

Certificate Of Conformity

Date: July 29, 2005

Manufacturer's Name: GENIE Company
Manufacturer's Address: 22790 Lake Park Boulevard
Alliance, OH 44601
Type of Equipment: AC ScrewDrive with software control
Model: 2060L, 3060L

FCC ID! B8Q315390R 2

Rules and Regulations:

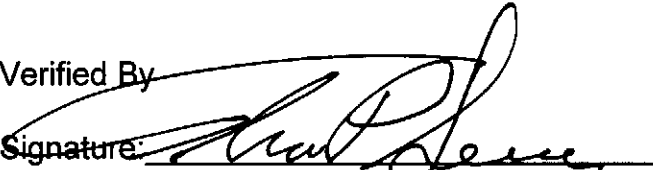
United States Code of Federal Regulations 47 Part 15
Electromagnetic Emissions, Class B Devices

Standards:

ANSI C63.4-1992, Methods of Measurement of Radio-Noise
Emissions from Low-Voltage Electrical Equipment in the
Range of 9kHz to 40GHz.

Section 11.0 Measurement of Information Technology Equipment (ITE)

Verified By

Signature: 

Thomas P. Sims
Diversified T.E.S.T. Technologies, Inc.
P.O. Box 8, 556 Route 222
Groton, NY 13073
Phone: 607-898-4218
Fax: 607-898-4830

NVLAP[®]
NVLAP Lab Code 200340-0

Conf # EA 484811



556 Route 222 • P.O. Box 8 • Groton, New York 13073 • 1-800-724-6452 • FAX: 607-898-4830 • 607-898-4218

August 15, 2005

Mr. Grant Carlson
GENIE Company
22790 Lake Park Boulevard
Alliance, OH 44601

Dear Mr. Carlson:

Enclosed is the test report for the GENIE Company AC ScrewDrive models 2060L and 3060L tested with a software control at our facility, located at 556 Route 222 in Groton, NY. This facility is on file with the FCC per CFR 47 2.948 (Site File Number 31040/SIT) and is NVLAP accredited.

As narrated in the report, the product configuration meets the requirements of the FCC per CFR 47 Part 15 Class B for Unintentional Radiators.

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 607-898-4218. Please feel free to visit our website at www.dttlabs.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Shaun Hotaling", written over the word "Sincerely,".

Shaun Hotaling
Technical Associate

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
The Genie Company Genie AC ScrewDrive with software control	Project Number: 5797

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

The Genie Company

Genie AC ScrewDrive with software control

Project Number:

5797

Test Report

Laboratory

Diversified TEST Technologies, Inc.

556 Route 222 – PO Box 8

Groton, NY 13073

607-898-4218

Manufacturer

The Genie Company

22790 Lake Park Boulevard

Alliance, OH 44601

Report Issue Date: **July 19, 2005**

Project Number: **5797**

Date Received: **July 11, 2005**

Date Tested: **July 13-14, 2005**

Product: **Genie AC ScrewDrive with software control**

Model: **2060L, 3060L**

Sample S/N:

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 standard(s) specified on page 3 of the test report. The results in this test report apply only to the product denoted above. The manufacturer is 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 on page 3 of this report.

Complied by:

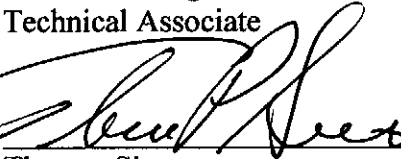
Signature: 

Shaun Hotaling

Technical Associate

Date: 8/15/05

Reviewed by:

Signature: 

Thomas Sims

Engineer

Date: 8/15/05

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

The Genie Company

Genie AC ScrewDrive with software control

Project Number:

5797

Emissions Test Regulations

The emissions tests were performed according to the following regulations:

☐ EN 50081-1:1992

☐ EN 50081-2:1995

☐ EN 55011:1998 / A1:1999 / A2:2001

☐ Group 1

☐ Group 2

☐ Class A

☐ Class B

☐ EN 55013:1990 / A12:1994 / A13:1996 / A14:1999

☐ EN 55014:1993 / A1: 1997

☐ Household appliances and similar

☐ Portable tools

☐ Semiconductor devices

☐ EN 55022:1998

☐ Class A

☐ Class B

☒ FCC Part 15

☐ Class A

☒ Class B

☒ Certification

☐ Verification

☐ Declaration of Conformity

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT**The Genie Company**

Genie AC ScrewDrive with software control

Project Number:

5797

Emissions Test Conditions: RADIATED EMISSIONS

The Radiated Emissions measurements, in the frequency range of 30 MHz – 1000 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

Test equipment used:

Manufacturer	Model	Description	Serial #
Hewlett Packard	8593EM	Spectrum Analyzer	3536A00139
Hewlett Packard	8447E	Amplifier	1937A01028
Hewlett Packard	7550A	Plotter	2407A00476
Electro-Metrics	BIA-25	Biconical Antenna, 20-220 MHz	001
Electro-Metrics	LPA-25	Log Periodic Antenna 200-1000 MHz	1242
EMCO		12-foot diameter non-conductive wooden turntable	
		Co-ax Cable, 100-foot RG 8/U, 20-foot RG 223/U	
		30-meter open field test range, grounded with ½" x ½" hardware cloth	
		AC supply cord, 100-foot, grounded	
		100-foot signal cable for remote testing	

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT**The Genie Company**

Genie AC ScrewDrive with software control

Project Number:

5797

Emissions Test Conditions: CONDUCTED EMISSIONS

The Conducted Emissions measurements were performed at the following test location:

- ☐ Diversified TEST Technologies, Inc. Open Area Test Site
☒ Diversified TEST Technologies, Inc. Lab

Test equipment used:

Manufacturer	Model	Description	Serial #
Rohde & Schwarz	ESH3	Receiver	892473/019
Electro-Metrics	25/2	50-ohm LISN	1017
		Co-ax Cable (LISN to receiver), 20-foot RG-223/U	
		Non-conductive wooden table, 0.8 meters off ground grid	

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
The Genie Company Genie AC ScrewDrive with software control	Project Number: 5797

Equipment Under Test (EUT) Test Operation Mode – Emissions Tests:

The device under test was operated under the following conditions during emissions testing:

- ☒ Standby
- ☒ Normal Operating Mode

Description / Configuration of the device under test:

The Genie AC ScrewDrive is a garage door opener. The device was tested with a software control.

Rationale for EUT setup / configuration:

ANSI C63.4

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

The Genie Company

Genie AC ScrewDrive with software control

Project Number:

5797

Emissions Test Results:

Radiated Emissions 30 MHz – 1000 MHz

The requirements were ☒ MET ☐ NOT MET

Conducted Emissions 150 kHz – 30 MHz

The requirements were ☒ MET ☐ NOT MET

Summary:

The requirements according to the technical regulations are

☒ met
☐ not met.

The device under test does

☒ fulfill the general approval requirements mentioned on page 3.
☐ not fulfill the general approval requirements mentioned on page 3.

Testing Start Date: July 13, 2005

Testing End Date: July 14, 2005

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

The Genie Company
Genie AC ScrewDrive with software control

Project Number:
5797

Test Setup Photographs

RADIATED EMISSIONS



Photograph 1: Radiated Emissions



Photograph 2: Radiated Emissions

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

The Genie Company
Genie AC ScrewDrive with software control

Project Number:
5797

Test Setup Photographs

CONDUCTED EMISSIONS



Photograph 1: Conducted Emissions



Photograph 2: Conducted Emissions

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

The Genie Company

Genie AC ScrewDrive with software control

Project Number:

5797

Appendix A

Test Data Sheets

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

The Genie Company

Genie AC ScrewDrive with software control

Project Number:

5797

Radiated Emissions Test Data

8 pages of data sheets to follow.

סקר

START

ACTV DET: PEAK

CLEAR

WHITE B

MKR 922.0 MHz

24.49 dB μ V/m

LOG

10

dB/

#ATTN

0 dB

ANT: Vertical operating mode screwdrive w/software control

MAX

HOLD 3

VIEW B

BLANK B

VA NB

SC FC

ACORR

Trace

A B C

More

1 of 4

START 200.0 MHz

IF BW 120 KHZ

AVG BW 300 KHz

STOP 1.0000 GHz

SWP 167 msec

RED: 114 on sheet off

06:01:02 JUL 14, 2005

START
200.0 MHz

ACTV DET: PEAK
MEAS DET: PEAK GP AVG
MKR 922.0 MHz
25.98 dB μ V/m

CLEAR
WRITE B

LOG
10
dB/
#ATN
0 dB

REF 70.0 dB μ V/m

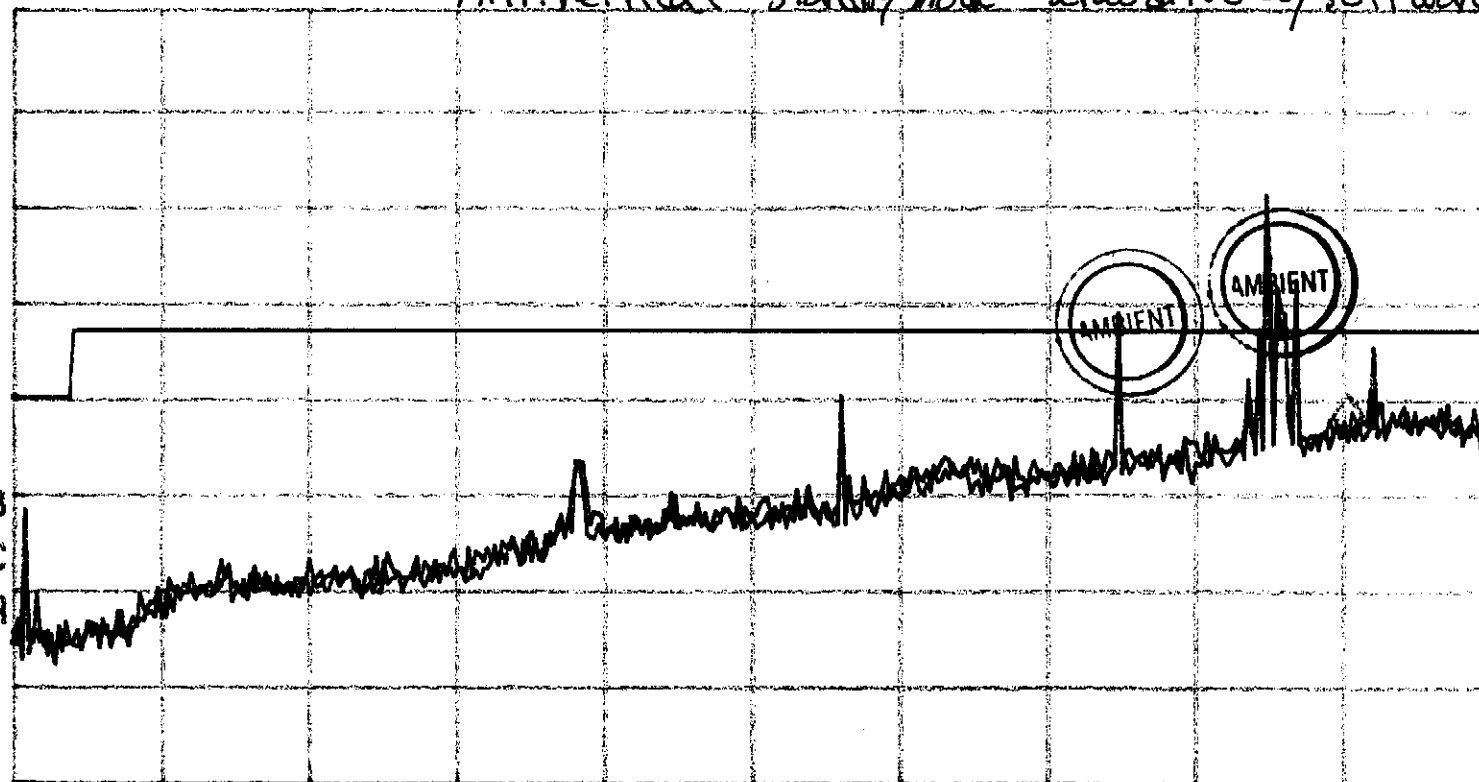
ANT: Vertical standby mode screwdriver w/ software control

MAX
HOLD B

VIEW B

BLANK B

VA WB
SC FC
ACORR



Trace
A B C

More
1 of 4

START 200.0 MHz

IF BW 120 KHz

AVG BW 300 KHz

STOP 1.0000 GHz

SWP 167 msec

RED:ENT ON BLUE:ENT off

05:52:35 JUL 14, 2005

START
200.0 MHz

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 600.0 MHz
17.36 dB μ V/m

CLEAR
WRITE B

LOG REF 70.0 dB μ V/m
10
dB/
#ATN
0 dB

Ant: Horizontal operating mode screwdriver w/software control

MAX

HOLD B

VIEW B

BLANK B

Trace

A B C

More

1 of 4

START 200.0 MHz

IF BW 120 kHz

AVG BW 300 kHz

STOP 1.0000 GHz

SWP 167 msec

RED' out ON Blue' out off

05:25:24 JUL 14, 2005

START
200.0 MHz

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 600.0 MHz
18.31 dB μ V/m

CLEAR
WRITE B

LOG REF 70.0 dB μ V/m
10
dB/
#ATN
0 dB

ANT: Horizontal standby mode screwdriver w/software control

MAX
HOLD B

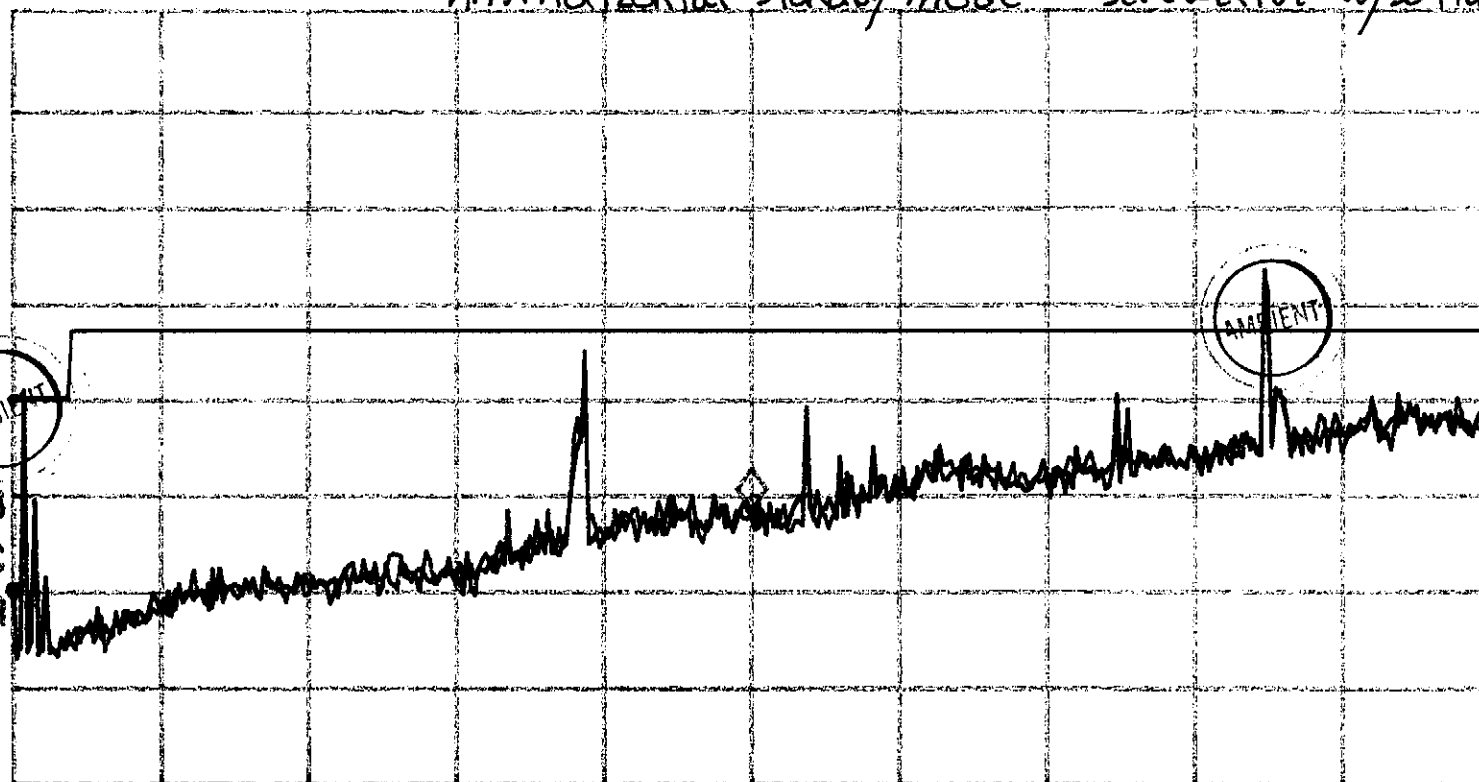
VIEW B

BLANK B

VA WB
SC FC
ACORR

Trace
A B C

More
1 of 4



START 200.0 MHz

IF BW 120 KHz

AVG BW 300 KHz

STOP 1.0000 GHz

SWP 167 msec

RED: FET on, H100: FET off

15:39:29 JUL 13, 2005

REF LEVEL
70.0 dB μ V/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
1.63 dB μ V/m

CLEAR
WRITE B

MAX

HOLD B

VIEW B

BLANK B

Trace

A B C

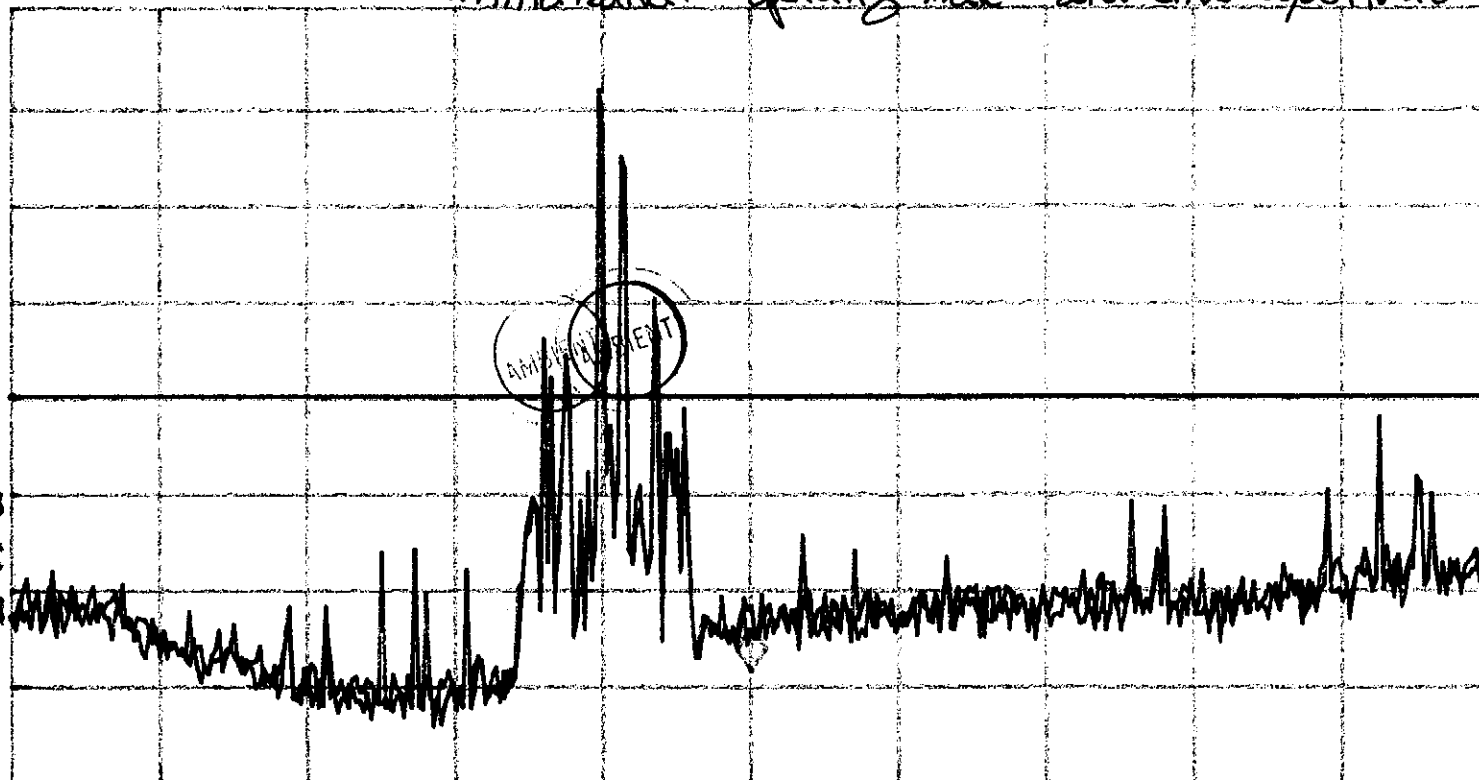
More

1 of 4

LOG REF 70.0 dB μ V/m
10
dB/
#ATN
0 dB

Anti-Horizontal operating mode screw drive w/software control

VA WB
SC FC
ACORR



START 30.0 MHz

IF BW 120 KHz

AVG BW 300 KHz

STOP 200.0 MHz

SWP 35.4 msec

15:35:51 JUL 13, 2005

REF LEVEL
70.0 dB μ V/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
4.57 dB μ V/m

CLEAR
WRITE B

LOG REF 70.0 dB μ V/m
10
dB/
#ATN
0 dB

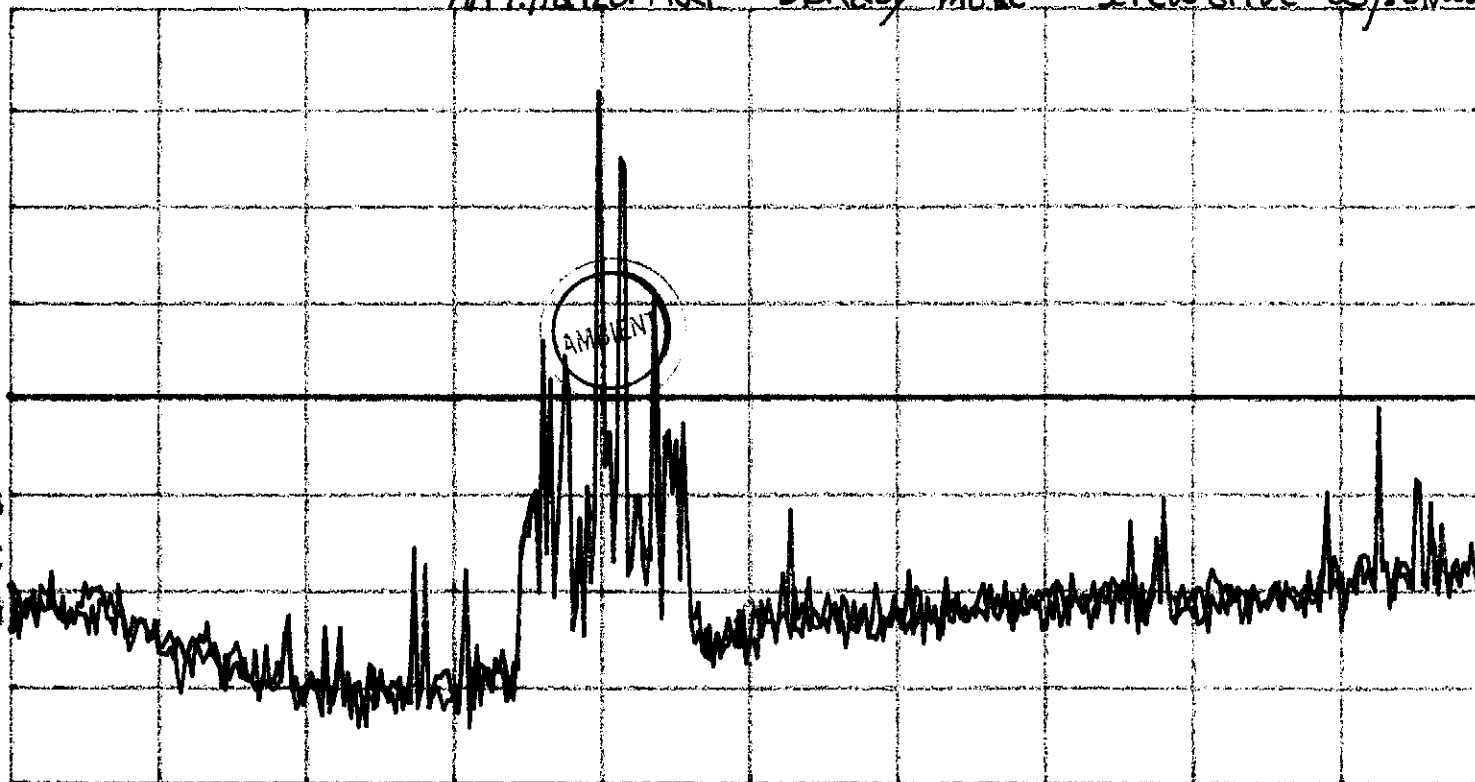
Anti-horizontal standby mode screwdriver us/rotary control

MAX
HOLD B

VIEW B

BLANK B

VA WB
SC FC
ACORR



Trace
A B C

More
1 of 4

START 30.0 MHz

IF BW 120 KHz

AVG BW 300 KHz

STOP 200.0 MHz

SWP 35.4 msec

RED: EUT on Hori: EUT off

15:31:54 JUL 13, 2005
hp

REF LEVEL
70.0 dB μ V/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
2.65 dB μ V/m

CLEAR
WRITE B

MAX
HOLD B

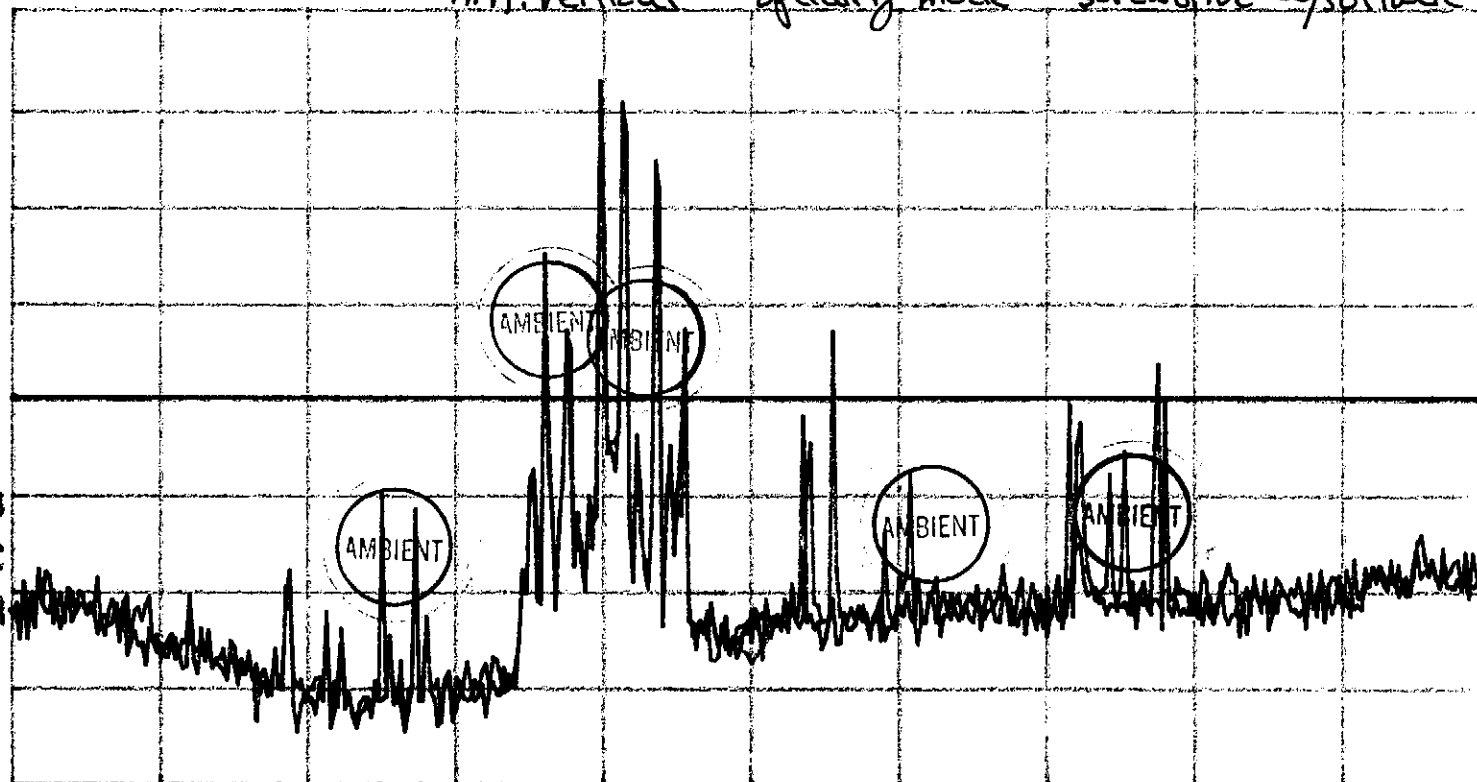
LOG REF 70.0 dB μ V/m
10
dB/
#ATN
0 dB

Anti-Vertical operating mode screwdriver w/software control

VIEW B

BLANK B

VA WB
SC FC
ACORR



Trace
A B C

More
1 of 4

START 30.0 MHz

IF BW 120 KHz

AVG BW 300 KHz

STOP 200.0 MHz

SWP 35.4 msec

RED: EUT ON Blue: EUT OFF

15:14:52 JUL 13, 2005
hp

REF LEVEL
70.0 dB μ V/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
3.72 dB μ V/m

CLEAR
WRITE B

LOG REF 70.0 dB μ V/m *AntiVertical standby mode screwdriver/software control* MAX HOLD B

10
dB/
#ATN
0 dB

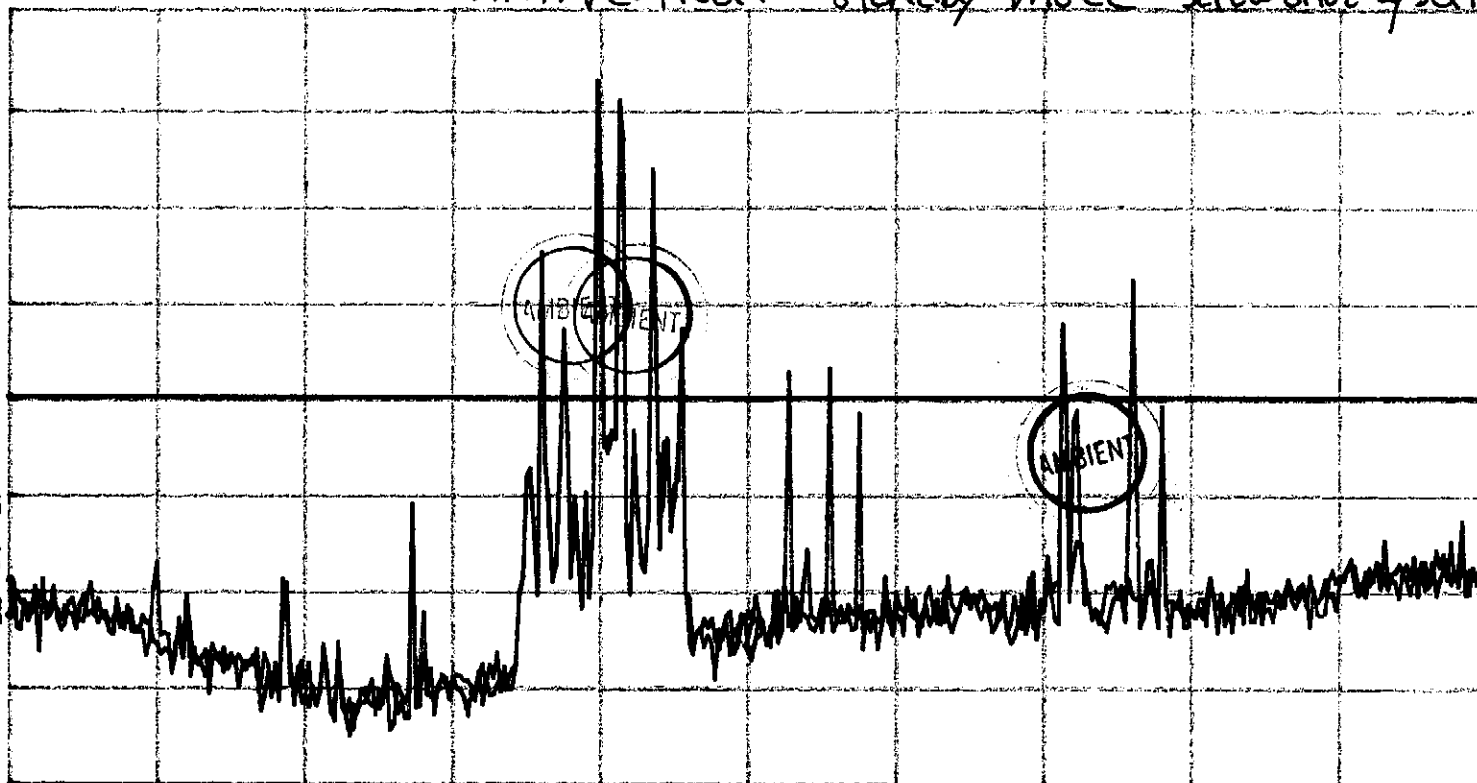
VIEW B

BLANK B

VA WB
SC FC
ACORR

Trace
A B C

More
1 of 4



START 30.0 MHz STOP 200.0 MHz
IF BW 120 KHZ AVG BW 300 KHZ SWP 35.4 msec

DEF: F1T on 11.0 F1T off

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

The Genie Company

Genie AC ScrewDrive with software control

Project Number:

5797

Conducted Emissions Test Data

4 pages of data sheets to follow.

14:38:34 JUL 13, 2005

MARKER
15.08 MHz
5.45 dB μ V/m

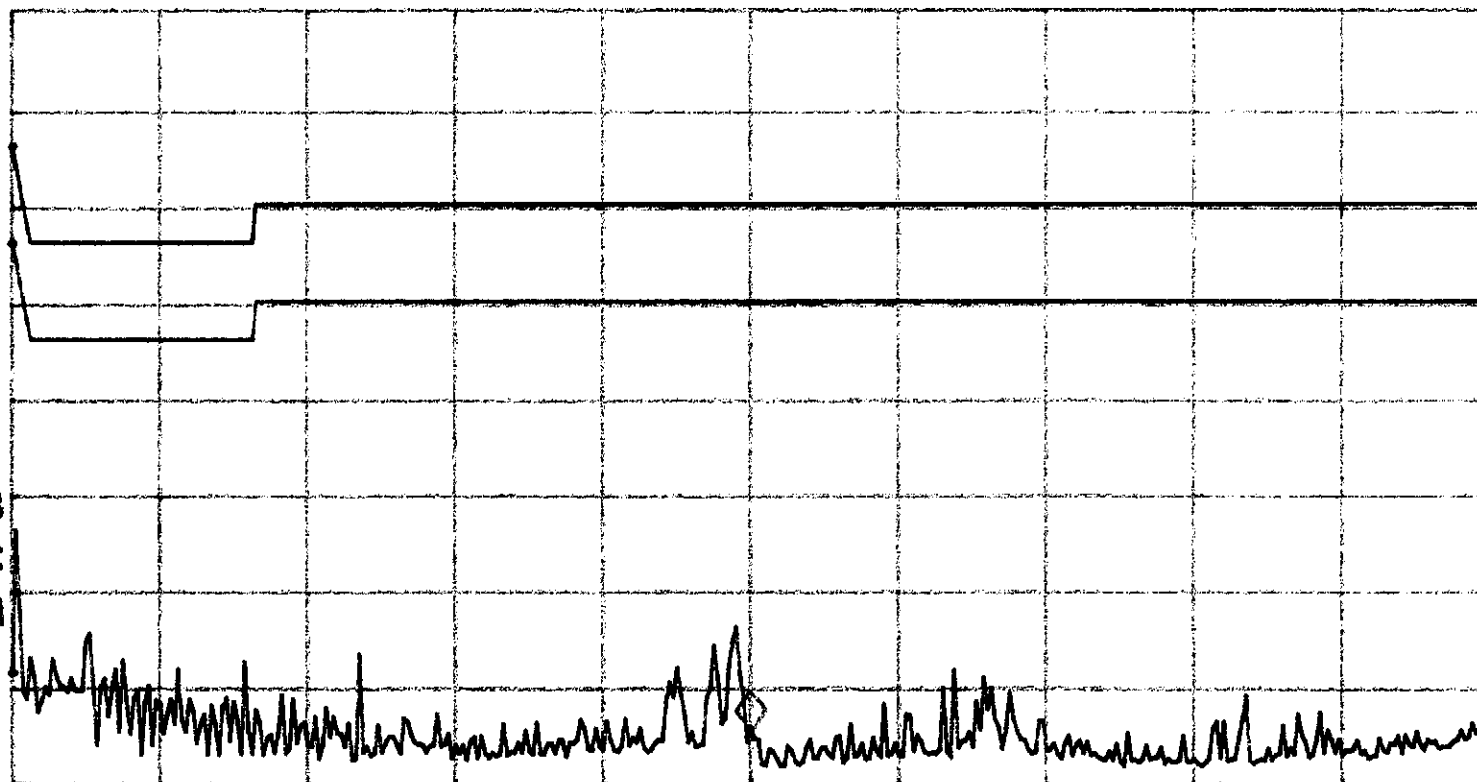
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.08 MHz
5.45 dB μ V/m

MARKER
NORMAL

MARKER
 Δ

LOG REF 80.0 dB μ V/m

10
dB/
#ATN
0 dB



MARKER
AMPTD

SELECT
1 2 3 4

MARKER 1
ON OFF

More
1 of 3

START 150 KHz

IF BW 9.0 KHz

AVG BW 30 KHz

STOP 30.00 MHz

SWP 1.11 sec

operator mode

operator mode

screwdriver w/software control

14: 35: 41 JUL 13, 2005
hp

MARKER
15.08 MHz
4.45 dB μ V/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.08 MHz
4.45 dB μ V/m

MARKER
NORMAL

MARKER
 Δ

LOG REF 80.0 dB μ V/m

10
dB/
#ATN
0 dB

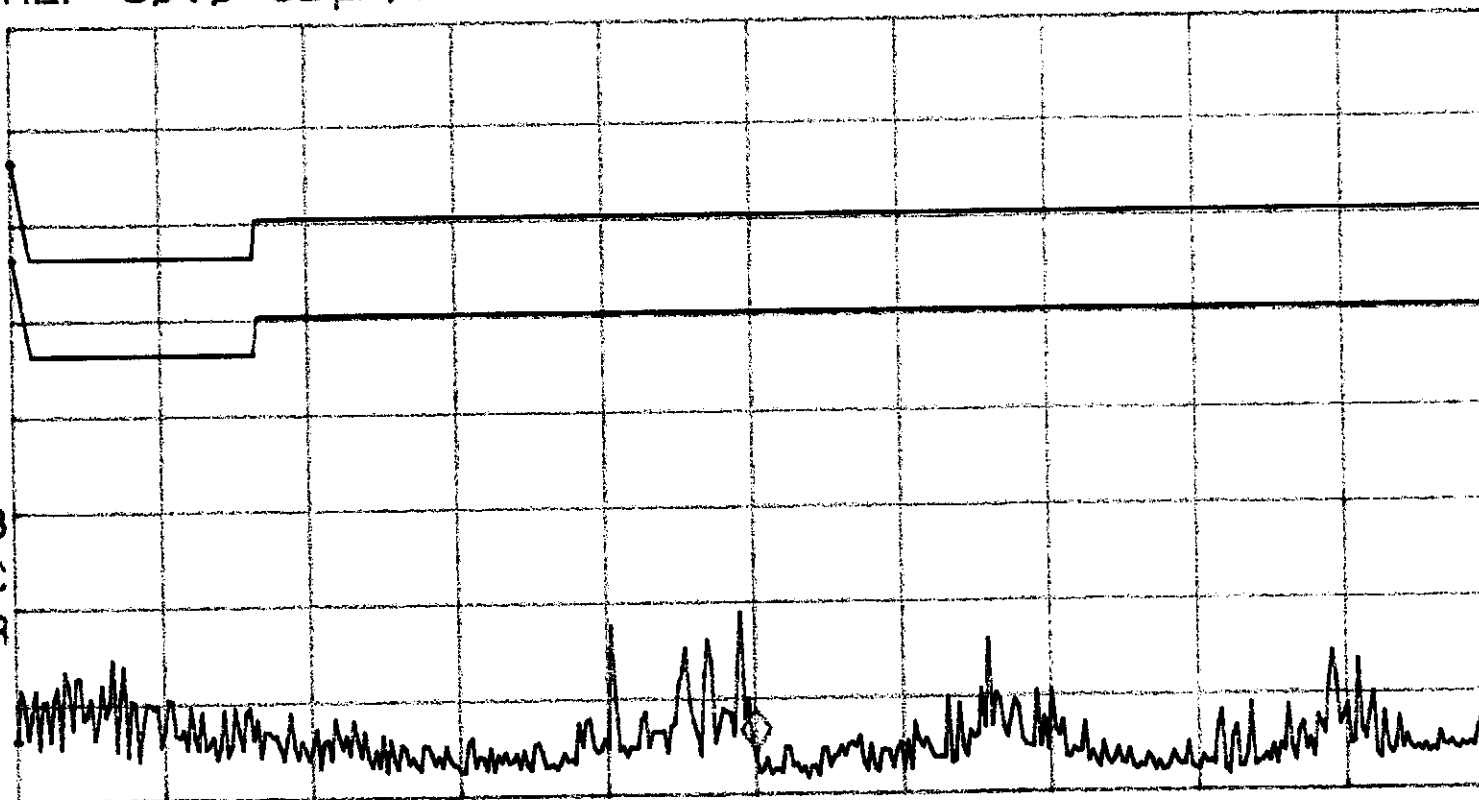
MARKER
AMPTD

SELECT
1 2 3 4

WA SB
SC FC
ACORR

MARKER 1
ON OFF

More
1 of 3



START 150 KHZ

IF BW 9.0 KHZ

AVG BW 30 KHZ

STOP 30.00 MHz

SWP 1.11 sec

measuring line 100 percent

standby mode

screwdrive w/software control

14:31:55 JUL 13, 2005

MARKER
15.08 MHz
2.71 dB μ V/m

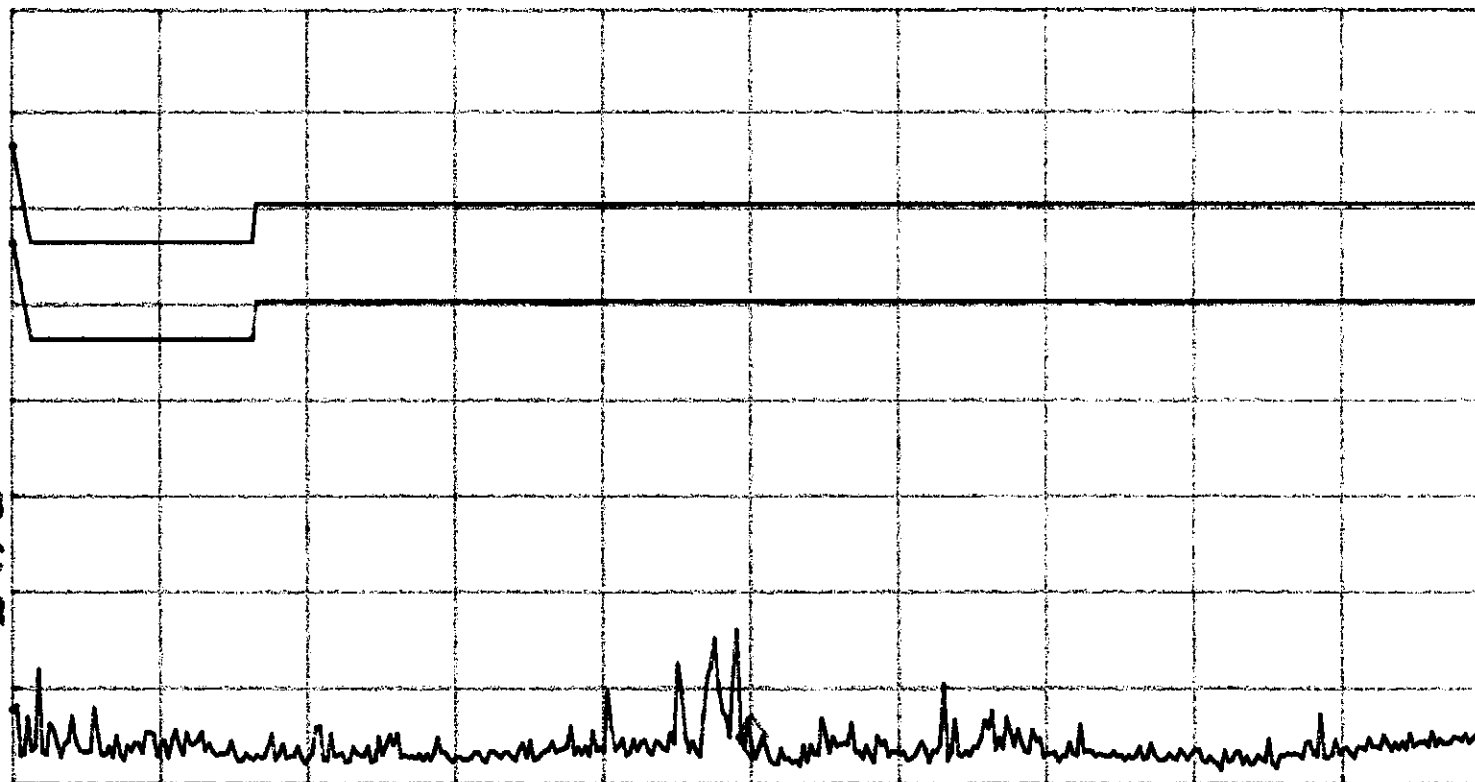
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.08 MHz
2.71 dB μ V/m

MARKER
NORMAL

MARKER
 Δ

LOG REF 80.0 dB μ V/m

10
dB/
#ATN
0 dB



WA SB
SC FC
ACORR

MARKER 1
ON OFF

More
1 of 3

START 150 KHz

IF BW 9.0 KHz

AVG BW 30 KHz

STOP 30.00 MHz

SWP 1.11 sec

measured line one Hot

measured mode

screwdriver w/software control

14:26:51 JUL 13, 2005

MARKER
15.08 MHz
2.85 dB μ V/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.08 MHz
2.85 dB μ V/m

MARKER
NORMAL

MARKER
 Δ

LOG REF 80.0 dB μ V/m

10
dB/
#ATN
0 dB

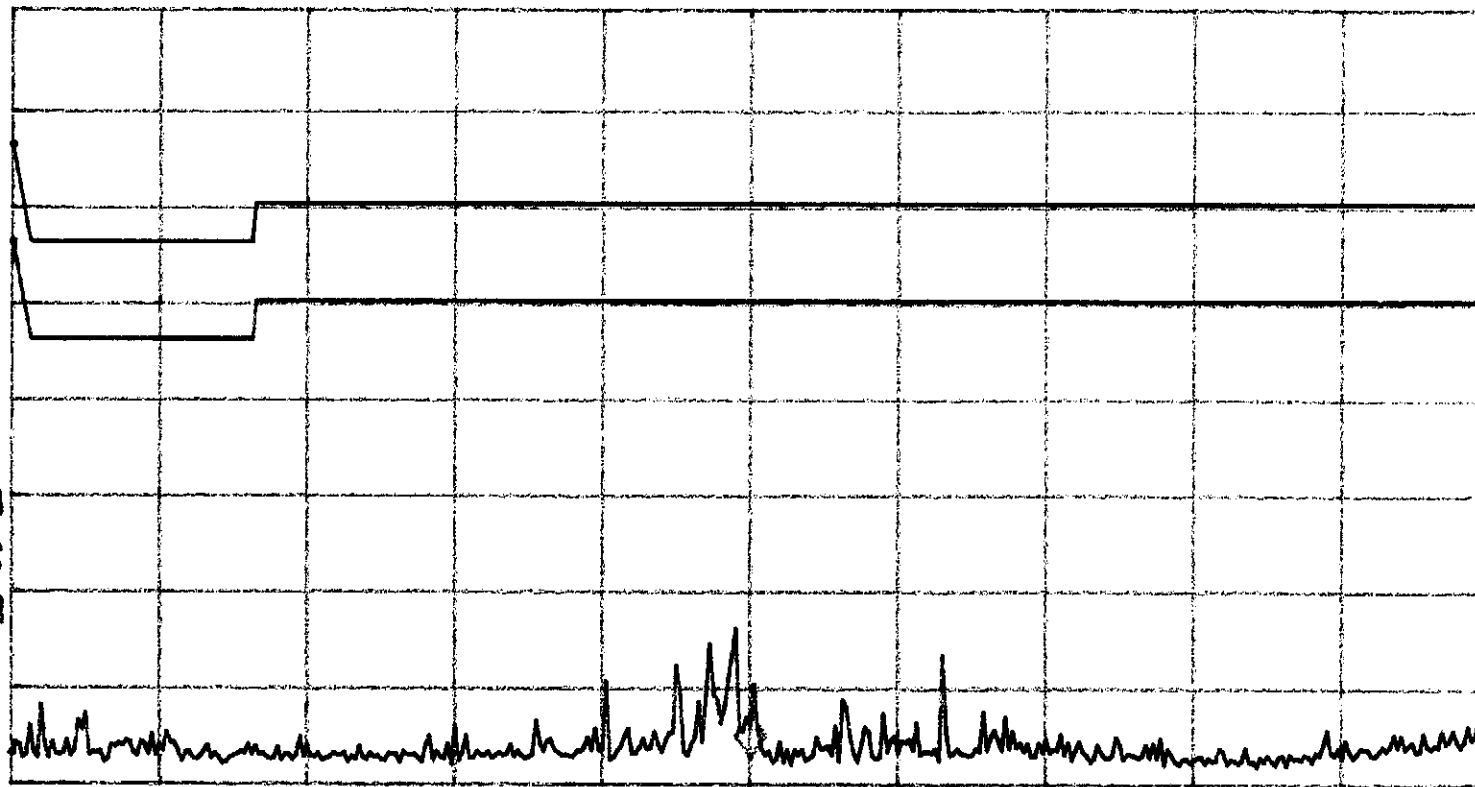
MARKER
AMPTD

SELECT
1 2 3 4

WA SB
SC FC
ACORR

MARKER 1
ON OFF

More
1 of 3



START 150 KHz

IF BW 9.0 KHz

AVG BW 30 KHz

STOP 30.00 MHz

SWP 1.11 sec

measuring line one: hot

standby mode

screw drive w/software control

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

The Genie Company

Genie AC ScrewDrive with software control

Project Number:

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Appendix B

Measurement Protocol

DIVERSIFIED T.E.S.T. TECHNOLOGIES, INC. TEST REPORT	
The Genie Company Genie AC ScrewDrive with software control	Project Number: 5797

Measurement Protocol

The methodology used during the testing performed on the EUT in this report was ANSI C63.4:1992.

The EUT was powered with 120 Volts 60 Hz DC during the collection of data included within this report.

The data is compared to the FCC Part 15B limits.

Please have a company official review this report and sign.
