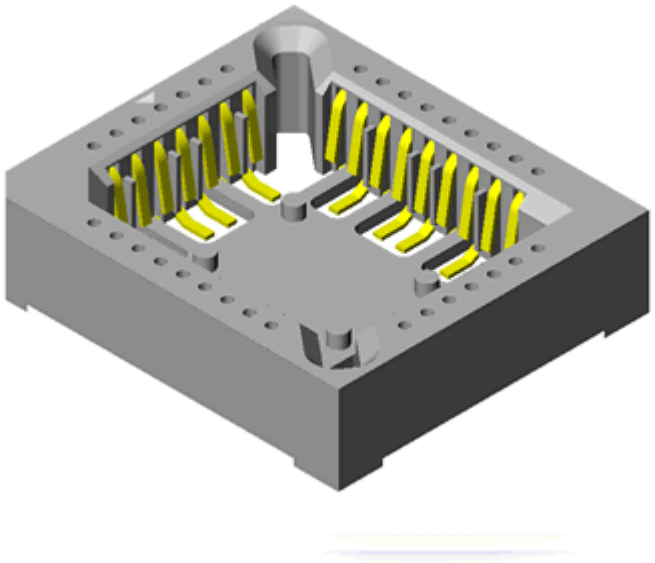
Project Number: N/A	Tracking Code: TC0327-N/A-0228		
Requested by: Phil Eckert	Date: 6/30/2003	Product Rev: N/A	
Part #: PLCC-044-T-A	Lot #: N/A	Tech: Troy Cook	Eng: John Tozier
Part description: PLCC			Qty to test: 10
Test Start: 07/17/2003	Test Completed: 8/21/2003		



Matte-Tin contact comparison, soldered with and without a Nitrogen blanket

PART DESCRIPTION

PLCC-044-T-A
Mated with
PLCA-044-T-S-A

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to IS0 10012-l and ANSI/NCSL 2540-1, as applicable.

SCOPE

To evaluate Matte-Tin contact system integrity after exposure to typical Pb-free soldering processes. The evaluation will occur on systems soldered with and without the Nitrogen blanket.

APPLICABLE DOCUMENTS

Standards: EIA Publication 364

TEST SAMPLES AND PREPARATION

The two mating components (if applicable) were soldered using AIM TSC-4 lead free alloy using Sn with 3.8%-4% Ag, and 0.5% - 0.7% Cu solder paste using the oven profile.

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 were cleaned with the Aqueous Inline Cleaning System (Aqueous Millennium Technologies)

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

FLOWCHART

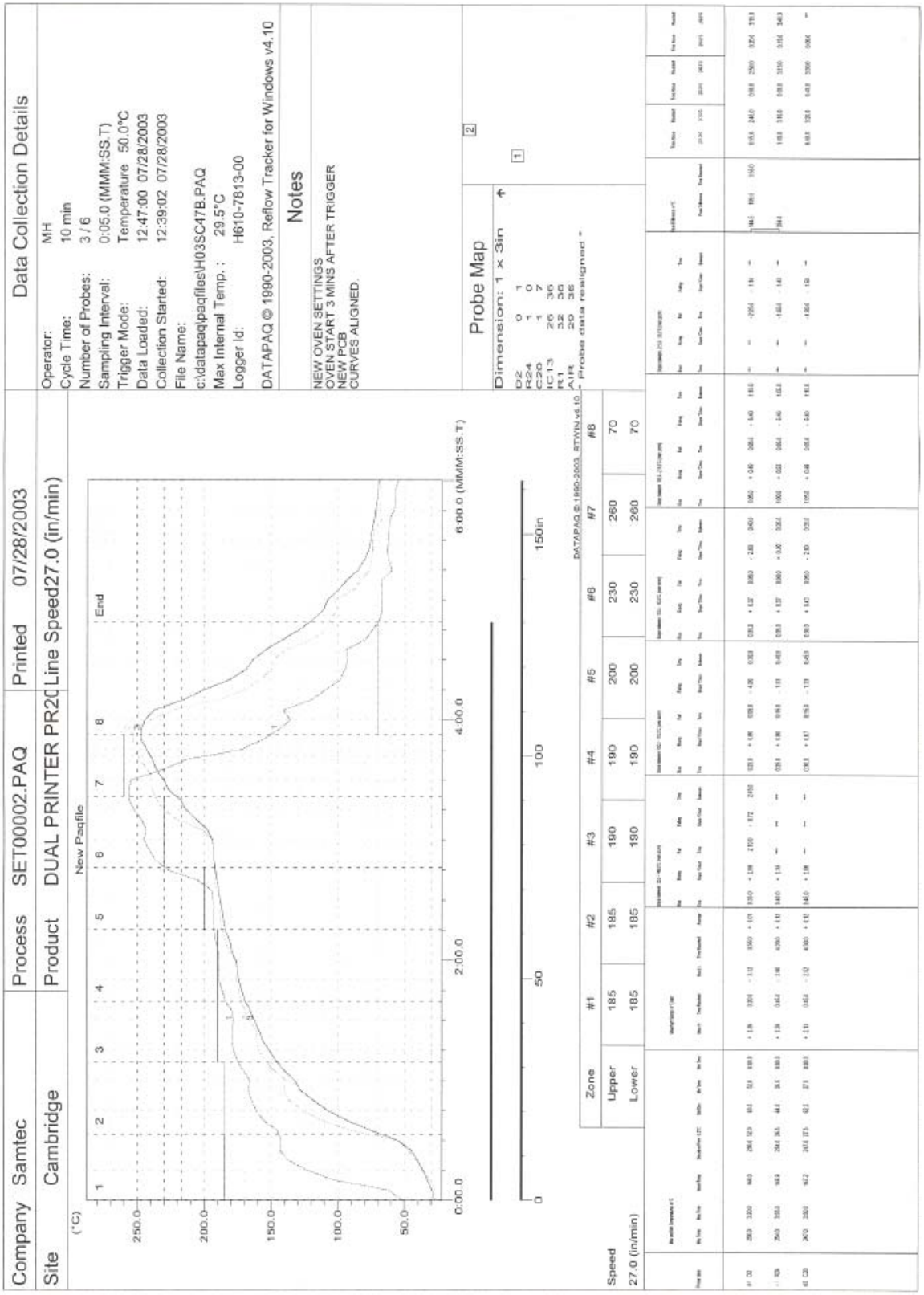
TEST STEP	GROUP A 200 Points 480 hour Test Processed in AIR	GROUP B 200 Points 480 hour Test Processed in Nitrogen
01	LLCR-1	LLCR-1
02	Data Review	Data Review
03	Cyclic Humidity, 240 Hours	Cyclic Humidity, 240 Hours
04	LLCR-2	LLCR-2
05	Data Review	Data Review
06	Cyclic Humidity, 240 Hours	Cyclic Humidity, 240 Hours
07	LLCR-3	LLCR-3

Humidity =EIA-364-31, Test Condition B (240 Hours)
and Method III (+25 ° C to +65 ° C @ 90%RH to 98% RH)
delete steps 7a and 7b

LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

OVEN PROFILE



Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

ATTRIBUTE DEFINITION

Following is a brief, simplified description of attributes.

CYCLIC HUMIDITY:

1) Reference document: EIA-364-31, *Humidity Test Procedure for Electrical Connectors.*
   a) Test Condition B, 240 Hours.
   b) Method III, +25° C to + 65° C, 90% to 98% Relative Humidity excluding sub-cycles 7a and 7b.
2) Connectors are mated.
3) Test Condition B run twice for a total of 480 hours.
   a) Intermediate results taken at 240 hours.

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) <= +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

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

RESULTS

LLCR (200 LLCR test points)

- **Initial**
  - **Air Processed ---------- ---------- 14.4 mOhms Max**
  - **Nitrogen Processed---------- ---------- 15.0 mOhms Max**
- **Stressed 240 Hours**
  - **<= +5.0 mOhms**
    - **Air Processed----------200 Points ---------- Stable**
    - **Nitrogen Processed----------198 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms**
    - **Air Processed----------0 Points ---------- Minor**
    - **Nitrogen Processed----------2 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms**
    - **Air Processed----------0 Points ---------- Acceptable**
    - **Nitrogen Processed----------0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms**
    - **Air Processed----------0 Points ---------- Marginal**
    - **Nitrogen Processed----------0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms**
    - **Air Processed----------0 Points ---------- Unstable**
    - **Nitrogen Processed----------0 Points ---------- Unstable**
  - **>+2000 mOhms**
    - **Air Processed----------0 Points ---------- Open Failure**
    - **Nitrogen Processed----------0 Points ---------- Open Failure**
- **Stressed 480 Hours**
  - **<= +5.0 mOhms**
    - **Air Processed----------200 Points ---------- Stable**
    - **Nitrogen Processed----------198 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms**
    - **Air Processed----------0 Points ---------- Minor**
    - **Nitrogen Processed----------2 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms**
    - **Air Processed----------0 Points ---------- Acceptable**
    - **Nitrogen Processed----------0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms**
    - **Air Processed----------0 Points ---------- Marginal**
    - **Nitrogen Processed----------0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms**
    - **Air Processed----------0 Points ---------- Unstable**
    - **Nitrogen Processed----------0 Points ---------- Unstable**
  - **>+2000 mOhms**
    - **Air Processed----------0 Points ---------- Open Failure**
    - **Nitrogen Processed----------0 Points ---------- Open Failure**

After soldering, parts soldered in the 'open air process' showed slight discoloration compared to those parts soldered in the 'nitrogen blanket process'. Discoloration is seen as a slight 'yellowing' or 'bronzing'.

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES

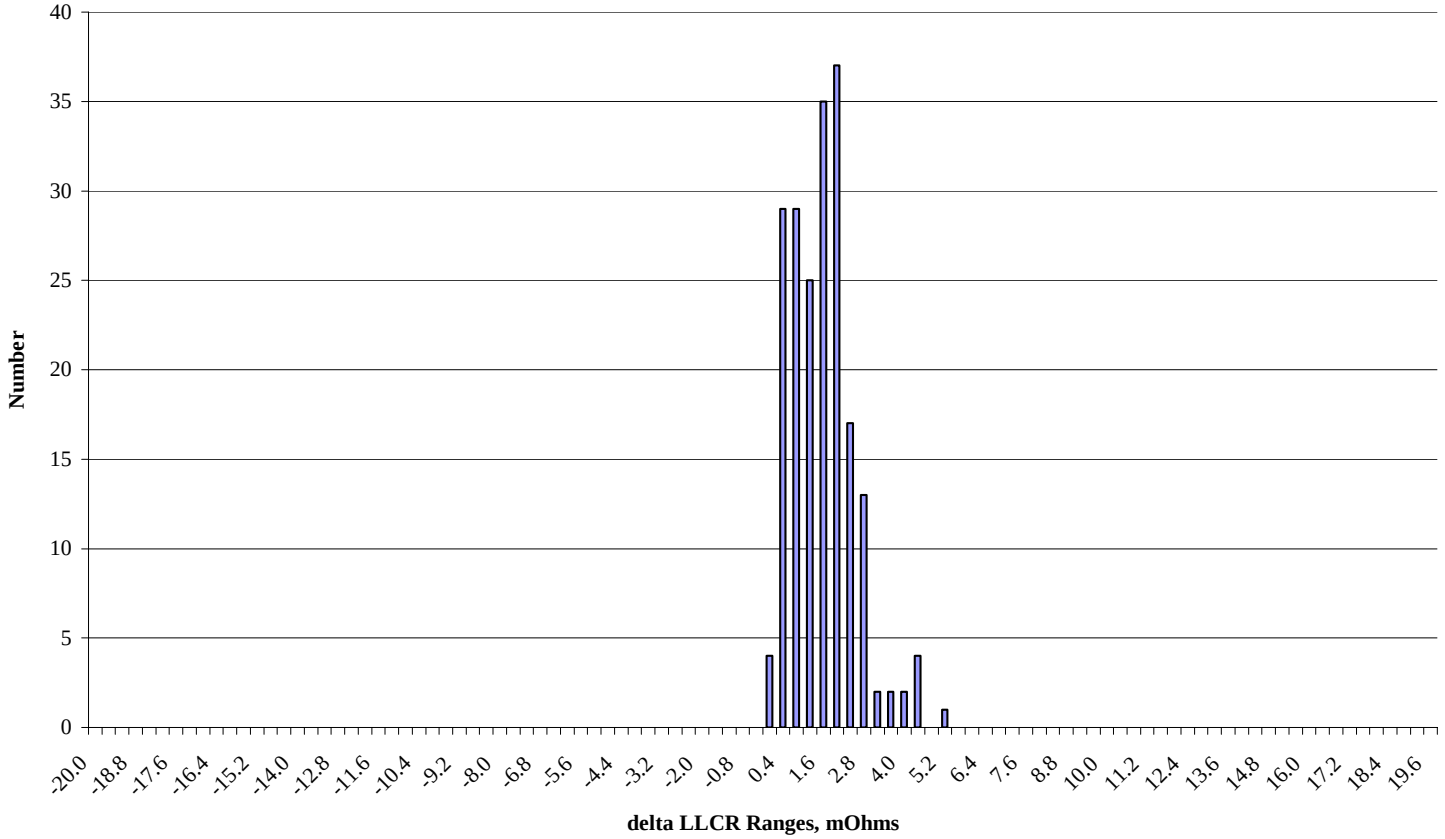
LLCR:

1) A total of 200 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) <= +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

Air Processed

mOhm values	Actual Initial	Delta Humidity-240 Hours	Delta Humidity-480 Hours
Average	11.2	0.7	1.4
St. Dev.	1.2	0.6	0.9
Min	9.4	-0.2	-0.3
Max	14.4	2.5	4.9
Count	200	200	200

Air Processeed
After 480 Hours



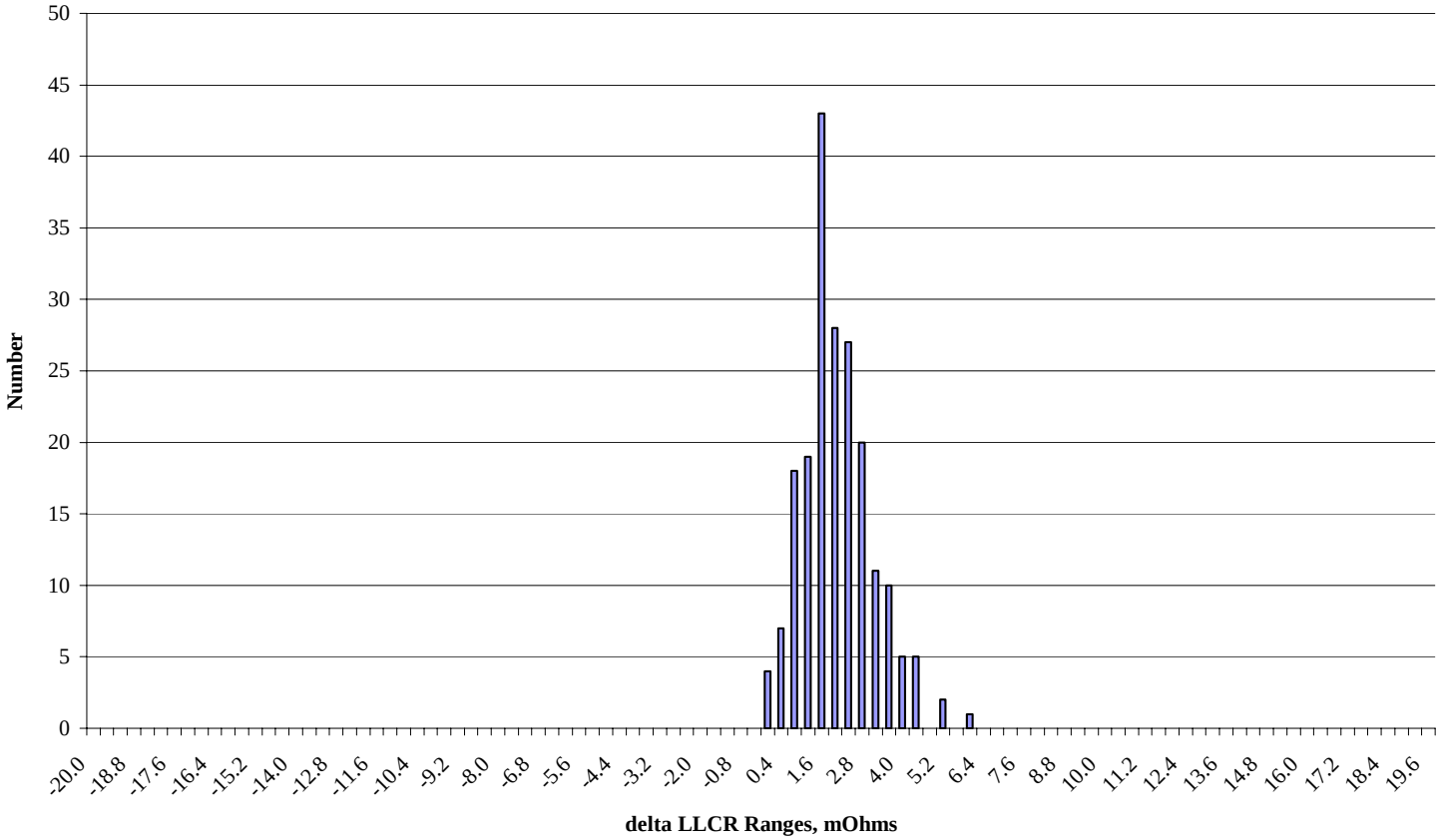
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Nitrogen Processed

mOhm values	Actual Initial	Delta Humidity-240 Hours	Delta Humidity-480 Hours
Average	11.5	1.3	1.9
St. Dev.	1.2	1.0	1.0
Min	9.6	-0.3	-0.3
Max	15.0	5.7	5.6
Count	200	200	200

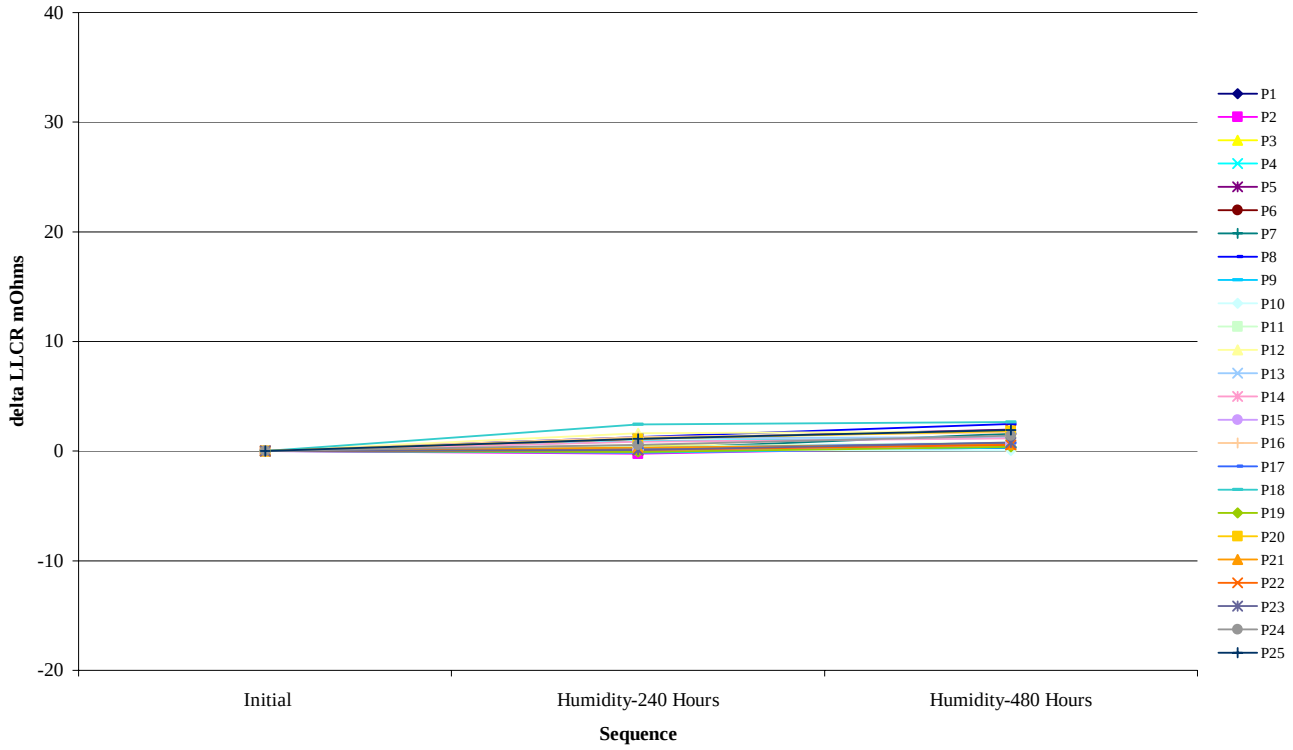
Nitrogen Processed
After 480 Hours



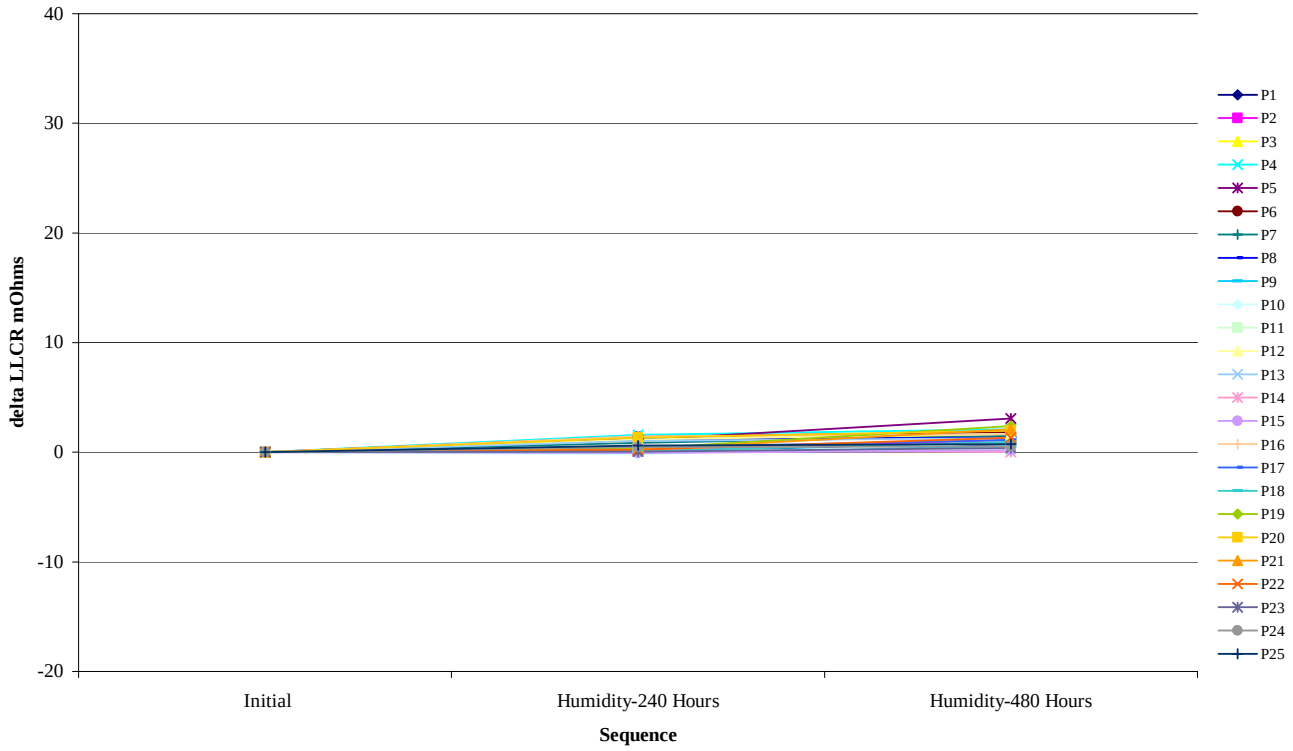
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Air Processed
Board #1



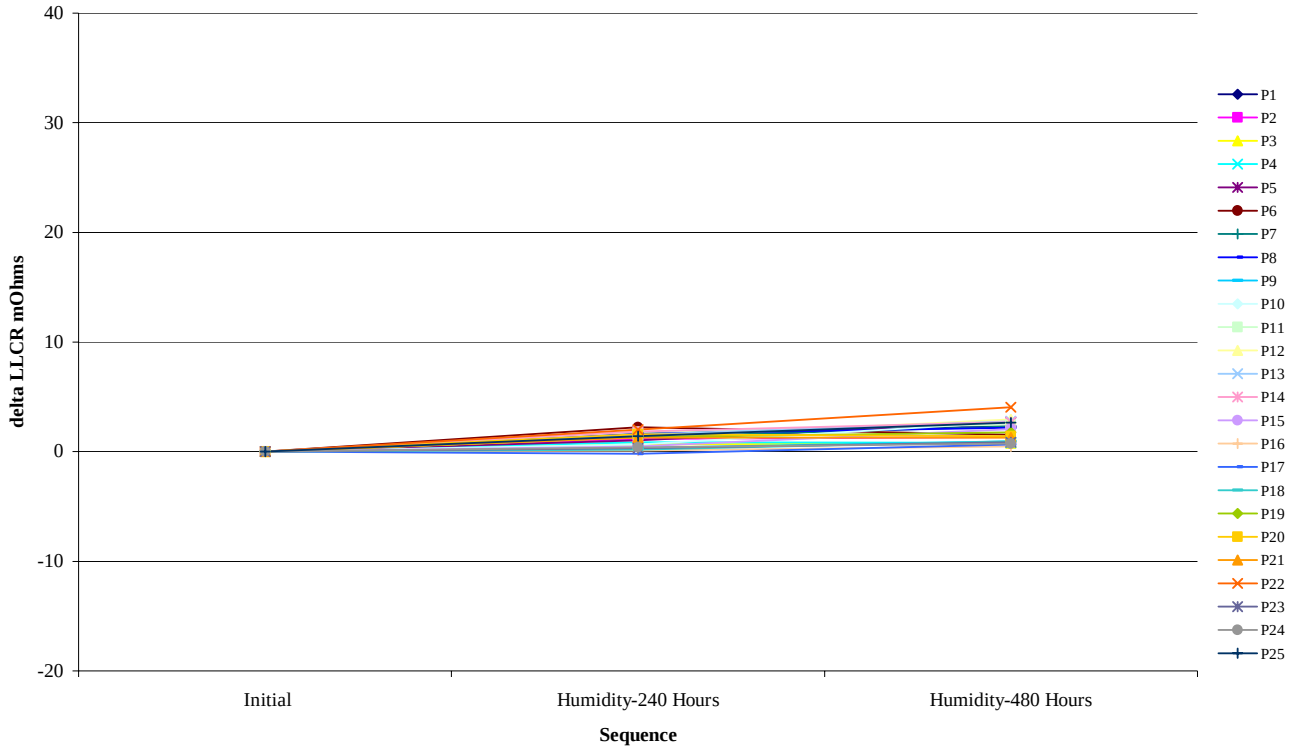
Air Processed
Board #2



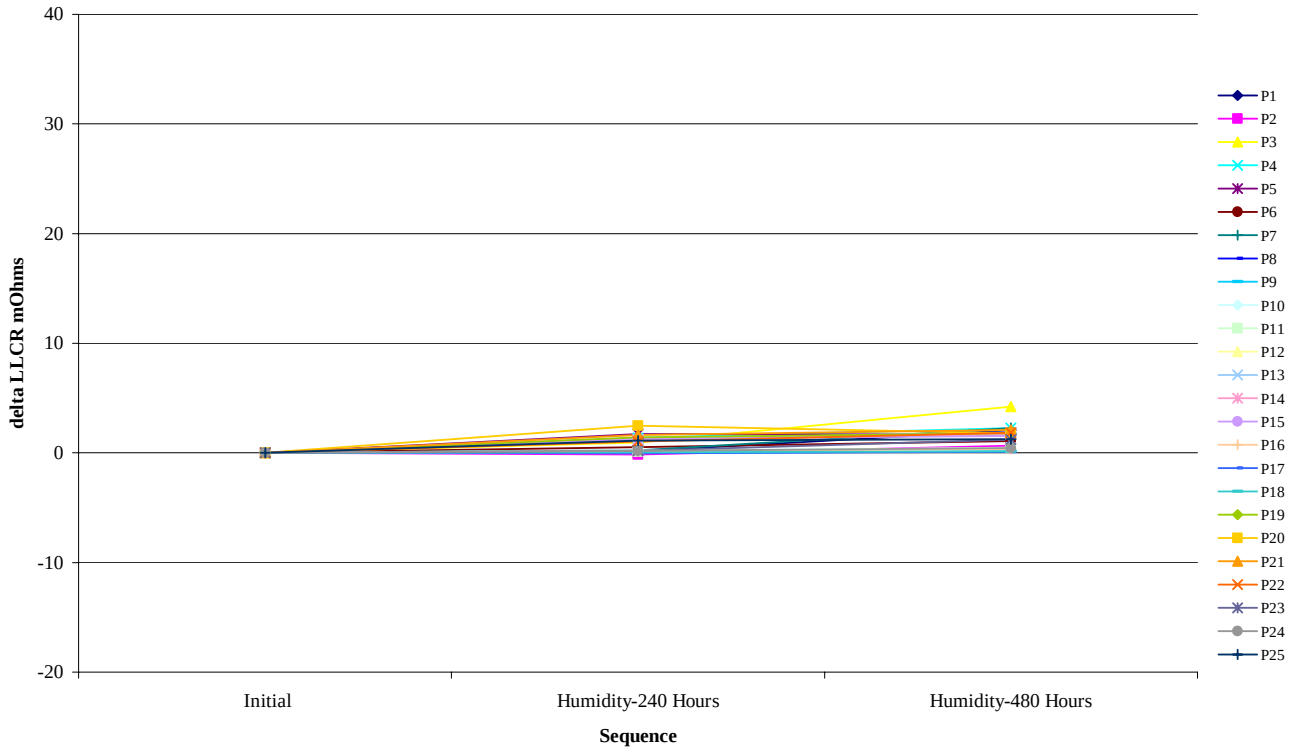
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Air Processed
Board #3



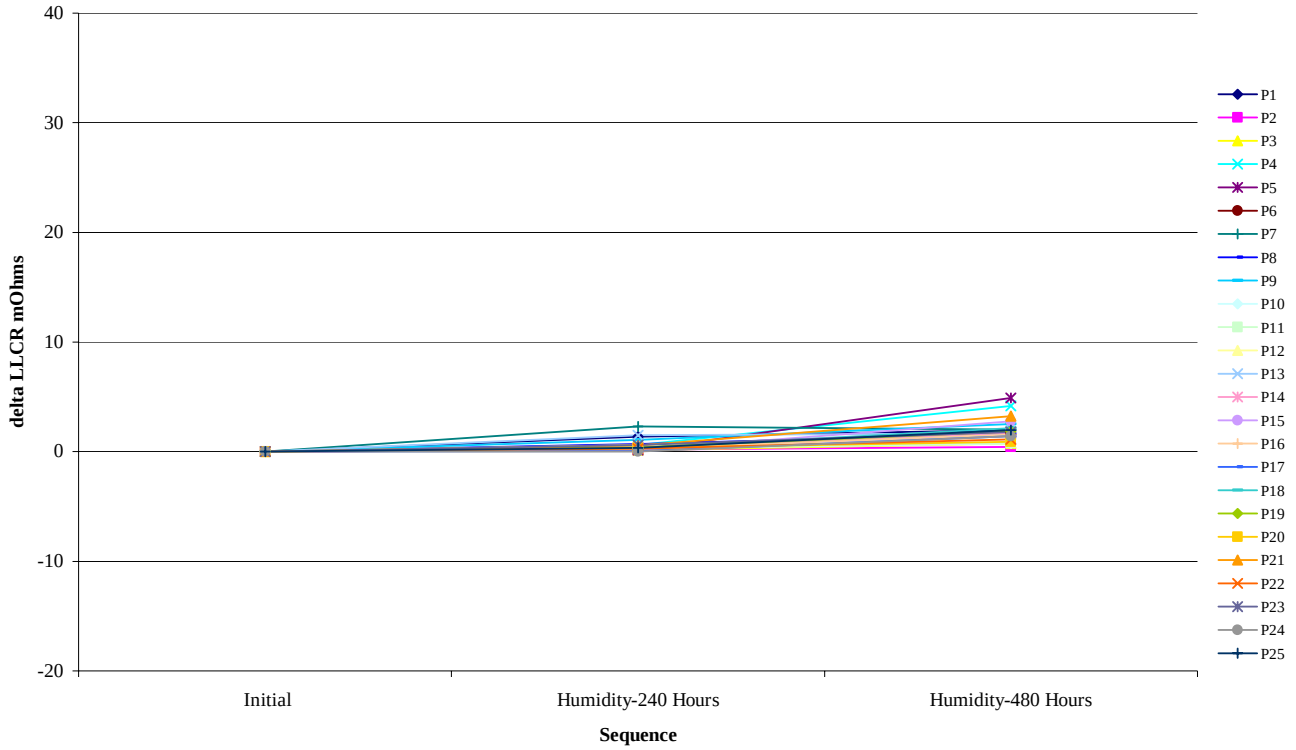
Air Processed
Board #4



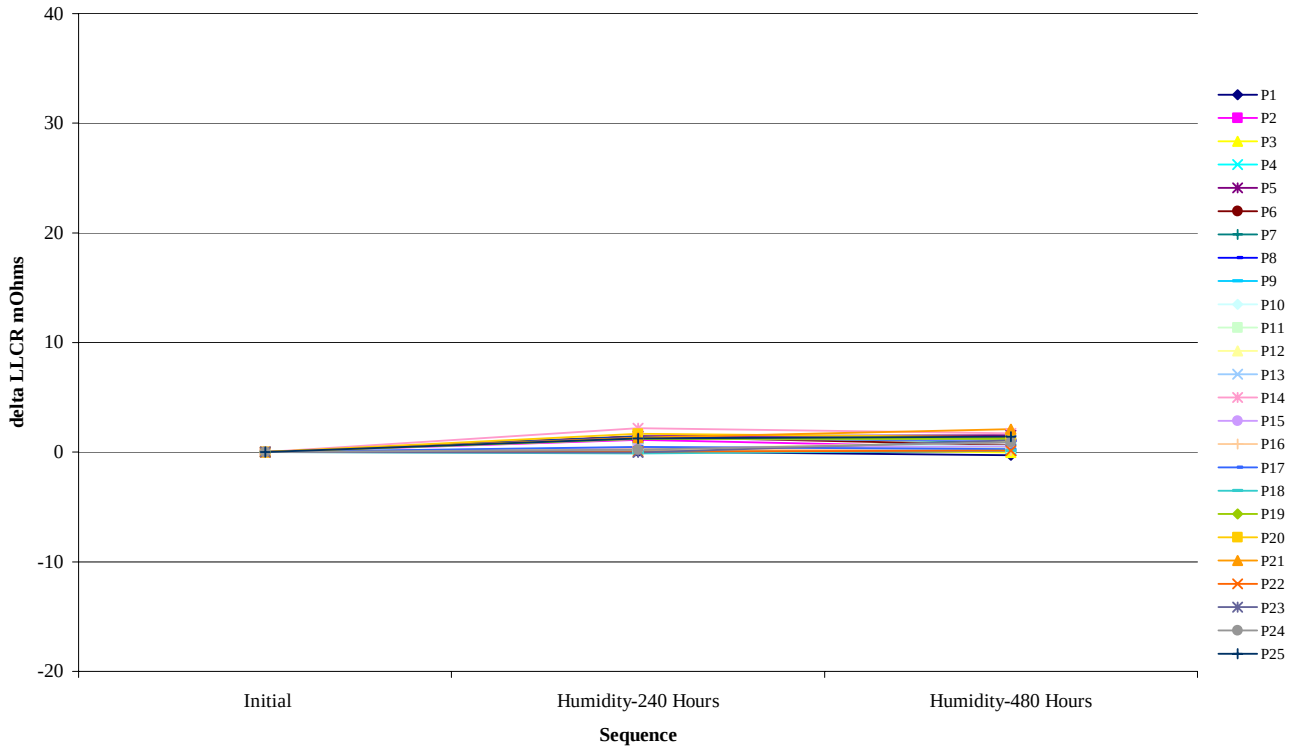
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Air Processed
Board #5



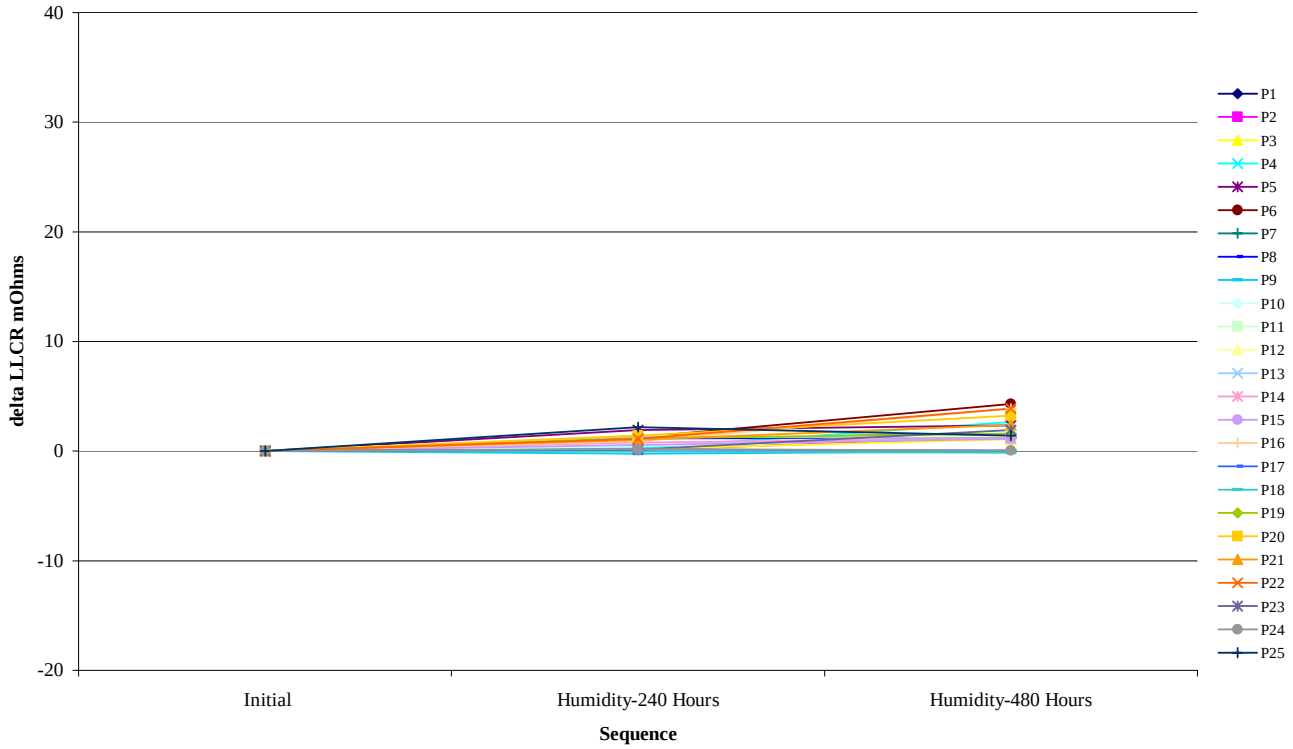
Air Processed
Board #6



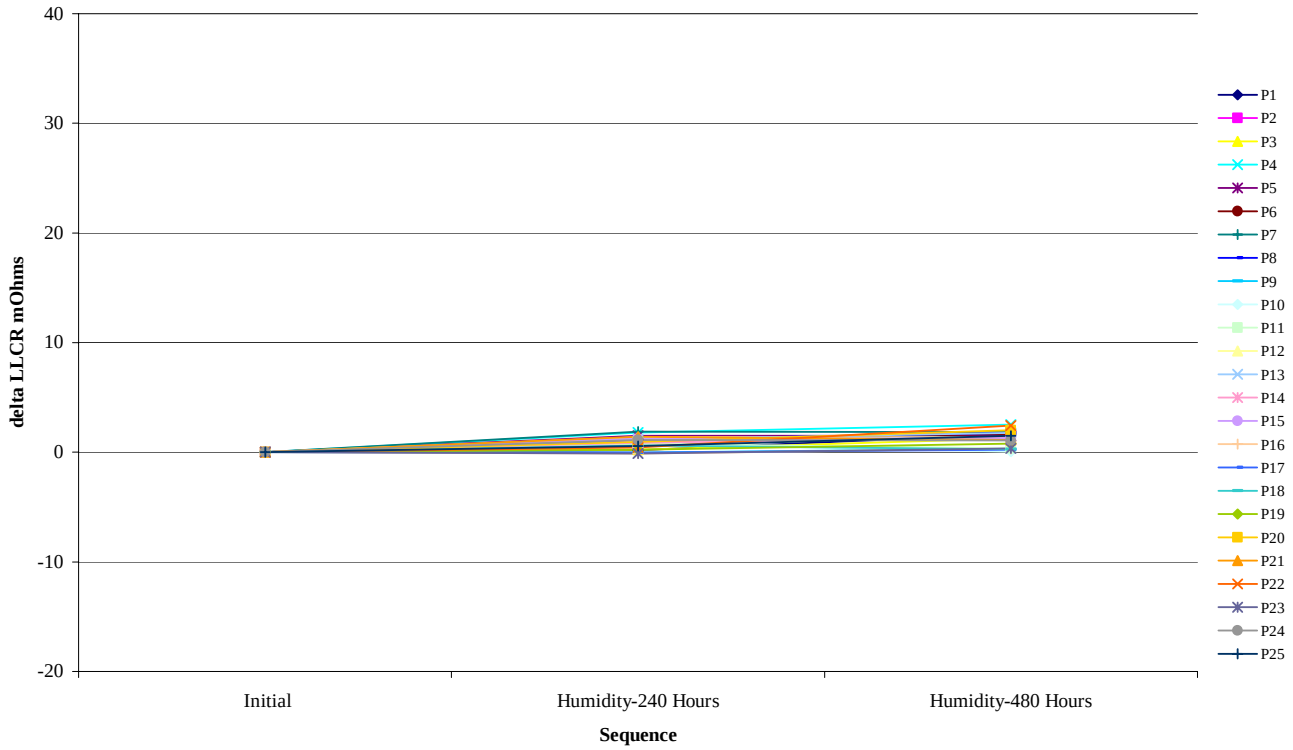
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Air Processed
Board #7



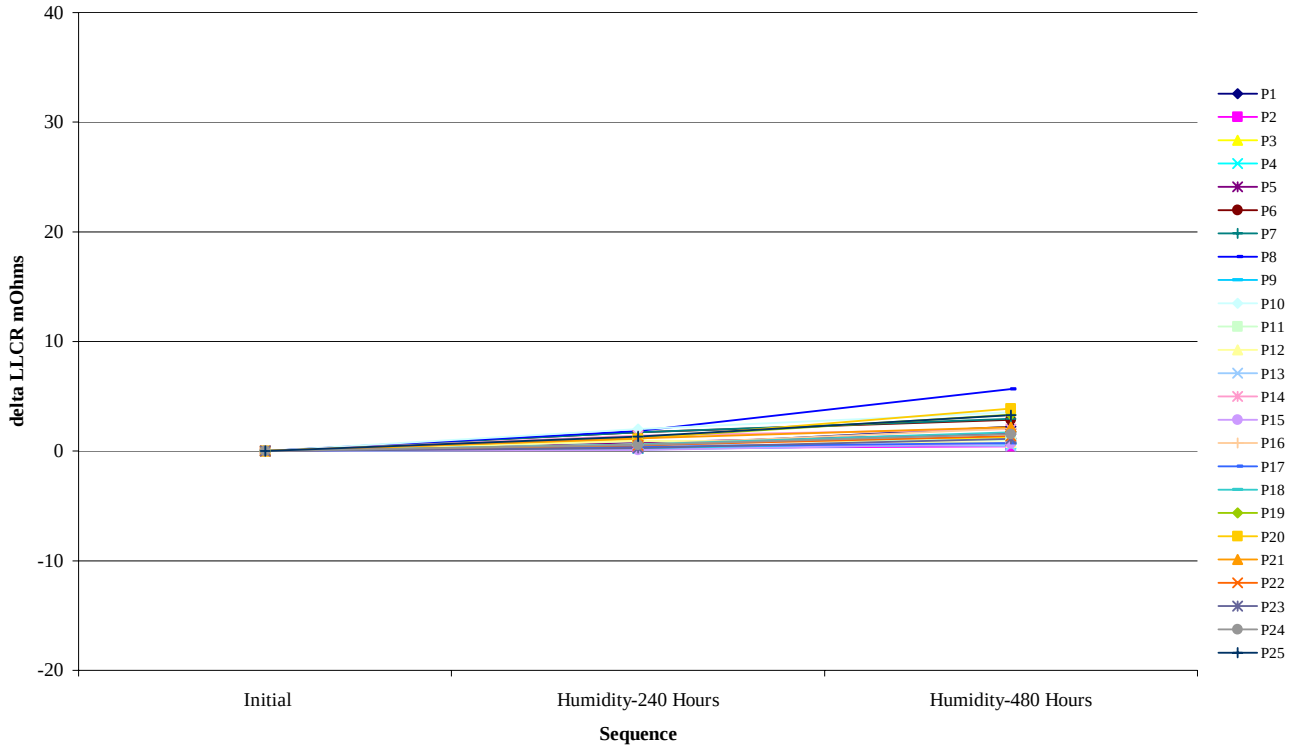
Air Processed
Board #8



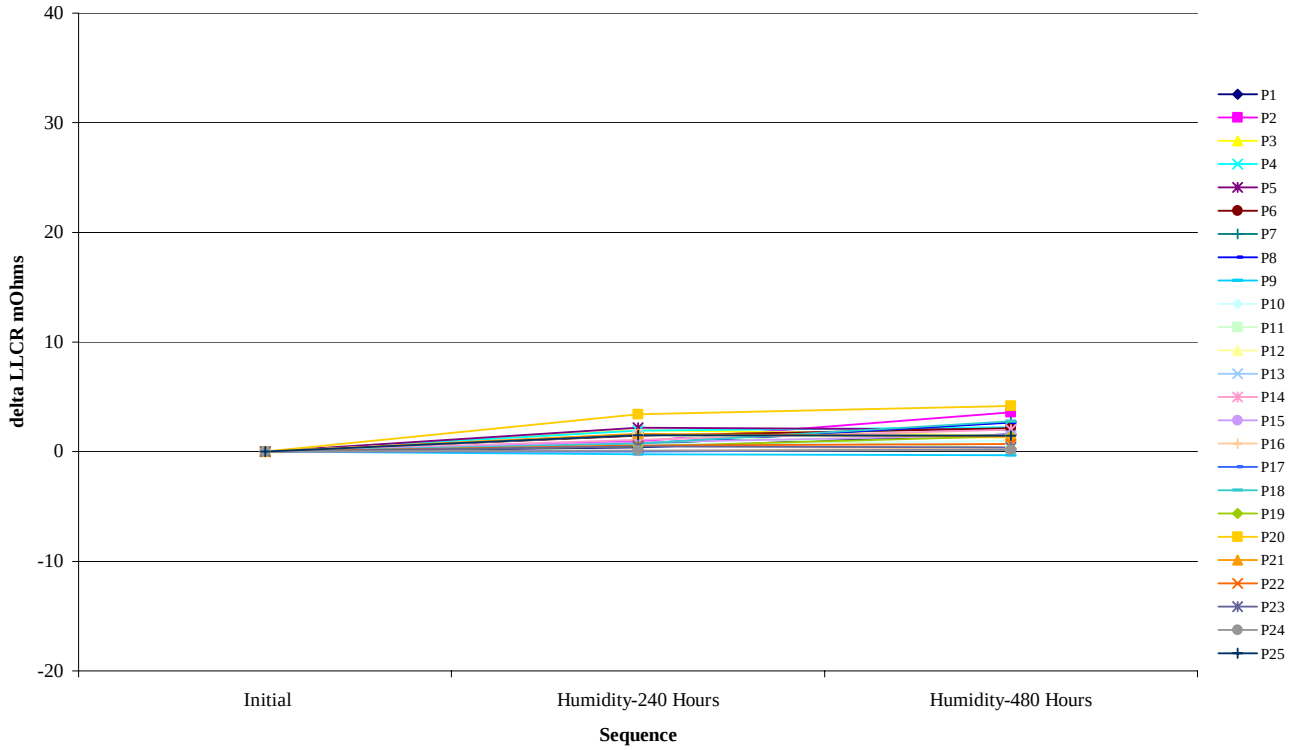
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Nitrogen Processed
Board #1



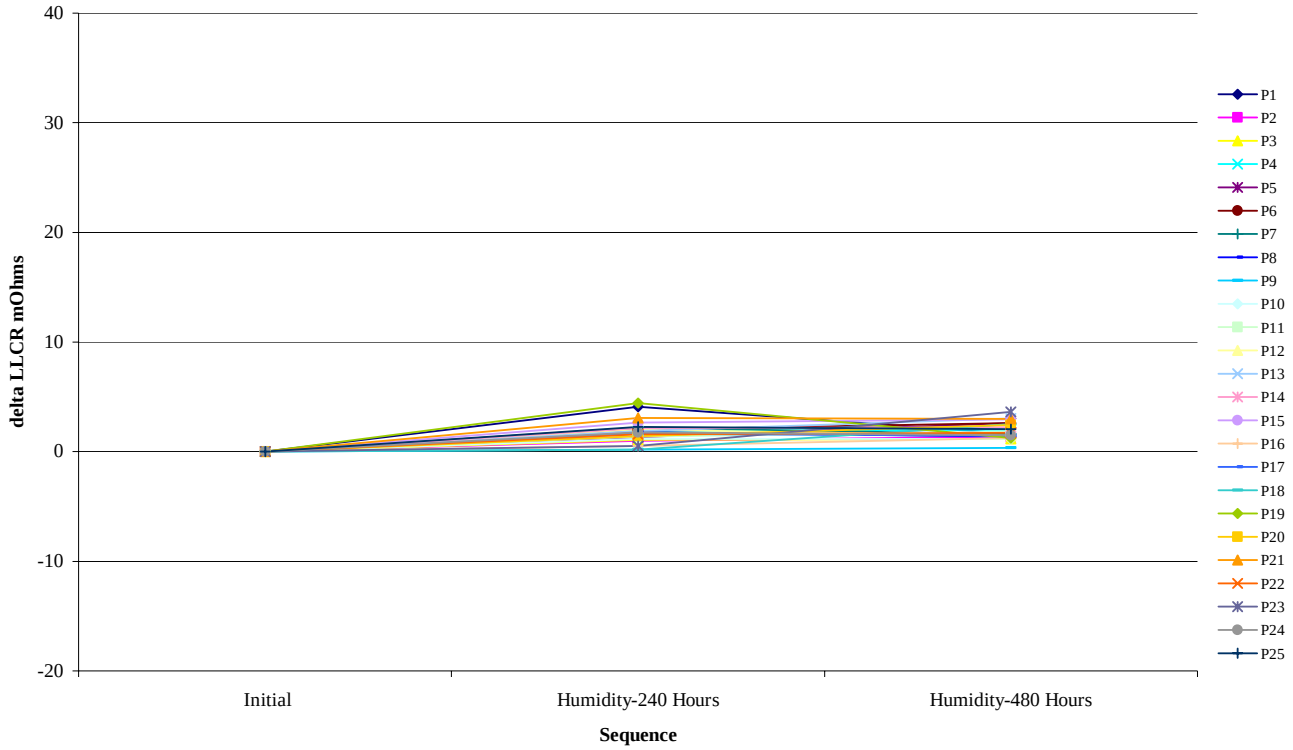
Nitrogen Processed
Board #2



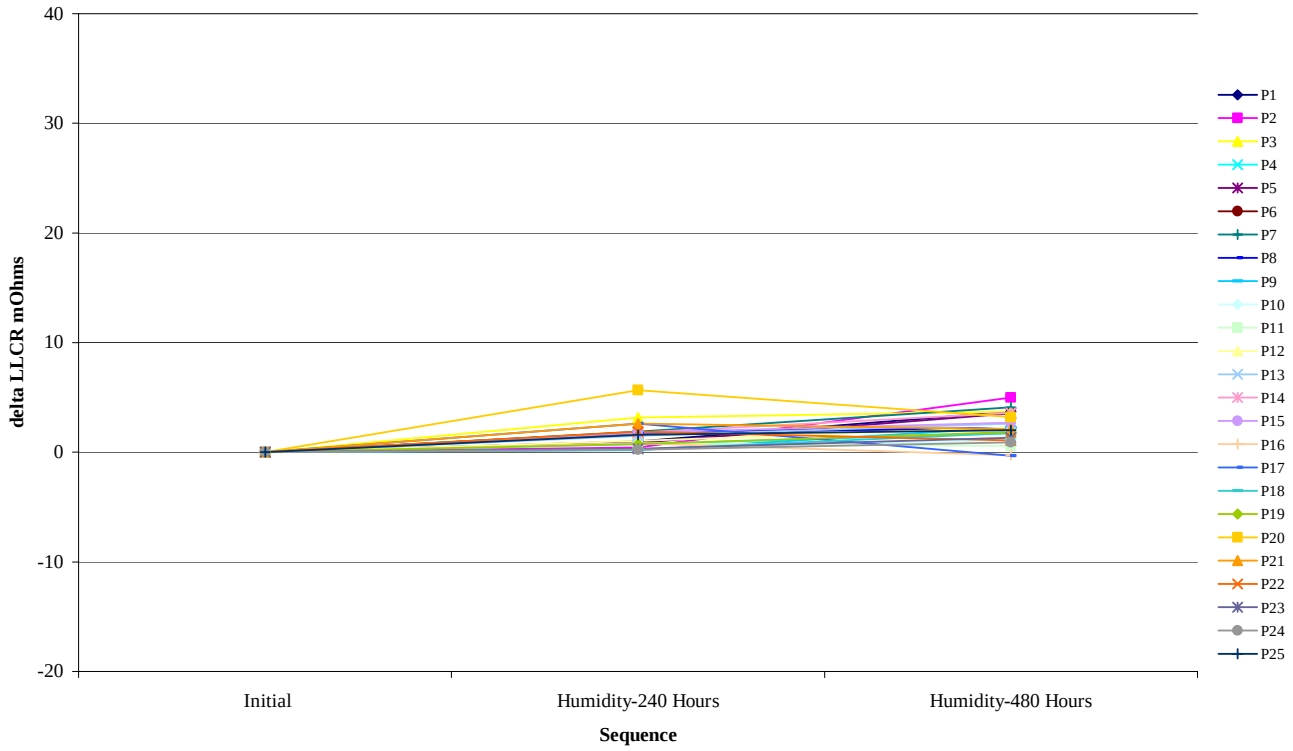
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Nitrogen Processed
Board #3



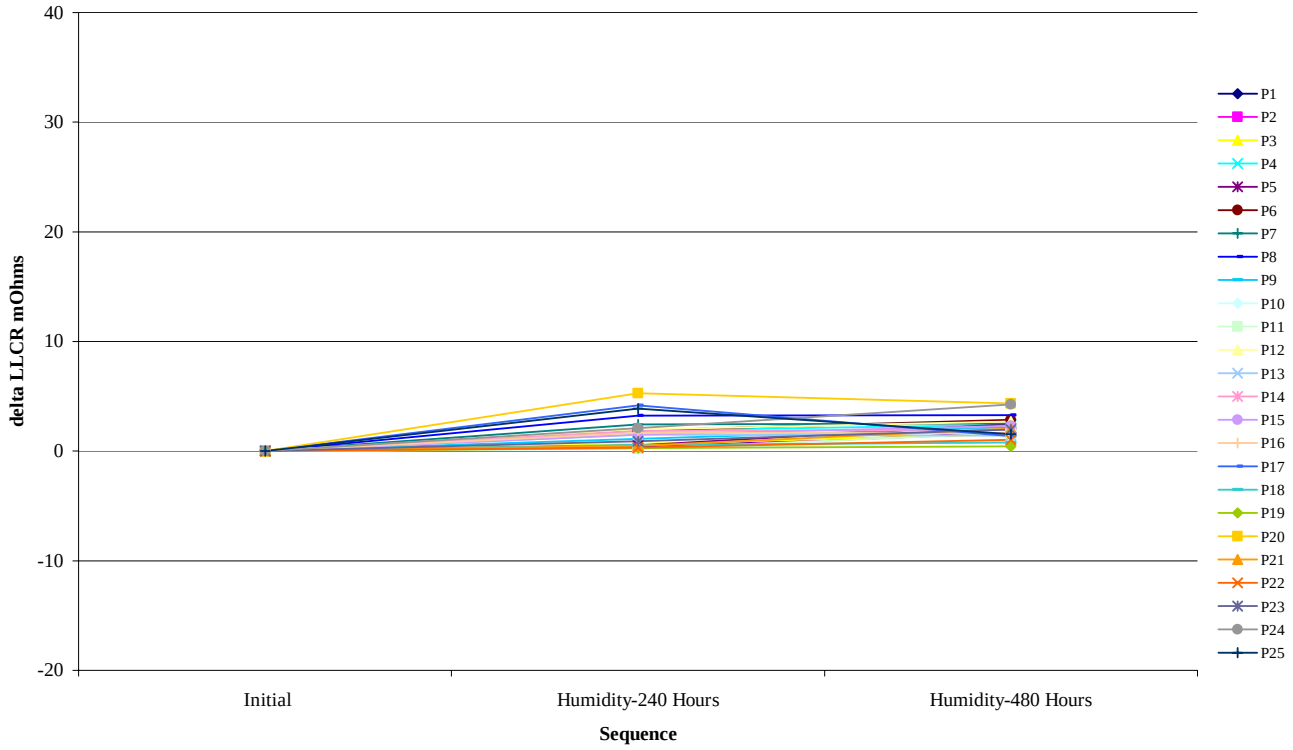
Nitrogen Processed
Board #4



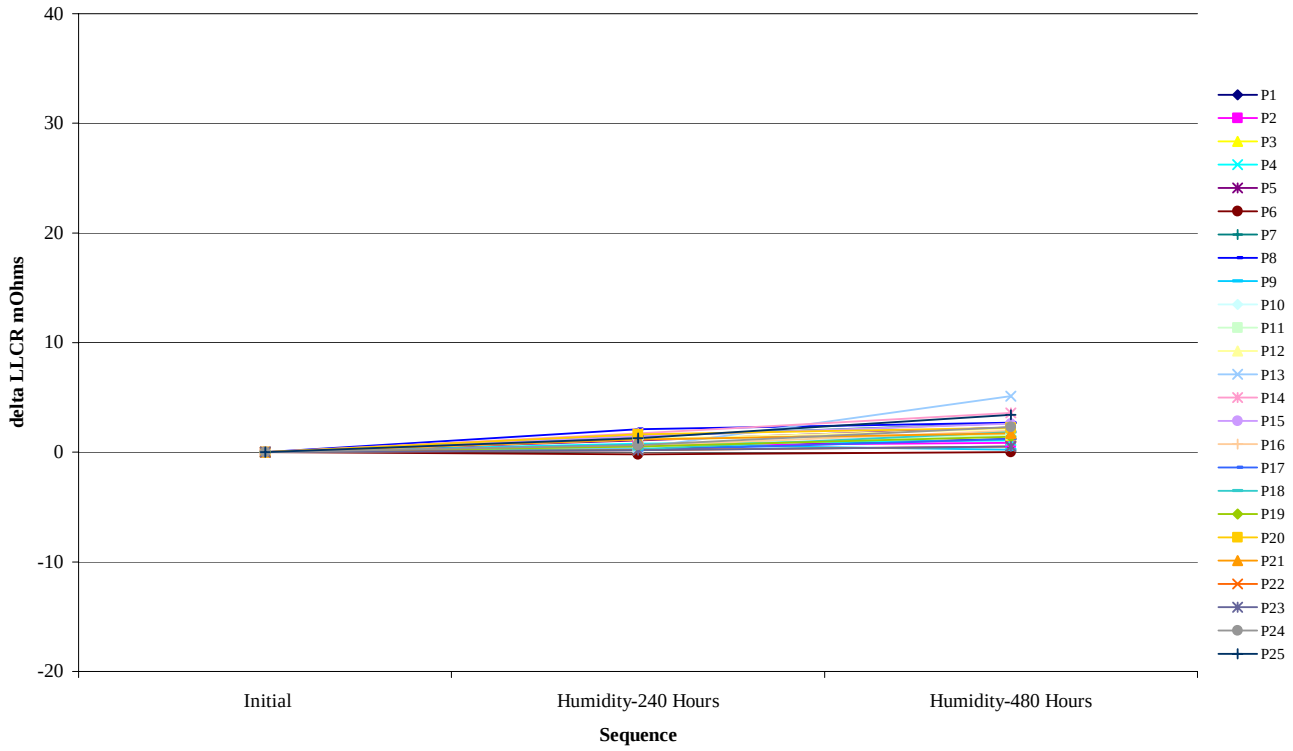
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Nitrogen Processed
Board #5



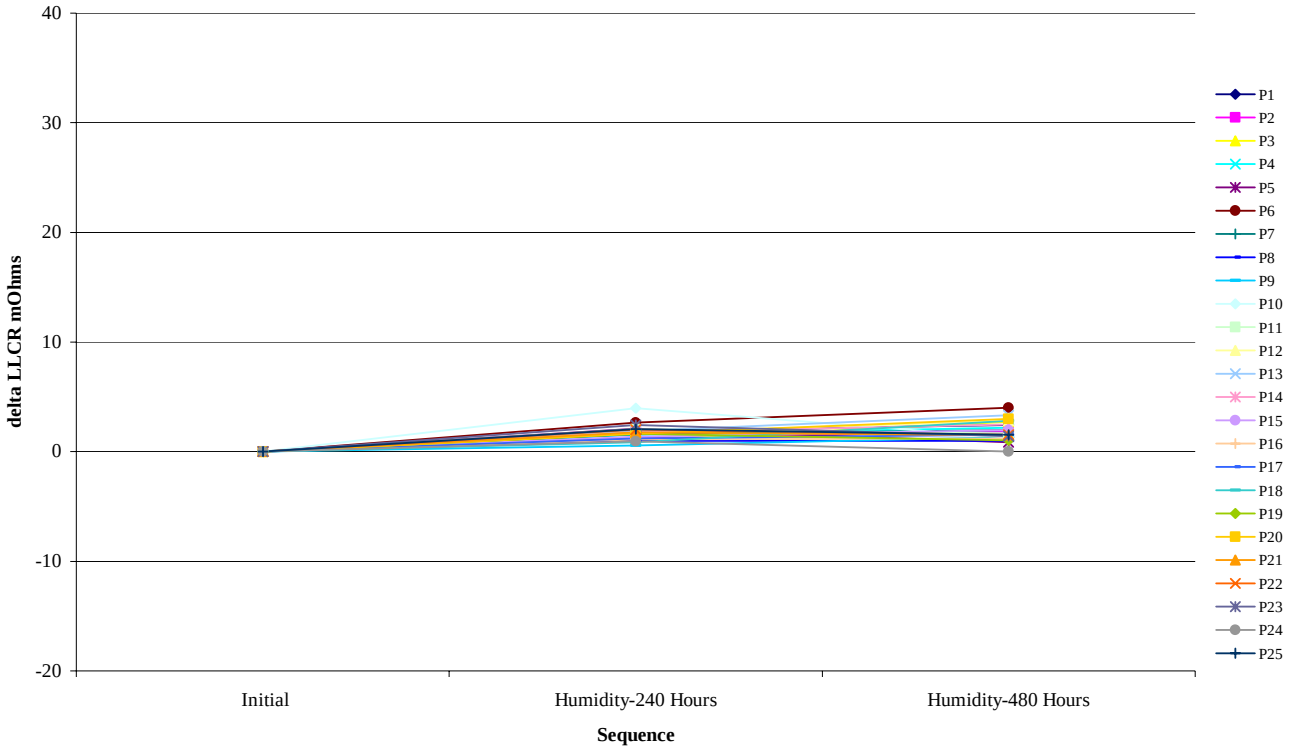
Nitrogen Processed
Board #6



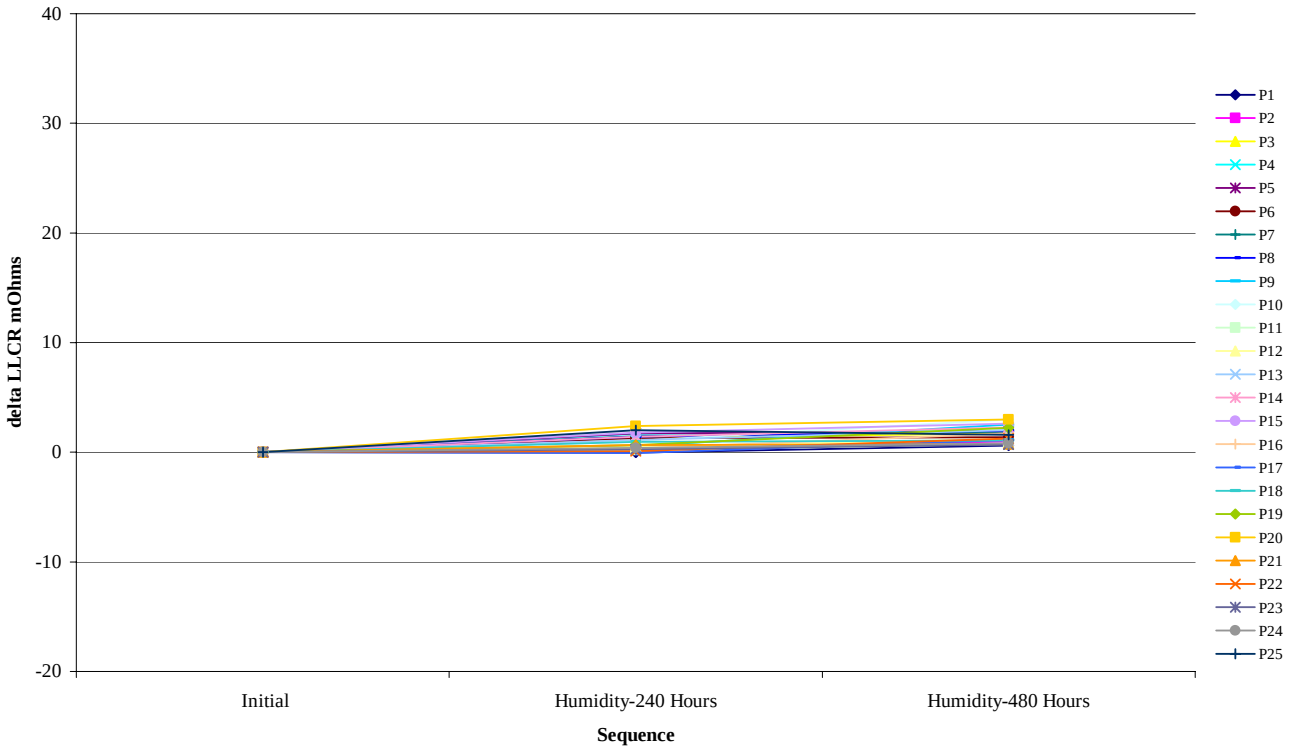
Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA SUMMARIES Continued

Nitrogen Processed
Board #7



Nitrogen Processed
Board #8



Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA

LLCR, Air Processed:

	Jul. 17 2003	Aug. 05 2003	Aug. 20 2003
Date			
Room Temp C	20	22	21
RH	49%	52%	49%
Initials	Troy Cook	Troy Cook	Troy Cook

mOhm values		Actual	Delta	Delta
Board	Position	Initial	Humidity-240 Hours	Humidity-480 Hours
1	P1	13.1	-0.1	0.3
1	P2	13.3	-0.2	0.4
1	P3	11.5	0.5	0.5
1	P4	11.4	0.9	1.2
1	P5	11.0	1.1	2.0
1	P6	10.9	0.1	0.6
1	P7	12.8	0.2	1.6
1	P8	13.2	1.3	2.5
1	P9	13.3	-0.1	0.3
1	P10	11.5	0.1	0.1
1	P11	10.6	0.4	0.8
1	P12	10.7	1.6	1.8
1	P13	10.2	1.2	1.3
1	P14	10.4	0.9	1.2
1	P15	11.8	0.0	0.6
1	P16	10.7	1.3	1.7
1	P17	11.0	0.3	0.7
1	P18	13.5	2.4	2.7
1	P19	13.3	-0.1	0.4
1	P20	9.4	1.1	1.8
1	P21	10.1	0.3	0.6
1	P22	11.2	0.1	0.6
1	P23	10.9	0.1	0.8
1	P24	12.9	0.6	1.4
1	P25	13.3	1.1	1.9
2	P1	13.5	0.0	0.8
2	P2	13.3	0.0	1.1
2	P3	11.8	1.1	1.5
2	P4	11.6	1.6	2.1
2	P5	11.1	1.1	3.1
2	P6	10.2	1.4	1.8
2	P7	13.5	0.9	1.5
2	P8	13.5	1.2	1.3
2	P9	13.2	0.1	0.5
2	P10	11.7	-0.2	0.8
2	P11	10.9	0.2	0.2

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

2	P12	10.9	1.2	1.7
2	P13	10.4	1.0	1.3
2	P14	11.4	0.2	0.0
2	P15	12.5	-0.1	0.2
2	P16	11.0	1.4	1.6
2	P17	11.5	0.5	1.1
2	P18	12.9	0.1	0.9
2	P19	12.8	0.3	2.4
2	P20	10.1	1.3	2.0
2	P21	10.6	0.2	2.1
2	P22	11.5	0.2	1.3
2	P23	11.6	0.0	0.4
2	P24	13.1	0.5	0.5
2	P25	14.4	0.6	0.7
3	P1	12.0	1.7	2.4
3	P2	11.5	1.1	1.4
3	P3	10.4	0.6	0.8
3	P4	10.1	0.9	0.8
3	P5	9.7	1.0	2.7
3	P6	9.4	2.2	1.5
3	P7	12.4	1.4	2.3
3	P8	12.1	1.6	2.2
3	P9	11.9	0.3	0.9
3	P10	10.7	0.7	2.7
3	P11	10.6	1.8	2.5
3	P12	10.1	1.3	3.0
3	P13	10.1	1.5	2.8
3	P14	9.9	1.9	2.7
3	P15	10.4	0.5	2.0
3	P16	10.9	0.1	0.5
3	P17	11.6	-0.2	0.7
3	P18	12.9	0.2	0.9
3	P19	13.0	1.3	1.7
3	P20	9.6	1.6	1.4
3	P21	10.3	1.3	1.3
3	P22	10.6	2.0	4.0
3	P23	10.3	0.3	0.8
3	P24	11.9	0.4	0.8
3	P25	12.6	1.4	2.7
4	P1	11.5	0.1	2.0
4	P2	11.7	-0.2	0.7
4	P3	10.1	1.0	4.2
4	P4	10.6	1.4	2.3
4	P5	9.8	1.7	1.7
4	P6	10.1	0.5	1.1
4	P7	11.8	0.2	2.3
4	P8	12.0	1.3	1.7
4	P9	11.6	0.0	0.2
4	P10	10.3	0.2	0.4
4	P11	9.8	0.1	0.5

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

4	P12	10.1	1.2	1.7
4	P13	9.7	1.3	1.9
4	P14	9.7	1.2	1.7
4	P15	10.3	1.3	1.6
4	P16	10.2	0.2	0.4
4	P17	10.6	0.0	0.1
4	P18	11.3	0.1	0.1
4	P19	11.6	1.4	1.8
4	P20	9.4	2.5	1.8
4	P21	9.8	1.6	2.1
4	P22	10.0	1.0	1.8
4	P23	10.1	0.2	1.2
4	P24	11.3	0.2	0.4
4	P25	11.9	1.1	1.2
5	P1	13.2	1.4	2.0
5	P2	14.3	0.2	0.5
5	P3	11.6	0.1	0.7
5	P4	10.2	0.6	4.2
5	P5	10.1	0.1	4.9
5	P6	10.5	0.3	1.7
5	P7	13.2	2.3	2.0
5	P8	13.1	0.7	1.6
5	P9	12.5	1.1	2.5
5	P10	11.2	0.3	0.8
5	P11	10.8	0.3	0.8
5	P12	10.5	0.6	1.5
5	P13	10.2	1.5	1.7
5	P14	9.7	0.4	1.7
5	P15	10.7	0.1	2.8
5	P16	10.6	0.3	1.6
5	P17	11.4	0.1	1.4
5	P18	13.1	0.3	2.1
5	P19	13.3	0.4	1.8
5	P20	10.2	0.4	0.9
5	P21	10.4	0.6	3.2
5	P22	10.4	0.3	1.1
5	P23	11.2	0.6	1.8
5	P24	12.7	0.0	1.4
5	P25	13.0	0.4	2.0
6	P1	12.7	0.0	-0.3
6	P2	12.7	1.1	0.4
6	P3	10.8	0.3	0.0
6	P4	10.7	0.4	0.3
6	P5	10.2	1.5	1.5
6	P6	9.7	1.4	0.6
6	P7	12.7	1.4	0.9
6	P8	12.5	1.4	1.0
6	P9	12.2	0.0	0.1
6	P10	10.6	0.4	0.6
6	P11	10.4	0.3	0.4

6	P12	10.4	0.3	1.0
6	P13	10.1	1.2	1.1
6	P14	9.7	2.2	1.7
6	P15	10.4	0.4	0.5
6	P16	10.3	0.3	0.1
6	P17	10.8	0.5	0.3
6	P18	12.2	-0.1	0.1
6	P19	12.4	1.2	1.2
6	P20	9.8	1.7	1.4
6	P21	10.3	1.3	2.1
6	P22	10.9	0.1	0.1
6	P23	10.8	0.0	1.1
6	P24	11.9	0.2	0.9
6	P25	12.6	1.2	1.4
7	P1	12.3	1.1	1.6
7	P2	12.0	0.1	1.3
7	P3	10.3	0.2	1.1
7	P4	10.8	0.3	2.6
7	P5	10.0	1.9	2.4
7	P6	9.8	1.3	4.3
7	P7	12.5	1.2	1.4
7	P8	12.3	1.2	1.2
7	P9	12.3	-0.2	0.0
7	P10	10.6	0.4	1.6
7	P11	10.6	1.3	1.5
7	P12	10.0	1.4	1.3
7	P13	10.1	1.3	1.1
7	P14	10.2	0.8	1.2
7	P15	10.4	0.6	1.1
7	P16	10.2	0.9	3.9
7	P17	10.7	0.2	0.1
7	P18	12.1	0.0	-0.1
7	P19	12.3	1.2	1.6
7	P20	9.6	1.4	3.2
7	P21	10.8	1.0	2.4
7	P22	11.1	1.1	3.9
7	P23	10.8	0.1	1.9
7	P24	12.1	0.2	0.1
7	P25	12.3	2.2	1.4
8	P1	12.5	0.2	1.6
8	P2	12.3	0.9	1.7
8	P3	11.1	0.2	1.2
8	P4	10.9	1.8	2.5
8	P5	10.6	1.5	1.5
8	P6	10.0	1.1	1.7
8	P7	12.8	1.9	1.8
8	P8	12.9	1.1	1.7
8	P9	12.6	0.0	0.3
8	P10	10.5	0.7	0.1
8	P11	10.7	0.8	0.4

8	P12	10.3	1.4	1.4
8	P13	10.4	1.2	1.7
8	P14	10.4	0.9	1.4
8	P15	10.4	1.2	1.3
8	P16	10.6	-0.1	0.3
8	P17	10.4	0.0	0.2
8	P18	11.2	0.6	0.3
8	P19	11.1	0.2	0.8
8	P20	9.4	0.9	2.0
8	P21	10.1	1.4	1.1
8	P22	9.9	0.4	2.4
8	P23	10.6	-0.1	0.4
8	P24	11.3	1.1	1.1
8	P25	11.3	0.6	1.5

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

DATA Continued

LLCR, Nitrogen Processed:

	Jul. 17 2003	Aug. 05 2003	Aug. 21 2003
Date			
Room Temp C	20	22	20
RH	52%	52%	55%
Initials	Troy Cook	Troy Cook	Troy Cook

mOhm values		Actual	Delta	Delta
Board	Position	Initial	Humidity-240 Hours	Humidity-480 Hours
1	P1	12.3	0.5	2.2
1	P2	12.2	0.3	0.4
1	P3	10.9	0.8	1.3
1	P4	10.5	0.2	0.7
1	P5	10.6	0.8	1.6
1	P6	10.2	1.7	2.8
1	P7	12.2	1.7	2.9
1	P8	12.5	1.9	5.6
1	P9	12.1	0.2	0.7
1	P10	10.7	2.0	3.6
1	P11	10.9	0.9	1.0
1	P12	10.6	1.0	0.8
1	P13	11.1	0.6	0.5
1	P14	10.1	1.4	2.0
1	P15	10.4	0.1	0.7
1	P16	10.3	0.6	2.1
1	P17	10.7	0.4	0.7
1	P18	11.5	0.6	1.7
1	P19	11.6	1.2	3.3
1	P20	10.4	1.1	3.9
1	P21	10.7	1.2	2.2
1	P22	10.7	0.5	1.4
1	P23	10.8	0.3	1.1
1	P24	11.8	0.6	1.6
1	P25	12.2	1.3	3.3
2	P1	12.9	0.4	1.6
2	P2	12.9	1.0	3.6
2	P3	11.2	2.0	1.5
2	P4	10.9	1.9	2.2
2	P5	10.6	2.2	2.0
2	P6	10.1	1.5	2.2
2	P7	12.4	0.6	2.7
2	P8	12.9	0.7	2.7
2	P9	12.6	-0.3	-0.3
2	P10	10.9	0.7	1.0
2	P11	11.6	1.6	0.3

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

2	P12	10.6	1.6	1.3
2	P13	10.4	1.5	1.5
2	P14	10.4	1.1	2.0
2	P15	10.3	0.9	1.5
2	P16	10.8	0.0	0.3
2	P17	10.6	0.0	0.2
2	P18	12.0	0.8	2.8
2	P19	12.8	0.5	1.4
2	P20	10.0	3.4	4.2
2	P21	10.6	1.6	1.4
2	P22	11.1	0.6	0.7
2	P23	11.3	0.5	0.4
2	P24	12.8	0.1	0.1
2	P25	13.0	1.5	1.5
3	P1	13.9	4.1	1.6
3	P2	13.5	1.0	1.4
3	P3	11.3	1.1	1.2
3	P4	11.1	1.9	2.0
3	P5	11.2	1.3	2.6
3	P6	9.6	2.0	2.6
3	P7	13.5	2.2	1.6
3	P8	13.6	1.8	1.4
3	P9	13.4	0.2	0.4
3	P10	11.5	1.2	1.2
3	P11	10.8	1.4	1.8
3	P12	11.2	2.0	1.5
3	P13	10.2	1.9	3.0
3	P14	10.1	2.2	2.2
3	P15	11.2	2.7	2.9
3	P16	10.5	0.5	1.2
3	P17	11.6	1.6	1.5
3	P18	13.6	0.2	2.5
3	P19	13.2	4.4	1.2
3	P20	10.0	1.4	2.4
3	P21	10.2	3.1	3.0
3	P22	11.0	1.6	1.7
3	P23	11.0	0.5	3.6
3	P24	12.9	1.8	1.5
3	P25	13.0	2.3	2.0
4	P1	13.8	1.0	3.7
4	P2	13.0	0.4	5.0
4	P3	11.6	3.1	3.7
4	P4	11.0	0.7	1.7
4	P5	10.7	0.9	3.6
4	P6	10.4	1.8	2.2
4	P7	13.3	1.9	4.1
4	P8	13.3	1.8	2.2
4	P9	13.0	0.2	2.3
4	P10	12.0	0.3	1.1
4	P11	11.6	0.8	0.6

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

4	P12	11.3	1.0	2.3
4	P13	10.2	1.5	2.6
4	P14	10.5	1.8	3.6
4	P15	11.0	1.8	2.7
4	P16	11.1	0.8	-0.3
4	P17	11.4	2.6	-0.3
4	P18	13.1	0.2	1.7
4	P19	13.0	0.8	1.8
4	P20	10.1	5.7	3.2
4	P21	10.3	2.6	2.1
4	P22	10.9	1.9	1.1
4	P23	10.8	0.3	1.3
4	P24	12.8	0.2	0.9
4	P25	13.0	1.6	2.0
5	P1	11.8	0.3	1.7
5	P2	11.6	0.3	1.7
5	P3	10.9	0.6	1.5
5	P4	10.5	1.9	2.4
5	P5	10.6	0.5	2.5
5	P6	10.0	1.9	2.9
5	P7	11.7	2.4	2.5
5	P8	11.7	3.2	3.3
5	P9	11.6	1.1	2.2
5	P10	10.6	0.2	0.9
5	P11	9.8	0.2	1.6
5	P12	10.2	2.0	2.7
5	P13	9.9	1.5	1.4
5	P14	9.6	1.9	2.0
5	P15	10.1	1.5	2.3
5	P16	10.4	1.7	1.6
5	P17	10.4	4.2	1.4
5	P18	11.3	0.6	0.8
5	P19	11.6	0.3	0.4
5	P20	10.0	5.3	4.3
5	P21	10.3	0.5	2.0
5	P22	10.7	0.3	1.0
5	P23	10.8	0.9	2.0
5	P24	11.4	2.1	4.3
5	P25	12.0	3.9	1.5
6	P1	13.7	0.4	1.2
6	P2	14.1	0.6	0.9
6	P3	11.7	1.2	1.6
6	P4	11.6	0.8	1.1
6	P5	10.6	1.1	2.3
6	P6	11.4	-0.2	0.0
6	P7	14.2	1.5	2.6
6	P8	14.1	2.1	2.7
6	P9	13.7	0.7	0.2
6	P10	11.8	1.2	1.5
6	P11	10.9	0.4	1.6

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

6	P12	11.5	1.2	2.2
6	P13	11.6	0.4	5.1
6	P14	10.3	1.7	3.6
6	P15	11.0	1.4	2.6
6	P16	10.9	0.6	2.0
6	P17	11.7	0.2	1.2
6	P18	13.6	0.3	1.8
6	P19	13.6	0.5	1.4
6	P20	9.6	1.6	2.2
6	P21	11.0	1.2	1.7
6	P22	12.4	0.2	0.5
6	P23	11.2	0.2	0.5
6	P24	13.4	0.6	2.3
6	P25	14.0	1.3	3.4
7	P1	14.5	1.9	2.5
7	P2	14.3	1.2	1.8
7	P3	11.9	1.0	2.7
7	P4	11.5	1.5	2.2
7	P5	12.2	2.1	0.9
7	P6	10.4	2.6	4.0
7	P7	14.5	1.6	2.0
7	P8	15.0	1.0	1.0
7	P9	14.1	0.6	1.4
7	P10	12.3	4.0	1.3
7	P11	11.6	2.1	1.7
7	P12	11.4	1.7	2.8
7	P13	10.9	1.9	3.3
7	P14	10.7	1.7	2.5
7	P15	11.1	1.4	2.0
7	P16	11.3	1.1	1.2
7	P17	12.2	1.2	1.5
7	P18	13.6	0.9	2.8
7	P19	13.7	1.6	1.0
7	P20	10.8	1.6	3.0
7	P21	11.3	1.8	1.5
7	P22	11.4	2.0	1.6
7	P23	11.7	2.4	1.4
7	P24	14.3	0.9	0.0
7	P25	14.0	2.1	1.6
8	P1	12.0	0.0	0.6
8	P2	11.5	0.2	1.0
8	P3	11.0	1.3	1.7
8	P4	10.0	1.7	2.0
8	P5	10.3	1.7	1.9
8	P6	10.2	1.3	1.4
8	P7	11.9	1.5	1.9
8	P8	12.0	1.4	2.0
8	P9	11.6	0.6	2.5
8	P10	11.3	1.0	3.0
8	P11	10.7	0.2	0.7

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

8	P12	10.6	0.5	1.2
8	P13	10.1	1.1	2.0
8	P14	9.9	1.4	2.3
8	P15	10.5	1.8	2.6
8	P16	10.2	0.4	1.7
8	P17	11.2	-0.1	1.1
8	P18	11.2	1.0	1.1
8	P19	11.6	0.7	2.2
8	P20	10.1	2.4	3.0
8	P21	9.8	0.7	0.8
8	P22	10.5	0.1	1.3
8	P23	10.6	0.3	0.7
8	P24	11.4	0.4	0.8
8	P25	11.8	2.0	1.6

Tracking Code: TC0327-N/A-0228	Part #: PLCC-044-T-A
Part description: PLCC	

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: THL-01
Description: Temperature/Humidity Chart Recorder
Manufacturer: Dickson
Model: THDX
Serial #: 9316255
Accuracy: Temp: +/- 1C; Humidity: +/-2% RH (0 - 60%) +/- 3% RH (61 - 95%).
… Last Cal: 7/15/02, Next Cal: 7/15/03

Equipment #: MO-01
Description: Micro-Ohmeter
Manufacturer: Keithley
Model: 580
Serial #: 0772740
Accuracy: See Manual
… Last Cal6/12/03, Next Cal: 6/12/04

Equipment #: MO-03
Description: Multimeter /Data Acquisition System
Manufacturer: Keithley
Model: 2700
Serial #: 0791975
Accuracy: See Manual
… Last Cal: 6/12/03, Next Cal: 6/12/04

Equipment #: THC-01
Description: Temperature/Humidity Chamber
Manufacturer: Thermotron
Model: SM-8-7800
Serial #: 30676
Accuracy: See Manual
… Last Cal: 5/28/2003, Next Cal: 5/28/2004

Equipment #: OV-5
Description: Nitrongen Purge IR Reflow
Manufacturer: Vitronics Soltec
Model: XPM-730
Serial #: XN 70328
Accuracy: +/- 5 deg. C