

Report By:

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



Report: Teriyaki Madness TAB Report

Function: Test, Adjust, & Balance

Date: 01/23/2024

PROJECT

Teriyaki Madness (Miamisburg, OH)

9474 Springboro Pike

Miamisburg, OH 35342

Client

Champion Commercial HVAC

2638 Tem Mile Rd.

Melbourne, KY 41059

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Project: Teriyaki Madness (Miamisburg, OH)

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National TAB

Project: Teriyaki Madness (Miamisburg, OH)

System/Unit: AHU/RTU



Asset: RTU-1

AREA:

Unit Data		
	Design	Actual
MFG	BRYANT	BRYANT
Serial Num	-	0308G20174
Model Num	580FPV048115AB	580FPV048115AB
Configuration	-	VERTICAL
Num PreFilter 1	-	2
PreFilter Size 1	-	16"X24"X2"

Test Data		
	Design	Actual
SF CFM	1600	1613
RA CFM	-	1396
OA CFM	200	217
RL Voltage	-	212.4/213.1/209.8
RL Amperage	-	3.21/3.32/3.38
OA Damper Position	-	10%

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	1.0	NA
Motor Rpm	-	NA
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	3.5
Service Factor	-	NA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.47"
Fan Suction SP	-	-0.69"
Fan Discharge SP	-	0.38"
Total ESP	1.0	0.85"
Fan Total SP	-	1.16"

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Project: Teriyaki Madness (Miamisburg, OH)

AHU/RTU



Diffuser Supply (GRD)

RTU-1/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
S1	BOH	SUPPLY	24"x24"	400	206	421	105.3
S2	BOH	SUPPLY	24"x24"	400	169	398	99.5
S3	BOH	SUPPLY	24"x24"	400	271	407	101.8
S4	BOH	SUPPLY	24"x24"	400	272	387	96.8
Total				1600	918	1613	100.81%

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Project: Teriyaki Madness (Miamisburg, OH)

System/Unit: AHU/RTU



Asset: RTU-2

AREA:

Unit Data		
	Design	Actual
MFG	TRANE	CARRIER
Serial Num	-	1723C08350
Model Num	YSC072H3	48FCEM07A2A50
Configuration	-	VERTICAL
Num PreFilter 1	-	4
PreFilter Size 1	-	16"X16"X2"

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	5.5
Service Factor	-	NA

Test Data		
	Design	Actual
SF CFM	2100	2210
RA CFM	-	2115
OA CFM	500	472
RL Voltage	-	214.2/213.8/212.9
RL Amperage	-	3.72/3.64/3.57
OA Damper Position	-	1"

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.56"
Fan Suction SP	-	-0.78"
Fan Discharge SP	-	0.48"
Total ESP	1.0	1.04"
Fan Total SP	-	1.26"

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Notes:

.Economizer not configured/fully installed.

.Attempted to set manually by loosening tension screw attached to actuator but did not allow damper to be manipulated.

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Project: Teriyaki Madness (Miamisburg, OH)

AHU/RTU



Diffuser Supply (GRD)

RTU-2/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
S1	FOH	SUPPLY	24"x24"	200	222	208	104.0
S2	FOH	SUPPLY	24"x24"	400	478	431	107.8
S3	SERVICE	SUPPLY	24"x24"	200	181	219	109.5
S4	DINING	SUPPLY	12"x12"	400	468	394	98.5
S5	DINING	SUPPLY	12"x12"	400	589	411	102.8
S6	WOMEN'S RR	SUPPLY	24"x24"	50	98	54	108.0
S7	MEN'S RR	SUPPLY	24"x24"	50	102	55	110.0
S8	BOH	SUPPLY	24"x24"	400	272	438	109.5
Total				2100	2410	2210	105.24%

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Project: Teriyaki Madness (Miamisburg, OH)

System/Unit: FAN - Supply



Asset: MAU-1 (HEAT/DX) 1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A2-D.250-20D-MPU	A2-D.250-20D-MPU
Serial Num	-	5994450
Type	-	MUA
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	182T
Horsepower	1.500	1.5
Motor Rpm	1178	1170
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	6.01
Service Factor	-	1

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	60
Air Flow Switch SP Actual	-	-0.33"

Test Data		
	Design	Actual
CFM	2530	2580
SF RPM	-	NA
Motor RPM	-	NA
SF System SetPt	-	50.5
RL Voltage	-	103
RL Amperage	-	3.9
Total ESP	-	0.27"
Fan Discharge SP	-	0.27"

General		
	Design	Actual
Fan Rotation Correct	-	YES

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Project: Teriyaki Madness (Miamisburg, OH)

System/Unit: FAN - Exhaust



Asset: EF-1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	BROAN
Model Num	CFA-D90-CA	AE-80B-B
Serial Num	-	NA
Type	CEILING	CEILING

Test Data		
	Design	Actual
CFM	70	67
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	0.25	NA

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	0.043	NA
Motor Rpm	-	NA
Phase	1	1
Voltage (rated)	115	120
Amperage (rated)	-	0.3
Service Factor	-	NA

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Project: Teriyaki Madness (Miamisburg, OH)

System/Unit: FAN - Exhaust



Asset: EF-2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	BROAN
Model Num	CFA-D90-CA	AE-80B-B
Serial Num	-	NA
Type	CEILING	CEILING

Test Data		
	Design	Actual
CFM	70	64
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	0.25	NA

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	NA
Horsepower	0.043	NA
Motor Rpm	-	NA
Phase	1	1
Voltage (rated)	115	120
Amperage (rated)	-	0.3
Service Factor	-	NA

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Project: Teriyaki Madness (Miamisburg, OH)

System/Unit: FAN - Exhaust



Asset: KEF-1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	5994450
Type	EXHAUST	EXHAUST
Configuration	-	UPBLAST

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	184T
Horsepower	2.000	2
Motor Rpm	1430	1165
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	8.3
Service Factor	-	1

Test Data		
	Design	Actual
CFM	2875	2895
Fan RPM	1430	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	68.6
RL Voltage	-	168
RL Amperage	-	7.3
Total ESP	1.700	0.69"
Fan Inlet SP	-	-0.69"
Fan Discharge SP	-	ATM

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Notes:

Amps and Volts read from VFD

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Project: Teriyaki Madness (Miamisburg, OH)

System/Unit: Kitchen Hood Type I



Asset: HD-1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5430 NDS-2-PSP-F	5430 NDS-2-PSP-F
Job / Serial Num	-	5994450
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	138"	138"
Hood Width	54"	54"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	16"	16"
Supply Plenum Length	150"	150"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO
Filter Size 1	20"x16"	20"X16"
Filter Qty 1	8	8
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	16.64
Filter1 FPM	-	151
Filter2 FPM	-	163
Filter3 FPM	-	163
Filter4 FPM	-	190
Filter5 FPM	-	195
Filter6 FPM	-	191
Filter7 FPM	-	163
Filter8 FPM	-	179
Filter Ave FPM(corr)	-	174
CFM	2875	2895

Cooking Equipment		
	Design	Actual
Item 1	-	GRILL
Item 2	-	FRYER
Item 3	-	FRYER
Item 4	-	STOVE STOP

Test Data Supply		
	Design	Actual
Total AK Area	-	16.6
Kv factor (Vel)	-	0.81
Num of Readings	-	12
Reading1 FPM	-	192
Reading2 FPM	-	182
Reading3 FPM	-	173
Reading4 FPM	-	203
Reading5 FPM	-	175
Reading6 FPM	-	212
Reading7 FPM	-	164
Reading8 FPM	-	239
Reading9 FPM	-	184
Reading10 FPM	-	178
Reading11 FPM	-	211
Reading12 FPM	-	194
Ave FPM(corr)	-	192
CFM	2530	2580

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