

Report By:

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SUITE 4210  
CINCINNATI, OH 45246



**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 03/12/2024**

**PROJECT**  
**03-11-24 FREDDY'S LAURINBURG, NC**

South Main Street

LAURINBURG, NC 28352

Client

POLO BURGER GROUP

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

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# National TAB

## Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

### RTU'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.

### Kitchen Exhaust Hood & Associated Fans

Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. . Any EF's that fell outside of this tolerance is noted throughout the report.

### General Exhaust Fans w/ Grilles

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

### Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of  $-0.02''$  wc to  $+0.02''$  wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

## Issue List

- KEF3-DU33HFA Missing Hinge Kit
- RTU1 Missing Dampers



**03-11-24 FREDDY'S LAURINBURG, NC**

**Project Issue Information**

**Issue Name :** KEF3-DU33HFA Missing Hinge Kit  
**Description :** KEF3 hinge kit is not installed.  
**Created By :** National TAB                      **Assigned To :** National TAB - Brianna Biggs  
**Status :** Open  
**Priority :** Low    **Asset Tag :** KEF3  
**Originated Date :** 03/12/2024 - RJ Cervantes - National TAB

Project Issue File Details



KEF3\_MISSING\_HINGE.jp..  
03/12/2024



03-11-24 FREDDY'S LAURINBURG, NC

Project Issue Information

**Issue Name :** RTU1 Missing Dampers  
**Description :** RTU1 (dining unit) dampers are not installed on supply grills SGRD4 through SGRD12. Unit total was set due to this issue.  
**Created By :** National TAB                      **Assigned To :** National TAB - Brianna Biggs  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :** RTU1  
**Originated Date :** 03/12/2024 - RJ Cervantes - National TAB

Project Issue File Details



RTU1\_no\_damper\_2  
03/12/2024



RTU1\_no\_damper  
03/12/2024

### 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
DOAS-1	Kitchen	2650	2525	0	0	2650	2525	100.0%	100.0%						
RTU-1	Dining	3000	3195	2416	2557	584	638	19.5%	20.0%						
KEF-1	Cookline											1600	1668		
KEF-2	Fryers											775	758		
KEF-3	Dishwasher											525	512		
EF-1	Women's Restroom													75	76
EF-2	Men's Restroom													150	148
<b>TOTALS</b>		5650	5720	2416	2557	3234	3163			0	0	2900	2938	225	224

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	3234	3163
TOTAL EXHAUST	3125	3162
<b>NET AIRFLOW</b>	109	1

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.003
SIDE	0.003
REAR	0.006
<b>AVERAGE</b>	<b>0.004</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 - SITE PICTURES
- 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





**DOAS1**  
**03/12/2024**

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RTU-2

**Comment:**



**RTU\_OR\_DOAS2**  
**03/12/2024**

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EF-1

**Comment:**



**EF\_1\_WOMENS**  
**03/12/2024**

---

EF-2

**Comment:**



**EF\_2\_MENS**  
**03/12/2024**

---

EF-3

**Comment:**



**KEF1**  
**03/12/2024**

---

EF-4

**Comment:**



**IMG\_0064**  
**03/12/2024**

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EF-5

**Comment:**



**KEF3**  
**03/12/2024**

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HOOD-1

**Comment:**



**KEH1**  
**03/12/2024**

---

HOOD-2

**Comment:**



**KH2**  
**03/12/2024**

---

HOOD-3

---

**Comment:**



**KEH3**  
**03/12/2024**



### 03-11-24 FREDDY'S LAURINBURG, NC

#### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/23/2024 - Brian Turnbough - National TAB

**Completed Date :** 03/12/2024 - Dale Wheeler - 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? N/A

**Comment:**

##### HMI SCREENS ARE INSTALLED AND POWERED

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

**Comment:**

YES

**Notes/Comments :**

N/A

**Date :**03/12/2024



### 03-11-24 FREDDY'S LAURINBURG, NC

#### CheckList Information

**Name :** TECH - STEP 2: UNIT DATA AND EVAL **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/23/2024 - Brian Turnbough - National TAB  
**Completed Date :** 03/12/2024 - Dale Wheeler - 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? Yes

##### Comment:

DCV Max damper opening position is set to minimum? Yes

##### Comment:

OA IS SET TO 5.8V OCCUPIED MODE OA IS SET TO 0.0V UNOCCUPIED MODE

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?

##### Comment:

N/A

If direct drive unit is the speed controller working.

**Comment:**

Is gas piping installed and valves turned on?

Yes

**Comment:**

Unit free of noticeable noise and vibration

Yes

**Comment:**

**EF's**

Rotation is correct?

Yes

**Comment:**

Belts are tight?

**Comment:**

N/A

Grease cup installed on hood fan?

Yes

**Comment:**

Hinge kit installed installed on hood fan?

**Comment:**

YES / EF2 NO / EF3

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

Yes

**Comment:**

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

Yes

**Comment:**

There is no major leakage around base of fan?

**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:**

YES / BACK DRAFT DAMPER IS LOCATED NEXT TO THE CEILING MOUNTED FANS

Unit free of noticeable noise and vibration? Yes

**Comment:**

**MUA**

Rotation is correct? N/A

**Comment:**

Gas piping is installed and valves are in on position? N/A

**Comment:**

Heater tested and is functional? N/A

**Comment:**

Internal motorized damper is fully opening? N/A

**Comment:**

Motor is operating below the FLA rating? N/A

**Comment:**

Unit free of noticeable noise and vibration? N/A

**Comment:**

**HOODS**

Kitchen equipment installed in proper places? Yes

**Comment:**

Can kitchen equipment be turned on for final smoke test?

No

**Comment:**

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**DOCUMENTATION**

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

Yes

**Comment:**

**Notes/Comments :**

N/A

**Date :**03/12/2024



### 03-11-24 FREDDY'S LAURINBURG, NC

#### CheckList Information

**Name :** TECH - STEP 3: TEST, ADJUST AND BALANCE      **Status :** Completed  
**Assigned Organization :** National TAB      **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/23/2024 - Brian Turnbough - National TAB  
**Completed Date :** 03/12/2024 - Dale Wheeler - 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:**

RTU1 DINING AREA DAMPERS ARE NOT INSTALLED, UNIT TOTAL HAD TO BE SET,

**Notes/Comments :**

N/A

**Date :**03/12/2024





### 03-11-24 FREDDY'S LAURINBURG, NC

#### CheckList Information

**Name :** TECH - STEP 4: FINAL TESTS **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/23/2024 - Brian Turnbough - National TAB  
**Completed Date :** 03/12/2024 - Dale Wheeler - National TAB

#### CheckList Item Details

##### FINAL TESTS

##### HOOD CAPTURE TEST

List equipment turned on for testing

**Comment:**

UNABLE TO TURN ON EQUIPMENT FOR SMOKE TEST

List smoke candle type used

**Comment:**

SMOKE EMITTER

Smoke test capture - Perimeter of hood

**Comment:**

100%

Smoke test capture - Top of cooking surface

**Comment:**

100%

##### WITNESS

Date test was completed

03/12/2024

**Comment:**

3/12/24

TAB tech name / Firm

**Comment:**

DALE WHEELR / NTAB

Site super name / Firm

**Comment:**

ALAN W. BROWN / COOKE CONTRACTING

Owner representative name / Firm (if Applicable)

**Comment:**

N/A

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

**Comment:**

FRONT DOOR +0.003" / BACK DOOR+0.006" / SIDE DOOR +0.003" / ALL SYSTEMS ON

**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:**

YES

Thermostats are programmed?

N/A

**Comment:**

HMI SCREENS ARE INSTALLED AND CAPTIVE-AIRE IS RESPONSABLE FOR PROGRAMMING THE SCHEDULE

**Notes/Comments :**

N/A

Date :03/12/2024

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

System/Unit: AHU/RTU



Asset: DOAS1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5827887
Model Num	CASRTU3-I.250-18-20T	CASRTU3-I.250-18-20T
Type	DOAS	DOAS
Configuration	Vertical	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	25x16x2
Num Final Filter 1	-	4
Final Filter Size 1	-	20x25x2

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	184T
Horsepower	2.0	2.0
Motor Rpm	-	1165
Phase	3	3
Rated Voltage	208	203
Rated Amperage	79.1	8.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	2650	2525
SF RPM	-	DD / 73.5 HZ
RA CFM	0	0
OA CFM	2650	2525
RL Voltage	-	215/215/215
RL Amperage	-	7.6/7.7/7.5
SF Rotation	-	CCW
RA Damper Position	-	CLOSED
Min OA Damper Position	-	100% OPEN / 10V
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.114"
Fan Suction SP	-	-0.693"
Fan Discharge SP	-	0.511"
Total ESP	0.5"	0.625"
Fan Total SP	-	1.204"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Dale Wheeler on 03/12/2024

# National TAB

Project:03-11-24 FREDDY'S LAURINBURG, NC

## AHU/RTU



**Diffuser Supply (GRD)**

DOAS1/									
Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
DOAS1-SGRD1	Kitchen	SD-2	24"x24"	246	1	186	214	226	91.9
DOAS1-SGRD2	Kitchen	SD-3	24"x24"	250	1	170	195	225	90.0
DOAS1-SGRD3	Mechanical	SD-3	24"x24"	250	1	186	215	233	93.2
DOAS1-SGRD4	Office	SD-4	24"x24"	154	1	65	69	164	106.5
DOAS1-SGRD5	Kitchen	SD-3	24"x24"	250	1	230	234	226	90.4
DOAS1-SGRD6	Kitchen	SD-3	24"x24"	250	1	218	229	255	102.0
DOAS1-SGRD7	Kitchen	SD-3	24"x24"	250	1	214	270	228	91.2
DOAS1-SGRD8	Kitchen	SD-3	24"x24"	250	1	273	244	229	91.6
DOAS1-SGRD9	Kitchen	SD-3	24"x24"	250	1	288	263	244	97.6
DOAS1-SGRD10	Kitchen	SD-3	24"x24"	250	1	256	251	243	97.2
DOAS1-SGRD11	Kitchen	SD-2	24"x24"	250	1	320	278	252	100.8
Total				2650		2406	2462	2525	95.28%

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

## System/Unit: AHU/RTU



Asset: RTU1

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX	CAPTIVE-AIRE
Serial Num	-	5899875
Model Num	LGH092H4M	CASRTU2-1.200-18-8T
Type	RTU	RTU1
Configuration	Vertical	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	20X25X2
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	182T
Horsepower	2.0	3.0
Motor Rpm	-	1755
Phase	3	3
Rated Voltage	208	208
Rated Amperage	42	8.60

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	3000	3195
SF RPM	-	DD / 49 HZ
RA CFM	2416	2557
OA CFM	584	638
RL Voltage	-	212/212/211
RL Amperage	-	5.6/5.7/5.7
SF Rotation	-	CCW
RA Damper Position	-	2.25"
Min OA Damper Position	-	5.8V
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.361"
Fan Suction SP	-	-1.05"
Fan Discharge SP	-	0.217"
Total ESP	1.0"	0.578"
Fan Total SP	-	1.267"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Dale Wheeler on 03/12/2024

Notes:

[1] SGRD4 THROUGH SGRD12 DAMPERS ARE NOT INSTALLED. UNIT TOTAL WAS SET DUE TO THIS ISSUE.

Written By: Dale Wheeler on 03/12/2024

# National TAB

Project:03-11-24 FREDDY'S LAURINBURG, NC

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU1-SGRD1	Women's Restroom	SD-5	12"x12"	50	1	44	47	54	108.0
RTU1-SGRD2	Corridor	SD-5	12"x12"	50	1	45	48	55	110.0
RTU1-SGRD3	Men's Restroom	SD-5	12"x12"	100	1	58	61	63	63.0
RTU1-SGRD4	Dining	SD-1	22"	315	1	423	463	498	158.1
RTU1-SGRD5	Dining	SD-1	22"	320	1	337	347	362	113.1
RTU1-SGRD6	Dining	SD-1	22"	315	1	321	338	345	109.5
RTU1-SGRD7	Dining	SD-1	22"	315	1	247	256	278	88.3
RTU1-SGRD8	Dining	SD-1	22"	320	1	231	238	256	80.0
RTU1-SGRD9	Dining	SD-1	22"	315	1	369	381	395	125.4
RTU1-SGRD10	Dining	SD-1	22"	320	1	371	388	401	125.3
RTU1-SGRD11	Dining	SD-1	22"	315	1	207	211	221	70.2
RTU1-SGRD12	Dining	SD-1	22"	315	1	241	256	267	84.8
Total				3050		2894	3034	3195	104.75%

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

System/Unit: FAN - Exhaust



Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	COOK	PENNBARRY
Model Num	GC-146	ZT
Serial Num	-	E220Z08952
Type	Ceiling	CEILING MOUNTED
Configuration	Vertical	VERTICAL

Test Data		
	Design	Actual
CFM	75	76
Fan RPM	900	DD / 1400
Fan Rotation	-	CCW
Motor RPM	-	DD / 1400
System SetPt	-	HIGH
RL Voltage	-	121
RL Amperage	-	0.74
Total ESP	0.25"	[1]
Fan Inlet SP	-	[1]
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	FASCO
Frame	-	N/L
Horsepower	-	N/L
Motor Rpm	-	1400
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.74
Service Factor	-	N/L

Completed By: Dale Wheeler on 03/12/2024

Notes:

[1] FAN LOCATED IN HARD CEILING UNABLE TO TAKE STATIC PRESSURE.

Written By: Dale Wheeler on 03/12/2024

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

System/Unit: FAN - Exhaust



Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	COOK	PENNBARRY
Model Num	GC-168	ZJI
Serial Num	-	23AA99588
Type	Ceiling	CEILING
Configuration	Vertical	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	FASCO
Frame	-	N/L
Horsepower	-	N/L
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.4
Service Factor	-	N/L

Test Data		
	Design	Actual
CFM	150	148
Fan RPM	1099	DD / 1550
Fan Rotation	-	CCW
Motor RPM	-	DD / 1550
System SetPt	-	HIGH
RL Voltage	-	121
RL Amperage	-	1.4
Total ESP	0.25"	[1]
Fan Inlet SP	-	[1]
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 03/12/2024

Notes:

[1] FAN LOCATED IN HARD CEILING UNABLE TO TAKE STATIC PRESSURE.

Written By: Dale Wheeler on 03/12/2024

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	CASRE18DD	CASRE18DD
Serial Num	-	5827887
Type	Utility	UTILITY
Configuration	Vertical	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	145T
Horsepower	1.5	1.5
Motor Rpm	-	1740
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	4.03
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	1600	1668
Fan RPM	1487	DD / 1740
Fan Rotation	-	CCW
Motor RPM	-	DD / 1740
System SetPt	-	36.0 HZ
RL Voltage	-	215/215/215
RL Amperage	-	3.8 AVG.
Total ESP	1.4"	[1]
Fan Inlet SP	-	[1]
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 03/12/2024

Notes:  
[1] UNABLE TO TAKE STATIC PRESSURE DUE TO FAN BEING A UTILITY TYPE FAN

Written By: Dale Wheeler on 03/12/2024

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

System/Unit: FAN - Exhaust



Asset: KEF2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU50HFA	DU50HFA
Serial Num	-	5827887
Type	Upblast	UPBLAST
Configuration	Vertical	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	N/L
Horsepower	0.5	0.5
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	6.3
Service Factor	-	1.0

Test Data		
	Design	Actual
CFM	775	758
Fan RPM	1532	DD / 1800
Fan Rotation	-	CCW
Motor RPM	-	DD / 1800
System SetPt	-	55%
RL Voltage	-	124
RL Amperage	-	2.6
Total ESP	1.25"	0.385"
Fan Inlet SP	-	-0.385"
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 03/12/2024

# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

System/Unit: FAN - Exhaust



Asset: KEF3

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU33HFA	DU33HFA
Serial Num	-	5827887
Type	Upblast	UPBLAST
Configuration	Vertical	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	N/L
Horsepower	0.333	0.333
Motor Rpm	150	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	4.3
Service Factor	-	1.0

Test Data		
	Design	Actual
CFM	525	512
Fan RPM	1500	DD / 887
Fan Rotation	-	CCW
Motor RPM	-	DD / 887
System SetPt	-	46-P
RL Voltage	-	122
RL Amperage	-	0.88
Total ESP	0.8"	0.211"
Fan Inlet SP	-	-0.211"
Fan Discharge SP	-	ATM

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# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

System/Unit: Kitchen Hood Type I



Asset: KEH1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	58278887
Type	ND2	TYPE I CANOPY
Hood length	8'	96"
Hood Width	-	54"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
Filter Size 1	16"x16"	16X16
Filter Qty 1	5	5
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	8.1	8.1
Filter1 FPM	-	197
Filter2 FPM	-	210
Filter3 FPM	-	208
Filter4 FPM	-	214
Filter5 FPM	-	200
Filter Ave FPM(corr)	-	206
CFM	1600	1668

Cooking Equipment		
	Design	Actual
Item 1	-	GRIDDLE
Item 2	-	GRIDDLE

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# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

## System/Unit: Kitchen Hood Type I



Asset: KEH2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	5827887
Type	Canopy	TYPE I CANOPY
Hood length	5'	60"
Hood Width	-	54"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTERATE SOLO
Filter Size 1	16"x16"	16X16
Filter Qty 1	3	3
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	4.86	4.86
Filter1 FPM	-	160
Filter2 FPM	-	167
Filter3 FPM	-	142
Filter Ave FPM(corr)	-	156
CFM	775	758

Cooking Equipment		
	Design	Actual
Item 1	-	FRYER
Item 2	-	FRYER

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# National TAB

Project: 03-11-24 FREDDY'S LAURINBURG, NC

## System/Unit: Kitchen Hood Type II



Asset: KEH3

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	4224 VHB-G	4224 VHB
Serial Num	-	5828887
Type	Canopy	TYPE II CANOPY
Hood length	3'6"	42"
Hood Width	-	42"

Test Data		
	Design	Actual
Exhaust CFM	525	512

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