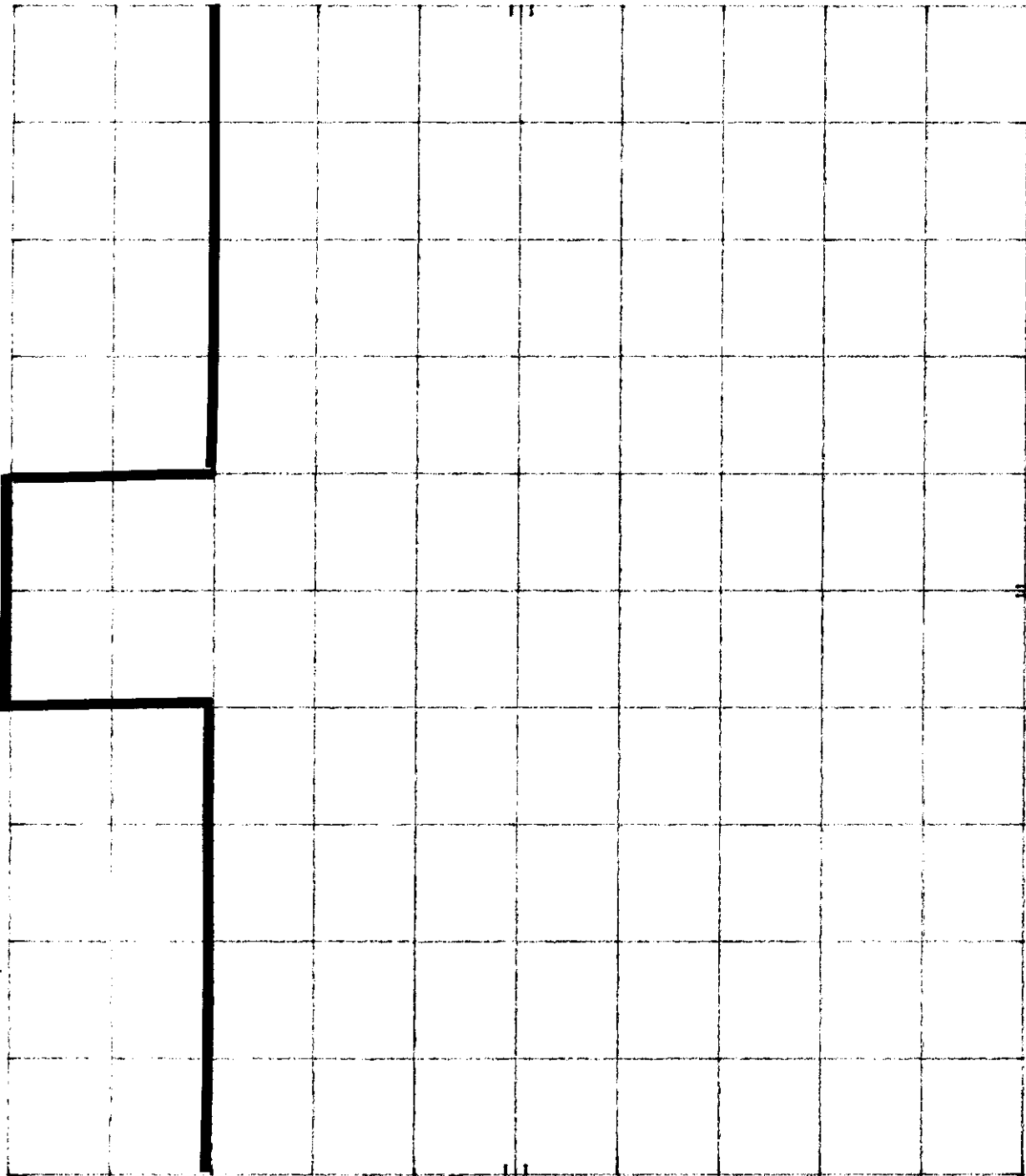
Retlif Testing Laboratories

Report No. R-7530-1

R-7530 RF280THS OCC BW 6/4/98
REF 79.1 dB μ V ATTEN 10 dB


hp

10 dB/



CENTER 304.03 MHz
RES BW 10 kHz
VBW 30 kHz
SPAN 3.80 MHz
SWP 114 msec

Customer:	Detection Systems, Inc.
Test Sample:	304 Mhz Transmitter
Model No.:	RF280THS FCC ID:ESV-0407-4
Test Method:	FCC 15.231 (c) Occupied Bandwidth
Notes:	The Bandwidth of the emission is not wider than .25% of the center frequency 20dB down from the modulated carrier
Date:	June 4, 1998
Tech:	Dennis Cortes
Sheet:	2 of 2

	Retlif Testing Laboratories
	Report No. R-7530-1



Retlif Testing Laboratories

Test Report No. R-7530-1
FCC ID: ESV-0407-4