

**Report By:**

National TAB  
1329 E. KEMPER ROAD  
SUITE 4210  
CINCINNATI, OH 45246



**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 11/11/2024**  
**Completed By: National TAB**

# PROJECT

**11-04-24 UCHIKO - AUSTIN, TX (REFRESH  
TAB)**

4200 NORTH LAMAR BLVD SERVICE RD

AUSTIN, TX

**Client**

HAI Hospitality

# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

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## Project Summary

The scope of work at Uchiko in Austin, TX was to balance all AHUs, kitchen hoods, as well as kitchen supply and exhaust fans.

The AHUs were balanced for total air flow. No drafting is noted in the restaurant and all areas are comfortable. The mechanical sheets do not give a specified outside air CFM for each AHU, and so the AHUs are not individually balanced for outside air. AHUs 6 through 10 are cassette style units and are not able to be measured. There are no issues noted in the kitchen area concerning the temperature or overall comfort.

The building space net CFM is designed to be -320 CFM. It is likely designed negative to contain the cooking odors and keep them from infiltrating neighboring spaces within the building. The actual net airflow after testing and maximizing all supply air flow is -2985 CFM. This is due to some air flow deficiencies of the MUA units. See the issues section for more details and recommendations on how to improve the overall building performance.

After testing, the building pressure was measured at -0.021" W.C. The initial building pressure was -0.025". The change in measurements was achieved by bringing down the air flow for KEF-2 to within tolerance. The hoods served by KEF-2 are still performing well.

## Issue List

- MUA-1 Air Flow
- MUA-1 Burner On-Off Intake Air Stat
- MUA-1 Leakage
- MUA-2 Air Flow
- MUA-2 Gas Valve



**11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)**

**Project Issue Information**

**Issue Name :** MUA-1 Air Flow  
**Description :** MUA-1 air flow was measured at 3792 CFM out of 5760 design (66%). This is likely due to restrictions at the air devices. There is not much room in the ceiling space. Could not investigate very well. Discharge pressure was measured at 1.78" which is high and supports downstream restriction.

**Created By :** National TAB                      **Assigned To :** National TAB - Oscar Ventura

**Status :** Open

**Priority :** Urgent                                      **Asset Tag :**

**Originated Date :** 11/11/2024 - Wesley John - National TAB



**11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)**

**Project Issue Information**

**Issue Name :** MUA-1 Burner On-Off Intake Air Stat  
**Description :** MUA-1 burner on-off intake air thermostat was set to 90.0 F and unit did not engage heating cycle. Recommend repair/replacement of thermostat and verifying gas heat functionality. Outdoor air temp was 83.0 F at time of testing.  
**Created By :** National TAB                      **Assigned To :** National TAB - Oscar Ventura  
**Status :** Open  
**Priority :** Low                                      **Asset Tag :**  
**Originated Date :** 11/04/2024 - Wesley John - National TAB

**11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)**

**Project Issue Information**

**Issue Name :** MUA-1 Leakage  
**Description :** Major leakage observed at MUA-1 discharge panel. Recommend sealing. Silver tape re-installed by NTAB during testing for more accurate readings.  
**Created By :** National TAB                      **Assigned To :** National TAB - Oscar Ventura  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 11/04/2024 - Wesley John - National TAB

Project Issue File Details



11/04/2024



**11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)**

**Project Issue Information**

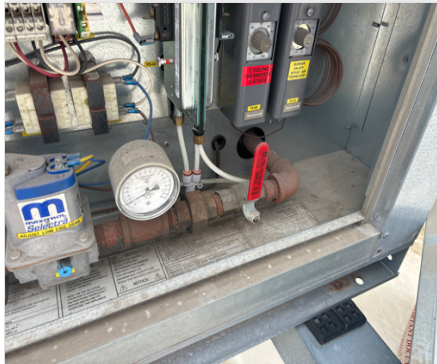
**Issue Name :** MUA-2 Air Flow  
**Description :** MUA-2 air flow was measured at 64% of design air flow. Fan speed maximized. Unit is likely undersized and designed for too small of a static pressure. 0.40" measured at unit. There are (4) 90 degree turns between the unit and the air devices in the space. The unit is likely unable to overcome these restrictions.  
**Created By :** National TAB                      **Assigned To :** National TAB - Oscar Ventura  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 11/11/2024 - Wesley John - National TAB

**11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)**

**Project Issue Information**

**Issue Name :** MUA-2 Gas Valve  
**Description :** MUA-2 interior gas valve is off. Gas heat not tested. Recommend verifying that gas valve can be turned to on position and verifying gas heat functionality.  
**Created By :** National TAB                      **Assigned To :** National TAB - Oscar Ventura  
**Status :** Open  
**Priority :** Low                                      **Asset Tag :**  
**Originated Date :** 11/04/2024 - Wesley John - National TAB

Project Issue File Details



11/04/2024

### AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
MUA-1	HOODS/AHUS									5760	3792				
MUA-2	KITCHEN GRILLES									1225	785				
KEF-1	HOOD-1											1100	1252		
KEF-2	HOODS-2, 5, 6											4130	4493		
KEF-3	TYPE II HOODS											1625	1359		
EF-1	RESTROOMS													450	458
<b>TOTALS</b>		0	0	0	0	0	0			6985	4577	6855	7104	450	458

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	6985	4577
TOTAL EXHAUST	7305	7562
<b>NET AIRFLOW</b>	<b>-320</b>	<b>-2985</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	-0.019
SIDE	-
REAR	-0.023
<b>AVERAGE</b>	<b>-0.021</b>

#### FINAL CHECKS

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

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- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

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- PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✗

NOTES:

## CheckList List

- TECH - STEP 1: INITIAL SITE WALKTHROUGH
- TECH - STEP 2: UNIT DATA AND EVAL
- TECH - STEP 3: TEST ADJUST AND BALANCE
- TECH - STEP 4: FINAL TESTS



**11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)**

**CheckList Information**

**Name :** TECH - STEP 1: INITIAL SITE WALKTHROUGH      **Status :** Completed

**Assigned Organization :** National TAB      **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 11/05/2024 - Oscar Ventura - National TAB

**CheckList Item Details**

**INITIAL SITE WALKTHROUGH**

**All diffusers and grilles are installed and match design?** Yes

**Comment:**

**All hood filters installed and accounted for?** Yes

**Comment:**

**Hoods are wired and have power?** Yes

**Comment:**

**Hood is free of alarms?** Yes

**Comment:**

**Thermostats have power?** Yes

**Comment:**

**Have trades/general contractor been notified about any issues and are they created on FaciliBuild?**

**Comment:**

YES



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### 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

#### CheckList Information

**Name :** TECH - STEP 2: UNIT DATA AND EVAL **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 11/11/2024 - Wesley John - National TAB

#### CheckList Item Details

UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

RTU's/AHU's

Economizers are assembled and functional? N/A

Comment:

DCV Max damper opening position is set to minimum? N/A

Comment:

Free cooling enthalpy set point set for lowest setting (Typically "D") N/A

Comment:

Motors are all operating below the FLA rating? Yes

Comment:

Are belts tight? N/A

**Comment:**

DIRECT DRIVE

**If direct drive unit is the speed controller working.**

Yes

**Comment:**

**Is gas piping installed and valves turned on?**

N/A

**Comment:**

UNITS ARE HEAT PUMPS

**Unit free of noticeable noise and vibration**

Yes

**Comment:**

**EF's**

**Rotation is correct?**

Yes

**Comment:**

**Belts are tight?**

Yes

**Comment:**

**Grease cup installed on hood fan?**

Yes

**Comment:**

**Hinge kit installed installed on hood fan?**

N/A

**Comment:**

FANS ARE UTILITY SET.

**Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?**

N/A

**Comment:**

**Flex conduit is long enough so that fan can be completely tilted back?**

N/A

**Comment:**

**There is no major leakage around base of fan?**

Yes

Comment:

Is the motor operating below the motor FLA rating?

Yes

Comment:

For restroom fan(s) is the back draft damper installed and can it fully open?

Yes

Comment:

Unit free of noticeable noise and vibration?

Yes

Comment:

MUA

Rotation is correct?

Yes

Comment:

Gas piping is installed and valves are in on position?

No

Comment:

Heater tested and is functional?

No

Comment:

CANNOT TEST EITHER MUA. SEE ISSUES.

Internal motorized damper is fully opening?

N/A

Comment:

Motor is operating below the FLA rating?

Yes

Comment:

Unit free of noticeable noise and vibration?

Yes

Comment:

HOODS

Kitchen equipment installed in proper places?

Yes

Comment:

Can kitchen equipment be turned on for final smoke test?

Yes

Comment:

**DOCUMENTATION**

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?

Yes

Comment:

**Notes/Comments :**

MECHANICAL SHEET DOES NOT SPECIFY OUTSIDE AIR FLOW TO EACH AHU. MUA UNIT BALANCED FOR TOTAL FLOW. AHU 6 THROUGH 10 ARE CASSETTE STYLE. UNABLE TO TEST THESE UNITS. NO ISSUES NOTED IN KITCHEN AREA THESE UNITS SERVE.

**Date :**11/11/2024



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### 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

#### CheckList Information

**Name :** TECH - STEP 3: TEST ADJUST AND BALANCE      **Status :** Completed

**Assigned Organization :** National TAB      **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 11/08/2024 - Oscar Ventura - National TAB

#### CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting? Yes

Comment:

Is space comfortable in all areas? Yes

Comment:

Is the space free of ventilation noise? Yes

Comment:

If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".

Comment:



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### 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

#### CheckList Information

**Name :** TECH - STEP 4: FINAL TESTS **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 11/11/2024 - Wesley John - National TAB

#### CheckList Item Details

##### FINAL TESTS

##### HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

NO EQUIPMENT TURNED ON FOR TESTING.

List smoke candle type used

Comment:

45-SEC SMOKE CANDLE.

Smoke test capture - Perimeter of hood

Comment:

100%

Smoke test capture - Top of cooking surface

Comment:

100%

##### WITNESS

Date test was completed

11/07/2024

Comment:

TAB tech name / Firm

Comment:

OSCAR VENTURA / NTAB

Site super name / Firm

Comment:

NO SITE SUPER ON SITE AT THE TIME OF TESTING.

Owner representative name / Firm (if Applicable)

Comment:

NA

Building pressure at front & back doors (All Systems On)

Comment:

-0.021

ADDITIONAL

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)

Comment:

BUILDING SPACE IS DESIGNED TO BE SLIGHTLY NEGATIVE. ACTUAL PRESSURE MEASURED AT -0.021"

Thermostats are programmed?

N/A

Comment:



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: AHU/RTU



Asset: AHU1

AREA:BAR DINING

Unit Data		
	Design	Actual
MFG	MITSUBISHI	MITSUBISHI
Serial Num	-	NL
Model Num	PEFY-48NMHU-E	PEFY-48NMHU-E
Type	-	AHU
Configuration	-	HORIZONTAL
Num OA Filters 1	-	(1)
OA Filter Size 1	-	(1)
Num Final Filter 1	-	(1)
Final Filter Size 1	-	(1)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	(1)

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	DIRECT DRIVE
Motor Sheave SetPt	DIRECT DRIVE
Fan Sheave Size	DIRECT DRIVE
Fan Sheave Bore	DIRECT DRIVE
Belt CL Distance	DIRECT DRIVE
Num of Belts	DIRECT DRIVE
Belt Size	DIRECT DRIVE
Belt Alignment	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	1000	923
SF RPM	-	(1)
RA CFM	-	(1)
OA CFM	-	(1)
RL Voltage	-	(1)
RL Amperage	-	(1)
SF Rotation	-	(1)
SF System SetPt	-	(1)
RA Damper Position	-	(1)
Min OA Damper Position	-	(1)
Min OA Damper Type	-	(1)

Performance Data		
	Design	Actual
MA Plenum SP	-	(1)
Fan Suction SP	-	(1)
Fan Discharge SP	-	(1)
Total ESP	-	(1)
Fan Total SP	-	(1)

General	
	Actual
Fan Rotation Correct	(1)
Unit Filters Clean	(1)
Condensate Drain Installed	(1)

Completed By: Oscar Ventura on 11/07/2024

Notes:  
(1). UNIT NOT ACCESSIBLE FOR TESTING.

Written By: Wesley John on 11/11/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: AHU/RTU



Asset: AHU2

AREA:BAR DINING

Unit Data		
	Design	Actual
MFG	MITSUBISHI	MITSUBISHI
Serial Num	-	NL
Model Num	PEFY-36NMHU-E	PEFY-36NMHU-E
Type	-	AHU
Configuration	-	HORIZONTAL
Num OA Filters 1	-	(1)
OA Filter Size 1	-	(1)
Num Final Filter 1	-	(1)
Final Filter Size 1	-	(1)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	(1)

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	DIRECT DRIVE
Motor Sheave SetPt	DIRECT DRIVE
Fan Sheave Size	DIRECT DRIVE
Fan Sheave Bore	DIRECT DRIVE
Belt CL Distance	DIRECT DRIVE
Num of Belts	DIRECT DRIVE
Belt Size	DIRECT DRIVE
Belt Alignment	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	800	864
SF RPM	-	(1)
RA CFM	-	(1)
OA CFM	-	(1)
RL Voltage	-	208
RL Amperage	-	(1)
SF Rotation	-	(1)
SF System SetPt	-	(1)
RA Damper Position	-	(1)
Min OA Damper Position	-	(1)
Min OA Damper Type	-	(1)

Performance Data		
	Design	Actual
MA Plenum SP	-	(1)
Fan Suction SP	-	(1)
Fan Discharge SP	-	(1)
Total ESP	-	(1)
Fan Total SP	-	(1)

General	
	Actual
Fan Rotation Correct	(1)
Unit Filters Clean	(1)
Condensate Drain Installed	(1)

Completed By: Oscar Ventura on 11/07/2024

Notes:  
(1). UNIT NOT ACCESSIBLE FOR TESTING.

Written By: Oscar Ventura on 11/07/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: AHU/RTU



Asset: AHU3

AREA:BAR DINING

Unit Data		
	Design	Actual
MFG	MITSUBISHI	MITSUBISHI
Serial Num	-	NL
Model Num	PEFY-48NMHU-E	PEFY-48NMHU-E
Type	-	AHU
Configuration	-	HORIZONTAL
Num OA Filters 1	-	(1)
OA Filter Size 1	-	(1)
Num Final Filter 1	-	(1)
Final Filter Size 1	-	(1)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	(1)

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	DIRECT DRIVE
Motor Sheave SetPt	DIRECT DRIVE
Fan Sheave Size	DIRECT DRIVE
Fan Sheave Bore	DIRECT DRIVE
Belt CL Distance	DIRECT DRIVE
Num of Belts	DIRECT DRIVE
Belt Size	DIRECT DRIVE
Belt Alignment	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	1000	1054
SF RPM	-	(1)
RA CFM	-	(1)
OA CFM	-	(1)
RL Voltage	-	208
RL Amperage	-	(1)
SF Rotation	-	(1)
SF System SetPt	-	(1)
RA Damper Position	-	(1)
Min OA Damper Position	-	(1)
Min OA Damper Type	-	(1)

Performance Data		
	Design	Actual
MA Plenum SP	-	(1)
Fan Suction SP	-	(1)
Fan Discharge SP	-	(1)
Total ESP	-	(1)
Fan Total SP	-	(1)

General	
	Actual
Fan Rotation Correct	(1)
Unit Filters Clean	(1)
Condensate Drain Installed	(1)

## Unit Data - PHOTO LOG



AHU\_3\_1188807109

Completed By: Oscar Ventura on 11/07/2024

### Notes:

(1). UNIT NOT ACCESSIBLE FOR TESTING.

Written By: Oscar Ventura on 11/07/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: AHU/RTU



Asset: AHU4

AREA:MAIN DINING

Unit Data		
	Design	Actual
MFG	MITSUBISHI	MITSUBISHI
Serial Num	-	NL
Model Num	PEFY-48NMHU-E	PEFY-48NMHU-E
Type	-	AHU
Configuration	-	HORIZONTAL
Num OA Filters 1	-	(1)
OA Filter Size 1	-	(1)
Num Final Filter 1	-	(1)
Final Filter Size 1	-	(1)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	(1)

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	DIRECT DRIVE
Motor Sheave SetPt	DIRECT DRIVE
Fan Sheave Size	DIRECT DRIVE
Fan Sheave Bore	DIRECT DRIVE
Belt CL Distance	DIRECT DRIVE
Num of Belts	DIRECT DRIVE
Belt Size	DIRECT DRIVE
Belt Alignment	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	1000	975
SF RPM	-	(1)
RA CFM	-	(1)
OA CFM	-	(1)
RL Voltage	-	208
RL Amperage	-	(1)
SF Rotation	-	(1)
SF System SetPt	-	(1)
RA Damper Position	-	(1)
Min OA Damper Position	-	(1)
Min OA Damper Type	-	(1)

Performance Data		
	Design	Actual
MA Plenum SP	-	(1)
Fan Suction SP	-	(1)
Fan Discharge SP	-	(1)
Total ESP	-	(1)
Fan Total SP	-	(1)

General	
	Actual
Fan Rotation Correct	(1)
Unit Filters Clean	(1)
Condensate Drain Installed	(1)

Completed By: Oscar Ventura on 11/07/2024

Notes:  
(1). UNIT NOT ACCESSIBLE FOR TESTING.

Written By: Oscar Ventura on 11/07/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: AHU/RTU



Asset: AHU5

AREA: MAIN DINING

Unit Data		
	Design	Actual
MFG	MITSUBISHI	MITSUBISHI
Serial Num	-	NL
Model Num	PEFY-48NMHU-E	PEFY-48NMHU-E
Type	-	AHU
Configuration	-	HORIZONTAL
Num OA Filters 1	-	(1)
OA Filter Size 1	-	(1)
Num Final Filter 1	-	(1)
Final Filter Size 1	-	(1)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	(1)

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	DIRECT DRIVE
Motor Sheave SetPt	DIRECT DRIVE
Fan Sheave Size	DIRECT DRIVE
Fan Sheave Bore	DIRECT DRIVE
Belt CL Distance	DIRECT DRIVE
Num of Belts	DIRECT DRIVE
Belt Size	DIRECT DRIVE
Belt Alignment	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	1000	949
SF RPM	-	(1)
RA CFM	-	(1)
OA CFM	-	(1)
RL Voltage	-	208
RL Amperage	-	(1)
SF Rotation	-	(1)
SF System SetPt	-	(1)
RA Damper Position	-	(1)
Min OA Damper Position	-	(1)
Min OA Damper Type	-	(1)

Performance Data		
	Design	Actual
MA Plenum SP	-	(1)
Fan Suction SP	-	(1)
Fan Discharge SP	-	(1)
Total ESP	-	(1)
Fan Total SP	-	(1)

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	(1)
Condensate Drain Installed	(1)

Completed By: Oscar Ventura on 11/07/2024

Notes:  
(1). UNIT NOT ACCESSIBLE FOR TESTING.

Written By: Oscar Ventura on 11/07/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: AHU/RTU



Asset: AHU11

AREA:OFFICE

Unit Data		
	Design	Actual
MFG	MITSUBISHI	MITSUBISHI
Serial Num	-	(1)
Model Num	PEFY-24NMHU-E	PEFY-24NMHU-E
Type	-	AHU
Configuration	-	HORIZONTAL
Num OA Filters 1	-	(1)
OA Filter Size 1	-	(1)
Num Final Filter 1	-	(1)
Final Filter Size 1	-	(1)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	NL

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	DIRECT DRIVE
Motor Sheave SetPt	DIRECT DRIVE
Fan Sheave Size	DIRECT DRIVE
Fan Sheave Bore	DIRECT DRIVE
Belt CL Distance	DIRECT DRIVE
Num of Belts	DIRECT DRIVE
Belt Size	DIRECT DRIVE
Belt Alignment	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	1000	1087
SF RPM	-	(1)
RA CFM	-	(1)
OA CFM	-	(1)
RL Voltage	-	208
RL Amperage	-	(1)
SF Rotation	-	(1)
SF System SetPt	-	(1)
RA Damper Position	-	(1)
Min OA Damper Position	-	(1)
Min OA Damper Type	-	(1)

Performance Data		
	Design	Actual
MA Plenum SP	-	(1)
Fan Suction SP	-	(1)
Fan Discharge SP	-	(1)
Total ESP	-	(1)
Fan Total SP	-	(1)

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	(1)
Condensate Drain Installed	(1)

Completed By: Oscar Ventura on 11/07/2024

Notes:  
(1). UNIT NOT ACCESSIBLE FOR TESTING.

Written By: Oscar Ventura on 11/07/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: AHU/RTU



Asset: AHU12

AREA:PRIVATE DINING

Unit Data		
	Design	Actual
MFG	MITSUBISHI	MITSUBISHI
Serial Num	-	(1)
Model Num	PEFY-24NMHU	PEFY-24NMHU
Type	-	AHU
Configuration	-	HORIZONTAL
Num OA Filters 1	-	(1)
OA Filter Size 1	-	(1)
Num Final Filter 1	-	(1)
Final Filter Size 1	-	(1)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	(1)

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	DIRECT DRIVE
Motor Sheave SetPt	DIRECT DRIVE
Fan Sheave Size	DIRECT DRIVE
Fan Sheave Bore	DIRECT DRIVE
Belt CL Distance	DIRECT DRIVE
Num of Belts	DIRECT DRIVE
Belt Size	DIRECT DRIVE
Belt Alignment	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	500	538
SF RPM	-	(1)
RA CFM	-	(1)
OA CFM	-	(1)
RL Voltage	-	208
RL Amperage	-	(1)
SF Rotation	-	(1)
SF System SetPt	-	(1)
RA Damper Position	-	(1)
Min OA Damper Position	-	(1)
Min OA Damper Type	-	(1)

Performance Data		
	Design	Actual
MA Plenum SP	-	(1)
Fan Suction SP	-	(1)
Fan Discharge SP	-	(1)
Total ESP	-	(1)
Fan Total SP	-	(1)

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	(1)
Condensate Drain Installed	(1)

Completed By: Oscar Ventura on 11/07/2024

Notes:  
(1) UNIT NOT ACCESSIBLE FOR TESTING.

Written By: Oscar Ventura on 11/07/2024

Asset: EF1

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	SQ-95-D	SQ-95-D
Serial Num	-	(1)
Type	-	CEILING
Configuration	-	HORIZONTAL

Test Data		
	Design	Actual
CFM	450	458
Fan RPM	-	(2)
Fan Rotation	-	CCW
Motor RPM	-	(2)
System SetPt	-	(2)
RL Voltage	-	120
RL Amperage	-	(2)
Total ESP	-	(2)
Fan Inlet SP	-	(2)
Fan Discharge SP	-	(2)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	1/8
Motor Rpm	-	1550
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	(1)
Service Factor	-	NL

**Unit Data - PHOTO LOG**



EF\_1\_53589254

Completed By: Oscar Ventura on 11/07/2024

Notes:

- (1). UNIT DATA TAG NOT ACCESIBLE.
- (2). TESTING POINTS NOT ACCESIBLE.

Written By: Wesley John on 11/11/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: FAN - Exhaust



Asset: KEF1

AREA:HOOD-1

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	BI10CA/CARM	BI10CA/CARM
Serial Num	-	1061362
Type	-	UTILITY
Configuration	-	CENTRIFUGAL

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	NL
Horsepower	-	1.0
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	14.4
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	1100	1252
Fan RPM	-	2630
Fan Rotation	-	CCW
Motor RPM	-	1720
System SetPt	-	3 TURNS
RL Voltage	-	208
RL Amperage	-	6.1
Total ESP	-	2.2"
Fan Inlet SP	-	-2.2"
Fan Discharge SP	-	ATM

### Unit Data - PHOTO LOG



KEF\_1\_855637545

Completed By: Oscar Ventura on 11/06/2024

Notes:

- FAN SHEAVE: 3"
- FAN BORE: 0.75"
- MOTOR SHEAVE: 5"
- MOTOR BORE: 0.5"
- CL: 7.5"
- BELT SIZE: AX-25

Written By: Oscar Ventura on 11/06/2024

Asset: KEF2

AREA:HOOD-2, 5, 6

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	BI15CA/CARM	BI20CARM
Serial Num	-	1061362
Type	-	UTILITY
Configuration	-	CENTRIFUGAL

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	-	5.0
Motor Rpm	-	1750
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	13.2
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	4130	4493
Fan RPM	-	1365
Fan Rotation	-	CCW
Motor RPM	-	1774
System SetPt	-	5 TURNS
RL Voltage	-	208/209/208
RL Amperage	-	7.9/8.2/8.4
Total ESP	-	[1]
Fan Inlet SP	-	[1]
Fan Discharge SP	-	ATM

**Unit Data - PHOTO LOG**



KEF\_2\_1304084446

Completed By: Oscar Ventura on 11/05/2024

**Notes:**

[1] CLEANOUT DOORS IN GREASE DUCT ARE SILICONED. UNABLE TO ACCESS TO TAKE SUCTION STATIC PRESSURE READING.

**DRIVE DATA:**

MOTOR PULLEY 2VP42x1 1/8"  
SET POINT 5.0 TURNS OPEN  
FAN PULLEY 2BK50x1 3/16"

(2) BX42 BELTS  
CENTERLINE 16 1/2"

Written By: Wesley John on 11/11/2024

Asset: KEF3

AREA:HOODS-3&4

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	BSQ-100-10	BSQ-100-10
Serial Num	-	(1)
Type	-	CEILING
Configuration	-	HORIZONTAL

Test Data		
	Design	Actual
CFM	1625	1359
Fan RPM	-	(2)
Fan Rotation	-	CCW
Motor RPM	-	(2)
System SetPt	-	(2)
RL Voltage	-	208
RL Amperage	-	(2)
Total ESP	-	(2)
Fan Inlet SP	-	(2)
Fan Discharge SP	-	(2)

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	1.0
Motor Rpm	-	2300
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	(1)
Service Factor	-	NL

**Unit Data - PHOTO LOG**



KEF\_3\_950052253

Completed By: Oscar Ventura on 11/07/2024

Notes:  
KEF-3 IS OPERATING AT 84% OF DESIGN AIR FLOW. HOODS SERVED BY KEF-3 ARE PERFORMING WELL. KEF-3 FAN SPEED KEPT AS IS TO HELP ACHIEVE A SATISFACTORY BUILDING PRESSURE.  
(1). DATA TAG NOT ACCESIBLE.  
(2). TESTING POINTS NOT ACCESIBLE.

Written By: Wesley John on 11/11/2024

Asset: MUA1

AREA:MAIN HOOD/AHU OA

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A3-D.750-G18	A3-D.750-G18
Serial Num	-	1061362
Type	-	MUA
Configuration	-	HORIZONTAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	184T
Horsepower	-	5.0
Motor Rpm	-	1750
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	13.6
Service Factor	-	1.15

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	NA
Flame Status (pass/fail)	-	NA
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	60
Air Flow Switch SP Actual	-	0.21"

Test Data		
	Design	Actual
CFM	5760	3792
SF RPM	-	1092
Motor RPM	-	1745
SF System SetPt	-	0 TURNS
RL Voltage	-	208/208/208
RL Amperage	-	12.4/12.3/12.5
Total ESP	-	1.78"
Fan Discharge SP	-	1.78"

General	
	Actual
Fan Rotation Correct	YES

**Unit Data - PHOTO LOG**



MAU\_1\_487108293

Completed By: Oscar Ventura on 11/05/2024

Notes:  
2VP70 X 1 1/8.

2BK110 X 1 3/16.  
CL 20".  
NUMBER OF BELTS 2. (B64).

Written By: Oscar Ventura on 11/05/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: FAN - Supply



Asset: MUA2

AREA: KITCHEN GRILLES

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-G10	A1-D.250-G10
Serial Num	-	1061362
Type	-	MUA
Configuration	-	HORIZONTAL

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	B56
Horsepower	-	0.5
Motor Rpm	-	1730
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	1.81
Service Factor	-	1.0

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	N/A
Flame Status (pass/fail)	-	N/A
Inlet Air Temp SetPt	-	55.0 F
Discharge Air Temp SetPt	-	60.0 F
Air Flow Switch SP Actual	-	0.18"

Test Data		
	Design	Actual
CFM	1225	785
SF RPM	-	1003
Motor RPM	-	1756
SF System SetPt	-	0 TURNS
RL Voltage	-	208/208/210
RL Amperage	-	1.4/1.3/1.4
Total ESP	-	0.40"
Fan Discharge SP	-	0.40"

General	
	Actual
Fan Rotation Correct	YES

### Unit Data - PHOTO LOG



MAU\_2\_183840507

Completed By: Wesley John on 11/11/2024

Notes:  
INTERIOR GAS VALVE TURNED OFF. GAS HEAT NOT TESTED.

DRIVE DATA:  
MOTOR PULLEY 1VL40x5/8"  
POSITION FULLY CLOSED  
FAN PULLEY AK66x3/4"  
BELT AX41  
CENTERLINE 13 1/2"

Written By: Wesley John on 11/11/2024

Asset: HD1

AREA:COOKLINE

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	52"
Hood Width	-	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	12"
Supply Plenum Length	-	52"

Test Data Supply		
	Design	Actual
Total AK Area	-	4.33
Kv factor (Vel)	-	0.87
Num of Readings	-	4
Reading1 FPM	-	332
Reading2 FPM	-	287
Reading3 FPM	-	271
Reading4 FPM	-	374
Ave FPM(corr)	-	316
CFM	-	1190

Test Data Exhaust		
	Design	Actual
Filter Type	-	MESH
Filter Size 1	-	16X16
Filter Qty 1	-	3
Filter AK factor size 1	-	1.63
Filter Total AK Area	-	4.89
Filter1 FPM	-	258
Filter2 FPM	-	259
Filter3 FPM	-	251
Filter Ave FPM(corr)	-	256
CFM	-	1252

Cooking Equipment	
	Actual
Item 1	WOOD GRILL

**Unit Data - PHOTO LOG**



HOOD\_1\_149487131

Completed By: Oscar Ventura on 11/07/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

## System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:COOKLINE

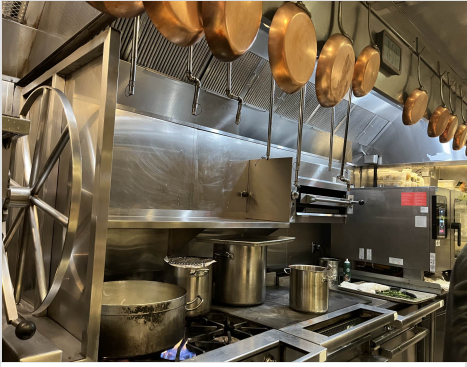
Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	144"
Hood Width	-	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	12"
Supply Plenum Length	-	156"

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	16X16
Filter Size 2	-	16X20
Filter Qty 1	-	4
Filter Qty 2	-	4
Filter AK factor size 1	-	1.62
Filters AK factor size 2	-	2.08
Filter Total AK Area	-	14.80
Filter1 FPM	-	168
Filter2 FPM	-	190
Filter3 FPM	-	165
Filter4 FPM	-	184
Filter5 FPM	-	201
Filter6 FPM	-	180
Filter7 FPM	-	189
Filter8 FPM	-	173
Filter Ave FPM(corr)	-	181
CFM	-	2529

Cooking Equipment	
	Actual
Item 1	RANGE
Item 2	GRIDDLE
Item 3	SALAMANDER
Item 4	OVEN

Test Data Supply		
	Design	Actual
Total AK Area	-	13.0
Kv factor (Vel)	-	0.87
Num of Readings	-	12
Reading1 FPM	-	301
Reading2 FPM	-	248
Reading3 FPM	-	141
Reading4 FPM	-	253
Reading5 FPM	-	150
Reading6 FPM	-	84
Reading7 FPM	-	123
Reading8 FPM	-	186
Reading9 FPM	-	191
Reading10 FPM	-	149
Reading11 FPM	-	133
Reading12 FPM	-	151
Ave FPM(corr)	-	175
CFM	-	1979

**Unit Data - PHOTO LOG**



HOOD\_2\_1961603456.jpe..

Completed By: Oscar Ventura on 11/07/2024

Asset: HD5

AREA:TEMPURA

Unit Data		
	Design	Actual
MFG	NA	NL
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I LOW PROXIMITY
Hood length	-	60"
Hood Width	-	24"

Test Data Exhaust		
	Design	Actual
Filter Type	-	MESH
Filter Size 1	-	12X20
Filter Qty 1	-	3
Filter AK factor size 1	-	1.50
Filter Total AK Area	-	4.50
Filter1 FPM	-	219
Filter2 FPM	-	237
Filter3 FPM	-	155
Filter Ave FPM(corr)	-	203
CFM	-	863

Cooking Equipment	
	Actual
Item 1	WOK
Item 2	FRYER

**Unit Data - PHOTO LOG**



HOOD\_5\_1929403055.jpe..

Completed By: Oscar Ventura on 11/08/2024

Asset: HD6

AREA:SUSHI BAR

Unit Data		
	Design	Actual
MFG	NA	NL
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I LOW PROXIMITY
Hood length	-	54"
Hood Width	-	24"

Test Data Exhaust		
	Design	Actual
Filter Type	-	MESH
Filter Size 1	-	12X20
Filter Qty 1	-	3
Filter AK factor size 1	-	1.50
Filter Total AK Area	-	4.50
Filter1 FPM	-	230
Filter2 FPM	-	276
Filter3 FPM	-	273
Filter Ave FPM(corr)	-	259
CFM	-	1101

Cooking Equipment	
	Actual
Item 1	RANGE

**Unit Data - PHOTO LOG**



HOOD\_6\_267802741

Completed By: Oscar Ventura on 11/07/2024



# National TAB

Project: 11-04-24 UCHIKO - AUSTIN, TX (REFRESH TAB)

System/Unit: Kitchen Hood Type II



Asset: HD(Type2)3

AREA:DISHWASHER

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	4818 VHB
Serial Num	-	6958422
Type	-	TYPE II CANOPY
Hood length	-	96"
Hood Width	-	48"

Test Data		
	Design	Actual
Exhaust CFM	-	556

## Unit Data - PHOTO LOG



HOOD\_3\_832834818

Completed By: Oscar Ventura on 11/07/2024

Asset: HD(Type2)4

AREA:PREP

Unit Data		
	Design	Actual
MFG	NA	NL
Model Num	NA	NL
Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	60"
Hood Width	-	30"

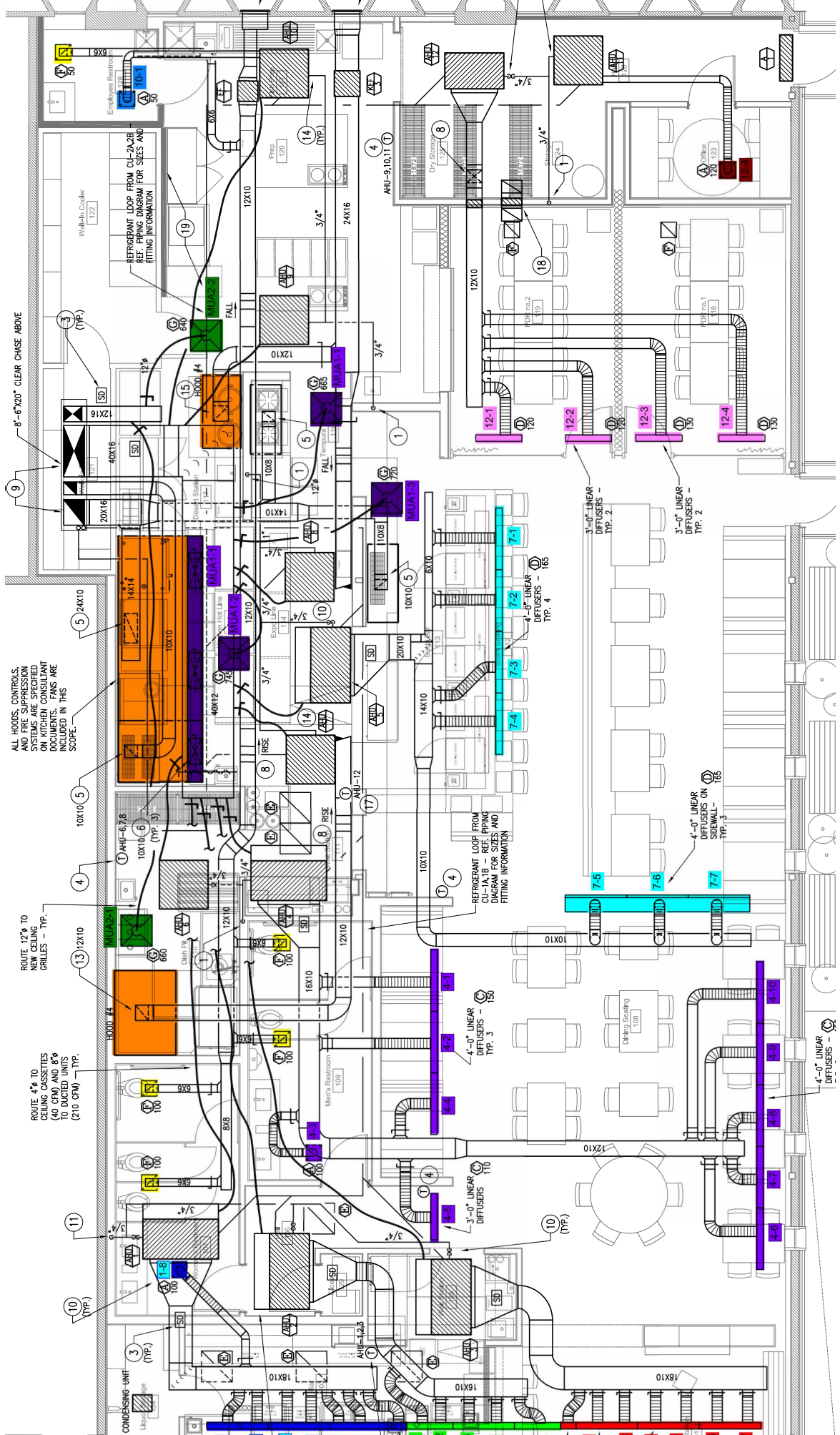
Test Data		
	Design	Actual
Exhaust CFM	-	803

**Unit Data - PHOTO LOG**



HOOD\_4\_197094319

Completed By: Oscar Ventura on 11/07/2024



8'-6"x20" CLEAR CHASE ABOVE

ALL HOODS, CONTROLS, AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED IN THE MECHANICAL SCHEDULE. ALL HOODS, CONTROLS, AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED IN THE MECHANICAL SCHEDULE. ALL HOODS, CONTROLS, AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED IN THE MECHANICAL SCHEDULE.

ROUTE 12" TO NEW CEILING GRILLES - TYP.

ROUTE 4" TO CEILING CASSETTES TO DUCTED UNITS (210 CFM) - TYP.

REFRIGERANT LOOP FROM CU-2A,2B - REF. PIPING DIAGRAM FOR SIZES AND FITTING INFORMATION

REFRIGERANT LOOP FROM CU-1A,1B - REF. PIPING DIAGRAM FOR SIZES AND FITTING INFORMATION