

# National TAB

Project: 09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)



## System/Unit: AHU/RTU

Asset: RTU-1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	0324P06455
Model Num	48HCE12	48LCEA12J2M6A4R4F0
Type	RTU	RTU
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE
Num OA Filters 1	-	2
OA Filter Size 1	-	24x26x1
Num Final Filter 1	-	6
Final Filter Size 1	-	18x24x2

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	NL
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	4.6

Drive Data	
	Actual
Motor Sheave Size	1VL44
Motor Bore Size	7/8"
Motor Sheave SetPt	CLOSED
Fan Sheave Size	AK84
Fan Sheave Bore	1 3/16"
Belt CL Distance	20"
Num of Belts	1
Belt Size	AX56
Belt Alignment	CORRECT

Test Data		
	Design	Actual
SF CFM	4000	3888
SF RPM	-	813
RA CFM	3500	3369
OA CFM	500	519
RL Voltage	-	488/489/492
RL Amperage	-	4.1/4.2/4.2
SF Rotation	-	CCW
RA Damper Position	-	78%
Min OA Damper Position	-	22%
Min OA Damper Type	-	OPPOSED BLADE

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.43"
Fan Suction SP	-	-0.66"
Fan Discharge SP	-	0.52"
Total ESP	0.80"	0.95"
Fan Total SP	-	1.18"

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

Completed By: Wesley John on 09/23/2024

# National TAB

Project:09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU-1/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	OFFICE	CD1	8"	200	1.0	162	198	214	107.0
SGRD2	BOH	CD1	12"	400	1.0	412	476	389	97.3
SGRD3	BOH	CD1	12"	400	1.0	482	535	376	94.0
SGRD4	FOOD PREP	CD1	12"	500	1.0	348	403	469	93.8
SGRD5	FOOD PREP	CD1	12"	500	1.0	402	449	483	96.6
SGRD6	SERVING	CD2	8"	325	1.0	147	188	348	107.1
SGRD7	SERVING	CD2	8"	325	1.0	190	233	319	98.2
SGRD8	SERVING	CD2	8"	325	1.0	214	243	307	94.5
SGRD9	SERVING	CD2	8"	325	1.0	164	193	299	92.0
SGRD10	HOOD1	ACPSP	165"X9"	700	5.36	956	1058	684	97.7
Total				4000		3477	3976	3888	97.2%

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Project: 09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)



## System/Unit: AHU/RTU

Asset: RTU-2

AREA: DINING

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	3723P27890
Model Num	48HCE14	48LCDA14J2C6A4S4C0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	4
OA Filter Size 1	-	16x25x1
Num Final Filter 1	-	6
Final Filter Size 1	-	20x25x2

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	145TZ
Horsepower	-	NL
Motor Rpm	-	1745
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	7.0

Drive Data	
	Actual
Motor Sheave Size	1VM50
Motor Bore Size	7/8"
Motor Sheave SetPt	2.0 TURNS OPEN
Fan Sheave Size	BK100
Fan Sheave Bore	1 3/16"
Belt CL Distance	13 1/4"
Num of Belts	1
Belt Size	BX46
Belt Alignment	CORRECT

Test Data		
	Design	Actual
SF CFM	4375	4316
SF RPM	-	802
RA CFM	3375	3272
OA CFM	1000	1044
RL Voltage	-	490/489/492
RL Amperage	-	6.8/6.5/6.6
SF Rotation	-	CCW
RA Damper Position	-	64%
Min OA Damper Position	-	36%
Min OA Damper Type	-	OPPOSED BLADE

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.50"
Fan Suction SP	-	-0.74"
Fan Discharge SP	-	0.56"
Total ESP	0.80"	1.06"
Fan Total SP	-	1.30"

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

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# National TAB

Project:09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU-2/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	DINING	SR2	18"X6"	450	1.0	413	-	437	97.1
SGRD2	DINING	SR2	18"X6"	550	1.0	372	-	530	96.4
SGRD3	DINING	SR1	14"	875	1.0	745	-	856	97.8
SGRD4	DINING	SR1	14"	750	1.0	926	-	738	98.4
SGRD5	DINING	SR1	14"	650	1.0	759	-	627	96.5
SGRD6	DINING	SR1	14"	550	1.0	728	-	584	106.2
SGRD7	DINING	SR1	14"	550	1.0	520	-	544	98.9
Total				4375		4463	0	4316	98.65%

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# National TAB

Project: 09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)



## System/Unit: FAN - Exhaust

Asset: EF-1

AREA:HOOD-1

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVE-AIRE	CAPTIVE-AIRE
<b>Model Num</b>	DU180HFA	DU180HFA
<b>Serial Num</b>	-	6502453
<b>Type</b>	CENTRIFUGAL	CENTRIFUGAL
<b>Configuration</b>	UPBLAST	UPBLAST

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	WEG
<b>Frame</b>	-	182/4T
<b>Horsepower</b>	2.0	2.0
<b>Motor Rpm</b>	-	1170
<b>Phase</b>	3	3
<b>Voltage (rated)</b>	460	460
<b>Amperage (rated)</b>	-	3.22
<b>Service Factor</b>	-	1.25

Test Data		
	Design	Actual
<b>CFM</b>	2550	2595
<b>Fan RPM</b>	1220	1203
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1203
<b>System SetPt</b>	-	61.7 Hz
<b>RL Voltage</b>	-	147 VFD
<b>RL Amperage</b>	-	5.6 VFD
<b>Total ESP</b>	1.45"	1.49"
<b>Fan Inlet SP</b>	-	-1.49"
<b>Fan Discharge SP</b>	-	ATM

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# National TAB

Project: 09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)



## System/Unit: FAN - Exhaust

Asset: EF-2

AREA:RESTROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	6502453
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Motor Data		
	Design	Actual
Motor MFG	-	TELCO
Frame	-	NL
Horsepower	0.25	0.25
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	NL
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	150	155
Fan RPM	1282	982
Fan Rotation	-	CCW
Motor RPM	-	982
System SetPt	-	52%
RL Voltage	-	121
RL Amperage	-	0.5
Total ESP	0.60"	0.29"
Fan Inlet SP	-	-0.29"
Fan Discharge SP	-	ATM

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Project:09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)

## FAN - Exhaust



### Diffuser Ret/Exh (GRD)

#### EF-2/RESTROOM

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	RR	ER1	6"X6"	75	1.0	49	89	75	100.0
EGRD2	RR	ER1	6"X6"	75	1.0	131	90	80	106.7
Total				150		180	179	155	103.33%

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# National TAB

Project: 09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)



## System/Unit: FAN - Supply

Asset: MUA-1

AREA:HOOD-1

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	6502453
Type	MUA	MUA
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	143T
Horsepower	1.0	1.0
Motor Rpm	-	1740
Phase	3	3
Voltage (rated)	460	460
Amperage (rated)	-	1.45
Service Factor	-	1.15

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	NO
Flame Status (pass/fail)	-	N/A
Inlet Air Temp SetPt	55.0 F	55.0 F
Discharge Air Temp SetPt	60.0 F	60.0 F
Air Flow Switch SP Actual	-	0.34"

Test Data		
	Design	Actual
CFM	1300	1286
SF RPM	1546	1363
Motor RPM	-	1363
RL Voltage	-	115 VFD
RL Amperage	-	1.3 VFD
Total ESP	-	0.47"
Fan Discharge SP	-	0.47"

General	
	Actual
Fan Rotation Correct	YES

Completed By: Wesley John on 09/23/2024

Notes:  
GAS HEAT FAILED TO LIGHT. SEE ISSUES.

Written By: Wesley John on 09/23/2024

# National TAB

Project: 09-23-24 CHIPOTLE #42-5110 MANVEL (MANVEL, TX)



## System/Unit: Kitchen Hood Type I

Asset: HD-1

AREA:COOKLINE

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	5424 ND-2-ACPSP-F	5424 ND-2
Job / Serial Num	-	6502453
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 Supply		
	Design	Actual
Total AK Area	10.31	10.31
Kv factor (Vel)	0.81	0.81
Num of Readings	-	148
Reading1 FPM	-	146
Reading2 FPM	-	118
Reading3 FPM	-	158
Reading4 FPM	-	137
Reading5 FPM	-	130
Reading6 FPM	-	193
Reading7 FPM	-	175
Reading8 FPM	-	187
Ave FPM(corr)	-	154
CFM	1300	1286

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
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	-	176
Filter2 FPM	-	182
Filter3 FPM	-	185
Filter4 FPM	-	188
Filter5 FPM	-	183
Filter6 FPM	-	182
Filter7 FPM	-	175
Filter8 FPM	-	169
Filter9 FPM	-	162
Filter Ave FPM(corr)	-	178
CFM	2550	2595

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	RANGE
Item 3	FRYER
Item 4	RICE COOKER

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