T.E.S.T.

TECHNOLOGIES, INC.

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

October 29, 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 315390C3 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 315390C3 | 6501-2 |

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Test Information

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

Report Issue Date: October 29, 2014

Report Number: 6501-2-102914- 15.231 (Edition 1)

Project Number: 6501-2

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

Product Three Button Remote Control 315/390 MHz

Model: 315390C3

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

The testing performed by Diversified TEST 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: 315390C3.

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: Date: October 21, 2014 Signature: Prasanna Gautam Technical Associate

Reviewed by: Signature: Date: October 21, 2014

Steve Frierson Technical Lab Manager

Authorized by: Date: October 21, 2014 Signature:

Annelle Frierson Vice-President

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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 |
| | 1 | |

| X | 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

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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 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 |
| 1916. 110pc, O11 77000 |

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Test Setup Photographs

1.1 Radiated Emissions / Occupied Bandwidth



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1.2. Radiated Emissions above 1 GHz



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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 TEST Technologies, Inc. Open Area Test Site☑ Diversified TEST 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

DTT 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 | 10/3/14 |
| 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 | | |

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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.

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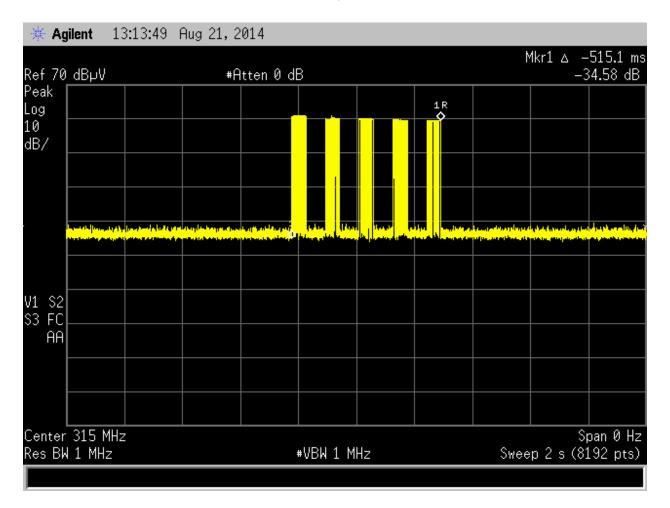
Rationale for Compliance with Transmission Requirements

| 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 alarm condition Non-Alarm Device | | |

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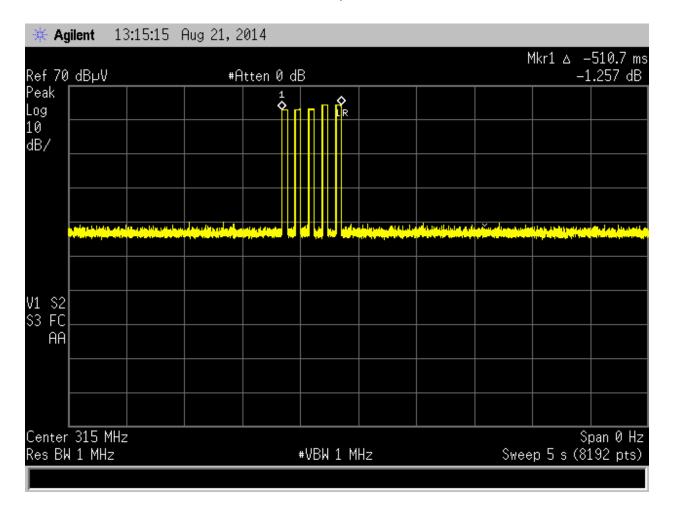
Deactivation Time

Test Data: Deactivation Time 2 seconds, 315 MHz



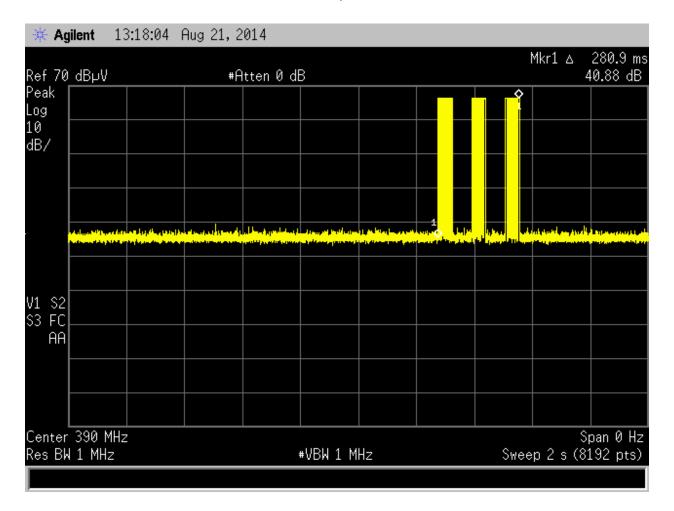
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | |
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Test Data: Deactivation Time 5 seconds, 315 MHz



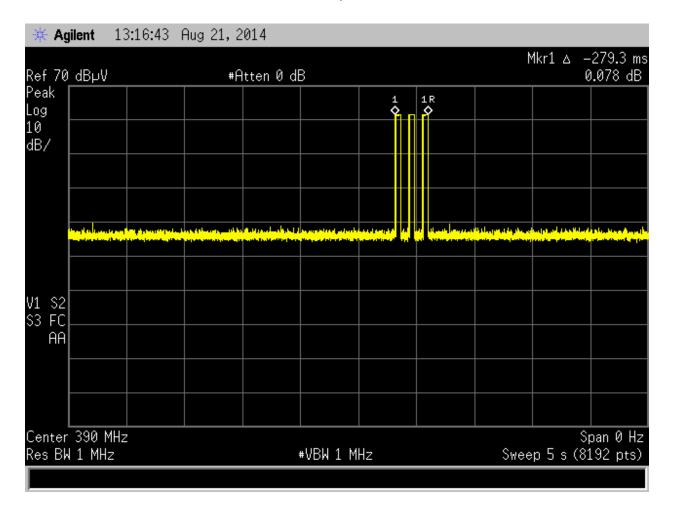
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | |
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Test Data: Deactivation Time 2 seconds, 390 MHz



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Test Data: Deactivation Time 5 seconds, 390 MHz



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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 | Field Strength | Field Strength |
|-----------|------------------|----------------|
| (MHz) | $(\mu V/m @ 3m)$ | (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.

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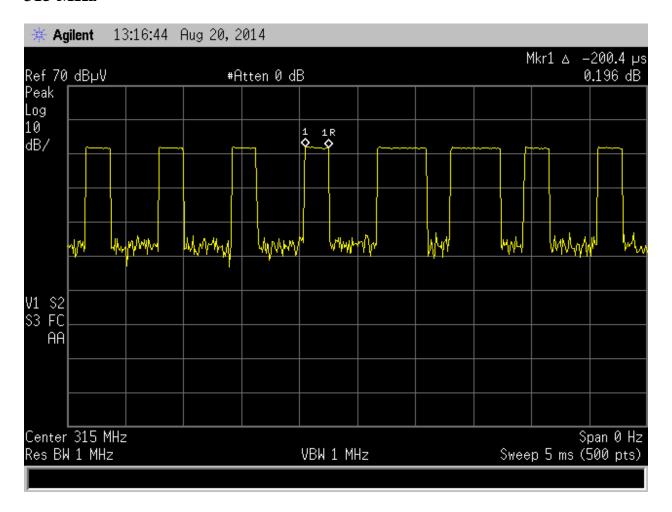
Test Data: Radiated Emissions

| Freq. (MHz) | Antenna Polarization | | Meter Readii | ng (dBuV) | | LESS Duty Factor (dB) | ADD Cable Factor (dB) | ADD Antenna Factor (dB) | LESS 1 m to 3 m Distance Factor | Corrected Reading | FCC Spec Limit | Margin (dB) | Results | Comments |
|--------------------------------------|---|--|---|--|--|---|---|--|---|--|--|---|---|---|
| (IVIIIZ) | FOIBITZBUOII | Х | Y | Z | Max | ractor (ub) | ractor (ub) | ractor (ub) | (dB) | (dBuV/m) | (dBuV/m) | (UB) | | |
| 315 | Н | 53.8 | 38.96 | 43.1 | 53.8 | -13.3 | 7.2 | 15.1 | 0.0 | 62.8 | 75.6 | -12.8 | Pass | |
| 313 | V | 31.72 | 49.56 | 49.3 | 49.6 | -13.3 | 7.2 | 15.1 | 0.0 | 58.5 | 75.6 | -17.1 | Pass | |
| 630 | Н | 22.94 | 21.29 | 21.6 | 22.9 | -13.3 | 12.4 | 19.7 | 0.0 | 41.8 | 55.6 | -13.9 | Pass | |
| 030 | V | 21.13 | 22.77 | 20.8 | 22.8 | -13.3 | 12.4 | 19.7 | 0.0 | 41.6 | 55.6 | -14.0 | Pass | |
| 945 | Н | 21.72 | 21.1 | 21.7 | 21.7 | -13.3 | 17.6 | 23.5 | 0.0 | 49.5 | 55.6 | -6.1 | Pass | Noise Floor |
| 3.3 | V | 21.35 | 21.6 | 21.8 | 21.8 | -13.3 | 17.6 | 23.5 | 0.0 | 49.7 | 55.6 | -6.0 | Pass | Noise Floor |
| 1260 | Н | 34.3 | 28.49 | 30.5 | 34.3 | -13.3 | 0.3 | 25.0 | -9.5 | 36.8 | 55.6 | -18.8 | Pass | |
| 1200 | V | 30.48 | 33.17 | 34.3 | 34.3 | -13.3 | 0.3 | 25.0 | -9.5 | 36.8 | 55.6 | -18.8 | Pass | |
| 1575 | Н | 30.75 | 31.16 | 31.0 | 31.2 | -13.3 | 0.5 | 26.3 | -9.5 | 35.2 | 54.0 | -18.8 | Pass | Noise Floor |
| 1373 | V | 31.49 | 33.47 | 33.0 | 33.5 | -13.3 | 0.5 | 26.3 | -9.5 | 37.5 | 54.0 | -16.5 | Pass | |
| 1890 | Н | 31 | 31.42 | 31.2 | 31.4 | -13.3 | 0.4 | 28.1 | -9.5 | 37.1 | 55.6 | -18.5 | Pass | Noise Floor |
| 1850 | V | 32.43 | 34.02 | 33.4 | 34.0 | -13.3 | 0.4 | 28.1 | -9.5 | 39.7 | 55.6 | -15.9 | Pass | |
| 2205 | Н | 31.01 | 31.16 | 31.9 | 31.9 | -13.3 | 0.2 | 28.9 | -9.5 | 38.2 | 54.0 | -15.8 | Pass | Noise Floor |
| 2203 | V | 31.2 | 31.58 | 30.8 | 31.6 | -13.3 | 0.2 | 28.9 | -9.5 | 37.9 | 54.0 | -16.1 | Pass | Noise Floor |
| 2520 | Н | 32.27 | 33.71 | 34.4 | 34.4 | -13.3 | 0.3 | 29.3 | -9.5 | 41.2 | 55.6 | -14.4 | Pass | |
| 2320 | V | 33.75 | 33.14 | 34.3 | 34.3 | -13.3 | 0.3 | 29.3 | -9.5 | 41.1 | 55.6 | -14.5 | Pass | |
| 2835 | Н | 31.56 | 31.74 | 34.0 | 34.0 | -13.3 | 0.3 | 30.1 | -9.5 | 41.6 | 54.0 | -12.4 | Pass | |
| 2033 | ٧ | 32.35 | 33.04 | 32.0 | 33.0 | -13.3 | 0.3 | 30.1 | -9.5 | 40.6 | 54.0 | -13.4 | Pass | |
| 2450 | Н | 31.44 | 31.87 | 31.0 | 31.9 | -13.3 | 0.4 | 31.0 | -9.5 | 40.5 | 55.6 | -15.1 | Pass | Noise Floor |
| 3150 | ٧ | 31.67 | 31.51 | 31.7 | 31.7 | -13.3 | 0.4 | 31.0 | -9.5 | 40.3 | 55.6 | -15.3 | Pass | Noise Floor |
| | | | | | | | | | | | | | | |
| Freq. (MHz) | Antenna Polarization | Meter Reading (dBuV) | | | LESS Duty Factor (dB) | ADD Cable | ADD Cable Factor (dB) | ADD Antenna Factor (dB) | LESS 1 m to 3 m Distance Factor | Corrected Reading | FCC Spec Limit | Margin (dB) | Results | Comments |
| (| | Х | Υ | Z | Max | | | | (dB) | (dBuV/m) | (dBuV/m) | (/ | | |
| 390 | Н | 60.75 | 46 | 52.0 | 60.8 | -12.9 | 9.5 | 15.8 | 0.0 | 73.2 | 79.2 | -6.1 | Pass | |
| 330 | V | 40.97 | | | | | | | | | | | | |
| 780 | | 40.97 | 57.63 | 56.5 | 57.6 | -12.9 | 9.5 | 15.8 | 0.0 | 70.0 | 79.2 | -9.2 | Pass | |
| | Н | 28.09 | 57.63 21.62 | 56.5 26.3 | 57.6 28.1 | -12.9 -12.9 | | | | 70.0 53.8 | 79.2 59.2 | -9.2 -5.4 | | |
| | H V | | | | | | 9.5 | 15.8 | 0.0 | | | | Pass | |
| 1170 | | 28.09 | 21.62 | 26.3 | 28.1 | -12.9 | 9.5 17.0 | 15.8 21.6 | 0.0 | 53.8 | 59.2 | -5.4 | Pass Pass | Noise Floor |
| 1170 | V H V | 28.09 22.05 | 21.62 24.3 | 26.3 21.6 | 28.1 24.3 | -12.9 -12.9 | 9.5 17.0 17.0 | 15.8 21.6 21.6 | 0.0 0.0 0.0 | 53.8 50.0 | 59.2 59.2 | -5.4 -9.2 -20.1 -19.9 | Pass Pass Pass | Noise Floor Noise Floor |
| | V H V H | 28.09 22.05 31.33 | 21.62 24.3 30 | 26.3 21.6 30.2 | 28.1 24.3 31.3 | -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 | 15.8 21.6 21.6 24.7 | 0.0 0.0 0.0 -9.5 | 53.8 50.0 33.9 | 59.2 59.2 54.0 | -5.4 -9.2 -20.1 | Pass Pass Pass Pass | |
| 1170 1560 | V H V | 28.09 22.05 31.33 30.37 | 21.62 24.3 30 31.49 | 26.3 21.6 30.2 30.9 | 28.1 24.3 31.3 31.5 | -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 | 15.8 21.6 21.6 24.7 24.7 | 0.0 0.0 0.0 -9.5 -9.5 | 53.8 50.0 33.9 34.1 | 59.2 59.2 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 | Pass Pass Pass Pass Pass | |
| 1560 | V H V H | 28.09 22.05 31.33 30.37 34.21 | 21.62 24.3 30 31.49 30.9 | 26.3 21.6 30.2 30.9 31.5 | 28.1 24.3 31.3 31.5 34.2 | -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 | 15.8 21.6 21.6 24.7 24.7 26.2 | 0.0 0.0 0.0 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 | 59.2 59.2 54.0 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 -15.5 | Pass Pass Pass Pass Pass Pass Pass | |
| | V H V H V V | 28.09 22.05 31.33 30.37 34.21 32.09 | 21.62 24.3 30 31.49 30.9 37.66 | 26.3 21.6 30.2 30.9 31.5 37.5 | 28.1 24.3 31.3 31.5 34.2 37.7 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 0.5 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 | 59.2 59.2 54.0 54.0 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor |
| 1560 | V H V H V | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 | 21.62 24.3 30 31.49 30.9 37.66 41.23 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 0.5 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 | 59.2 59.2 54.0 54.0 54.0 54.0 59.2 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor |
| 1560 | V H V H V V | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 | 21.62 24.3 30 31.49 30.9 37.66 41.23 40.03 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 0.5 0.5 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 28.4 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 | 59.2 59.2 54.0 54.0 54.0 54.0 59.2 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor |
| 1560 1950 2340 | V H V V H | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 31.86 | 21.62 24.3 30 31.49 30.9 37.66 41.23 40.03 31.5 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 31.8 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 31.9 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 0.5 0.5 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 28.4 29.0 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 38.8 | 59.2 59.2 54.0 54.0 54.0 54.0 59.2 59.2 59.2 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 -15.2 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor Noise Floor |
| 1560 | V H V H V V H V V | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 31.86 31.23 | 21.62 24.3 30 31.49 30.9 37.66 41.23 40.03 31.5 31.56 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 31.8 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 31.9 31.6 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 0.5 0.5 0.5 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 28.4 29.0 29.0 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 38.8 38.5 | 59.2 59.2 54.0 54.0 54.0 54.0 59.2 59.2 59.2 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 -15.2 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor Noise Floor |
| 1560 1950 2340 2730 | V H V H V V H V V H H V V H H V V H M V V H M V V H M V M M M M | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 31.86 31.23 33.7 | 21.62 24.3 30 31.49 30.9 37.66 41.23 40.03 31.5 31.56 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 31.8 31.4 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 31.9 31.6 36.5 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 0.5 0.5 0.5 0.5 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 28.4 29.0 29.0 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 38.8 38.5 44.1 | 59.2 59.2 54.0 54.0 54.0 54.0 59.2 59.2 54.0 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 -15.2 -15.5 -9.9 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor Noise Floor |
| 1560 1950 2340 | V H V H V H V V H V V | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 31.86 31.23 33.7 36.02 | 21.62 24.3 30 31.49 30.9 37.66 41.23 40.03 31.5 31.56 36.51 36.28 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 31.8 31.4 35.7 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 31.9 31.6 36.5 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.3 0.5 0.5 0.5 0.5 0.5 0.2 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 28.4 29.0 29.0 29.8 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 38.8 38.5 44.1 43.9 | 59.2 59.2 54.0 54.0 54.0 54.0 59.2 59.2 54.0 54.0 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 -15.2 -15.5 -9.9 -10.1 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor Noise Floor |
| 1560 1950 2340 2730 3120 | V H V H V V H V V H H V V H H V V H M V V H M V V H M V M M M M | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 31.86 31.23 33.7 36.02 | 21.62 24.3 30 31.49 30.9 37.66 41.23 40.03 31.5 31.56 36.51 36.28 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 31.8 31.4 35.7 36.1 38.6 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 31.9 31.6 36.5 36.3 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.5 0.5 0.5 0.5 0.5 0.3 0.3 0.3 | 15.8 21.6 21.6 24.7 24.7 26.2 28.4 28.4 29.0 29.0 29.8 30.9 | 0.0 0.0 0.0 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 -9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 38.8 38.5 44.1 43.9 50.3 | 59.2 59.2 54.0 54.0 54.0 54.0 59.2 59.2 54.0 54.0 54.0 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 -15.2 -15.5 -9.9 -10.1 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor Noise Floor |
| 1560 1950 2340 2730 | V H V H V H V V H V V H V V H V V V H V | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 31.86 31.23 33.7 36.02 35.71 35.62 | 21.62 24.3 30 31.49 37.66 41.23 40.03 31.5 31.56 36.51 36.28 41.4 34.3 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 31.4 35.7 36.1 38.6 40.5 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 31.9 31.6 36.5 36.3 41.4 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 17.0 0.3 0.5 0.5 0.5 0.5 0.5 0.3 0.3 0.3 0.4 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 29.0 29.0 29.8 30.9 30.9 | 0.0 0.0 0.0 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 38.8 38.5 44.1 43.9 50.3 49.4 | 59.2 59.2 54.0 54.0 54.0 59.2 59.2 54.0 54.0 54.0 54.0 54.0 59.2 59.2 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 -15.5 -9.9 -10.1 -8.9 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor Noise Floor |
| 1560 1950 2340 2730 3120 | V H V H V H V H M V H M V H M V H M V H M V H M V H M V H M V M M V M M V H M V M M V M V | 28.09 22.05 31.33 30.37 34.21 32.09 34.07 41.39 31.86 31.23 33.7 36.02 35.71 35.62 30.82 | 21.62 24.3 30 31.49 30.9 37.66 41.23 40.03 31.5 31.56 36.51 36.28 41.4 34.3 32.38 | 26.3 21.6 30.2 30.9 31.5 37.5 37.1 41.5 31.4 35.7 36.1 38.6 40.5 | 28.1 24.3 31.3 31.5 34.2 37.7 41.2 41.5 31.6 36.5 36.3 41.4 40.5 | -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 -12.9 | 9.5 17.0 17.0 0.3 0.5 0.5 0.5 0.5 0.5 0.3 0.3 0.2 0.2 | 15.8 21.6 21.6 24.7 24.7 26.2 26.2 28.4 29.0 29.0 29.8 29.8 30.9 30.9 32.2 | 0.0 0.0 0.0 0.0 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 | 53.8 50.0 33.9 34.1 38.5 42.0 47.7 48.0 38.8 38.5 44.1 43.9 50.3 49.4 42.6 | 59.2 59.2 54.0 54.0 54.0 59.2 59.2 59.2 54.0 54.0 54.0 54.0 54.0 54.0 54.0 54.0 | -5.4 -9.2 -20.1 -19.9 -15.5 -12.0 -11.5 -11.2 -15.5 -9.9 -10.1 -8.9 -9.8 -11.4 | Pass Pass Pass Pass Pass Pass Pass Pass | Noise Floor Noise Floor Noise Floor Noise Floor |

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

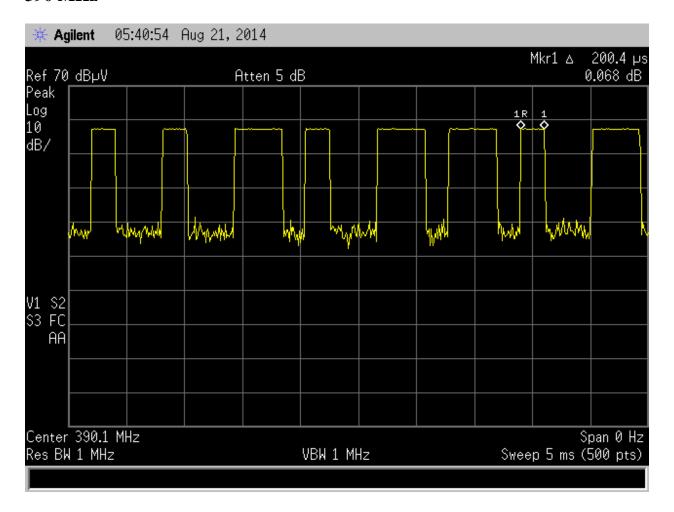
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | | |
|---|--|--|--|--|--|
| Genie Company Project Number: | | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | | |

Narrow Pulses



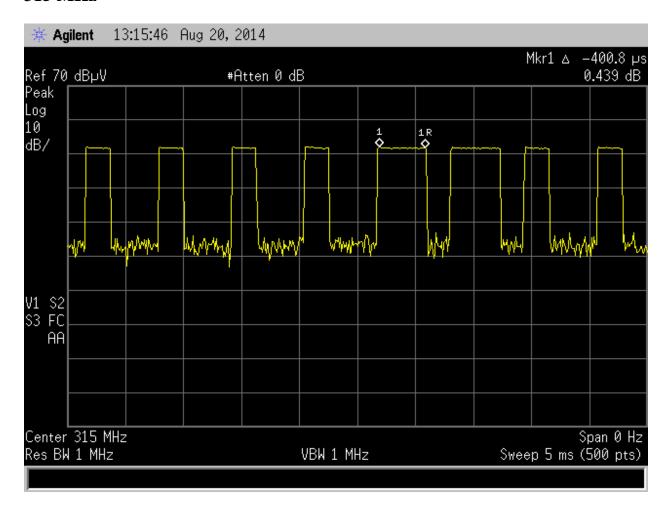
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | |
|---|--|--|--|--|
| Genie Company Project Number: | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | |

Narrow Pulses



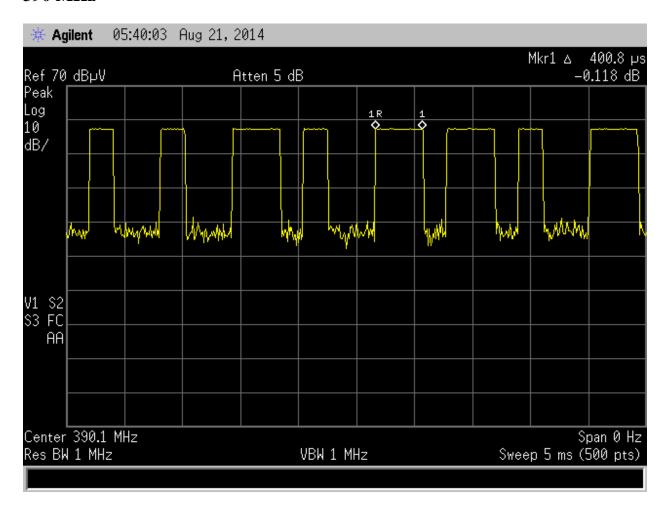
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | |
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| Genie Company Project Number: | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | |

Wide Pulses



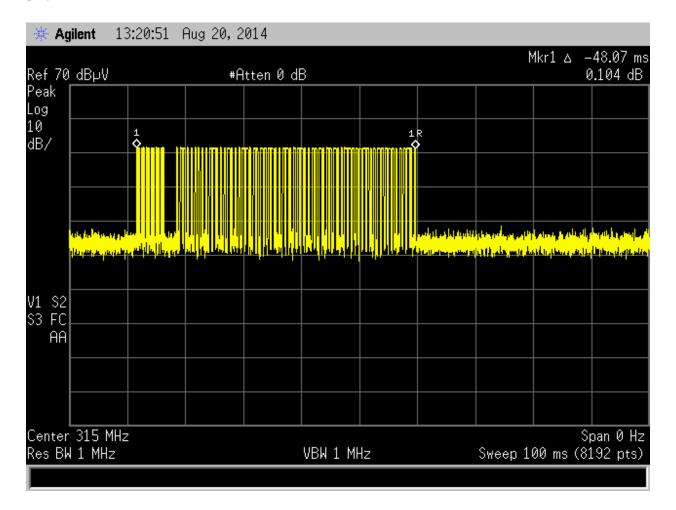
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | |
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| Genie Company Project Number: | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | |

Wide Pulses



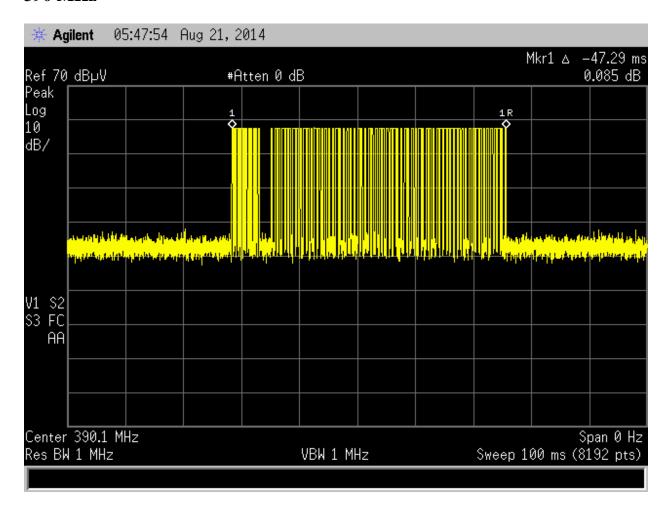
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | |
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| Genie Company Project Number: | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | |

100 ms



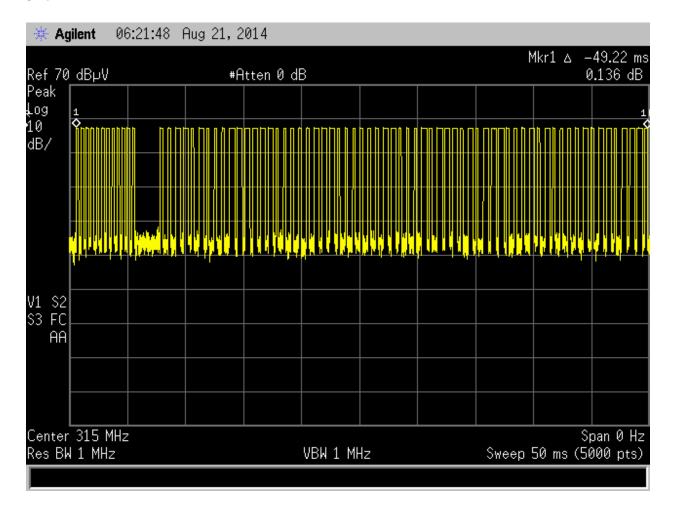
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | |
|---|--|--|--|--|
| Genie Company Project Number: | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | |

100 ms



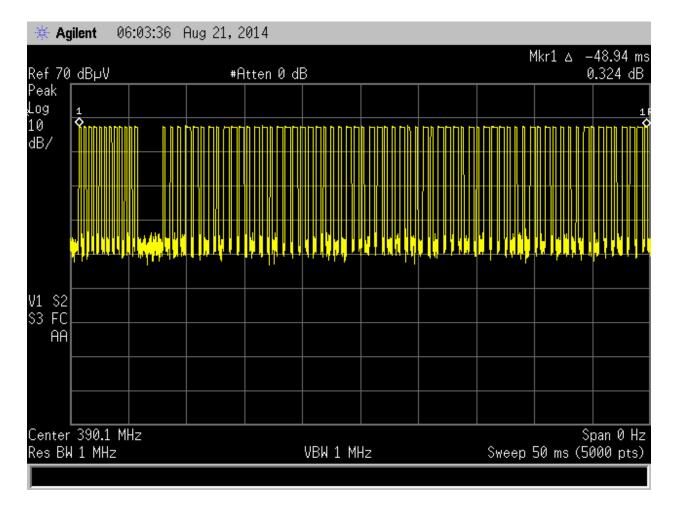
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | | |
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| Genie Company Project Number: | | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | | |

50 ms



| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | | |
|---|--------|--|--|--|--|
| Genie Company Project Number: | | | | | |
| Three Button Remote Control 315390C3 | 6501-2 | | | | |

50 ms



| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | | | |
|---|--|--|--|--|
| Genie Company Project Number: | | | | |
| Three Button Remote Control 315390C3 6501-2 | | | | |

315 MHz Duty Cycle Correction 100 ms window 30 wide pulses (t = 12 ms) 48 narrow pulses (t = 9.6 ms) 21.6 ms total time on 20*log(22.6/100) = -13.3 dB

390 MHz Duty Cycle Correction 100 ms window 35 wide pulses (t = 14 ms) 43 narrow pulses (t = 806 ms) 22.6 ms total time on 20*log(22.6/100) = -12.9 dB

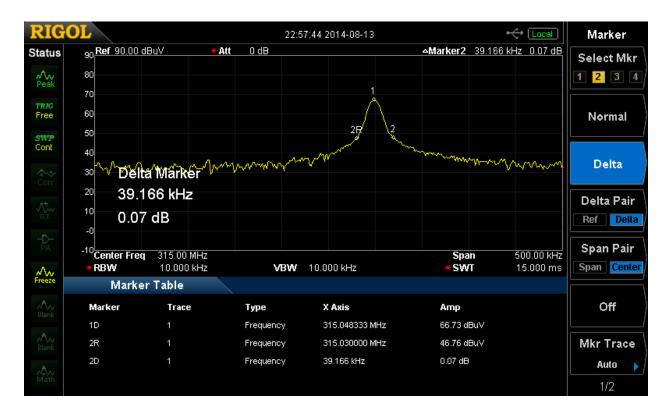
| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | |
|---|-----------------|--|
| Genie Company | Project Number: | |
| Three Button Remote Control 315390C3 | 6501-2 | |

Occupied Bandwidth

Minimum Standard:

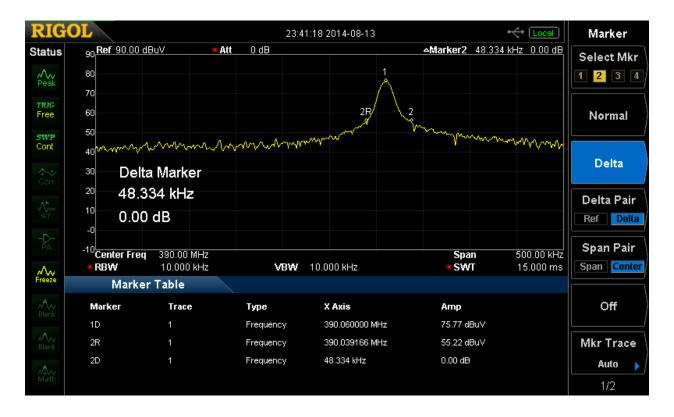
15.231 (c) The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from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

Test Data - Occupied Bandwidth 315 MHz



| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | |
|---|-----------------|--|
| Genie Company | Project Number: | |
| Three Button Remote Control 315390C3 | 6501-2 | |

Test Data - Occupied Bandwidth 390 MHz



| DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT | | |
|---|-----------------|--|
| Genie Company | Project Number: | |
| Three Button Remote Control 315390C3 | 6501-2 | |

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: | |
| Three Button Remote Control 315390C3 | 6501-2 | |

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 27.62 dBuV at 5.025 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:

| radiation or rain that of the control of the cont | | |
|--|-----------------------------------|-------------------------------|
| 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 | | |
|---|-----------------|--|
| Genie Company | Project Number: | |
| Three Button Remote Control 315390C3 | 6501-2 | |

Radiated Emissions Test Data 15.109

Test Result: Complies, see attached data.

