

**Report By:**

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

**NATIONAL**

**TAB**

Comfort. Under control.

**Report: FINAL TAB REPORT  
Function: Test, Adjust, & Balance  
Date: 11/22/2022**

# **PROJECT**

## **Hurts Donuts - Springfield MO**

1231 EAST SUNSHINE ST

SPRINGFIELD, MO 65804

### **Client**

CAPTIVE-AIRE R120  
1329 E. Kemper Road  
Suite 4210  
Cincinnati, OH 45246

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Project: Hurts Donuts - Springfield MO

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## Hurts Donuts - Springfield MO

### CheckList Information

**Name :** Hood Capture Test Form **Status :** NotSubmitted

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

**Requesting Organization :** National TAB

### CheckList Item Details

Owner Representative Smoke Test Witness	Video file
Witness Company	Video file
Balance Company / Tech Name (Witness)	DAN HERTENSTEIN / NT
Date	11/23/2022
List cooking equipment turned on for the test	None - no gas started up on food equipment
Take Three Pictures one each of Hood Left, Hood Center, Hood Right (include cooking equipment in photo)	



Hoodright.jpeg



Hoodcenter.jpeg



Hoodleft.jpeg

Take and Load a Hood Left Cooktop smoke test capture video	Pass
Take and Load a Hood Right Cooktop smoke test capture video	Pass

Notes/Comments :

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Project: Hurts Donuts - Springfield MO  
System/Unit: FAN - Exhaust



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Asset: EF1

AREA:

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVE-AIRE	CAPTIVE-AIRE
<b>Model Num</b>	DU85	DU85
<b>Serial Num</b>	-	5479645
<b>Type</b>	-	UPBLAST
<b>Configuration</b>	-	VERTICAL

Test Data		
	Design	Actual
<b>CFM</b>	1775	1757
<b>Fan Rotation</b>	-	CCW
<b>System SetPt</b>	-	65/53%
<b>RL Voltage</b>	-	122
<b>RL Amperage</b>	-	3.95
<b>Fan Inlet SP</b>	-	-0.56"

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	Telco Green
<b>Horsepower</b>	-	1
<b>Motor Rpm</b>	-	300-1800
<b>Phase</b>	-	1
<b>Voltage (rated)</b>	-	208
<b>Amperage (rated)</b>	-	6.9

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Project: Hurts Donuts - Springfield MO  
System/Unit: FAN - Exhaust



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Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DU85	DU85
Serial Num	-	5479645
Type	-	UPBLAST
Configuration	-	VERTICAL

Test Data		
	Design	Actual
CFM	1600	1667
Fan Rotation	-	CCW
System SetPt	-	58%/48%
RL Voltage	-	122
RL Amperage	-	2.5
Fan Inlet SP	-	-0.36"

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	1
Motor Rpm	-	300-1800
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	6.9

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Project: Hurts Donuts - Springfield MO  
System/Unit: FAN - Supply



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Asset: SF1

AREA:

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVE-AIRE	CAPTIVE-AIRE
<b>Model Num</b>	A2-D.250-20D-MPU	A2-D.250-20D-MPU
<b>Serial Num</b>	-	5479645

Test Data		
	Design	Actual
<b>CFM</b>	2700	2850
<b>SF RPM</b>	-	59.1 HZ
<b>RL Voltage</b>	-	212 AVG
<b>RL Amperage</b>	-	5.2 AVG
<b>Suction ESP</b>	-	0.16 (BI)
<b>Discharge ESP</b>	-	0.59 BD)
<b>Total ESP</b>	-	0.43 B-DP

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	TECO
<b>Frame</b>	-	184T
<b>Horsepower</b>	-	2
<b>Motor Rpm</b>	-	1150
<b>Phase</b>	-	3
<b>Voltage (rated)</b>	-	208
<b>Amperage (rated)</b>	-	8,3
<b>Service Factor</b>	-	1.15

Drive Data		
	Design	Actual
<b>Num of Belts</b>	-	DD

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Project: Hurts Donuts - Springfield MO

## System/Unit: Kitchen Hood Type I



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Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	5424ND-2 PSP	5424ND-2 PSP
Job / Serial Num	-	5479645
Type	TYPE I	TYPE I
Hood length	120	120
Hood Width	54	54
Supply Plenum Type	-	PSP
Supply Plenum Width	12	12
Supply Plenum Length	132	132

Test Data Supply		
	Design	Actual
Total AK Area	11	11
Kv factor (Vel)	0.87	0.87
Num of Readings	-	8
Reading1 FPM	-	187
Reading2 FPM	-	141
Reading3 FPM	-	143
Reading4 FPM	-	155
Reading5 FPM	-	160
Reading6 FPM	-	133
Reading7 FPM	-	117
Reading8 FPM	-	188
Ave FPM(corr)	-	153
CFM	1420	1464

Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	BAFFLE
Filter Size 1	16X16	16X16
Filter Qty 1	7	7
Filter AK factor size 1	11.34	11.34
Filter Total AK Area	11.34	11.34
Filter1 FPM	-	135
Filter2 FPM	-	159
Filter3 FPM	-	176
Filter4 FPM	-	198
Filter5 FPM	-	154
Filter6 FPM	-	140
Filter7 FPM	-	127
Filter Ave FPM(corr)	-	155
CFM	1775	1757

Cooking Equipment		
	Design	Actual
Item 1	-	2 burner-Range
Item 2	-	Griddle
Item 3	-	Donut fryer

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Project: Hurts Donuts - Springfield MO

## System/Unit: Kitchen Hood Type I



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Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	5424ND-2 PSP	5424ND-2 PSP
Job / Serial Num	-	5479645
Type	TYPE I	TYPE I
Hood length	120	120
Hood Width	54	54
Supply Plenum Type	-	PSP
Supply Plenum Width	12	12
Supply Plenum Length	120	120

Test Data Supply		
	Design	Actual
Total AK Area	10	10
Kv factor (Vel)	0.87	0.87
Num of Readings	-	8
Reading1 FPM	-	147
Reading2 FPM	-	157
Reading3 FPM	-	137
Reading4 FPM	-	206
Reading5 FPM	-	170
Reading6 FPM	-	148
Reading7 FPM	-	165
Reading8 FPM	-	150
Ave FPM(corr)	-	160
CFM	1280	1392

Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	BAFFLE
Filter Size 1	16X16	16X16
Filter Qty 1	7	7
Filter AK factor size 1	11.34	11.34
Filter Total AK Area	11.34	11.34
Filter1 FPM	-	118
Filter2 FPM	-	135
Filter3 FPM	-	157
Filter4 FPM	-	179
Filter5 FPM	-	183
Filter6 FPM	-	143
Filter7 FPM	-	114
Filter Ave FPM(corr)	-	147
CFM	1600	1667

Cooking Equipment		
	Design	Actual
Item 1	-	Donut fryer
Item 2	-	Donut fryer

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