4675 Burr Drive • Liverpool, NY 13088 • 1-800-724-6452 • FAX: 315-457-0428 • 315-457-0245

October 21, 2014

James Midyette **Genie Company**One Door Drive
Mt. Hope, OH 44660

Dear Mr. Midyette:

Enclosed is the test report for the Three Button Remote Control 315/390 MHz garage door opener transmitter model 315390C5 tested at our facility, located at 4675 Burr Drive in Liverpool, NY. This facility is on file with the Federal Communications Commission (FCC) per 47 CFR 2.948 (Site File Number 306552) and Industry Canada Site# 3034a-1.

We have completed our testing of Emissions to the FCC per 47 CFR Part 15 Class B and Part 15.231 Class C for intentional radiators and IC RSS 210 for Industry Canada Radio Standards Specification.

Thank you for selecting Diversified T.E.S.T. Technologies, Inc. for your testing needs. We look forward to working with you on future projects. Should you have any questions or concerns regarding this report, contact me at 315-457-0245. Please feel free to visit our website at www.dttlab.com.

Sincerely,

Prasanna Gautam Technical Associate

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT

Genie Company

Project Number:

Three Button Remote Control 315390C5

<u>6502</u>-1

Test Report - Table of Contents

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DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
Three Button Remote Control 315390C5	6502-1

Test Information

<u>Laboratory</u>	<u>Manufacturer</u>
Diversified T.E.S.T. Technologies, Inc.	Genie Company
4675 Burr Drive	One Door Drive
Liverpool, NY 13088	Mt. Hope, OH 44660

Report Issue Date: October 21, 2014

Report Number: 6502-1-102114- 15.231 (Edition 1)

Project Number: 6502-1

Date Received: August 4, 2014

Date Tested: August 4, 2014 – September 10, 2014

Product Three Button Remote Control 315/390 MHz

Model: 315390C5

Traceability: Reference standards of measurement have been calibrated by a competent body using standards traceable to NIST.

The testing performed by Diversified T.E.S.T. Technologies, Inc. has shown that the product referenced above complies with the electromagnetic compatibility requirements according to the FCC per 47 CFR Part 15.231. The results in this test report apply only to the Three Button Remote Control 315/390 MHz, Model: 315390C5.

It is the responsibility of the manufacturer to ensure that the product identification and labeling are in compliance with the applicable standards requirements. The manufacturer is also responsible for ensuring that additional units are manufactured with identical mechanical and electrical characteristics.

The equipment listed above conforms to the specified requirements of the test standards listed in the Test Regulations section of this report.

Compiled by:

Signature:

Prasanna Gautam Technical Associate

Date: October 21, 2014

Reviewed by:

Signature:

Steve Frierson

Technical Lab Manager

Date:

October 21, 2014

Authorized by:

Signature:

Annelle Frierson Vice-President

Date:

October 21, 2014

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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Test Regulations

The tests were performed according to the following standards:

FCC Part 15.231	Class A	Class C
FCC Part 15	Class A	⊠ Class B

⊠ Certification	-
■Verification	

Summary of Test Data

Name of Test	Paragraph Number	Results
Transmission	15.231 (a)	Complies
Requirements		
Radiated Emissions	15.231 (b)	Complies
Occupied Bandwidth	15.231 (c)	Complies
Frequency Tolerance	15.231 (d)	N/A
Alternate Field Strength	15.231 (e)	N/A
Requirements		
Power line Conducted	15.207	N/A
Emissions		

Note:

- 1.) The Device does not operate between 40.66 to 40.70 MHz
- 2.) The Device does not operate at a periodic rate
- 3.) The Device is battery powered

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT		
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Equipment under Test (EUT) Testing Operation Mode

The EUT was operated under the following conditions during testing:
Standby
Normal Operating Mode
Practice Operation
Description / Configuration of the EUT:
The Three Button Remote Control is a remote garage door opener transmitter. It operates at 315/390 MHz for the use of opening garage doors. The transmitter utilizes OOK Modulation techniques.
The EUT was powered with a 3 V battery during the collection of data included within this report.
Rationale for EUT setup / configuration:
ANSI C63.4 (2003) / FCC Part 15.231
Modifications:
None
Technical Contact:
James Midyette
Genie Company
One Door Drive Mt. Hope, OH 44660
Mt. Hope, OH 44660

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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Test Setup Photographs

1.1 Radiated Emissions / Occupied Bandwidth



DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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1.2. Radiated Emissions above 1 GHz



DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
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Emissions Testing Conditions

Radiated Emissions

The Radiated Emissions measurements, in the frequency range of 1 MHz -6000 MHz, were tested in a horizontal and vertical polarization at the following test location:
☑ Diversified T.E.S.T. Technologies, Inc. Open Area Test Site☑ Diversified T.E.S.T. Technologies, Inc. Lab
at a test distance of:
 ∑ 3 meters ☐ 10 meters ☐ 30 meters

Measurements above 1 GHz were made at a test distance of 1 Meter

Diversified T.E.S.T. Technologies, Inc. uses automated data reductions to determine product compliance to Radiated Emissions regulations. The product's signal data is compared to a current ambient scan. The frequencies that are of significant amplitude are sorted and are brought out to be further analyzed and maximized.

Test equipment used:

Manufacturer	Model	Description	Serial #	Due Date
Hewlett Packard	8596E	Spectrum Analyzer	3235A00144	5/16/15
Agilent	E4405B	EMC Analyzer	US40520846	10/30/15
RIGOL	DSA 815	Spectrum Analyzer	DSA8A143500948	11/12/14
Hewlett Packard	7550A	Plotter	2407A00476	N/A
Electro-Metrics	BIA-25	Biconical Antenna, 20-220 MHz	001	10/30/14
Electro-Metrics	LPA-25	Log Periodic Antenna 200-1000 MHz	1242	7/8/15
Electro-Metric	RGA-60	Horn Antenna	2981	12/9/14
		Co-ax Cable, 100-foot RG 8/U, 20-foot RG 223/U		
		10-meter open field test range, grounded with 1/4" x 1/4" hardware cloth		
		AC supply cord, 100-foot, grounded		
	100-foot signal cable for remote testing,			
		Wooden turn table, 0.8 meters high		

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT					
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Transmission Requirements

Minimum Standard:

- 15.231 (a): Continuous transmissions such as voice, video, or data transmissions are not permitted.
- 15.231 (a) (1): A Manually operated transmitter shall employ a switch that will automatically deactivate within not more than 5 seconds after being released.
- 15.231 (a) (2): A transmitter activated automatically shall cease transmission within 5 seconds of activation.
- 15.231 (a) (3): Periodic Transmission at regular predetermined intervals are not permitted. However, polling or supervisory transmissions to determine system integrity of transmitters used in security or safety applications are allowed if the periodic rate of transmission does not exceed one transmission of not more than one second duration per hour for each transmitter.
- 15.231 (a) (4): Intentional radiators which are employed for radio control purposes during emergencies involving fire, security, and safety of life when activated to signal an alarm, may operate during the pendency of the alarm.

Test Results: Complies

Test Data: Compliance was determined by verification of technical specifications and functional tests on the equipment.

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT						
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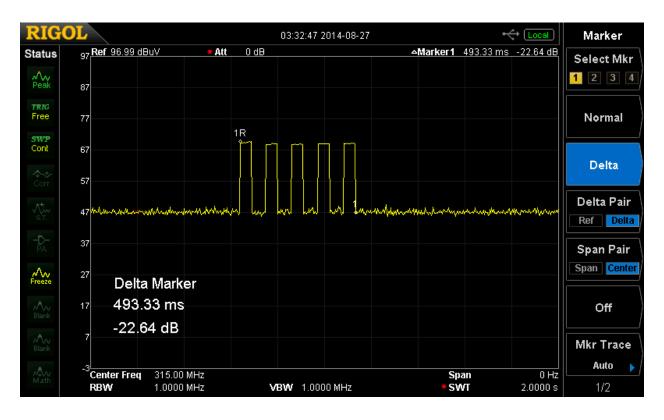
Rationale for Compliance with Transmission Requirements

15.231 (a) (1)	Manual Activation	Tx deactivation time:
15.231 (a) (2)	Automatic Activation	
15.231 (a) (3)	Regular, predetermined transmissions Polling or supervisory transmissions	Tx rate and duration
15.231 (a) (4)	Alarm device operating during the pendency of a Non-Alarm Device	larm condition

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST	T REPORT
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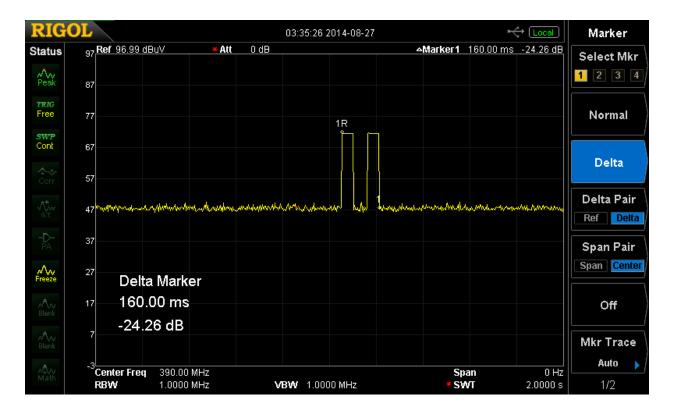
Deactivation Time

Test Data: Deactivation Time 2 seconds, 315 MHz



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Test Data: Deactivation Time 2 seconds, 390 MHz



DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST	T REPORT
Genie Company	Project Number:
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Radiated Emissions 15.231 (b)

Minimum Standard:

Fundamental frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	¹ 1,250 to 3,750	¹ 125 to 375
174-260	3,750	375
260-470	¹ 3,750 to 12,500	¹ 375 to 1,250
Above 470	12,500	1,250

Any emissions that fall within the restricted bands of 15.205 shall not exceed the following limits:

Frequency (MHz)	Field Strength (µV/m @ 3m)	Field Strength (dB @ 3m)
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
Above 960	500	54.0

Test Result: Complies, see table on next page.

Above 1 GHz a spectrum analyzer is used to measure emission levels. The spectrum analyzer resolution bandwidth was set to 1 MHz and video bandwidth was set to 1 MHz.

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT						
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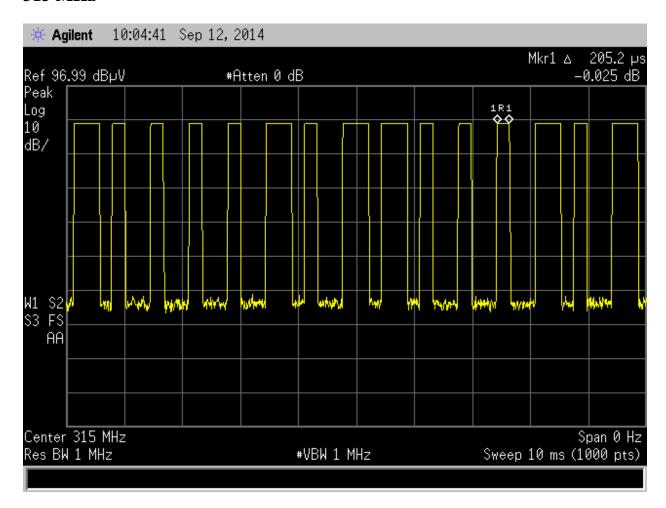
Test Data: Radiated Emissions

X	ults Comments	Results	Margin (dB)	FCC Spec Limit	Corrected Reading	LESS 1 m to 3 m Distance Factor	ADD Antenna Factor (dB)	ADD Cable Factor (dB)	LESS Duty Factor (dB)		ng (dBuV)	Meter Readir		Antenna Polarization	Freq.
315			(/	(dBuV/m)	(dBuV/m)	(dB)		(/		Max	Z	Υ	Х		(
V 29.68 50.35 48.9 50.4 12.8 72.2 15.1 0.0 59.8 75.6 15.5 Pass	SS	Pass	-10.9	75.6	64.7	0.0	15.1	7.2	-12.8	55.3	43.2	37.91	55.28	Н	215
Page	SS	Pass	-15.8	75.6	59.8	0.0	15.1	7.2	-12.8	50.4	48.9	50.35	29.68	V	313
Y	SS	Pass	-11.9	55.6	43.7	0.0	19.7	12.4	-12.8	24.5	21.1	20.04	24.47	Н	620
945	SS	Pass	-10.2	55.6	45.4	0.0	19.7	12.4	-12.8	26.1	21.9	26.14	19.74	V	030
1260	ss Noise Floor	Pass	-7.5	55.6	48.1	0.0	23.5	17.6	-12.8	19.8	19.8	19.07	19.1	Н	0.45
1260 V 29.57 32.36 33.3 33.3 -12.8 0.3 25.0 -9.5 36.3 55.6 -19.3 Pass	ss Noise Floor	Pass	-7.9	55.6	47.7	0.0	23.5	17.6	-12.8	19.4	19.4	19.08	19.23	V	945
V 29.57 32.36 33.3 33.3 -12.8 0.5 26.3 -9.5 36.3 55.6 -19.3 Pass	ss Noise Floor	Pass	-21.8	55.6	33.8	-9.5	25.0	0.3	-12.8	30.8	30.4	29.28	30.84	Н	1260
1575 V 30.6 31.76 31.1 31.8 -12.8 0.5 26.3 -9.5 36.2 54.0 -17.8 Pass	ss Noise Floor	Pass	-19.3	55.6	36.3	-9.5	25.0	0.3	-12.8	33.3	33.3	32.36	29.57	V	1200
No.	ss Noise Floor	Pass	-19.3	54.0	34.7	-9.5	26.3	0.5	-12.8	30.2	29.6	30.23	29.61	Н	4575
1890 V	ss Noise Floor	Pass	-17.8	54.0	36.2	-9.5	26.3	0.5	-12.8	31.8	31.1	31.76	30.6	V	15/5
Y 31.96 33.04 33.1 33.1 -12.8 0.4 28.1 -9.5 39.2 55.6 -16.4 Pass	ss	Pass	-15.9	55.6	39.7	-9.5	28.1	0.4	-12.8	33.6	32.3	33.6	29.74	Н	4000
Name	ss	Pass	-16.4	55.6	39.2	-9.5	28.1	0.4	-12.8	33.1	33.1	33.04	31.96	V	1890
Name	SS	Pass	-15.2	54.0	38.8	-9.5	28.9	0.2	-12.8	32.1	30.6	32.06	29.44	Н	2205
2520 V 30.61 29.94 30.7 30.7 -12.8 0.3 29.3 -9.5 37.9 55.6 -17.7 Pass	ss Noise Floor	Pass	-16.1	54.0	37.9	-9.5	28.9	0.2	-12.8	31.2	31.2	30.58	30.1	V	2205
V 30.61 29.94 30.7 30.7 -12.8 0.3 29.3 -9.5 37.9 55.6 -17.7 Pass	ss Noise Floor	Pass	-16.6	55.6	39.0	-9.5	29.3	0.3	-12.8	31.8	30.7	31.75	30.1	Н	
Note	ss Noise Floor	Pass	-17.7	55.6	37.9	-9.5	29.3	0.3	-12.8	30.7	30.7	29.94	30.61	V	2520
V 33.87 35.67 33.8 35.7 -12.8 0.3 30.1 -9.5 43.7 54.0 -10.3 Pass	ss	Pass	-9.2	54.0	44.8	-9.5	30.1	0.3	-12.8	36.7	34.1	36.73	32.61	Н	
Note	ss	Pass	-10.3	54.0	43.7	-9.5	30.1	0.3	-12.8	35.7	33.8	35.67	33.87	V	2835
Note	ss	Pass	-12.1	55.6	43.5	-9.5	31.0	0.4	-12.8	34.4	33.5	34.4	30.04	Н	
Results Resu	ss	Pass	-15.6					0.4		30.9		29.76	30.43		3150
Results Resu															
Results Resu				FCC Spec	Corrected	LESS 1 m to 3 m	ADD Astrono	ADD C-bl-	LECC Durk		og (dBu\/)	Motor Pondir			F
X	ults Comments	Results		Reading Limit	Reading	Distance Factor									
No.			(ав)		(dBuV/m)	(dB)		ractor (ub)	ractor (ub)	Max	Z	Υ	Х	1 014112411011	(IVII IZ)
No.	ss	Pass	-7.5	79.2	71.7	0.0	15.8	9.5	-13.3	59.7	52.1	45.92	59.67	Н	200
780 V 20.05 22.96 19.0 23.0 -13.3 17.0 21.6 0.0 48.2 59.2 -11.0 Pass 1170 H 30.66 29.43 30.2 30.7 -13.3 0.3 24.7 -9.5 32.9 54.0 -21.1 Pass V 29.7 34.57 31.5 34.6 -13.3 0.3 24.7 -9.5 36.8 54.0 -17.2 Pass 1560 H 31.36 31.51 30.5 31.5 -13.3 0.5 26.2 -9.5 35.4 54.0 -18.6 Pass V 31.78 35.8 37.1 37.1 -13.3 0.5 26.2 -9.5 41.1 54.0 -12.9 Pass 1950 H 35.18 37.91 36.1 37.9 -13.3 0.5 28.4 -9.5 44.0 59.2 -15.2 Pass 1950 V 37.92 39.38 38.5 <td< td=""><td>SS</td><td>Pass</td><td>-10.6</td><td>79.2</td><td>68.6</td><td>0.0</td><td>15.8</td><td>9.5</td><td>-13.3</td><td>56.6</td><td>55.6</td><td>56.6</td><td>37.34</td><td>V</td><td>330</td></td<>	SS	Pass	-10.6	79.2	68.6	0.0	15.8	9.5	-13.3	56.6	55.6	56.6	37.34	V	330
V 20.05 22.96 19.0 23.0 -13.3 17.0 21.6 0.0 48.2 59.2 -11.0 Pass	SS	Pass	-8.1	59.2	51.1	0.0	21.6	17.0	-13.3	25.8	23.6	19.13	25.82	Н	700
1170 V 29.7 34.57 31.5 34.6 -13.3 0.3 24.7 -9.5 36.8 54.0 -17.2 Pass 1560 H 31.36 31.51 30.5 31.5 -13.3 0.5 26.2 -9.5 35.4 54.0 -18.6 Pass 1560 V 31.78 35.8 37.1 37.1 -13.3 0.5 26.2 -9.5 41.1 54.0 -12.9 Pass 1950 H 35.18 37.91 36.1 37.9 -13.3 0.5 28.4 -9.5 44.0 59.2 -15.2 Pass 17.2 Pas	ss	Pass	-11.0	59.2	48.2	0.0	21.6	17.0	-13.3	23.0	19.0	22.96	20.05	V	780
V 29.7 34.57 31.5 34.6 -13.3 0.3 24.7 -9.5 36.8 54.0 -17.2 Pass	ss Noise Floor	Pass	-21.1	54.0	32.9	-9.5	24.7	0.3	-13.3	30.7	30.2	29.43	30.66	Н	1170
1560 V 31.78 35.8 37.1 37.1 -13.3 0.5 26.2 -9.5 41.1 54.0 -12.9 Pass 1950 H 35.18 37.91 36.1 37.9 -13.3 0.5 28.4 -9.5 44.0 59.2 -15.2 Pass 1950 V 37.92 39.38 38.5 39.4 -13.3 0.5 28.4 -9.5 45.5 59.2 13.7 Pass 240 H 30.8 33.78 30.9 33.8 -13.3 0.3 29.0 -9.5 40.3 54.0 -13.7 Pass 1950 V 32.7 30.8 32.0 32.7 -13.3 0.3 29.0 -9.5 39.2 54.0 14.8 Pass 2730 H 32.71 39.65 35.7 39.7 -13.3 0.2 29.8 -9.5 46.8 54.0 -7.2 Pass	ss Noise Floor	Pass	-17.2	54.0	36.8	-9.5	24.7	0.3	-13.3	34.6	31.5	34.57	29.7	V	1170
V 31.78 35.8 37.1 37.1 -13.3 0.5 26.2 -9.5 41.1 54.0 -12.9 Pass 1950 H 35.18 37.91 36.1 37.9 -13.3 0.5 28.4 -9.5 44.0 59.2 -15.2 Pass 1950 V 37.92 39.38 38.5 39.4 -13.3 0.5 28.4 -9.5 45.5 59.2 -13.7 Pass 2340 H 30.8 33.78 30.9 33.8 -13.3 0.3 29.0 -9.5 40.3 54.0 -13.7 Pass 1950 V 32.7 30.8 32.0 32.7 -13.3 0.3 29.0 -9.5 39.2 54.0 -14.8 Pass 1950 H 32.71 39.65 35.7 39.7 -13.3 0.2 29.8 -9.5 46.8 54.0 -7.2 Pass 1950 P	ss Noise Floor	Pass	-18.6	54.0	35.4	-9.5	26.2	0.5	-13.3	31.5	30.5	31.51	31.36	Н	1560
1950 V 37.92 39.38 38.5 39.4 -13.3 0.5 28.4 -9.5 45.5 59.2 -13.7 Pass 2340 H 30.8 33.78 30.9 33.8 -13.3 0.3 29.0 -9.5 40.3 54.0 -13.7 Pass V 32.7 30.8 32.0 32.7 -13.3 0.3 29.0 -9.5 39.2 54.0 -14.8 Pass 2730 H 32.71 39.65 35.7 39.7 -13.3 0.2 29.8 -9.5 46.8 54.0 -7.2 Pass	ss Noise Floor	Pass	-12.9	54.0	41.1	-9.5	26.2	0.5	-13.3	37.1	37.1	35.8	31.78	V	1300
V 37.92 39.38 38.5 39.4 -13.3 0.5 28.4 -9.5 45.5 59.2 -13.7 Pass 2340 H 30.8 33.78 30.9 33.8 -13.3 0.3 29.0 -9.5 40.3 54.0 -13.7 Pass V 32.7 30.8 32.0 32.7 -13.3 0.3 29.0 -9.5 39.2 54.0 -14.8 Pass 2730 H 32.71 39.65 35.7 39.7 -13.3 0.2 29.8 -9.5 46.8 54.0 -7.2 Pass	ss Noise Floor	Pass	-15.2	59.2	44.0	-9.5	28.4	0.5	-13.3	37.9	36.1	37.91	35.18	Н	1050
V 32.7 30.8 32.0 32.7 -13.3 0.3 29.0 -9.5 39.2 54.0 -14.8 Pass Pass 46.8 54.0 -7.2 Pass	ss Noise Floor	Pass	-13.7	59.2	45.5	-9.5	28.4	0.5	-13.3	39.4	38.5	39.38	37.92	V	1950
V 32.7 30.8 32.0 32.7 -13.3 0.3 29.0 -9.5 39.2 54.0 -14.8 Pass Pass 2730 H 32.71 39.65 35.7 39.7 -13.3 0.2 29.8 -9.5 46.8 54.0 -7.2 Pass	SS	Pass	-13.7	54.0	40.3	-9.5	29.0	0.3	-13.3	33.8	30.9	33.78	30.8	Н	2240
2730	SS	Pass	-14.8	54.0	39.2	-9.5	29.0	0.3	-13.3	32.7	32.0	30.8	32.7	V	2340
2730	SS	Pass	-7.2	54.0	46.8	-9.5	29.8	0.2	-13.3	39.7	35.7	39.65	32.71	Н	2720
	SS	Pass	-10.9	54.0	43.1	-9.5	29.8	0.2	-13.3	36.0	34.0	34.35	35.95	V	2730
H 34 40.15 37.5 40.2 -13.3 0.4 30.9 -9.5 48.6 59.2 -10.6 Pass	SS	Pass	-10.6	59.2	48.6	-9.5	30.9	0.4	-13.3	40.2	37.5	40.15	34	Н	2420
3120 V 33.92 33.17 37.2 37.2 -13.3 0.4 30.9 -9.5 45.7 59.2 -13.5 Pass	SS	Pass	-13.5	59.2	45.7	-9.5	30.9	0.4	-13.3	37.2	37.2	33.17	33.92	V	3120
H 38.23 40.98 40.6 41.0 -13.3 0.4 32.2 -9.5 50.8 54.0 -3.2 Pass	ss	Pass	-3.2	54.0	50.8	-9.5	32.2	0.4	-13.3	41.0	40.6	40.98	38.23	Н	2540
3510 V 32.17 36.71 40.1 40.1 -1.13.3 0.4 32.2 -9.5 49.9 54.0 -4.1 Pass															3510
H 29.84 31.41 32.8 32.8 -13.3 0.1 33.0 -9.5 43.1 54.0 -10.9 Pass	ss	Pass		54.0	43.1	-9.5	33.0	0.1	-13.3	32.8	32.8	31.41	29.84	Н	2000
3900		Pass	-13.8	54.0	40.2	-9.5	33.0	0.1	-13.3	29.9	29.9	29.73	29.11	V	3900

The EUT was tested on all three axis
The EUT was tested with fresh batteries
The spectrum was searched from 30 MHz to 6 GHz

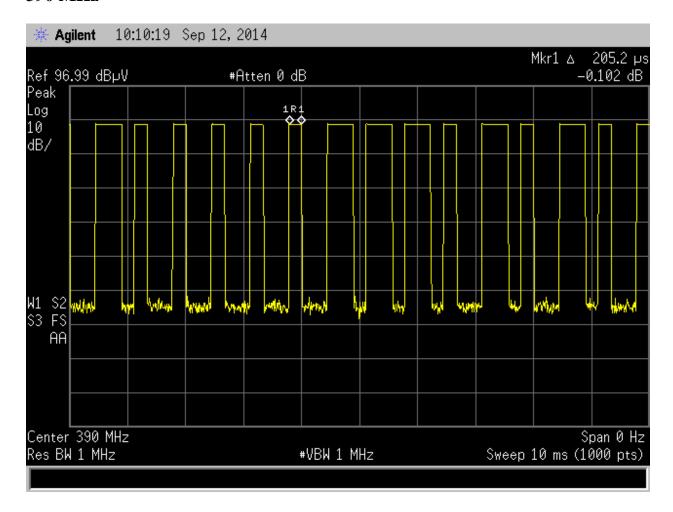
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
Three Button Remote Control 315390C5	6502-1

Narrow Pulses



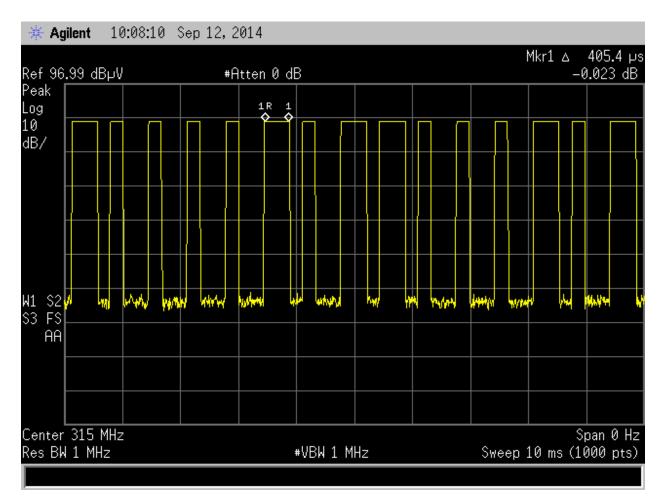
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
Three Button Remote Control 315390C5	6502-1

Narrow Pulses



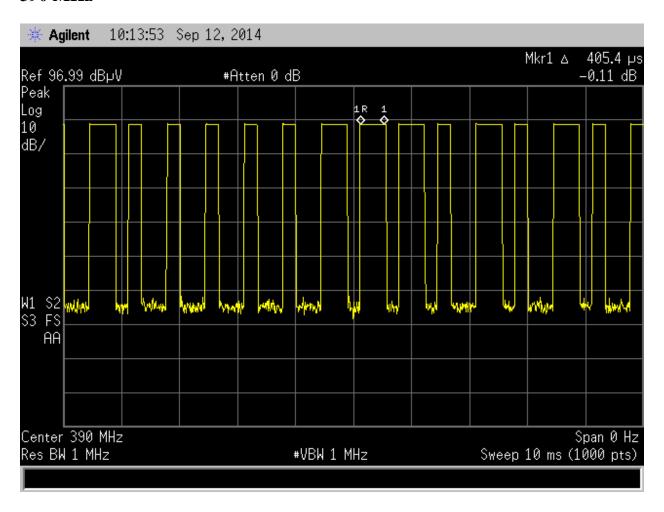
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
Three Button Remote Control 315390C5	6502-1

Wide Pulses



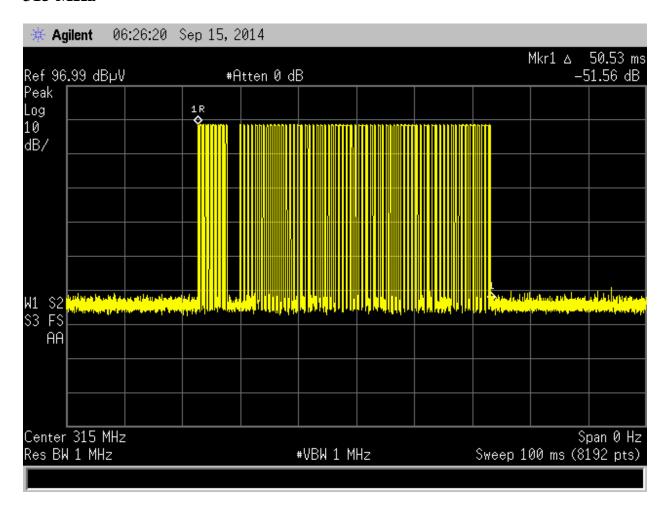
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
Three Button Remote Control 315390C5	6502-1

Wide Pulses



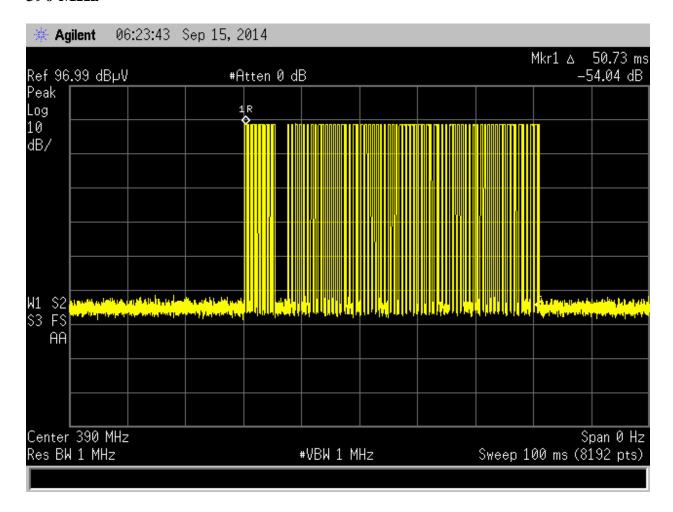
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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Three Button Remote Control 315390C5	6502-1

100 ms



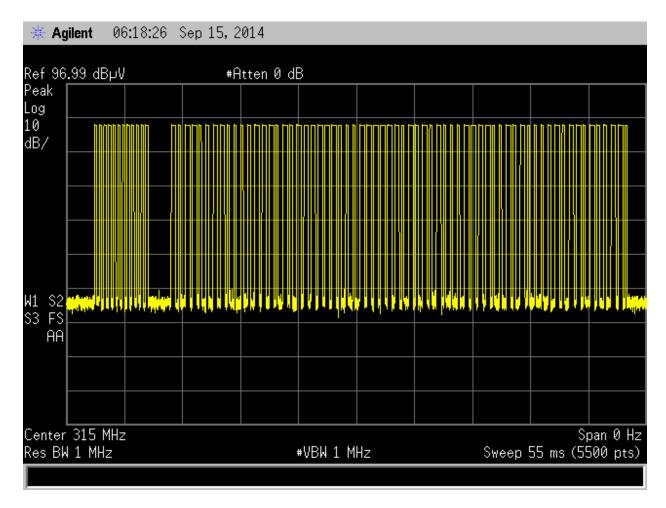
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
Three Button Remote Control 315390C5	6502-1

100 ms



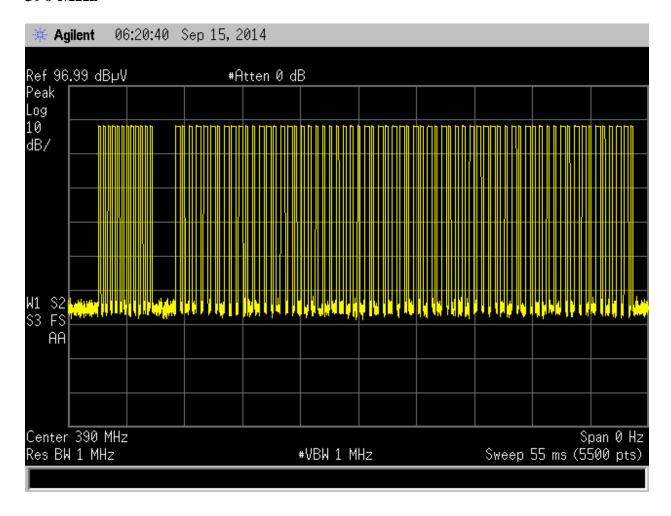
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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55 ms



DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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55 ms



DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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315 MHz Duty Cycle Correction 100 ms window 42 wide pulses (t = 14.4 ms) 36 narrow pulses (t = 8.4 ms) 22.8 ms total time on 20*log (22.8/100) = -12.8 dB

390 MHz Duty Cycle Correction 100 ms window 48 wide pulses (t = 12 ms) 30 narrow pulses (t = 9.6 ms) 21.6 ms total time on 20*log (21.6/100) = -13.3 dB

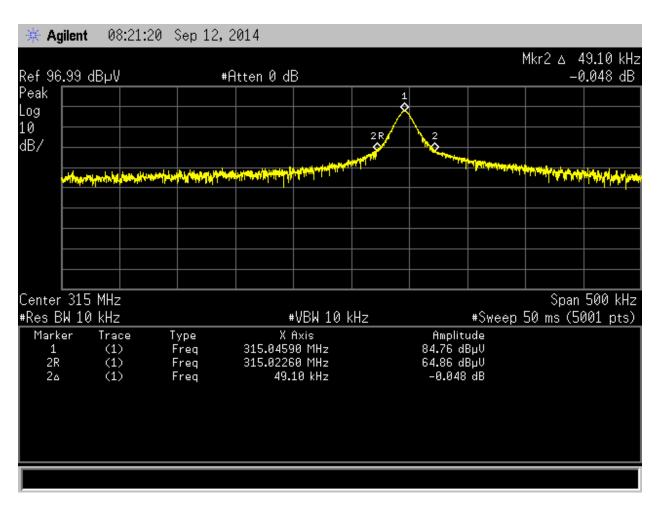
DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
Genie Company	Project Number:
Three Button Remote Control 315390C5	6502-1

Occupied Bandwidth

Minimum Standard:

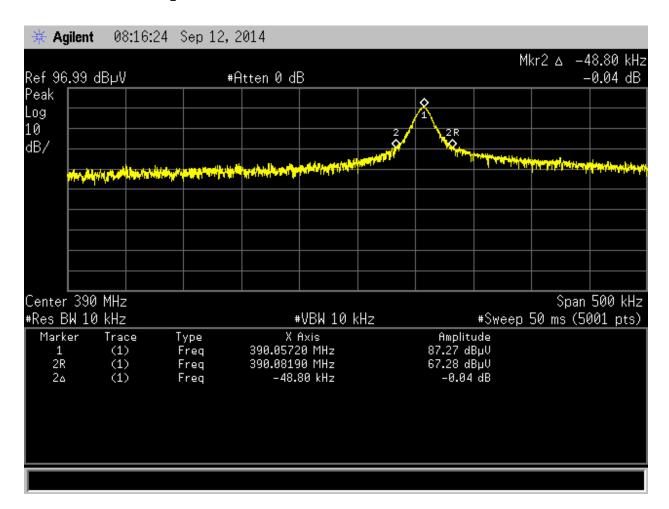
15.231 (c) The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

Test Data - Occupied Bandwidth 315 MHz



DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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Test Data - Occupied Bandwidth 390 MHz



DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
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Restricted Bands of Operation

15.205 Restricted bands of operation.

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT				
Genie Company	Project Number:			
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Spurious Emissions

Minimum Requirements:

Radiated emission limits 15.109

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (microvolts/meter)
30-88	100
88-216	150
216-960	200
Above 960	500

Test Result: Complies; highest spurious emission level recorded from 30 MHz - 6 GHz is 39.93 dBuV at 2.459 GHz.

15.209 Radiated emission limits; general requirements.

(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT				
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Radiated Emissions Test Data 15.109

Test Result: Complies, see attached data.

