

## Appendix D – Test Data Package Checklist

GLAT 2436 Protoflight  
 2437 Acceptance



HCB YC 11/23/05  
 QUANTA LABS YC 11/23/05  
**GLAST LAT Project GASU/PDU Vibration Testing**  
**Qualification/Acceptance Test Data Package Checklist**  
 (Items supplied by Wyle Labs at end of test)

Item		Description / Location
1		Calibrated Equipment List
2		Vibration Test plots (Pre- and Post test signature overlays and random vibration test data for Z, X, and Y axes)
3		Electronic Data in UFF or equivalent format, if available
4		Photographs of test setup
5		Procedure data sheets (Appendices A, B, and C)
6	N/A	Visual Inspection Report
7	N/A	Test Control System Software Setup Sheets

HCB SN # GLAT 2436

SN # GLAT 2437

11/27/05 11/23/05

-07374-01  
~~0615702~~  
 HCB  
 11/27/05

# Appendix B – Test Log

HCB 2436 Proto High  
 2437 Acceptance

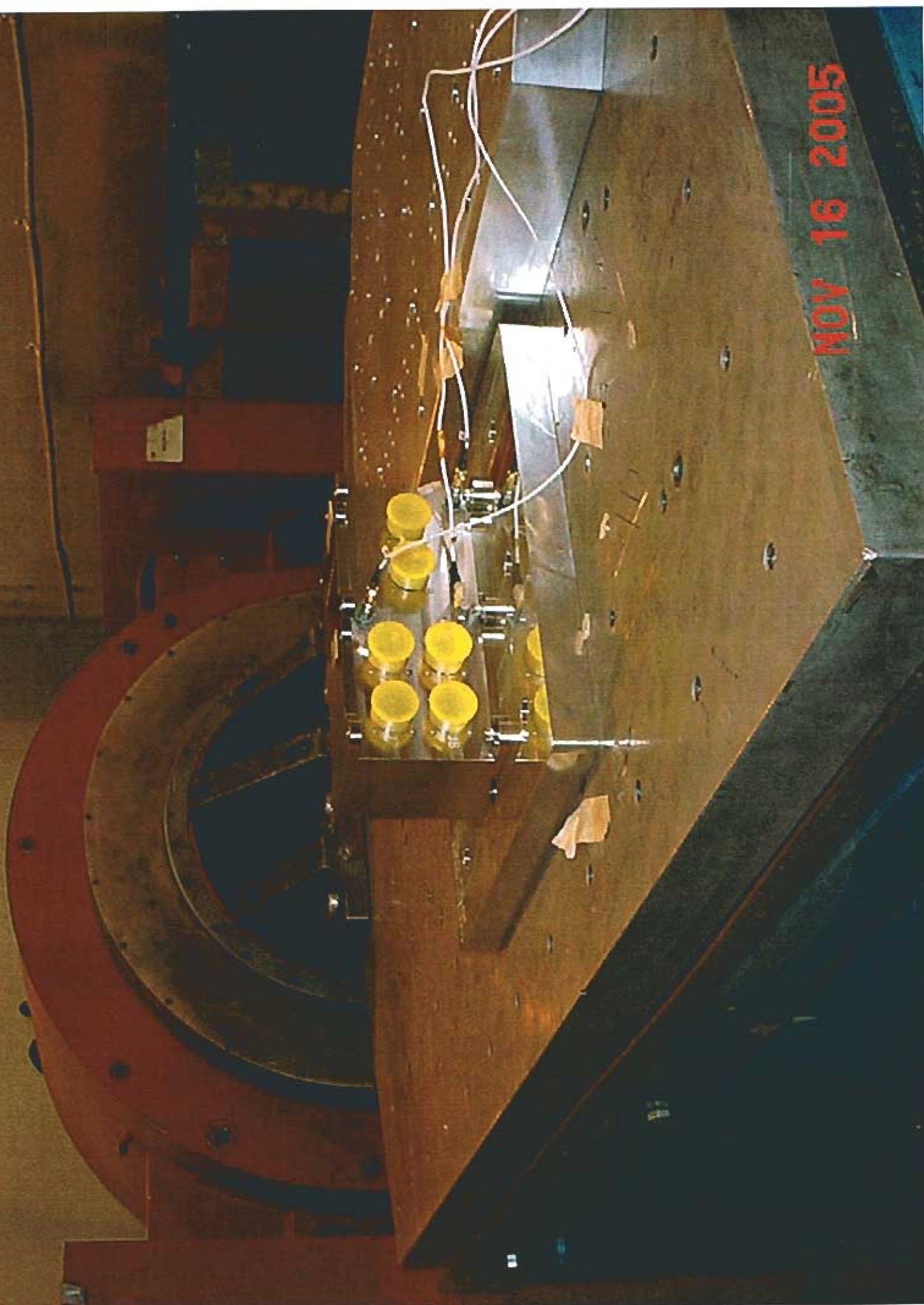


HCB  
 GLAST LAT Project TEM/TPS Vibration Testing

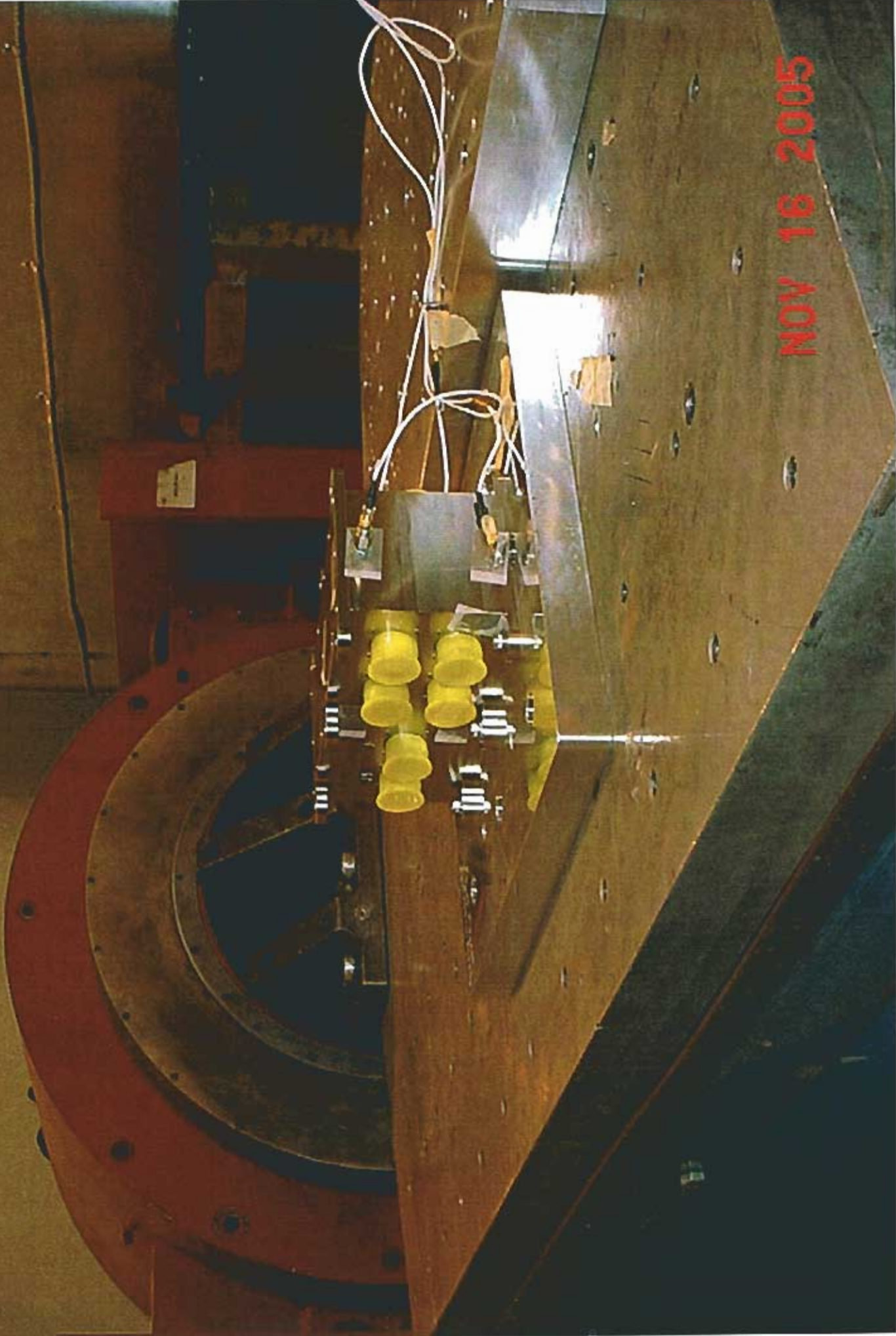
## Test Log

Date	Time	Unit #	Axis	Sine or Random	Level [g]/[grms]	Frequency [Hz]	File Name	Remarks
11/19/05	1:30	2436	X	<del>Sine</del> Sweep	0.15	5-2000		
	1:40		X	Sin-Proto	1.6 etc	5-50		
	1:45		X	Sweep	0.15	5-2000		
	1:55		X	Random	6.8	20-2000		
	2:05		X	Sweep	0.15	5-2000		
	3:10	2437	X	Sweep	0.15	5-2000		
	3:20		X	Sin-Acc	1.5	5-50		
	3:30		X	Sweep	0.15	5-2000		
	3:40		X	Rand-Acc	6.8	20-2000		
	3:50		X	Sweep	0.15	5-2000		
	9:40	2436	Y	Sweep	0.15	5-2000		
	9:45		Y	Sin Proto	1.6 etc	5-50		
	9:55		Y	Sweep	0.15	5-2000		
	10:05		Y	Rand Proto	6.8	20-2000		
	10:10		Y	Sweep	0.15	5-2000		
	10:15		Z	Sweep	0.15	5-2000		
	10:20		Z	Sin Proto	0.3 etc	5-50		
	10:25		Z	Sweep	0.15	5-2000		
	10:30		Z	Rand Proto	6.8	20-2000		
	10:35		Z	Sweep	0.15	5-2000		
	10:55	2437	Z	Sweep	0.15	5-2000		
	11:00		Z	Sin Acc	0.2 etc.	5-50		
	11:05		Z	Sweep	0.15	5-2000		
	11:15		Z	Rand Acc	6.8	20-2000		
	11:20		Z	Sweep	0.15	5-2000		
	11:30		Y	Sweep	0.15	5-2000		
	11:35		Y	Sin Acc	1.2 etc	5-50		
	11:40		Y	Sweep	0.15	5-2000		
	11:45		Y	Rand Acc	6.8	20-2000		
	11:50		Y	Sweep	0.15	5-2000		

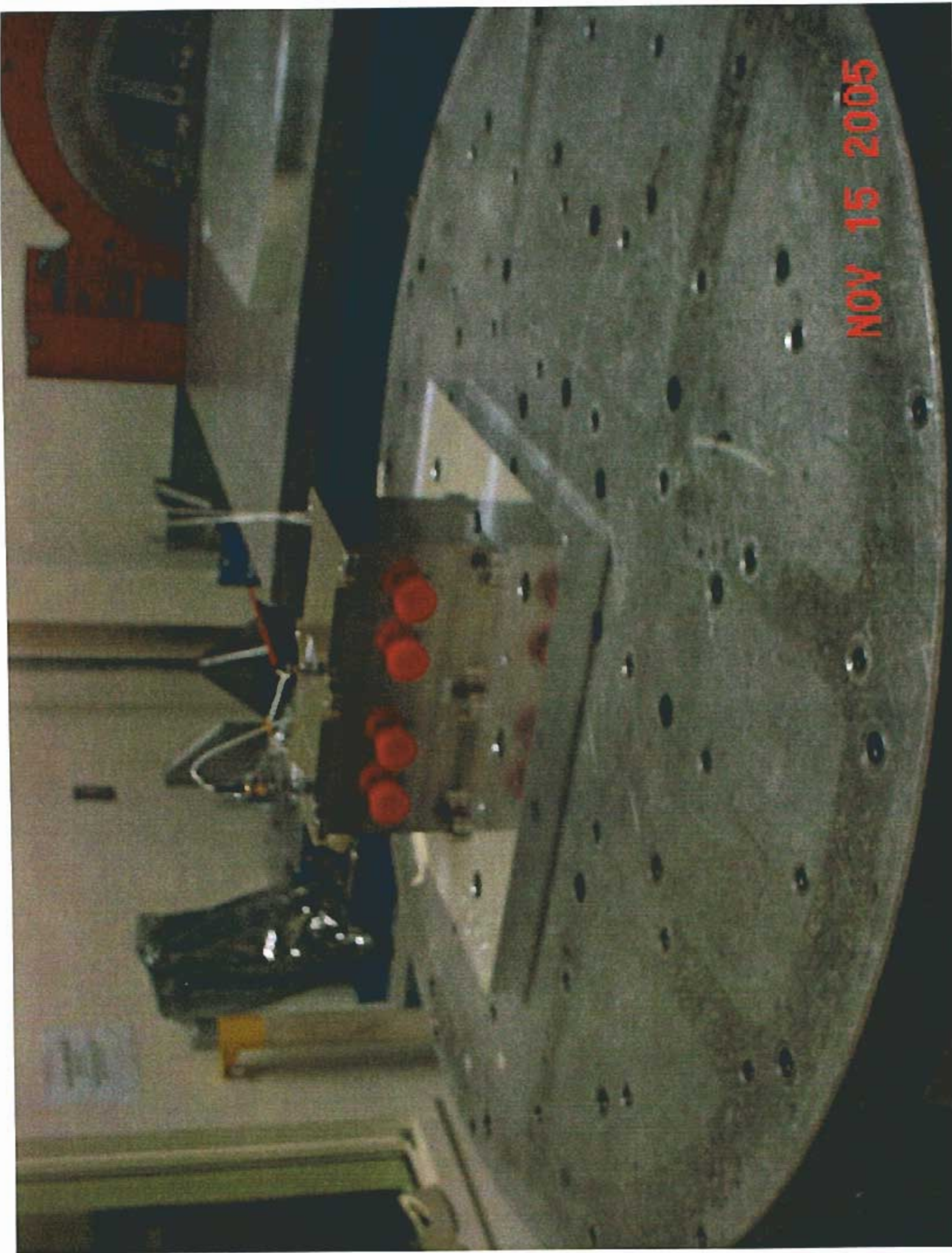
NOV 16 2005



NOV 18 2005



NOV 15 2005



## ACCELEROMETER CALIBRATION REPORT

No. \_\_\_\_\_

Make: DRTRAN  
 Model: 3031AG  
 Serial No.: 252  
 Asset No. QL-0247

Ambient Temperature: 24 °C  
 Ambient Relative Humidity: 35 %

Procedure: QL-CP-002  
 Axis: Single

Sensitivity @ 100Hz 9.76 mV/g  
 Useable Freq Range 20 Hz to 2000 Hz

Oscillator Set Frequency (HZ)	Sensitivity of Standard Accelerometer (mV/g)	Sensitivity of Unit Under Calibration (mV/g)	Deviation %
20	10.04	9.50	-2.7
30	10.00	9.26	-5.0
50	10.00	9.67	-0.9
100	10.02	9.76	0.0
300	10.02	9.27	-5.0
500	10.02	9.59	-1.7
1000	10.00	9.68	-0.8
2000	10.10	9.87	1.1

In Specs: Y

In Service: Y

Out of Service: N

Description	Make & Model	Standards Used		Cal Date	Date Due
		Serial #	Asset #		
Multimeter	Fluke 45	7020016	QL-0561	10-07-05	10-07-06
T/H Meter	Cooper SRH 77A-E	314220	QL-0557	4-22-05	4-22-06
Accel Ref.	Dytran 3120AK	199	QL-0421	9-26-05	9-26-06

**Notes:**

- Calibration is traceable to NIST and complies with MIL-STD-45662A.
- All Calibrations have been performed using standards having an accuracy of four or more times greater than the unit calibrated, unless otherwise stated. Acceptable accuracy for voltage setting is 7.07mV +/- 0.05% (7.11 to 7.03) and the system stability should be less 0.3mV.
- This certificate may not be reproduced, except in full, without written approval.

Calibrated by: Y.M. G. Sun  
 Calibration Technician

Calibration date: 11/02/2005

Next Calibration Due Date: 11/02/2006

Certified by: [Signature]  
 Quality System Manager

## ACCELEROMETER CALIBRATION REPORT

No. \_\_\_\_\_

Make: DYTRAN  
 Model: 3030A4  
 Serial No.: 1386  
 Asset No.: QL-0225

Ambient Temperature: 24 °C  
 Ambient Relative Humidity: 33 %

Procedure: QL-CP-002  
 Axis: Single

Sensitivity @ 100Hz 9.83 mV/g  
 Useable Freq Range 20 Hz to 2000 Hz

Oscillator Set Frequency (HZ)	Sensitivity of Standard Accelerometer (mV/g)	Sensitivity of Unit Under Calibration (mV/g)	Deviation %
20	9.95	9.70	-1.3
30	9.97	9.71	-1.2
50	9.99	9.71	-1.2
100	10.00	9.83	0.0
300	10.01	9.69	-1.4
500	10.04	9.80	-0.3
1000	10.05	9.85	0.2
2000	10.06	10.00	1.7

In Specs: Y

In Service: Y

Out of Service: N

Description	Make & Model	Standards Used		Cal Date	Date Due
		Serial #	Asset #		
Multimeter	Fluke 45	7020016	QL-0561	10-28-04	10-28-05
T/H Meter	Cooper SRH 77A-E	314220	QL-0557	6-11-04	6-11-05
Accel Ref.	Dytran 3120AK	114	QL-0033	10-15-05	10-15-05

## Notes:

- Calibration is traceable to NIST and complies with MIL-STD-45862A.
- All Calibrations have been performed using standards having an accuracy of four or more times greater than the unit calibrated, unless otherwise stated. Acceptable accuracy for voltage setting is 7.07mV +/- 0.05% (7.11 to 7.03) and the system stability should be less 0.3mV.
- This certificate may not be reproduced, except in full, without written approval.

Calibrated by: Ym G. San  
 Calibration Technician

Calibration date: 03/10/2005Next Calibration Due Date: 03/10/2006

Certified by: \_\_\_\_\_  
 Quality System Manager

## ACCELEROMETER CALIBRATION REPORT

No. \_\_\_\_\_

Make: DYTRAN  
 Model: 3031A  
 Serial No.: 101  
 Asset No.: QL-0194

Ambient Temperature: 25 °C  
 Ambient Relative Humidity: 30 %

Procedure: QL-CP-002  
 Axis: Single

Sensitivity @ 100Hz 96.50 mV/g  
 Useable Freq Range 20 Hz to 2000 Hz

Oscillator Set Frequency (HZ)	Sensitivity of Standard Accelerometer (mV/g)	Sensitivity of Unit Under Calibration (mV/g)	Deviation %
20	9.95	93.41	-3.2
30	9.97	93.40	-3.2
50	9.99	94.56	-2.0
100	10.00	96.50	0.0
300	10.01	94.30	-2.3
500	10.04	96.11	-0.4
1000	10.05	96.26	-0.3
2000	10.06	101.18	4.9

In Specs: Y

In Service: Y

Out of Service:

N

Description	Make & Model	Standards Used		Cal Date	Date Due
		Serial #	Asset #		
Multimeter	Fluke 45	7020016	QL-0581	10-28-04	10-28-05
T/H Meter	Cooper SRH 77A-E	314220	QL-0557	4-22-05	4-22-06
Accel Ref.	Dytran 3126AK	114	QL-0033	10-15-05	10-15-05

## Notes:

- Calibration is traceable to NIST and complies with MIL-STD-45662A.
- All Calibrations have been performed using standards having an accuracy of four or more times greater than the unit calibrated, unless otherwise stated. Acceptable accuracy for voltage setting is 7.07mV +/- 0.05% (7.11 to 7.03) and the system stability should be less 0.3mV.
- This certificate may not be reproduced, except in full, without written approval.

Calibrated by: Y.M. G. S.  
 Calibration Technician

Calibration date: 10/04/2005

Next Calibration Due Date: 10/04/2006

Certified by: \_\_\_\_\_  
 Quality System Manager



## ACCELEROMETER CALIBRATION REPORT

No. \_\_\_\_\_

Make: DYTRAN  
 Model: 3030A4  
 Serial No.: 1385  
 Asset No.: QL-0224

Ambient Temperature: 25.6 °C  
 Ambient Relative Humidity: 35 %

Procedure QL-CF-002  
 Axis: Single

Sensitivity @ 100Hz 9.78 mV/g  
 Useable Freq Range 20 Hz to 2000 Hz

Oscillator Set Frequency (HZ)	Sensitivity of Standard Accelerometer (mV/g)	Sensitivity of Unit Under Calibration (mV/g)	Deviation %
20	9.95	9.59	-1.9
30	9.97	9.62	-1.6
50	9.99	9.61	-1.7
100	10.00	9.78	0.0
300	10.01	9.58	-2.0
500	10.04	9.71	-0.7
1000	10.05	9.80	0.2
2000	10.06	10.09	3.2

In Specs: YIn Service: YOut of Service: N

Description	Make & Model	Standards Used		Cal Date	Date Due
		Serial #	Asset #		
Multimeter	Fluke 45	7020016	QL-0581	10-28-04	10-28-05
T/H Meter	Cooper SRH 77A-E	314220	QL-0557	4-22-05	4-22-06
Accel Ref.	Dytran 3120AK	114	QL-0033	10-15-05	10-15-05

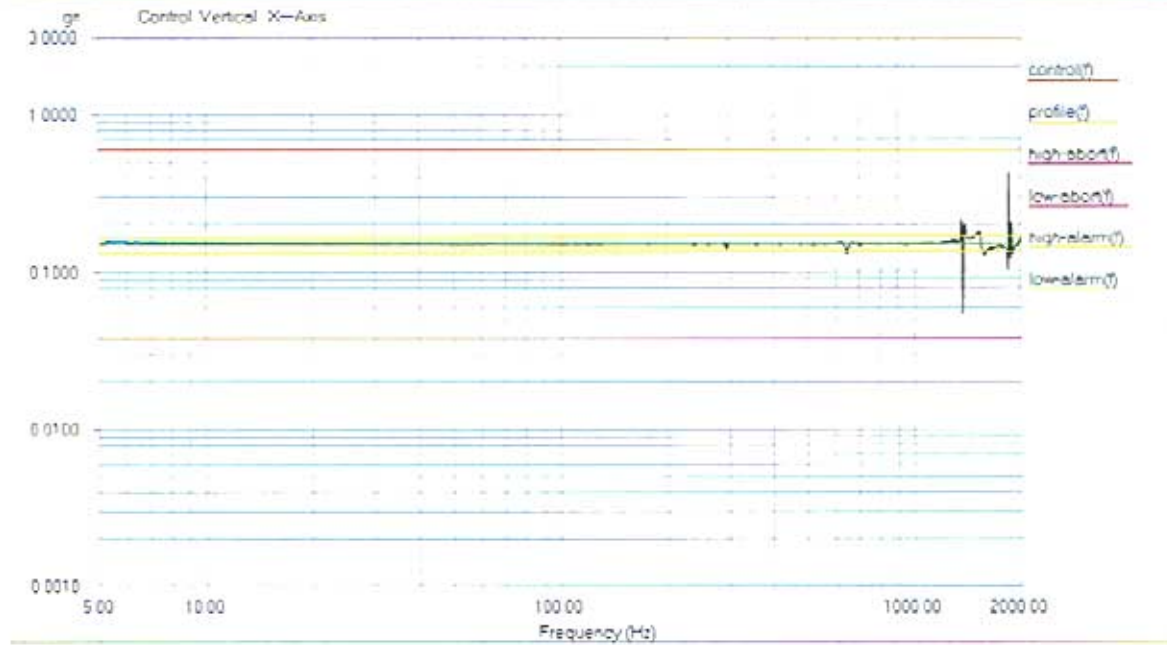
## Notes:

- Calibration is traceable to NIST and complies with MIL-STD-45662A.
- All Calibrations have been performed using standards having an accuracy of four or more times greater than the unit calibrated, unless otherwise stated. Acceptable accuracy for voltage setting is 7.07mV +/- 0.05% (7.11 to 7.03) and the system stability should be less 0.3mV.
- This certificate may not be reproduced, except in full, without written approval.

Calibrated by: Y.M. G. Sam  
 Calibration Technician

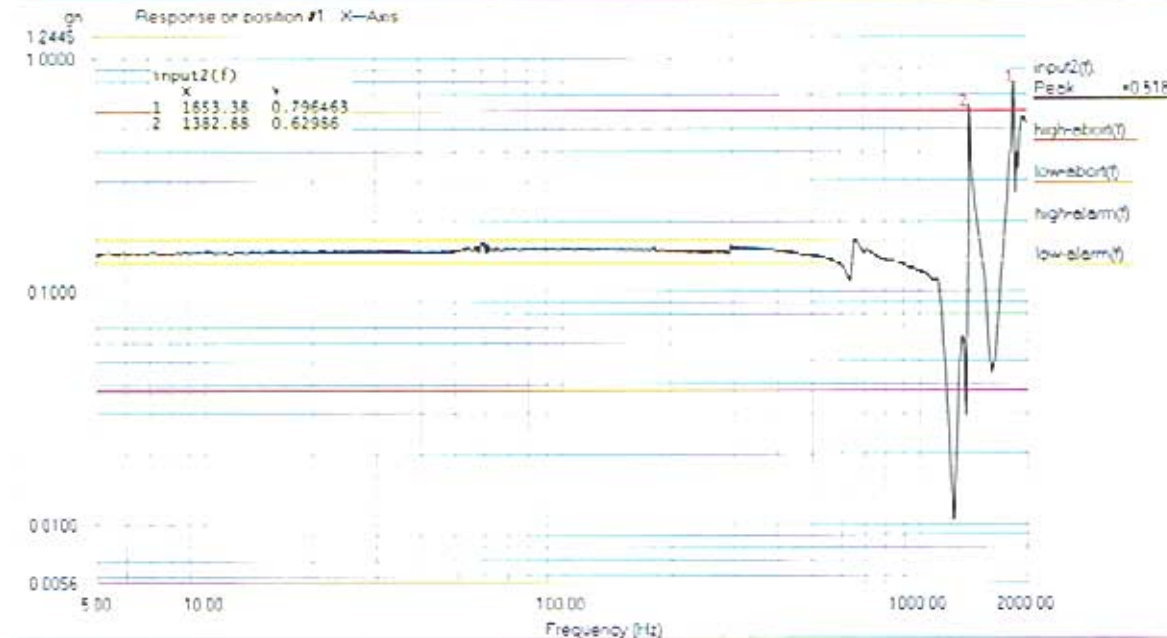
Calibration date: 10/04/2005Next Calibration Due Date: 10/04/2008

Certified by: N  
 Quality System Manager



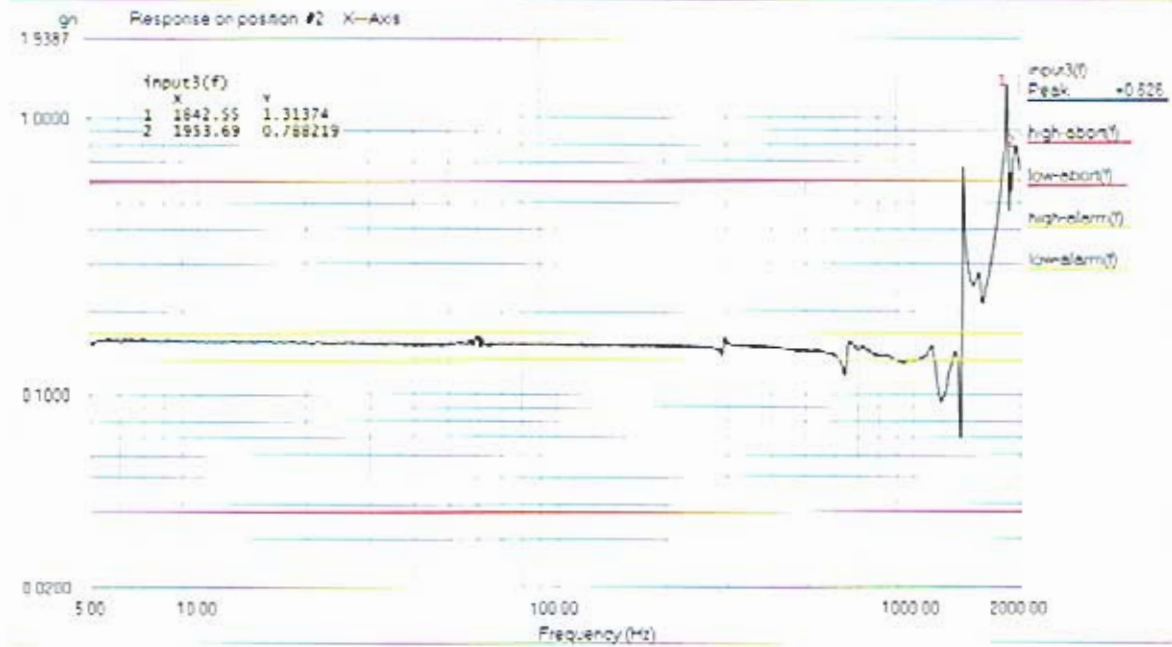
Level: 100 % Control Peak: 0.163402 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.669067 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 03:24:01 PM, Tuesday, November 15, 2005 Report created at 03:24:02 PM, Tuesday, November 15, 2005



Level: 100 % Control Peak: 0.163402 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.669067 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

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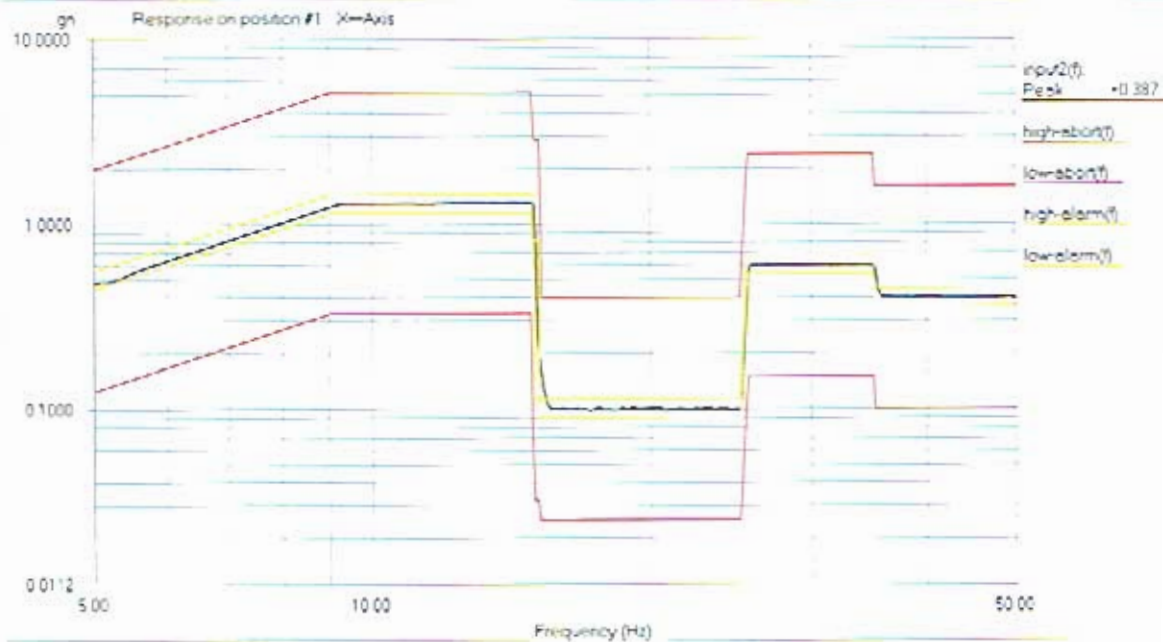


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 Frequency: 1999.669067 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min



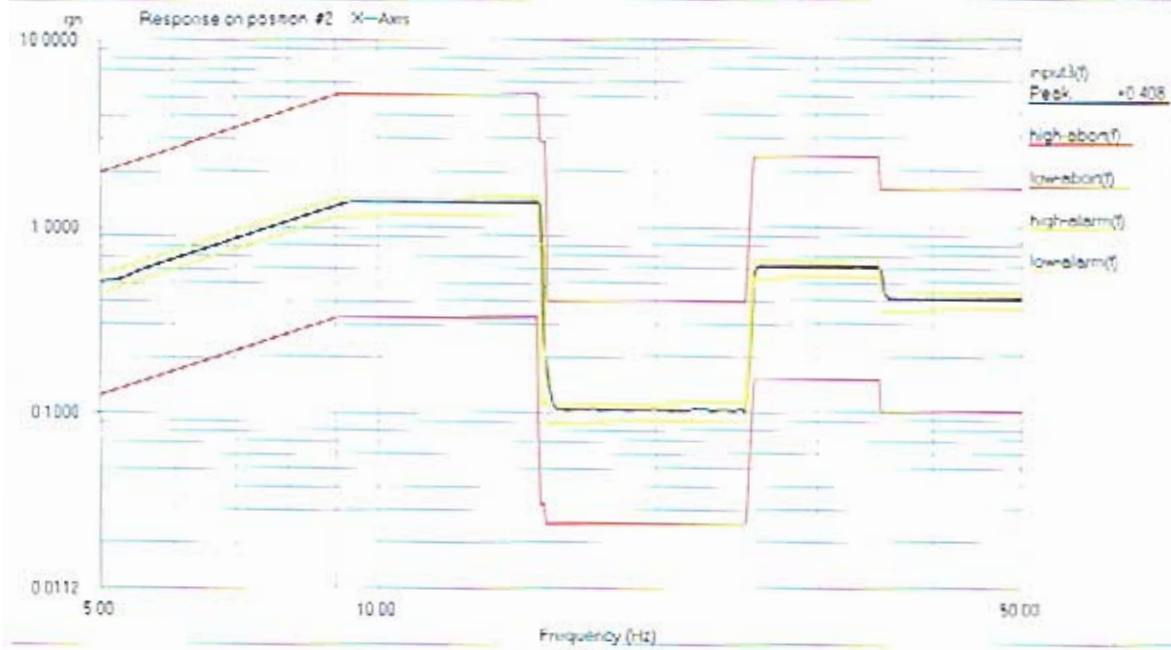
Level 100 % Control Peak: 0.401649 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency 49.979610 Hz Demand Peak: 0.400000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

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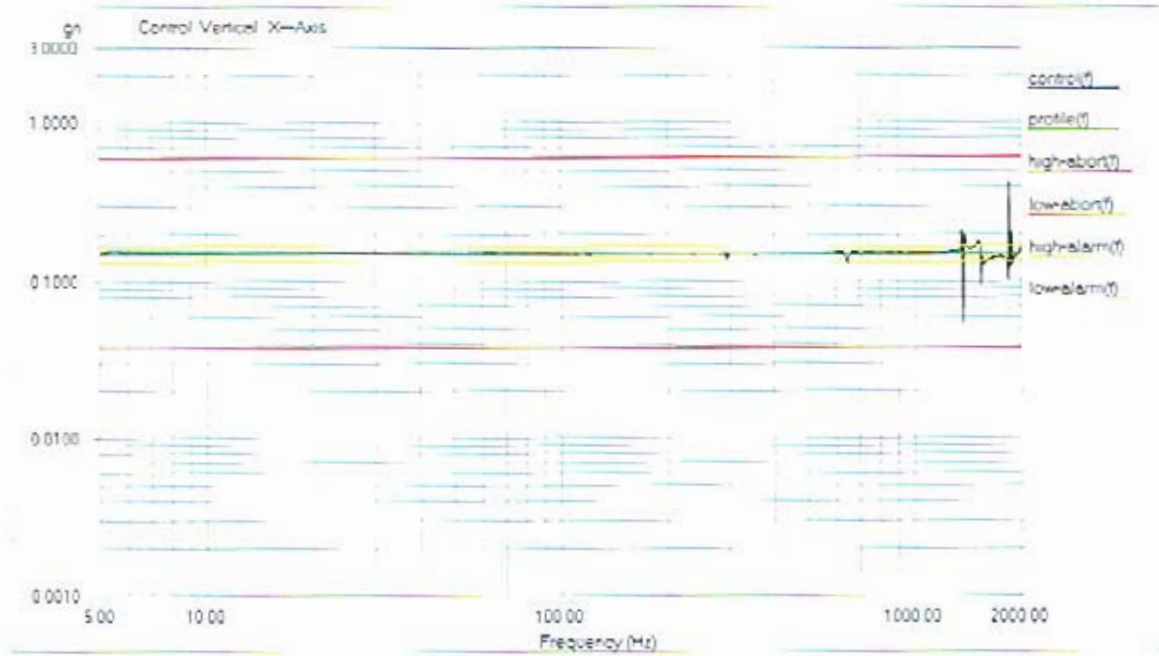
Level 100 % Control Peak: 0.401649 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency 49.979610 Hz Demand Peak: 0.400000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

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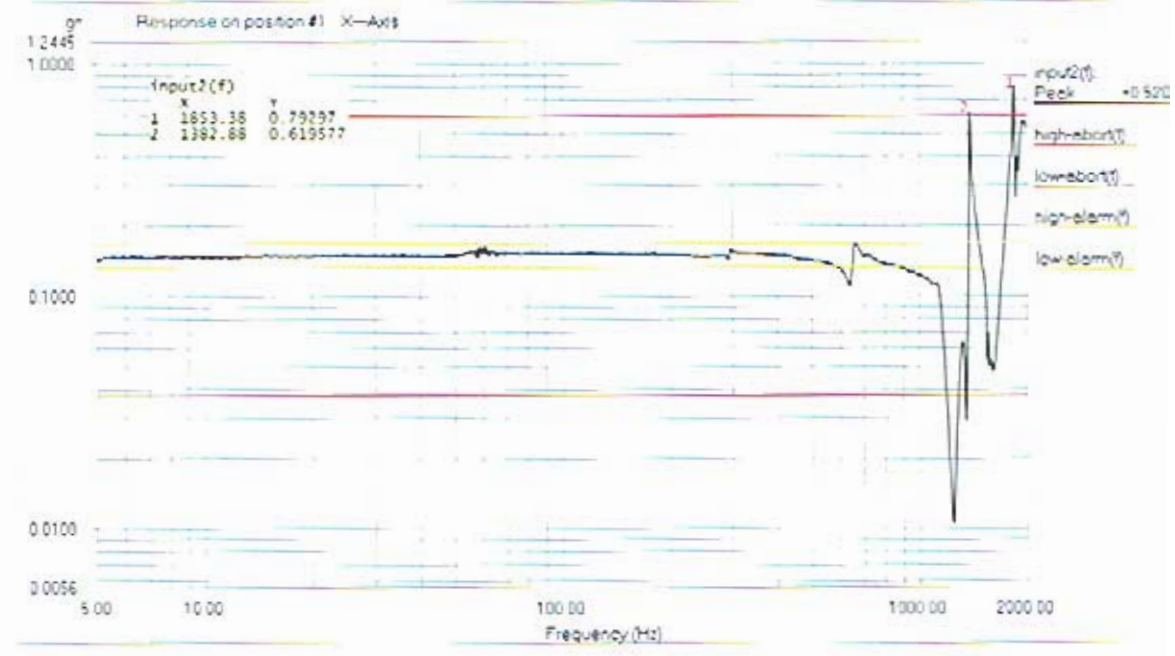
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Frequency:	49.979610 Hz	Demand Peak:	0.400000 gn	Time Remaining:	00:00:00	Sweep Rate:	4 Oct/Min

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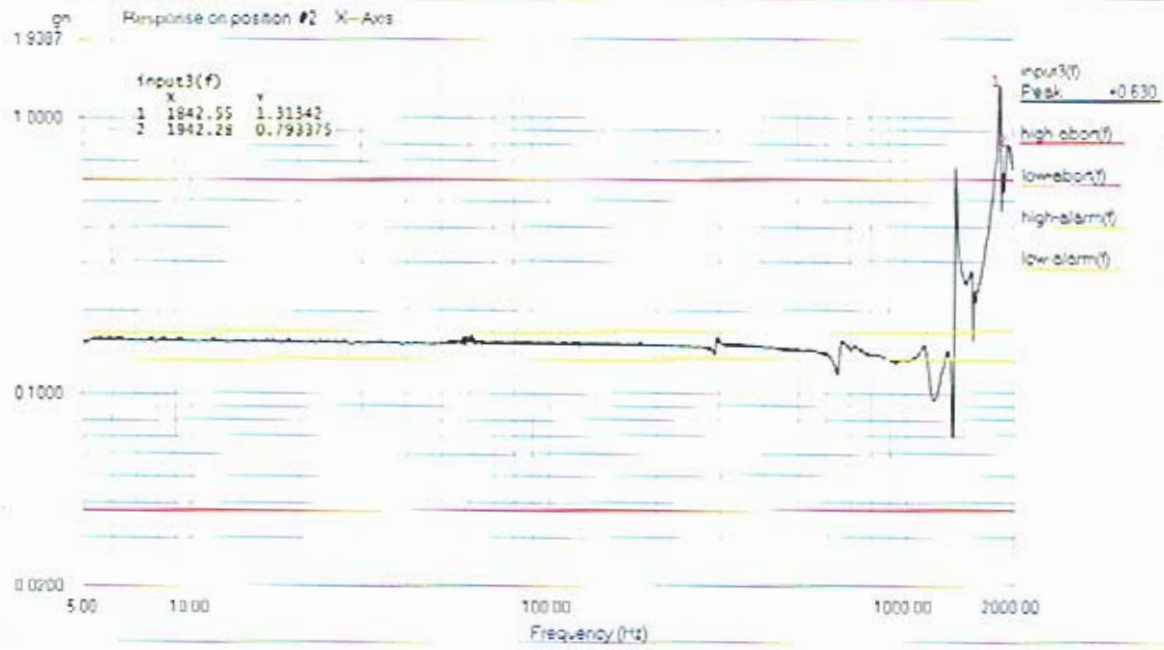
Level: 100 % Control Peak: 0.163490 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.669067 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

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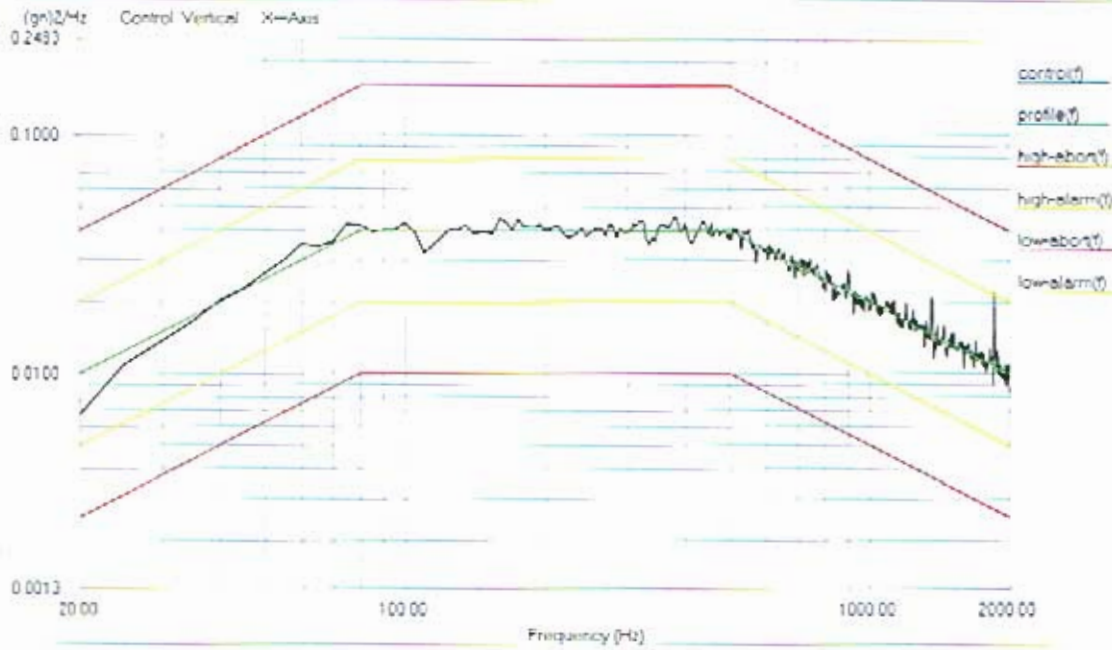


Level: 100 % Control Peak: 0.163490 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
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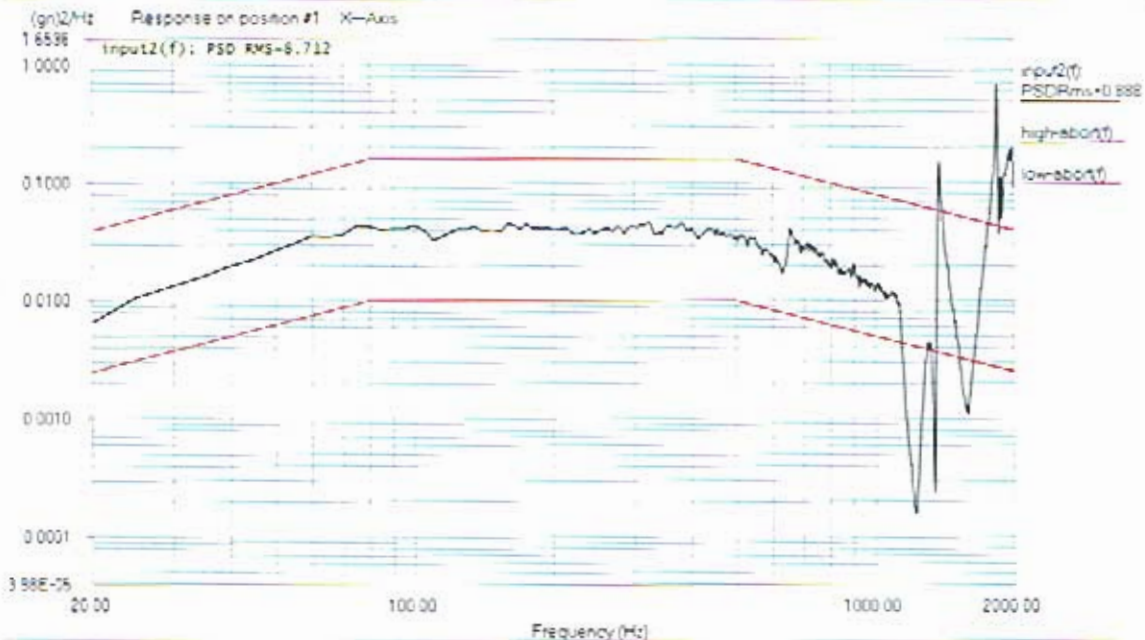


Level: 100 % Control Peak: 0.163490 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.669067 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min



Level: 100 %  
Control RMS: 6.817384 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DOF: 154 dF: 5.000000 Hz

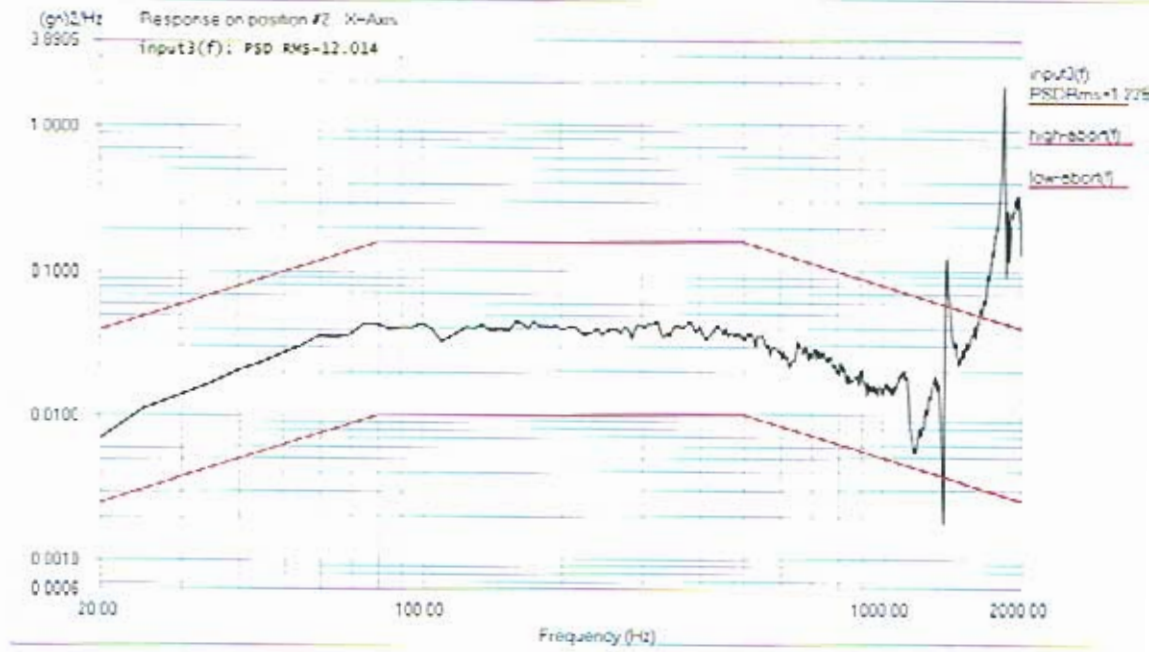
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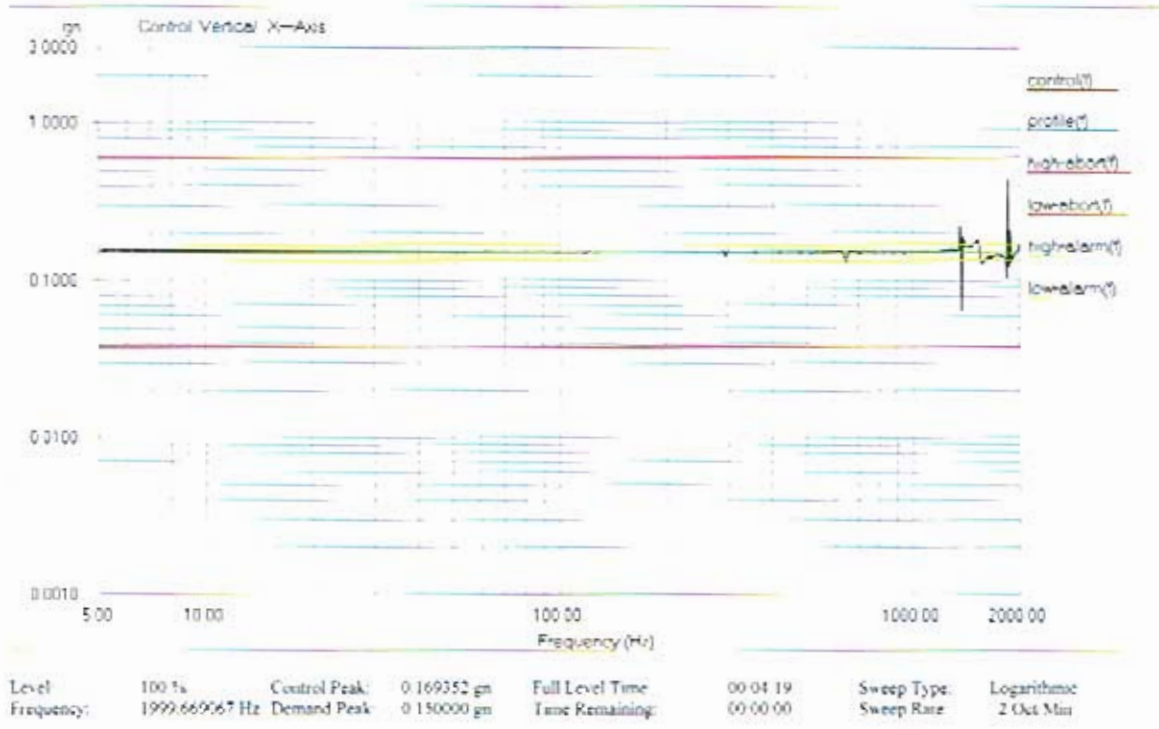
Level: 100 %  
Control RMS: 6.817384 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DOF: 154 dF: 5.000000 Hz

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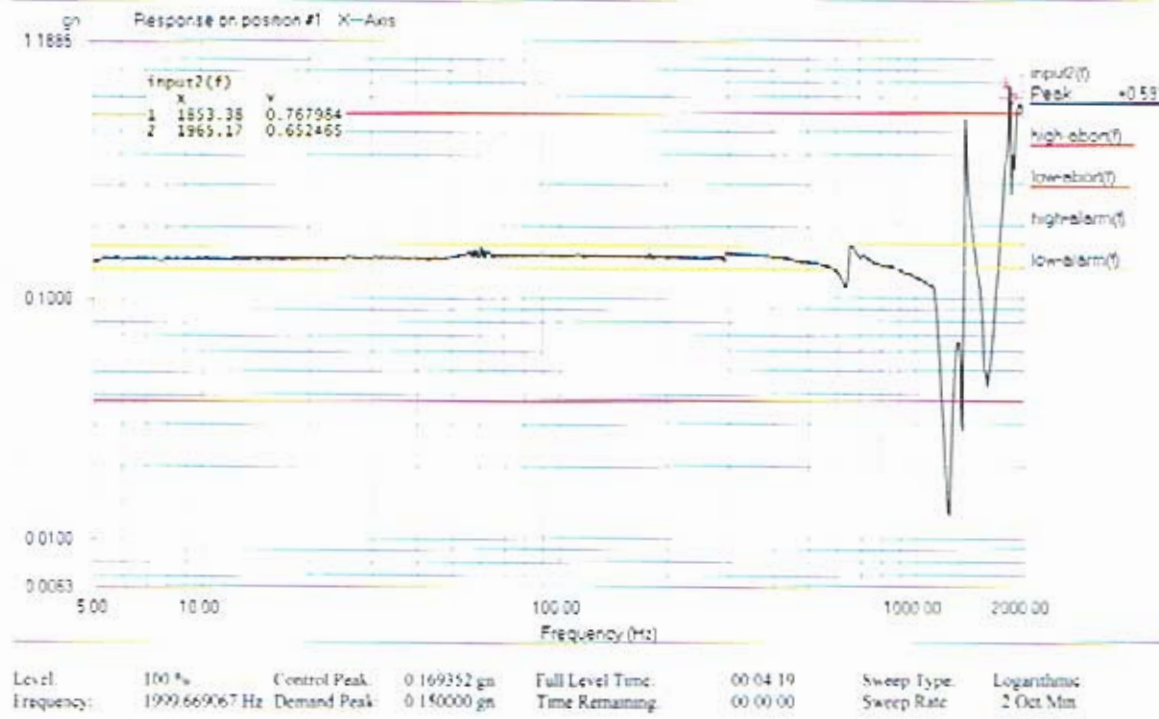




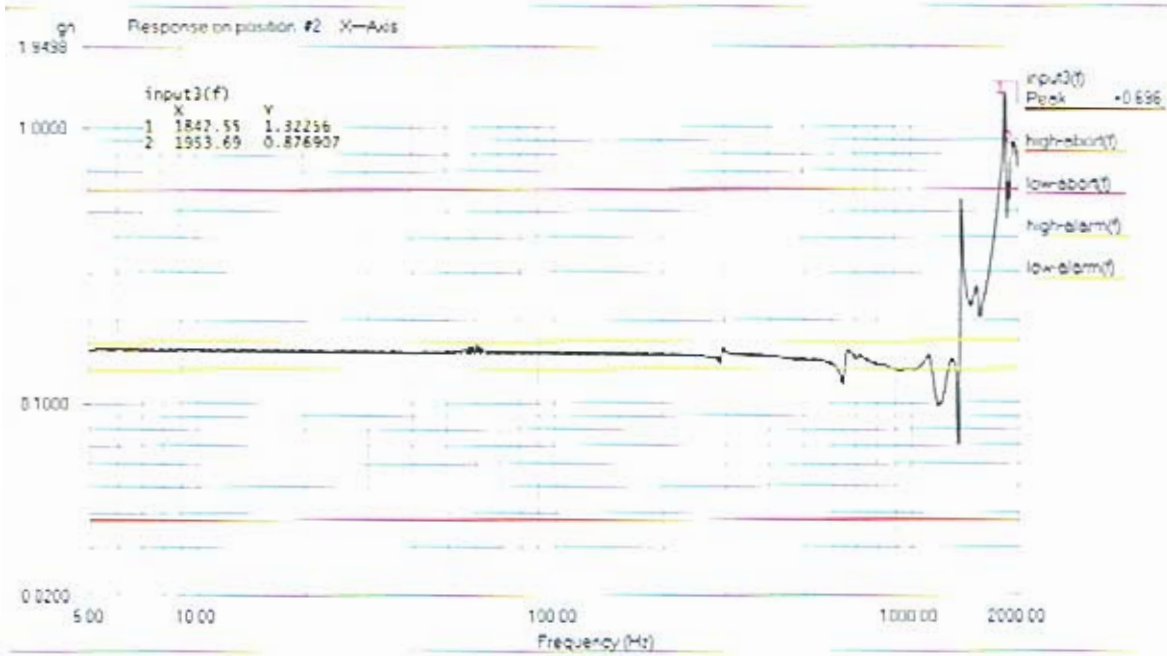
Level: 100 %  
 Control RMS: 6.817384 gm Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
 Demand RMS: 6.785996 gm Remaining Time: 00:00:00 DOF: 154 dF: 5.000000 Hz



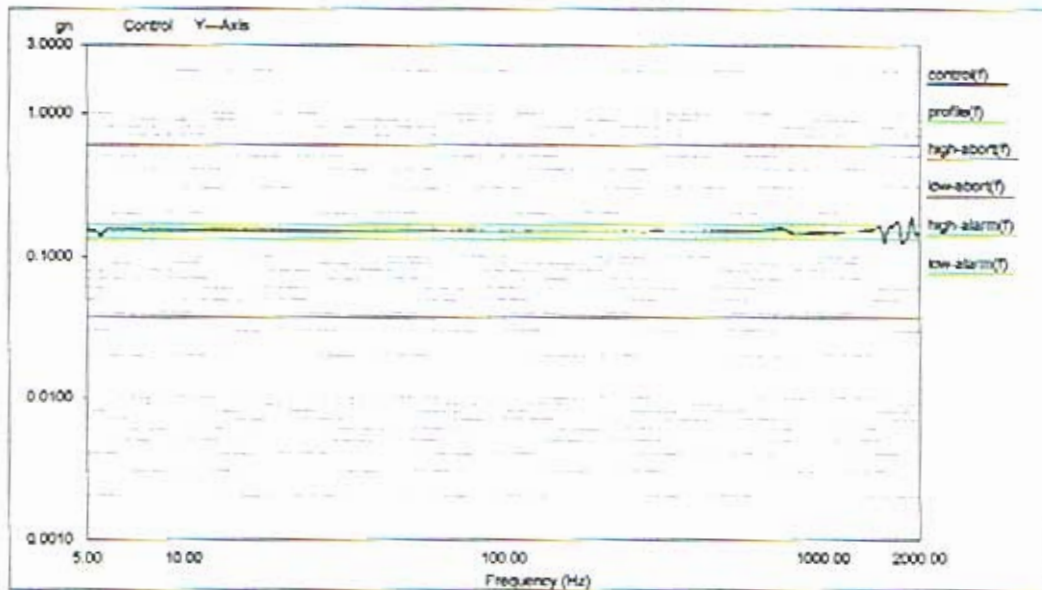
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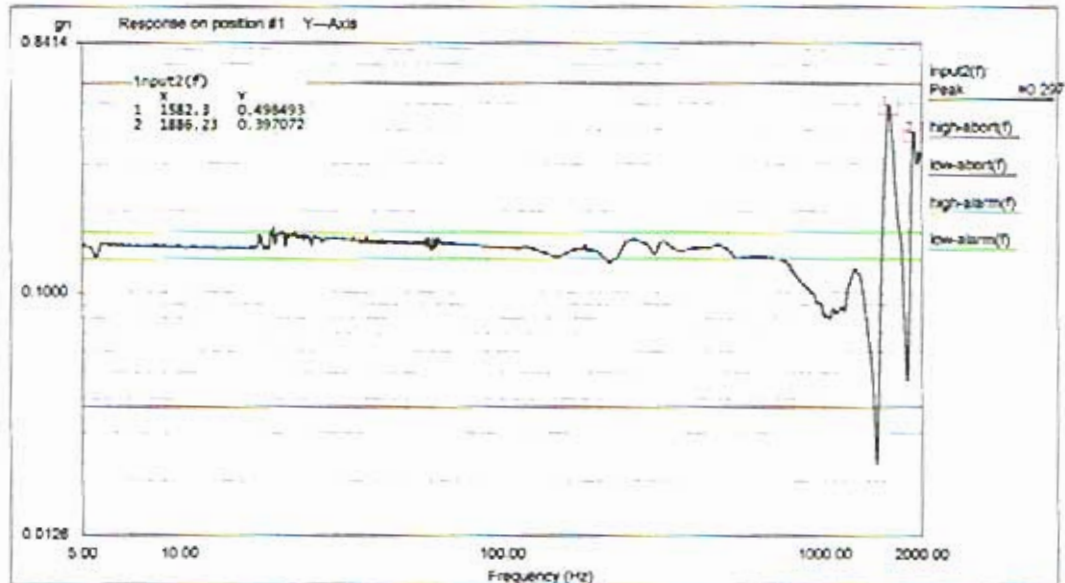


Level:	100 %	Control Peak:	0.169352 gn	Full Level Time:	00:04:19	Sweep Type:	Logarithmic
Frequency:	1999.669067 Hz	Demand Peak:	0.150000 gn	Time Remaining:	00:00:00	Sweep Rate:	2 Oct/Min



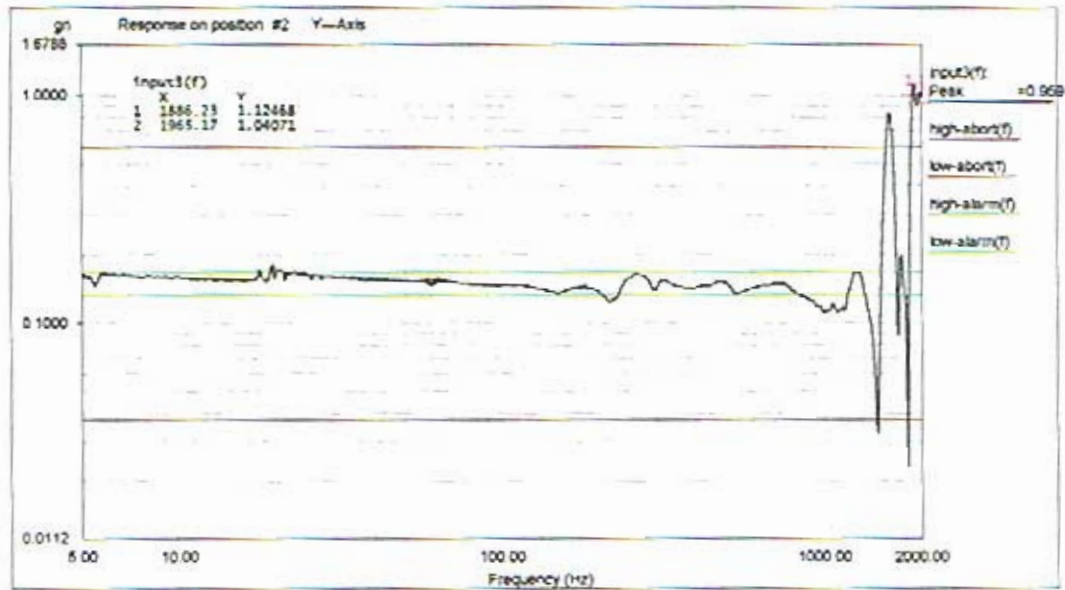
Level: 100 % Control Peak: 0.146869 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.176514 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

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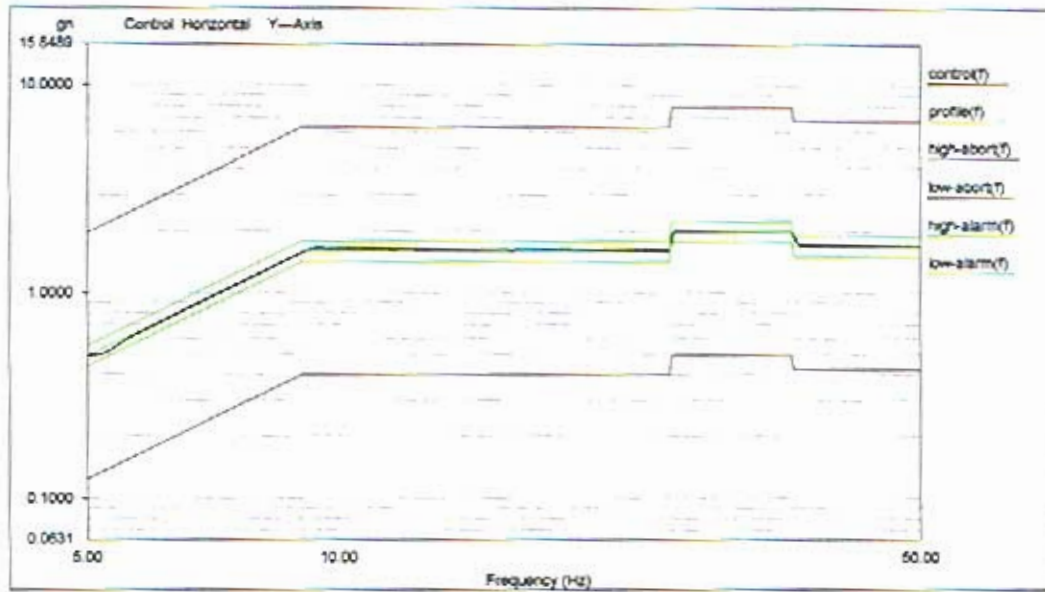
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 Frequency: 1999.176514 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

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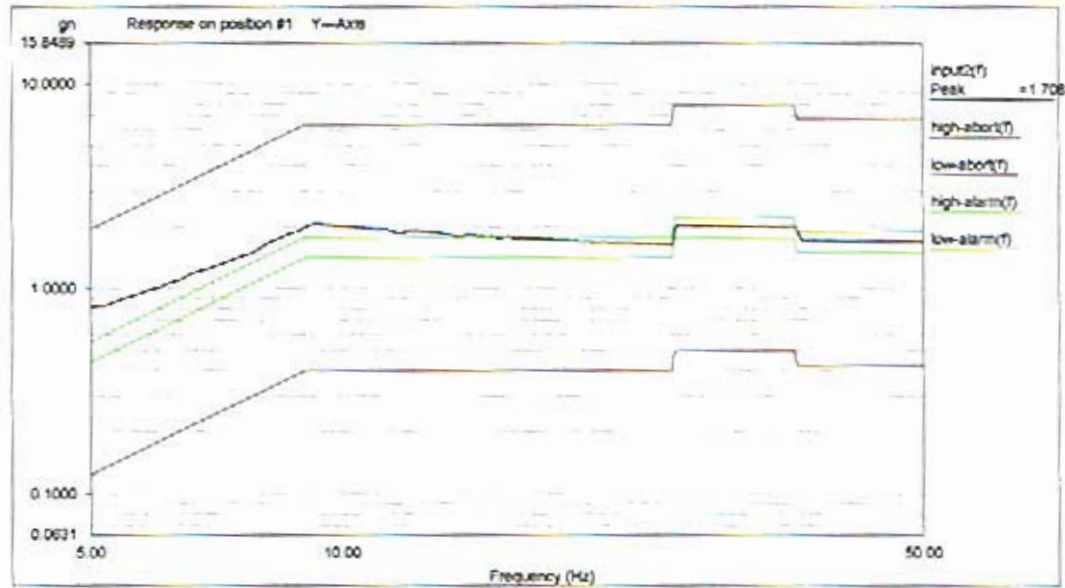
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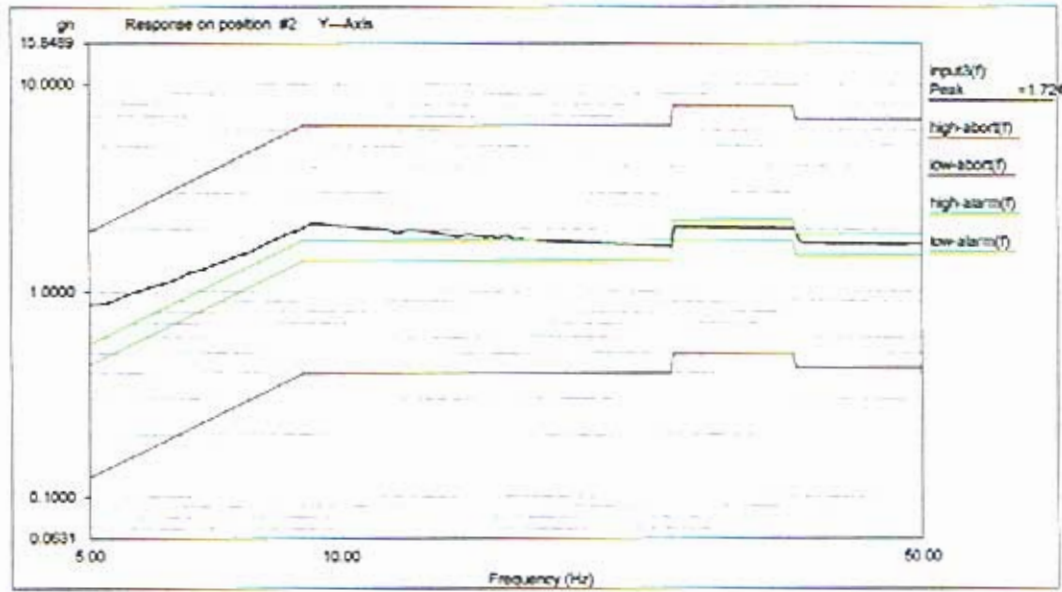
Level: 100 % Control Peak: 1.711438 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency: 49.930378 Hz Demand Peak: 1.700000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

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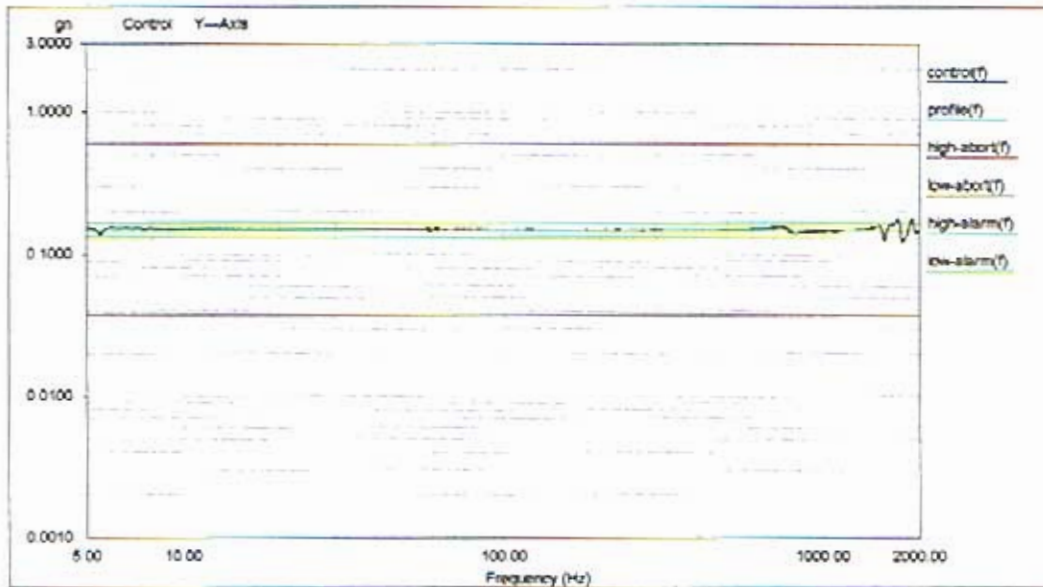
Level: 100 % Control Peak: 1.711438 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency: 49.930378 Hz Demand Peak: 1.700000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

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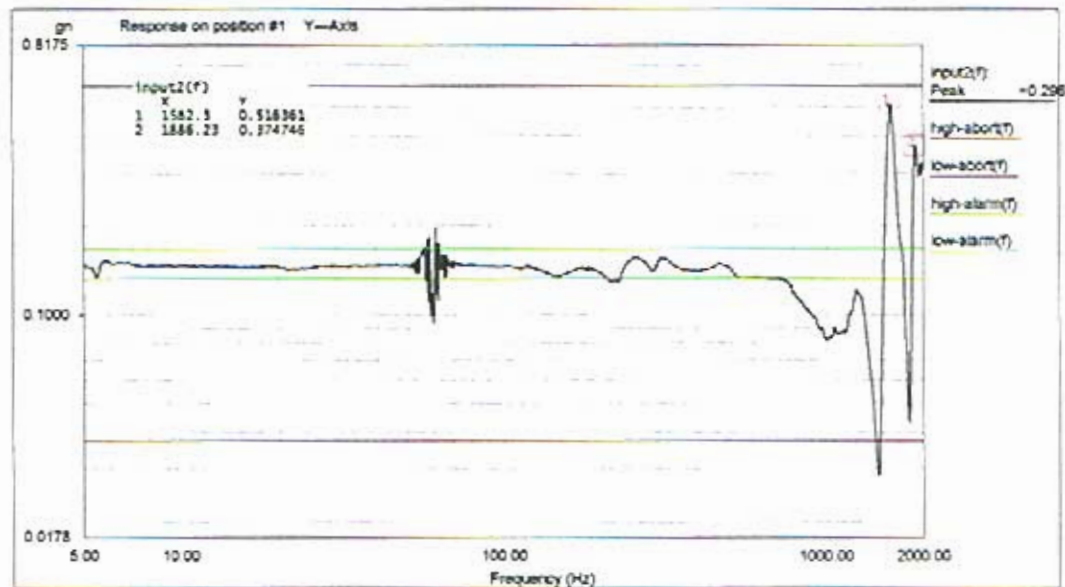
Level: 100 % Control Peak: 1.711438 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency: 49.930178 Hz Demand Peak: 1.700000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

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Level: 100 % Control Peak: 0.147113 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1997.699585 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

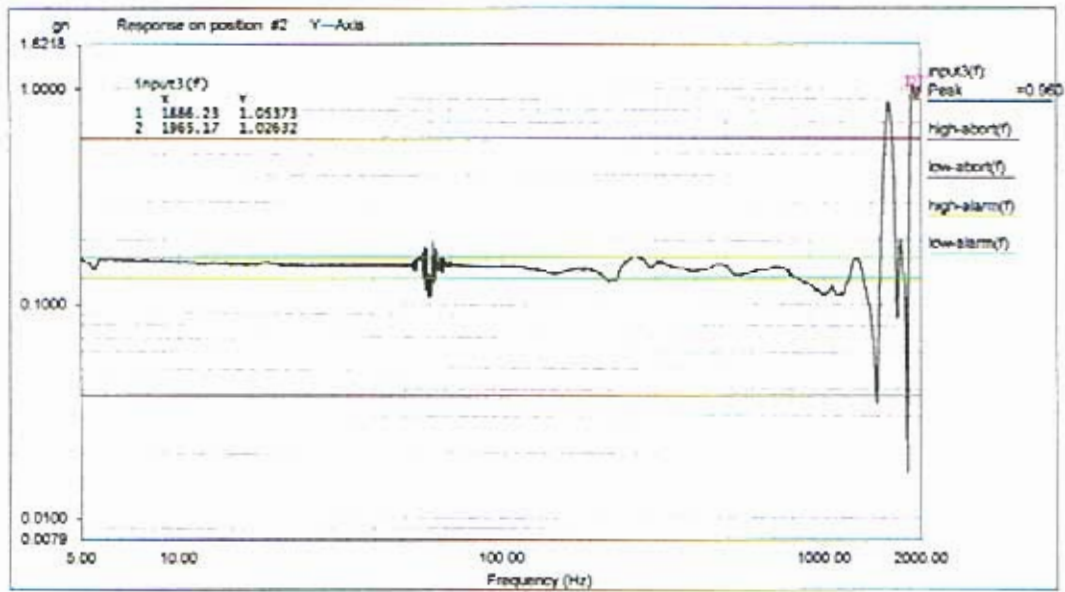
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 Frequency: 1997.699585 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

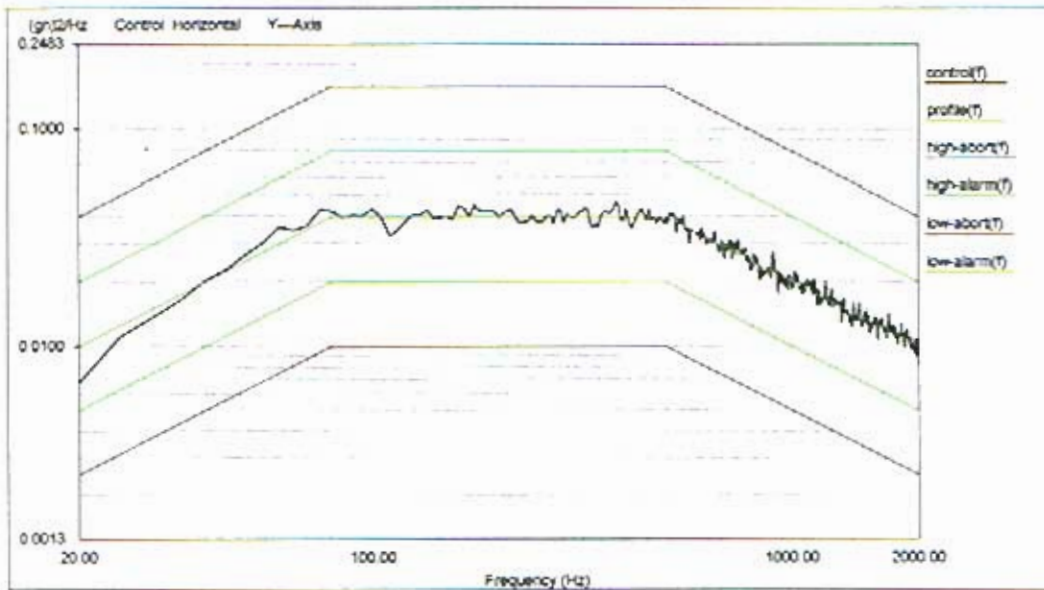
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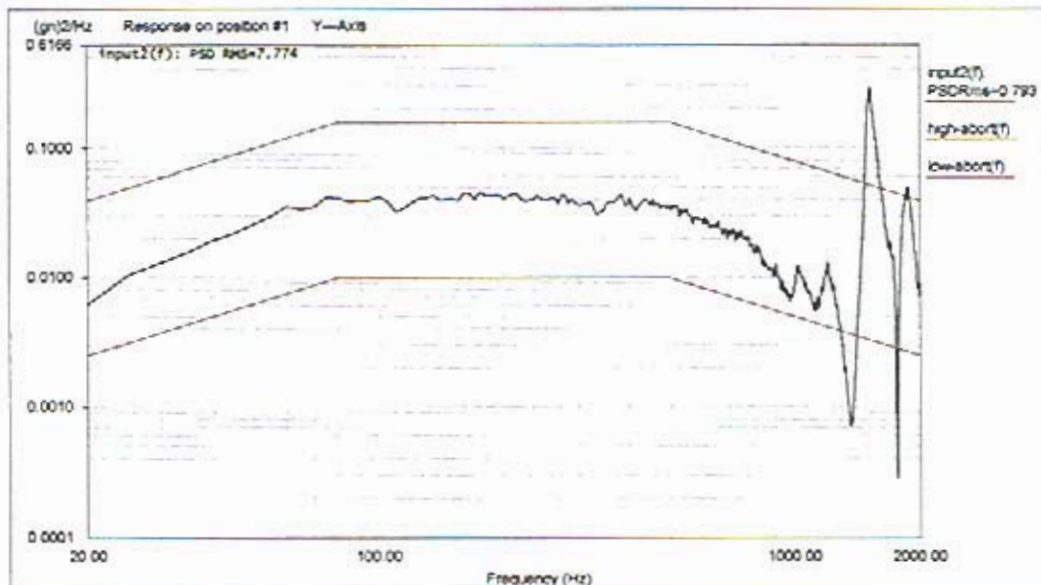
Level	100 %	Control Peak	0.147113 gn	Full Level Time	00:04:19	Sweep Type	Logarithmic
Frequency	1997.699585 Hz	Demand Peak	0.150000 gn	Time Remaining	00:00:00	Sweep Rate	2 Oct/Min

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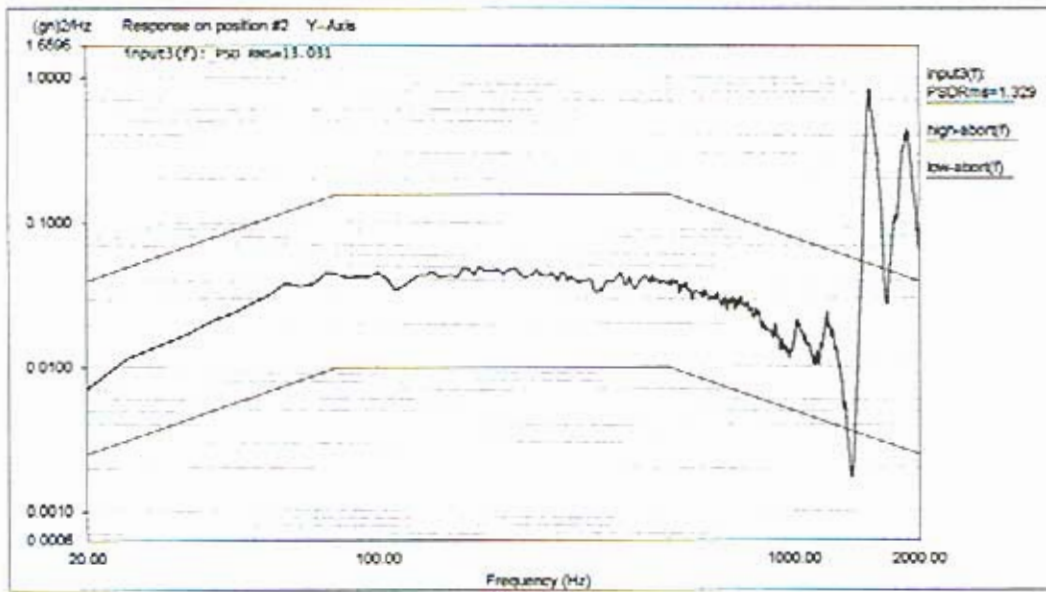
Level: 100 %  
Control RMS: 6.795797 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DOF: 154 dF: 5.000000 Hz

Data saved at 12:10:02 PM, Wednesday, November 16, 2005 Report created at 12:10:03 PM, Wednesday, November 16, 2005



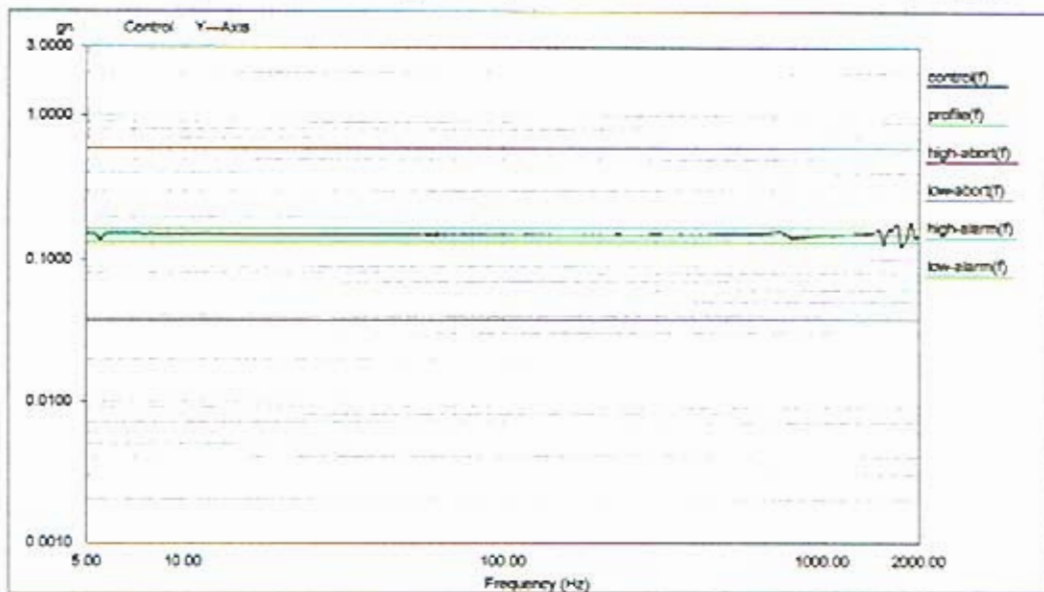
Level: 100 %  
Control RMS: 6.795797 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DOF: 154 dF: 5.000000 Hz

Data saved at 12:10:02 PM, Wednesday, November 16, 2005 Report created at 12:10:03 PM, Wednesday, November 16, 2005



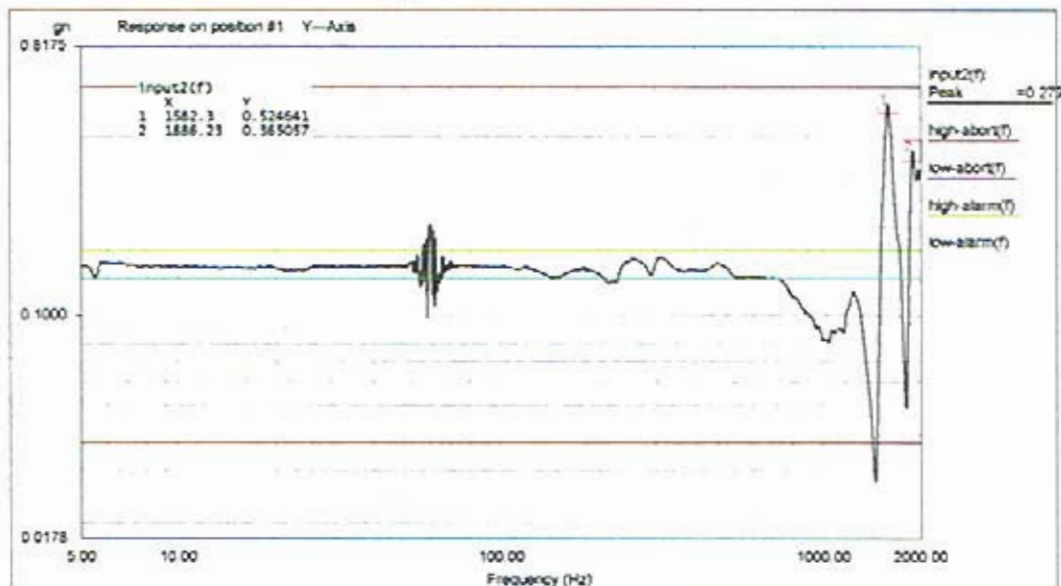
Level: 100 %  
 Control RMS: 6.795797 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Rate: 0.200000 Seconds  
 Demand RMS: 6.782996 gn Remaining Time: 00:00:00 DOF: 154 dF: 5.000000 Hz

Data saved at 12:10:02 PM, Wednesday, November 16, 2005 Report created at 12:10:03 PM, Wednesday, November 16, 2005



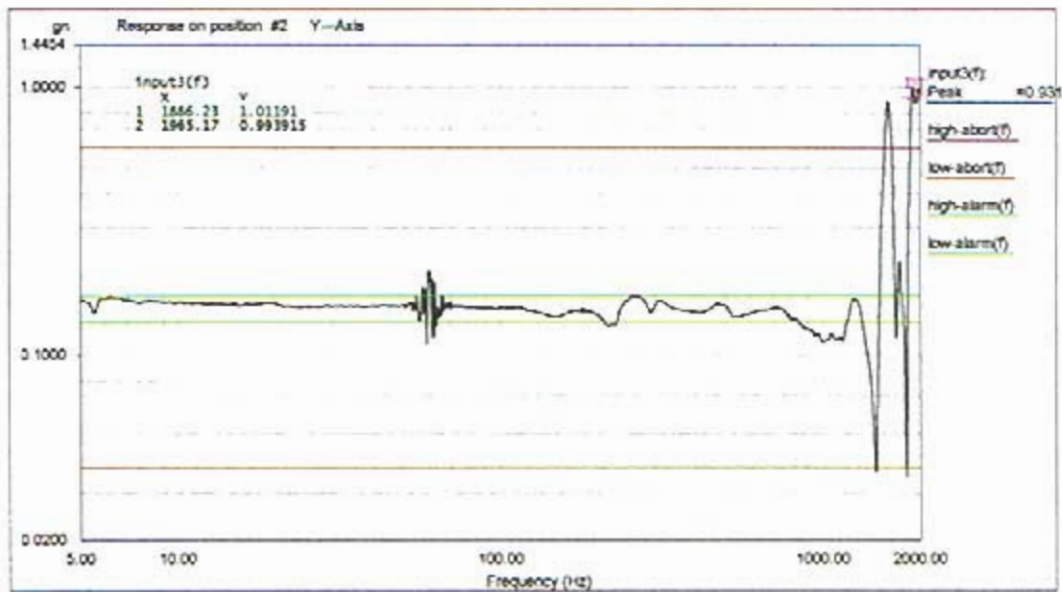
Level: 100 % Control Peak: 0.146923 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.176514 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 12:15:24 PM, Wednesday, November 16, 2005 Report created at 12:15:25 PM, Wednesday, November 16, 2005



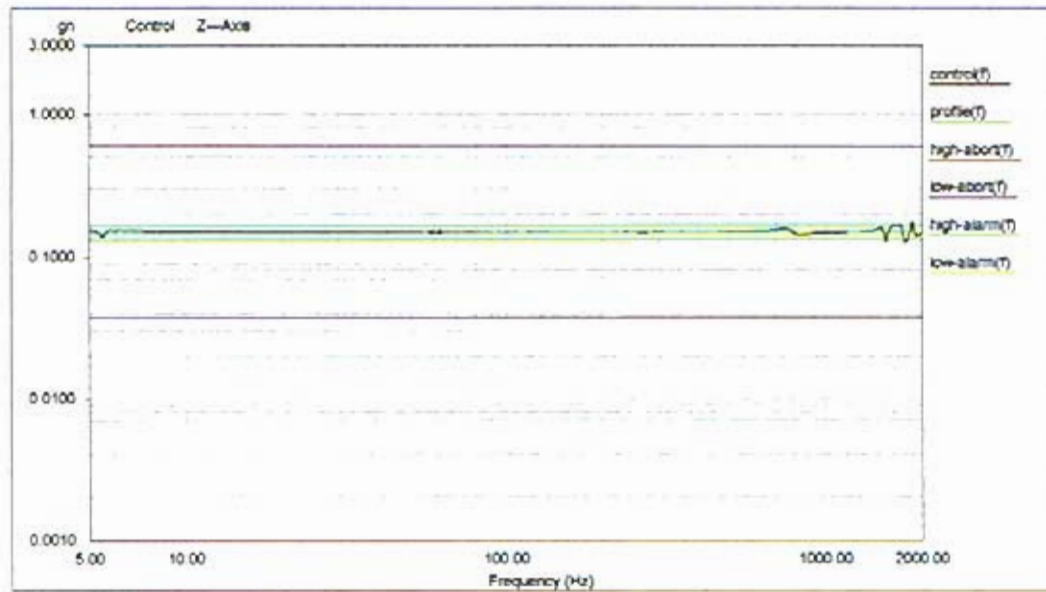
Level: 100 % Control Peak: 0.146923 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.176514 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 12:15:24 PM, Wednesday, November 16, 2005 Report created at 12:15:26 PM, Wednesday, November 16, 2005



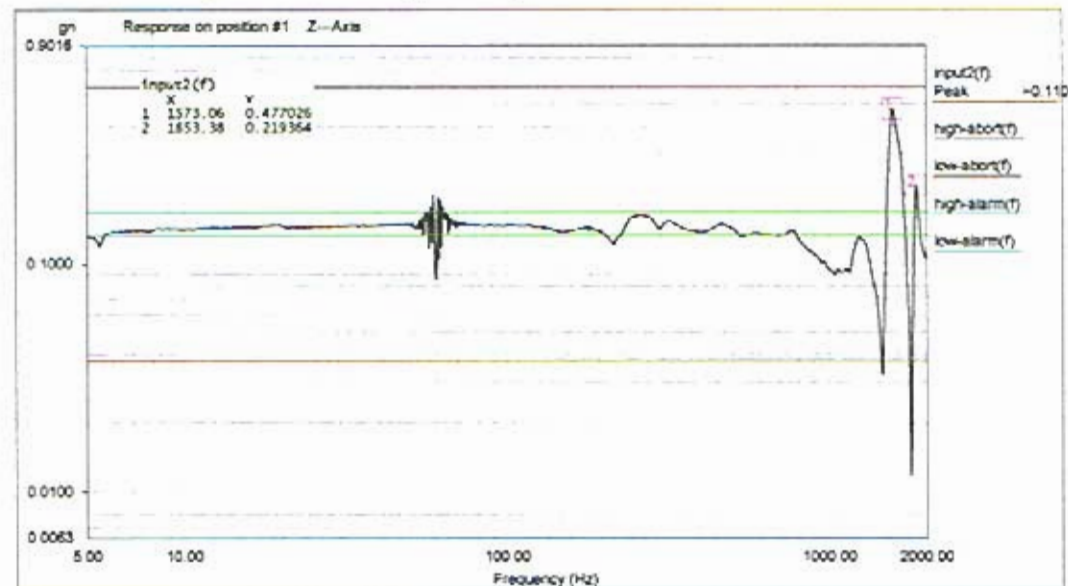
Level: 100 % Control Peak: 0.146923 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1999.176514 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 12:15:24 PM, Wednesday, November 16, 2005 Report created at 12:15:26 PM, Wednesday, November 16, 2005



Level: 100 % Control Peak: 0.144541 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.684382 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 10:57:43 AM, Wednesday, November 16, 2005 Report created at 10:57:43 AM, Wednesday, November 16, 2005



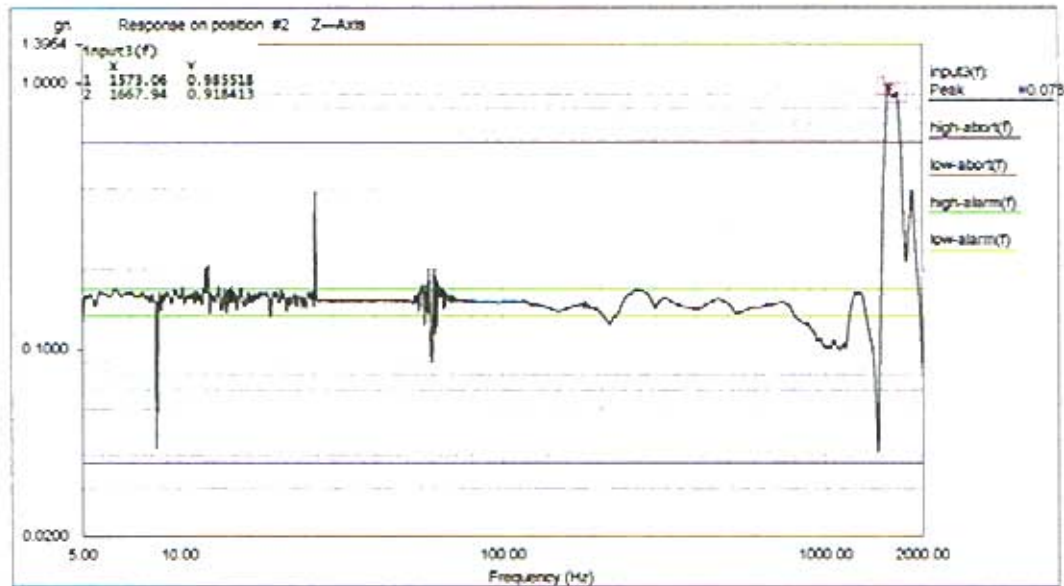
Level: 100 % Control Peak: 0.144541 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.684382 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 10:57:43 AM, Wednesday, November 16, 2005 Report created at 10:57:43 AM, Wednesday, November 16, 2005



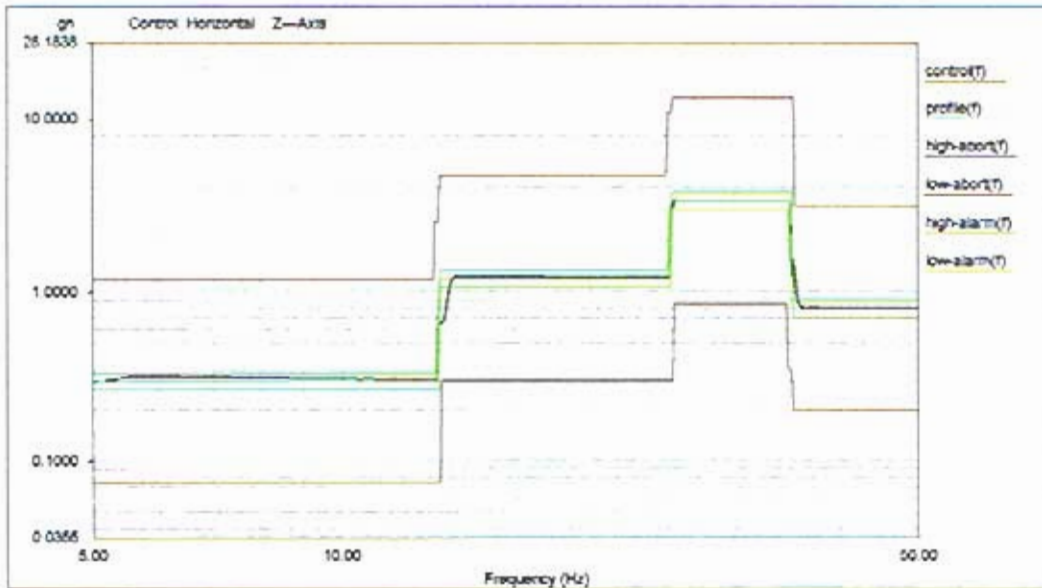
Level: 100 % Control Peak: 0.144941 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.684082 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 10:57:43 AM, Wednesday, November 16, 2005 Report created at 10:57:43 AM, Wednesday, November 16, 2005



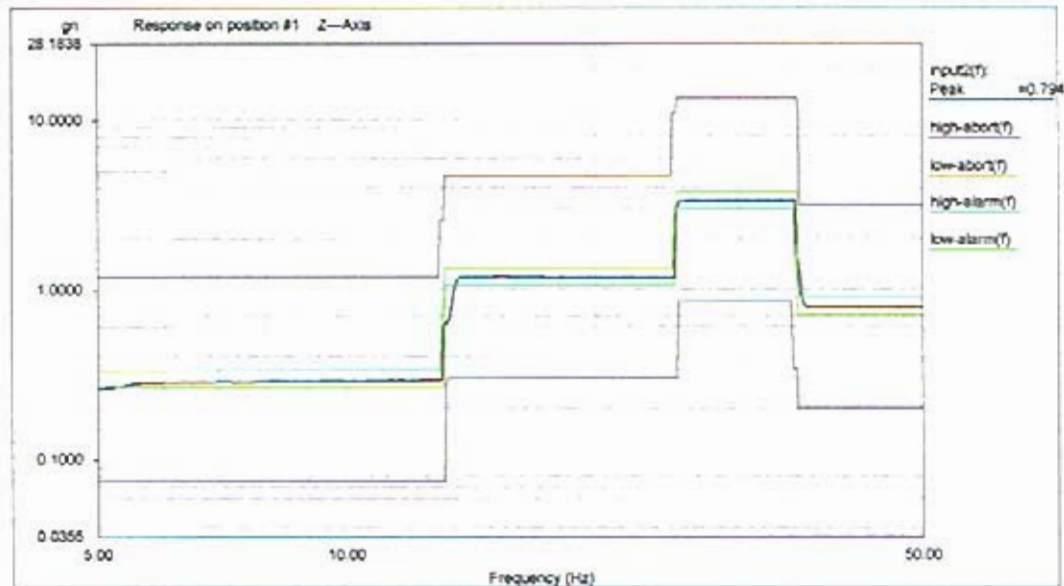
Level: 100 % Control Peak: 0.144941 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.684082 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 10:57:43 AM, Wednesday, November 16, 2005 Report created at 10:57:43 AM, Wednesday, November 16, 2005



Level: 100 % Control Peak: 0.805249 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency: 49.905781 Hz Demand Peak: 0.800000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

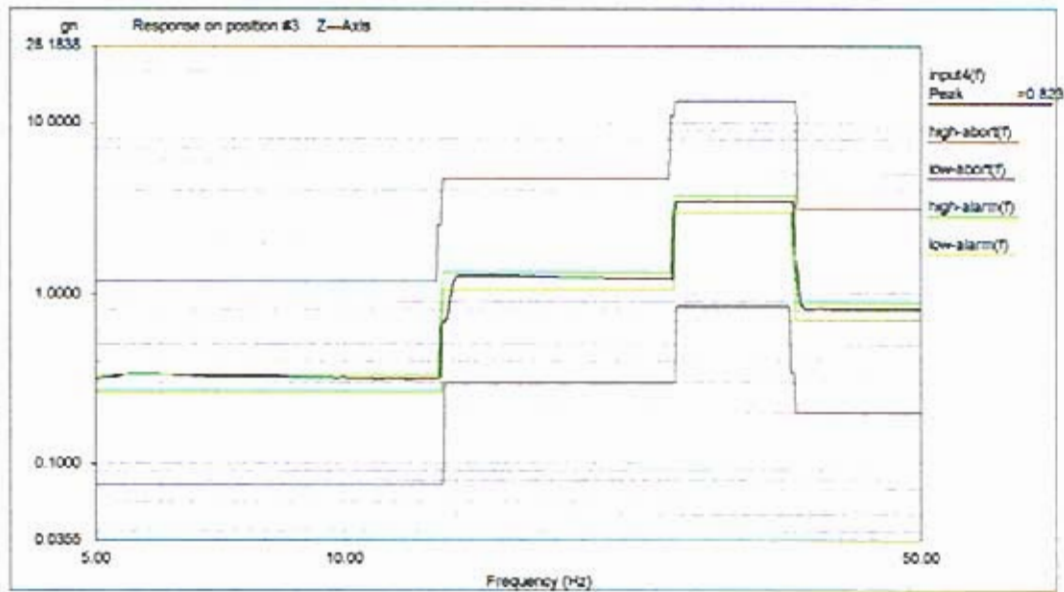
Data saved at 10:59:54 AM, Wednesday, November 16, 2005 Report created at 10:59:54 AM, Wednesday, November 16, 2005



Level: 100 % Control Peak: 0.805249 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency: 49.905781 Hz Demand Peak: 0.800000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

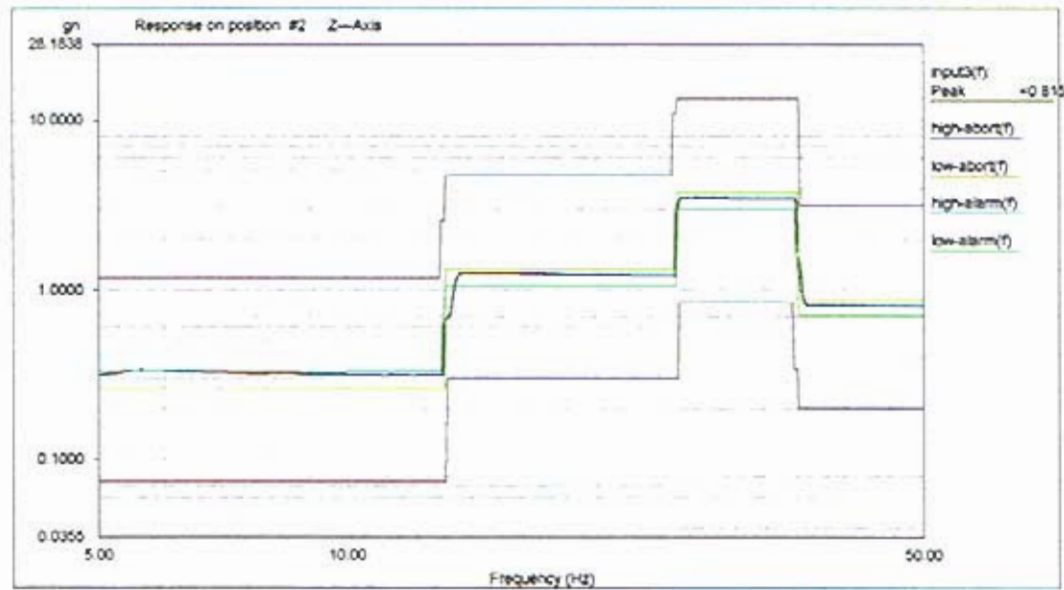
Data saved at 10:59:54 AM, Wednesday, November 16, 2005 Report created at 10:59:54 AM, Wednesday, November 16, 2005





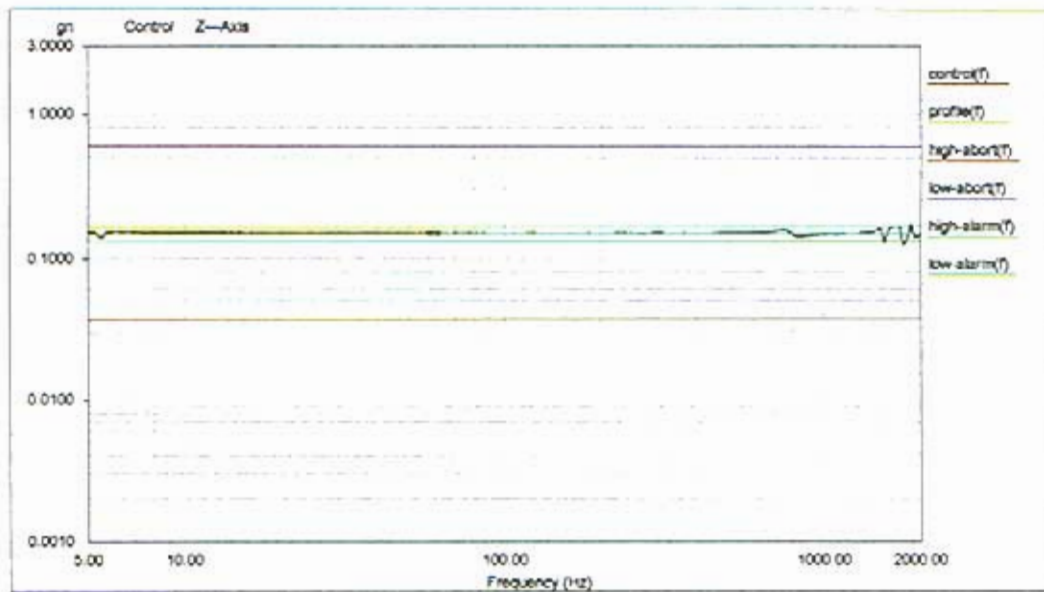
Level: 100 % Control Peak: 0.803249 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency: 49.905781 Hz Demand Peak: 0.800000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

Data saved at 10:59:54 AM, Wednesday, November 16, 2005 Report created at 10:59:54 AM, Wednesday, November 16, 2005



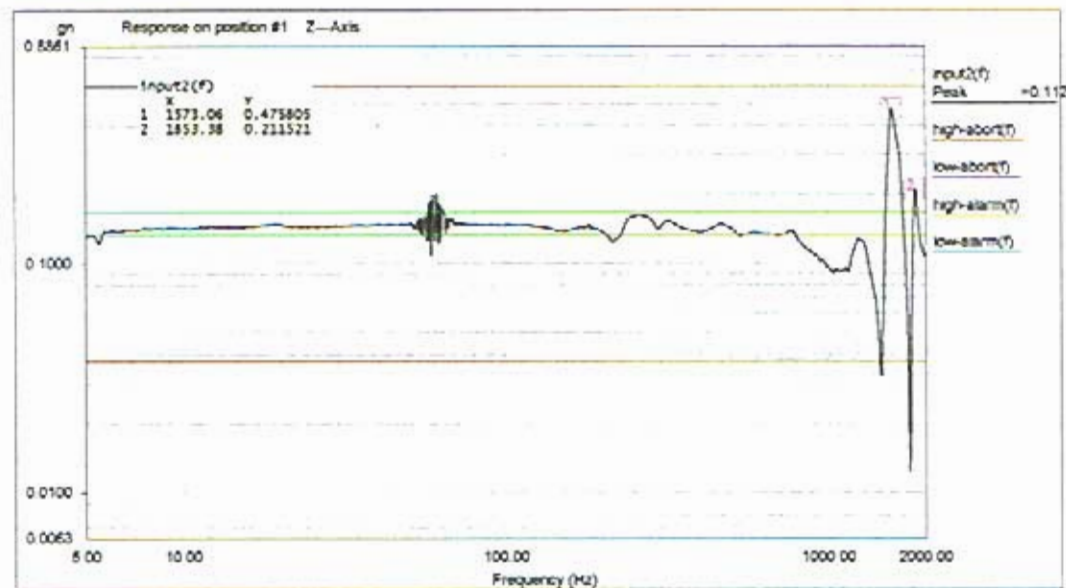
Level: 100 % Control Peak: 0.805249 gn Full Level Time: 00:01:02 Sweep Type: Logarithmic  
 Frequency: 49.905781 Hz Demand Peak: 0.800000 gn Time Remaining: 00:00:00 Sweep Rate: 4 Oct/Min

Data saved at 10:59:54 AM, Wednesday, November 16, 2005 Report created at 10:59:54 AM, Wednesday, November 16, 2005



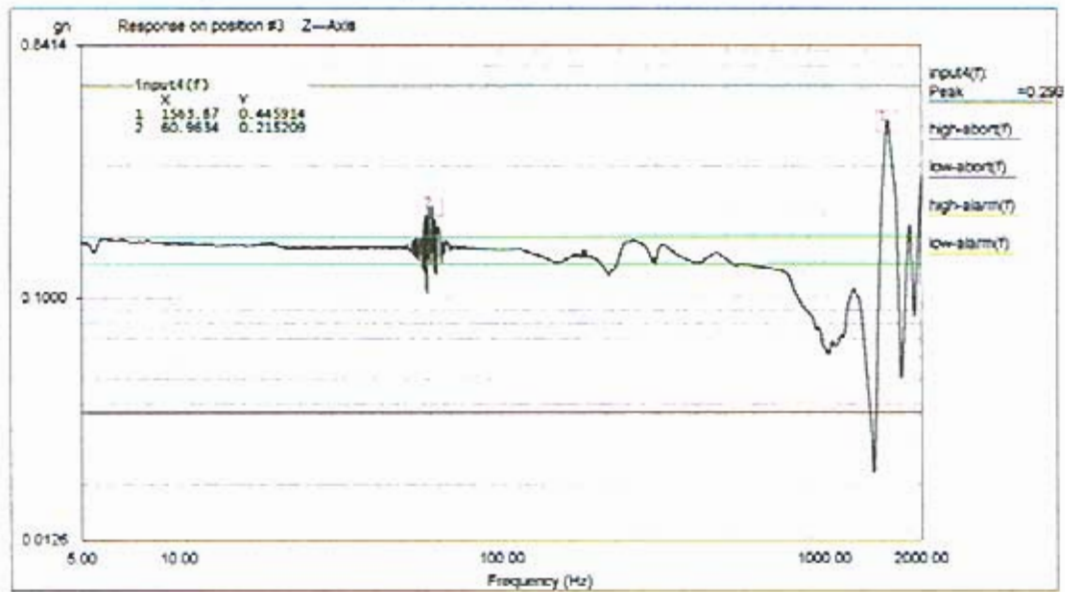
Level: 100 % Control Peak: 0.144633 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.191772 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:05:03 AM, Wednesday, November 16, 2005 Report created at 11:05:03 AM, Wednesday, November 16, 2005



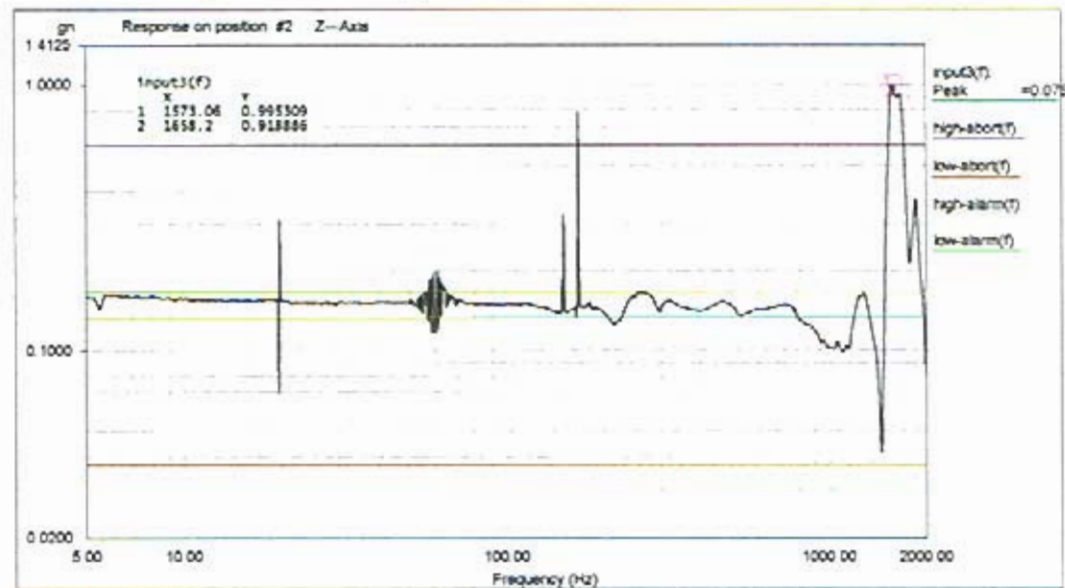
Level: 100 % Control Peak: 0.144633 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.191772 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:05:03 AM, Wednesday, November 16, 2005 Report created at 11:05:03 AM, Wednesday, November 16, 2005



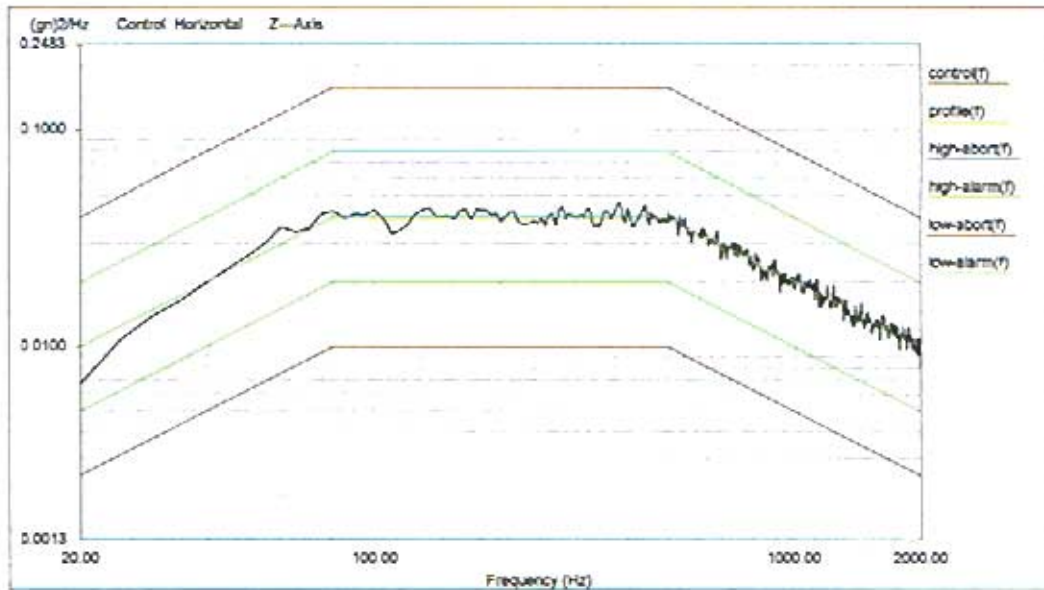
Level: 100 % Control Peak: 0.144633 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.191772 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:05:03 AM, Wednesday, November 16, 2005 Report created at 11:05:03 AM, Wednesday, November 16, 2005



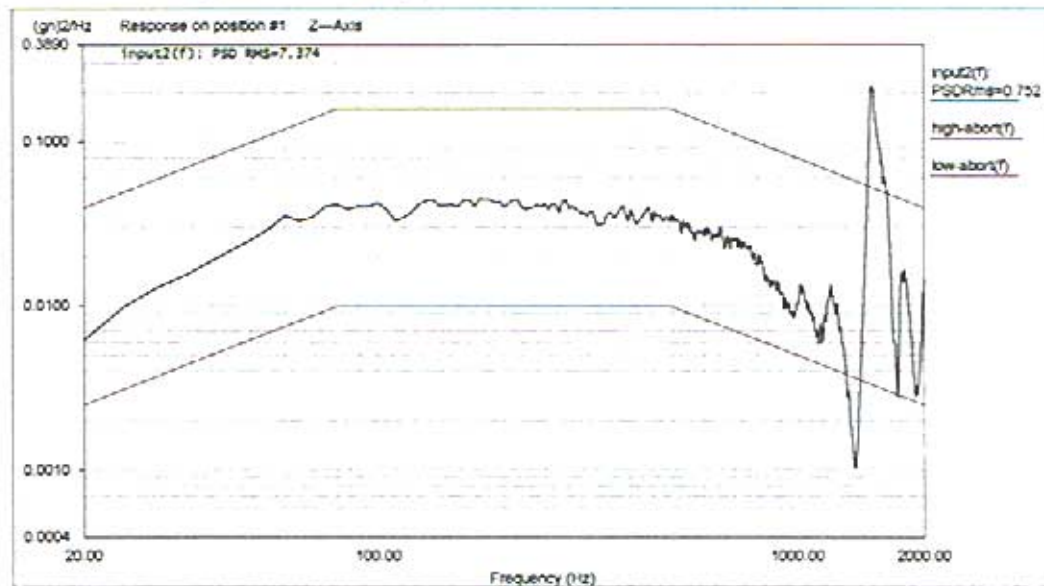
Level: 100 % Control Peak: 0.144633 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1998.191772 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:05:03 AM, Wednesday, November 16, 2005 Report created at 11:05:03 AM, Wednesday, November 16, 2005



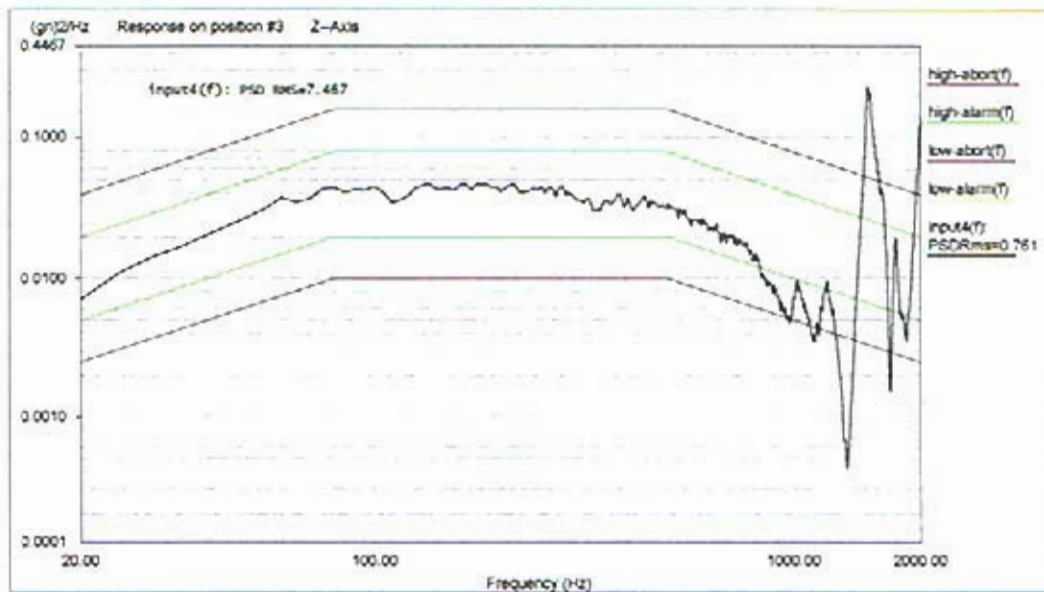
Level: 100 %  
 Control RMS: 6.792680 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
 Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DOF: 154 df: 5.000000 Hz

Data saved at 11:07:53 AM, Wednesday, November 16, 2005 Report created at 11:07:53 AM, Wednesday, November 16, 2005



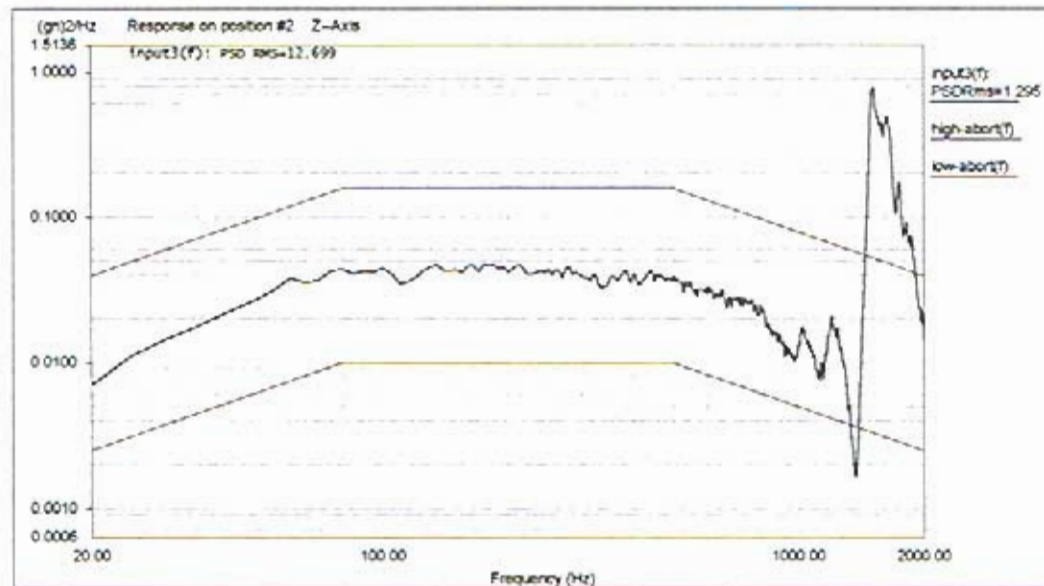
Level: 100 %  
 Control RMS: 6.792680 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
 Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DOF: 154 df: 5.000000 Hz

Data saved at 11:07:53 AM, Wednesday, November 16, 2005 Report created at 11:07:53 AM, Wednesday, November 16, 2005



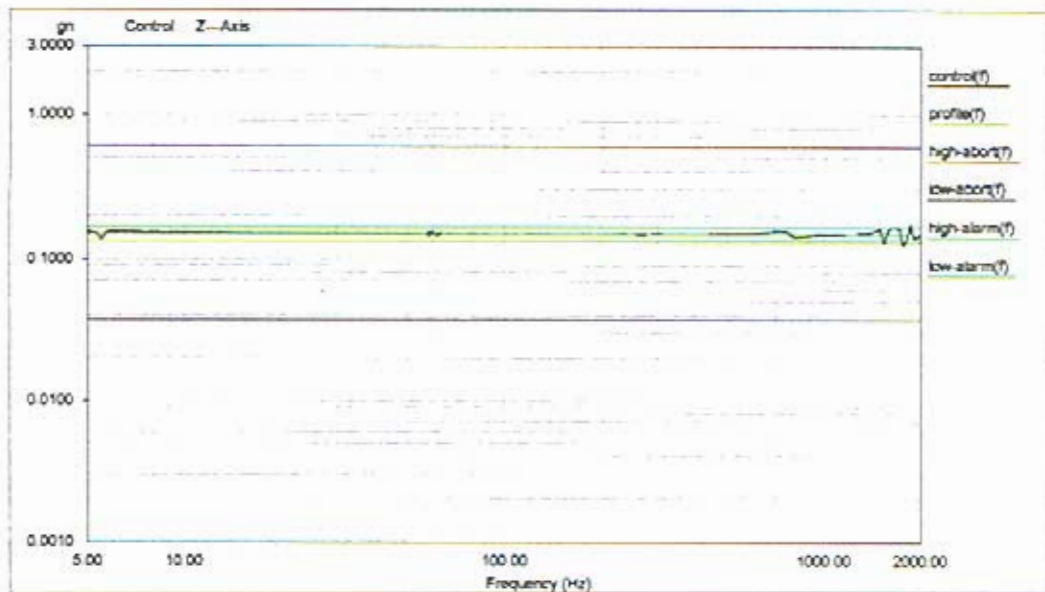
Level: 100 %  
Control RMS: 6.792680 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DCF: 154 dB 5.000000 Hz

Data saved at 11:07:53 AM, Wednesday, November 16, 2005 Report created at 11:07:53 AM, Wednesday, November 16, 2005



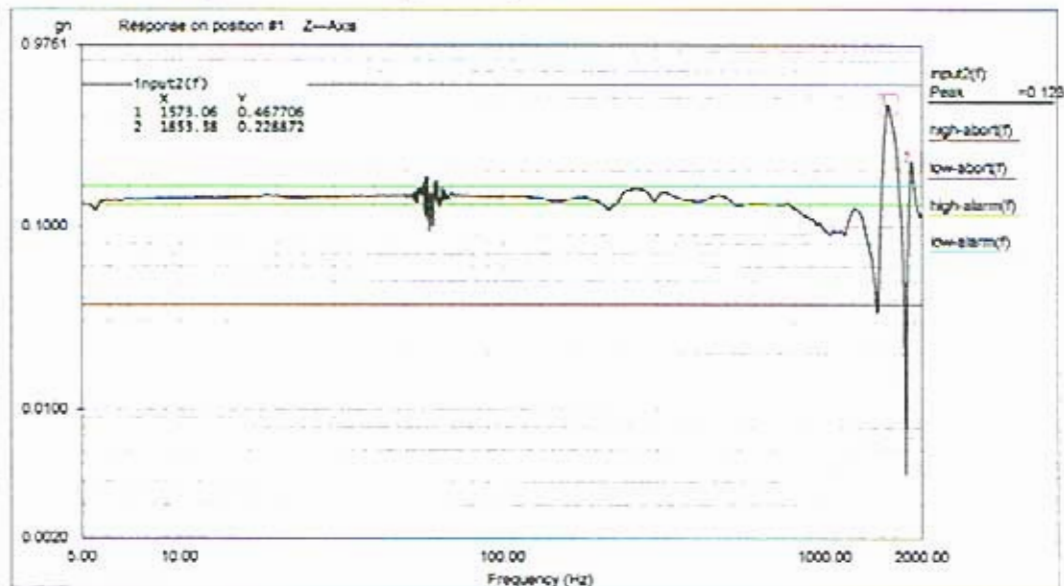
Level: 100 %  
Control RMS: 6.792680 gn Full Level Elapsed Time: 00:01:00 Lines: 400 Frame Time: 0.200000 Seconds  
Demand RMS: 6.785996 gn Remaining Time: 00:00:00 DCF: 154 dB 5.000000 Hz

Data saved at 11:07:53 AM, Wednesday, November 16, 2005 Report created at 11:07:53 AM, Wednesday, November 16, 2005



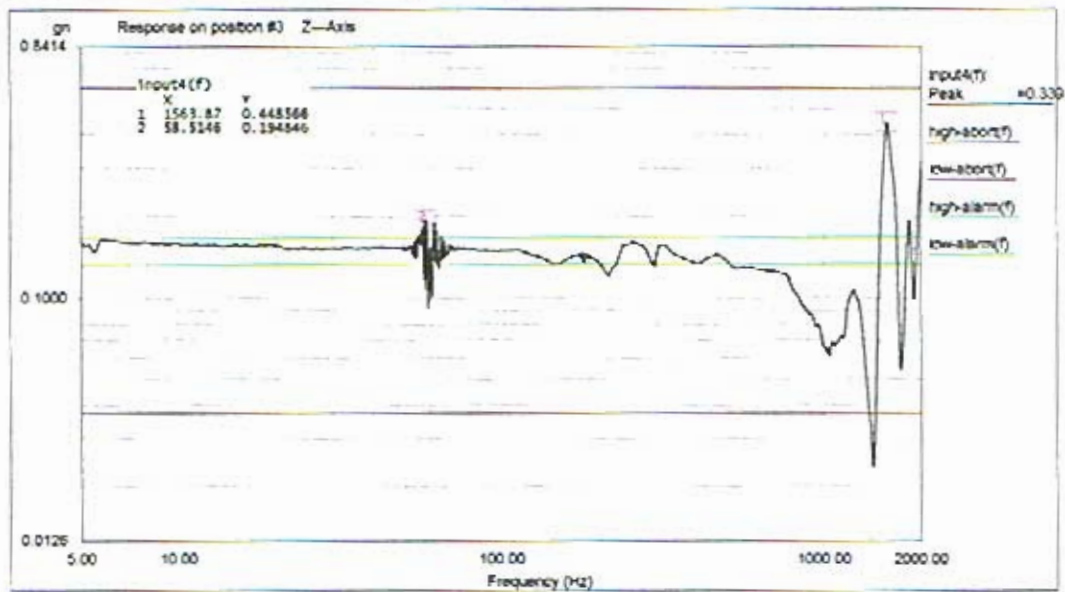
Level: 100 % Control Peak: 0.145054 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1997.699585 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:13:14 AM, Wednesday, November 16, 2005 Report created at 11:13:15 AM, Wednesday, November 16, 2005



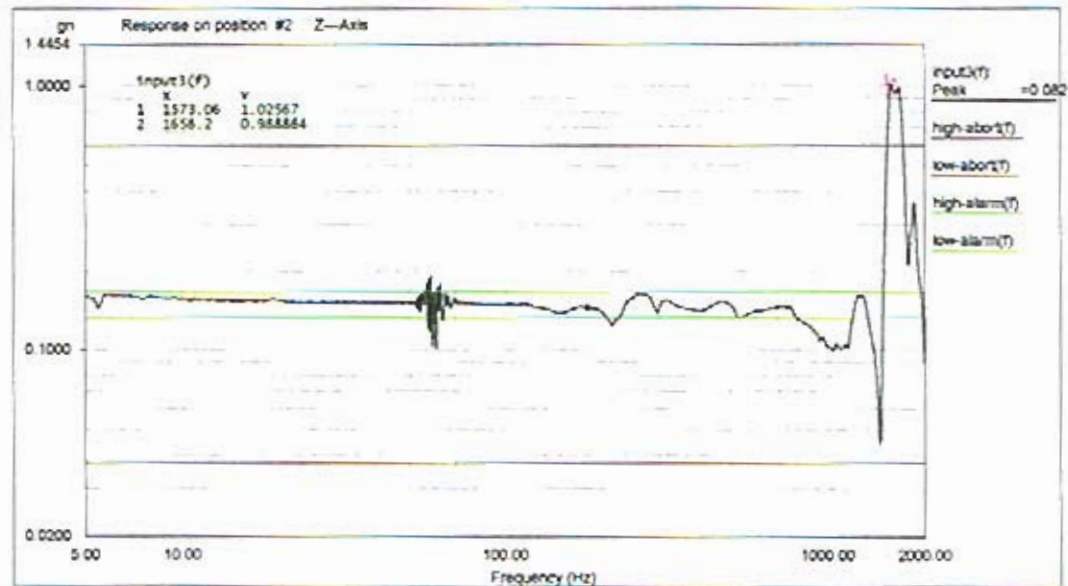
Level: 100 % Control Peak: 0.145054 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1997.699585 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:13:14 AM, Wednesday, November 16, 2005 Report created at 11:13:15 AM, Wednesday, November 16, 2005



Level: 100 % Control Peak: 0.145054 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1997.699585 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:13:14 AM, Wednesday, November 16, 2005 Report created at 11:13:15 AM, Wednesday, November 16, 2005



Level: 100 % Control Peak: 0.145054 gn Full Level Time: 00:04:19 Sweep Type: Logarithmic  
 Frequency: 1997.699585 Hz Demand Peak: 0.150000 gn Time Remaining: 00:00:00 Sweep Rate: 2 Oct/Min

Data saved at 11:13:14 AM, Wednesday, November 16, 2005 Report created at 11:13:15 AM, Wednesday, November 16, 2005