

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: AHU/RTU



Asset: RTU1

AREA:MAIN SALES

Unit Data			Test Data		
	Design	Actual		Design	Actual
MFG	YORK	YORK	SF CFM	5250	5344
Serial Num	-	N2G3760765	SF RPM	932	928
Model Num	AW15N3DQ4S1ARS32A2	AW15N3DQ4S1CQS32A2	RA CFM	4200	4325
Type	RTU	RTU	OA CFM	1050	1019
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE	RL Voltage	-	486/488/488
Num OA Filters 1	-	2	RL Amperage	-	5.8/5.6/5.8
OA Filter Size 1	-	18x32x1	SF Rotation	-	CCW
Num Final Filter 1	-	9	RA Damper Position	-	78%
Final Filter Size 1	-	16x25x2	Min OA Damper Position	-	22%

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	184TZ
Horsepower	5	5.25
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	6.7

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VM50
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	5.0 TURNS OPEN
Fan Sheave Size	-	1B5V74
Fan Sheave Bore	-	1 7/16"
Belt CL Distance	-	12 1/2"
Num of Belts	-	1
Belt Size	-	BX40
Belt Alignment	-	CORRECT

Min OA Damper Type	-	PARALLEL BLADE
OA Enthalpy Setpt	-	24 BTU/LB

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.81"
Fan Suction SP	-	-1.09"
Fan Discharge SP	-	0.53"
Total ESP	1.0"	1.34"
Fan Total SP	-	1.62"

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

Completed By: Wesley John on 10/10/2023

Notes:
DRIVE TOP SPEED REDUCED TO 90% (54 Hz).

Written By: Wesley John on 10/10/2023

National TAB

Project:10-02-23 WALGREENS #3870 - HOUSTON, TX

AHU/RTU



Diffuser Supply (GRD)

RTU1/MAIN SALES

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	SALES		24X6	150	1.0	230	182	178	118.7
SGRD2	SALES		24X6	150	1.0	162	124	167	111.3
SGRD3	SALES		24X6	150	1.0	139	119	163	108.7
SGRD4	SALES		24X6	150	1.0	138	210	180	120.0
SGRD5	SALES		24X6	150	1.0	265	260	173	115.3
SGRD6	SALES		24X6	150	1.0	307	257	164	109.3
SGRD7	CUSTOMER SERVICE		9X9	204	1.0	152	126	211	103.4
SGRD8	PASSAGE 2		12X12	315	1.0	550	461	329	104.4
SGRD9	ELECTRICAL ROOM		12X12	315	1.0	655	527	319	101.3
SGRD10	PHOTO		18X18	615	1.0	1392	1108	642	104.4
SGRD11	OFFICE		15X15	365	1.0	229	191	397	108.8
SGRD12	SALES		18X18	634	1.0	842	682	694	109.5
SGRD13	SALES		18X18	634	1.0	537	447	594	93.7
SGRD14	SALES		18X18	634	1.0	563	453	579	91.3
SGRD15	SALES		18X18	634	1.0	529	439	554	87.4
Total				5250		6690	5586	5344	101.79%

Completed By: Wesley John on 10/10/2023

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: AHU/RTU



Asset: RTU2

AREA:SALES/BREAKROOM

Unit Data			Test Data		
	Design	Actual		Design	Actual
MFG	YORK	YORK	SF CFM	4375	4062
Serial Num	-	N2E3656566	SF RPM	1260	1081
Model Num	ZT150N18R4B5HAE2A2	ZT150N18R4B5GCE2R2	RA CFM	3500	3221
Type	RTU	RTU	OA CFM	875	841
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE	RL Voltage	-	493/492/495
Num OA Filters 1	-	1	RL Amperage	-	6.3/6.5/6.4
OA Filter Size 1	-	22x30x1	SF Rotation	-	CCW
Num Final Filter 1	-	4	RA Damper Position	-	78%
Final Filter Size 1	-	20x24x2	Min OA Damper Position	-	22%
			Min OA Damper Type	-	PARALLEL BLADE
			OA Enthalpy Setpt	-	24 BTU/LB

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5	5
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	6.5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.92"
Fan Suction SP	-	-1.24"
Fan Discharge SP	-	0.52"
Total ESP	0.6"	1.44"
Fan Total SP	-	1.76"

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VP56
Motor Bore Size	-	1 1/8"
Motor Sheave SetPt	-	1.0 TURN OPEN
Fan Sheave Size	-	BK77
Fan Sheave Bore	-	1"
Belt CL Distance	-	19 1/2"
Num of Belts	-	1
Belt Size	-	BX56
Belt Alignment	-	CORRECT

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

Completed By: Wesley John on 12/18/2023

Notes:
 UNIT SHUT OFF AFTER INITIAL READ. DRIVE IS IN ALARM. CANNOT CLEAR.
 UNIT BALANCED AT RETURN TRIP COMPLETED ON 12/6.
 HIGH FAN SPEED SET TO 90%.

Written By: Wesley John on 12/18/2023

National TAB

Project:10-02-23 WALGREENS #3870 - HOUSTON, TX

AHU/RTU



Diffuser Supply (GRD)

RTU2/SALES/BREAKROOM

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	SALES		18X8	656	1.0	577	680	673	102.6
SGRD2	SALES		18X8	660	1.0	618	670	678	102.7
SGRD3	SALES		18X8	660	1.0	588	668	682	103.3
SGRD4	PASSAGE 1		12X12	255	1.0	353	293	267	104.7
SGRD5	EMPLOYEE RM		9X9	116	1.0	147	158	107	92.2
SGRD6	VALUABLE RM		6X6	52	1.0	110	74	55	105.8
SGRD7	SALES		18X8	660	1.0	510	542	538	81.5
SGRD8	SALES		18X8	660	1.0	464	502	519	78.6
SGRD9	SALES		18X8	656	1.0	483	541	543	82.8
Total				4375		3850	4128	4062	92.85%

Completed By: Wesley John on 12/18/2023

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Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: AHU/RTU



Asset: RTU3

AREA:PHARMACY

Unit Data			Test Data		
	Design	Actual		Design	Actual
MFG	YORK	YORK	SF CFM	1750	1791
Serial Num	-	N2E3656496	SF RPM	1045	1046
Model Num	ZJ061N08D4B5HAA2A4	ZJ061N08D4B5GCA2R4	RA CFM	1750	1791
Type	RTU	RTU	OA CFM	0	0
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE	RL Voltage	-	488/487/487
Num OA Filters 1	-	1	RL Amperage	-	2.4/2.6/2.5
OA Filter Size 1	-	22x30x1	SF Rotation	-	CCW
Num Final Filter 1	-	4	RA Damper Position	-	OPEN
Final Filter Size 1	-	16x24x2	Min OA Damper Position	-	CLOSED

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	2	2
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.4

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VP40
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	CLOSED
Fan Sheave Size	-	AK74
Fan Sheave Bore	-	1"
Belt CL Distance	-	17"
Num of Belts	-	1
Belt Size	-	AX50
Belt Alignment	-	CORRECT

Min OA Damper Type	-	PARALLEL BLADE
OA Enthalpy Setpt	-	N/A

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.61"
Fan Suction SP	-	-0.87"
Fan Discharge SP	-	0.47"
Total ESP	1.2"	1.08"
Fan Total SP	-	1.34"

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

Completed By: Wesley John on 10/10/2023

Notes:
MOTOR PULLEY FIELD CHANGED FROM 1VP56 TO BRING AIRFLOW TO WITHIN TOLERANCE.

Written By: Wesley John on 10/10/2023

National TAB

Project:10-02-23 WALGREENS #3870 - HOUSTON, TX

AHU/RTU



Diffuser Supply (GRD)

RTU3/PHARMACY

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	PHARMACY WAITING		9X9	180	1.0	193	137	169	93.9
SGRD2	PHARMACY		12X12	255	1.0	315	244	261	102.4
SGRD3	PHARMACY		12X12	255	1.0	305	235	254	99.6
SGRD4	PHARMACY		12X12	255	1.0	339	271	277	108.6
SGRD5	PHARMACY		12X15	255	1.0	359	287	258	101.2
SGRD6	TECH ROOM		15X15	500	1.0	794	668	519	103.8
SGRD7	PRIVATE HEALTH ROOM		12X12	50	1.0	0	0	53	106.0
Total				1750		2305	1842	1791	102.34%

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: AHU/RTU



Asset: RTU4

AREA:STOCK ROOM

Unit Data			Test Data		
	Design	Actual		Design	Actual
MFG	YORK	YORK	SF CFM	1050	1107
Serial Num	-	N2F3699310	SF RPM	940	806
Model Num	ZJ037N06D4B5HAA2A4	ZJ037N06D4B5GCA2R4	RA CFM	840	888
Type	RTU	RTU	OA CFM	210	219
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE	RL Voltage	-	487/488/488
Num OA Filters 1	-	1	RL Amperage	-	1.7/1.6/1.6
OA Filter Size 1	-	22x30x1	SF Rotation	-	CCW
Num Final Filter 1	-	4	RA Damper Position	-	85%
Final Filter Size 1	-	16x24x2	Min OA Damper Position	-	15%
			Min OA Damper Type	-	PARALLEL BLADE
			OA Enthalpy Setpt	-	24 BTU/LB

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	56HZ
Horsepower	1.5	1.5
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	2.5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.43"
Fan Suction SP	-	-0.68"
Fan Discharge SP	-	0.44"
Total ESP	1.2"	0.87"
Fan Total SP	-	1.12"

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VP34
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	4.5 TURNS OPEN
Fan Sheave Size	-	AK69
Fan Sheave Bore	-	1"
Belt CL Distance	-	16 1/2"
Num of Belts	-	1
Belt Size	-	A47
Belt Alignment	-	CORRECT

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

Completed By: Wesley John on 10/10/2023

Notes:
MOTOR PULLEY FIELD CHANGED FROM 1VP44 TO BRING AIRFLOW TO WITHIN TOLERANCE.

Written By: Wesley John on 10/10/2023

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: FAN - Exhaust



Asset: EF1

AREA:EMPLOYEE ROOM

Unit Data		
	Design	Actual
MFG	GREENHECK	BROAN
Model Num	SP-127	NA
Serial Num	-	NA
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	CEILING	CEILING

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	190W	NA
Motor Rpm	-	NA
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.6
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	300	170
Fan RPM	1580	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
RL Voltage	-	122
RL Amperage	-	0.94
Suction ESP	-	N/A
Discharge ESP	-	N/A
Total ESP	0.125"	N/A

Completed By: Wesley John on 10/10/2023

Notes:
UNIT OPERATES AT SINGLE SPEED AND MEASURED AT 56% OF DESIGN AIR FLOW.

Written By: Wesley John on 12/18/2023

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: FAN - Exhaust



Asset: EF2

AREA:MENS RR

Unit Data		
	Design	Actual
MFG	GREENHECK	BROAN
Model Num	SP-150	NA
Serial Num	-	NA
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	CEILING	CEILING

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	120W	NA
Motor Rpm	-	NA
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.6
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	240	161
Fan RPM	-	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
RL Voltage	-	122
RL Amperage	-	0.90
Suction ESP	-	N/A
Discharge ESP	-	N/A
Total ESP	0.375"	N/A

Completed By: Wesley John on 10/10/2023

Notes:
UNIT OPERATES AT SINGLE SPEED AND MEASURED AT 67% OF DESIGN AIR FLOW.

Written By: Wesley John on 10/17/2023

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: FAN - Exhaust



Asset: EF3

AREA:WOMENS RR

Unit Data		
	Design	Actual
MFG	GREENHECK	BROAN
Model Num	SP-150	NA
Serial Num	-	NA
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	CEILING	CEILING

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	120W	NA
Motor Rpm	-	NA
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.6
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	240	173
Fan RPM	-	DIRECT DIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
RL Voltage	-	122
RL Amperage	-	0.91
Suction ESP	-	N/A
Discharge ESP	-	N/A
Total ESP	0.375"	N/A

Completed By: Wesley John on 10/10/2023

Notes:
UNIT OPERATES AT SINGLE SPEED AND MEASURED AT 72% OF DESIGN AIR FLOW.

Written By: Wesley John on 10/17/2023

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: FAN - Exhaust



Asset: EF4

AREA:OFFICE

Unit Data		
	Design	Actual
MFG	GREENHECK	PENN BARRY
Model Num	G-85-G	DX11Q
Serial Num	-	B23AX05417
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NL
Horsepower	0.20	0.20
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	3.0
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	300	312
Fan RPM	1300	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
RL Voltage	-	120
RL Amperage	-	2.1
Suction ESP	-	-0.19"
Discharge ESP	-	ATM
Total ESP	0.125"	0.19"

Completed By: Wesley John on 12/18/2023

Notes:
 COULD NOT TURN UNIT ON.
 UNIT BALANCED AT RETURN TRIP ON 12/6.

Written By: Wesley John on 12/18/2023

National TAB

Project: 10-02-23 WALGREENS #3870 - HOUSTON, TX

System/Unit: FAN - Exhaust



Asset: EF5

AREA:PHOTO

Unit Data		
	Design	Actual
MFG	GREENHECK	PENN BARRY
Model Num	G-100-B	DX11Q
Serial Num	-	B23AX05419
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NL
Horsepower	1/6	0.20
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	3.0
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	750	683
Fan RPM	1140	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
RL Voltage	-	120
RL Amperage	-	2.8
Suction ESP	-	-0.26"
Discharge ESP	-	ATM
Total ESP	0.250"	0.26"

Completed By: Wesley John on 12/18/2023

Notes:
UNIT BALANCED AT RETURN TRIP ON 12/6. FAN TURNED OFF AFTER BALANCING.

Written By: Wesley John on 12/18/2023