

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 02/03/2026
Completed By: National TAB

PROJECT

**9187 Lighthouse Way (Loveland, OH) -
6290596**

9187 Lighthouse Way

Loveland, OH 45140

Client

Captive-Aire Region #120
1329 E Kemper RD
Ste. 4210
Cincinnati, OH 45246

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Project: 9187 Lighthouse Way (Loveland, OH) - 6290596

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Project: 9187 Lighthouse Way (Loveland, OH) - 6290596
Function: Test, Adjust, & Balance

Project Summary

The 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. The MAU was completed similarly with readings taken at the mesh PSP and using manufacturer correction factors to conclude a final airflow total.

The MAU setpoints for the intake and discharge temperatures were placed at 58 F and 68 F respectively. A smoke test was performed on the hood ensuring that capture and containment around all areas of the unit is satisfactory. Finally, a building pressure was taken and a pressure of -0.010" was collected.

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Project: 9187 Lighthouse Way (Loveland, OH) - 6290596

System/Unit: FAN - Exhaust



Asset: EF-1

AREA:

Unit Data		
	Design	Actual
MFG	Econ-Air	Econ-Air
Model Num	EADU180H	EADU180H
Serial Num	-	6290596
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	ODP
Frame	-	56
Horsepower	1.500	1.5
Motor Rpm	1150	1150
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	6.6
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	2800	2818
Fan Rotation	-	CCW CORRECT
System SetPt	-	50.0 HZ
RL Voltage	-	126 VFD
RL Amperage	-	4.1 VFD
Total ESP	1.000	1.32"
Fan Inlet SP	-	1.32"
Fan Discharge SP	-	ATM

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Project: 9187 Lighthouse Way (Loveland, OH) - 6290596

System/Unit: FAN - Supply



Asset: HMUA-1

AREA:

Unit Data		
	Design	Actual
MFG	Econ-Air	Econ-Air
Model Num	EA2-D.250-20D	EA2-D.250-20D
Serial Num	-	6290596
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	ODP
Frame	-	56
Horsepower	1.000	1.0
Motor Rpm	1150	1150
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	3.8
Service Factor	-	1.15

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	58
Discharge Air Temp SetPt	60	68
Air Flow Switch SP Actual	-	0.27"

Test Data		
	Design	Actual
CFM	2240	2177
Motor RPM	-	1150
SF System SetPt	-	56.3 HZ
RL Voltage	-	205 VFD
RL Amperage	-	2.9 VFD
Total ESP	-	0.50
Fan Discharge SP	-	0.12"

General	
	Actual
Fan Rotation Correct	YES

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Project: 9187 Lighthouse Way (Loveland, OH) - 6290596

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	Econ-Air	Econ-Air
Model Num	5424 EX-2-PSP-F	5424 EX-2-PSP-F
Job / Serial Num	-	6290596
Type	TYPE I	TYPE I
Hood length	168"	168"
Hood Width	54"	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	14"	14"
Supply Plenum Length	180"	180"

Test Data Exhaust		
	Design	Actual
Filter Type	SS Baffle with Handles	BAFFLE
Filter Size 1	16"	16X16
Filter Qty 1	10	10
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	16.2	16.2
Filter1 FPM	-	138
Filter2 FPM	-	140
Filter3 FPM	-	158
Filter4 FPM	-	195
Filter5 FPM	-	217
Filter6 FPM	-	229
Filter7 FPM	-	196
Filter8 FPM	-	163
Filter9 FPM	-	159
Filter10 FPM	-	149
Filter Ave FPM(corr)	-	174
CFM	2800	2818

Cooking Equipment	
	Actual
Item 1	STOVE
Item 2	OVEN
Item 3	VERTICAL BROILER

Test Data Supply		
	Design	Actual
Total Area	17.5	17.5
Kv factor (Vel)	0.87	0.87
Num of Readings	-	12
Reading1 FPM	-	177
Reading2 FPM	-	144
Reading3 FPM	-	122
Reading4 FPM	-	159
Reading5 FPM	-	163
Reading6 FPM	-	140
Reading7 FPM	-	122
Reading8 FPM	-	161
Reading9 FPM	-	157
Reading10 FPM	-	132
Reading11 FPM	-	121
Reading12 FPM	-	129
Ave FPM(corr)	-	143
CFM	2240	2177

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