



# ENVIRONMENTAL TEST REPORT

Purchase Order No: 048328  
PMI Part No: 27310120  
PMI Model No: PEC-1D575G-1AFS-SFF

Serial Numbers: PL5523 thru PL5538

Electrical	D. Vescuso	04/30/09			<p align="center"><b>ENVIRONMENTAL TEST REPORT</b></p> <p align="center">Prepared By: PMI April 30<sup>th</sup>, 2009</p>
Mechanical	D. Durbin	04/30/09			
Quality	P. Wood	04/30/09			

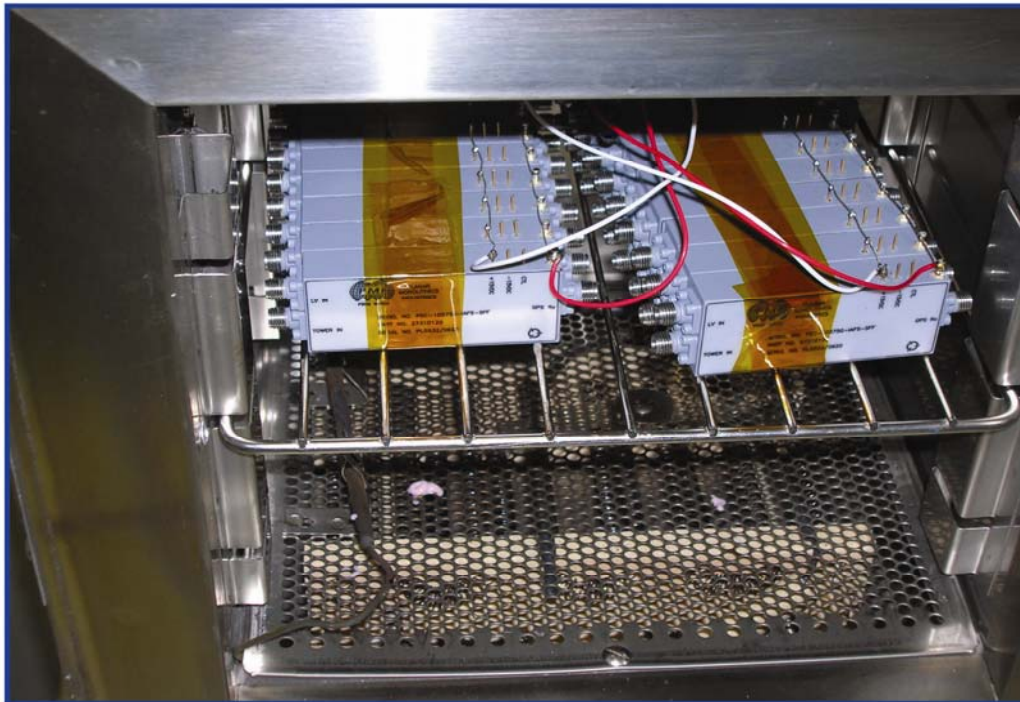


## TABLE OF CONTENTS

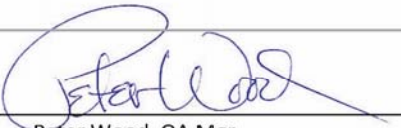
▶	BURN-IN	3
▶	TEMPERATURE CYCLING	4
▶	VIBRATION AND CONSTANT ACCELERATION	5



# BURN-IN CERTIFICATE



START DATE	TEMPERATURE	END DATE	TECHNICIAN	QA
4/24/09 5:00 PM	85°C	4/28/09 8:00 AM	D. Durbin	P. Wood
	With DC voltage applied	Total time: 87 hrs.		

QA Signature:  Date: April 28<sup>th</sup>, 2009  
Peter Wood, QA Mgr.

Planar Monolithics Industries, Inc, 7311-F Grove Road, Frederick, MD 21704 USA  
Tel: 301662-5019 Fax: 301-662-1731 Email: [quality@planarmonolithics.com](mailto:quality@planarmonolithics.com)



# TEMPERATURE CYCLING CERTIFICATE



Temperature cycling MIL-STD-883G, Method 1010, Condition B

START DATE	TEMPERATURE	END DATE	TECHNICIAN	QA
3/24/09 5:00 PM	-55°C to +125°C	3/25/09 8:00 AM	H. Gonzales	P. Wood
Total time: 10 Cycles (≈13.3 hrs)				

QA Signature: \_\_\_\_\_

Peter Wood, QA Mgr.

Date: March 25<sup>th</sup>, 2009

Planar Monolithics Industries, Inc, 7311-F Grove Road, Frederick, MD 21704 USA  
Tel: 301662-5019 Fax: 301-662-1731 Email: [quality@planarmonolithics.com](mailto:quality@planarmonolithics.com)



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

Customer: **Planar Monolithics Industries**

Purchase Order #: **PET0900132**

Job No.: **281313**

Order Quantity: **20**

Mfg. P/N **N/A**

Customer P/N: **PEC-1D575G-1AFS-SFF**

Generic P/N **N/A**

Specification **Customer's PO & MIL-STD-883**

Part Type: **MicroCircuit**

Prepared By: **Michael Dombrowski**



Date Prepared: **4/8/09**

Reviewed By:

*[Handwritten signature]*



Date Reviewed: **4-9-09**

### CERTIFICATE OF COMPLIANCE

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 Monolithics Industries Date Code: N/A

Accept: 20

Reject: 0

### SEE ATTACHED DOCUMENTATION

Approved By:

*[Handwritten signature]*

Date Approved: **4-30-09**

C of C 1/1/03




Page 2 of 10	Planar Monolithics Industries	281313
--------------	-------------------------------	--------

TASK	CONDITIONS	Date Completed	Operator Stamp			
INCOMING INSPECTION	Visual check for shipping damage Verify packing slip information	4/9/09				
	<table border="1"> <thead> <tr> <th>Quantity</th> <th>Part #</th> <th>Serial #</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>PEC-1D575G-AFS-SFF</td> <td>1-20</td> </tr> </tbody> </table>			Quantity	Part #	Serial #
Quantity	Part #	Serial #				
20	PEC-1D575G-AFS-SFF	1-20				

VIBRATION VARIABLE FREQUENCY	<p><b>Documentation:</b> Customer's P.O. &amp; MIL-STD-883G, Method 2007.3</p> <p><b>Conditions:</b> Test Condition: A Frequency range: 20Hz / 2000Hz / 20Hz Level: 20 g peak minimum Number of Sweeps: 4 Sweep time: 4 minutes Time per axis: 16 minutes Number of axis: 3 ( X, Y &amp; Z )</p> <p><b>Procedure:</b> 1. Verify accelerometer operation. 2. Attach fixture to the vibration unit using fixture PDT. 3. Perform vibration test on units per conditions specified above. 4. Repeat steps 1-3 for each conditional orientation of test unit.</p> <p><b>Details:</b> Operational: N/A Failure criteria: N/A</p> <p><b>Operator's Notes:</b></p> <p>Qty in: <u>20</u> Qty Out: <u>20</u></p>	4/11/09	

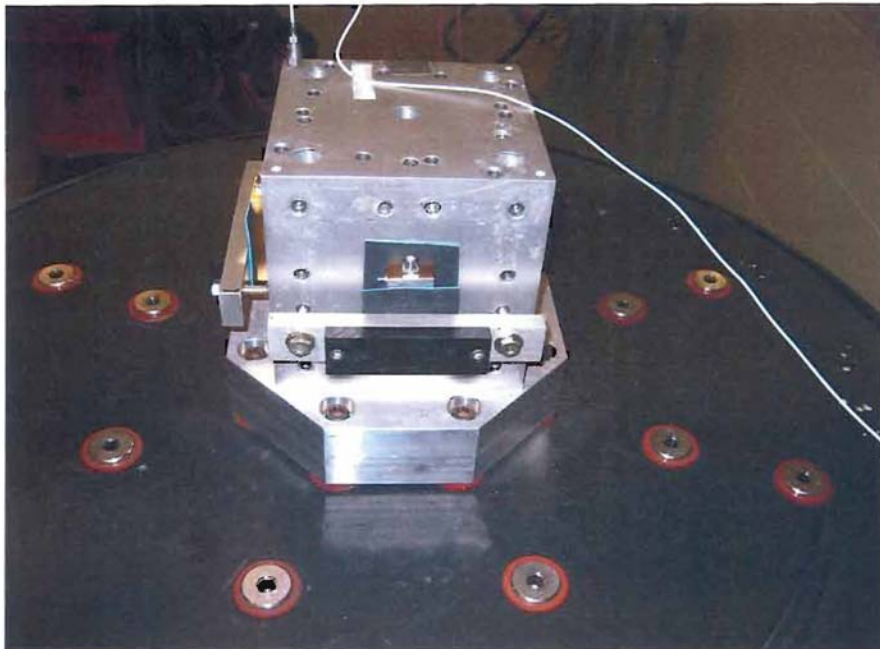
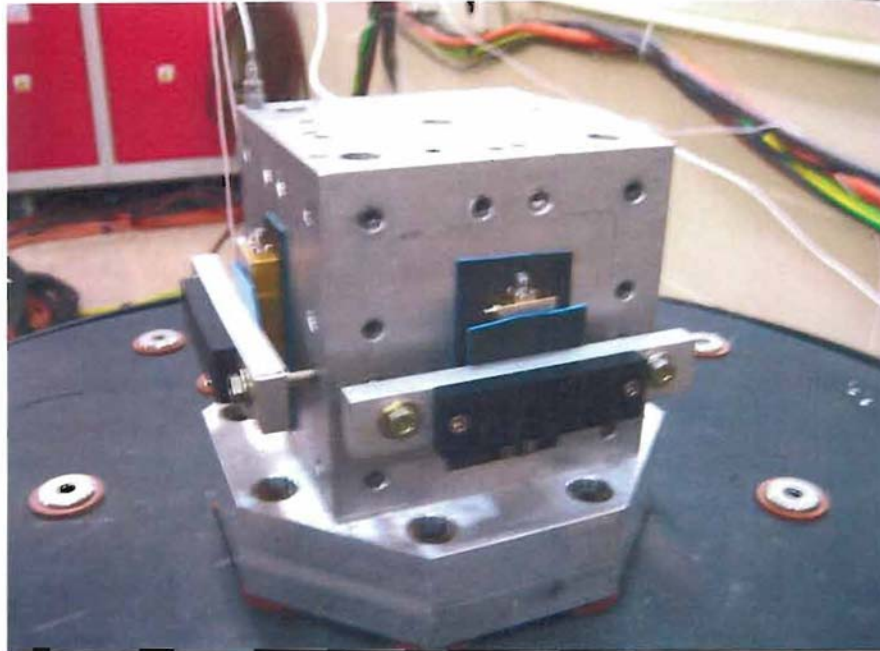


Page 3 of 10	Planar Monolithics Industries	281313	
--------------	-------------------------------	--------	--

TASK	CONDITIONS	Date Completed	Operator Stamp
<p><b>CONSTANT ACCELERATION</b></p>	<p><b>Documentation:</b> Customer P.O.</p> <p><b>Conditions:</b> Acceleration Level: <b>10 G's</b> Number of Orientations: <b>1 (Y1)</b> Hold Time: <b>1 Minute</b></p> <p><b>Procedure:</b> 1. Mount units into test fixture. 2. Accelerate test lot per test conditions listed above. 3. Visually inspect units after test for damage.</p> <p><b>Details:</b> Operational: N/A Failure criteria: N/A.</p> <p><b>Operator's Notes:</b></p> <p>Qty in: <u>20</u>      Qty Out: <u>20</u></p>	<p>4/23/09</p>	<p> Jew 2009</p>



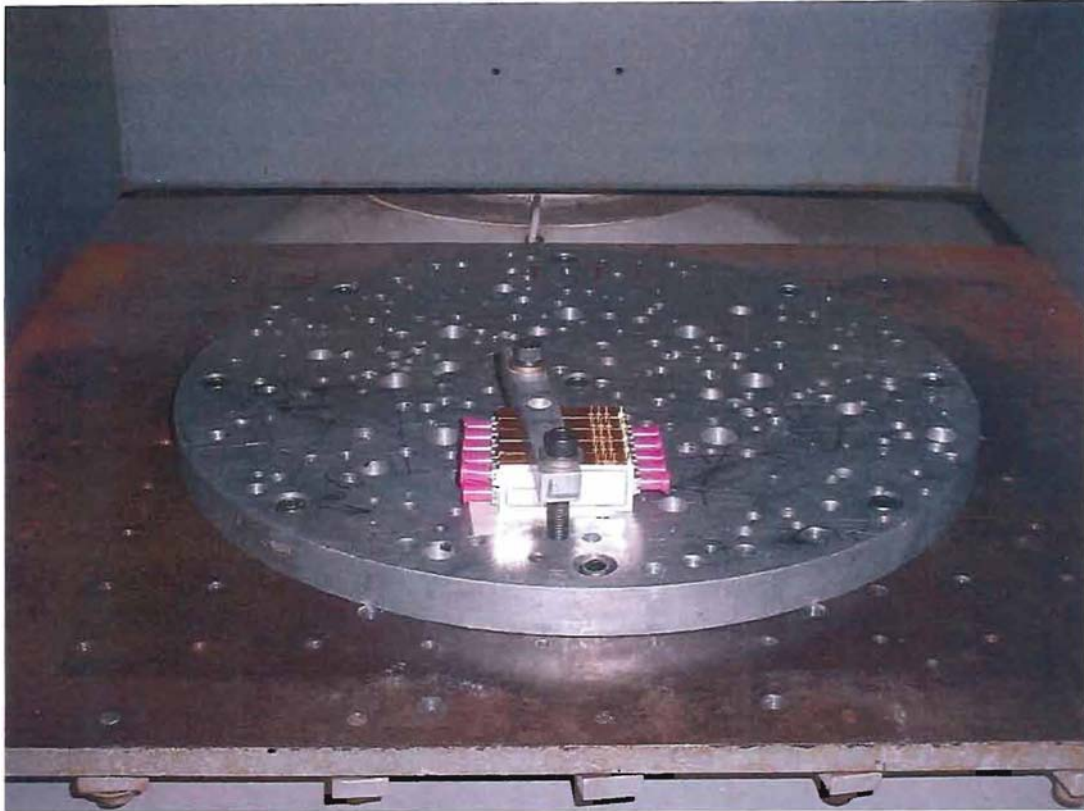
REPRESENTATIVE PHOTOS OF VIBRATION TESTING







REPRESENTATIVE PHOTOS OF CONSTANT ACCELERATION TESTING





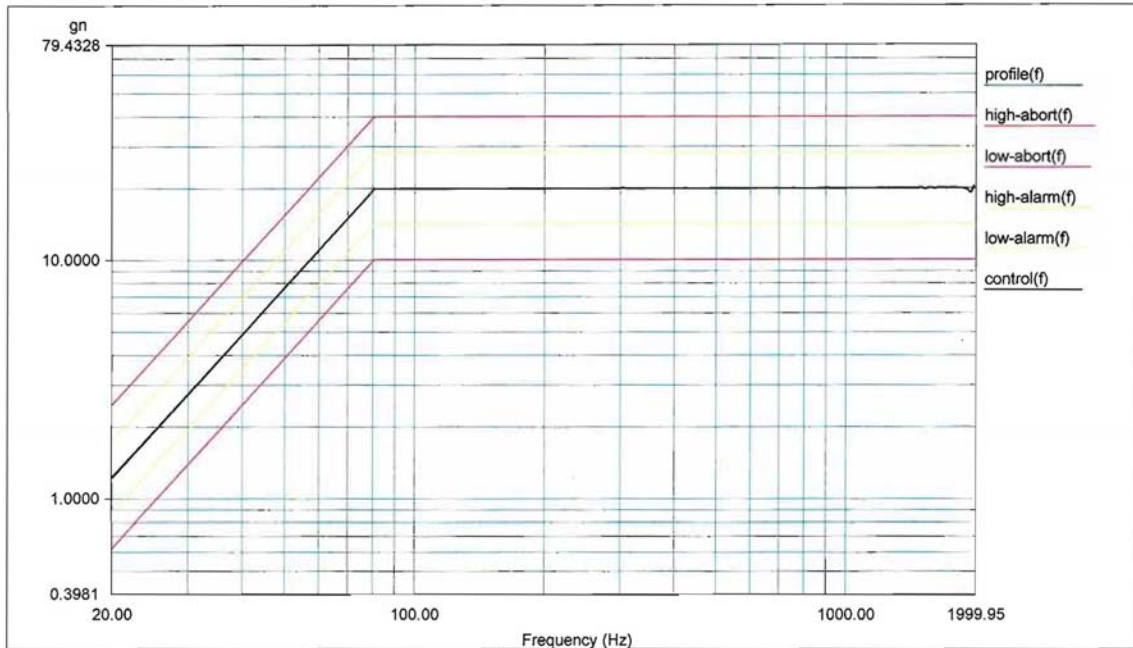
Page 6 of 10	Planar Monolithics Industries	281313
--------------	-------------------------------	--------

REPRESENTATIVE VIBRATION DATA X AXIS

DUT: PLANNAR - 281313  
Serial Number:  
Project File Name: Untitled  
Profile Name: Low Level

Test Type: Swept Sine

Run Folder: \RunDefault Apr 10, 2009 16-24-07



Level: 100 % Full Level Time: 00:16:00 Sweep Type: Logarithmic  
Frequency: 20.016891 Hz Time Remaining: 00:00:00 Sweep Rate: 1.66 Oct/Min

Data saved at 04:40:20 PM, Friday, April 10, 2009 Report created at 04:40:20 PM, Friday, April 10, 2009

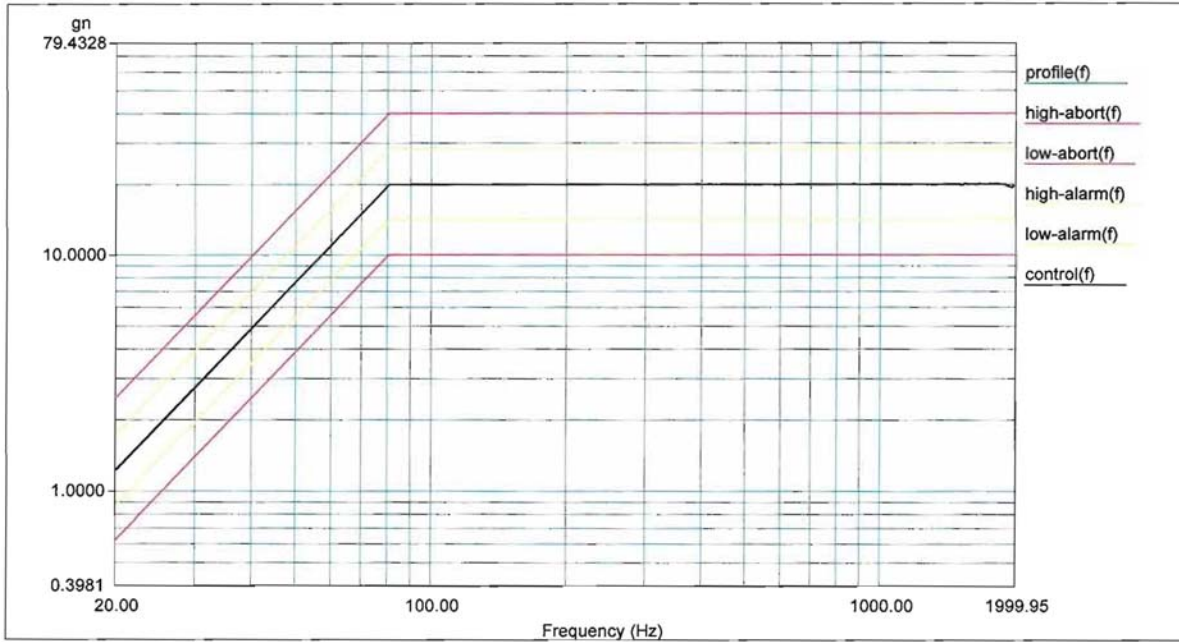


REPRESENTATIVE VIBRATION DATA Y AXIS

DUT: PLANNAR - 281313  
Serial Number:  
Project File Name: Untitled  
Profile Name: Low Level

Test Type: Swept Sine

Run Folder: \RunDefault Apr 11, 2009 12-25-09



Level: 100 % Full Level Time: 00:16:00 Sweep Type: Logarithmic  
Frequency: 20.012793 Hz Time Remaining: 00:00:00 Sweep Rate: 1.66 Oct/Min

Data saved at 01:17:24 PM, Saturday, April 11, 2009

Report created at 01:17:25 PM, Saturday, April 11, 2009



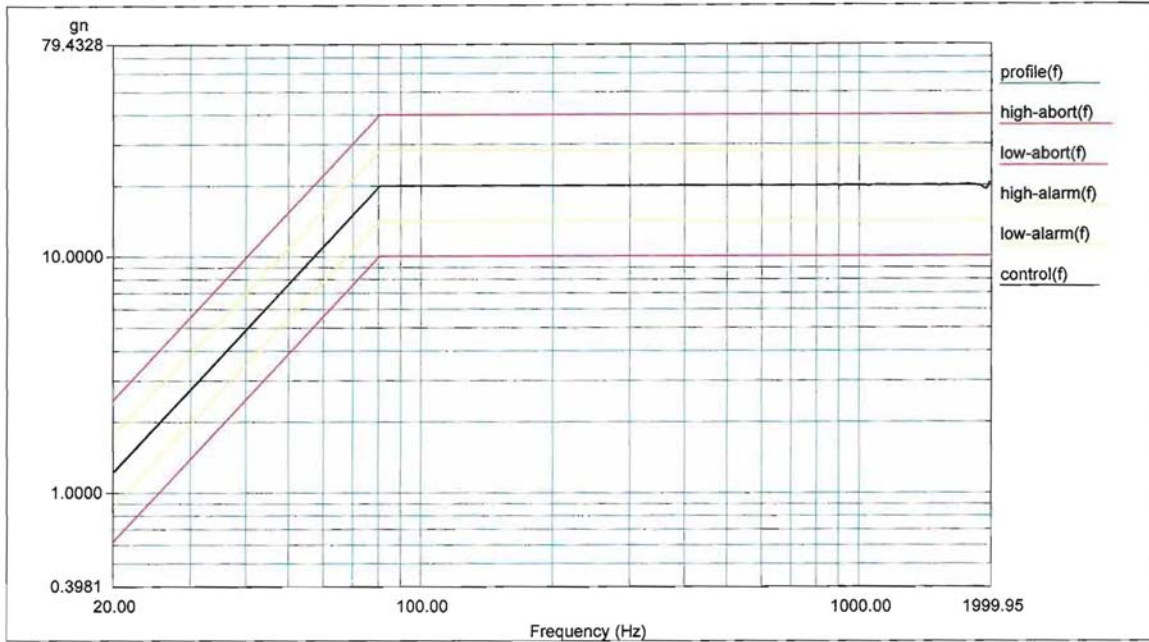
Page 8 of 10	Planar Monolithics Industries	281313
--------------	-------------------------------	--------

### REPRESENTATIVE VIBRATION DATA Z AXIS

DUT: PLANNAR - 281313  
Serial Number:  
Project File Name: Untitled  
Profile Name: Low Level

Test Type: Swept Sine

Run Folder: \RunDefault Apr 11, 2009 16-19-30



Level: 100 % Full Level Time: 00:16:00 Sweep Type: Logarithmic  
Frequency: 20.016891 Hz Time Remaining: 00:00:00 Sweep Rate: 1.66 Oct/Min

Data saved at 04:40:33 PM, Saturday, April 11, 2009

Report created at 04:40:34 PM, Saturday, April 11, 2009



Page 9 of 10

Planar Monolithics Industries

281313

CONSTANT ACCELERATION DATA

Axis	G level	RPM	Radius
Y1	10	95	39"



Page 10 of 10	Planar Monolithics Industries	281313
---------------	-------------------------------	--------

TASK	CONDITIONS	Date Completed	Operator Stamp																								
USAGE LOG	All Equipment Station Logs Completed.	4/28/09	STM 20-17 TECH																								
	<table border="1"> <thead> <tr> <th>Manufacturer</th> <th>Model # / Function</th> <th>Asset #</th> <th>Cal. Due</th> </tr> </thead> <tbody> <tr> <td>LDS</td> <td>V860 / Vibration System</td> <td>83-LDS01R</td> <td>8/28/09</td> </tr> <tr> <td>Dytran</td> <td>3030B5H</td> <td>83-2054</td> <td>8/29/09</td> </tr> <tr> <td>Ruckon</td> <td>RCT-2 / Centrifuge</td> <td>28-0003</td> <td>Monitor Externally</td> </tr> <tr> <td>HP</td> <td>3478A / DMM</td> <td>13-0028</td> <td>9/10/09</td> </tr> <tr> <td>Accusp1:T</td> <td>705X / Stopwatch</td> <td>19-0033</td> <td>8/22/09</td> </tr> </tbody> </table>			Manufacturer	Model # / Function	Asset #	Cal. Due	LDS	V860 / Vibration System	83-LDS01R	8/28/09	Dytran	3030B5H	83-2054	8/29/09	Ruckon	RCT-2 / Centrifuge	28-0003	Monitor Externally	HP	3478A / DMM	13-0028	9/10/09	Accusp1:T	705X / Stopwatch	19-0033	8/22/09
	Manufacturer			Model # / Function	Asset #	Cal. Due																					
	LDS			V860 / Vibration System	83-LDS01R	8/28/09																					
	Dytran			3030B5H	83-2054	8/29/09																					
	Ruckon			RCT-2 / Centrifuge	28-0003	Monitor Externally																					
HP	3478A / DMM	13-0028	9/10/09																								
Accusp1:T	705X / Stopwatch	19-0033	8/22/09																								

PACK	Use original container or equivalent One copy of test plan.	4/28/09	STM 20-17 TECH
SHIP TO:	PLANAR ELECTRONICS TECHNOLOGY 7311-F GROVE ROAD, PMI FREDERICK, MD 21704		
SHIP VIA:	UPS RED		