Report By:

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

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 03/24/2025

Completed By: National TAB

PROJECT

03-24-25 CHIPOTLE #4941 DUNCAN, NC

6 TYGER RIVER DR

DUNCAN , NC 29334

Client

Chipotle Mexican Grill

610 Newport Center Drive, Suite 1100

Newport Beach, CA 92660

National TAB

Project: 03-24-25 CHIPOTLE #4941 DUNCAN, NC

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Project Summary
The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report are further details 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.

FCU's w/ Diffusers
Each of the FCU's were measured at their terminal devices utilizing a flow hood. The sum of these readings is equal to the total flow for that particular unit. The total flow of each FCU was then adjusted to within tolerance of the specified design. Each terminal diffuser was balanced to within tolerance of the engineer's design volume utilizing the provided hand damper located at the takeoff of the main & branch trunk line(s). Any equipment that fell outside of this 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.

MUA (Make Up Air Unit) w/ PSP
Total flow for the MAU (Make-up Air Unit) unit was measured by readings taken at the discharge of the hood's perforated supply plenum. Readings taken with a velocity matrix were averaged and multiplied by a manufacturer's corrected area. Adjustments to the fan speed were made in order to bring the unit to within design tolerance. Any MUA's that fell outside of this tolerance is noted throughout the report.

Ceiling Exhaust Fans
The ceiling exhaust fans were measured using a flow hood. If speed adjustment was provided, the fan speed was adjusted to within design tolerance. 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

- Final filters dirty.

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Project Issue Information

Issue Name : Final filters dirty.

Description : Filters on both RTU's are dirty, recommend replacement.

Created By : National TAB

Assigned To : National TAB - Brianna Biggs

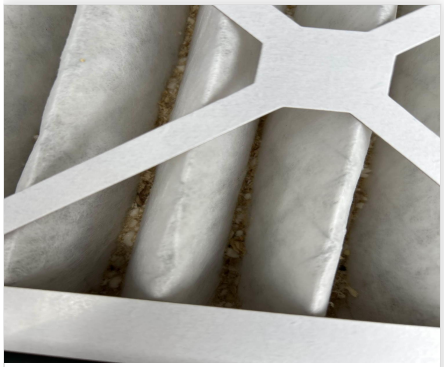
Status : Open

Priority : Medium

Asset Tag :

Originated Date : 03/24/2025 - Jearod Ferrette - National TAB

Project Issue File Details



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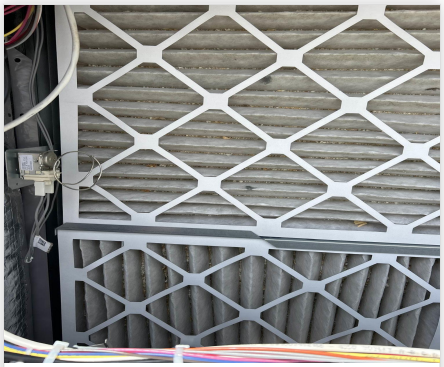

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NATIONAL TAB

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
RTU-1	KITCHEN	4000	4004	3300	3306	700	698	17.5%	17.4%						
RTU-2	DINING ROOM	5000	5052	4200	4243	800	809	16.0%	16.0%						
MUA-1	KITCHEN HD									1300	1319				
EF-1	KITCHEN											2550	2536		
EF-2	RESTROOMS													150	148
TOTALS		9000	9056	7500	7549	1500	1507			1300	1319	2550	2536	150	148

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2800	2826
TOTAL EXHAUST	2700	2684
NET AIRFLOW	100	142

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.01
SIDE	0.004
REAR	0.01
AVERAGE	**0.008**

FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

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

NOTES:

CheckList List

- 01: RTU’S/AHU’S
- 02: EF’S
- 03: MUAC
- 04: HOODS
- 05: FINAL TESTS

03-24-25 CHIPOTLE #4941 DUNCAN, NC

CheckList Information

Name :	01: RTU'S/AHU'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/10/2025 - Tara Metcalf - National TAB		
Completed Date :	03/24/2025 - Jearod Ferrette - National TAB		

CheckList Item Details

RTU's/AHU's

Thermostats installed and have power?	Yes
Comment:	
All diffusers and grilles are installed and match design?	Yes
Comment:	
Deflector plates are removed from 1x1 diffusers on the serve line (double check that this is specified on the diffuser schedule first)	Yes
Comment:	
Economizer blank plate is installed below the ouside air intake (Trane only) (N/A = not applicable)	N/A
Comment:	
Economizers are assembled and functional?	Yes
Comment:	
DCV Max damper opening position is set to minimum?	Yes
Comment:	

Free cooling enthalpy set point set for lowest setting (Typically "D")	Yes
Comment:	
Motors are all operating below the FLA rating?	Yes
Comment:	
Are belts tight?	N/A
Comment:	
If direct drive unit is the speed controller working?	Yes
Comment:	
Is gas piping installed and valves turned on?	Yes
Comment:	
Unit free of noticeable noise and vibration	Yes
Comment:	
Final outside air damper position is marked with permanent marker?	Yes
Comment:	

03-24-25 CHIPOTLE #4941 DUNCAN, NC

CheckList Information

Name :	02: EF'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/10/2025 - Tara Metcalf - National TAB		
Completed Date :	03/24/2025 - Jearod Ferrette - National TAB		

CheckList Item Details

EF's

Rotation is correct?	Yes
Comment:	
Belts are tight?	N/A
Comment:	
Viroguard installed on hood fan(s)?	Yes
Comment:	
Hinge kit installed installed on hood fan?	Yes
Comment:	
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?	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:	

03-24-25 CHIPOTLE #4941 DUNCAN, NC

CheckList Information

Name :	03: MUAC	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/10/2025 - Tara Metcalf - National TAB		
Completed Date :	03/24/2025 - Jearod Ferrette - National TAB		

CheckList Item Details

MUA

Rotation is correct?	Yes
Comment:	
Gas piping is installed and valves are in on position?	Yes
Comment:	
Internal motorized damper is fully opening?	Yes
Comment:	
Motor is operating below the FLA rating?	Yes
Comment:	
Unit free of noticeable noise and vibration?	Yes
Comment:	

03-24-25 CHIPOTLE #4941 DUNCAN, NC

CheckList Information

Name :	04: HOODS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/10/2025 - Tara Metcalf - National TAB		
Completed Date :	03/24/2025 - Jearod Ferrette - National TAB		

CheckList Item Details

HOODS

All hood filters installed and accounted for?	Yes
Comment:	
Hoods are wired and have power?	Yes
Comment:	
Hood is free of alarms?	Yes
Comment:	
Hood is free of damage?	Yes
Comment:	
Quarter or full vertical end panels are installed if specified?	Yes
Comment:	

03-24-25 CHIPOTLE #4941 DUNCAN, NC

CheckList Information

Name :	05: FINAL TESTS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/10/2025 - Tara Metcalf - National TAB		
Completed Date :	03/24/2025 - Jearod Ferrette - National TAB		

CheckList Item Details

FINAL CHECKS

Is space free of drafting?	Yes
Comment:	
Is space comfortable in all areas?	Yes
Comment:	
Is the space free of ventilation noise?	Yes
Comment:	
List kitchen equipment turned on for testing	Yes
Comment: RICE COOKER, GRILL, STOVE, FRYER	
List smoke candle type used	
Comment: SMOKE EMITTER	

HOOD CAPTURE TEST

- Open MicrosoftTeams_video_472415618.mp4

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Smoke test capture % - Perimeter of hood	
Comment:	
100%	
Smoke test capture % - Top of cooking surface	
Comment:	
100%	
WITNESS	
Date test was completed	03/24/2025
Comment:	
TAB tech name / Firm	
Comment:	
JEAROD FERRETE	
Site super name / Firm	
Comment:	
Chris	
Owner representative name / Firm (if Applicable)	
Comment:	
NA	
BUILDING PRESSURE	
Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	Pass
Comment:	
FRONT 0.001, SIDE 0.004, REAR 0.01	

National TAB

Project: 03-24-25 CHIPOTLE #4941 DUNCAN, NC

System/Unit: AHU/RTU

Asset: RTU1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	3423P68559
Model Num	48FC_M11	48FC_M11
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X19.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	CARRIAR
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	NL

Drive Data	
	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

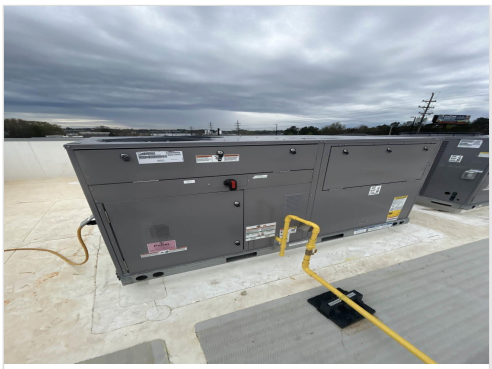
Test Data		
	Design	**Actual**
SF CFM	4000	4004
SF RPM	-	2126
RA CFM	3300	3306
OA CFM	700	698
RL Voltage	-	210/211/210
RL Amperage	-	5.6/5.6/5.7
SF Rotation	-	CCW
RA Damper Position	-	6.9
Min OA Damper Position	-	3.10
Min OA Damper Type	-	ECON
OA Enthalpy Setpt	-	S5

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-1.09"
Fan Suction SP	-	-1.45"
Fan Discharge SP	-	0.54"
Total ESP	0.80"	1.63"
Fan Total SP	-	1.99"

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

Completed By: Jearod Ferrette on 03/24/2025

Unit Data - PHOTO LOG



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Project:03-24-25 CHIPOTLE #4941 DUNCAN, NC

AHU/RTU

Diffuser Supply (GRD)

RTU1/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	CD1	14"	500	1	506	532	492	98.4
SGRD2	KITCHEN	CD1	14"	500	1	583	614	501	100.2
SGRD3	KITCHEN	CD2	8"	250	1	161	173	248	99.2
SGRD4	KITCHEN	CD2	8"	250	1	179	195	260	104.0
SGRD5	KITCHEN	CD2	8"	250	1	169	183	247	98.8
SGRD6	KITCHEN	CD2	8"	250	1	164	179	248	99.2
SGRD7	KITCHEN	ACPSP	165X6	700	5.36	428	562	723	103.3
SGRD8	KITCHEN	CD2	8"	150	1	186	196	149	99.3
SGRD9	KITCHEN	CD2	14"	500	1	577	597	498	99.6
SGRD10	KITCHEN	CD2	14"	500	1	530	564	490	98.0
SGRD11	KITCHEN	CD2	8"	150	1	192	203	148	98.7
Total				4000		3675	3998	4004	100.1%

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Project: 03-24-25 CHIPOTLE #4941 DUNCAN, NC

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING ROOM

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	3423P68661
Model Num	48FC_M14	48FC_M14
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X19.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	CARRIER
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	NL

Drive Data	
	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

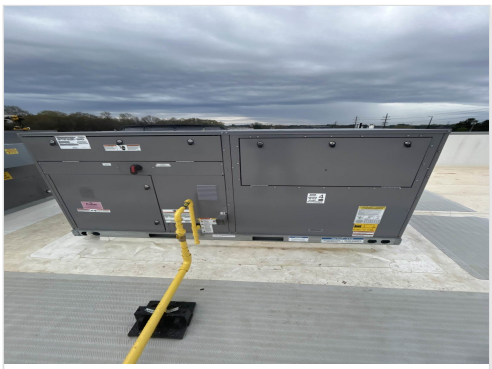
Test Data		
	Design	**Actual**
SF CFM	5000	5052
SF RPM	-	1882
RA CFM	4200	4243
OA CFM	800	809
RL Voltage	-	210/211/211
RL Amperage	-	5.7/5.6/5.6
SF Rotation	-	CCW
RA Damper Position	-	6.85
Min OA Damper Position	-	3.15
Min OA Damper Type	-	ECON
OA Enthalpy Setpt	-	S5

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-1.33"
Fan Suction SP	-	-1.70"
Fan Discharge SP	-	0.33"
Total ESP	0.80"	1.66"
Fan Total SP	-	2.03"

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

Completed By: Jearod Ferrette on 03/24/2025

Unit Data - PHOTO LOG



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National TAB

Project:03-24-25 CHIPOTLE #4941 DUNCAN, NC

AHU/RTU

Diffuser Supply (GRD)

RTU2/DINING ROOM

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DINING ROOM	SR2	18"	500	0.61	491	218	499	99.8
SGRD2	DINING ROOM	SR2	18"	600	0.61	506	483	598	99.7
SGRD3	DINING ROOM	SR1	14"	900	1.07	954	1026	920	102.2
SGRD4	DINING ROOM	SR1	14"	900	1.07	766	802	909	101.0
SGRD5	DINING ROOM	SR1	14"	800	1.07	849	924	809	101.1
SGRD6	DINING ROOM	SR1	14"	700	1.07	941	833	710	101.4
SGRD7	DINING ROOM	SR1	14"	600	1.07	935	772	607	101.2
Total				5000		5442	5058	5052	101.04%

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Project: 03-24-25 CHIPOTLE #4941 DUNCAN, NC

System/Unit: FAN - Exhaust

Asset: EF1 AREA:KITCHEN

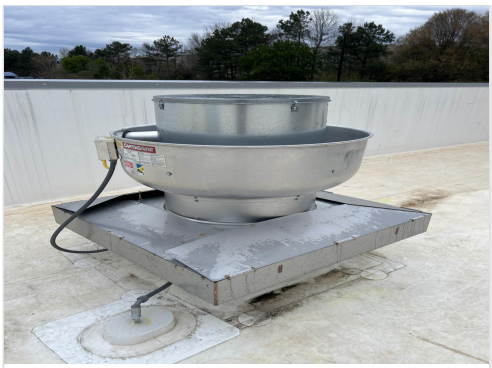
Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	6304903
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	182/4T
Horsepower	2	2
Motor Rpm	1170	1170
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	6.44
Service Factor	-	1.5

Test Data		
	Design	**Actual**
CFM	2550	2536
Fan RPM	-	DD/48.3
Fan Rotation	-	CCW
Motor RPM	-	DD/48.3
System SetPt	-	48.3HZ
RL Voltage	-	88 VFD
RL Amperage	-	4.8 VFD
Total ESP	1.20"	0.55"
Fan Inlet SP	-	-0.55"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 03/24/2025

Unit Data - PHOTO LOG



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Project: 03-24-25 CHIPOTLE #4941 DUNCAN, NC

System/Unit: FAN - Exhaust

Asset: EF2 AREA:RESTROOMS

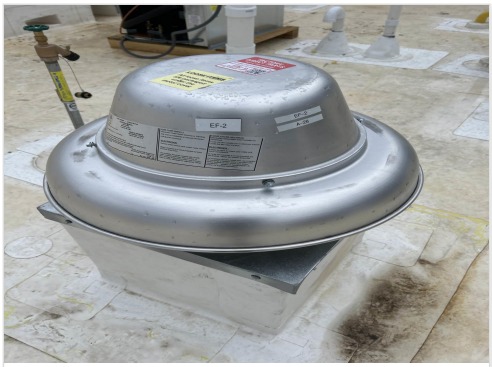
Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	6304903
Type	DOWBLAST	DOWBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO
Frame	-	143T
Horsepower	1	1
Motor Rpm	1740	1740
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	2.90
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	150	148
Fan RPM	1304	1251
Fan Rotation	-	CCW
Motor RPM	-	1251
System SetPt	-	65P
RL Voltage	-	115V
RL Amperage	-	0.80
Total ESP	0.600"	0.40"
Fan Inlet SP	-	-0.40"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 03/24/2025

Unit Data - PHOTO LOG



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Project:03-24-25 CHIPOTLE #4941 DUNCAN, NC

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF2/RESTROOMS

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	RESTROOMS	ER1	6"	75	1	115	105	72	96.0
EGRD2	RESTROOMS	ER1	6"	75	1	80	60	76	101.3
Total				150		195	165	148	98.67%

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Project: 03-24-25 CHIPOTLE #4941 DUNCAN, NC

System/Unit: FAN - Supply

Asset: MUA 1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	6304903
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO
Frame	-	143T
Horsepower	1	1
Motor Rpm	1740	1740
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	2.90
Service Factor	-	1.15

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	Yes
Flame Status (pass/fail)	-	Pass
Inlet Air Temp SetPt	55	55
Discharge Air Temp SetPt	60	60
Air Flow Switch SP Actual	-	0.34"

Test Data		
	Design	**Actual**
CFM	1300	1319
SF RPM	1557	DD/53.4
Motor RPM	-	DD/53.4
SF System SetPt	-	53.4HZ
RL Voltage	-	145 VFD
RL Amperage	-	2.5 VFD

General	
	Actual
Fan Rotation Correct	YES

Completed By: Jearod Ferrette on 03/24/2025

Unit Data - PHOTO LOG

03/24/2025

National TAB

Project: 03-24-25 CHIPOTLE #4941 DUNCAN, NC

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	CAPTIVEARE	CAPTIVEARE
Model Num	5424 ND-2-ACPSP-F	5424 ND-2-ACPSP-F
Job / Serial Num	-	6304903
Type	TYPE I - CANOPY	TYPE I - CANOPY
Hood length	153"	153"
Hood Width	54"	54"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	9"	9"
Supply Plenum Length	165"	165"

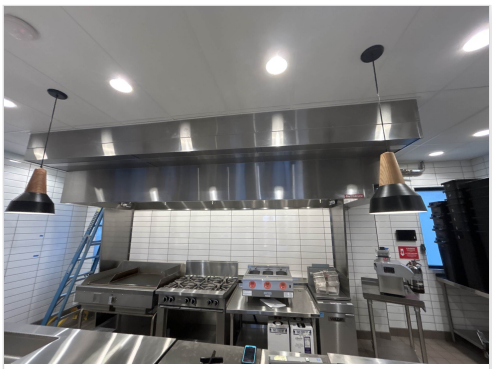
Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	16X16	16X16
Filter Qty 1	9	9
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	14.58	14.58
Filter1 FPM	-	161
Filter2 FPM	-	170
Filter3 FPM	-	177
Filter4 FPM	-	181
Filter5 FPM	-	191
Filter6 FPM	-	185
Filter7 FPM	-	168
Filter8 FPM	-	169
Filter9 FPM	-	165
Filter Ave FPM(corr)	-	174
CFM	2550	2536

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	GRILL
Item 3	STOVE
Item 4	RICE COOKER

Test Data Supply		
	Design	**Actual**
Total Area	10.31	10.31
Kv factor (Vel)	.81	.81
Num of Readings	-	9
Reading1 FPM	-	231
Reading2 FPM	-	200
Reading3 FPM	-	170
Reading4 FPM	-	1563
Reading5 FPM	-	137
Reading6 FPM	-	105
Reading7 FPM	-	124
Reading8 FPM	-	130
Reading9 FPM	-	162
Ave FPM(corr)	-	158
CFM	1300	1319

Completed By: Jearod Ferrette on 03/24/2025

Unit Data - PHOTO LOG



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