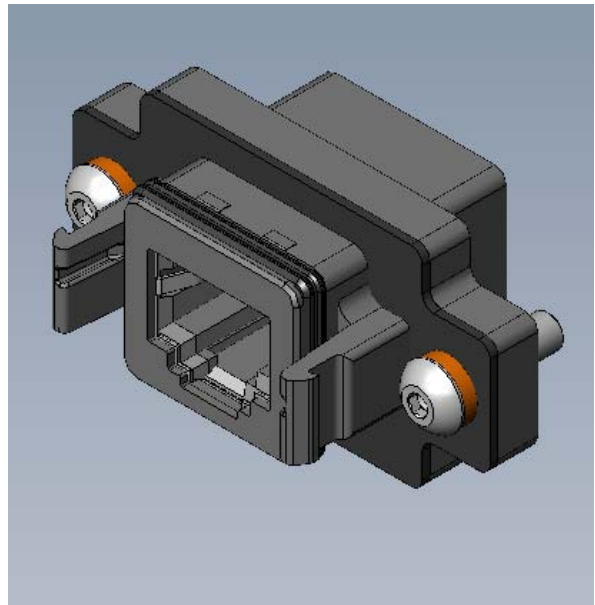
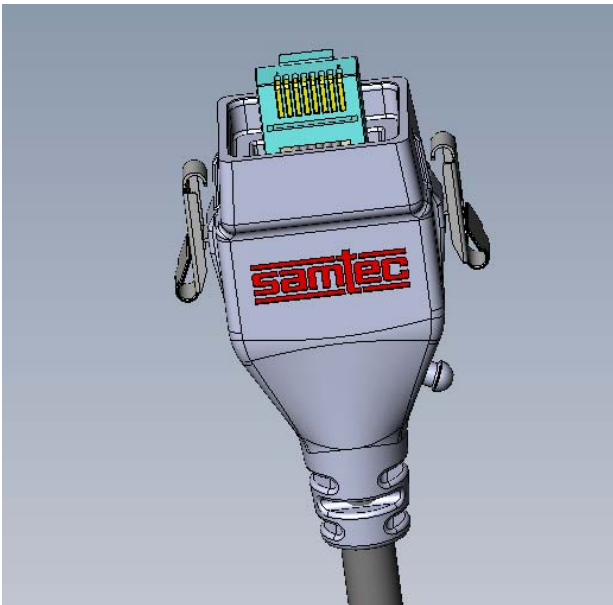




Project Number: Design Verification Test		Tracking Code: TC0951—2962_Report_Rev_1	
Requested by: Craig Ryan		Date: 3/26/2010	Product Rev: 5
Part #: RCE-01-G-XX.XX-XX/RPBE-XX-01-E		Lot #: N/A	Tech: Troy Cook Eng: Eric Mings
Part description: Rectangular Ethernet			Qty to test: 87
Test Start: 12/25/2009		Test Completed: 1/27/2010	



Design Verification Test Report

RCE/RPBE

RCE-01-G-XX.XX-XX/RPBE-XX-01-E

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to ISO 10012-1 and ANSI/NCSL 2540-1, as applicable.

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SCOPE

To perform the following tests: Design verification testing. See flowchart.

APPLICABLE DOCUMENTS

Standards: EIA Publication 364

TEST SAMPLES AND PREPARATION

- 1) All materials were manufactured in accordance with the applicable product specification.
- 2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
- 3) After soldering, the parts to be used for LLCR and DWV/IR testing were cleaned according to TLWI-0001.
- 4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
- 5) The automated procedure is used with aqueous compatible soldering materials.
- 6) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
- 7) Any additional preparation will be noted in the individual test sequences.

FLOWCHARTS

Mating/Unmating

TEST STEP	GROUP A 10 Cables 100 Cycles
01	Mating / Unmating Force
02	25 Cycles
03	Clean w/Compressed Air
04	Gasket Visual Inspection
05	Mating / Unmating Force
06	25 Cycles (50 Total)
07	Clean w/Compressed Air
08	Gasket Visual Inspection
09	Mating / Unmating Force
10	25 Cycles (75 Total)
11	Clean w/Compressed Air
12	Gasket Visual Inspection
13	Mating / Unmating Force
14	25 Cycles (100 Total)
15	Clean w/Compressed Air
16	Gasket Visual Inspection
17	Mating / Unmating Force
18	Thermal Aging (Mated)
19	Gasket Visual Inspection
20	Mating / Unmating Force
21	Cyclic Humidity (Mated)
22	Gasket Visual Inspection
23	Mating / Unmating

Thermal Aging = EIA-364-17, Test Condition 3 (85°C);

Time Condition 'B' (250 hours)

Humidity = EIA-364-31, Test Condition 'B' (240 hours)

and Method III (+25 ° C to +65 ° C @ 90%RH to 98% RH)

ambient pre-condition and delete steps 7a and 7b

Mating/Un-Mating Forces = EIA-364-13

Gasket Visual Inspection = Check for and document w/ Photos of any damage to the gasket

Durability/Cyclic Humidity

TEST STEP	GROUP A 64 Points Cycles
01	LLCR-1
02	Data Review
03	Cycles
04	LLCR-2
05	Data Review
06	Thermal Age
07	LLCR-3
08	Data Review
09	Cyclic Humidity
10	LLCR-4

Thermal Aging = EIA-364-17, Test Condition 3 (85°C);

Time Condition 'B' (250 hours)

Humidity =EIA-364-31, Test Condition 'B' (240 hours)

and Method III (+25 ° C to +65 ° C @ 90%RH to 98% RH)

ambient pre-condition and delete steps 7a and 7b

LLCR = EIA-364-23, LLCR

use Keithley 580 in the dry circuit mode, 10 mA Max

IP67 Dust & Water

TEST STEP	6 Mated Connectors	6 Mated Connectors	6 Connectors	6 Connectors
	GROUP A	GROUP A1	GROUP B	GROUP B1
	RCE-01-G-XX.XX-XX	RCE-01-G-XX.XX-XX	RCE-01-G-XX.XX-XX	RCE-01-G-XX.XX-XX
	RPBE-XX-01-E	RPBE-XX-01-E	DCRCE-01	DCRCE-01
01	Dust Test	Submersion Water Test	Dust Test	Submersion Water Test
02	Check for Dust	Check for Water	Check for Dust	Check for Water

TEST STEP	6 Connectors	6 Connectors	6 Connectors	6 Connectors
	GROUP C	GROUP C1	GROUP D	GROUP D1
	RPBE-01-01-E	RPBE-01-01-E	RPBE-02-01-E	RPBE-02-01-E
	DCRPBE-01-01	DCRPBE-01-01	DCRPBE-02-01	DCRPBE-02-01
01	Dust Test	Submersion Water Test	Dust Test	Submersion Water Test
02	Check for Dust	Check for Water	Check for Dust	Check for Water

TEST STEP	6 Mated Connectors	6 Mated Connectors
	GROUP E	GROUP E
	RCE-01-G-XX.XX-XX	RCE-01-G-XX.XX-XX
	RPBE-XX-01-E	RPBE-XX-01-E
01	Cycle 100x	Cycle 100x
02	Submersion Water Test	Dust Test
03	Check for Water	Check for Dust

Dust/Water Testing = Per CEI/IEC 60529 Code IP67

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

THERMAL:

- 1) EIA-364-17, *Temperature Life with or without Electrical Load Test Procedure for Electrical Connectors*.
- 2) Test Condition 3 at 85°C.
- 3) Test Time Condition B for 250 hours.
- 4) All test samples are pre-conditioned at ambient.
- 5) All test samples are exposed to environmental stressing in the mated condition.

HUMIDITY:

- 1) Reference document: EIA-364-31, *Humidity Test Procedure for Electrical Connectors*.
- 2) Test Condition B, 240 Hours.
- 3) Method III, +25° C to + 65° C, 90% to 98% Relative Humidity excluding sub-cycles 7a and 7b.
- 4) All samples are pre-conditioned at ambient.
- 5) All test samples are exposed to environmental stressing in the mated condition.

MATING/UNMATING:

- 1) Reference document: EIA-364-13, *Mating and Unmating Forces Test Procedure for Electrical Connectors*.
- 2) The full insertion position was to within 0.003" to 0.004" of the plug bottoming out in the receptacle to prevent damage to the system under test.
- 3) One of the mating parts is secured to a floating X-Y table to prevent damage during cycling.

LLCR:

- 1) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 2) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 3) The following guidelines are used to categorize the changes in LLCR as a result from stressing
 - a. $\leq +5.0$ mOhms: ----- Stable
 - b. +5.1 to +10.0 mOhms: ----- Minor
 - c. +10.1 to +15.0 mOhms: ----- Acceptable
 - d. +15.1 to +50.0 mOhms: ----- Marginal
 - e. +50.1 to +2000 mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

SUPPLEMENTAL TESTS

WATER TESTING:

- 1) Reference document: CEI/IEC 60529 Code IP67

DUST TESTING:

- 1) Reference document: CEI/IEC 60529 Code IP67

RESULTS

Mating – Unmating Forces

- **Initial**
 - **Mating**
 - **Min** -----16.92 Lbs
 - **Max** -----26.49 Lbs
 - **Unmating**
 - **Min** -----2.77 Lbs
 - **Max** -----5.74 Lbs
- **After 25 Cycles**
 - **Mating**
 - **Min** -----16.09 Lbs
 - **Max** -----30.03 Lbs
 - **Unmating**
 - **Min** -----3.31 Lbs
 - **Max** -----5.71 Lbs
- **After 50 Cycles**
 - **Mating**
 - **Min** -----17.66 Lbs
 - **Max** -----34.83 Lbs
 - **Unmating**
 - **Min** -----2.94 Lbs
 - **Max** -----5.86 Lbs
- **After 75 Cycles**
 - **Mating**
 - **Min** -----19.47 Lbs
 - **Max** -----34.10 Lbs
 - **Unmating**
 - **Min** -----2.88 Lbs
 - **Max** -----5.77 Lbs
- **After 100 Cycles**
 - **Mating**
 - **Min** -----19.71 Lbs
 - **Max** -----35.34 Lbs
 - **Unmating**
 - **Min** -----2.72 Lbs
 - **Max** -----6.27 Lbs
- **Thermal**
 - **Mating**
 - **Min** -----7.00 Lbs
 - **Max** -----15.81 Lbs
 - **Unmating**
 - **Min** -----2.50 Lbs
 - **Max** -----3.58 Lbs
- **Humidity**
 - **Mating**
 - **Min** -----3.31 Lbs
 - **Max** -----5.25 Lbs
 - **Unmating**
 - **Min** -----1.50 Lbs
 - **Max** -----2.85 Lbs

Tracking Code: TC0951-2962_Report_Rev_1	Part #: RCE-01-G-XX.XX-XX / RPBE-XX-01-E
Part description: Rectangular Ethernet	

LLCR Durability (64 LLCR test points)

- Initial----- 57.4 mOhms Max
- Durability, 100 Cycles
 - o <= +5.0 mOhms ----- 64 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- Thermal
 - o <= +5.0 mOhms ----- 57 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 4 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 3 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- Humidity
 - o <= +5.0 mOhms ----- 62 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 2 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

SUPPLEMENTAL TESTING

IP67 Testing (Dust & Water)

	<u>Initial (Before Exposure)</u>	<u>After Exposure</u>
Dust	No Dust Present	No Dust Present
Water	No Water Present	No Water Present

DATA SUMMARIES

MATING/UNMATING:

	Initial				After 25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)
Minimum	75.25	16.92	12.32	2.77	71.55	16.09	14.74	3.31
Maximum	117.85	26.49	25.53	5.74	133.58	30.03	25.41	5.71
Average	94.38	21.22	16.58	3.73	100.79	22.66	18.41	4.14
St Dev	14.01	3.15	3.78	0.85	19.86	4.47	3.23	0.73
Count	10	10	10	10	10	10	10	10
	After 50 Cycles				After 75 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)
Minimum	78.55	17.66	13.08	2.94	86.58	19.47	12.83	2.88
Maximum	154.91	34.83	26.05	5.86	151.66	34.10	25.65	5.77
Average	113.51	25.52	19.10	4.29	122.89	27.63	20.14	4.53
St Dev	23.91	5.37	3.78	0.85	23.87	5.37	4.12	0.93
Count	10	10	10	10	10	10	10	10
	After 100 Cycles				After Thermals			
	Mating		Unmating		Mating		Unmating	
	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)
Minimum	87.69	19.71	12.08	2.72	31.12	7.00	11.11	2.50
Maximum	157.17	35.34	27.91	6.27	70.34	15.81	15.94	3.58
Average	133.38	29.99	21.21	4.77	44.01	9.89	13.49	3.03
St Dev	24.13	5.43	4.33	0.97	11.91	2.68	1.75	0.39
Count	10	10	10	10	10	10	10	10
	After Humidity							
	Mating		Unmating					
	Newton's	Force (Lbs)	Newton's	Force (Lbs)				
Minimum	14.71	3.31	6.67	1.50				
Maximum	23.34	5.25	12.69	2.85				
Average	18.85	4.24	9.65	2.17				
St Dev	2.60	0.58	2.04	0.46				
Count	10	10	10	10				

IP67 Testing (Water & Dust)**Submersion Water test:*****Visual Inspection after Water Test (10X Magnification)***

Group A-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No water ingress in enclosure or connector.
	2	No water ingress in enclosure or connector.
	3	No water ingress in enclosure or connector.
	4	No water ingress in enclosure or connector.
	5	No water ingress in enclosure or connector.
	6	No water ingress in enclosure or connector.

Group B-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No water ingress in cable connector or dust/water cap.
	2	No water ingress in cable connector or dust/water cap.
	3	No water ingress in cable connector or dust/water cap.
	4	No water ingress in cable connector or dust/water cap.
	5	No water ingress in cable connector or dust/water cap.
	6	No water ingress in cable connector or dust/water cap.

Group C-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No water ingress in mating connector or dust/water cap.
	2	No water ingress in mating connector or dust/water cap.
	3	No water ingress in mating connector or dust/water cap.
	4	No water ingress in mating connector or dust/water cap.
	5	No water ingress in mating connector or dust/water cap.
	6	No water ingress in mating connector or dust/water cap.

Group D-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No water ingress in mating connector or dust/water cap.
	2	No water ingress in mating connector or dust/water cap.
	3	No water ingress in mating connector or dust/water cap.
	4	No water ingress in mating connector or dust/water cap.
	5	No water ingress in mating connector or dust/water cap.
	6	No water ingress in mating connector or dust/water cap.

Group E-1 (AFTER 100 CYCLES)	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No water ingress in enclosure or connector.
	2	No water ingress in enclosure or connector.
	3	No water ingress in enclosure or connector.
	4	No water ingress in enclosure or connector.
	5	No water ingress in enclosure or connector.
	6	No water ingress in enclosure or connector.

Dust test:***Visual Inspection after Dust Test (10X Magnification)***

Group A-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No dust ingress in enclosure or connector.
	2	No dust ingress in enclosure or connector.
	3	No dust ingress in enclosure or connector.
	4	No dust ingress in enclosure or connector.
	5	No dust ingress in enclosure or connector.
	6	No dust ingress in enclosure or connector.

Group B-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No dust ingress in connector or inside of dust cover.
	2	No dust ingress in connector or inside of dust cover.
	3	No dust ingress in connector or inside of dust cover.
	4	No dust ingress in connector or inside of dust cover.
	5	No dust ingress in connector or inside of dust cover.
	6	No dust ingress in connector or inside of dust cover.

Group C-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No dust ingress in connector or inside of dust cover.
	2	No dust ingress in connector or inside of dust cover.
	3	No dust ingress in connector or inside of dust cover.
	4	No dust ingress in connector or inside of dust cover.
	5	No dust ingress in connector or inside of dust cover.
	6	No dust ingress in connector or inside of dust cover.

Group D-1	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No dust ingress in enclosure or connector.
	2	No dust ingress in enclosure or connector.
	3	No dust ingress in enclosure or connector.
	4	No dust ingress in enclosure or connector.
	5	No dust ingress in enclosure or connector.
	6	No dust ingress in enclosure or connector.

Group E-1 (AFTER 100 CYCLES)	<u>Sample #</u>	<u>Visual Inspection</u>
	1	No dust ingress in enclosure or connector.
	2	No dust ingress in enclosure or connector.
	3	No dust ingress in enclosure or connector.
	4	No dust ingress in enclosure or connector.
	5	No dust ingress in enclosure or connector.
	6	No dust ingress in enclosure or connector.

LLCR:

- 1) A total of 64 points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
 - a. $\leq +5.0$ mOhms: ----- Stable
 - b. $+5.1$ to $+10.0$ mOhms: ----- Minor
 - c. $+10.1$ to $+15.0$ mOhms: ----- Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: ----- Marginal
 - e. $+50.1$ to $+2000$ mOhms ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

Date	2009-12-17	2009-12-18	2010-1-4	01-15-10
Room Temp C	23	23	20.2	22.9
RH	25%	26%	20%	26%
Name	Tony Wagoner	Tony Wagoner	Troy Cook	Troy Cook
mOhm values	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	52.5	0.4	3.0	1.5
St. Dev.	3.8	0.6	6.7	1.7
Min	46.1	-1.1	-0.6	-0.6
Max	57.4	2.1	41.5	6.6
Count	64	64	64	64

	Stable	Minor	Acceptable	Marginal	Unstable	Open
100 Cycles	64	0	0	0	0	0
Thermal	57	4	0	3	0	0
Humidity	62	2	0	0	0	0

DATA**MATING/UNMATING:**

Sample#	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles		After 100 Cycles		After Thermals		After Humidity	
	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	20.68	4.42	21.63	4.72	29.04	4.79	29.80	5.77	32.10	6.27	9.76	2.84	4.87	2.51
2	16.92	2.94	20.25	4.30	25.49	4.42	29.34	4.60	30.37	5.02	7.89	2.98	5.25	2.38
3	20.21	3.37	24.28	3.68	26.81	3.66	31.30	4.21	33.30	4.47	12.55	3.46	4.09	2.15
4	21.20	5.74	23.04	5.71	24.78	5.86	29.66	5.71	31.74	5.77	7.13	3.58	3.81	2.85
5	22.91	3.77	22.44	4.31	22.92	4.66	27.64	4.80	28.86	4.65	15.81	2.50	4.88	1.50
6	17.79	3.78	23.74	4.38	24.33	5.09	22.33	5.37	32.39	5.08	7.00	2.97	4.04	2.15
7	25.85	3.69	28.51	4.00	31.28	3.87	34.10	4.00	35.00	4.85	10.35	3.15	4.01	2.13
8	18.86	3.19	16.09	3.31	18.07	3.53	19.47	3.59	21.04	3.92	9.48	2.51	3.96	1.82
9	26.49	3.61	30.03	3.66	34.83	4.12	33.19	4.35	35.34	4.96	8.58	3.53	3.31	1.51
10	21.29	2.77	16.60	3.31	17.66	2.94	19.47	2.88	19.71	2.72	10.40	2.81	4.16	2.68

LLCR:

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	100 Cycles	Thermal	Humidity
1	P1	53.2	0.7	1.2	1.1
1	P2	56.3	1.0	-0.3	0.6
1	P3	48.4	0.4	2.5	2.4
1	P4	56.4	0.0	-0.6	0.1
1	P5	46.7	-0.1	1.6	2.0
1	P6	56.1	0.6	-0.3	0.5
1	P7	47.7	0.1	0.2	-0.5
1	P8	52.5	0.4	-0.5	0.3
2	P1	54.9	-0.8	0.5	0.4
2	P2	56.2	0.4	-0.1	0.5
2	P3	49.2	0.1	8.2	4.1
2	P4	56.5	2.0	41.5	3.9
2	P5	48.1	0.6	27.6	5.7
2	P6	57.2	0.5	9.1	2.5
2	P7	48.2	-0.5	-0.5	-0.4
2	P8	53.5	-0.2	2.2	2.8
3	P1	54.8	0.2	-0.4	0.3
3	P2	56.6	0.5	0.2	0.8
3	P3	48.5	0.3	2.6	1.9
3	P4	57.3	0.3	1.5	1.2
3	P5	48.5	0.3	1.0	1.4
3	P6	57.0	0.7	1.7	0.8
3	P7	47.7	0.4	0.9	1.4
3	P8	52.7	0.2	1.0	1.1
4	P1	54.2	1.1	1.3	0.9
4	P2	55.8	0.3	0.7	0.0
4	P3	48.9	0.2	1.4	1.6
4	P4	57.4	-0.3	0.5	0.4

4	P5	48.3	-0.5	1.9	0.1
4	P6	56.1	0.6	4.7	5.0
4	P7	48.6	-1.1	0.0	-0.1
4	P8	54.0	-0.9	0.7	-0.6
5	P1	53.9	0.5	0.3	-0.2
5	P2	54.8	0.8	1.6	1.0
5	P3	47.7	1.4	3.7	4.9
5	P4	56.4	2.1	22.3	4.4
5	P5	46.8	0.8	4.7	1.7
5	P6	57.2	0.9	9.9	2.0
5	P7	46.8	0.6	1.9	2.3
5	P8	52.5	1.3	1.9	6.6
6	P1	54.6	0.2	0.1	1.1
6	P2	56.3	0.3	-0.6	-0.2
6	P3	49.3	0.5	0.5	2.3
6	P4	56.4	0.7	2.8	5.0
6	P5	48.2	0.3	1.2	1.7
6	P6	55.3	1.4	1.8	0.3
6	P7	47.7	0.4	0.9	0.8
6	P8	53.2	0.7	1.4	0.0
7	P1	54.4	0.9	0.6	-0.2
7	P2	55.9	1.0	0.4	1.7
7	P3	49.4	0.3	4.6	3.1
7	P4	55.5	0.6	3.8	4.1
7	P5	48.2	0.0	1.5	2.2
7	P6	55.8	1.0	6.0	2.7
7	P7	47.5	0.1	0.2	0.3
7	P8	53.4	0.0	3.2	0.1
8	P1	53.4	0.4	1.8	1.6
8	P2	56.6	0.4	0.1	0.7
8	P3	48.9	0.3	0.2	0.8
8	P4	56.2	0.0	1.6	0.3
8	P5	46.1	1.5	2.2	2.6
8	P6	56.9	0.2	0.5	0.6
8	P7	47.0	0.2	1.0	0.0
8	P8	52.5	0.4	-0.1	1.8

EQUIPMENT AND CALIBRATION SCHEDULES**Equipment #:** THC-01**Description:** Temperature/Humidity Chamber**Manufacturer:** Thermotron**Model:** SM-8-7800**Serial #:** 30676**Accuracy:** See Manual

... Last Cal: 04/07/2009, Next Cal: 04/07/2010

Equipment #: THC-03**Description:** Temperature/Humidity Chamber (SJR Room - Unit #2)**Manufacturer:** Thermotron**Model:** SE-1000-10-10**Serial #:** 37551**Accuracy:** See Manual (For SJR Testing)

... Last Cal: 08/19/2008, Next Cal: 08/19/2009

Equipment #: MO-01**Description:** Micro-Ohmmeter**Manufacturer:** Keithley**Model:** 580**Serial #:** 0772740**Accuracy:** See Manual

... Last Cal: 06/16/09, Next Cal: 06/16/2010

Equipment #: MO-06**Description:** Micro-Ohmmeter**Manufacturer:** Keithley**Model:** 580**Serial #:** 1110525**Accuracy:** See Manual

... Last Cal: 06/16/2009, Next Cal: 06/16/2010

Equipment #: TCT-04**Description:** Dillon Quantrol TC21 25-1000 mm/min series test stand**Manufacturer:** Dillon Quantrol**Model:** TC2 I series test stand**Serial #:** 04-1041-04**Accuracy:** Speed Accuracy: +/- 5% of indicated speed; Speed Accuracy: +/- 5% of indicated speed;

... Last Cal: 5/12/2009, Next Cal: 5/12/2010