**Report By:**

**National TAB - Kansas City**
**1126 Swift St**
**N Kansas City, MO 64116**

**Report: CERTIFIED TAB REPORT**

**Function: Test, Adjust, & Balance**

**Date: 07/03/2024**

# PROJECT

## Rivermaid Trading Co (Lodi, CA)

6337 East Pine St

Lodi, CA 95240

Client

IC Refrigeration

2216 Rockefeller Dr.

Ceres, CA 95307

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## Table Of Contents

# CERTIFICATION

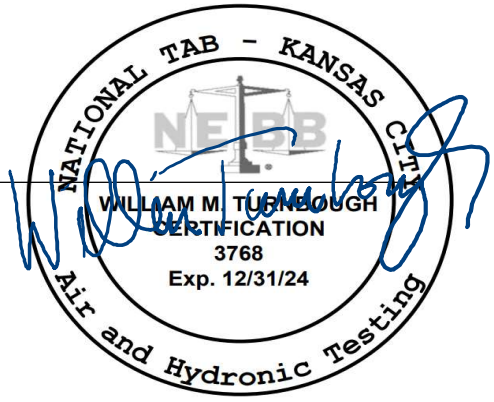
**PROJECT:** RIVERMAID (LODI, CA)

The data presented in this report is a record of system measurements and final adjustments that have been obtained in accordance with the current edition of the NEBB Procedural Standard for Testing, Adjusting and Balancing of Environmental Systems. The measurements shown, and the information given, in this report are certified to be accurate and complete, at the time and date information was gathered. Any variances from design quantities, which exceed NEBB tolerances, are noted in the TAB report project summary.

**NEBB TAB FIRM:** National TAB - Kansas City
**REGISTRATION NO:** 3768
**CERTIFIED BY:** Will Turnbough
**DATE:** 7/3/2024

## Submitted and Certified by:

**NEBB TAB FIRM:** National TAB - Kansas City
**TAB PROFESSIONAL:** Will Turnbough
**REGISTRATION NO:** CP-24289
**CERTIFICATION EXP:** 12/31/2024



## Project Summary

AC's (Roof Top Units) w/ Diffusers
Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

HPFC's
The three HPFC's share common ductwork. The units were balanced by having them all run simultaneously and running at the same fan speed. The total airflow for the diffusers serving these units is equal to the total airflow for all three units. The diffusers were then balanced to design. OA was measured via a traverse of the ductwork.

Prop Fans (PF's)
The prop fan airflow was measured by reading the velocity at the mesh intake air grille with a velgrid. The velocity times the area was equal to the airflow of the fans.

Ceiling Exhaust Fans
The ceiling exhaust fans were measured using a flow hood. If speed adjustment was provided, the fan speed was adjusted to within design tolerance. Any equipment that fell outside of this tolerance is noted throughout the report.

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: AHU/RTU

**Asset: AC-1** AREA:12

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | INTERNATIONAL COMFORT PRODUCTS |
| **Serial Num** | - | P233468885 |
| **Model Num** | NA | RHV120L02A0AAAA |
| **Configuration** | VERTICAL | HORIZONTAL |
| **Num PreFilter 1** | - | 1 |
| **PreFilter Size 1** | - | 20.5X29.5 |
| **Num Final Filter 1** | - | 4 |
| **Final Filter Size 1** | - | 20X20X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | - | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 480 | 460 |
| **Rated Amperage** | - | 3 |
| **Service Factor** | - | NL |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 4000 | 4219 |
| **SF RPM** | - | 1563 |
| **RA CFM** | 3550 | 3757 |
| **OA CFM** | 450 | 462 |
| **RL Voltage** | 480 | 485/485/483 |
| **RL Amperage** | 3 | 1.45/1.45/1.46 |
| **RA Damper Position** | - | 85% |
| **OA Damper Position** | - | 15% |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.41" |
| **Fan Suction SP** | - | -0.72" |
| **Fan Discharge SP** | - | 0.34" |
| **Total ESP** | 0.5 | 0.75" |
| **Fan Total SP** | - | 1.06" |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project:Rivermaid Trading Co (Lodi, CA)**

## AHU/RTU

### Diffuser Supply (GRD)

**AC-1/12**

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **CFM(1)** | **FINAL CFM** | **% to design** |
| 1-1 | 12 | DS-1 | 18X10 | 500 | 511 | 542 | 108.4 |
| 1-3 | 12 | DS-1 | 18X10 | 500 | 531 | 541 | 108.2 |
| 1-3 | 12 | DS-1 | 18X10 | 500 | 527 | 507 | 101.4 |
| 1-4 | 12 | DS-1 | 18X10 | 500 | 621 | 537 | 107.4 |
| 1-5 | 12 | DS-1 | 18X10 | 500 | 433 | 504 | 100.8 |
| 1-6 | 12 | DS-1 | 18X10 | 500 | 489 | 542 | 108.4 |
| 1-7 | 12 | DS-1 | 18X10 | 500 | 601 | 512 | 102.4 |
| 1-8 | 12 | DS-1 | 18X10 | 500 | 572 | 534 | 106.8 |
| Total | | | | 4000 | 4285 | 4219 | 105.48% |

### Diffuser Ret/Exh (GRD)

**AC-1/12**

| Asset | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| R1-1 | WR-1 | 30X30 | 3550 | 1 | 3757 | 3757 | 3757 | 105.8 |
| Total | | | 3550 | | 3757 | 3757 | 3757 | 105.83% |

**Completed By: Zack Eismin on 07/02/2024**

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: AHU/RTU

**Asset: AC-2** AREA:13

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | INTERNATIONAL COMFORT PRODUCTS |
| **Serial Num** | - | P233468886 |
| **Model Num** | NA | RHV120L02A0A0AAAA |
| **Configuration** | VERTICAL | HORIZONTAL |
| **Num PreFilter 1** | - | 1 |
| **PreFilter Size 1** | - | 20.5X29.5 |
| **Num Final Filter 1** | - | 4 |
| **Final Filter Size 1** | - | 20X20X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | - | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 480 | 460 |
| **Rated Amperage** | - | 3 |
| **Service Factor** | - | NL |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 4000 | 4156 |
| **SF RPM** | - | 1577 |
| **RA CFM** | 3400 | 3535 |
| **OA CFM** | 600 | 621 |
| **RL Voltage** | 480 | 485/484/486 |
| **RL Amperage** | - | 1.47/1.48/1.44 |
| **VFD Max SetPt** | - | N/A |
| **SF Motor Freq(HZ)** | - | N/A |
| **SF System SetPt** | - | N/A |
| **RA Damper Position** | - | 80% |
| **OA Damper Position** | - | 20% |
| **Brake Horse Power** | - | N/A |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.39" |
| **Fan Suction SP** | - | -0.66" |
| **Fan Discharge SP** | - | 0.37" |
| **Total ESP** | 0.5 | 0.76" |
| **Fan Total SP** | - | 1.03" |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project:Rivermaid Trading Co (Lodi, CA)**

## AHU/RTU

### Diffuser Supply (GRD)

**AC-2/13**

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **CFM(1)** | **FINAL CFM** | **% to design** |
| 2-1 | 13 | DS-1 | 18X10 | 500 | 411 | 492 | 98.4 |
| 2-2 | 13 | DS-1 | 18X10 | 500 | 452 | 521 | 104.2 |
| 2-3 | 13 | DS-1 | 18X10 | 500 | 552 | 517 | 103.4 |
| 2-4 | 13 | DS-1 | 18X10 | 500 | 571 | 531 | 106.2 |
| 2-5 | 13 | DS-1 | 18X10 | 500 | 511 | 507 | 101.4 |
| 2-6 | 13 | DS-1 | 18X10 | 500 | 629 | 531 | 106.2 |
| 2-7 | 13 | DS-1 | 18X10 | 500 | 542 | 531 | 106.2 |
| 2-8 | 13 | DS-1 | 18X10 | 500 | 531 | 526 | 105.2 |
| Total | | | | 4000 | 4199 | 4156 | 103.9% |

### Diffuser Ret/Exh (GRD)

**AC-2/13**

| Asset | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| R2-1 | WR-1 | 30X30 | 3400 | 1 | 3535 | 3535 | 3535 | 104.0 |
| Total | | | 3400 | | 3535 | 3535 | 3535 | 103.97% |

**Completed By: Zack Eismin on 07/01/2024**

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: AHU/RTU

**Asset: AC-3** AREA:13

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | INTERNATIONAL COMFORT PRODUCTS |
| **Serial Num** | - | P232765054 |
| **Model Num** | NA | RHV120L02A0AAAA |
| **Configuration** | VERTICAL | HORIZONTAL |
| **Num PreFilter 1** | - | 1 |
| **PreFilter Size 1** | - | 20.5X29.5 |
| **Num Final Filter 1** | - | 4 |
| **Final Filter Size 1** | - | 20X20X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | - | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 480 | 460 |
| **Rated Amperage** | - | 3 |
| **Service Factor** | - | NL |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 4000 | 4021 |
| **SF RPM** | - | 1490 |
| **RA CFM** | 3400 | 3414 |
| **OA CFM** | 600 | 609 |
| **RL Voltage** | 480 | 485/488/488 |
| **RL Amperage** | 2 | 1.62/1.60/1.59 |
| **VFD Max SetPt** | - | N/A |
| **SF Motor Freq(HZ)** | - | N/A |
| **SF System SetPt** | - | N/A |
| **RA Damper Position** | - | 80% |
| **OA Damper Position** | - | 20% |
| **Brake Horse Power** | - | N/A |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.45" |
| **Fan Suction SP** | - | -0.69" |
| **Fan Discharge SP** | - | 0.41" |
| **Total ESP** | 0.5 | 0.86" |
| **Fan Total SP** | - | 1.1" |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project:Rivermaid Trading Co (Lodi, CA)**

## AHU/RTU

### Diffuser Supply (GRD)

**AC-3/13**

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **CFM(1)** | **FINAL CFM** | **% to design** |
| 3-1 | 13 | DS-1 | 18X10 | 500 | 421 | 484 | 96.8 |
| 3-2 | 13 | DS-1 | 18X10 | 500 | 479 | 489 | 97.8 |
| 3-3 | 13 | DS-1 | 18X10 | 500 | 527 | 532 | 106.4 |
| 3-4 | 13 | DS-1 | 18X10 | 500 | 543 | 512 | 102.4 |
| 3-5 | 13 | DS-1 | 18X10 | 500 | 601 | 488 | 97.6 |
| 3-6 | 13 | DS-1 | 18X10 | 500 | 567 | 511 | 102.2 |
| 3-7 | 13 | DS-1 | 18X10 | 500 | 521 | 507 | 101.4 |
| 3-8 | 13 | DS-1 | 18X10 | 500 | 441 | 498 | 99.6 |
| Total | | | | 4000 | 4100 | 4021 | 100.52% |

### Diffuser Ret/Exh (GRD)

**AC-3/13**

| Asset | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| R3-1 | WR-1 | 30X30 | 3400 | 1 | 3414 | 3414 | 3414 | 100.4 |
| Total | | | 3400 | | 3414 | 3414 | 3414 | 100.41% |

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# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: AHU/RTU

**Asset: AC-4** AREA:13

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | INTERNATIONAL COMFORT PRODUCTS |
| **Serial Num** | - | P233468884 |
| **Model Num** | NA | NA |
| **Configuration** | VERTICAL | HORIZONTAL |
| **Num PreFilter 1** | - | 1 |
| **PreFilter Size 1** | - | 20.5X29.5 |
| **Num Final Filter 1** | - | 4 |
| **Final Filter Size 1** | - | 20X20X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | - | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 480 | 460 |
| **Rated Amperage** | - | 3 |
| **Service Factor** | - | NL |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 4000 | 4089 |
| **SF RPM** | - | 1590 |
| **RA CFM** | 3400 | 3501 |
| **OA CFM** | 600 | 588 |
| **RL Voltage** | 480 | 488/488/489 |
| **RL Amperage** | 22 | 1.9/1.85/1.88 |
| **VFD Max SetPt** | - | N/A |
| **SF Motor Freq(HZ)** | - | N/A |
| **SF System SetPt** | - | N/A |
| **RA Damper Position** | - | 80% |
| **OA Damper Position** | - | 20% |
| **Brake Horse Power** | - | N/A |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.48" |
| **Fan Suction SP** | - | -0.79" |
| **Fan Discharge SP** | - | 0.52" |
| **Total ESP** | 0.5 | 1.0" |
| **Fan Total SP** | - | 1.31" |

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# National TAB

**Project:Rivermaid Trading Co (Lodi, CA)**

## AHU/RTU

### Diffuser Supply (GRD)

**AC-4/13**

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **CFM(1)** | **FINAL CFM** | **% to design** |
| 4-1 | 13 | DS-1 | 18X10 | 500 | 522 | 547 | 109.4 |
| 4-2 | 13 | DS-1 | 18X10 | 500 | 531 | 515 | 103.0 |
| 4-3 | 13 | DS-1 | 18X10 | 500 | 662 | 521 | 104.2 |
| 4-4 | 13 | DS-1 | 18X10 | 500 | 701 | 496 | 99.2 |
| 4-5 | 13 | DS-1 | 18X10 | 500 | 402 | 513 | 102.6 |
| 4-6 | 13 | DS-1 | 18X10 | 500 | 451 | 526 | 105.2 |
| 4-7 | 13 | DS-1 | 18X10 | 500 | 488 | 492 | 98.4 |
| 4-8 | 13 | DS-1 | 18X10 | 500 | 403 | 479 | 95.8 |
| Total | | | | 4000 | 4160 | 4089 | 102.22% |

### Diffuser Ret/Exh (GRD)

**AC-4/13**

| Asset | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| R4-1 | | | 3400 | 1 | 3501 | 3501 | 3501 | 103.0 |
| Total | | | 3400 | | 3501 | 3501 | 3501 | 102.97% |

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# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: Fan Coil

**Asset: HPFC-1** AREA:FCU COMMON DUCT, TOTAL 1400 MIN OA

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | INTERNATIONAL COMFORT PRODUCTS |
| **Model Num** | NA | FVM4X6000BL |
| **Serial Num** | - | F233413342 |
| **Configuration** | - | VERTICAL |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Horsepower** | - | 3/4 |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 208 | 230 |
| **Amperage (rated)** | - | 6.8 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SFAN CFM** | 2000 | 1857 |
| **Motor Speed SetPt** | - | HI |
| **RL Voltage** | - | 208 |
| **RL Amperage** | - | 6.8 |
| **RA CFM** | 1535 | 1405 |
| **OA CFM** | 466 | 452 |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Suction ESP** | - | -0.43 |
| **Discharge ESP** | - | 0.39" |
| **Total ESP** | 0.5 | 0.82" |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project:Rivermaid Trading Co (Lodi, CA)**

## Fan Coil

### Diffuser Supply (GRD)

**HPFC-1/FCU COMMON DUCT, TOTAL 1400 MIN OA**

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **CFM(1)** | **FINAL CFM** | **% to design** |
| F1-1 | BREAK ROOM | CS-4 | 14X14 | 400 | 453 | 437 | 109.3 |
| F1-2 | BREAK ROOM | CS-4 | 14X14 | 400 | 431 | 422 | 105.5 |
| F1-3 | MENS RR | CS-4 | 10X10 | 250 | 413 | 271 | 108.4 |
| F1-4 | BREAK ROOM | CS-4 | 14X14 | 400 | 369 | 412 | 103.0 |
| F1-5 | BREAK ROOM | CS-4 | 14X14 | 400 | 377 | 405 | 101.3 |
| F1-6 | BREAK ROOM | CS-4 | 14X14 | 400 | 346 | 422 | 105.5 |
| F1-7 | BREAK ROOM | CS-4 | 14X14 | 400 | 311 | 403 | 100.8 |
| F1-8 | JAN | CS-4 | 8X8 | 50 | 171 | 53 | 106.0 |
| F1-9 | JAN | CS-4 | 8X8 | 50 | 30 | 48 | 96.0 |
| F1-10 | WOMENS RR | CS-4 | 10X10 | 300 | 516 | 312 | 104.0 |
| F1-11 | BREAK ROOM | CS-4 | 14X14 | 400 | 389 | 419 | 104.8 |
| F1-12 | BREAK ROOM | CS-4 | 14X14 | 400 | 428 | 411 | 102.8 |
| F1-13 | BREAK ROOM | CS-4 | 14X14 | 400 | 373 | 387 | 96.8 |
| F1-14 | BREAK ROOM | CS-4 | 14X14 | 400 | 362 | 392 | 98.0 |
| F1-15 | BREAK ROOM | CS-4 | 14X14 | 400 | 400 | 398 | 99.5 |
| F1-16 | BREAK ROOM | CS-4 | 14X14 | 400 | 350 | 379 | 94.8 |
| Total | | | | 5450 | 5719 | 5571 | 102.22% |

### Diffuser Ret/Exh (GRD)

**HPFC-1/FCU COMMON DUCT, TOTAL 1400 MIN OA**

| Asset | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| RF1-1 | WR-1 | 60X18 | 4600 | 1 | 4215 | 4215 | 4215 | 91.6 |
| Total | | | 4600 | | 4215 | 4215 | 4215 | 91.63% |

**Completed By: Zack Eismin on 07/02/2024**

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: Fan Coil

**Asset: HPFC-2** AREA:FCU COMMON DUCT, TOTAL 1400 MIN OA

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | INTERNATIONAL COMFORT PRODUCTS |
| **Model Num** | NA | FVM4X6000BL |
| **Serial Num** | - | F233200797 |
| **Configuration** | - | VERTICAL |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Horsepower** | - | 3/4 |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 208 | 230 |
| **Amperage (rated)** | - | 6.8 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SFAN CFM** | 2000 | 1857 |
| **Motor Speed SetPt** | - | HI |
| **RL Voltage** | - | 208 |
| **RL Amperage** | - | 6.8 |
| **RA CFM** | - | 1405 |
| **OA CFM** | - | 452 |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Suction ESP** | - | -0.43" |
| **Discharge ESP** | - | 0.39" |
| **Total ESP** | 0.5 | 0.82" |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: Fan Coil

**Asset: HPFC-3** AREA:FCU COMMON DUCT, TOTAL 1400 MIN OA

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | INTERNATIONAL COMFORT PRODUCTS |
| **Model Num** | NA | FVM4X6000BL |
| **Serial Num** | - | F233601863 |
| **Configuration** | - | VERTICAL |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Horsepower** | - | 3/4 |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 208 | 230 |
| **Amperage (rated)** | - | 6.8 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SFAN CFM** | 2000 | 1857 |
| **Motor Speed SetPt** | - | HI |
| **RL Voltage** | - | 208 |
| **RL Amperage** | - | 6.8 |
| **RA CFM** | - | 1405 |
| **OA CFM** | - | 452 |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Suction ESP** | - | -0.42" |
| **Discharge ESP** | - | 0.39" |
| **Total ESP** | 0.5 | 0.82" |

Completed By: Zack Eismin on 07/03/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: EF-1** AREA:JAN

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | BROAN |
| **Model Num** | NA | L100 |
| **Serial Num** | - | NL |
| **Type** | CEILING | CEILING |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 100 | 92 |
| **RL Voltage** | - | 120 |
| **RL Amperage** | - | NA |
| **Total ESP** | 0.5 | 0.32" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | 100W | NL |
| **Motor Rpm** | 850 | NL |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 120 | 120 |
| **Amperage (rated)** | - | 1.1 |
| **Service Factor** | - | NL |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: EF-2** AREA:JAN

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | BROAN |
| **Model Num** | NA | L100 |
| **Serial Num** | - | NA |
| **Type** | CEILING | CEILING |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 100 | 91 |
| **RL Voltage** | - | 120 |
| **RL Amperage** | - | NA |
| **Total ESP** | 0.5 | 0.33" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | 100W | NL |
| **Motor Rpm** | 850 | NL |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 120 | 120 |
| **Amperage (rated)** | - | NA |
| **Service Factor** | - | NL |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: EF-3** AREA:WOMENS RR

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | BROAN |
| **Model Num** | NA | L500 |
| **Serial Num** | - | NA |
| **Type** | CEILING | CEILING |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 400 | 372 |
| **RL Voltage** | - | 120 |
| **RL Amperage** | - | NA |
| **Total ESP** | 0.5 | 0.41" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | 232W | NL |
| **Motor Rpm** | 890 | NL |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 120 | 120 |
| **Amperage (rated)** | - | NL |
| **Service Factor** | - | NL |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: EF-4** AREA:MENS RR

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | BROAN |
| **Model Num** | NA | L500 |
| **Serial Num** | - | NA |
| **Type** | CEILING | CEILING |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 400 | 368 |
| **RL Voltage** | - | 120 |
| **RL Amperage** | - | NA |
| **Total ESP** | 0.5 | 0.51" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Frame** | - | NL |
| **Horsepower** | 232W | NL |
| **Motor Rpm** | 890 | NL |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 120 | 120 |
| **Amperage (rated)** | - | NA |
| **Service Factor** | - | NL |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: IEF-1** AREA:ELECT/UTILITY

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | BROAN |
| **Model Num** | NA | L500LNA |
| **Serial Num** | - | NA |
| **Type** | INLINE EXHAUST | INLINE |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BROAD-OCEAN MOTOR |
| **Frame** | - | NL |
| **Horsepower** | 232W | NL |
| **Motor Rpm** | - | 815 |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 120 | 120 |
| **Amperage (rated)** | - | 1.7 |
| **Service Factor** | - | NL |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 450 | 411 |
| **Fan RPM** | 890 | 815 |
| **RL Voltage** | - | 120 |
| **RL Amperage** | - | 1.5 |
| **Suction ESP** | - | ATM |
| **Discharge ESP** | - | 0.35" |
| **Total ESP** | 0.5 | 0.35" |
| **Brake Horse Power** | - | N/A |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: PF-1** AREA:DISTRIBUTION

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | PENNBARRY |
| **Model Num** | NA | LWP24L1 |
| **Serial Num** | - | B24A060377 |
| **Type** | WALL PROP | WALL PROP |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 6000 | 5732 |
| **RL Voltage** | - | 488/489/488 |
| **RL Amperage** | - | 1.02 |
| **Total ESP** | 0.25 | 0.19" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR RELIANCE |
| **Frame** | - | 56 |
| **Horsepower** | 1 | 0.75 |
| **Motor Rpm** | 850 | 1765 |
| **Phase** | 3 | 3 |
| **Voltage (rated)** | 480 | 460 |
| **Amperage (rated)** | - | 1.14 |
| **Service Factor** | - | 1.25 |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: PF-2** AREA:DISTRIBUTION

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | PENNBARRY |
| **Model Num** | NA | LWP24L1 |
| **Serial Num** | - | B24A060380 |
| **Type** | WALL PROP | WALL PROP |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 6000 | 5531 |
| **RL Voltage** | - | 480 |
| **RL Amperage** | - | 1.04/1.05/1.06 |
| **Total ESP** | 0.25 | 0.22" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR RELIANCE |
| **Frame** | - | 56 |
| **Horsepower** | 1 | 3/4 |
| **Motor Rpm** | 850 | 1765 |
| **Phase** | 3 | 3 |
| **Voltage (rated)** | 480 | 480 |
| **Amperage (rated)** | - | 1.14 |
| **Service Factor** | - | 1.25 |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: PF-3** AREA:DISTRIBUTION

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | PENNBARRY |
| **Model Num** | NA | LWP24L1 |
| **Serial Num** | - | B24A060378 |
| **Type** | WALL PROP | WALL PROP |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 6000 | 5899 |
| **RL Voltage** | - | 488/487/488 |
| **RL Amperage** | - | 1.10/1.11/1.09 |
| **Total ESP** | 0.25 | 0.23" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR RELIANCE |
| **Frame** | - | 56 |
| **Horsepower** | 1 | 3/4 |
| **Motor Rpm** | 850 | 1765 |
| **Phase** | 3 | 3 |
| **Voltage (rated)** | 480 | 460 |
| **Amperage (rated)** | - | 1.14 |
| **Service Factor** | - | 1.25 |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: PF-4** AREA:

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | PENNBARRY |
| **Model Num** | NA | LWP24L1 |
| **Serial Num** | - | NL |
| **Type** | - | WALL PROP |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 6000 | 5782 |
| **RL Voltage** | - | 488/488/489 |
| **RL Amperage** | - | 1.10/1.10/1.11 |
| **Total ESP** | - | 0.22" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR RELIANCE |
| **Frame** | - | 56 |
| **Horsepower** | - | 3/4 |
| **Motor Rpm** | - | 1765 |
| **Phase** | - | 3 |
| **Voltage (rated)** | - | 460 |
| **Amperage (rated)** | - | 1.14 |
| **Service Factor** | - | 1.25 |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: PF-5** AREA:DISTRIBUTION

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | PENNBARRY |
| **Model Num** | NA | LWP24L1 |
| **Serial Num** | - | NL |
| **Type** | WALL PROP | WALL PROP |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 6000 | 5935 |
| **RL Voltage** | - | 488/489/488 |
| **RL Amperage** | - | 1.12/1.11/1.12 |
| **Total ESP** | 0.25 | 0.24" |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR RELIANCE |
| **Frame** | - | 56 |
| **Horsepower** | 1 | 3/4 |
| **Motor Rpm** | 850 | 1765 |
| **Phase** | 3 | 3 |
| **Voltage (rated)** | 480 | 460 |
| **Amperage (rated)** | - | 1.14 |
| **Service Factor** | - | 1.25 |

Completed By: Zack Eismin on 07/02/2024

# National TAB

**Project: Rivermaid Trading Co (Lodi, CA)**

## System/Unit: FAN - Exhaust

**Asset: RF-1** AREA:MECH RM

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | NA | PENNBARRY |
| **Model Num** | NA | SQX270-0091 |
| **Serial Num** | - | B24AR45521 |
| **Type** | INLINE RETURN | INLINE |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR RELIANCE |
| **Frame** | - | 145T |
| **Horsepower** | 1 | 1.5 |
| **Motor Rpm** | - | 1770 |
| **Phase** | 3 | 3 |
| **Voltage (rated)** | 480 | 460 |
| **Amperage (rated)** | - | 2.3 |
| **Service Factor** | - | 1.15 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 5500 | 5433 |
| **Fan RPM** | 717 | NA |
| **RL Voltage** | - | 488/489/487 |
| **RL Amperage** | - | 1.86/1.91/1.93 |
| **Suction ESP** | - | -0.56" |
| **Discharge ESP** | - | 0.12" |
| **Total ESP** | 0.5 | 0.68" |
| **Brake Horse Power** | - | 1.25 |

Completed By: Zack Eismin on 07/02/2024

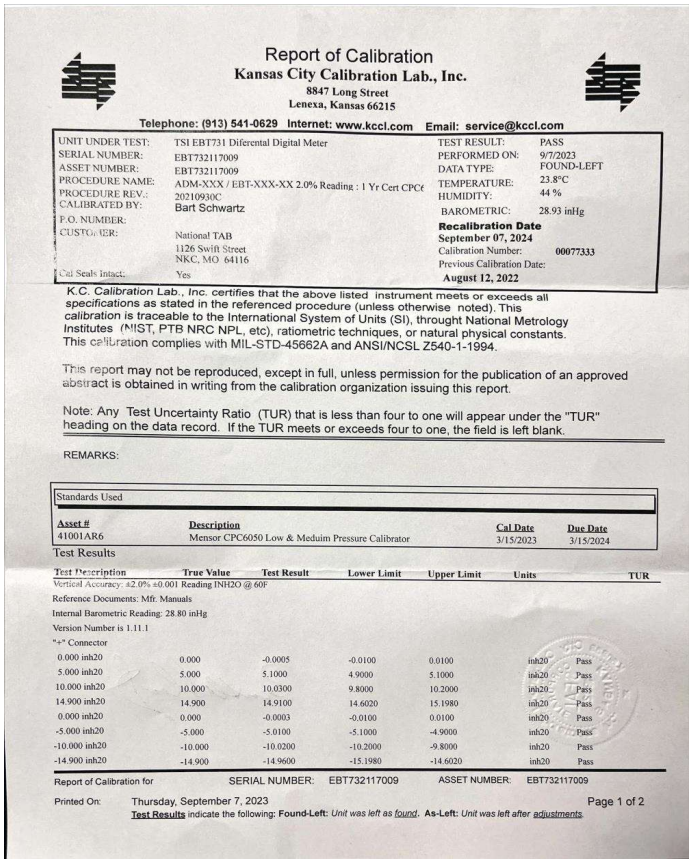
# Abbreviation List

| | |
|---|---|
| A = Area ($ft^2$) | S.F. = Service Factor |
| AHU = Air Handling Unit | SF = Supply Fan |
| $A_k$ = Effective Area | SP = Static Pressure |
| BHP = Brake Horsepower (IP) HP | SR = Supply Register |
| Btu = British Thermal Unit | T = Temperature |
| Btu/h = Btuh = BTUH = BTU/Hour | $T_{ma}$ = Mixed Air Temperature |
| CL = Center Distance (used in belt formula) | $T_{oa}$ = Outside Air Temperature |
| CD = Ceiling Diffuser | $T_{ra}$ = Return Air Temperature |
| CF = Correction Factor | H = Head (in wc, ft wc, psi) |
| CFM = Volumetric Flow:  Cubic Feet Per Minute | h = Enthalpy |
| CO2 = Carbon Dioxide | HP = Horsepower |
| CO = Carbon Monoxide | hr = Hour |
| $C_v$ = Flow Constant | $K_v$ = Flow constant (SI) |
| d = Diameter (in.) IP | kW = Kilowatt = 1000 Watts |
| Δ = Difference or Change (Final - Initial) | LAT = Leaving Air Temperature |
| DB = Dry Bulb | lb = Pounds |
| EA = Exhaust Air | LWT = Leaving Water Temperature |
| EAT = Entering Air Temperature | ma = Mixed Air |
| EF = Exhaust Fan | MIN = Minimum |
| Eff = Efficiency | MAX = Maximum |
| EG = Exhaust Grille | N/A = Not Applicable |
| ESP = External Static Pressure | NA = No Access |
| EWT = Entering Water Temperature | NL = Not Listed |
| °F = Degrees Fahrenheit, °F | NPSHA = Net Positive Suction Head Available |
| FPB = Fan Powered Box | NS = Not Specified |
| FLA = Full Load Amps | OA = Outside Air |
| fpm = Feet per Minute (fpm) | OAT = Outside Air Temperature |
| ft = Foot | PD = Sheave Pitch Diameter |
| gal = Gallons | P.D. = Pressure Drop |
| GPM = Gallons Per Minute (GPM) | PF = Power Factor |
| h = Enthalpy (BTU/lb dry air) | SG = Supply Grille |
| P = Pressure | SR = Supply Register |
| ppm = parts per million | TP = Total Pressure |
| psi = Pounds Per Square Inch | $T_{ra}$ = Return Air Temperature |
| psid = PSI Differential | TS = Tip Speed (fpm) IP, (m/s) SI |
| r = Radius (in) | TSP = Total Static Pressure |
| % $_{ra}$ = % of Return Air | V = Velocity |
| RA = Return Air | VAV = Variable Air Volume |
| RAT = Return Air Temperature | VD = Volume Damper |
| RF = Return Fan | VFD = Variable Frequency Drive |
| RG = Return Grille | W = Watt |
| RH = Relative Humidity | WB = Wet Bulb |
| RPM = Revolutions Per Minute | wg = wc = water gauge = water column |
| RTU = Roof Top Unit | WHP = Water Horsepower (IP) |
| SA = Supply Air | ω = Humidity Ratio |

# National TAB

## Testing, Adjusting, and Balancing Equipment

| Function | | Range | Minimum Accuracy | Instrument Information | Calibration Date | Date Due |
|---|---|---|---|---|---|---|
| AIR | AIR PRESSURE | 0 in wg to 10 in wg | 2% +/- 0.001 in wg | TSI EBT731 EBT732117009 | 9/7/2023 | 9/7/2024 |
| | AIR VELOCITY INSTRUMENT | 50 fpm to 3900 fpm | +/- 5 % +/- 7 fpm | TSI EBT731 EBT732117009 | 9/7/2023 | 9/7/2024 |
| | DIRECT HOOD READING | 100 cfm to 2000 cfm | +/- 5 % +/- 7 cfm | TSI EBT731 EBT732117009 | 9/7/2023 | 9/7/2024 |
| TEMPERATURE | AIR METER | -20 F to 240 F | +/- .5 % 2 F | Cooper SRH77A S/N 100516003 | 9/29/2023 | 9/29/2024 |
| | AIR PROBE | -20 F to 240 F | +/- .5 % 2 F | Cooper SRH77A S/N 100516003 | 9/29/2023 | 9/29/2024 |
| | IMMERSION METER | -20 F to 240 F | +/- .5 % 2 F | Cooper SRH77A S/N 100516003 | 9/29/2023 | 9/29/2024 |
| | IMMERSION PROBE | -20 F to 240 F | +/- .5 % 2 F | Cooper SRH77A S/N 100516003 | 9/29/2023 | 9/29/2024 |
| | CONTACT METER | -20 F to 240 F | +/- .5 % 2 F | Cooper SRH77A S/N 100516003 | 9/29/2023 | 9/29/2024 |
| | CONTACT PROBE | -20 F to 240 F | +/- .5 % 2 F | Cooper SRH77A S/N 100516003 | 9/29/2023 | 9/29/2024 |
| HUMIDITY | HUMIDITY PROBE | 10 % RH to 90 % RH | 3% of reading | Cooper SRH77A S/N 100516003 | 9/29/2023 | 9/29/2024 |
| ELECTRICAL | VOLTAGE MEASUREMENT | 0 VAC to 600 VAC | 2 % reading +/- 5 digits | Klein Tools CL800 S/N 1220C-C1 | 9/29/2023 | 9/29/2024 |
| | AMPERAGE MEASUREMENT | 0 Amperers to 100 Amperes | 2 % reading +/- 5 digits | Klein Tools CL800 S/N 1220C-C1 | 9/29/2023 | 9/29/2024 |
| ROTATION | ROTATION MEASUREMENT | 60 rpm to 5000 rpm | 2 % reading 2 rpm | Shimpo DT 207Lp S/N D1690029R | 9/29/2023 | 9/29/2024 |



Report of Calibration
Kansas City Calibration Lab., Inc.
8847 Long Street
Lenexa, Kansas 66215
Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

| | | | |
|---|---|---|---|
| UNIT UNDER TEST: | TSI EBT731 Diferental Digital Meter | TEST RESULT: | PASS |
| SERIAL NUMBER: | EBT732117009 | PERFORMED ON: | 9/7/2023 |
| ASSET NUMBER: | EBT732117009 | DATA TYPE: | FOUND-LEFT |
| PROCEDURE NAME: | ADM-XXX / EBT-XXX-XX 2.0% Reading : 1 Yr Cert CPC( | TEMPERATURE: | 23.8°C |
| PROCEDURE REV.: | 20210930C | HUMIDITY: | 44 % |
| CALIBRATED BY: | Bart Schwartz | BAROMETRIC: | 28.93 inHg |
| P.O. NUMBER: | | **Recalibration Date** | |
| CUSTOMER: | National TAB<br>1126 Swift Street<br>NKC, MO 64116 | **September 07, 2024** | |
| | | Calibration Number: | 00077333 |
| Cal Seals Intact: | Yes | Previous Calibration Date: | **August 12, 2022** |

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), throught National Metrology Institutes (NIST, PTB NRC NPL, etc), ratiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCSL Z540-1-1994.

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Note: Any Test Uncertainty Ratio (TUR) that is less than four to one will appear under the "TUR" heading on the data record. If the TUR meets or exceeds four to one, the field is left blank.

REMARKS:

Standards Used

| Asset # | Description | Cal Date | Due Date |
|---|---|---|---|
| 41001AR6 | Mensor CPC6050 Low & Meduim Pressure Calibrator | 3/15/2023 | 3/15/2024 |

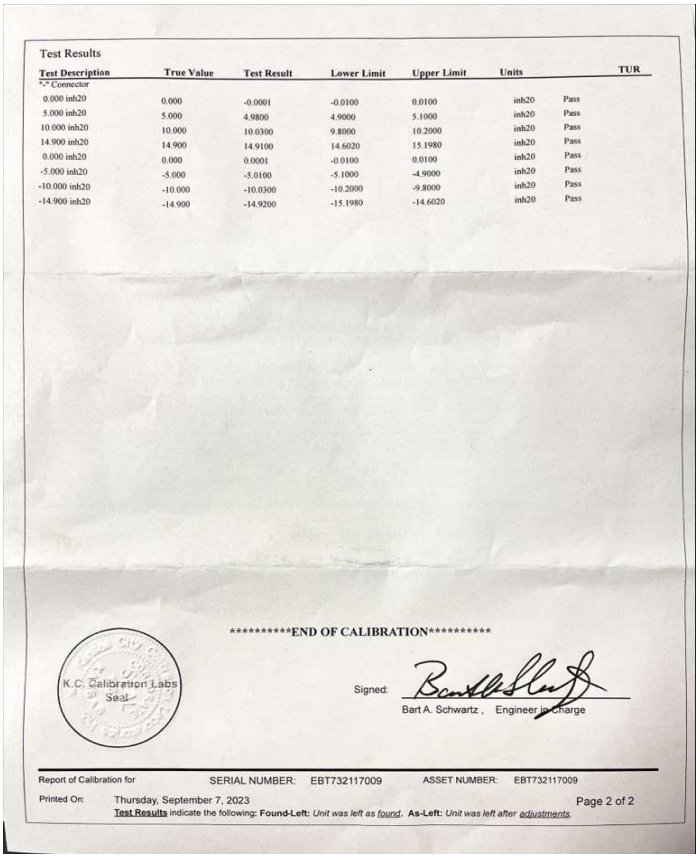
Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR |
|---|---|---|---|---|---|---|
| Vertical Accuracy: ±2.0% ±0.001 Reading INH2O @ 60F | | | | | | |
| Reference Documents: Mfr. Manuals | | | | | | |
| Internal Barometric Reading: 28.80 inHg | | | | | | |
| Version Number is 1.11.1 | | | | | | |
| "+" Connector | | | | | | |
| 0.000 inh20 | 0.000 | -0.0005 | -0.0100 | 0.0100 | inh20 | Pass |
| 5.000 inh20 | 5.000 | 5.1000 | 4.9000 | 5.1000 | inh20 | Pass |
| 10.000 inh20 | 10.000 | 10.0300 | 9.8000 | 10.2000 | inh20 | Pass |
| 14.900 inh20 | 14.900 | 14.9100 | 14.6020 | 15.1980 | inh20 | Pass |
| 0.000 inh20 | 0.000 | -0.0003 | -0.0100 | 0.0100 | inh20 | Pass |
| -5.000 inh20 | -5.000 | -5.0100 | -5.1000 | -4.9000 | inh20 | Pass |
| -10.000 inh20 | -10.000 | -10.0200 | -10.2000 | -9.8000 | inh20 | Pass |
| -14.900 inh20 | -14.900 | -14.9600 | -15.1980 | -14.6020 | inh20 | Pass |

Report of Calibration for SERIAL NUMBER: EBT732117009 ASSET NUMBER: EBT732117009

Printed On: Thursday, September 7, 2023 Page 1 of 2

**Test Results** indicate the following: **Found-Left:** *Unit was left as found*. **As-Left:** *Unit was left after adjustments*.



Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR |
|---|---|---|---|---|---|---|
| "+" Connector | | | | | | |
| 0.000 inh20 | 0.000 | -0.0001 | -0.0100 | 0.0100 | inh20 | Pass |
| 5.000 inh20 | 5.000 | 4.9800 | 4.9000 | 5.1000 | inh20 | Pass |
| 10.000 inh20 | 10.000 | 10.0300 | 9.8000 | 10.2000 | inh20 | Pass |
| 14.900 inh20 | 14.900 | 14.9100 | 14.6020 | 15.1980 | inh20 | Pass |
| 0.000 inh20 | 0.000 | 0.0001 | -0.0100 | 0.0100 | inh20 | Pass |
| -5.000 inh20 | -5.000 | -5.0100 | -5.1000 | -4.9000 | inh20 | Pass |
| -10.000 inh20 | -10.000 | -10.0300 | -10.2000 | -9.8000 | inh20 | Pass |
| -14.900 inh20 | -14.900 | -14.9200 | -15.1980 | -14.6020 | inh20 | Pass |

**********END OF CALIBRATION**********

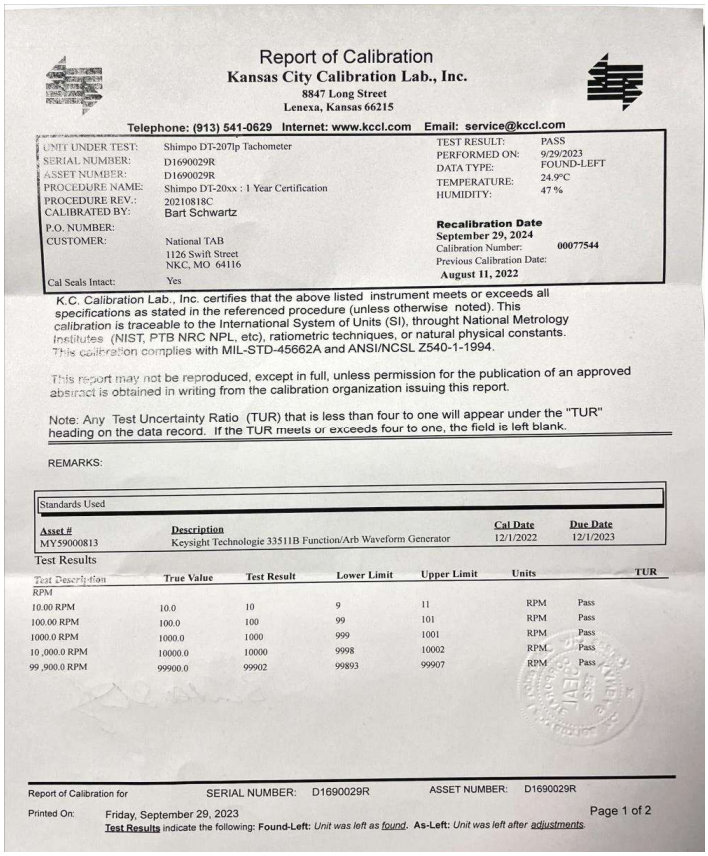
K.C. Calibration Labs Seal

Signed: Bart A. Schwartz , Engineer in Charge

Report of Calibration for SERIAL NUMBER: EBT732117009 ASSET NUMBER: EBT732117009

Printed On: Thursday, September 7, 2023 Page 2 of 2

**Test Results** indicate the following: **Found-Left:** *Unit was left as found*. **As-Left:** *Unit was left after adjustments*.



Report of Calibration
Kansas City Calibration Lab., Inc.
8847 Long Street
Lenexa, Kansas 66215
Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

| | | | |
|---|---|---|---|
| UNIT UNDER TEST: | Shimpo DT-207lp Tachometer | TEST RESULT: | PASS |
| SERIAL NUMBER: | D1690029R | PERFORMED ON: | 9/29/2023 |
| ASSET NUMBER: | D1690029R | DATA TYPE: | FOUND-LEFT |
| PROCEDURE NAME: | Shimpo DT-20xx : 1 Year Certification | TEMPERATURE: | 24.9°C |
| PROCEDURE REV.: | 20210818C | HUMIDITY: | 47 % |
| CALIBRATED BY: | Bart Schwartz | | |
| P.O. NUMBER: | | **Recalibration Date** | |
| CUSTOMER: | National TAB<br>1126 Swift Street<br>NKC, MO 64116 | **September 29, 2024** | |
| | | Calibration Number: | 00077544 |
| Cal Seals Intact: | Yes | Previous Calibration Date: | **August 11, 2022** |

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), throught National Metrology Institutes (NIST, PTB NRC NPL, etc), ratiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCSL Z540-1-1994.

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Note: Any Test Uncertainty Ratio (TUR) that is less than four to one will appear under the "TUR" heading on the data record. If the TUR meets or exceeds four to one, the field is left blank.

REMARKS:

Standards Used

| Asset # | Description | Cal Date | Due Date |
|---|---|---|---|
| MY59000813 | Keysight Technologie 33511B Function/Arb Waveform Generator | 12/1/2022 | 12/1/2023 |

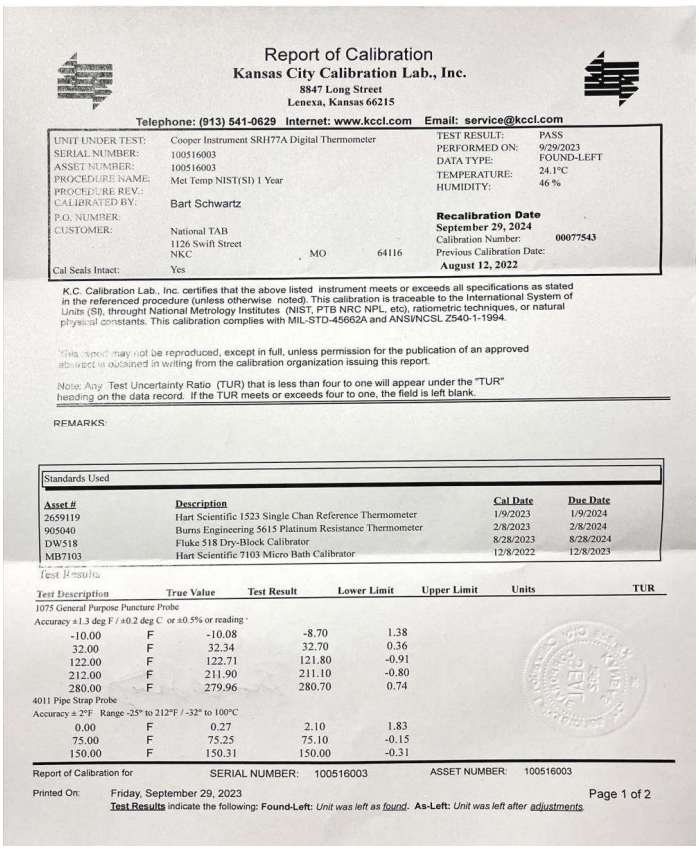
Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR |
|---|---|---|---|---|---|---|
| RPM | | | | | | |
| 10.00 RPM | 10.0 | 10 | 9 | 11 | RPM | Pass |
| 100.00 RPM | 100.0 | 100 | 99 | 101 | RPM | Pass |
| 1000.0 RPM | 1000.0 | 1000 | 999 | 1001 | RPM | Pass |
| 10 ,000.0 RPM | 10000.0 | 10000 | 9998 | 10002 | RPM | Pass |
| 99 ,900.0 RPM | 99900.0 | 99902 | 99893 | 99907 | RPM | Pass |

Report of Calibration for SERIAL NUMBER: D1690029R ASSET NUMBER: D1690029R

Printed On: Friday, September 29, 2023 Page 1 of 2

**Test Results** indicate the following: **Found-Left:** *Unit was left as found*. **As-Left:** *Unit was left after adjustments*.



Report of Calibration
Kansas City Calibration Lab., Inc.
8847 Long Street
Lenexa, Kansas 66215
Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

| | | | |
|---|---|---|---|
| UNIT UNDER TEST: | Cooper Instrument SRH77A Digital Thermometer | TEST RESULT: | PASS |
| SERIAL NUMBER: | 100516003 | PERFORMED ON: | 9/29/2023 |
| ASSET NUMBER: | 100516003 | DATA TYPE: | FOUND-LEFT |
| PROCEDURE NAME: | Met Temp NIST(SI) 1 Year | TEMPERATURE: | 24.1°C |
| PROCEDURE REV.: | | HUMIDITY: | 46 % |
| CALIBRATED BY: | Bart Schwartz | | |
| P.O. NUMBER: | | **Recalibration Date** | |
| CUSTOMER: | National TAB<br>1126 Swift Street<br>NKC MO 64116 | **September 29, 2024** | |
| | | Calibration Number: | 00077543 |
| Cal Seals Intact: | Yes | Previous Calibration Date: | **August 12, 2022** |

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), throught National Metrology Institutes (NIST, PTB NRC NPL, etc), ratiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCSL Z540-1-1994.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the calibration organization issuing this report.

Note: Any Test Uncertainty Ratio (TUR) that is less than four to one will appear under the "TUR" heading on the data record. If the TUR meets or exceeds four to one, the field is left blank.

REMARKS:

Standards Used

| Asset # | Description | Cal Date | Due Date |
|---|---|---|---|
| 2659119 | Hart Scientific 1523 Single Chan Reference Thermometer | 1/9/2023 | 1/9/2024 |
| 905040 | Burns Engineering 5615 Platinum Resistance Thermometer | 2/8/2023 | 2/8/2024 |
| DW518 | Fluke 518 Dry-Block Calibrator | 8/28/2023 | 8/28/2024 |
| MB7103 | Hart Scientific 7103 Micro Bath Calibrator | 12/8/2022 | 12/8/2023 |

Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR |
|---|---|---|---|---|---|---|
| 1075 General Purpose Puncture Probe | | | | | | |
| Accuracy ±1.3 deg F / ±0.2 deg C or ±0.5% or reading ' | | | | | | |
| -10.00 | F | -10.08 | -8.70 | 1.38 | | |
| 32.00 | F | 32.34 | 32.70 | 0.36 | | |
| 122.00 | F | 122.71 | 121.80 | -0.91 | | |
| 212.00 | F | 211.90 | 211.10 | -0.80 | | |
| 280.00 | F | 279.96 | 280.70 | 0.74 | | |
| 4011 Pipe Strap Probe | | | | | | |
| Accuracy ± 2°F Range -25° to 212°F / -32° to 100°C | | | | | | |
| 0.00 | F | 0.27 | 2.10 | 1.83 | | |
| 75.00 | F | 75.25 | 75.10 | -0.15 | | |
| 150.00 | F | 150.31 | 150.00 | -0.31 | | |

Report of Calibration for SERIAL NUMBER: 100516003 ASSET NUMBER: 100516003

Printed On: Friday, September 29, 2023 Page 1 of 2

**Test Results** indicate the following: **Found-Left:** *Unit was left as found*. **As-Left:** *Unit was left after adjustments*.

### Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR |
|---|---|---|---|---|---|---|
| 5028 Slim Humidity Probe | | | | | | |
| Accuracy ±2% from 20 to 80%RH, ±3% below 20 and a | | | | | | |
| 10.0 %RH @ 23.0°C | %RH | 10.0 | 16 | 6.0 | | |
| 25.0 %RH @23.0°C | %RH | 25.0 | 30 | 5.0 | | |
| 50.0 %RH @ 23.0°C | %RH | 50.0 | 53 | 3.0 | | |
| 75.0 %RH @ 23.0°C | %RH | 75.0 | 77 | 2.0 | | |
| 23.0°C @ 10.0 %RH | C | 23.0 | 23.2 | 0.2 | | |
| 23.0°C @ 25.0 %RH | C | 23.0 | 23.2 | 0.2 | | |
| 23.0°C @ 50.0 %RH | C | 23.0 | 23.2 | 0.2 | | |
| 23.0°C @ 75.0 %RH | C | 23.0 | 23.1 | 0.1 | | |

**********END OF CALIBRATION**********

K.C. Calibration Labs Seal

Signed: Bart A. Schwartz , Engineer in Charge

Report of Calibration for SERIAL NUMBER: 100516003 ASSET NUMBER: 100516003

Printed On: Friday, September 29, 2023 Page 2 of 2

**Test Results** indicate the following: **Found-Left:** *Unit was left as found.* **As-Left:** *Unit was left after adjustments.*

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## Report of Calibration

**Kansas City Calibration Lab., Inc.**
**8847 Long Street**
**Lenexa, Kansas 66215**

Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

| | | | |
|---|---|---|---|
| UNIT UNDER TEST: | Klein Tools CL800 True RMS Digital Clampmeter | TEST RESULT: | PASS |
| SERIAL NUMBER: | 1220C-C1 | PERFORMED ON: | 9/29/2023 |
| ASSET NUMBER: | 1220C-C1 | DATA TYPE: | FOUND-LEFT |
| PROCEDURE NAME: | Klein Tools CL800 : (1 year) CAL VER / 5520 | TEMPERATURE: | 24.9°C |
| PROCEDURE REV.: | 20230928 | HUMIDITY: | 46 % |
| CALIBRATED BY: | Bart Schwartz | | |
| P.O. NUMBER: | | **Recalibration Date** | |
| CUSTOMER: | National TAB<br>1126 Swift Street<br>NKC, MO 64116 | **September 29, 2024** | |
| | | Calibration Number: | 00077542 |
| | | Previous Calibration Date: | |
| Cal Seals Intact: | Unknown | | |

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), throught National Metrology Institutes (NIST, PTB NRC NPL, etc), ratiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCSL Z540-1-1994.



Note: Any Test Uncertainty Ratio (TUR) that is less than four to one will appear under the "TUR" heading on the data record. If the TUR meets or exceeds four to one, the field is left blank.

REMARKS:

Standards Used

| Asset # | Description | Cal Date | Due Date |
|---|---|---|---|
| 3277903 | Fluke 5522A Multi-Product Calibrator | 11/30/2022 | 11/30/2023 |

### Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR | |
|---|---|---|---|---|---|---|---|
| Root Difference Square guardbanding method used | | | | | | | |
| AC VOLTS TESTS | | | | | | | |
| 6 V Range | | | | | | | |
| 5.900 V @ 60 Hz | 5.9000 | 5.897 | 5.807 | 5.994 | V | | Pass |
| 60 V Range | | | | | | | |
| 59.00 V @ 60 Hz | 59.000 | 58.97 | 58.24 | 59.76 | V | | Pass |
| 600 V Range | | | | | | | |
| 590.0 V @ 60 Hz | 590.00 | 589.7 | 582.4 | 597.6 | V | | Pass |
| 1000 V Range | | | | | | | |
| 990.0 V @ 60 Hz | 990.00 | 991.0 | 970.1 | 1009.9 | V | | Pass |
| DC VOLTS TESTS | | | | | | | |
| 600 mV Range | | | | | | | |
| 600.0 mV | 600.00 | 599.8 | 593.2 | 606.8 | m V | | Pass |

Report of Calibration for SERIAL NUMBER: 1220C-C1 ASSET NUMBER: 1220C-C1

Printed On: Friday, September 29, 2023 Page 1 of 3

**Test Results** indicate the following: **Found-Left:** *Unit was left as found.* **As-Left:** *Unit was left after adjustments.*

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### Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR | |
|---|---|---|---|---|---|---|---|
| -600.0 mV | -600.00 | -599.9 | -606.8 | -593.2 | m V | | Pass |
| 6 V Range | | | | | | | |
| 6.000 V | 6.0000 | 5.997 | 5.937 | 6.063 | V | | Pass |
| -6.000 V | -6.0000 | -5.995 | -6.063 | -5.937 | V | | Pass |
| 60 V Range | | | | | | | |
| 60.00 V | 60.000 | 59.96 | 59.37 | 60.63 | V | | Pass |
| 600 V Range | | | | | | | |
| 600.0 V | 600.00 | 599.6 | 593.7 | 606.3 | V | | Pass |
| 1000 V Range | | | | | | | |
| 1000 V | 1000.0 | 1001 | 985 | 1015 | V | | Pass |
| -1000 V | -1000.0 | -1001 | -1015 | -985 | V | | Pass |
| CONTINUITY TESTS | | | | | | | |
| Audible Indicator ON @ 10 ohms | | | | | | | Pass |
| Audible Indicator OFF @ 51 ohms | | | | | | | Pass |
| RESISTANCE TESTS | | | | | | | |
| 600 Ohm Range | | | | | | | |
| 600.0 Ohm | 600.00 | 601.2 | 590.5 | 609.5 | Ω | | Pass |
| 6 kOhm Range | | | | | | | |
| 6.000 kOhm | 6.0000 | 6.000 | 5.905 | 6.095 | k Ω | | Pass |
| 60 kOhm Range | | | | | | | |
| 60.00 kOhm | 60.000 | 59.99 | 59.05 | 60.95 | k Ω | | Pass |
| 600 kOhm Range | | | | | | | |
| 600.0 kOhm | 600.00 | 599.9 | 590.5 | 609.5 | k Ω | | Pass |
| 6 MOhm Range | | | | | | | |
| 6.000 MOhm | 6.0000 | 5.993 | 5.905 | 6.095 | M Ω | | Pass |
| 60 MOhm Range | | | | | | | |
| 60.00 MOhm | 60.000 | 59.47 | 58.70 | 61.30 | M Ω | | Pass |
| DIODE CHECK TESTS | | | | | | | |
| Diode Voltage | | | | | | | Pass |
| FREQUENCY TESTS | | | | | | | |
| 9.000 Hz @ 8 V | 9.0000 | 8.999 | 8.905 | 9.095 | Hz | | Pass |
| 90.00 Hz @ 8 V | 90.000 | 90.00 | 89.05 | 90.95 | Hz | | Pass |
| 900.0 Hz @ 8 V | 900.00 | 900.0 | 890.5 | 909.5 | Hz | | Pass |
| 9.000 kHz @ 8 V | 9.0000 | 9.000 | 8.905 | 9.095 | k Hz | | Pass |
| 90.00 kHz @ 8 V | 90.000 | 90.00 | 89.05 | 90.95 | k Hz | | Pass |
| 100.0 kHz @ 8 V | 100.00 | 100.0 | 98.5 | 101.5 | k Hz | | Pass |
| DUTY CYCLE | | | | | | | |
| 50.0 % @ 1 kHz | 50.00 | 50.3 | 49.3 | 50.8 | % | | Pass |
| CAPACITANCE TESTS | | | | | | | |
| 60 nF Range | | | | | | | |
| 59.00 nF | 59.000 | 59.96 | 55.70 | 62.30 | n F | | Pass |
| 600 nF Range | | | | | | | |
| 590.0 nF | 590.00 | 597.1 | 571.8 | 608.2 | n F | | Pass |
| 6 uF Range | | | | | | | |
| 5.900 µF | 5.9000 | 5.854 | 5.718 | 6.082 | µ F | | Pass |
| 60 uF Range | | | | | | | |
| 59.00 µF | 59.000 | 58.87 | 57.18 | 60.82 | µ F | | Pass |

Report of Calibration for SERIAL NUMBER: 1220C-C1 ASSET NUMBER: 1220C-C1

Printed On: Friday, September 29, 2023 Page 2 of 3

**Test Results** indicate the following: **Found-Left:** *Unit was left as found.* **As-Left:** *Unit was left after adjustments.*

---

### Test Results

| Test Description | True Value | Test Result | Lower Limit | Upper Limit | Units | TUR | |
|---|---|---|---|---|---|---|---|
| 600 uF Range | | | | | | | |
| 590.0 µF | 590.00 | 590.6 | 560.0 | 620.0 | µ F | | Pass |
| 6000 uF Range | | | | | | | |
| 5900 µF | 5900.0 | 5957 | 5600 | 6200 | µ F | | Pass |
| TEMPATURE F TESTS | | | | | | | |
| -14 °F | -14.0 | -10 | -23 | -5 | °F | | Pass |
| 100 °F | 100.0 | 102 | 94 | 106 | °F | | Pass |
| 500 °F | 500.0 | 502 | 490 | 510 | °F | | Pass |
| 900 °F | 900.0 | 902 | 873 | 927 | °F | | Pass |
| TEMPATURE C TESTS | | | | | | | |
| -25 °C | -25.0 | -23 | -31 | -20 | °C | | Pass |
| 100 °C | 100.0 | 102 | 96 | 104 | °C | | Pass |
| 350 °C | 350.0 | 351 | 344 | 357 | °C | | Pass |
| 500 °C | 500.0 | 501 | 485 | 515 | °C | | Pass |
| AC CURRENT TESTS | | | | | | | |
| 60 A Range | | | | | | | |
| 50.00 A @ 60 Hz | 50.000 | 49.60 | 48.92 | 51.08 | A | | Pass |
| 50.00 A @ 400 Hz | 50.000 | 50.00 | 48.92 | 51.08 | A | | Pass |
| 400 A Range | | | | | | | |
| 500.0 A @ 60 Hz | 500.00 | 494.2 | 489.5 | 510.5 | A | | Pass |
| 500.0 A @ 100 Hz | 500.00 | 494.4 | 489.5 | 510.5 | A | | Pass |
| 60 A Range | | | | | | | |
| 50.00 A | 50.000 | 49.20 | 48.92 | 51.08 | A | | Pass |
| 600 A Range | | | | | | | |
| 300.0 A | 300.00 | 296.5 | 293.5 | 306.5 | A | | Pass |
| 590.0 A | 590.00 | 582.7 | 577.7 | 602.3 | A | | Pass |

**********END OF CALIBRATION**********

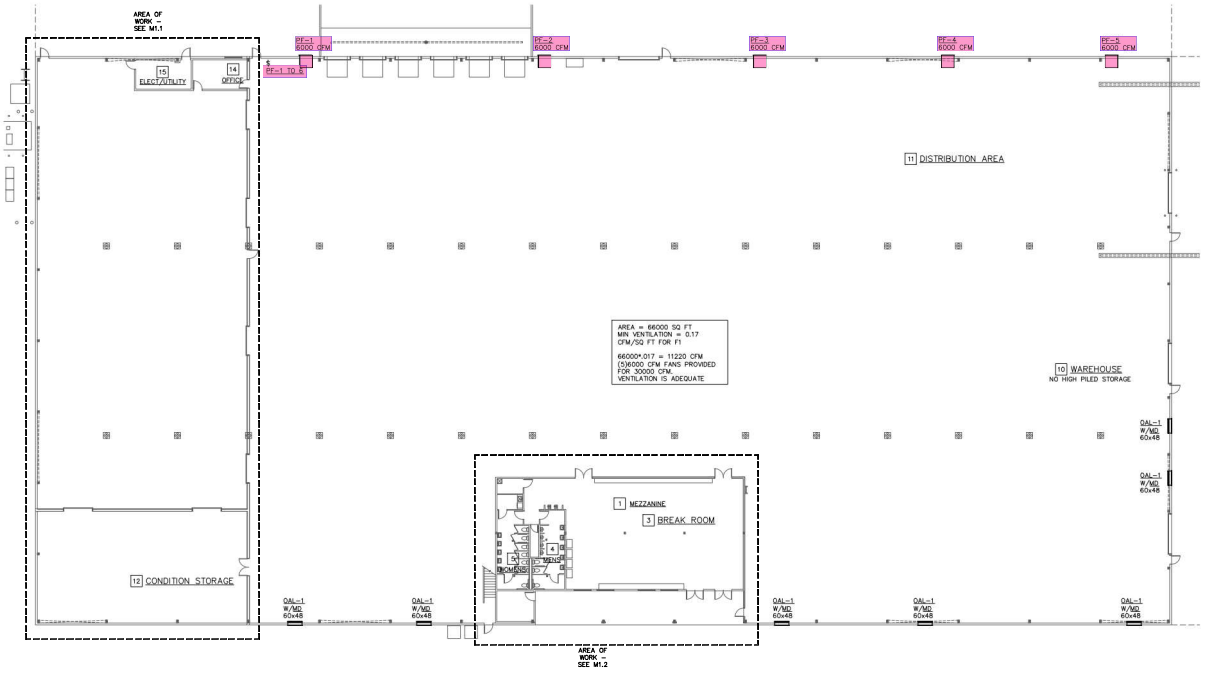
K.C. Calibration Labs Seal

Signed: Bart A. Schwartz , Engineer in Charge

Report of Calibration for SERIAL NUMBER: 1220C-C1 ASSET NUMBER: 1220C-C1

Printed On: Friday, September 29, 2023 Page 3 of 3

**Test Results** indicate the following: **Found-Left:** *Unit was left as found.* **As-Left:** *Unit was left after adjustments.*




HVAC OVERALL FLOOR PLAN

1/16" = 1'-0"

NORTH

JOB # 2022-023

GDMD ENGINEERING, INC
Mechanical and Safety Engineers
212 W Pine St, Ste 4
Lodi, Ca 95242
Ph 209-367-0899
Fax 209-367-0898
E-mail:gdmdengrinc@sbcglobal.net

| REVISIONS | BY |
|---|---|
| 1 PLAN CHECK 12/6/22 | NR |
| 2 PLAN CHECK 8/9/23 | NR |

MIKE SMITH ENGINEERING INC.
4 NORTH MAIN STREET
LODI, CALIFORNIA 95240
PHONE (209) 334-2332

TITLE: HVAC FLOOR PLAN

PROJECT: NEW CANOPY & STORAGE FACILITY FOR: RIVERBAND TRADING COMPANY
PROJECT LOCATION 6337 EAST PINE ST. LODI, CA 95240

STAMP

THESE PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS THERE IS A WET SIGNED SIGNATURE UPON STAMP

DRAWN NR
CHECKED GD
DATE 8/31/2023
SCALE AS NOTED
JOB NO 22030
SHEET M1.0
OF SHEETS