TEST NUMBER - 170-03

TEST REPORT TO

INDUSTRY CANADA RSS 210 SECTION 8.6.2
FEDERAL COMMUNICATIONS COMMISSION CFR47 PART15.235

Low Power License-Exempt Radio communication Devices
Intentional Radiators

for

Dorel Juvenile Group
Canton Commerce Center
45 Dan Road
Canton, MA 02021
800-909-7133

of

Safe Glow 49MHz Baby Monitor

Model 08039

FCC ID: MNJ08039T

on

5/5/03

Tested by

_____
Clifton P. Brick

Reviewed by

_____
Larry K. Stillings

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TEST DESCRIPTION

1. TEST OBJECTIVE

To test the Safe Glow 49MHz Baby Monitor 08039 to RSS 210 / Part 15 Subpart C Rules and write a report.

2. E.U.T. DESCRIPTION

GENERAL

The Safe Glow 49MHz Baby Monitor 08039 is a 49 MHz band 2 channel baby monitor with a night light.

SERIAL NUMBERS:

Production Prototype

TEST RESULTS AND CONCLUSIONS

PRODUCT TESTED - Safe Glow 49MHz Baby Monitor

MODEL NUMBER - 08039

RADIATED TEST RESULTS

The test results show that the emissions radiated from this equipment are in compliance with IC Rules RSS 210 / FCC Rules Part 15 Subpart C.

OCCUPIED BANDWIDTH & OUTPUT POWER

The test results show that the occupied bandwidth and output power of this equipment are in compliance with IC Rules RSS 210 / FCC Rules Part 15 Subpart C .

CONDUCTED TEST RESULTS

The test results show that the emissions conducted through the power line from this equipment are in compliance with IC Rules RSS 210 / FCC Rules Part 15 Subpart C.

ANALYSIS AND CONCLUSIONS

Based upon the radiated and conducted measurements we find that this equipment is within the limits of the IC Rules RSS 210 / FCC Rules Part 15 Subpart C. All results are based on a test of one sample, and represent other production units, only in as much as a sample represents other production units. If any significant changes are made to the unit, the changes shall be evaluated and a retest may be required.

NOTES (Special conditions unique to this test)

Unit was examined with the night light on and off, worst case is with the night light off. The data represents worst case.

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TEST PROCEDURES

1. TEST EQUIPMENT

A. HP 8546A (9 kHz - 6.5 GHz) EMI Receiver w/ RF Filter Section, S/N 3704A00323 / 3650A00360. Calibration Date 12-28-2002, calibrated annually.

B. Com-Power Biconilog Antenna, Model AC220, S/N 25509. Calibration Date 3-11-2003, calibrated annually.

C. EMCO LISN, Model EM 3825/2, S/N 9109-1860. Calibration Date: 3-9-2003, calibrated annually.

2. FREQUENCY RANGE TO BE SCANNED.

A. Radiated Test from 30 MHz to 40 GHz (or the 10^{th} harmonic of the highest frequency whichever is lower).

B. Conducted Test from 150 kHz to 30 MHz.

3. TEST PROCEDURES.

Radiated test procedure:

The EUT, associated cables and peripheral devices are placed on the supporting table and any support equipment is placed off the site. The EUT is turned on and any necessary operating or test software installed and allowed to warm up. The EUT is pre-scanned in our ferrite tile lined chamber where it is rotated 360 degrees and examined in both horizontal and vertical polarization, all emission frequencies are identified and recorded. The EUT is then moved to the OATS and the frequency band from 30 MHz to 40 GHz is scanned, all frequencies identified in the chamber are investigated, as well as harmonic frequencies of the EUT. When an emission is found the emission is maximized by varying the bundle position of the connecting cables, the antenna height, the antenna polarization (vertical and horizontal) and the table orientation (360 degrees). The maximum reading is recorded and the next signal is searched for.

Conducted test procedure:

The power line of the EUT is connected to the LISN (Line Impedance Stabilization Network). A measurement of the emissions are made from the power line for both phase and neutral on the analyzer in the frequency range from 150 kHz to 30 MHz. The maximum readings are recorded for each phase.

All measurements are made according to the procedures defined in: "ANSI C63.4-1992 Standard Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronics Equipment in the Range of 9 kHz to 40 GHz, American National Standard for (ISBN 1-55937-215-5).

RSS 210 TEST LIMITS

1. RSS 210 Section 6.2.2, Table 3 Radiation Limits (Quasi-Peak):
   FCC Part 15.209, 15.235, 15.249 Radiation Limits (Quasi-Peak):

Frequency MHz	Distance meters	Limit dBµV/m	Limit µV/m
1.705 - 30	30	29.5*	30*
30 - 88	3	40.0	100
49.82 - 49.90	3	80.0*	10,000*
88 - 216	3	43.5	150
216 - 960	3	46.0	200
902 - 928	3	94.0*	50,000*
960 - 1000	3	54.0	500
1000 - 40000	3	54.0*	500*

*NOTE: Average Limits

2. RSS 210 Section 6.6a Conduction Limits (Quasi-Peak):
   FCC Part 15.207 Conduction Limits (Quasi-Peak)

Frequency MHz	Quasi-Peak Limit dBµV	Average Limit dBµV
0.150 - 0.500	66 to 56	56 to 46
0.500 - 5.0	56	46
5.0 - 30.0	60	50

TEST FACILITY DESCRIPTION

Compliance Worldwide is located on 357 Main Street in Sandown, New Hampshire. The conducted and radiated test sites, located at C.W. are used for Federal Communications Commission (FCC) testing and Industry Canada Testing. A site description is on file with the FCC in Columbia, MD USA. Site information is also on file with Industry Canada, anyone wishing to review this Test Facility Description is referred to file number **IC 3023**. This is currently on file at Industry Canada, 1241 Clyde Avenue, Ottawa, ON K2C 1Y3.

The radiated site is a 3/10 meter indoor site with an enclosure for the product and a basement for the personnel, support equipment and test equipment.

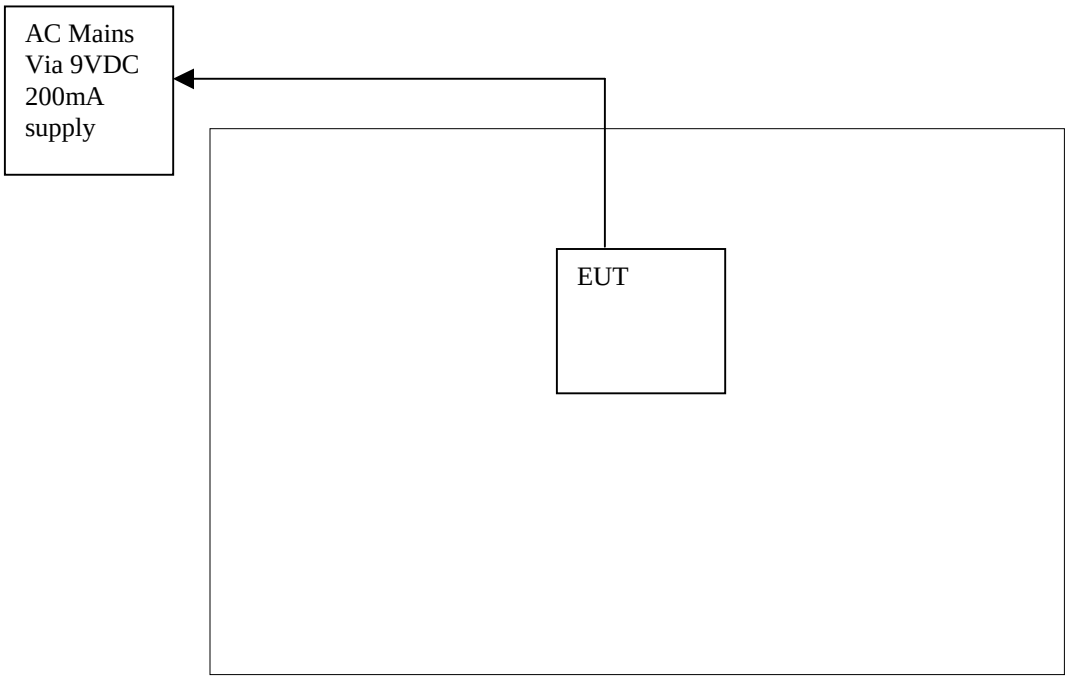
The conducted site is part of a 16' x 20' x 12' ferrite tile chamber and uses one of the walls for the vertical metal wall required by EN 55022.

Both sites are designed to test products or systems 1.5 meter x 1.0 meter, floor standing or table top.

DATE ON FILE FCC: August 10, 2000

DATE ON FILE IC: August 11, 2000

TEST SET UP
AND
PERIPHERAL CONNECTION INFORMATION



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PLEASE NOTE - EUT (equipment under test) is Safe Glow 49MHz Baby Monitor.

The cables directly connected to this equipment are listed below.

Connection Descriptions

1. __Power Cable_____
(description)

___EUT_____
(from device)

___AC Mains Via Class 2 power supply block_____
(to device)

CABLE LENGTH __2m__ (S) SHIELDED or (U) UNSHIELDED _U__

2. __N/A_____
(description)

_____
(from device)

_____
(to device)

CABLE LENGTH _____ (S) SHIELDED or (U) UNSHIELDED ____

3. __N/A_____
(description)

_____
(from device)

_____
(to device)

CABLE LENGTH _____ (S) SHIELDED or (U) UNSHIELDED ____

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RADIATED TEST RESULTS

Frequency Range:	30 - 1000 MHz.
Measurement Distance:	3.0 Meters.
Bandwidth:	120 kHz, Per ANSI C63.4-1992.*
Detector Functions:	Peak, Quasi Peak, Average
Video Filter:	300 kHz
Table Height:	0.8 meters
Antenna Height Variation:	1 - 4 Meters.

Horizontal and Vertical Polarization Measurements Taken.

*Measurement Bandwidth is 1 MHz above 1 GHz

PLEASE SEE NEXT PAGE FOR RADIATED TEST DATA

All Harmonics of the 16 MHz crystal, including harmonics of the 49MHz fundamental were examined, all signals greater than 26dBuV/m were recorded.

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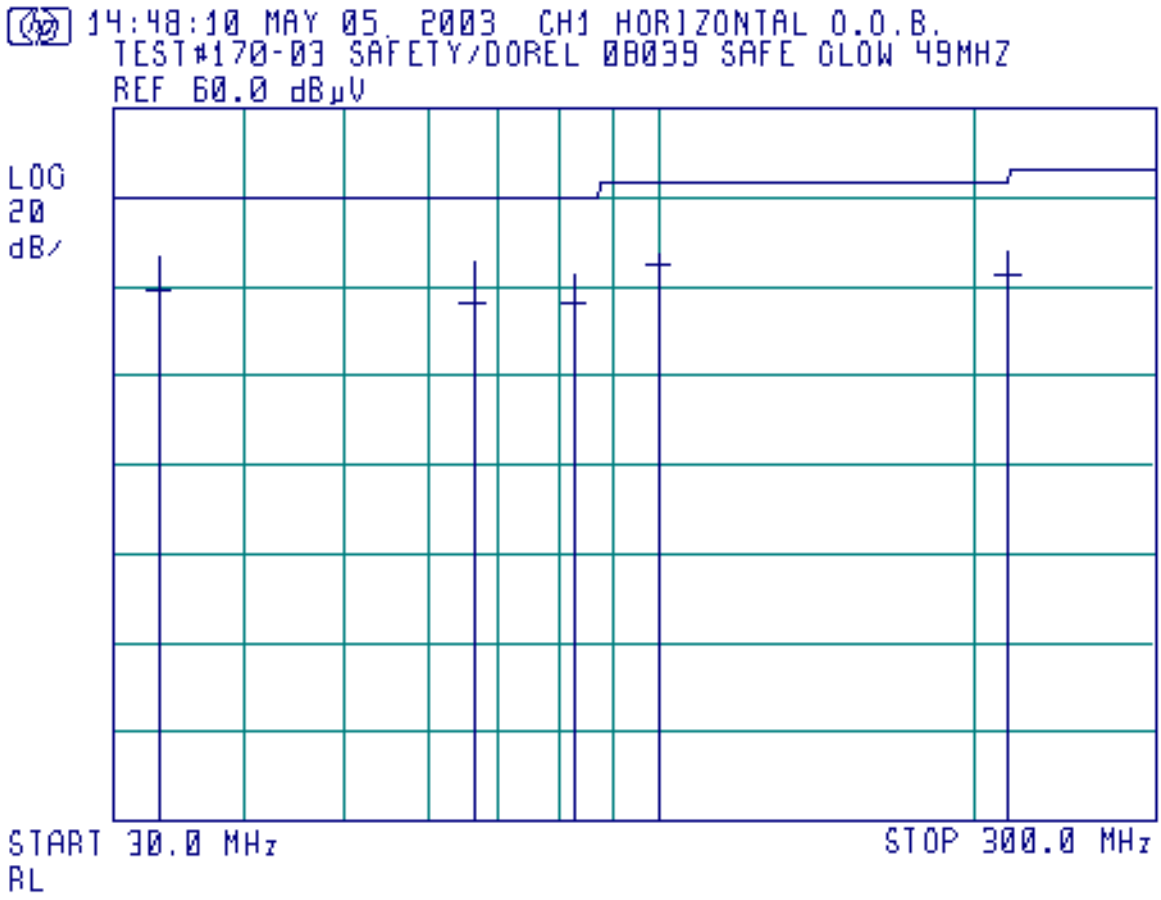
Radiated Horizontal channel A Data Log Plot



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Radiated Horizontal Channel A Tabular Data

Freq (MHz)	Azimuth (Degrees)	Antenna Height (Meters)	Peak Amp (dBuV)	QP Amp (dBuV)	QP Limit (dBuV)	QP Margin (dB)
33.269200	198	1.0	26.69	19.86	40.00	-20.14
66.455975	50	1.0	26.38	16.32	40.00	-23.68
83.086213	188	2.2	23.02	16.90	40.00	-23.10
99.703713	174	1.6	27.27	25.61	43.50	-17.89
216.031613	104	1.5	28.34	22.64	46.00	-23.36

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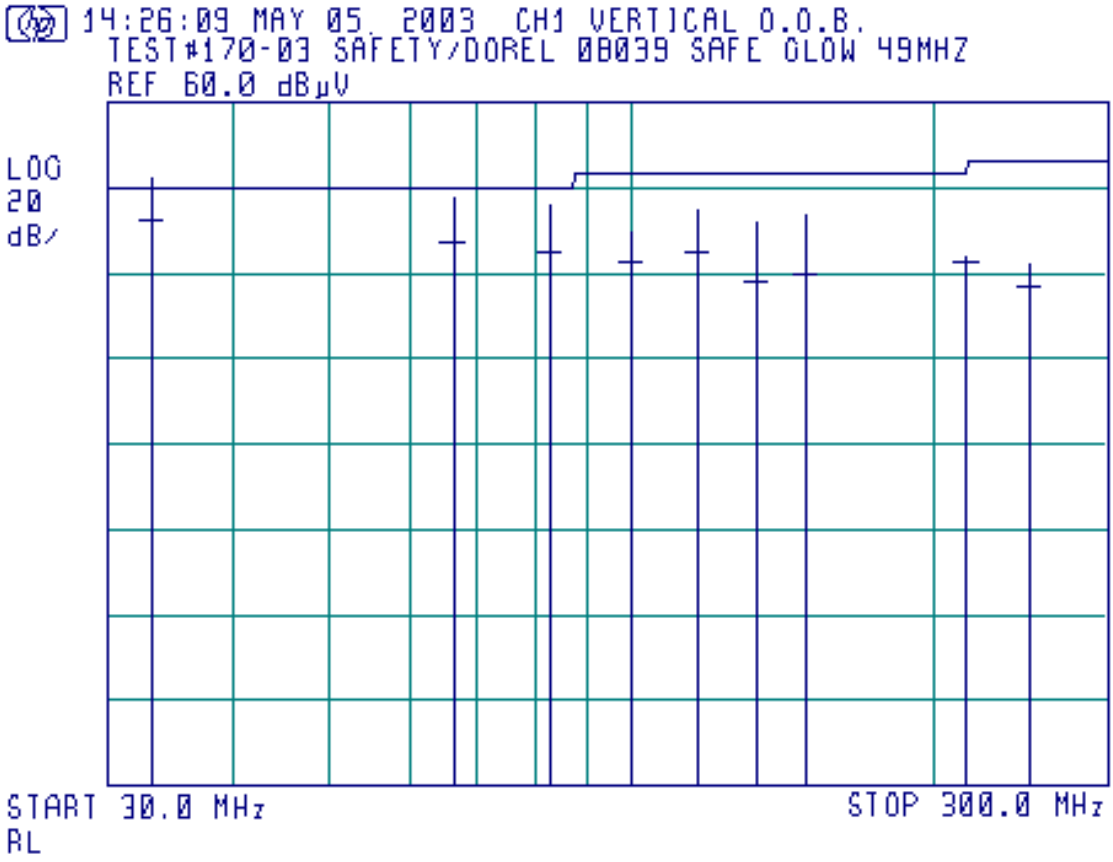
Radiated Vertical Channel A Data Log Plot



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Radiated Vertical Channel A Tabular Data

Freq (MHz)	Azimuth (Degrees)	Antenna Height (Meters)	Peak Amp (dBuV)	QP Amp (dBuV)	QP Limit (dBuV)	QP Margin (dB)
33.357650	240	1.0	42.47	33.04	40.00	-6.96
66.431725	110	1.0	37.79	27.58	40.00	-12.42
83.090125	354	1.0	36.04	25.46	40.00	-14.54
99.704838	64	1.0	29.75	22.99	43.50	-20.51
116.347800	48	1.0	34.53	24.95	43.50	-18.55
132.916850	310	1.0	32.61	17.96	43.50	-25.54
149.555450	354	1.0	33.56	20.92	43.50	-22.58
216.041900	4	1.0	24.70	22.68	46.00	-23.32
249.107250	354	1.0	22.46	17.56	46.00	-28.44

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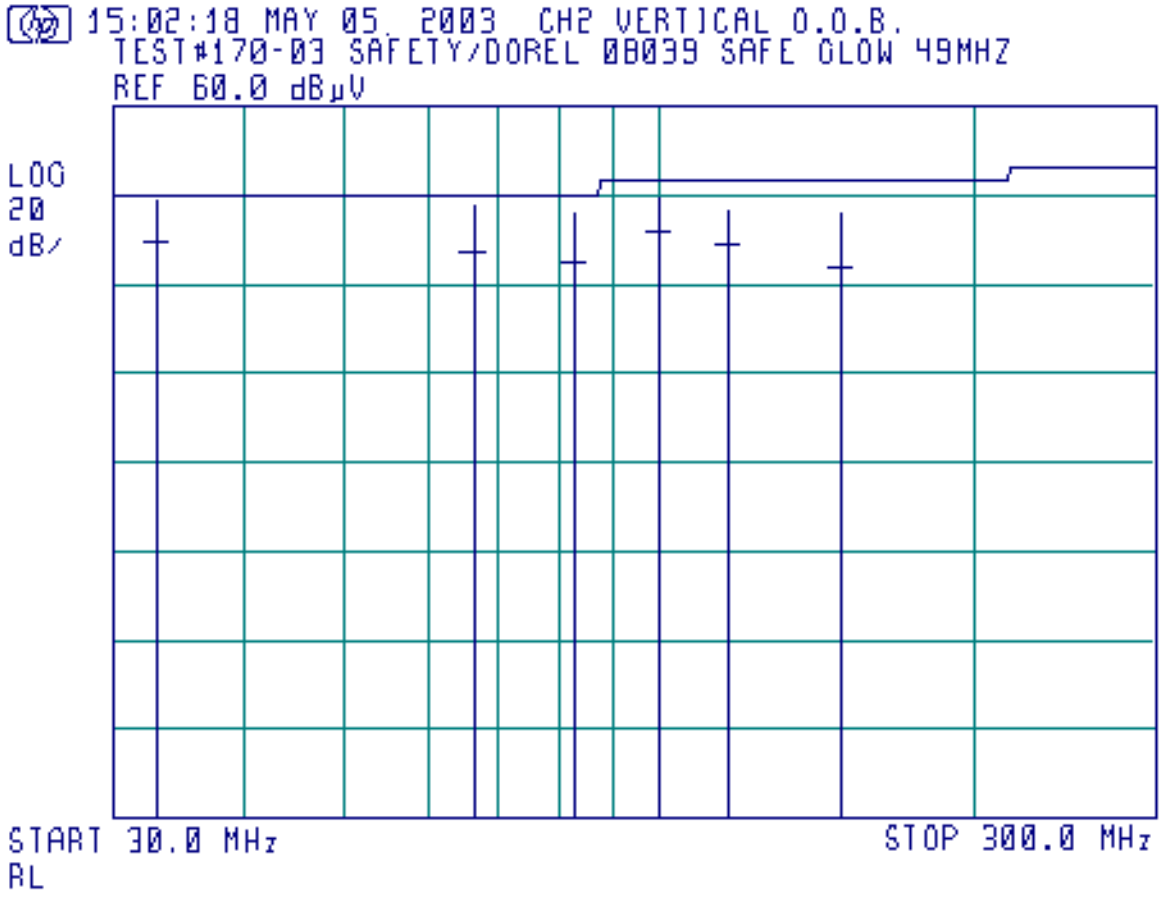
Radiated Vertical Channel B Log Plot



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Radiated Vertical Channel B Tabular Data

Freq (MHz)	Azimuth (Degrees)	Antenna Height (Meters)	Peak Amp (dBuV)	QP Amp (dBuV)	QP Limit (dBuV)	QP Margin (dB)
33.252267	4	1.7	39.16	29.99	40.00	-10.01
66.461133	354	1.0	37.82	27.93	40.00	-12.07
83.120941	4	1.0	36.43	25.56	40.00	-14.44
99.745574	4	1.0	39.85	32.22	43.50	-11.28
116.365282	40	1.0	37.16	28.89	43.50	-14.61
149.613648	178	1.0	36.40	24.53	43.50	-18.97

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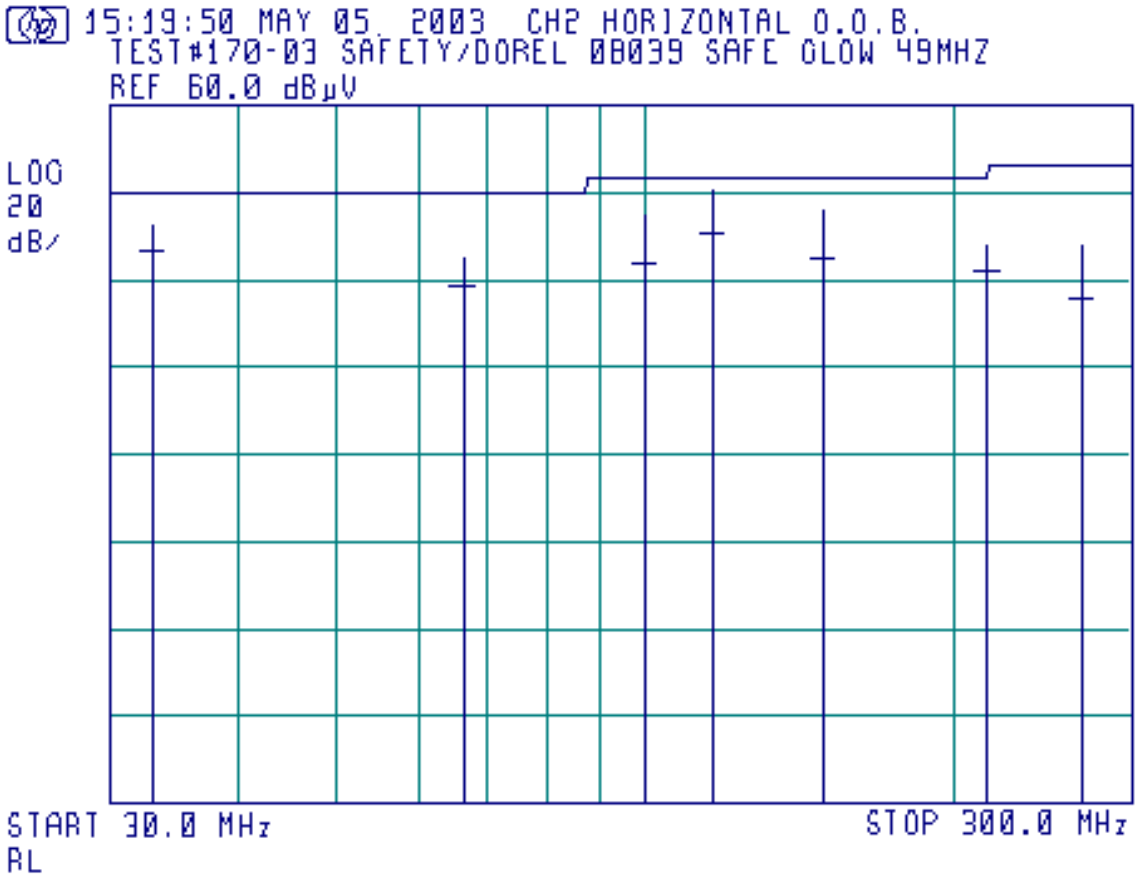
Radiated Horizontal Channel B Log Plot



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Radiated Horizontal Channel B Tabular Data

Freq (MHz)	Azimuth (Degrees)	Antenna Height (Meters)	Peak Amp (dBuV)	QP Amp (dBuV)	QP Limit (dBuV)	QP Margin (dB)
33.236917	160	2.1	33.12	27.18	40.00	-12.82
66.569733	118	1.0	25.23	19.07	40.00	-20.93
99.736274	110	1.4	34.32	24.56	43.50	-18.94
116.369232	108	2.7	40.93	31.82	43.50	-11.68
149.606436	114	2.1	36.45	25.00	43.50	-18.50
216.102355	138	1.3	28.07	22.34	46.00	-23.66
266.009279	130	1.0	28.17	15.93	46.00	-30.07

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RADIATED OUTPUT POWER & OCCUPIED BANDWIDTH TEST RESULTS

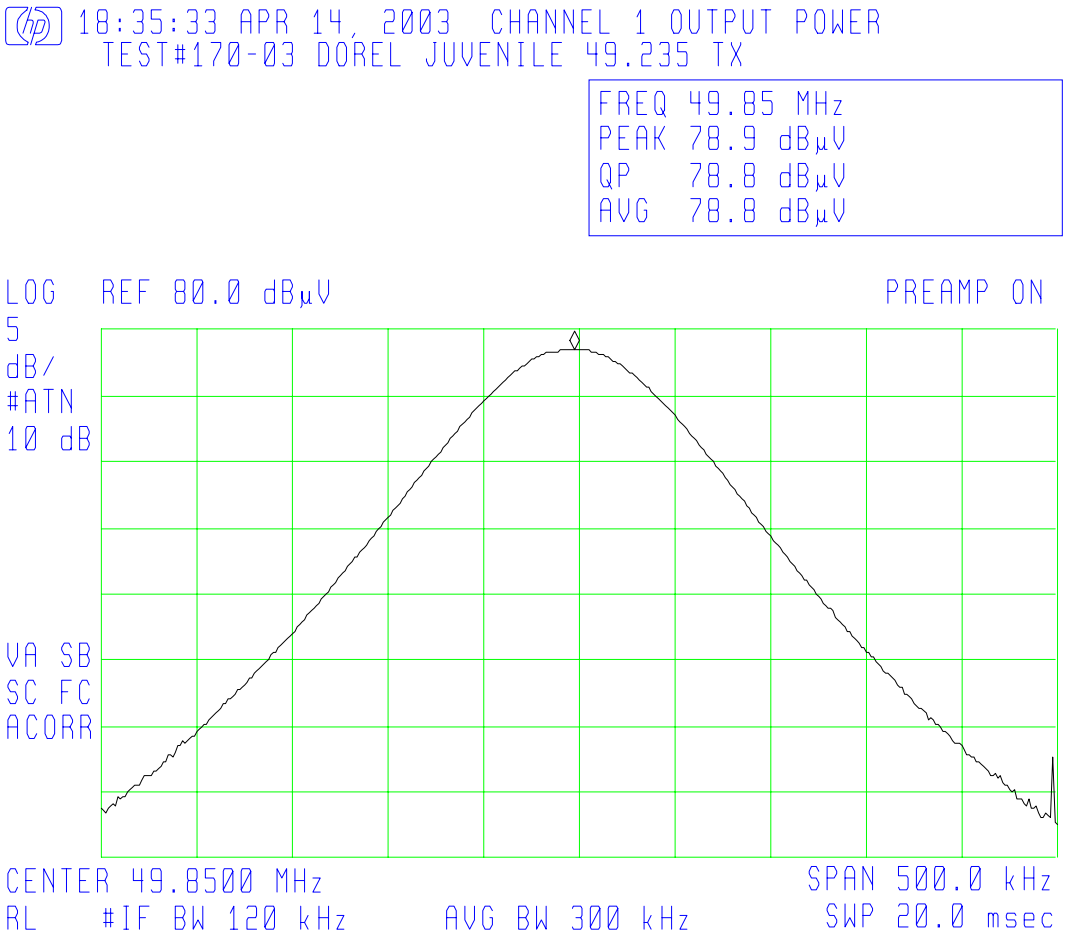
Frequency Range:	49.82-49.90 MHz.
Measurement Distance:	3.0 Meters.
Bandwidth:	As Noted, Per ANSI C63.4-1992.
Detector Functions:	Peak, Quasi Peak, Average.
Video Filter:	300 kHz
Table Height:	0.8 meters
Antenna Height Variation:	1 - 4 Meters.

Horizontal and Vertical Polarization Measurements Taken, Worst Case Reported.

PLEASE SEE NEXT PAGE(S) FOR OCCUPIED BANDWIDTH RADIATED TEST DATA

Worst Case Polarization was Vertical for Channels 1 and 2.

Channel A Output Power Plot



Freq (MHz)	Azimuth (Degrees)	Antenna Height (meters)	Peak Amp (dBuV/m)	Avg Amp (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)
49.8500	180	1.0	78.9	78.8	80.0	-1.2

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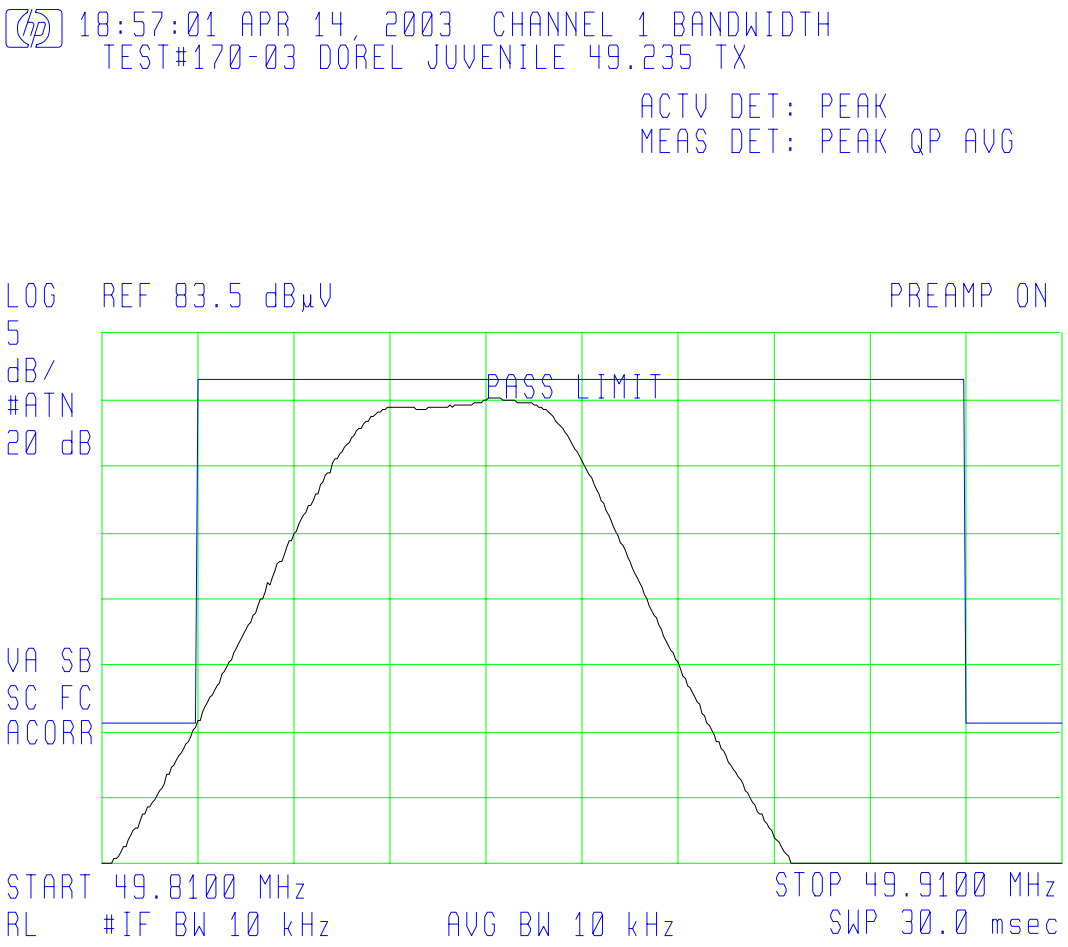
Channel A Occupied Bandwidth Plot



Plot shows limit and 26 dB down with edges at 49.82 and 49.90.
Emission is within the band at maximum modulation using a 2.5kHz tone.
Bandwidth was examined form 100 Hz to 8kHz, worst case is as shown.

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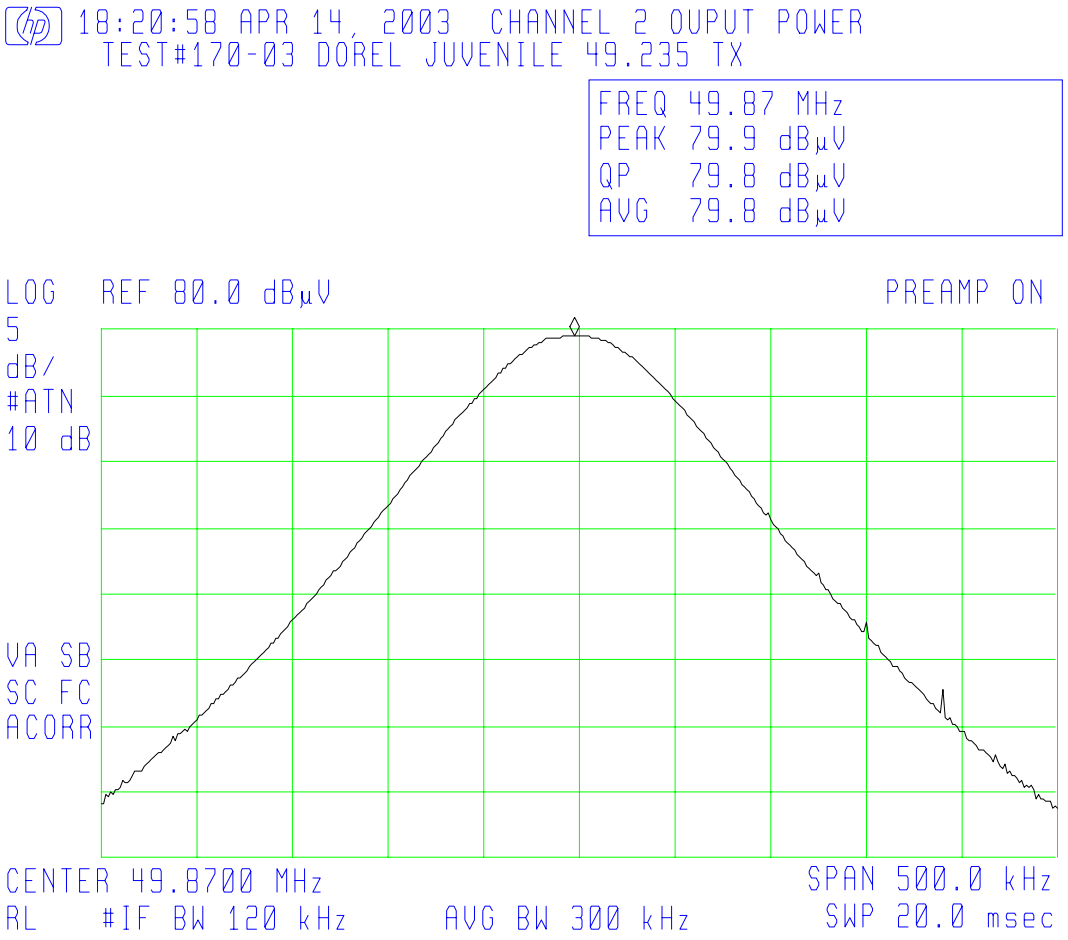
Channel B Output Power Plot



Freq (MHz)	Azimuth (Degrees)	Antenna Height (meters)	Peak Amp (dBuV/m)	Avg Amp (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)
49.8700	180	1.0	79.8	79.8	80.0	-0.2

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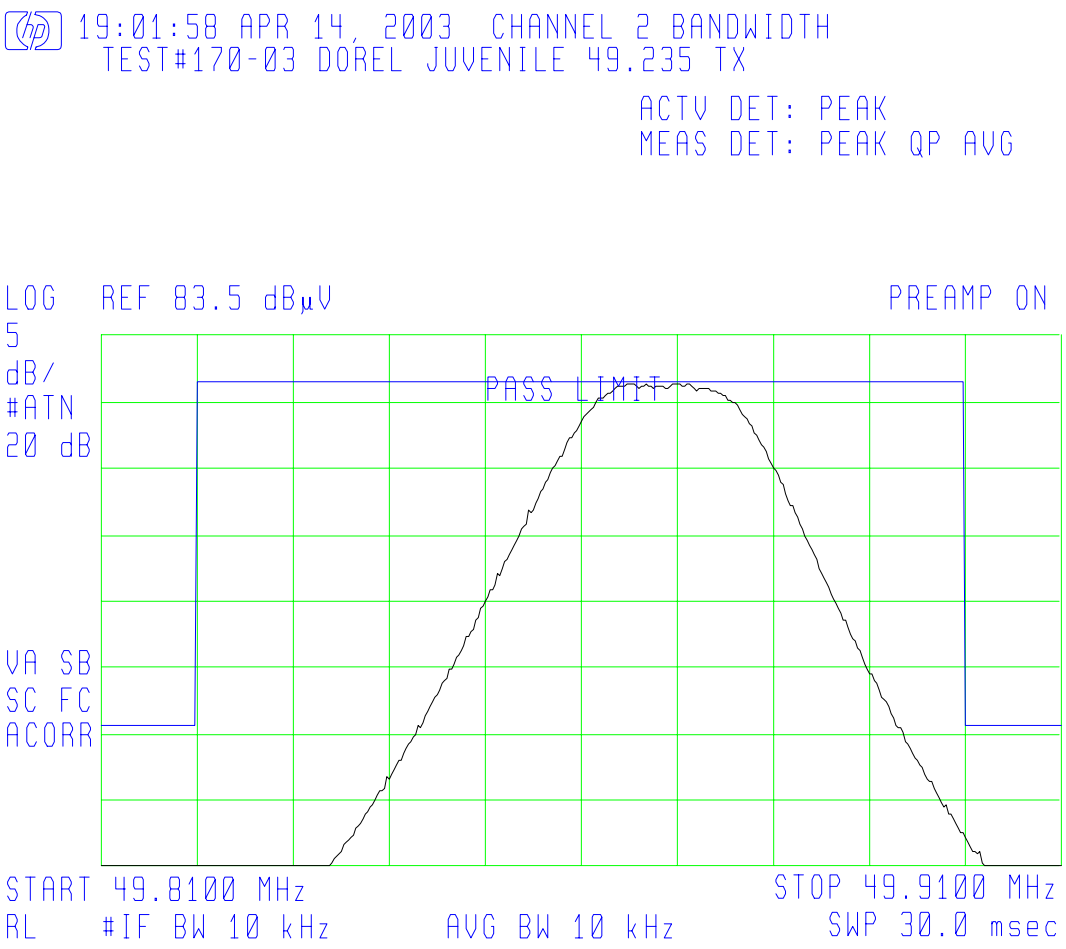
Channel B Occupied Bandwidth Plot



Plot shows limit and 26 dB down with edges at 49.82 and 49.90.
Emission is within the band at maximum modulation using a 2.5kHz tone.
Bandwidth was examined from 100 Hz to 8kHz, worst case is as shown.

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CONDUCTED TEST RESULTS

Frequency Range:	150 kHz to 30.0 MHz.
Bandwidth:	9 kHz per ANSI C63.4-1992.
Detector Functions:	Peak, Quasi-Peak, Average
Table Height:	0.8 meters
Video Bandwidth:	30 kHz.

Phase and Neutral Measurements Taken.

PLEASE SEE NEXT PAGE FOR CONDUCTED TEST DATA

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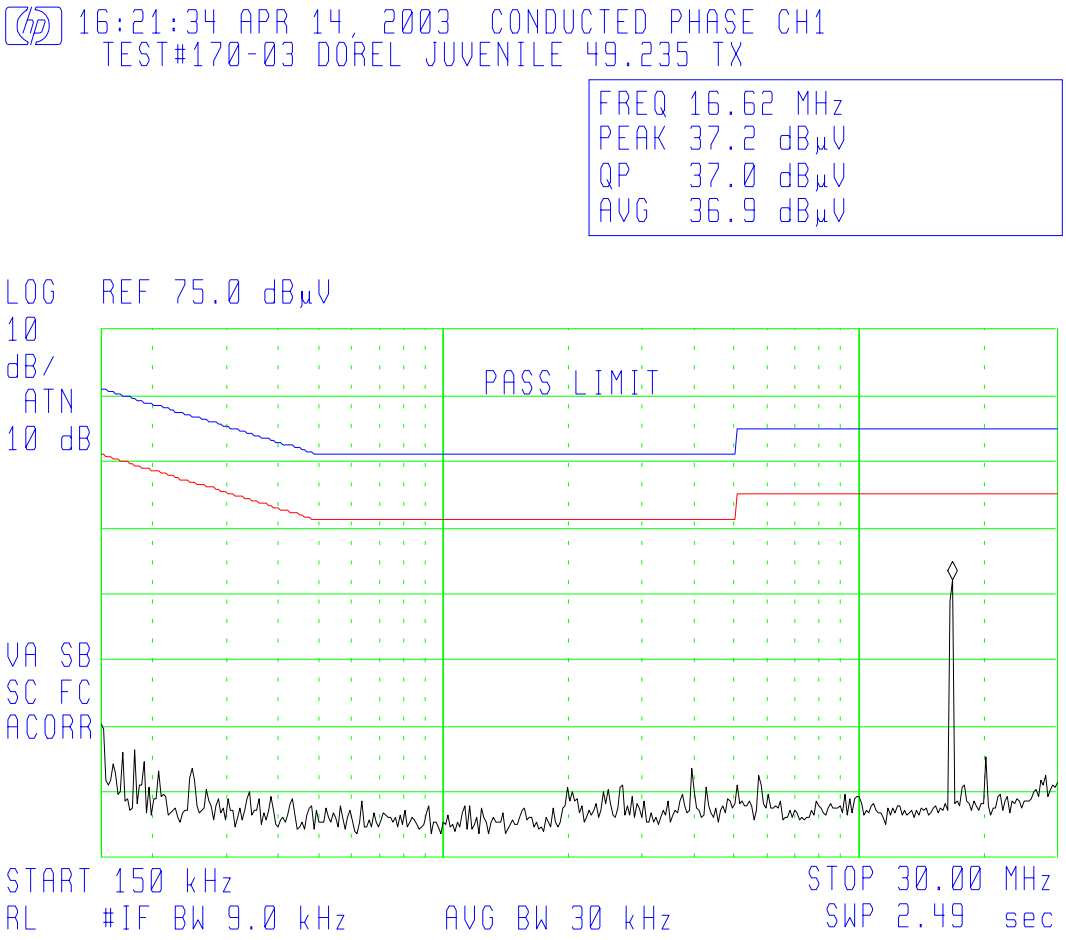
Conducted Channel A 120V 60Hz Phase Data Log Plot



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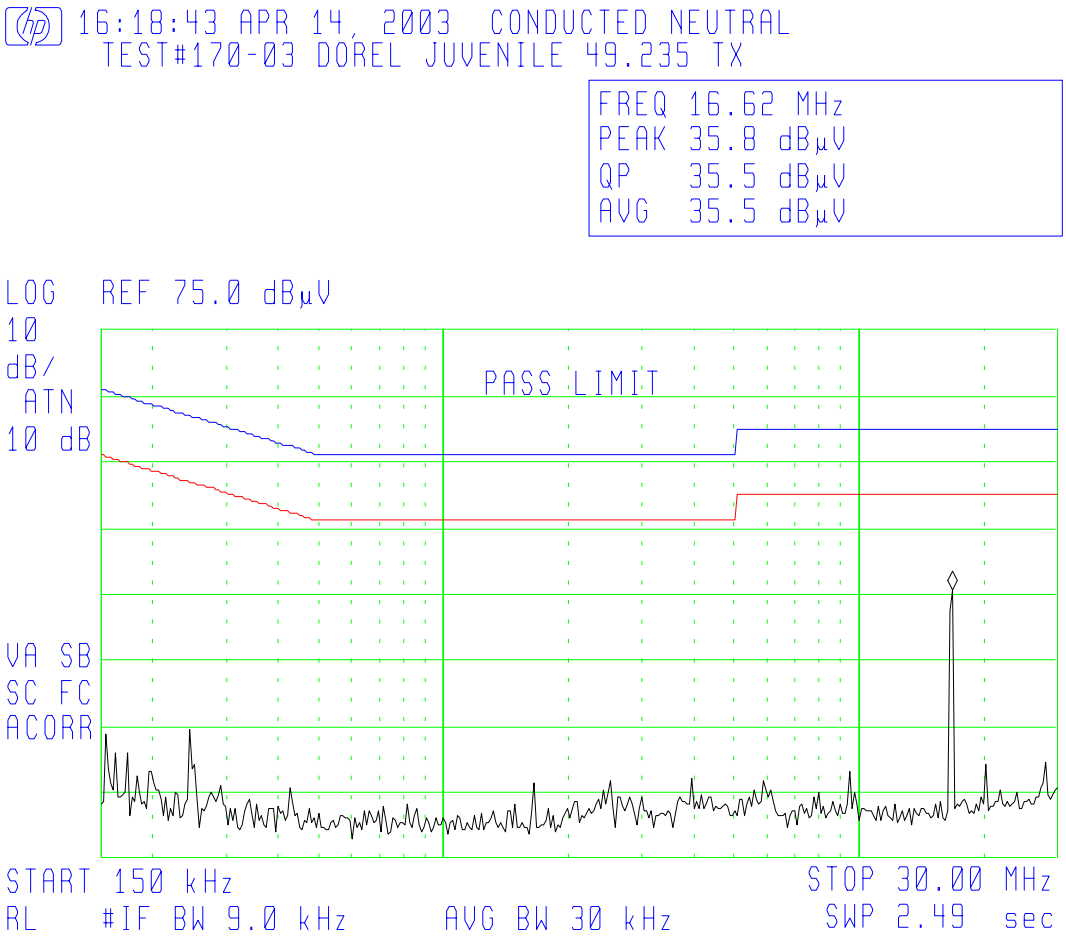
Conducted Channel A 120V 60Hz Neutral Data Log Plot



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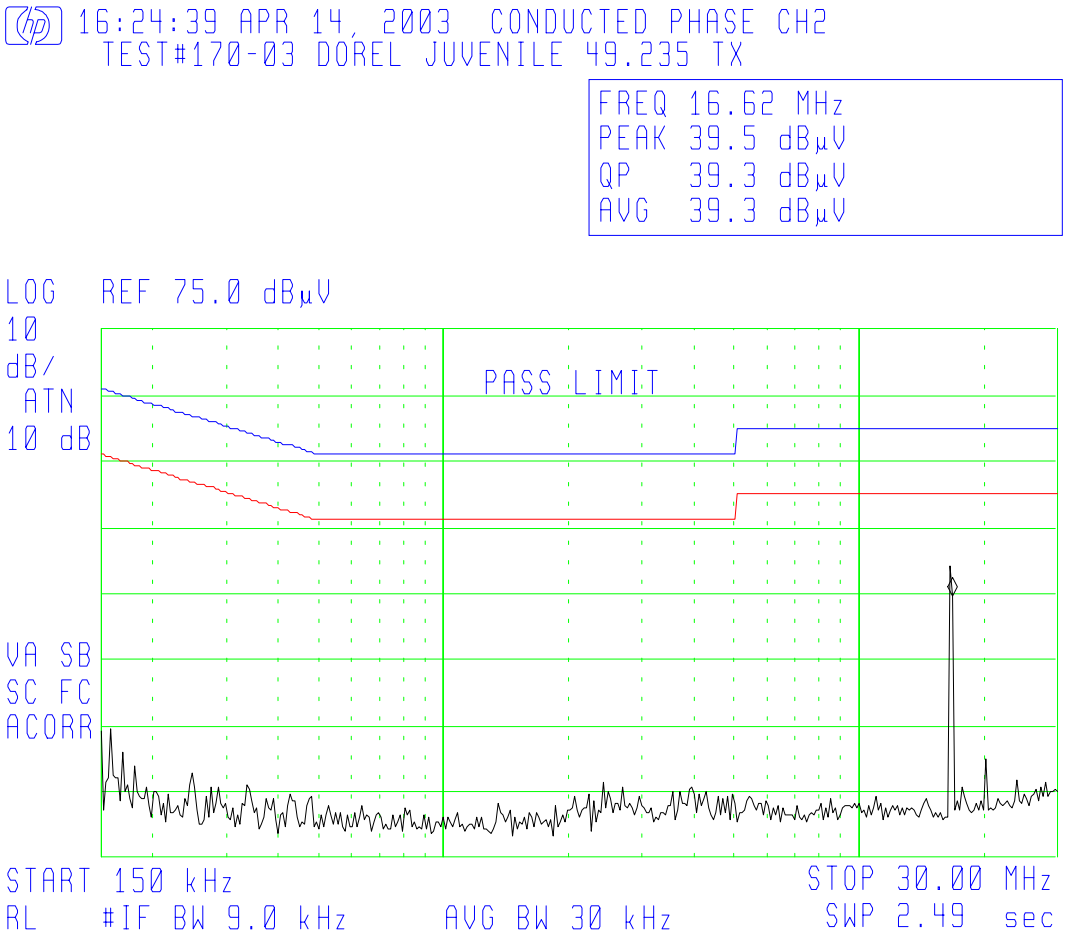
Conducted Channel B 120V 60Hz Phase Data Log Plot



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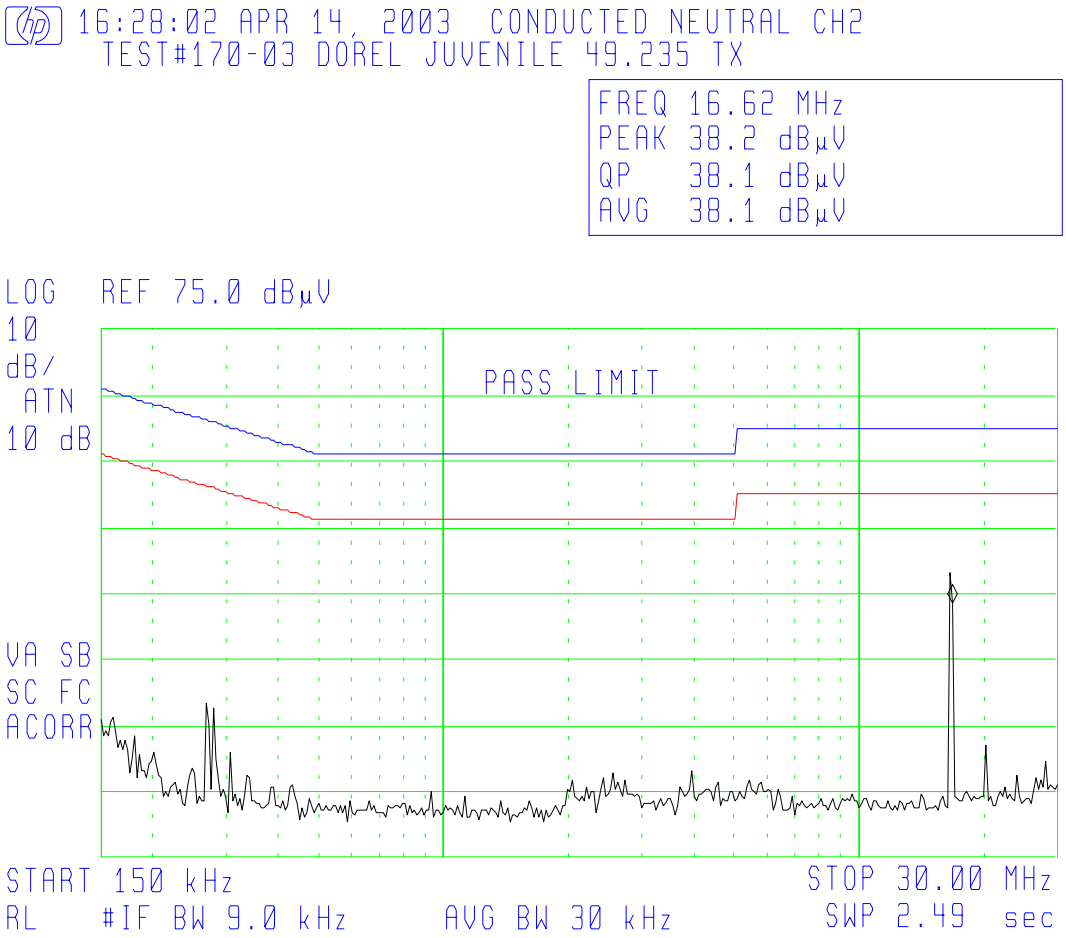
Conducted Channel B 120V 60Hz Neutral Data Log Plot



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NOTES AND COMMENTS

(Special conditions unique to this test)

Unit was examined with the night light on and off, worst case is with the night light off. The data represents worst case.

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