

**Report By:**

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



**Report: Inspection TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 01/05/2026**  
**Completed By: National TAB**

**PROJECT**  
**12-29-25 CULVERS CLEVELAND, TN**

1020 PAUL HUFF PKWY

CLEVELAND, TN 37312

**Client**

Captive-Aire Region #60

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

## Table Of Contents

<b>Section</b>	<b>Page #</b>
Summary	3
AHU/RTU	4
FAN - Exhaust	6
Kitchen Hood Type I	15
Kitchen Hood Type II	19
GRD Layout	20



# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN  
Function: Test, Adjust, & Balance

## Project Summary

### 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.

### DOAS w/ Diffusers

Each of the DOAS were measured at their terminal devices or via traverse to establish a total flow for that unit. Each DOAS 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.

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	7533601
Model Num	CAS-HVAC3-1.300-24-20T	CAS-HVAC3-1.300-24-20T
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16X25X2
Num Final Filter 1	-	8
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	215T
Horsepower	10	10
Motor Rpm	-	1755
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	24.3

Test Data		
	Design	Actual
SF CFM	6200	5382
SF RPM	-	1576
RA CFM	4300	3338
OA CFM	1900	2044
RL Voltage	-	169V
RL Amperage	-	23.9A
SF Rotation	-	CCW
SF System SetPt	-	53.9 HZ
RA Damper Position	-	MECHANICALLY LINKED
Min OA Damper Position	-	4.0 V
Min OA Damper Type	-	ECONOMIZER

Performance Data	
	Actual
Fan Discharge SP	1.23"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Anthony Taylor on 12/31/2025

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: AHU/RTU



Asset: RTU2

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	7533601
Model Num	CAS-HVAC3-I.250-24-20T	CAS-HVAC3-I.250-24-20T
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16X25X2
Num Final Filter 1	-	8
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	215T
Horsepower	10	10
Motor Rpm	-	1755
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	24.3

Test Data		
	Design	Actual
SF CFM	6200	5256
SF RPM	-	1494
RA CFM	4300	3592
OA CFM	1900	1727
RL Voltage	-	146
RL Amperage	-	22.3
SF Rotation	-	CCW
SF System SetPt	-	51.1 HZ
RA Damper Position	-	MECHANICALLY LINKED
Min OA Damper Position	-	4.2V
Min OA Damper Type	-	ECONOMIZER

Performance Data	
	Actual
Fan Discharge SP	1.30"

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

Completed By: Anthony Taylor on 12/31/2025

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: FAN - Exhaust



Asset: DEF1

AREA:DISH HOOD

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU12HFA	DU12HFA
Serial Num	-	7533601
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO GREEN
Horsepower	0.250	0.250
Motor Rpm	1606	678
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	0.6

Test Data		
	Design	Actual
CFM	350	359
Fan RPM	1606	678
Fan Rotation	-	CCW
Motor RPM	-	678
System SetPt	-	37 %
RL Voltage	-	124
RL Amperage	-	0.36
Total ESP	0.500"	0.012"
Fan Inlet SP	-	-0.012"
Fan Discharge SP	-	ATM

Completed By: Anthony Taylor on 12/31/2025

**Unit Data - PHOTO LOG**



**12/31/2025**

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: FAN - Exhaust



Asset: EF1

AREA:RESTROOM

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVEAIRE	CAPTIVEAIRE
<b>Model Num</b>	DR12HFA	DR12HFA
<b>Serial Num</b>	-	7533601
<b>Type</b>	DOWNBLAST	DOWNBLAST
<b>Configuration</b>	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	TELCO GREEN
<b>Horsepower</b>	0.250	0.25
<b>Motor Rpm</b>	1369	1239
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	2.9

Test Data		
	Design	Actual
<b>CFM</b>	375	348
<b>Fan RPM</b>	1369	1239
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1239
<b>System SetPt</b>	-	63%
<b>RL Voltage</b>	-	122
<b>RL Amperage</b>	-	1.2
<b>Total ESP</b>	0.500"	0.16"
<b>Fan Inlet SP</b>	-	-0.16"
<b>Fan Discharge SP</b>	-	ATM

Completed By: Anthony Taylor on 12/31/2025

**Unit Data - PHOTO LOG**



**12/31/2025**

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: FAN - Exhaust



Asset: EF2

AREA:BOH

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVEAIRE	CAPTIVEAIRE
<b>Model Num</b>	CFA 100CA	CFA 100CA
<b>Serial Num</b>	-	7533601
<b>Type</b>	CEILING	CEILING
<b>Configuration</b>	VERTICAL	VERTICAL

Test Data		
	Design	Actual
<b>CFM</b>	75	69
<b>Fan Rotation</b>	-	CCW

Motor Data	
	Actual
<b>Motor MFG</b>	BROAN

Completed By: Anthony Taylor on 12/31/2025

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:FRYER

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVEAIRE	CAPTIVEAIRE
<b>Model Num</b>	DU85HFA	DU85HFA
<b>Serial Num</b>	-	7533601
<b>Type</b>	UPBLAST	UPBLAST
<b>Configuration</b>	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	TELCO GREEN
<b>Horsepower</b>	1	1
<b>Motor Rpm</b>	-	1063
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	11.6

Test Data		
	Design	Actual
<b>CFM</b>	1500	1507
<b>Fan RPM</b>	1406	1068
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1068
<b>System SetPt</b>	-	54%
<b>RL Voltage</b>	-	122
<b>RL Amperage</b>	-	2.4
<b>Total ESP</b>	1.412"	0.38"
<b>Fan Inlet SP</b>	-	-0.38"
<b>Fan Discharge SP</b>	-	ATM

Completed By: Anthony Taylor on 12/31/2025

**Unit Data - PHOTO LOG**



**12/29/2025**

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: FAN - Exhaust



Asset: KEF2

AREA:GRILL

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVEAIRE	CAPTIVEAIRE
<b>Model Num</b>	DU85HFA	DU85HFA
<b>Serial Num</b>	-	7533601
<b>Type</b>	UPBLAST	UPBLAST
<b>Configuration</b>	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	TELCO GREEN
<b>Horsepower</b>	1	1
<b>Motor Rpm</b>	-	1063
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	11.6

Test Data		
	Design	Actual
<b>CFM</b>	1500	1483
<b>Fan RPM</b>	1348	1240
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1240
<b>System SetPt</b>	-	62%
<b>RL Voltage</b>	-	121
<b>RL Amperage</b>	-	1.6
<b>Total ESP</b>	1.250"	0.56"
<b>Fan Inlet SP</b>	-	-0.56"
<b>Fan Discharge SP</b>	-	ATM

Completed By: Anthony Taylor on 12/31/2025

## Unit Data - PHOTO LOG



12/29/2025

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

## System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:GRILL

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	3347 BD-2	3347 BD-2
Job / Serial Num	-	7533601
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	66"	66"
Hood Width	33"	33"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	CAPTRATE
Filter Size 1	16X16	16X16
Filter Qty 1	4	4
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	6.48	6.48
Filter1 FPM	-	218
Filter2 FPM	-	225
Filter3 FPM	-	234
Filter4 FPM	-	237
Filter Ave FPM(corr)	-	229
CFM	1500	1483

Cooking Equipment	
	Actual
Item 1	GRILL

Completed By: Anthony Taylor on 12/29/2025

## Unit Data - PHOTO LOG



12/29/2025

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:FRYER

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	3347 BD-2	3347 BD-2
Job / Serial Num	-	7533601
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	84"	84"
Hood Width	33"	33"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	CAPTRATE
Filter Size 1	16X16	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	-	180
Filter2 FPM	-	189
Filter3 FPM	-	194
Filter4 FPM	-	190
Filter5 FPM	-	176
Filter Ave FPM(corr)	-	186
CFM	1500	1507

Cooking Equipment	
	Actual
Item 1	FRYER

Completed By: Anthony Taylor on 12/29/2025

## Unit Data - PHOTO LOG



12/29/2025

# National TAB

Project: 12-29-25 CULVERS CLEVELAND, TN

## System/Unit: Kitchen Hood Type II



Asset: HD(Type2)1

AREA:DISH HOOD

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVEAIRE	CAPTIVEAIRE
<b>Model Num</b>	4224 VHB-G-ND-REM1	4224 VHB-G-ND-REM1
<b>Serial Num</b>	-	7433601
<b>Type</b>	TYPE II CANOPY	TYPE II CANOPY
<b>Hood length</b>	42"	42"
<b>Hood Width</b>	42"	42"

Test Data		
	Design	Actual
<b>Exhaust CFM</b>	350	359

Completed By: Anthony Taylor on 12/31/2025

PROVIDE 4" CW O.C. MINIMUM FEET OF FLOOR FOR UNITS, VERIFY ALL OTHERS TO BE WHITE.

RECOMMENDED DUCT SIZES:  
 1. MINIMUM 70" COOLING 72"  
 2. MINIMUM 65" COOLING 74"

