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: B8Q315390R2

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

DIVERSIFIED
T.E.S.T.
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.dttlab.com.

Sincerely,

Shaun Hotaling
Technical Associate

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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: _____ Date: 8/15/05
Shaun Hotaling
Technical Associate

Reviewed by:
Signature: _____ Date: 8/15/05
Thomas Sims
Engineer

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

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	

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	

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

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

Test Setup Photographs

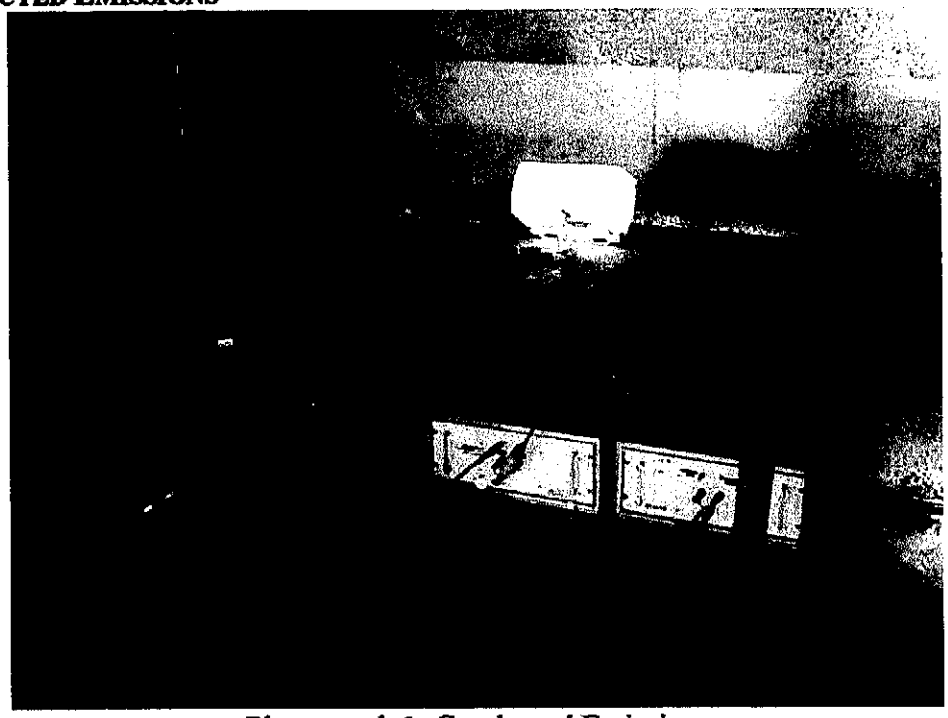
RADIATED EMISSIONS

Photograph 1: Radiated Emissions

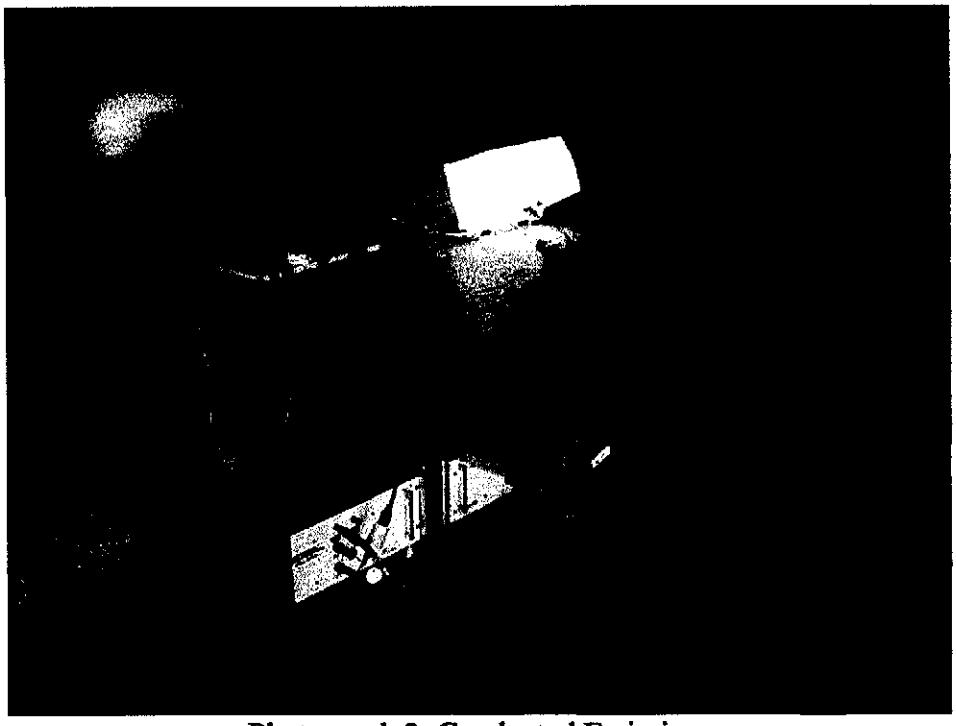
Photograph 2: Radiated Emissions

Test Setup Photographs

CONDUCTED EMISSIONS



Photograph 1: Conducted Emissions



Photograph 2: Conducted Emissions

Appendix A

Test Data Sheets

Radiated Emissions Test Data

8 pages of data sheets to follow.

ϕ6: ϕ8: 53 JUL 14, 2ϕϕ5

START
2ϕϕ.ϕ MHz

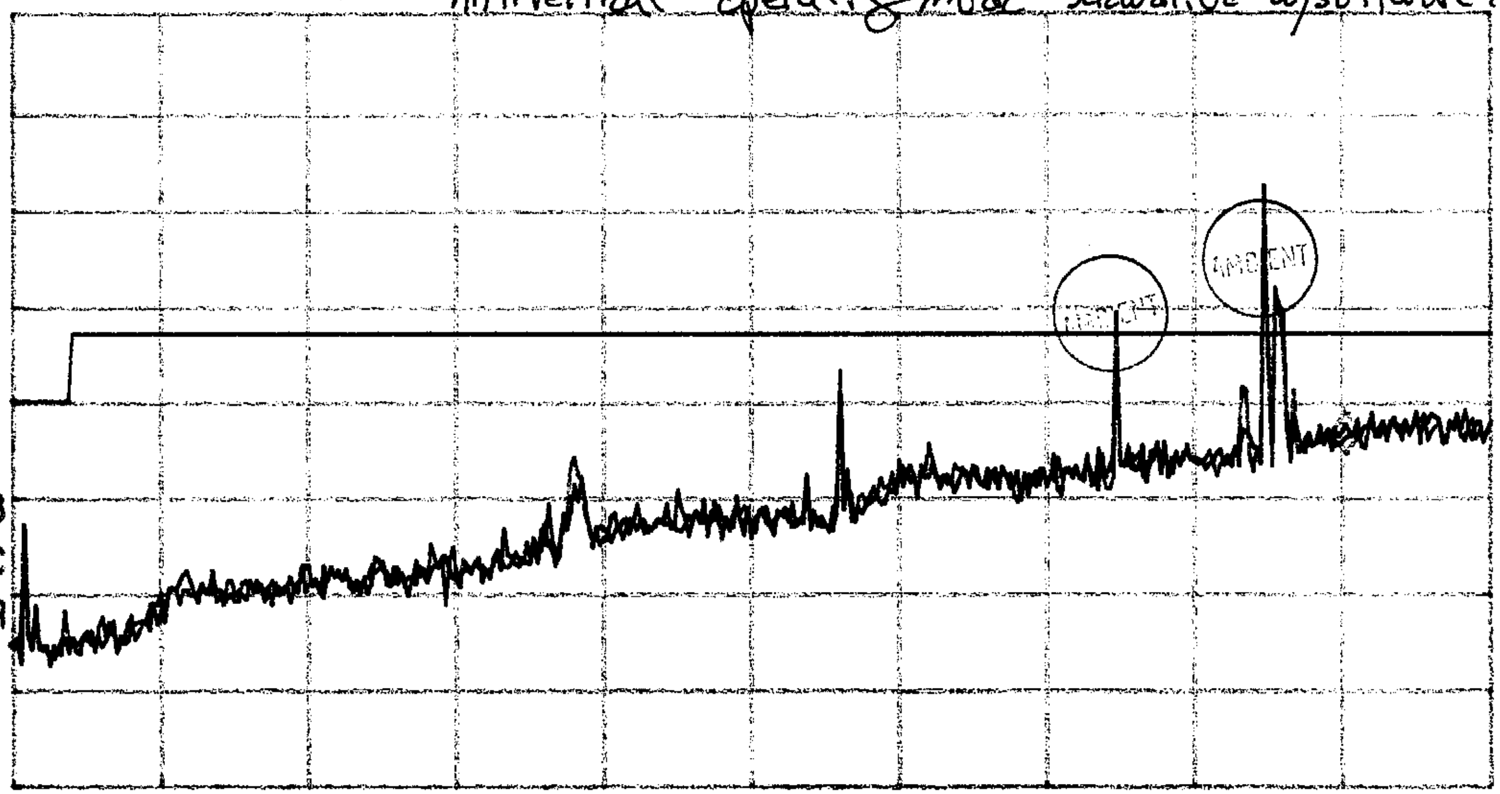
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 922.ϕ MHz
24.49 dBμV/m

CLEAR
WRITE B

MAX
HOLD B

LOG REF 7ϕ.ϕ dBμV/m
1ϕ
dB/
#ATN
ϕ dB

ANTi Vertical operating mode screwdrive w/software control



VA WB
SC FC
ACORR

VIEW B

BLANK B

Trace
A B C

More
1 of 4

START 2ϕϕ.ϕ MHz
IF BW 12ϕ kHz
AVG BW 3ϕϕ kHz
STOP 1.ϕϕϕϕ GHz
SWP 167 msec

[illegible] off

06:01:02 JUL 14, 2005

START
200.0 MHz

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 922.0 MHz
25.98 dBµV/m

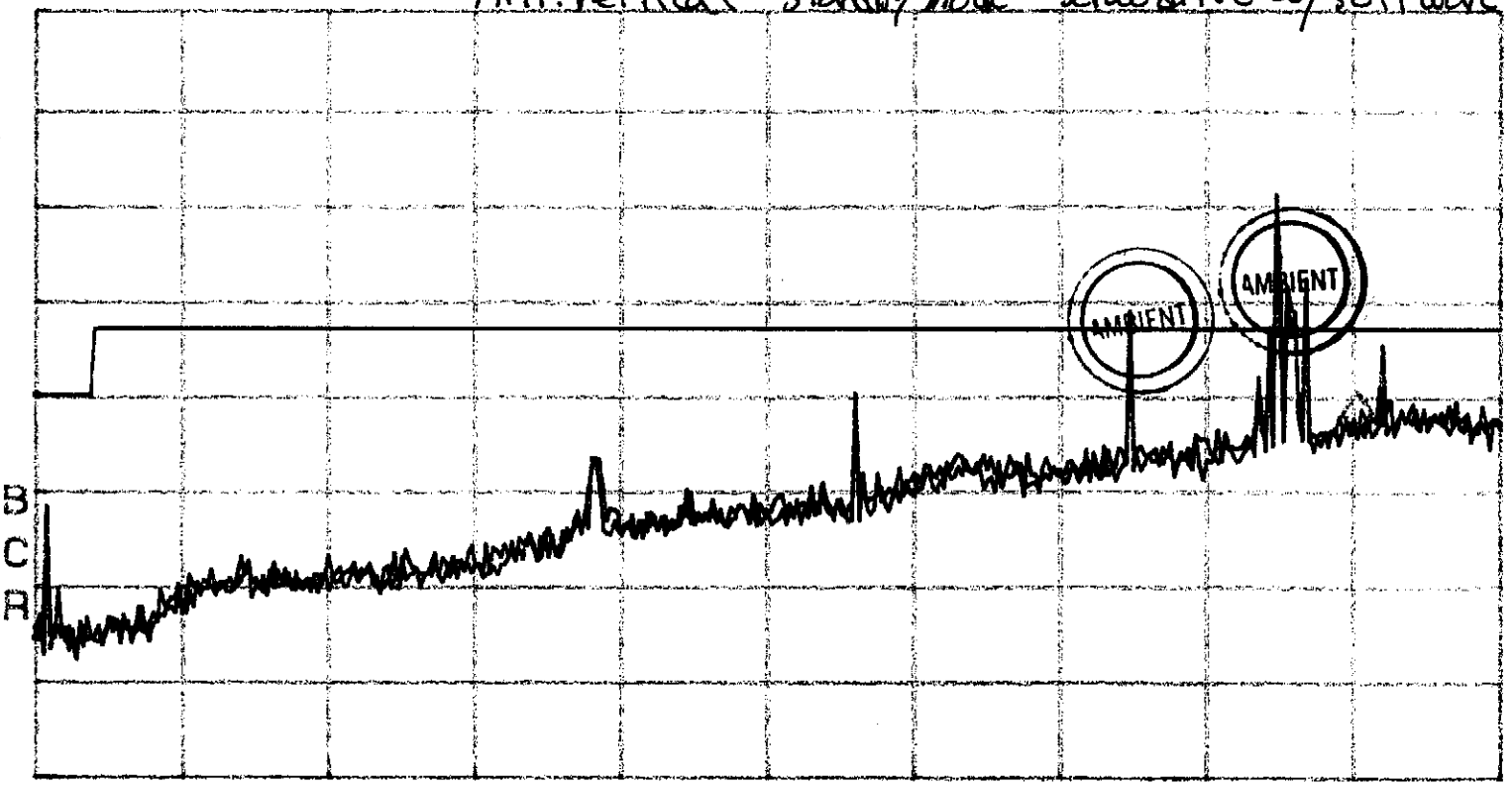
CLEAR
WRITE B

MAX
HOLD B

LOG
10
dB/
#ATN
0 dB

REF 70.0 dBµV/m

ANT: Vertical standby mode screwdriver w/ software control



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

RB: EUT on Blue: EUT 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 dBµV/m

CLEAR
WRITE B

MAX
HOLD B

LOG REF 70.0 dBµV/m Ant: Horizontal operating mode screwdrive w/software control

10
dB/
#ATN
0 dB

VIEW B

BLANK B

AMBIENT

AMBIENT

VA VB
SC FC
ACORR

Trace
A B C

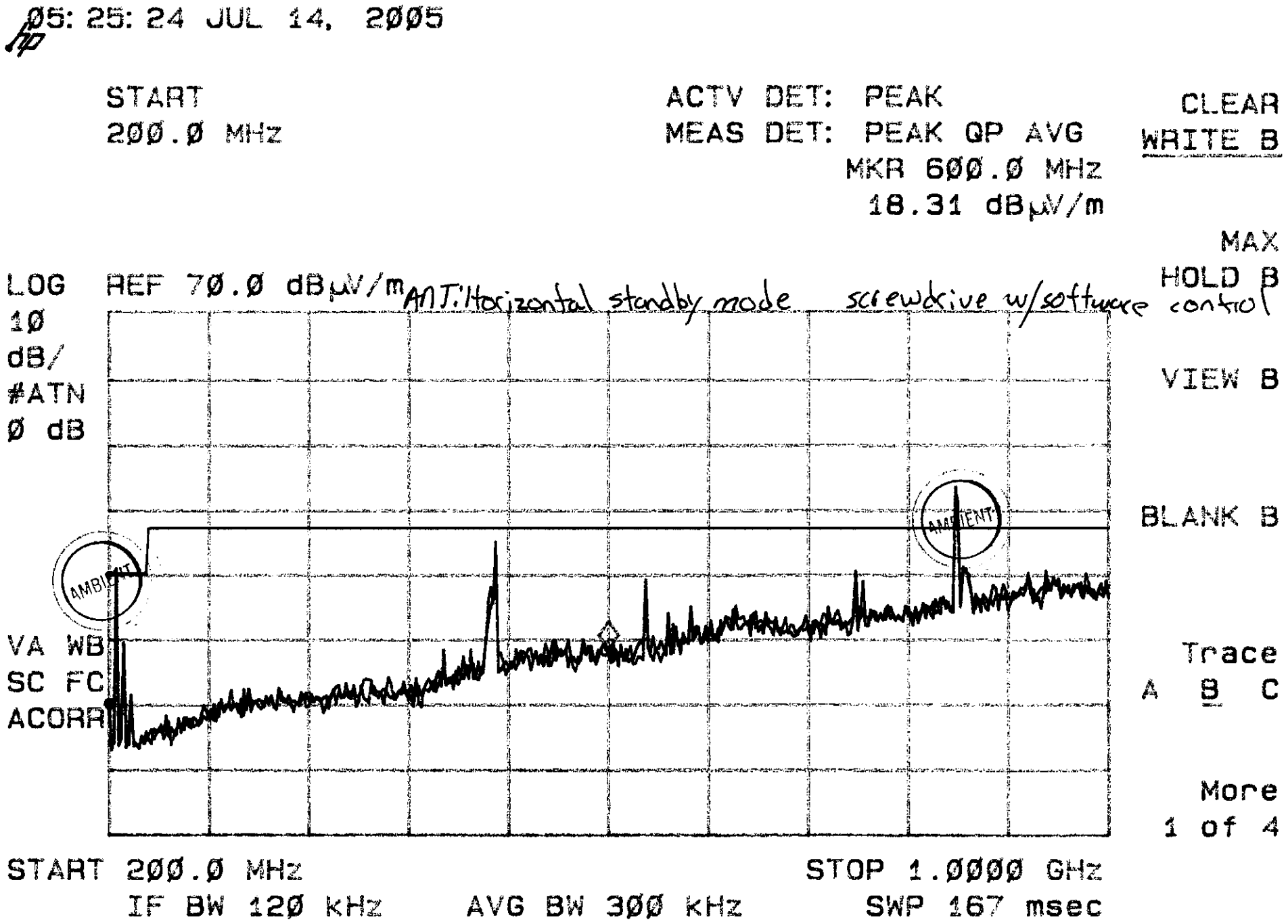
More
1 of 4

START 200.0 MHz
IF BW 120 kHz

AVG BW 300 kHz

STOP 1.0000 GHz
SWP 167 msec

QP' Cut on Blue' Cut off



RED: EUT on blue: EUT off

15: 39: 29 JUL 13, 2005

REF LEVEL
70.0 dBµV/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
1.63 dBµV/m

CLEAR
WRITE B
MAX
HOLD B
VIEW B
BLANK B
Trace
A B C
More
1 of 4

LOG REF 70.0 dBµV/m Ant: Horizontal operating mode screwdrive w/software control
10
dB/
#ATN
0 dB

VA WB
SC FC
ACORR

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

15: 35: 51 JUL 13, 2005

REF LEVEL
70.0 dBµV/m

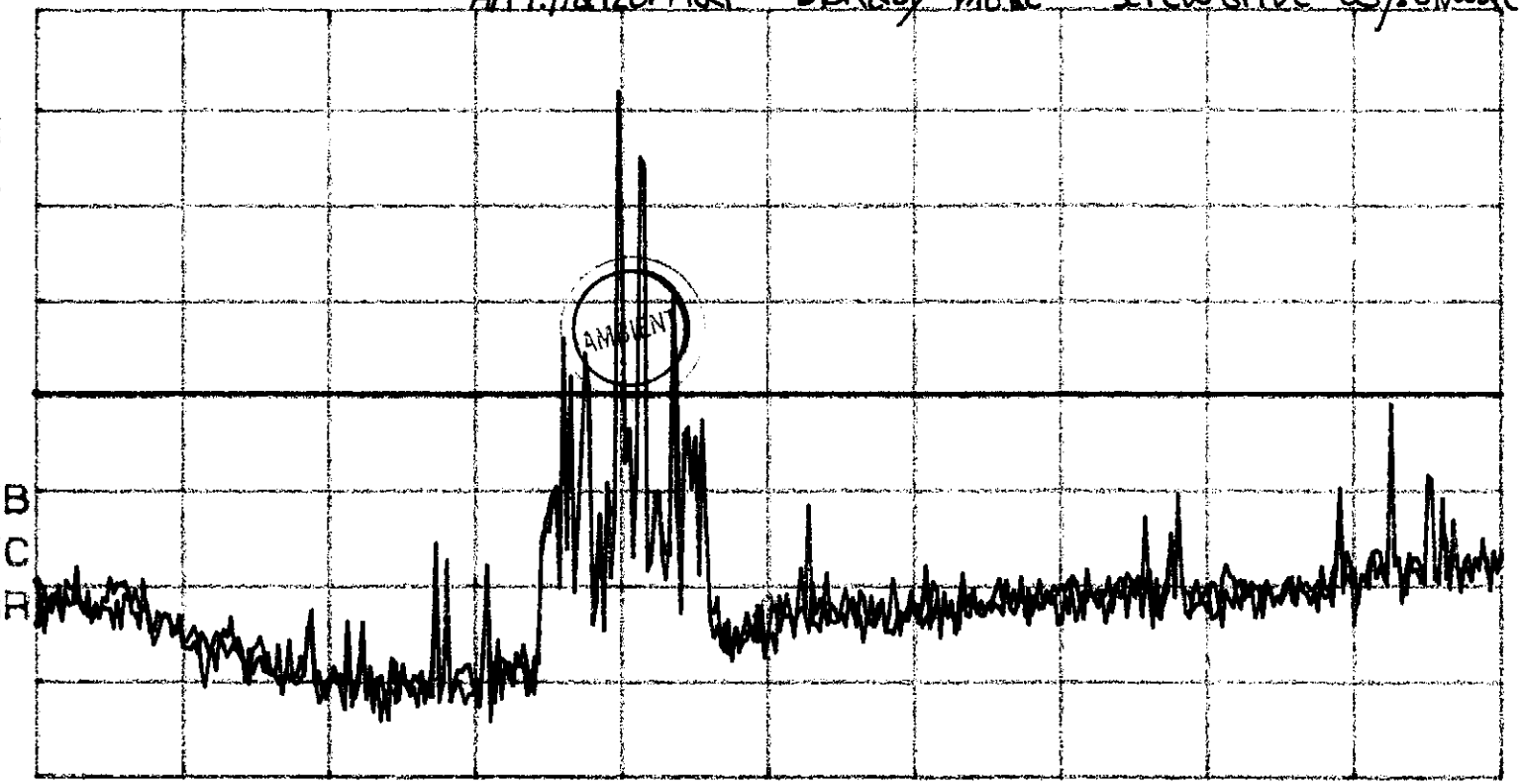
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
4.57 dBµV/m

CLEAR
WRITE B

MAX
HOLD B

LOG REF 70.0 dBµV/m Antihorizontal standby mode screwdrive w/software control

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

RED: EUT on blue: EUT off

15:31:54 JUL 13, 2005

REF LEVEL
70.0 dBµV/m

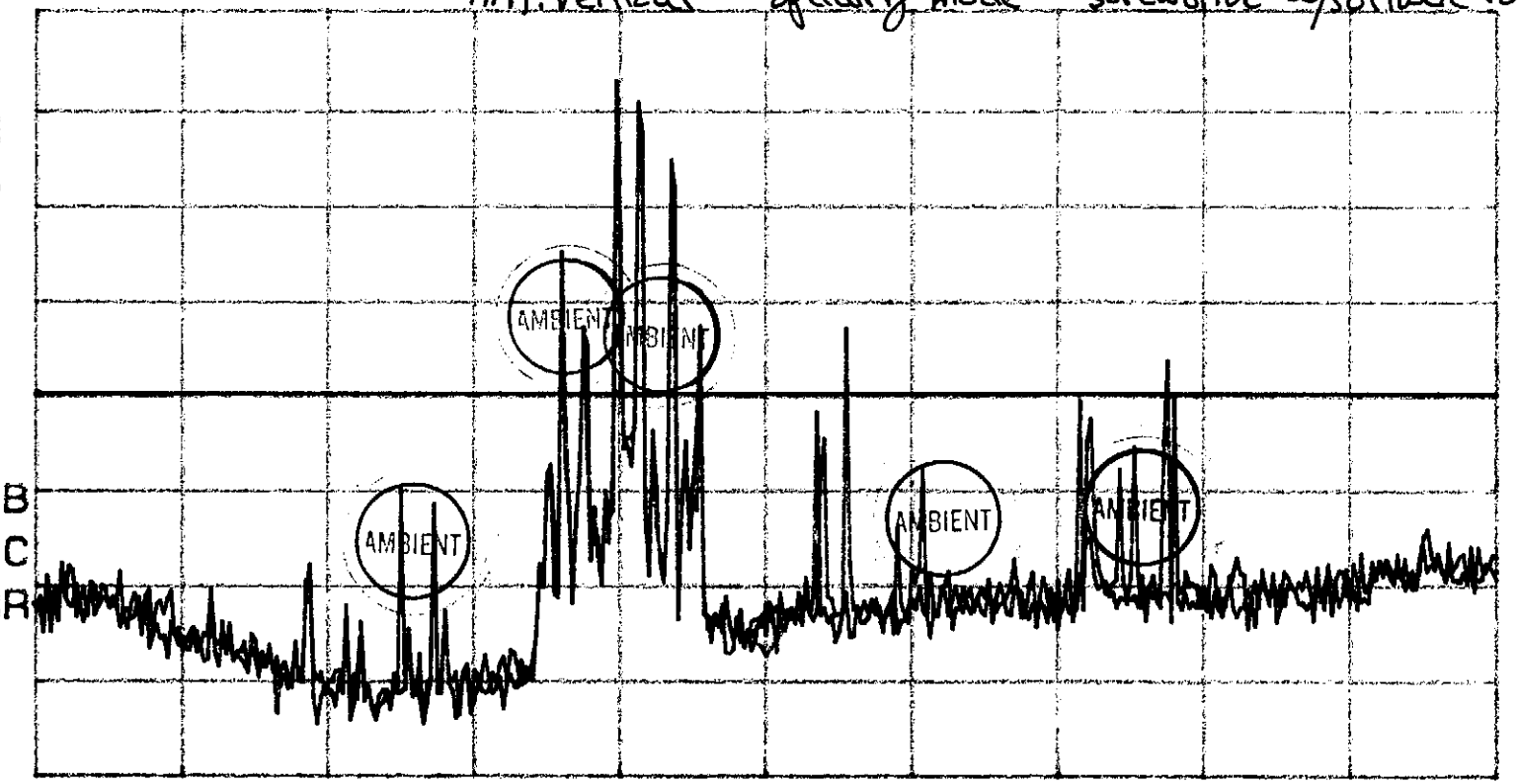
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
2.65 dBµV/m

CLEAR
WRITE B

MAX
HOLD B

LOG REF 70.0 dBµV/m Ant. Vertical operating mode screwdrive w/software control

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

RED: EUT on Blue: EUT off

15: 14: 52 JUL 13, 2005

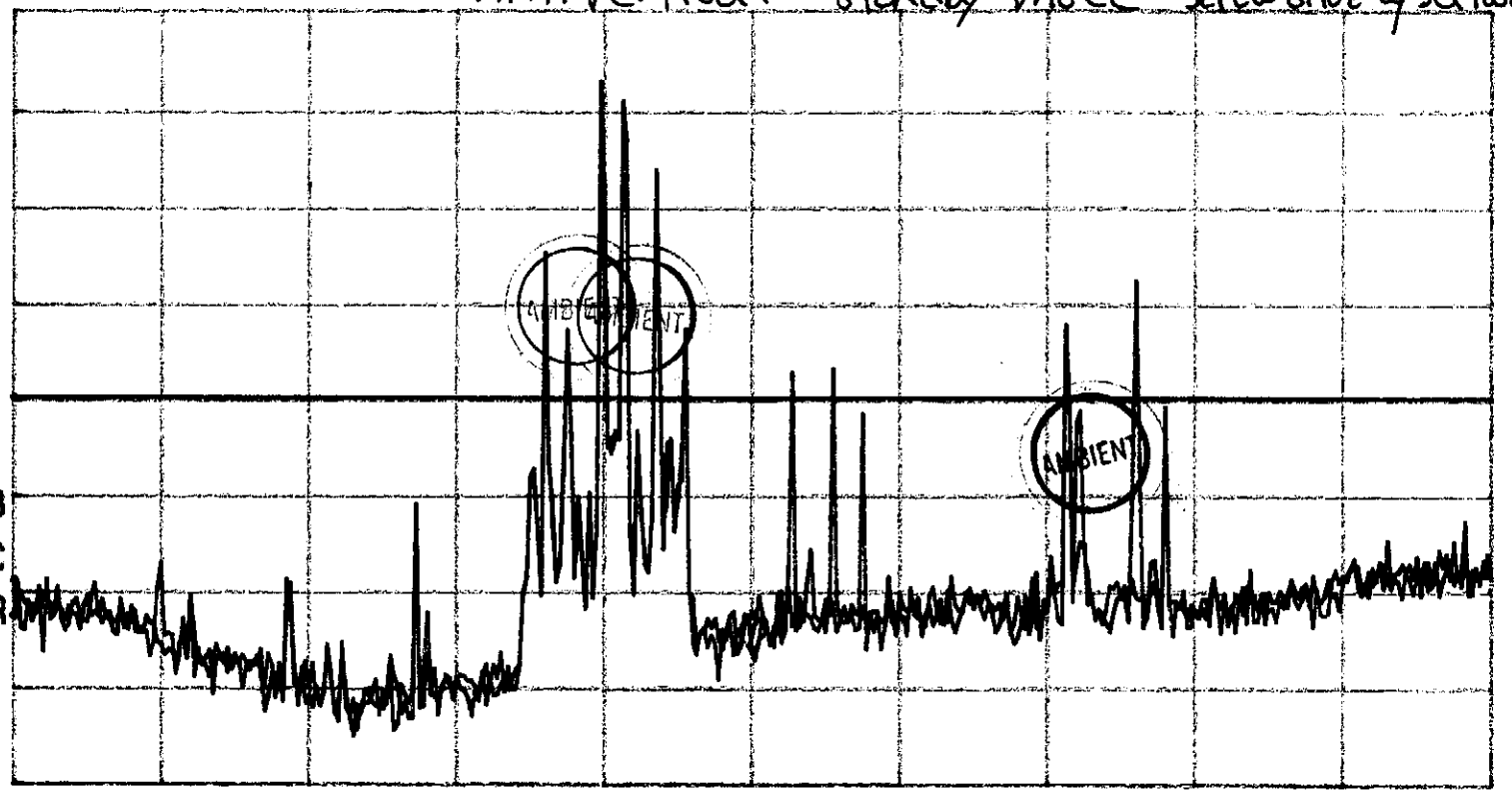
REF LEVEL
70.0 dBµV/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 115.0 MHz
3.72 dBµV/m

CLEAR
WRITE B

MAX
HOLD B

LOG REF 70.0 dBµV/m Antivertical standby mode screwdrive w/software control
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

RED EUT on Blue EUT off

Conducted Emissions Test Data

4 pages of data sheets to follow.

14: 38: 34 JUL 13, 2005

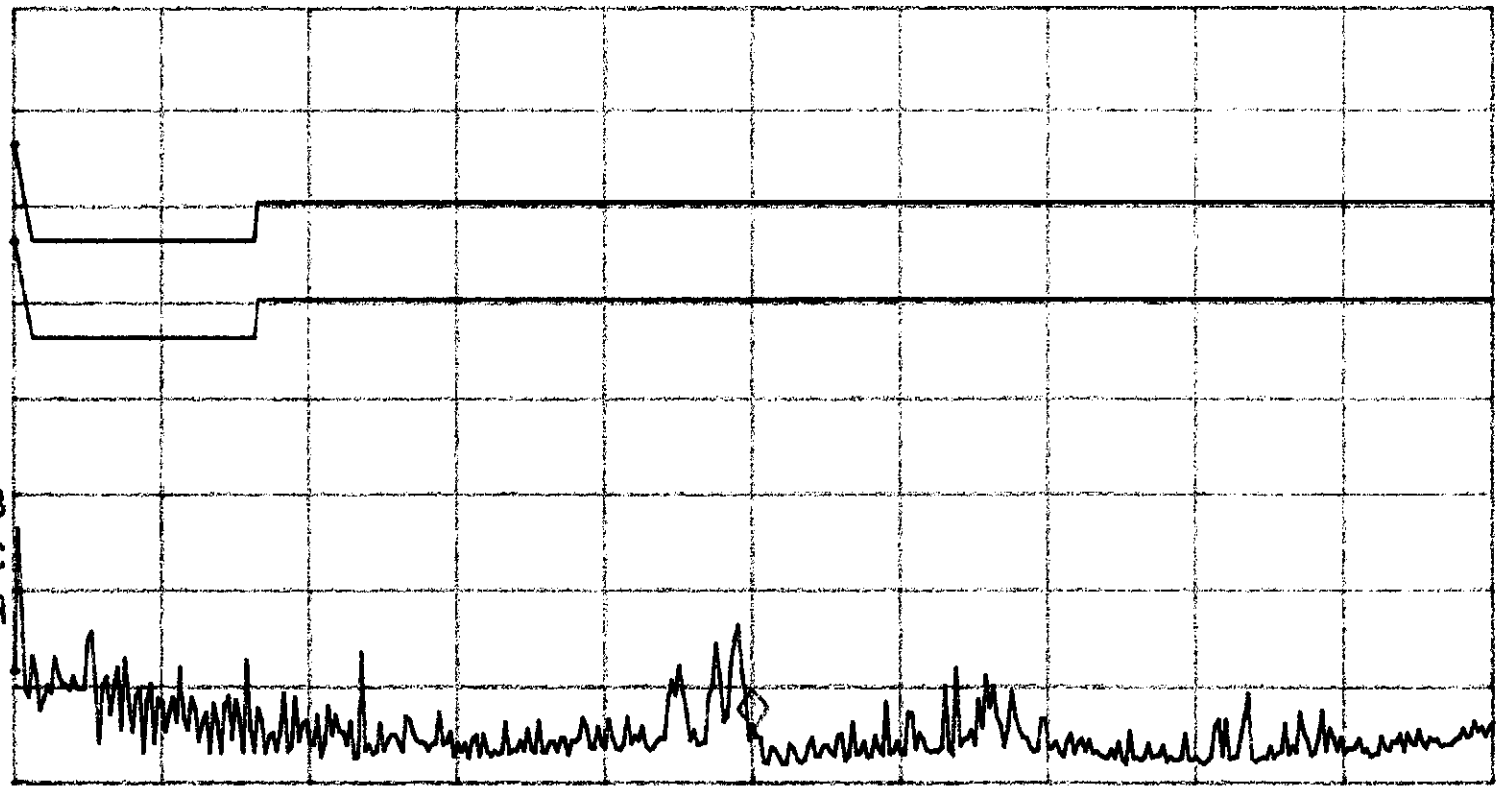
MARKER
15.08 MHz
5.45 dBµV/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.08 MHz
5.45 dBµV/m

MARKER
NORMAL

MARKER
△

LOG REF 80.0 dBµV/m
10
dB/
#ATN
0 dB



MARKER
AMPTD

SELECT
1 2 3 4

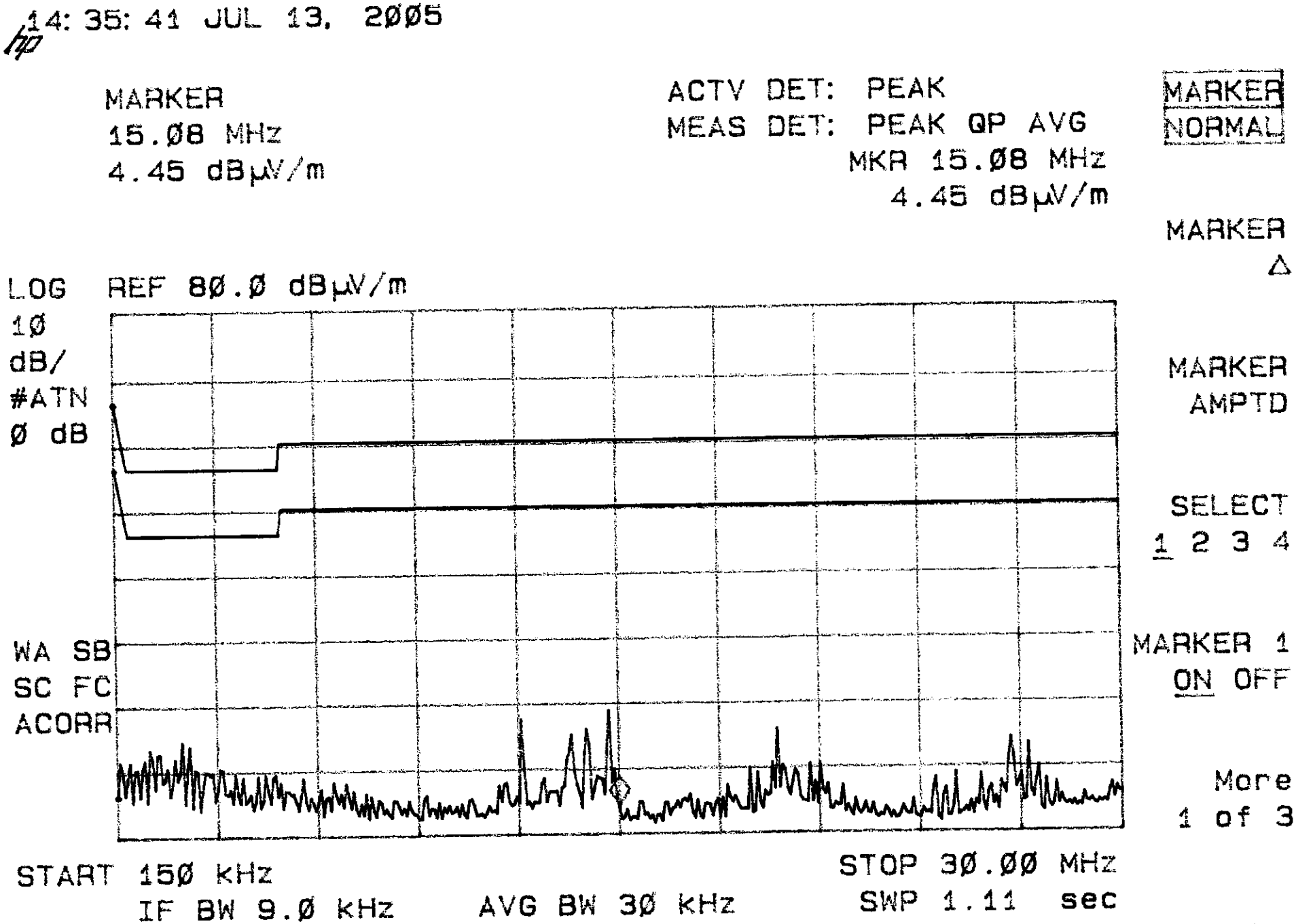
WA SB
SC FC
ACORR

MARKER 1
ON OFF

More
1 of 3

START 150 kHz
STOP 30.00 MHz
IF BW 9.0 kHz
AVG BW 30 kHz
SWP 1.11 sec

manual/ hand control operator mode screwdrive w/software control



receiving antenna two meters

standby mode

screwdrive w/software control

14:31:55 JUL 13, 2005

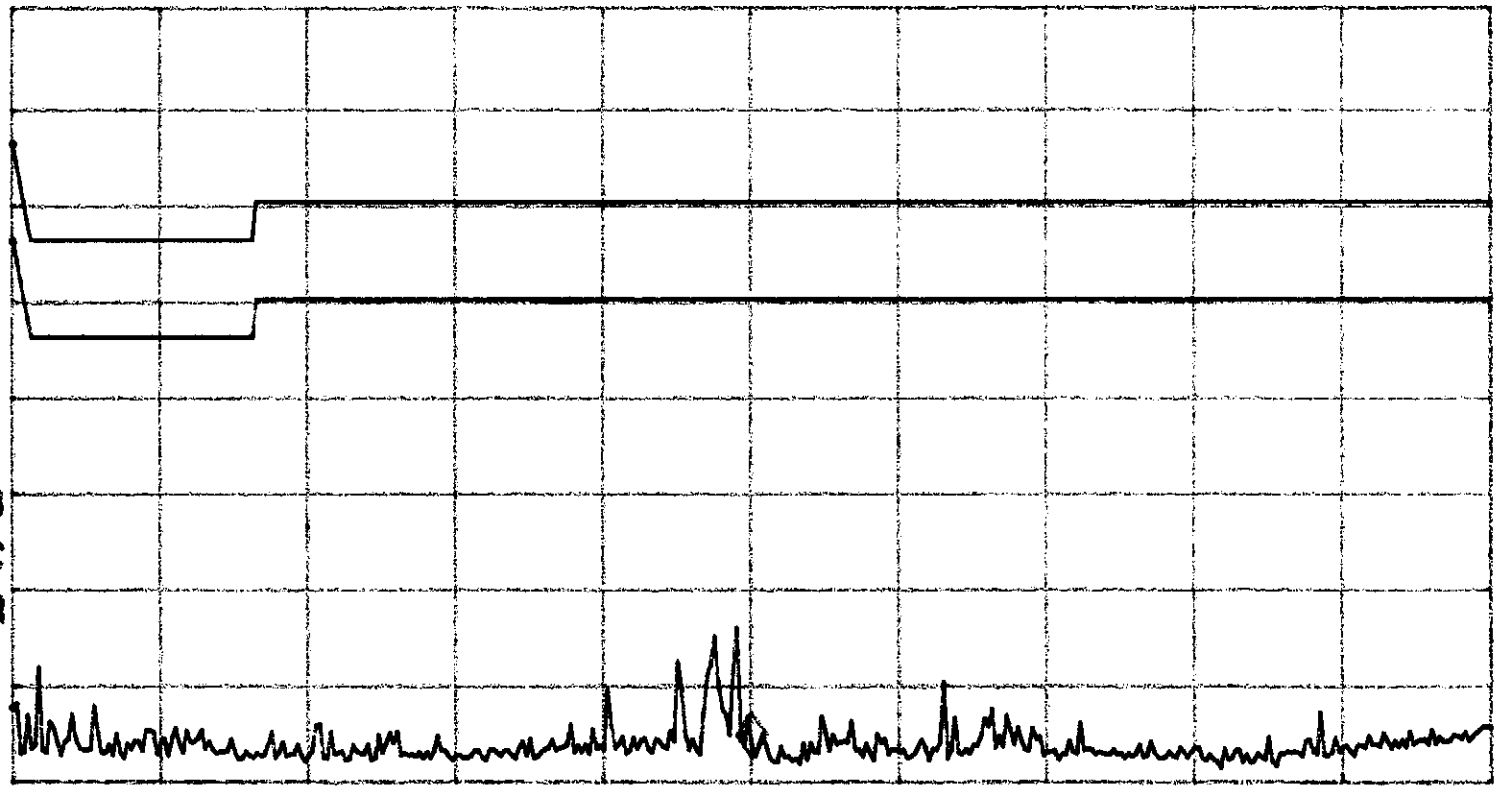
MARKER
15.08 MHz
2.71 dBµV/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.08 MHz
2.71 dBµV/m

MARKER
NORMAL

MARKER
Δ

LOG REF 80.0 dBµV/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

measurements like one Hot
operator mode
screwdrive w/software control

14: 26: 51 JUL 13, 2005

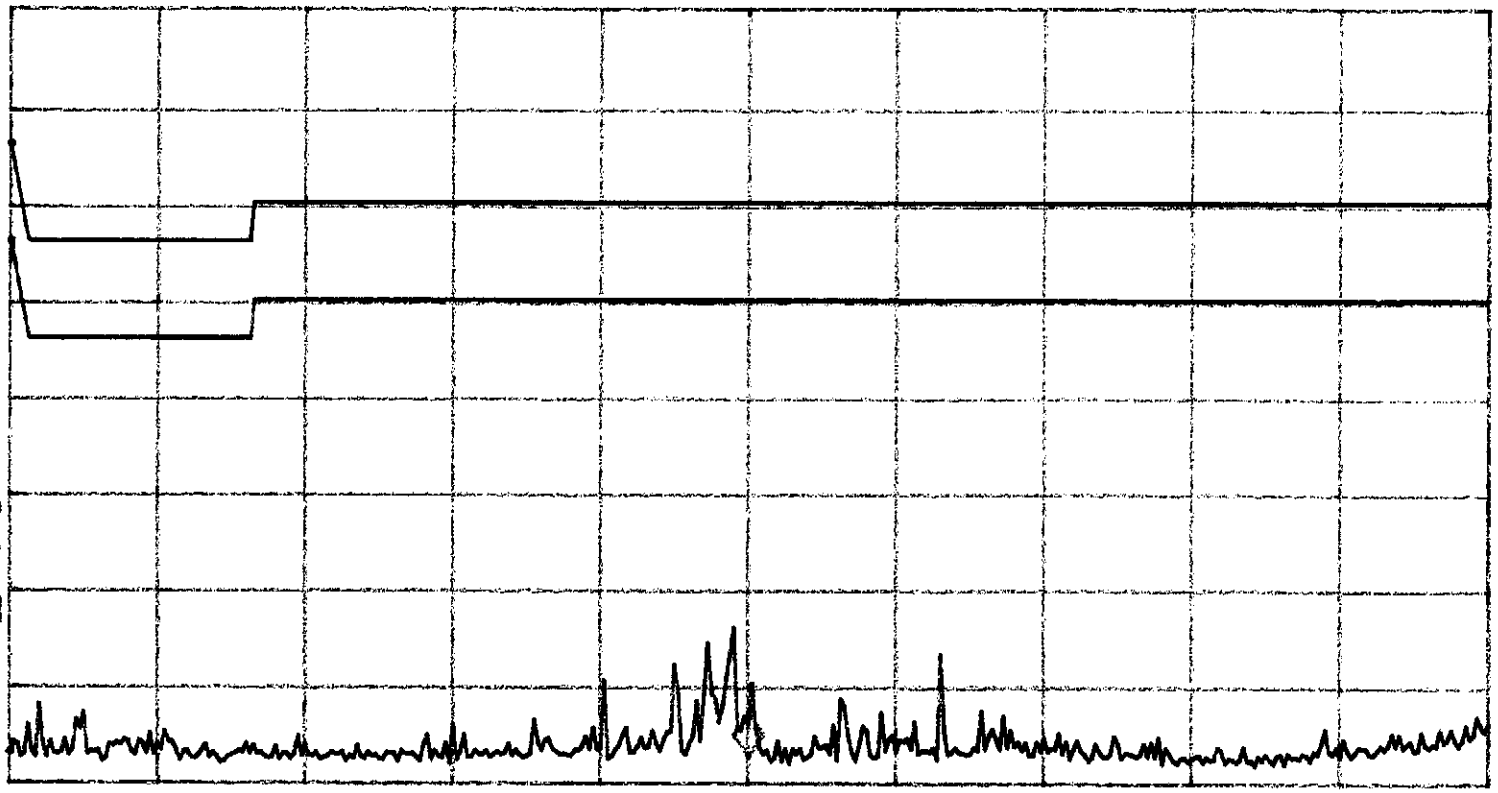
MARKER
15.00 MHz
2.85 dBµV/m

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.00 MHz
2.85 dBµV/m

MARKER
NORMAL

MARKER
Δ

LOG REF 80.0 dBµV/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 screwdrive w/software control

Appendix B

Measurement Protocol

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.

_____