



# QUALIFICATION TEST REPORT

8.9 TO 9.4 GHz

TWO CHANNEL DUAL AMPLIFIER

WITH INTEGRATED BI-PHASE MODULATORS

PART NUMBER: 27007170

SCD NUMBER: 5829474 Rev. V

Project Engineer: Daniel Vescuso

May 16, 2008

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- QUALIFICATION TEST RESULTS

## 8.9 TO 9.4 GHz, TWO CHANNEL DUAL AMPLIFIER WITH INTEGRATED BI-PHASE MODULATORS

PART NO: 27007170

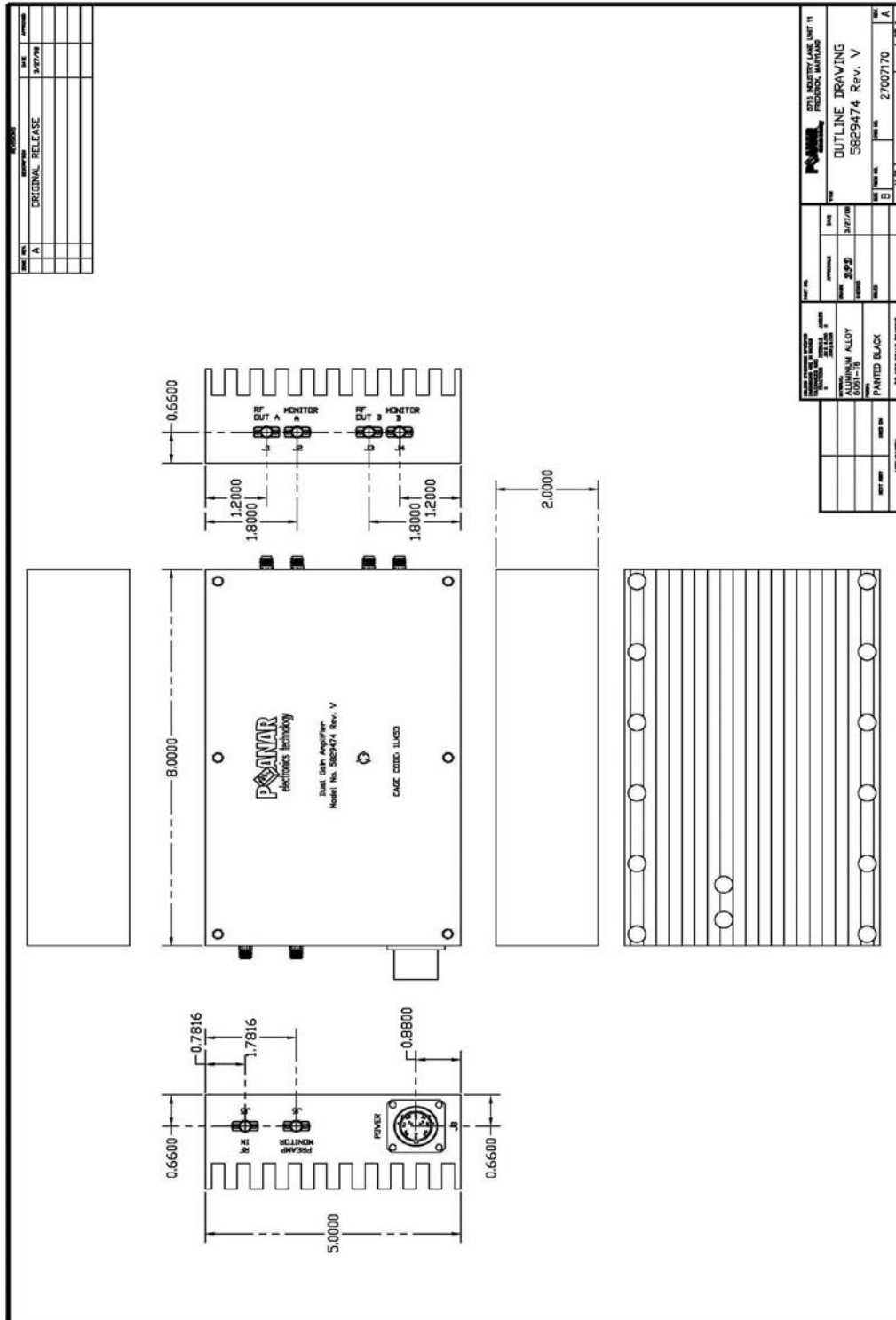
### GENERAL SPECIFICATIONS:

REFER TO SCD ATTACHED FOR DETAIL SPECIFICATIONS

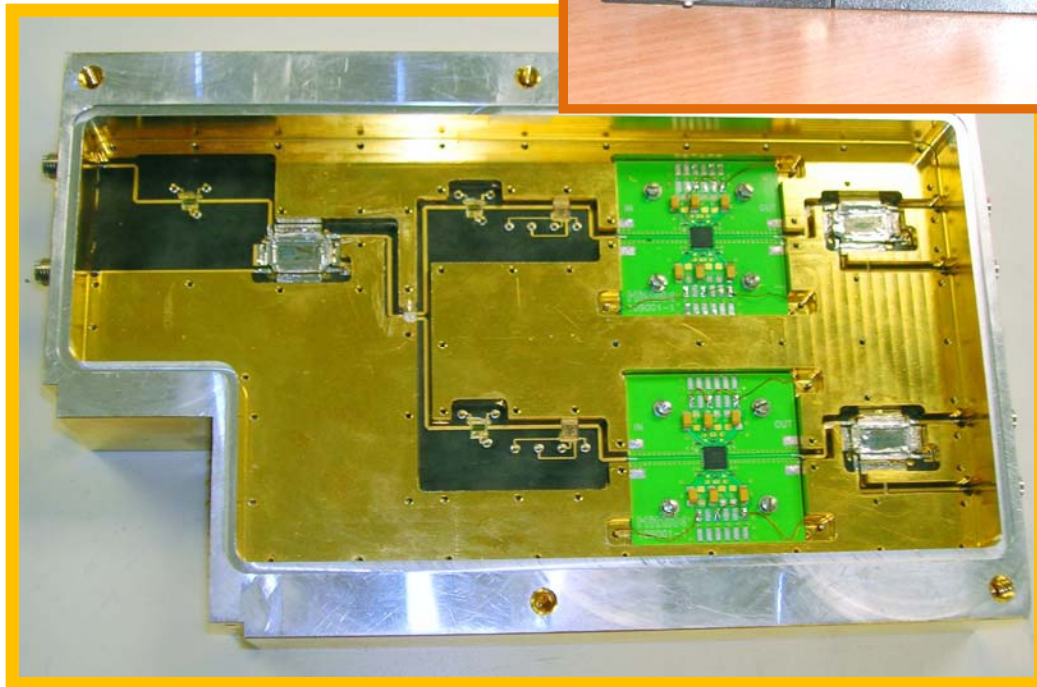
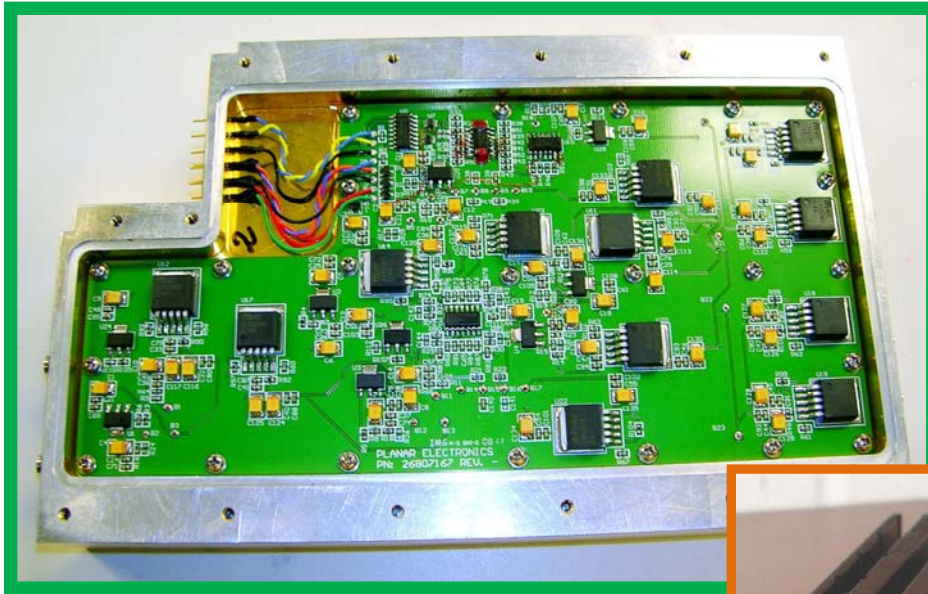
- **FREQUENCY RANGE:** 8.9 to 9.4 GHz
- **VSWR:** 1.3:1 Input (J5) & Output (J1 & J3)
- **OPERATING TEMPERATURE:** 0 to 50°C
- **STORAGE TEMPERATURE:** -62°C to +75°C
- **RF PULSES:** 0.1  $\mu$ S to 33.6  $\mu$ S (Rep Rates up to 4K PPS)
- **RISE & FALL TIME:** 30nS
- **IMPEDENCE:** 50 $\Omega$
- **RF INPUT POWER:** +0.5mW Min. +5.0mW Max.
- **RF INPUT SURVIVAL:** +10mW Max.
- **RF OUTPUT POWER:** +1.15W Min.
- **RF OUTPUT POWER VARIATION OVER FREQUENCY:**  $\leq \pm 0.5$ dB over entire Frequency Range
- **RF OUTPUT POWER VARIATION OVER TEMPERATURE:** -0.038dB/°C Max over Temperature or Phase
- **RF OUTPUT PHASE TRACKING OUTPUT TO OUTPUT:**  $\pm 5^\circ$  Max. (Over Frequency @ 0° Phase setting & +45°C)
- **RF OUTPUT PHASE OFFSET OUTPUT TO OUTPUT:** 15° Max (Calculated per SCD Para. 2.1.6.1)
- **NOISE FIGURE:** 10dB Max
- **DESCRETE SPURIOUS:** -60dBc Max. (DC to 12GHz @ RF Output Rated Power)
- **TOTAL SPURIOUS:** -30dBm Max.
- **2<sup>nd</sup> HARMONIC:** 30dBc Min.
- **DC POWER SUPPLY:** +15VDC  $\pm 2\%$  @ 4.0A Max, -15VDC  $\pm 2\%$  @ 0.6A Max.
- **SIZE & WEIGHT:** 9.0" x 5.0" X 3.25" @  $\leq 6.0$  lb Max. (Including Fins)
- **ENVIRONMENTAL STRESS TESTING PER 53711-WS32884 (Para. 4.4.2 & 4.5)**



MECHANICAL OUTLINE



Planar Electronics Technology, a division of Planar Monolithics Industries, Inc.  
 7311-F Grove Road, Frederick, MD 21704 USA Tel: 301-631-1579 Fax: 301-662-2029  
 Email: [sales@planarmonolithics.com](mailto:sales@planarmonolithics.com) Web: [www.planarelec.com](http://www.planarelec.com) [www.planarfilter.com](http://www.planarfilter.com) [www.planarmonolihtics.com](http://www.planarmonolihtics.com)



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7311-F Grove Road, Frederick, MD 21704 USA Tel: 301-631-1579 Fax: 301-662-2029  
Email: [sales@planarmonolithics.com](mailto:sales@planarmonolithics.com) Web: [www.planarelec.com](http://www.planarelec.com) [www.planarfilter.com](http://www.planarfilter.com) [www.planarmonolithics.com](http://www.planarmonolithics.com)



6120 Hanging Moss Road, Orlando, Florida, 32807 (407) 678-6900, FAX (407) 671-0664

Customer: **PLANAR**

P. O. No.: **PET0800241**

Job No.: **280688-002**

Order Quantity: **1**

Mfg. P/N

Customer P/N: **27007170**

Generic P/N

Specification **Customer's PO & MIL-STD-202**

Part Type:

Prepared By: **Harry E Cummings III**



Date Prepared: **04/17/08**

Reviewed By:

Date Reviewed: **4/17/08**

### CERTIFICATE OF CONFORMANCE

This is to certify that the referenced item was subjected to a testing program in accordance with your Procurement Document, as defined in the attached test plan. This plan specifies the test sequence, outlines the test conditions and provides a summary for each test.

Sypris Test & Measurement does not infer or imply that the test methods utilized in the body of this report have been granted suitability by the Defense Supply Center Columbus, (DSCC). A current listing of approved suitability methods is available upon request.

Mfr.: PLANAR

Date Code: N/A

Accept: 1


Reject: 0


### SEE ATTACHED DOCUMENTATION

Approved By:

Date Approved: **4/23/08**

Task	Conditions	Date Completed	Operator Stamp
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<b>INCOMING INSPECTION</b>	Visual check for shipping damage Verify packing slip information								
	<table border="1" style="width:100%; border-collapse: collapse; margin-left: 20px;"> <thead> <tr> <th style="width:25%;">Quantity</th> <th style="width:25%;">Part #</th> <th style="width:50%;">Serial #</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">27007170</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table>	Quantity	Part #	Serial #	1	27007170	N/A	4-17-08	
Quantity	Part #	Serial #							
1	27007170	N/A							

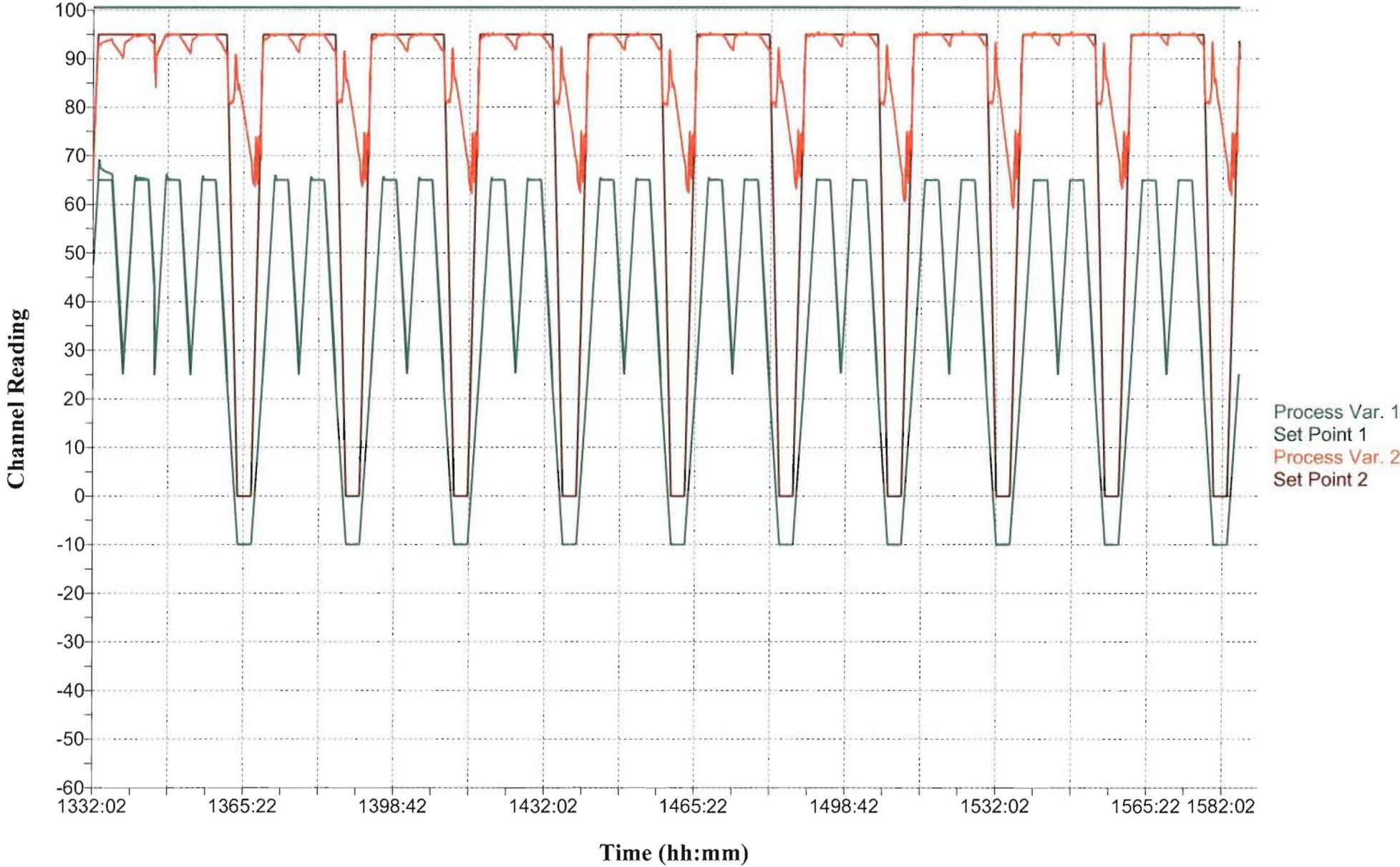
<b>MOISTURE RESISTANCE</b>	<p><b>Documentation:</b> MIL-STD-202 Method 103 (As modified by Customer P.O.)</p> <p><b>Conditions:</b>                  Perform Initial Conditioning:      <b>No</b>                  Perform Initial Measurements:      <b>No</b>                  Step 7 applicable:                      <b>Yes</b>                  Number of Cycles:                      <b>10</b>                  Cycle Duration:                          <b>24 hours each (Per Figure 1021-1)</b></p> <p><b>RETURN PARTS IN MOISTURE BARRIER BAG!</b> !</p> <p>DATE IN <u>4-18-08</u> TIME TEST STARTED <u>10:00 AM</u>                  DATE OUT <u>4-28-08</u> TIME TEST ENDED <u>10:00 AM</u></p> <p><b>Details:</b>                  Operational: NA                  Failure criteria: Illegible part markings when examined at 1X to 3X.                  Evidence of corrosion over more than 5 percent of the area of the finish or base metal of any package element..                  Corrosion that completely crosses the element when viewed at 10X to 20X.                  Leads damaged or missing, or partially separated.</p> <p><b>Operator's Notes:</b></p> <p>Qty in <u>  1  </u>      Qty out <u>  1  </u></p>	4-28-08	
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Task	Conditions	Date Completed	Operator Stamp
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<b>USAGE LOG</b>	All Equipment Station Logs Completed.			4-28-08	STM 20-18 TECH	
	<b>Manufacturer</b>	<b>Model # / Function</b>	<b>Asset #</b>			<b>Cal. Due</b>
	Thermotron	SM-16/ Chamber	83-6231			04/23/09

<b>PACK</b>	Use original container or equivalent One copy of test plan.	4-28-08	STM 20-18 TECH
<b>SHIP TO:</b>	<b>PLANAR ELECTRONICS TECHNOLOGY</b> <b>5715 INDUSTRY LANE</b> <b>UNIT 11</b> <b>FREDERICK, MD 21704</b>		
<b>SHIP VIA:</b>	UPS GROUND COD		







6120 Hanging Moss Road, Orlando, Florida, 32807 (407) 678-6900, FAX (407) 671-0664

Customer: **PLANAR**

Assembly Lot: **PET0800241**

Job No.: **280688-001**

Order Quantity: **1**

Mfg. P/N

Customer P/N: **27007170**

Generic P/N

Specification **Customer's PO & MIL-STD-167, MIL-STD-202**

Part Type:

Prepared By: **Harry E Cummings III**



Date Prepared: **04/17/08**

Reviewed By:

Date Reviewed: **4/17/08**

### CERTIFICATE OF CONFORMANCE

This is to certify that the referenced item was subjected to a testing program in accordance with your Procurement Document, as defined in the attached test plan. This plan specifies the test sequence, outlines the test conditions and provides a summary for each test.

Sypris Test & Measurement does not infer or imply that the test methods utilized in the body of this report have been granted suitability by the Defense Supply Center Columbus, (DSCC). A current listing of approved suitability methods is available upon request.

Mfr.: **PLANAR**

Date Code: **N/A**

Accept: **1**


Reject: **0**


### SEE ATTACHED DOCUMENTATION

Approved By:

Date Approved: **4/28/08**

TASK	CONDITIONS	Date Completed	Operator Stamp
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<b>INCOMING INSPECTION</b>	Visual check for shipping damage Verify packing slip information	4-17-08													
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Quantity :</th> <th style="width: 25%;">Part Number</th> <th style="width: 25%;">Serial Number</th> <th style="width: 35%;">Date Code</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">27007170</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Quantity :	Part Number	Serial Number	Date Code	1	27007170	N/A	N/A				
	Quantity :			Part Number	Serial Number	Date Code									
1	27007170	N/A	N/A												

<b>MECHANICAL SHOCK</b>	<p><b>Documentation: MIL-STD-202 METHOD 213 CONDITION A</b> Customer P.O.</p> <p><b>Conditions:</b>                  Amplitude: <b>50 g's</b>                  Duration: <b>11 msec</b>                  Waveform: <b>Half-sine</b>                  Number of Orientations : <b>3 (X, Y, Z)</b>                  Number Shocks per Orientation: <b>6</b>                  Total Shocks: <b>18</b></p> <p><b>Procedure:</b>                  Mount the units on fixture                  Verify accelerometer operation.                  Attach fixture to the shock table.                  Shock devices IAW referenced specifications.</p> <p><b>Details:</b>                  Operational: N/A                  Failure criteria:.</p> <p><b>Operator's Notes:</b>                  No Physical Damage</p> <p>Qty in <u>  /  </u>                      Qty out <u>  1  </u></p>	4-23-08	
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TASK	CONDITIONS	Date Completed	Operator Stamp
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**EXPLORATORY  
VIBRATION  
FREQUENCY**

**Documentation:**

Per MIL-STD-167 & As modified by Customer P.O.

**Conditions:**

Frequency range: 4/70 HZ  
 Level 4 TO 15 (0.060 DA)  
 Level: 16 TO 25 (0.040 DA)  
 Level 26 to 70 (0.020 DA)  
 Sweep rate : 0.067 HZ/ SEC  
 Number of axis: 3 ( X, Y & Z )  
 Sweep length 1 sweep per axis

**Place response accelerometer on side of unit.**

**Procedure:**

Mount the units on fixture #:  
 Verify accelerometer operation  
 Attach fixture to the vibration table.  
 Test devices IAW referenced specifications.

**Details:**

Operational: N/A  
 Failure criteria: N/A

**Operator's Notes:**


No Physical Damage

Qty in   1   Qty out   1  

4-24-08



TASK	CONDITIONS	Date Completed	Operator Stamp
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<b>VARIABLE FREQUENCY</b>	<p><b>Documentation:</b> Per MIL-STD-167 &amp; As modified by Customer P.O.</p> <p><b>Conditions:</b> Frequency range: <b>4/70 HZ</b> Level <b>4 TO 15 (0.060 DA)</b> Level: <b>16 TO 25 (0.040 DA)</b> Level <b>26 to 70 (0.020 DA)</b> Sweep rate : <b>5 MINUTES PER EACH INTEGRAL</b> Number of axis: <b>3 ( X, Y &amp; Z )</b> Sweep length <b>1 SWEEP PER AXIS</b></p> <p><b>Procedure:</b> Mount the units on fixture #: Verify accelerometer operation Attach fixture to the vibration table. Test devices IAW referenced specifications.</p> <p><b>Details:</b> Operational: N/A Failure criteria: N/A</p> <p><b>Operator's Notes:</b></p> <p style="text-align: center;">No Physical Damage</p> <p>Qty in <u>  /  </u> Qty out <u>  /  </u></p>	<p style="text-align: center;">4-26-08</p>	
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TASK	CONDITIONS	Date Completed	Operator Stamp
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**ENDURANCE TEST**

**Documentation:**

Per MIL-STD-167 & As modified by Customer P.O.

**Conditions:**

Frequency range:	<b>70 HZ OR RESONANT FREQ</b>
Level	<b>4 TO 15 (0.060 DA)</b>
Level:	<b>16 TO 25 (0.040 DA)</b>
Level	<b>26 to 70 (0.020 DA)</b>
Number of axis:	<b>3 ( X, Y &amp; Z )</b>
Sweep length	<b>2 HOURS PER AXIS</b>

**Procedure:**

Endurance test frequencies are selected from the candidate list of endurance test frequencies developed during exploratory and variable frequency testing. The equipment shall be vibrated for a total period of at least 2 hours at the frequency determined to most seriously affect the functional or structural integrity of the equipment.

Mount the units on fixture #:  
 Verify accelerometer operation  
 Attach fixture to the vibration table.  
 Test devices IAW referenced specifications.

**Details:**

Operational: N/A  
 Failure criteria: N/A

**Operator's Notes:**

No Physical Damage

Qty in   1   Qty out   1  

*4-26-18*



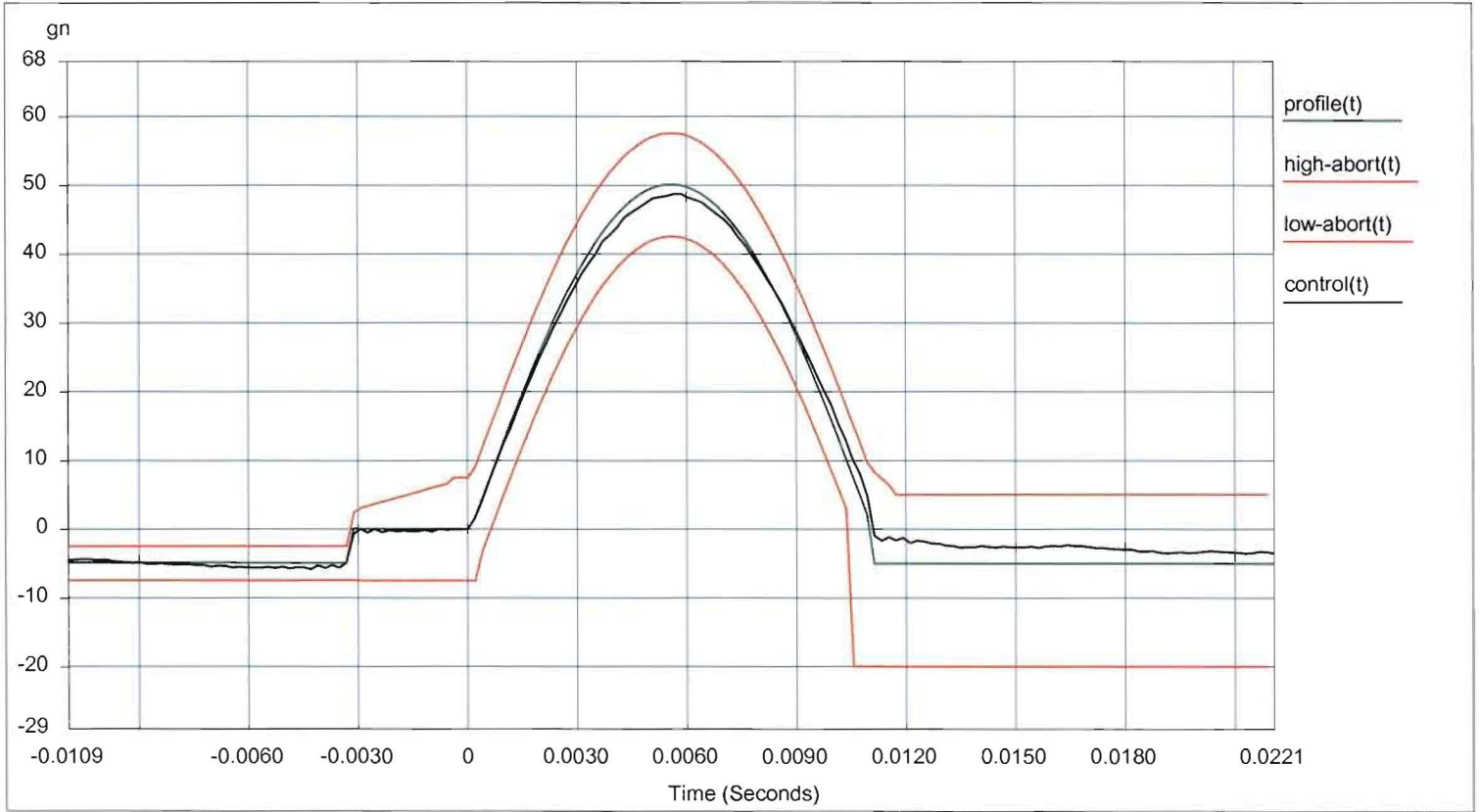
Page 6 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688-001

Serial Number: AXIS: X

Project File Name: 50G 11MS SHOCK.prj

Profile Name: 50g shock Test Type: Classical Shock Run Folder: \RunDefault Apr 22, 2008 05-52-16



Level:	100 %	Block Size:	2048	Elapsed Pulses:	15	
Frame Time:	0.400000 Seconds	Control Peak:	48.693954	Control RMS:	6.564518	Full Level Elapsed
Pulses:	3					
dT:	0.000195 Seconds	Demand Peak:	50.000004	Demand RMS:	6.622088	Remaining Pulses:
	0					
Pulse Type:	Half Sine	Amplitude:	50.000000	Pulse Width:	11.000000 ms	

Data saved at 05:52:32 AM, Tuesday, April 22, 2008

Report created at 05:52:33 AM, Tuesday, April 22, 2008

Page 7 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688-001

Serial Number: AXIS: X

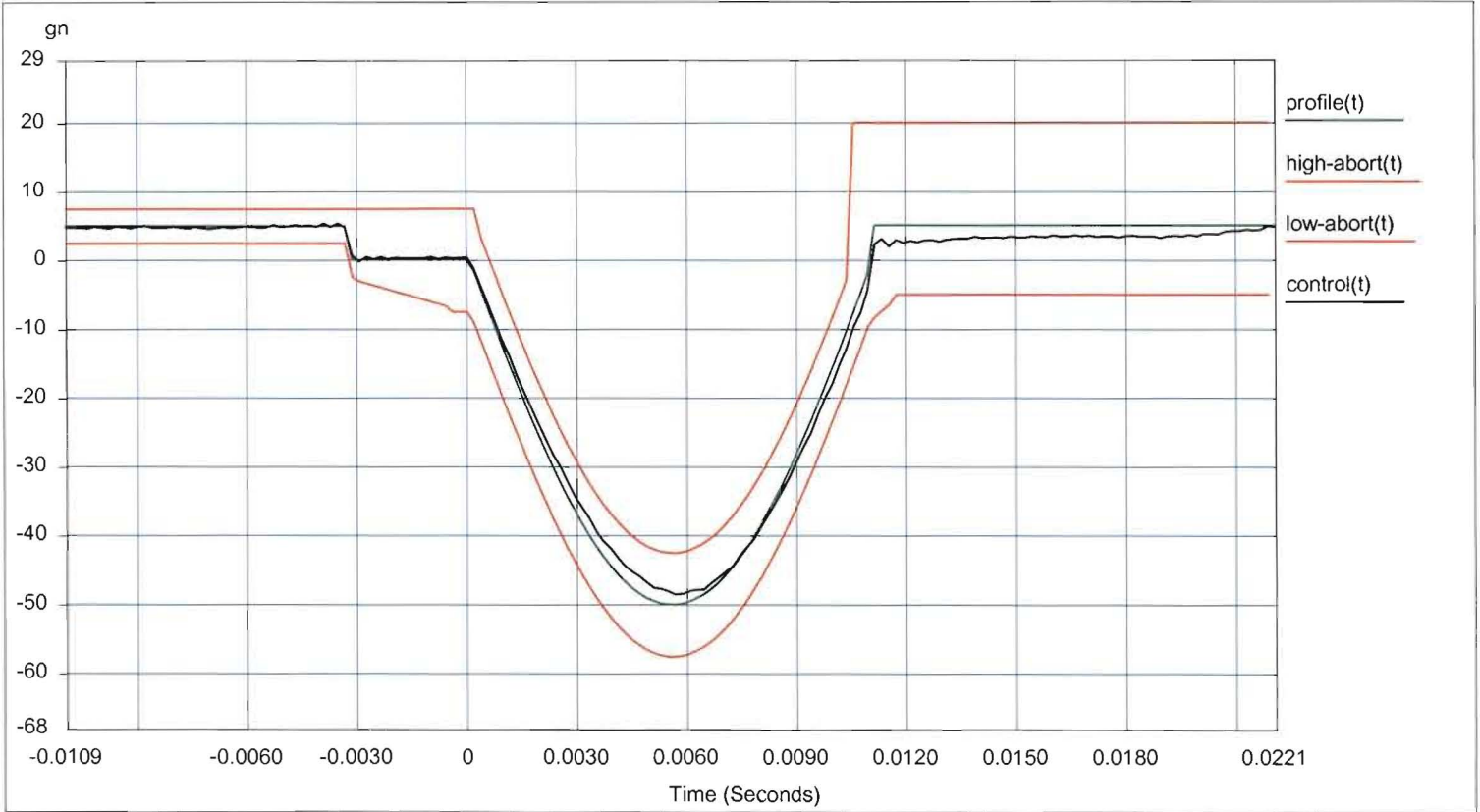
Project File Name: 50G 11MS SHOCK.prj

Profile Name: 50g shock

Test Type: Classical Shock

Run Folder: \RunDefault Apr 22, 2008 05-52-

57



Level:	100 %	Block Size:	2048	Elapsed Pulses:	15	
Frame Time:	0.400000 Seconds	Control Peak:	48.449265	Control RMS:	6.532141	Full Level Elapsed
Pulses:	3					
dT:	0.000195 Seconds	Demand Peak:	50.000004	Demand RMS:	6.622088	Remaining Pulses:
	0					
Pulse Type:	Half Sine	Amplitude:	50.000000	Pulse Width:	11.000000 ms	

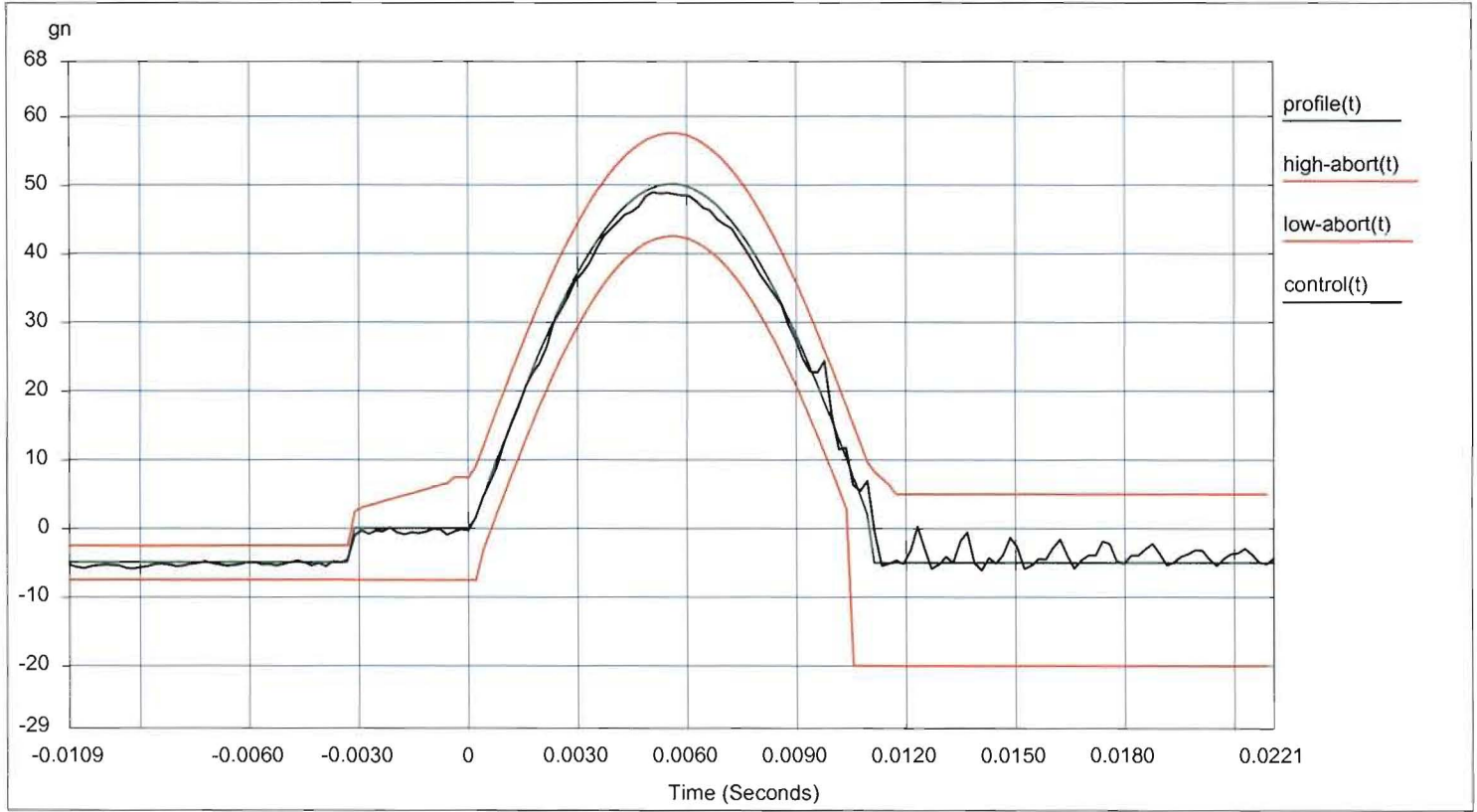
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Report created at 05:53:16 AM, Tuesday, April 22, 2008



Page 8 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688-001  
 Serial Number: AXIS: Y  
 Project File Name: 50G 11MS SHOCK.prj  
 Profile Name: 50g shock Test Type: Classical Shock Run Folder: \RunDefault Apr 23, 2008 05-14-25

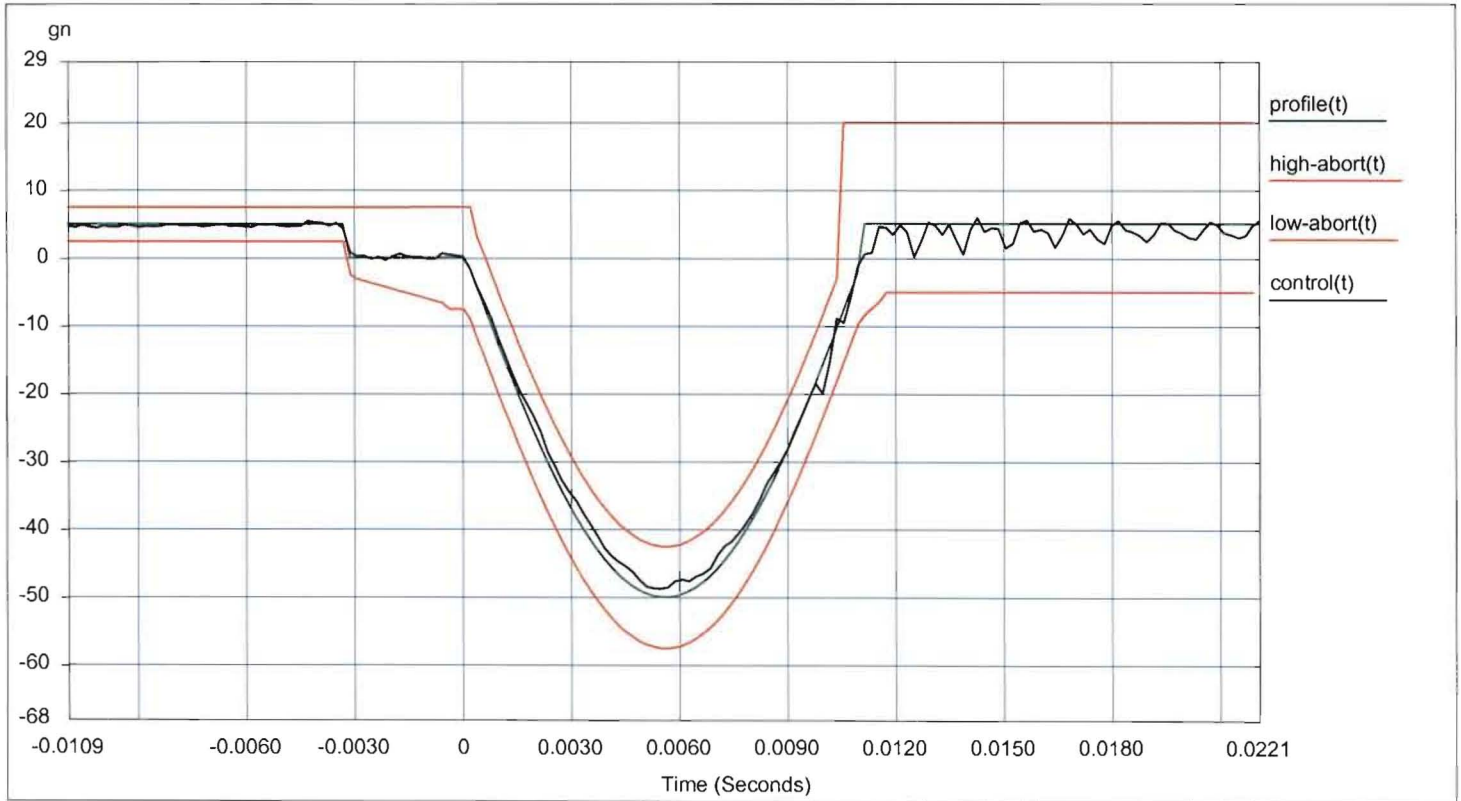


Level:	100 %	Block Size:	2048	Elapsed Pulses:	16	
Frame Time:	0.400000 Seconds	Control Peak:	48.904800	Control RMS:	6.511930	Full Level Elapsed
Pulses:	3					
dT:	0.000195 Seconds	Demand Peak:	50.000004	Demand RMS:	6.622088	Remaining Pulses:
	0					
Pulse Type:	Half Sine	Amplitude:	50.000000	Pulse Width:	11.000000 ms	

Data saved at 05:14:40 AM, Wednesday, April 23, 2008      Report created at 05:14:43 AM, Wednesday, April 23, 2008

Page 9 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688-001  
Serial Number: AXIS: Y  
Project File Name: 50G 11MS SHOCK.prj  
Profile Name: 50g shock Test Type: Classical Shock Run Folder: \RunDefault Apr 23, 2008 05-15-14



Level:	100 %	Block Size:	2048	Elapsed Pulses:	16	
Frame Time:	0.400000 Seconds	Control Peak:	48.628033	Control RMS:	6.448987	Full Level Elapsed
Pulses:	3					
dT:	0.000195 Seconds	Demand Peak:	50.000004	Demand RMS:	6.622088	Remaining Pulses:
	0					
Pulse Type:	Half Sine	Amplitude:	50.000000	Pulse Width:	11.000000 ms	
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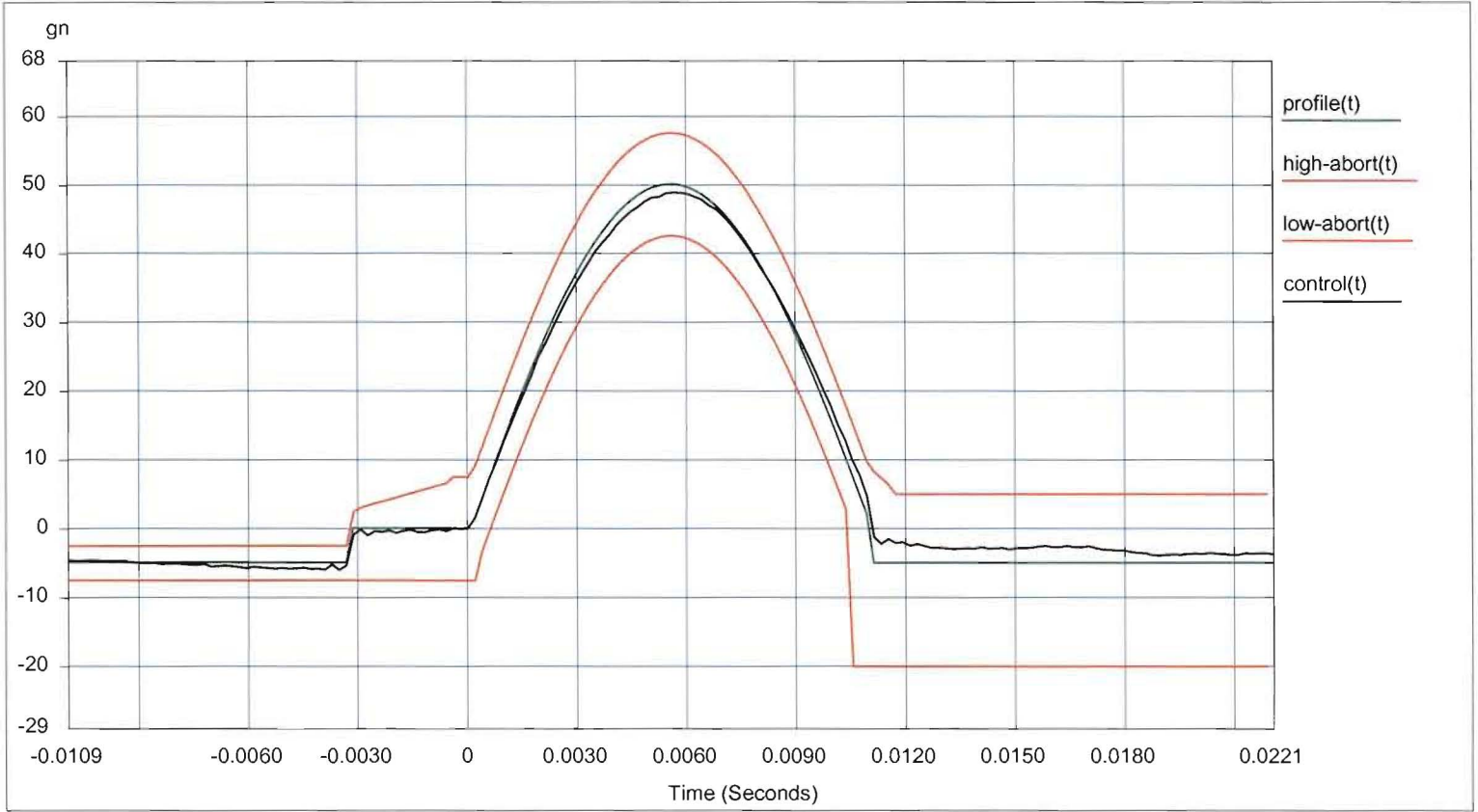
Page 10 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688-001

Serial Number: AXIS: Z

Project File Name: 50G 11MS SHOCK.prj

Profile Name: 50g shock Test Type: Classical Shock Run Folder: \RunDefault Apr 22, 2008 05-43-07



Level:	100 %	Block Size:	2048	Elapsed Pulses:	15	
Frame Time:	0.400000 Seconds	Control Peak:	48.870358	Control RMS:	6.595700	Full Level Elapsed
Pulses:	3					
dT:	0.000195 Seconds	Demand Peak:	50.000004	Demand RMS:	6.622088	Remaining Pulses:
	0					
Pulse Type:	Half Sine	Amplitude:	50.000000	Pulse Width:	11.000000 ms	

Data saved at 05:43:34 AM, Tuesday, April 22, 2008      Report created at 05:43:35 AM, Tuesday, April 22, 2008

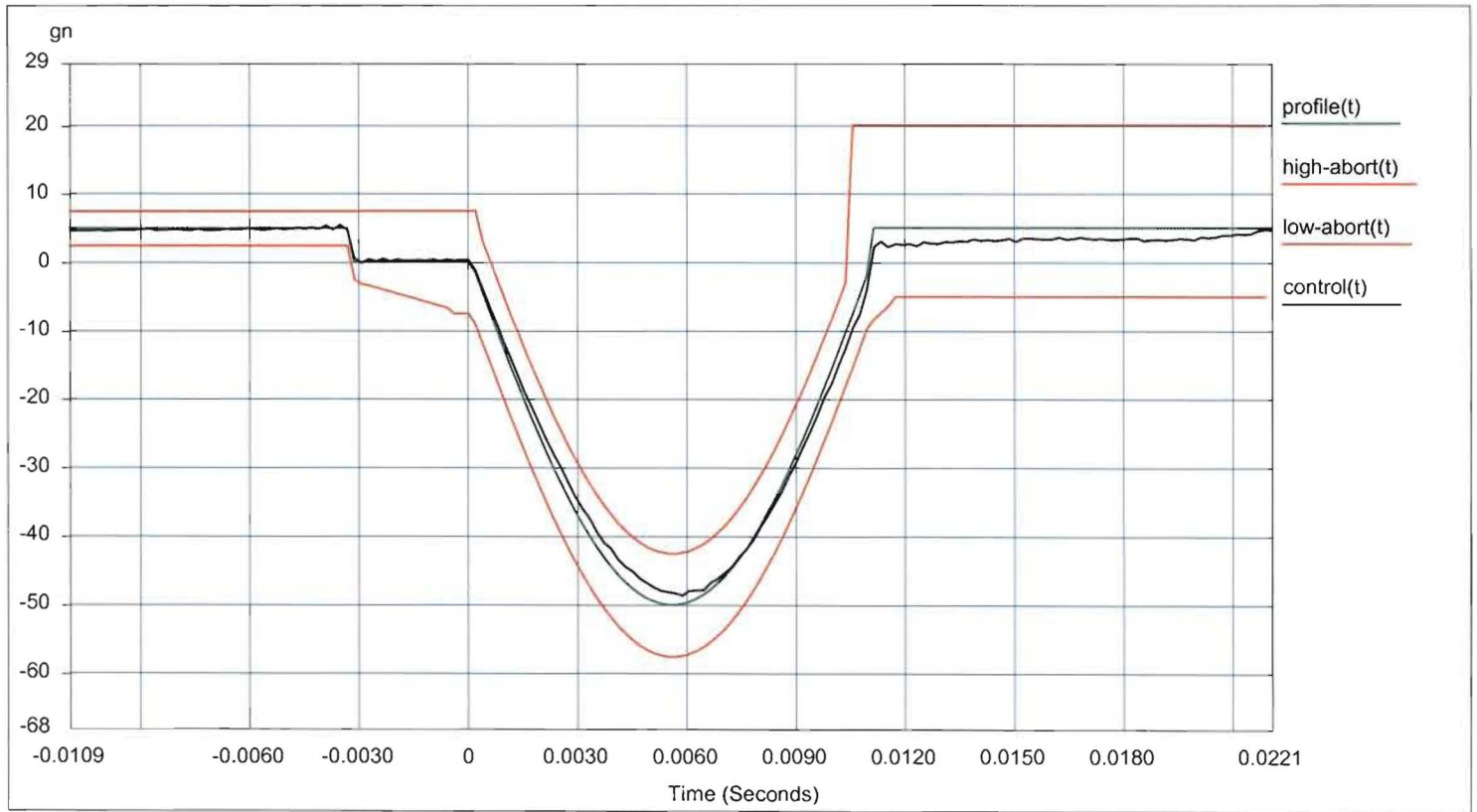
Page 11 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688-001

Serial Number: AXIS: Z

Project File Name: 50G 11MS SHOCK.prj

Profile Name: 50g shock Test Type: Classical Shock Run Folder: .\RunDefault Apr 22, 2008 05-44-33

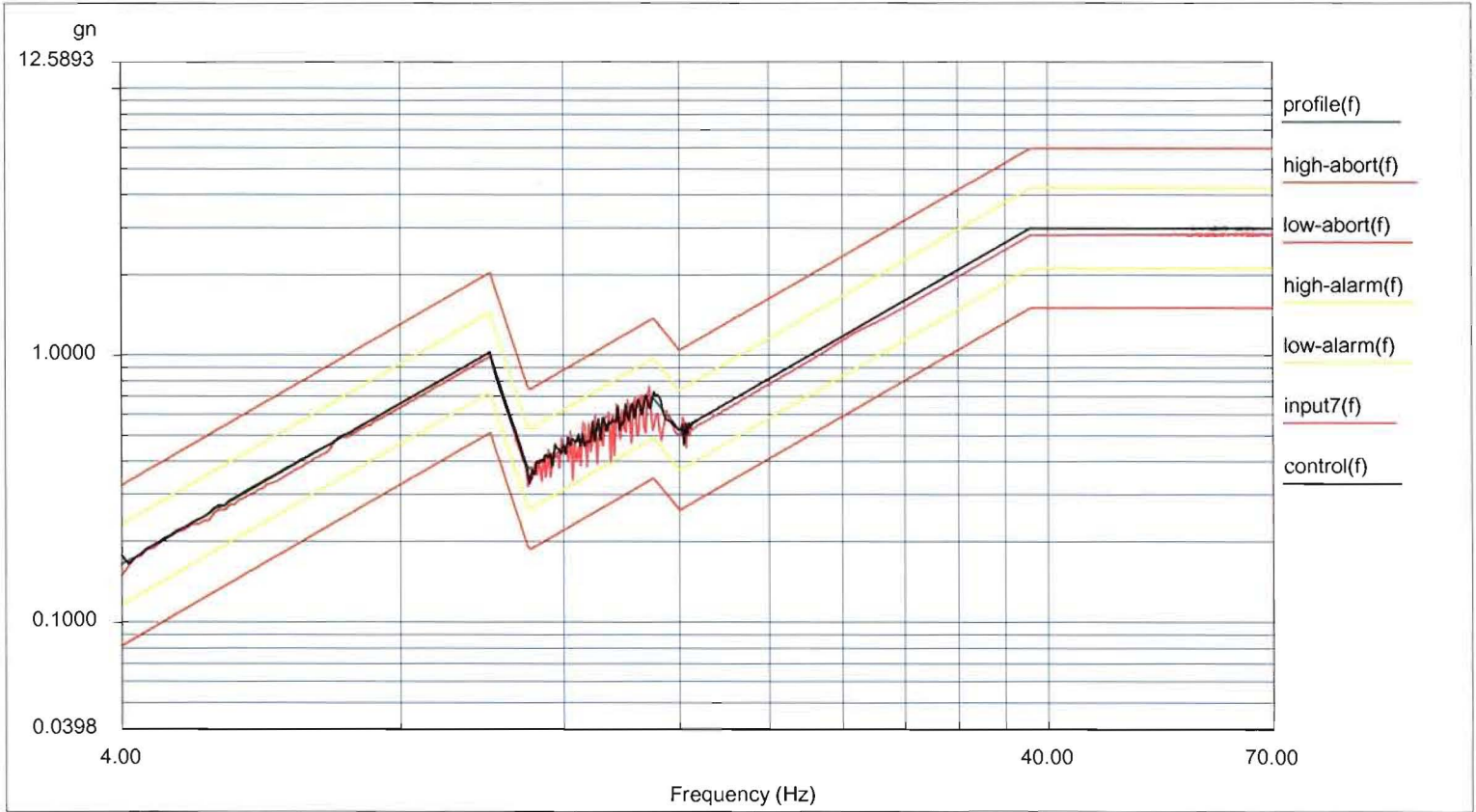


Level:	100 %	Block Size:	2048	Elapsed Pulses:	15	
Frame Time:	0.400000 Seconds	Control Peak:	48.536076	Control RMS:	6.535199	Full Level Elapsed
Pulses:	3					
dT:	0.000195 Seconds	Demand Peak:	50.000004	Demand RMS:	6.622088	Remaining Pulses:
	0					
Pulse Type:	Half Sine	Amplitude:	50.000000	Pulse Width:	11.000000 ms	

Data saved at 05:44:50 AM, Tuesday, April 22, 2008      Report created at 05:44:51 AM, Tuesday, April 22, 2008

Page 12 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688  
 Serial Number: AXIS:X  
 Project File Name: sweep.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: \RunDefault Apr 24, 2008 16-37-03



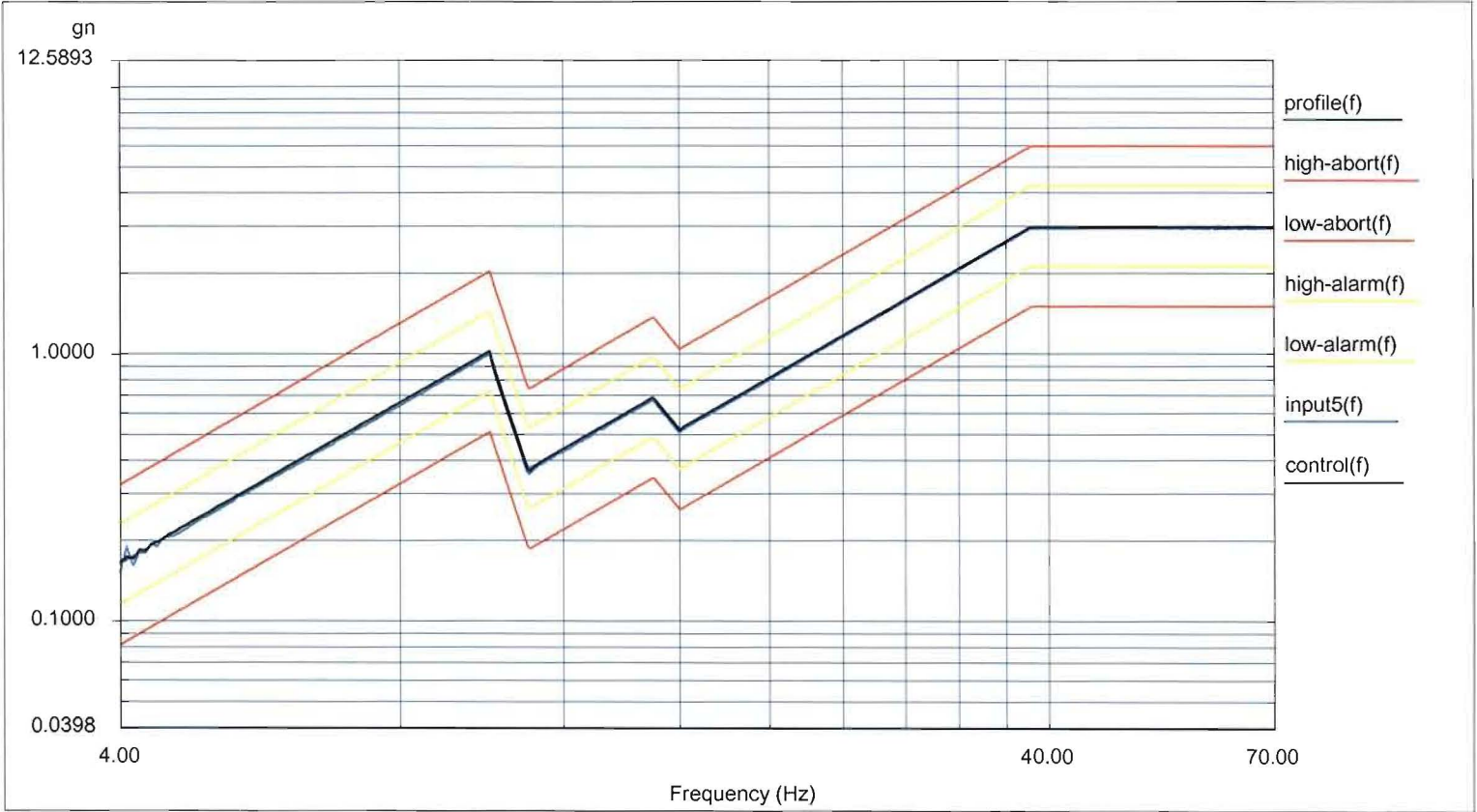
Level: 100 % Full Level Time: 00:16:27 Sweep Type: Linear  
 Frequency: 69.997040 Hz Time Remaining: 00:00:00 Sweep Rate: 0.067 Hz/Second

Data saved at 04:53:38 PM, Thursday, April 24, 2008

Report created at 04:53:39 PM, Thursday, April 24, 2008

Page 13 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688-001  
 Serial Number: AXIS: Y  
 Project File Name: sweep.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: \RunDefault Apr 23, 2008 05-27-01



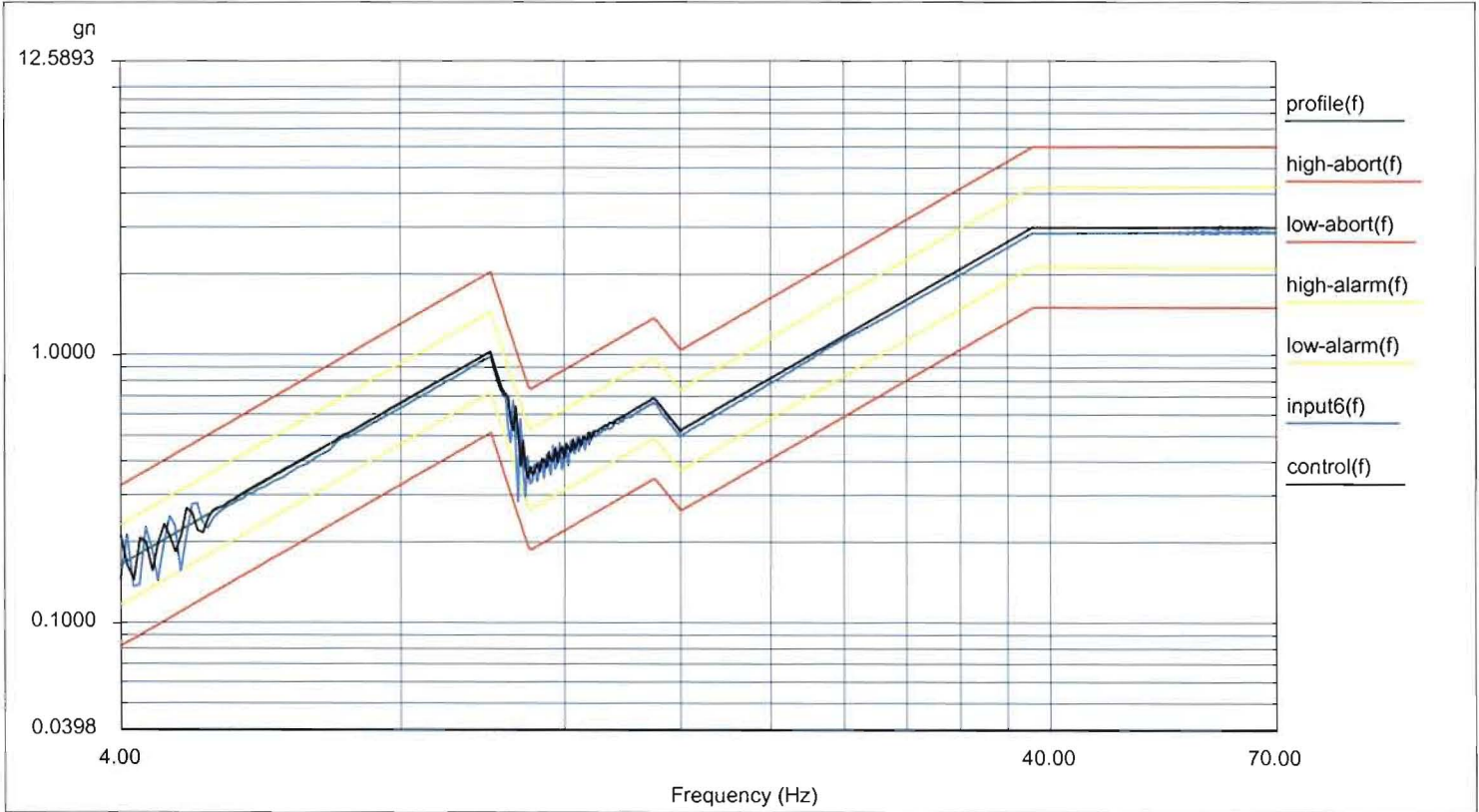
Level: 100 % Full Level Time: 00:16:27 Sweep Type: Linear  
 Frequency: 69.997749 Hz Time Remaining: 00:00:00 Sweep Rate: 0.067 Hz/Second

Data saved at 05:43:37 AM, Wednesday, April 23, 2008

Report created at 05:43:38 AM, Wednesday, April 23, 2008

Page 14 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688  
 Serial Number: AXIS:Z  
 Project File Name: sweep.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: \RunDefault Apr 24, 2008 05-15-54



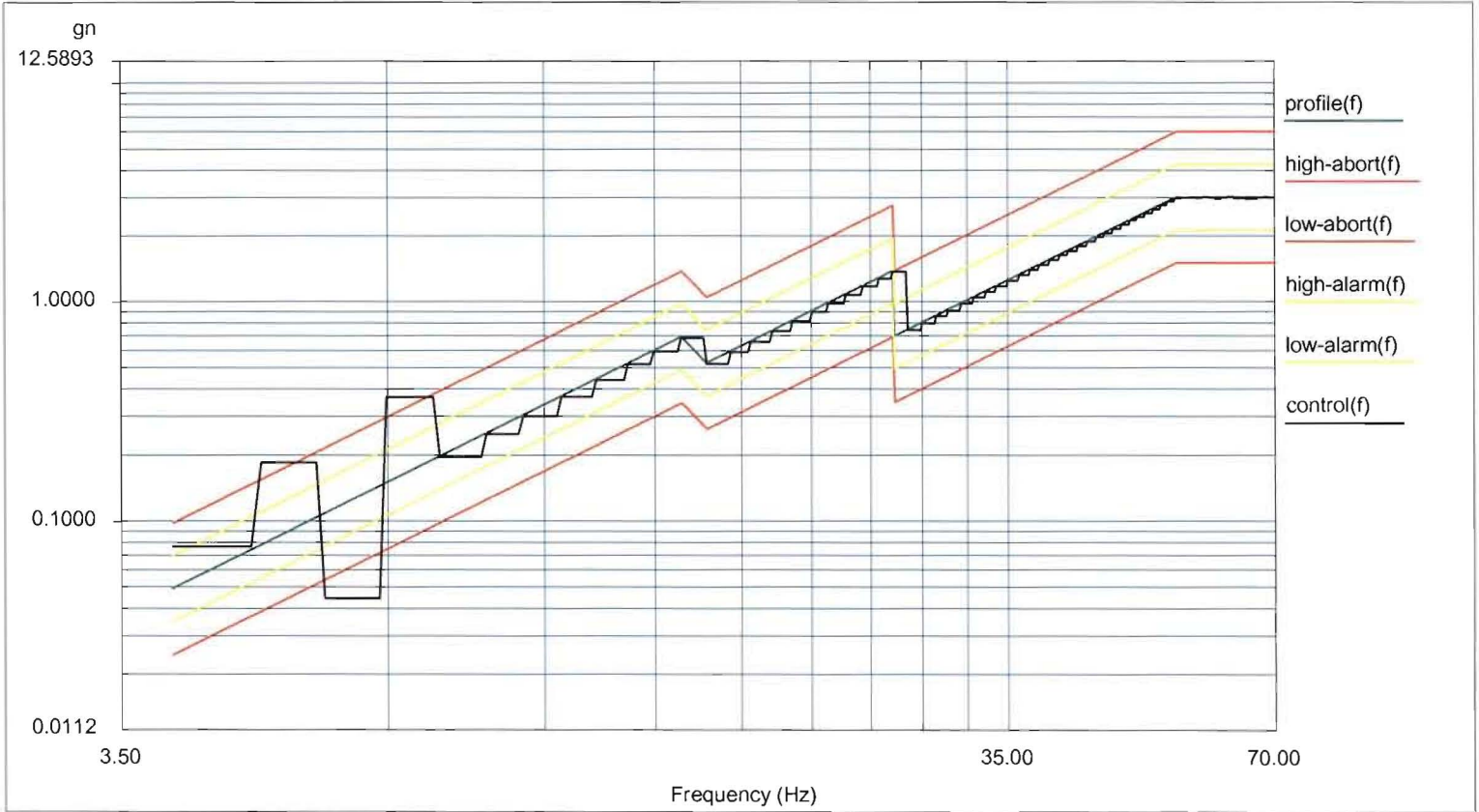
Level: 100 % Full Level Time: 00:16:27 Sweep Type: Linear  
 Frequency: 69.996330 Hz Time Remaining: 00:00:00 Sweep Rate: 0.067 Hz/Second

Data saved at 05:32:31 AM, Thursday, April 24, 2008

Report created at 05:32:32 AM, Thursday, April 24, 2008

Page 15 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688  
Serial Number: AXIS: X  
Project File Name: INTEGER SWEEP 4-70.prj  
Profile Name: Low Level Test Type: Swept Sine Run Folder: .\RunDefault Apr 24, 2008 16-55-23



Level: 100 % Full Level Time: 05:35:00 Sweep Type: Linear  
Frequency: 70.000000 Hz Time Remaining: 00:00:00 Sweep Rate: 200 Hz/Second

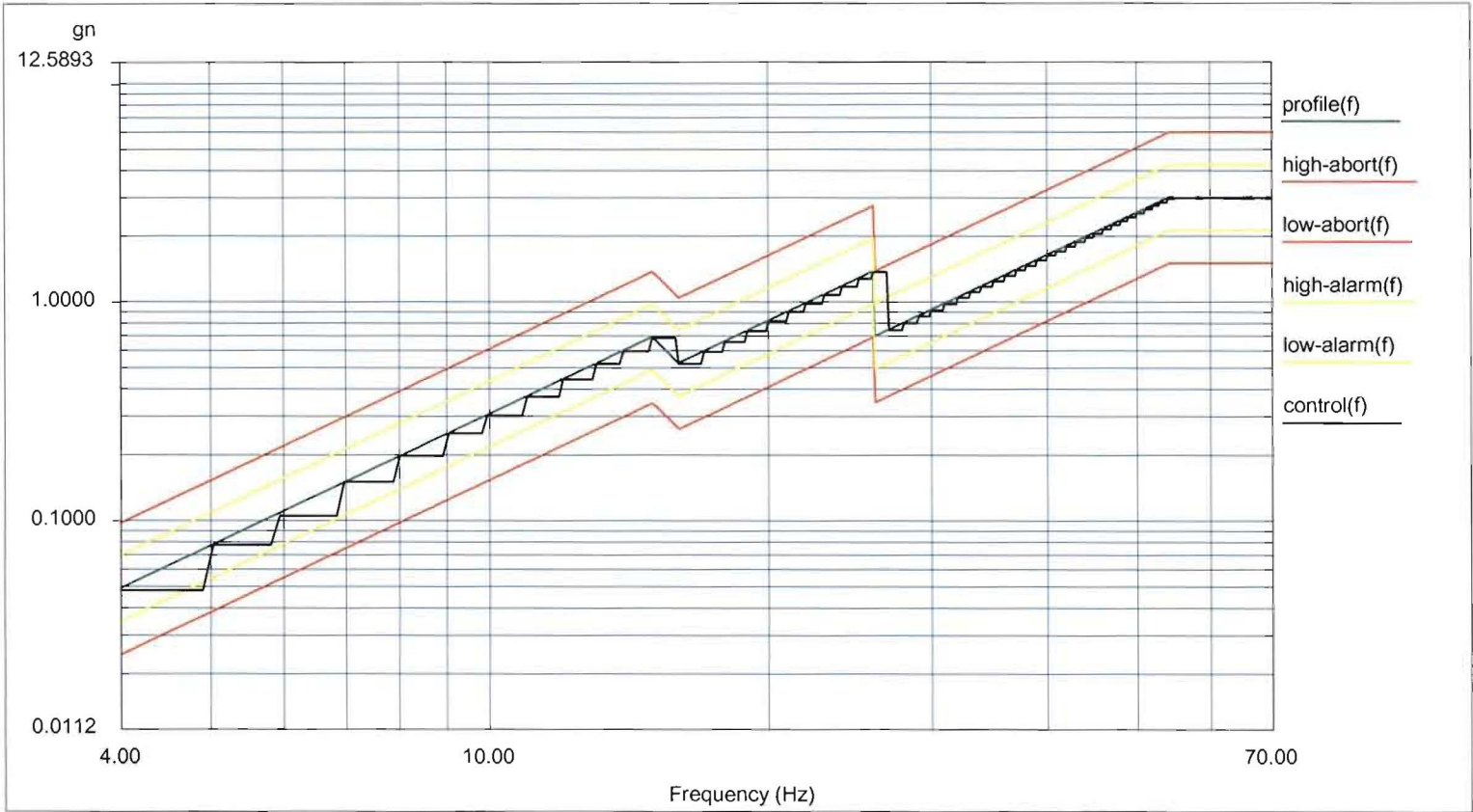
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TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688  
 Serial Number: AXIS: Y  
 Project File Name: INTEGER SWEEP 4-70.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: \RunDefault Apr 26, 2008 05-32-16



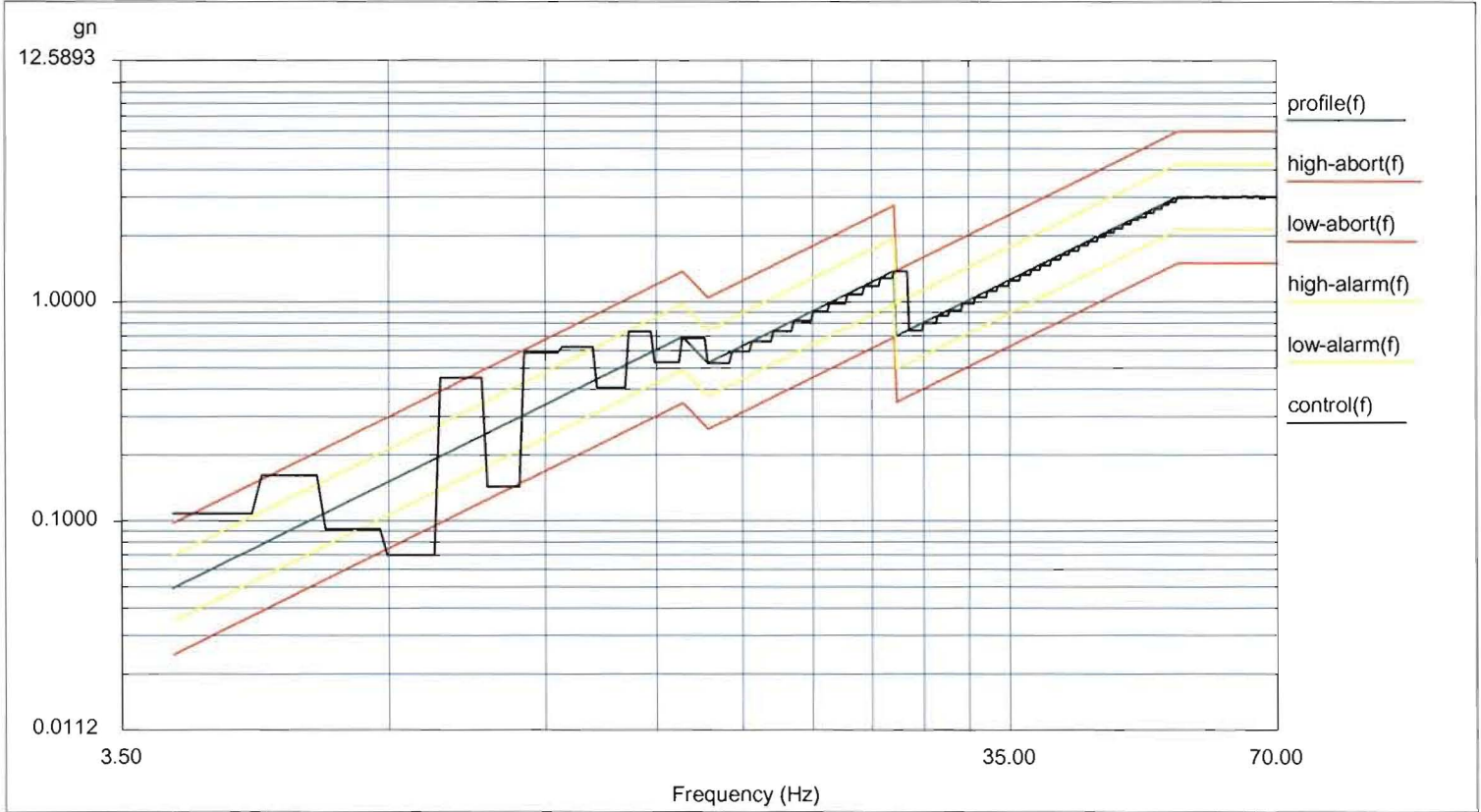
Level: 100 % Full Level Time: 05:35:00 Sweep Type: Linear  
 Frequency: 70.000000 Hz Time Remaining: 00:00:00 Sweep Rate: 200 Hz/Second

Data saved at 11:08:32 AM, Saturday, April 26, 2008

Report created at 11:08:36 AM, Saturday, April 26, 2008

Page 17 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688  
 Serial Number: AXIS: Z  
 Project File Name: INTEGER SWEEP 4-70.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: .\RunDefault Apr 24, 2008 08-08-46



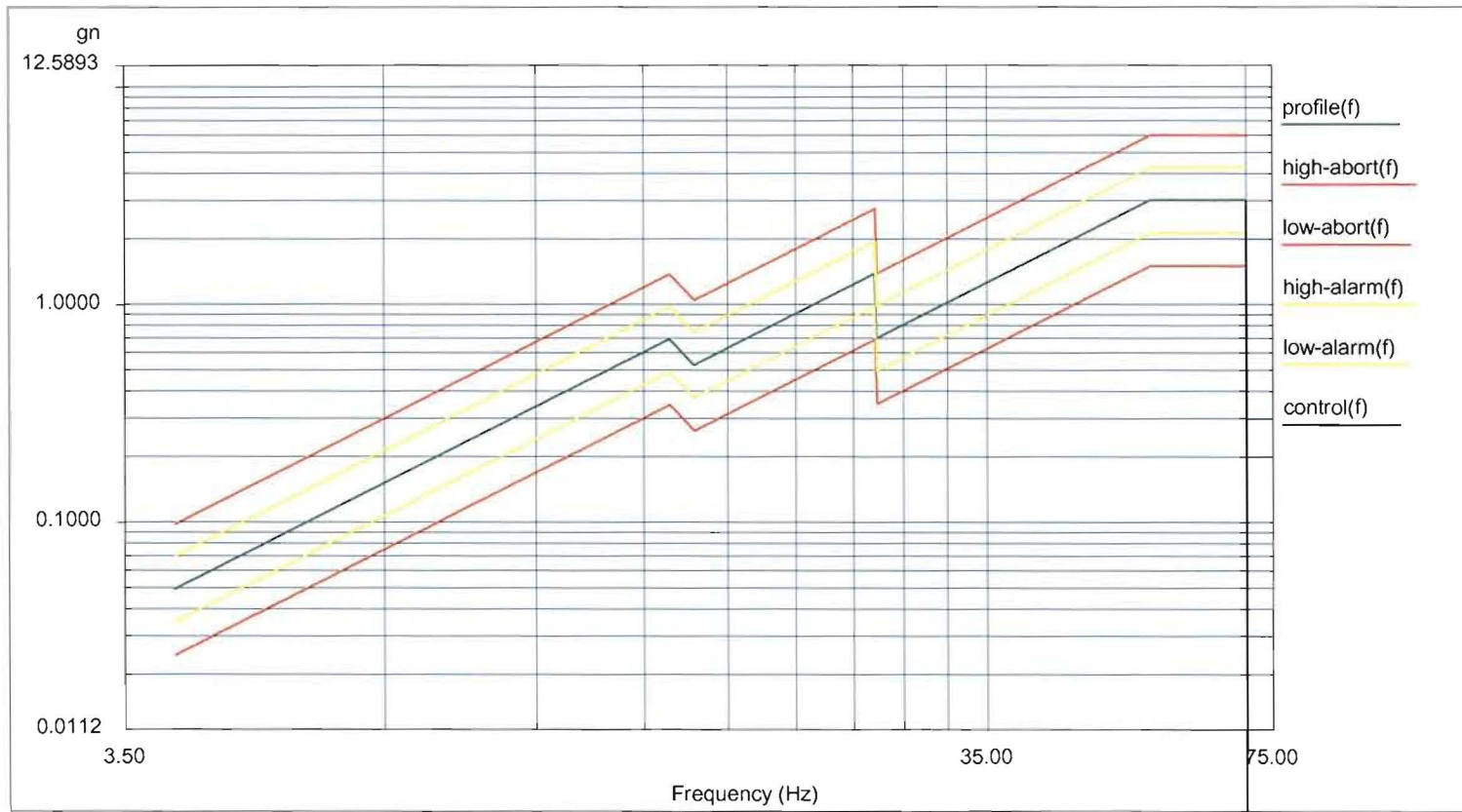
Level: 100 % Full Level Time: 05:35:00 Sweep Type: Linear  
 Frequency: 70.000000 Hz Time Remaining: 00:00:00 Sweep Rate: 200 Hz/Second

Data saved at 02:22:40 PM, Thursday, April 24, 2008

Report created at 02:22:41 PM, Thursday, April 24, 2008

Page 18 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688 DWELL 70 HZ  
 Serial Number: AXIS: X  
 Project File Name: INTEGER SWEEP 4-70.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: .\RunDefault Apr 25, 2008 04-44-20



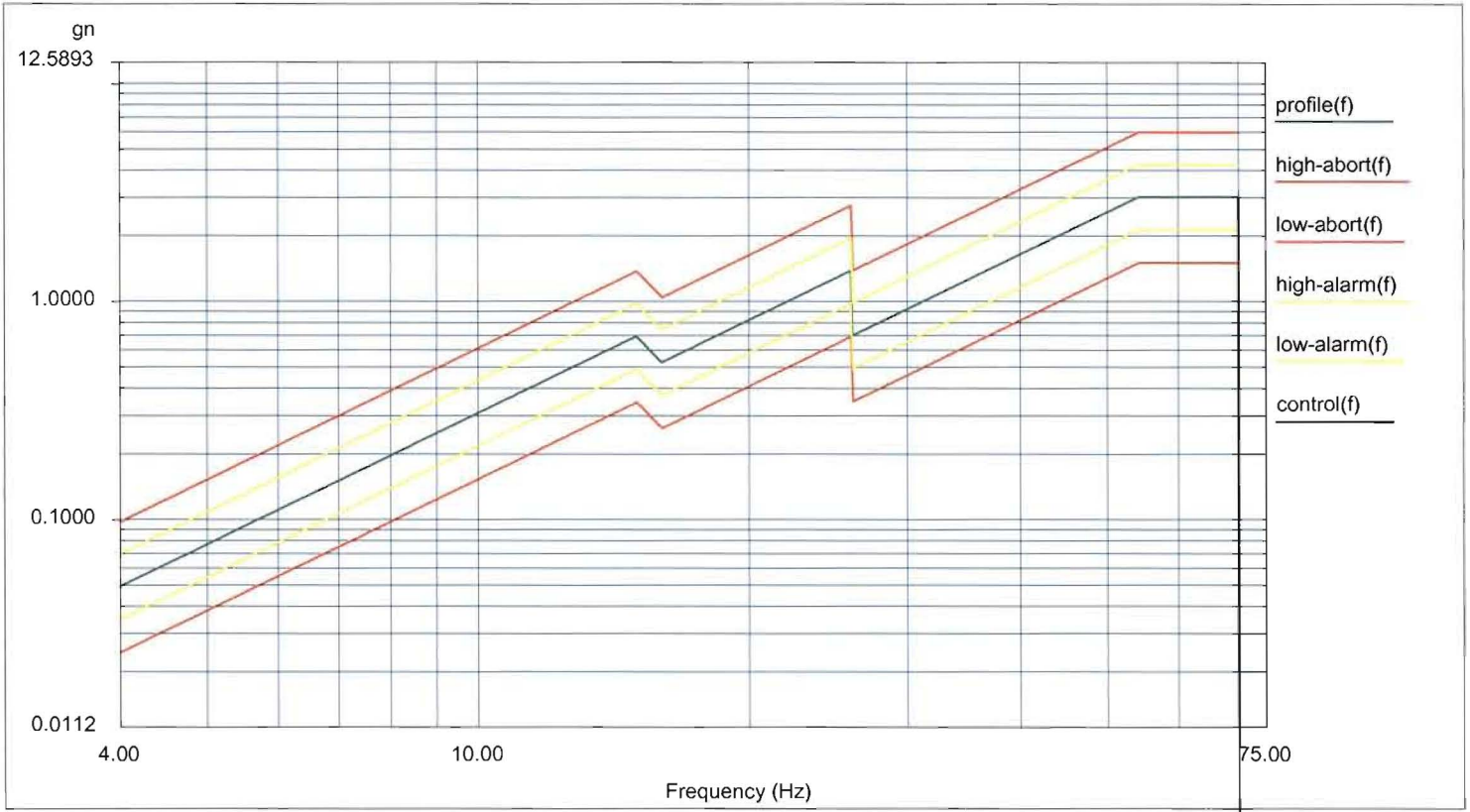
Level: 100 % Full Level Time: 02:00:00 Sweep Type: Linear  
 Frequency: 70.000000 Hz Time Remaining: 00:00:00 Sweep Rate: 10 Hz/Second

Data saved at 06:47:17 AM, Friday, April 25, 2008

Report created at 06:47:22 AM, Friday, April 25, 2008

Page 19 of 24		PLANAR		280688	001
TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688 DWELL 70 HZ  
 Serial Number: AXIS: Y  
 Project File Name: INTEGER SWEEP 4-70.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: \RunDefault Apr 26, 2008 11-10-43



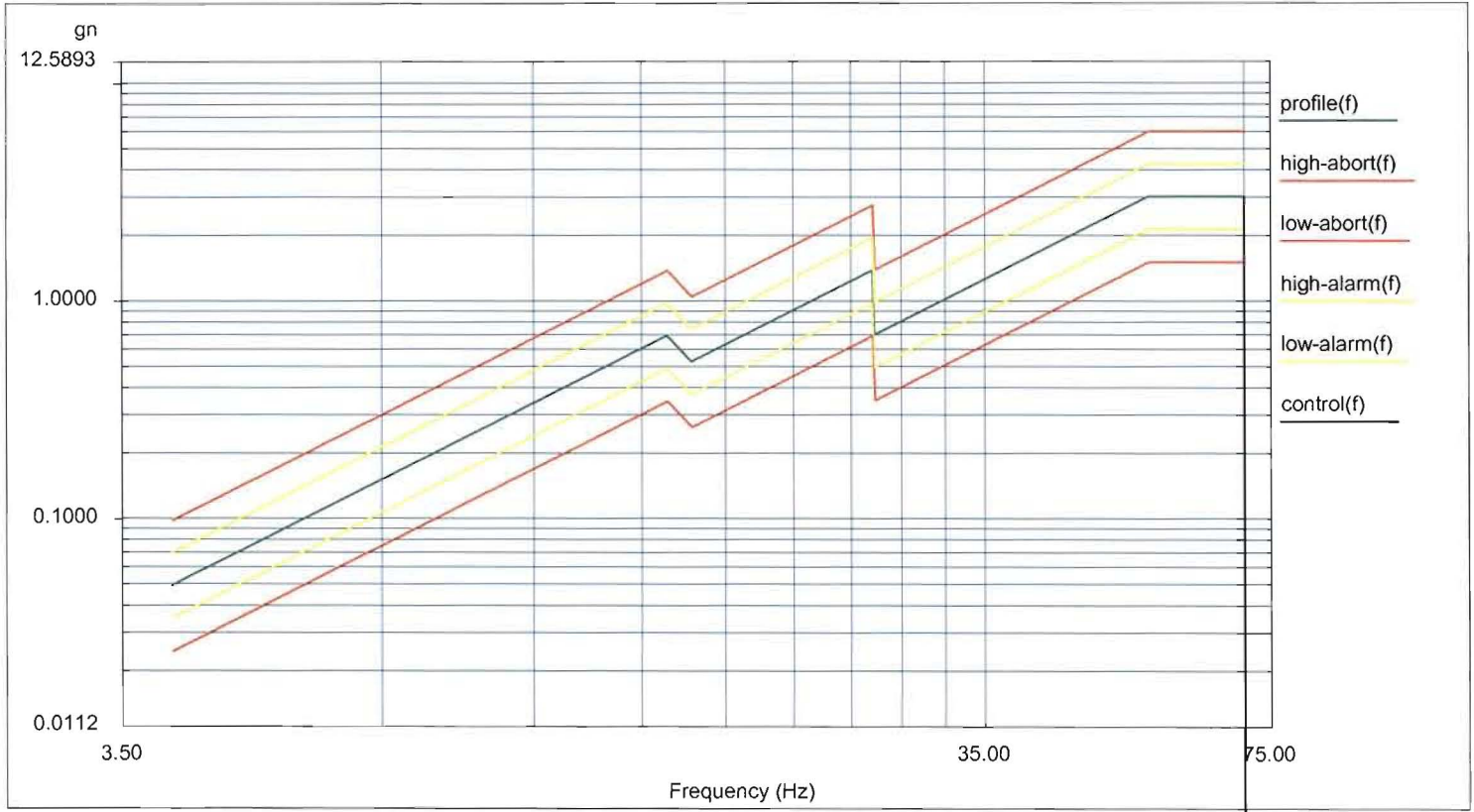
Level: 100 % Full Level Time: 02:00:00 Sweep Type: Linear  
 Frequency: 70.000000 Hz Time Remaining: 00:00:00 Sweep Rate: 10 Hz/Second

Data saved at 01:10:50 PM, Saturday, April 26, 2008

Report created at 01:10:51 PM, Saturday, April 26, 2008

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TASK	CONDITIONS			Date Completed	Operator Stamp

DUT: PLANAR 280688  
 Serial Number: AXIS: Z  
 Project File Name: INTEGER SWEEP 4-70.prj  
 Profile Name: Low Level Test Type: Swept Sine Run Folder: \RunDefault Apr 24, 2008 14-29-05

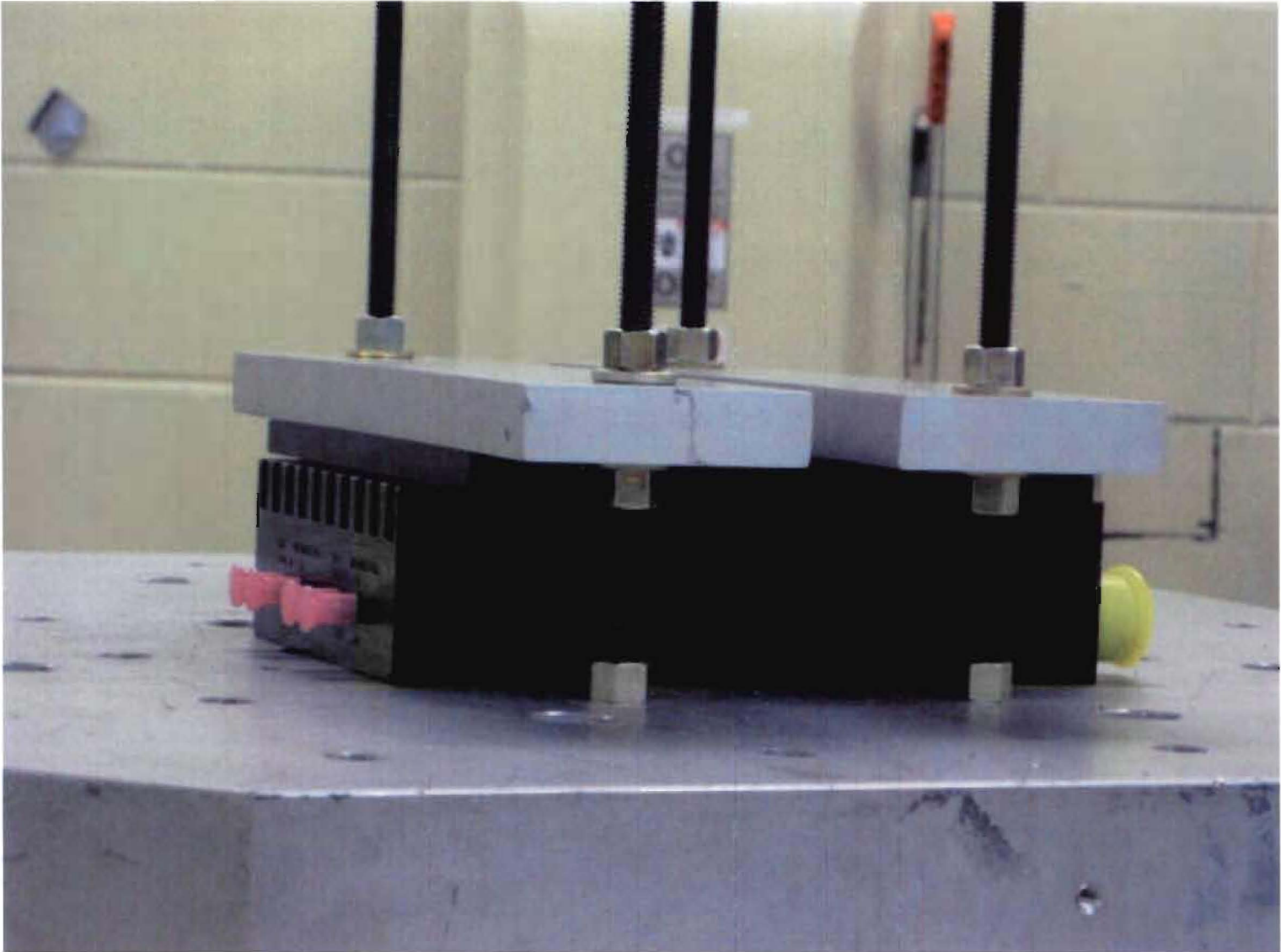


Level: 100 % Full Level Time: 02:00:00 Sweep Type: Linear  
 Frequency: 70.000000 Hz Time Remaining: 00:00:00 Sweep Rate: 10 Hz/Second

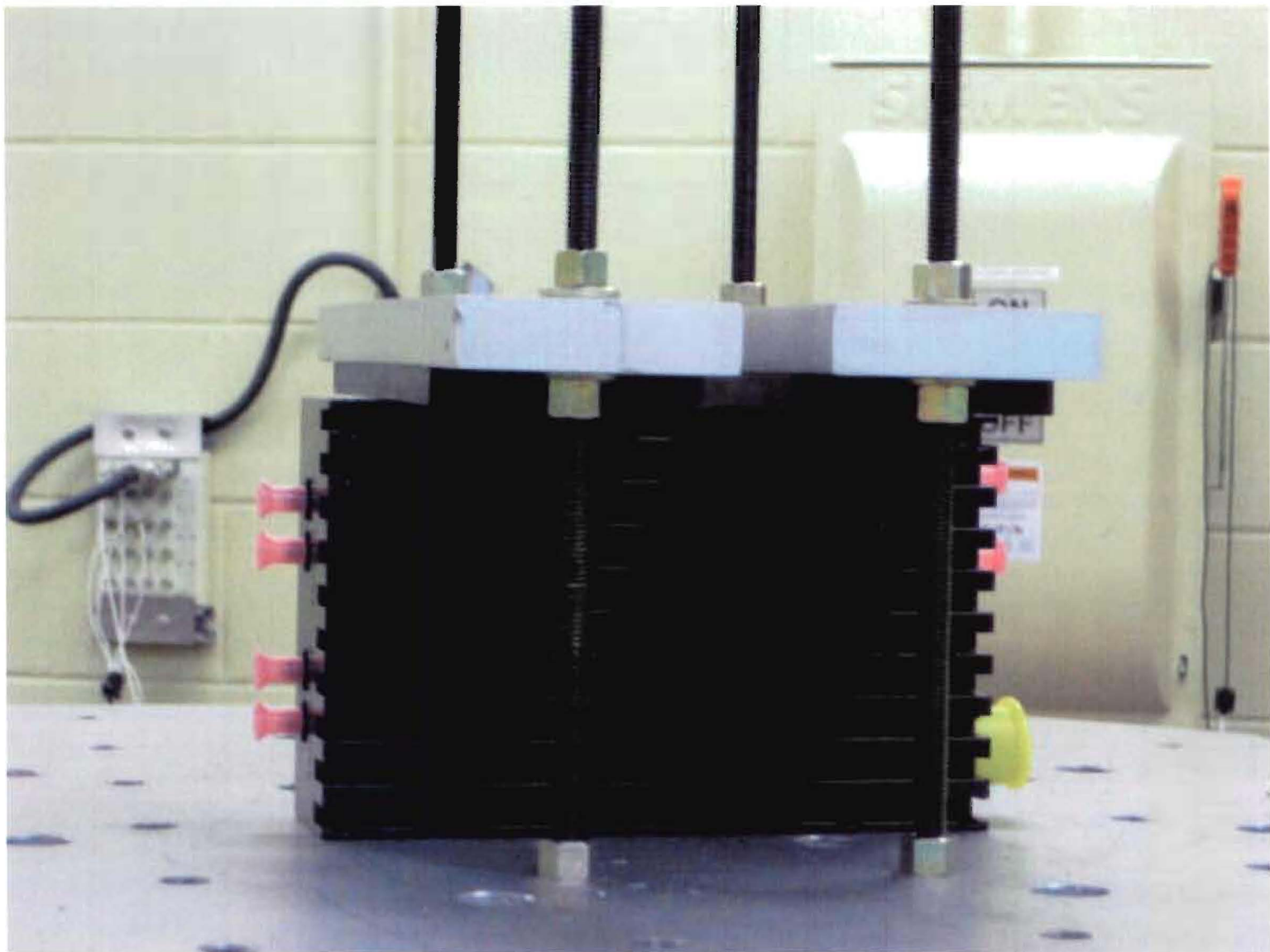
Data saved at 04:34:42 PM, Thursday, April 24, 2008

Report created at 04:34:43 PM, Thursday, April 24, 2008

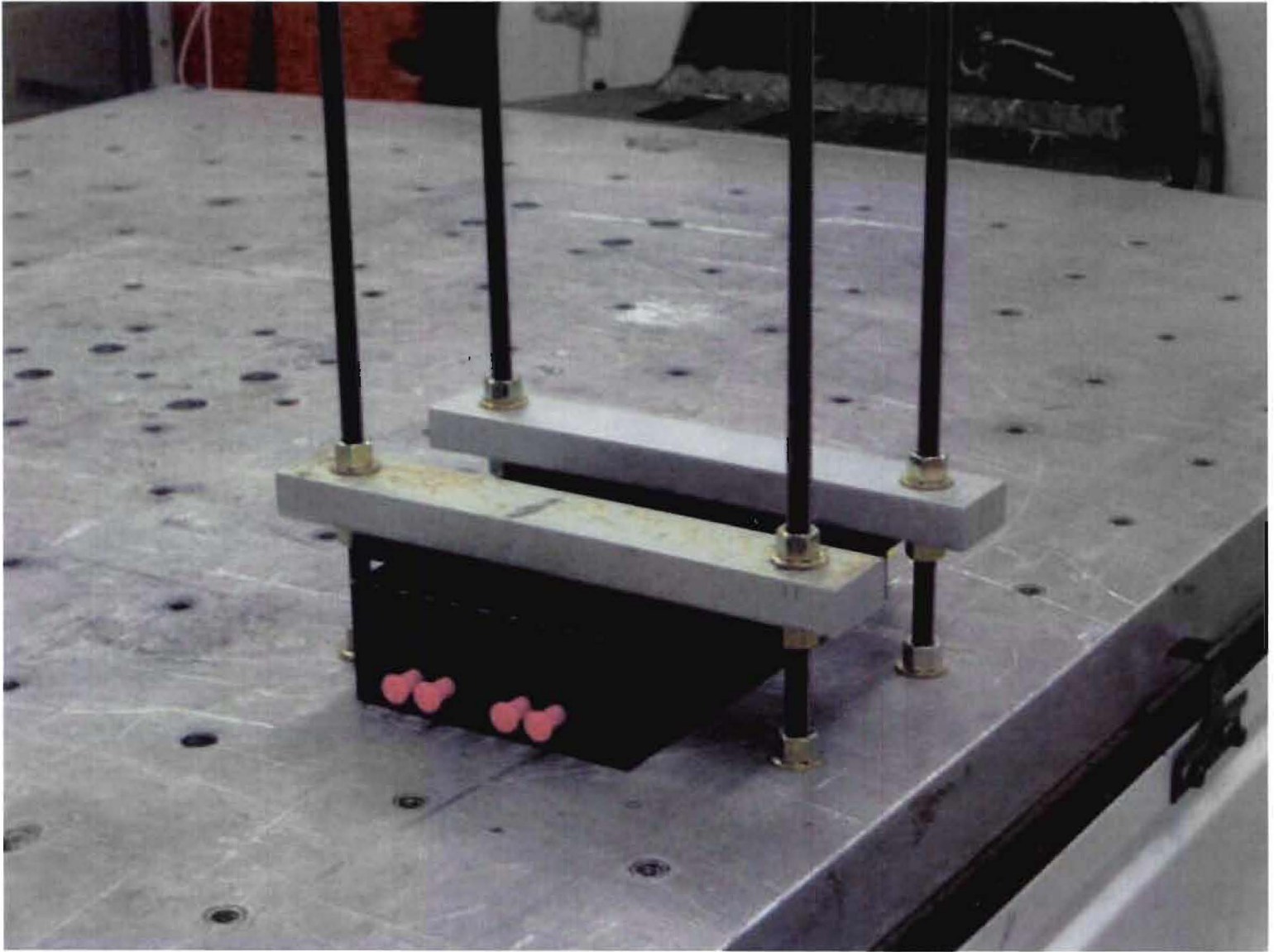
Page 21 of 24		PLANAR	280688	001
TASK	CONDITIONS		Date Completed	Operator Stamp



TASK	CONDITIONS	Date Completed	Operator Stamp
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TASK	CONDITIONS	Date Completed	Operator Stamp
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TASK	CONDITIONS	Date Completed	Operator Stamp
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<b>USAGE LOG</b>	All Equipment Station Logs Completed. <table border="1" style="width:100%; margin-top: 10px; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;">Manufacturer</th> <th style="width:25%;">Model # / Function</th> <th style="width:25%;">Asset #</th> <th style="width:25%;">Cal. Due</th> </tr> </thead> <tbody> <tr> <td>LDS</td> <td>V9 / Vib. Sim.</td> <td>83-6316</td> <td>12/7/08</td> </tr> <tr> <td>Kistler</td> <td>8704B500M1 / Accel.</td> <td>83-10024</td> <td>8/13/08</td> </tr> <tr> <td>Dytran</td> <td>Tri-Ax</td> <td>17032215</td> <td>4/19/09</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Manufacturer	Model # / Function	Asset #	Cal. Due	LDS	V9 / Vib. Sim.	83-6316	12/7/08	Kistler	8704B500M1 / Accel.	83-10024	8/13/08	Dytran	Tri-Ax	17032215	4/19/09					4-26-08	
Manufacturer	Model # / Function	Asset #	Cal. Due																				
LDS	V9 / Vib. Sim.	83-6316	12/7/08																				
Kistler	8704B500M1 / Accel.	83-10024	8/13/08																				
Dytran	Tri-Ax	17032215	4/19/09																				

<b>PACK</b>	Use original container or equivalent One copy of test plan.	4-26-08	
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<b>SHIP TO:</b>	PLANAR ELECTRONICS TECHNOLOGY 5715 INDUSTRY LANE UNIT 11 FREDERICK, MD 21704		
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<b>SHIP VIA:</b>	UPS RED (COD)		
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