Report By:

National TAB
Sample Address1
Sample Address2
Sample Address3
Noida, CA 28 972

Report: Test and Balance
Date: 11/8/2021

PROJECT

21 Sep Test

Noida

Noida, AK 20320

Client

,

FaciliBuild
make it easy

National TAB

Project: 21 Sep Test

Table Of Contents

Section	Page #
AHU/RTU	3

National TAB

Project: 21 Sep Test

System/Unit: AHU/RTU

Asset: AHU1 AREA:

Unit Data		
	Design	**Actual**
MFG	PAHU	PAHU
Model Num	2021	2021
Serial Num	-	PAHUS-1
Inventory Tag ID	-	PAHUT-2
Type	PAHUT	PAHUT
Series	-	1
Configuration	Parent	Parent
Num OA Filters 1	-	1
OA Filter Size 1	-	1
Num OA Filters 2	-	2
OA Filter Size 2	-	2
Num PreFilter 1	-	1
PreFilter Size 1	-	1
Num PreFilter 2	-	2
PreFilter Size 2	-	2
Num Final Filter 1	-	1
Final Filter Size 1	-	1
Num Final Filter 2	-	2
Final Filter Size 2	-	2

Motor Data		
	Design	**Actual**
Motor MFG	-	PAHUMFG
Frame	-	PAHUF
Horsepower	PAHU	PAHU
Motor Rpm	1000	1000
Phase	3	3
Rated Voltage	220	220
Rated Amperage	2	2
Frequency	-	50
Service Factor	-	1
Efficiency	-	60
Power Factor	-	5

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	PAHU
Motor Sheave Size	-	145
Motor Bore Size	-	545
Motor Sheave SetPt	-	145
Fan Sheave MFG	-	145
Fan Sheave Size	-	121
Fan Sheave Bore	-	112
Belt CL Distance	-	112
Num of Belts	-	1
Belt Size	-	212
Belt MFG	-	212
Belt Deflection	-	12
Belt Alignment	-	12

Test Data		
	Design	**Actual**
SF CFM (Initial)	-	PAHU
SF CFM	PAHU	PAHU
SF RPM (Initial)	-	1000
SF RPM	1100	1100
RA CFM	111	111
OA CFM	11	11
Exhaust CFM	111	111
Relief CFM	111	111
RL Voltage	-	220
RL Amperage	-	2
SF Rotation	-	1500
VFD Max SetPt	-	124
VFD Min SetPt	-	141
SF Motor Freq(HZ)	-	50
SF Flow Station (Kv)	-	100
OA Flow Station (Kv)	-	100
SF System SetPt	-	14
RA Flow Station (Kv)	-	111
Relief Flow Station (Kv)	-	111
RA Damper Position	-	111
RA Damper Type	-	111
MA Damper Position	-	56565
MA Damper Type	-	
OA Damper Position	-	
OA Damper Type	-	
Min OA Damper Position	-	565
Min OA Damper Type	-	56565
Econo Damper Position	-	556
Econo Damper Type	-	565
Relief Damper Position	-	
Relief Damper Type	-	
OA Enthalpy Setpt	-	
Brake Horse Power	-	

Condensor Fan		
	Design	Actual
Fan Alignment	-	
Fan Rotation	-	
Fan 1 Motor RLA	-	
Fan 1 Motor RLV	-	
Fan 2 Motor RLA	-	
Fan 2 Motor RLV	-	

Gas Heat		
	Design	Actual
Gas Type	-	
Burner Type	-	
Burner Construction	-	
Input MBH (rated)	-	
Output MBH (rated)	-	
Gas Inlet Pres (wc)	-	
Gas Low Fire Pres (wc)	-	
Gas High Fire Pres (wc)	-	
Pilot Ignition Status (pass/fail)	-	
Single or Dual Bank	-	
Staged or Modulating	-	
Heater Operates (y/n)	-	
Combustion Blower Operates (y/n)	-	
Flame Status (pass/fail)	-	
High Limit Temp Cut-off SetPt	-	
Inlet Temp SetPt	-	
Discharge Temp SetPt	-	
Temp Rise SetPt	-	
Air Flow Switch SetPt	-	
Air Flow Switch Actual	-	
Air Flow Switch CTRL Voltage	-	
Air Switch Proved (Pass/Fail)	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	
Flame Modulates (y/n)	-	

Electric Heat		
	Design	Actual
KW (TOTAL)	PAHU	PAHU
Num of Stages	PAHU	PAHU
Voltage	-	
Stage 1 RLA	-	41
Stage 2 RLA	-	4
Stage 3 RLA	-	4
Stage 4 RLA	-	441
Stage 5 RLA	-	11
Stage 6 RLA	-	11
EAT (db/wb)	1	11
LAT (db/wb)	-	110
Coil Delta T	-	
Inlet SP	-	10
Discharge SP	-	
Coil Delta SP	-	101
High Limit Temp Cut-off SetPt	-	101
Inlet Temp SetPt	-	01
Discharge Temp SetPt	-	
Temp Rise SetPt	-	1
Airflow Switch SP	-	11
Airflow Switch CTRL Voltage	-	11
Space Temp SetPt-ON	-	11
Space Temp SetPt-OFF	-	11

Performance Data		
	Design	Actual
Return Duct SP	-	
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Supply Duct SP	-	
Total ESP	-	
Fan Total SP	-	
Pre-Filter Delta SP	-	
PreHeat Coil Delta SP	-	
DX Coil Delta SP	-	
CHW Coil Delta SP	-	
HW Coil Delta SP	-	
Steam Coil Delta SP	-	
Final Filters Delta SP	-	
Heat Wheel (Exh) Delta SP	-	
Heat Wheel (Sup) Delta SP	-	
OA Temp (db/wb)	-	
RA Temp (db/wb)	-	
MA Temp (db/wb)	-	
SA Temp (db/wb)	-	
HW Coil Delta T	-	
CW Coil Delta T	-	
Coil Delta T	-	
Heat Wheel(Exh) Delta T	-	
Heat Wheel(Sup) Delta T	-	

Compressors		
	Design	Actual
Refrigerant Charge	-	
Refrigerant Type	-	
Comp 1 RLA	-	
Comp 2 RLA	-	
Comp 1 Suction Pres	-	
Comp 2 Suction Pres	-	
Comp 1 Discharge Pres	-	
Comp 2 Discharge Pres	-	
Circuit 1 Superheat	-	
Circuit 2 Superheat	-	
Comp 1 Liquid Line Temp	-	
Comp 2 Liquid Line Temp	-	
Circuit 1 SubCooling	-	
Circuit 2 SubCooling	-	

Combustion Fan Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Phase	-	
Voltage	-	
Amperage	-	

Combustion Gas Duct		
	Design	Actual
Duct Type	-	
Gauge & Material	-	
Size	-	
Min Rise:Run	-	
Room properly ventilated	-	
Space pres condition	-	
Flue backdrafts eliminated	-	
Flue Terminates Properly	-	

Electrical		
	Design	Actual
Evap Fan Overload size/setpt	-	11
Cond Fan Overload size/setpt	-	11
VFD Phase Voltage (line)	-	11
VFD Min Setpt	-	11
VFD Max Setpt	-	110
Phase Brownout Dial Setpt (v)	-	11
Phase Brownout Volt Variance	-	11
Control Voltage (v)	-	01
System Fused (y/n)	-	11
Fuse Size (amps)	-	11
Freeze Stat Setpt	-	101
Compressor Lockout Setpt	-	11

General		
	Design	Actual
Unit free of Damage	-	11
Unit Completely Assembled	-	11
Unit Leveled	-	11
Curb & Unit Installed Air Tight	-	111
Controls Complete	-	44
Fan Rotation Correct	-	444
Fan Belt Condition	-	
Unit Filters Clean	-	
Evap Coil Clean	-	
Evap Coil Free of Frost	-	
Condensor Coil Clean	-	
Condensor Fins Straight	-	
Refr Sight Glass Dry	-	
Condensate Drain Installed	-	
Crankcase Heaters Operate	-	

Completed By: Dan Hertenstein

Notes:

National TAB

Project: 21 Sep Test

System/Unit: AHU/RTU

Asset: AHU1-BLR1-AHU1 AREA:

Unit Data		
	Design	**Actual**
MFG	AHUAHSC	AHUAHSC
Model Num	AHU	AHU
Serial Num	-	123
Inventory Tag ID	-	QA
Type	QA	QA
Series	-	123
Configuration	QA	QA
Num OA Filters 1	-	1
OA Filter Size 1	-	1
Num OA Filters 2	-	2
OA Filter Size 2	-	2
Num PreFilter 1	-	1
PreFilter Size 1	-	1
Num PreFilter 2	-	2
PreFilter Size 2	-	2
Num Final Filter 1	-	1
Final Filter Size 1	-	1
Num Final Filter 2	-	2
Final Filter Size 2	-	2

Motor Data		
	Design	**Actual**
Motor MFG	-	123
Frame	-	12
Horsepower	23	33
Motor Rpm	434	545
Phase	22	4
Rated Voltage	232	53
Rated Amperage	232	545
Frequency	-	232
Service Factor	-	54
Efficiency	-	232
Power Factor	-	232

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	43
Motor Sheave Size	-	343
Motor Bore Size	-	434
Motor Sheave SetPt	-	343
Fan Sheave MFG	-	434
Fan Sheave Size	-	43
Fan Sheave Bore	-	343
Belt CL Distance	-	232
Num of Belts	-	34
Belt Size	-	232
Belt MFG	-	242
Belt Deflection	-	242
Belt Alignment	-	242

Test Data		
	Design	**Actual**
SF CFM (Initial)	-	232
SF CFM	242	242
SF RPM (Initial)	-	242
SF RPM	24	242
RA CFM	22	24
OA CFM	242	424
Exhaust CFM	242	24
Relief CFM	24	242
RL Voltage	-	24
RL Amperage	-	24
SF Rotation	-	242
VFD Max SetPt	-	24
VFD Min SetPt	-	424
SF Motor Freq(HZ)	-	
SF Flow Station (Kv)	-	24
OA Flow Station (Kv)	-	24
SF System SetPt	-	242
RA Flow Station (Kv)	-	24
Relief Flow Station (Kv)	-	24
RA Damper Position	-	242
RA Damper Type	-	24
MA Damper Position	-	
MA Damper Type	-	24
OA Damper Position	-	242
OA Damper Type	-	
Min OA Damper Position	-	24
Min OA Damper Type	-	24
Econo Damper Position	-	24
Econo Damper Type	-	
Relief Damper Position	-	24
Relief Damper Type	-	242
OA Enthalpy Setpt	-	
Brake Horse Power	-	

Condensor Fan		
	Design	Actual
Fan Alignment	-	24
Fan Rotation	-	3
Fan 1 Motor RLA	-	23
Fan 1 Motor RLV	-	43
Fan 2 Motor RLA	-	
Fan 2 Motor RLV	-	

Gas Heat		
	Design	Actual
Gas Type	24	24
Burner Type	24	24
Burner Construction	-	24
Input MBH (rated)	42	24
Output MBH (rated)	232	34
Gas Inlet Pres (wc)	-	3
Gas Low Fire Pres (wc)	-	53
Gas High Fire Pres (wc)	-	2342
Pilot Ignition Status (pass/fail)	-	
Single or Dual Bank	-	
Staged or Modulating	-	
Heater Operates (y/n)	-	
Combustion Blower Operates (y/n)	-	
Flame Status (pass/fail)	-	
High Limit Temp Cut-off SetPt	-	
Inlet Temp SetPt	-	
Discharge Temp SetPt	-	
Temp Rise SetPt	-	
Air Flow Switch SetPt	-	
Air Flow Switch Actual	-	
Air Flow Switch CTRL Voltage	-	
Air Switch Proved (Pass/Fail)	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	
Flame Modulates (y/n)	-	

Electric Heat		
	Design	Actual
KW (TOTAL)	-	
Num of Stages	-	
Voltage	-	
Stage 1 RLA	-	
Stage 2 RLA	-	
Stage 3 RLA	-	
Stage 4 RLA	-	
Stage 5 RLA	-	
Stage 6 RLA	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Delta T	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	
High Limit Temp Cut-off SetPt	-	
Inlet Temp SetPt	-	
Discharge Temp SetPt	-	
Temp Rise SetPt	-	
Airflow Switch SP	-	
Airflow Switch CTRL Voltage	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	

Performance Data		
	Design	Actual
Return Duct SP	-	24
MA Plenum SP	-	42
Fan Suction SP	-	24
Fan Discharge SP	-	42
Supply Duct SP	-	42
Total ESP	24	24
Fan Total SP	24	24
Pre-Filter Delta SP	-	24
PreHeat Coil Delta SP	-	42
DX Coil Delta SP	-	24
CHW Coil Delta SP	-	24
HW Coil Delta SP	-	42
Steam Coil Delta SP	-	4
Final Filters Delta SP	-	243
Heat Wheel (Exh) Delta SP	-	53
Heat Wheel (Sup) Delta SP	-	2
OA Temp (db/wb)	24	23
RA Temp (db/wb)	-	24
MA Temp (db/wb)	24	435
SA Temp (db/wb)	24	5
HW Coil Delta T	-	4
CW Coil Delta T	-	
Coil Delta T	-	
Heat Wheel(Exh) Delta T	-	
Heat Wheel(Sup) Delta T	-	

Compressors		
	Design	Actual
Refrigerant Charge	-	242
Refrigerant Type	-	24
Comp 1 RLA	-	24
Comp 2 RLA	-	24
Comp 1 Suction Pres	-	24
Comp 2 Suction Pres	-	24
Comp 1 Discharge Pres	-	24
Comp 2 Discharge Pres	-	24
Circuit 1 Superheat	-	
Circuit 2 Superheat	-	
Comp 1 Liquid Line Temp	-	
Comp 2 Liquid Line Temp	-	
Circuit 1 SubCooling	-	
Circuit 2 SubCooling	-	

Combustion Fan Motor Data		
	Design	Actual
Motor MFG	-	232
Frame	-	242
Horsepower	42	244
Phase	24	24
Voltage	242	242
Amperage	-	2342

Combustion Gas Duct		
	Design	Actual
Duct Type	-	
Gauge & Material	-	
Size	-	
Min Rise:Run	-	
Room properly ventilated	-	
Space pres condition	-	
Flue backdrafts eliminated	-	
Flue Terminates Properly	-	

Electrical		
	Design	Actual
Evap Fan Overload size/setpt	-	
Cond Fan Overload size/setpt	-	
VFD Phase Voltage (line)	-	
VFD Min Setpt	-	
VFD Max Setpt	-	
Phase Brownout Dial Setpt (v)	-	
Phase Brownout Volt Variance	-	
Control Voltage (v)	-	
System Fused (y/n)	-	
Fuse Size (amps)	-	
Freeze Stat Setpt	-	
Compressor Lockout Setpt	-	

General		
	Design	Actual
Unit free of Damage	-	
Unit Completely Assembled	-	
Unit Leveled	-	
Curb & Unit Installed Air Tight	-	
Controls Complete	-	
Fan Rotation Correct	-	
Fan Belt Condition	-	
Unit Filters Clean	-	
Evap Coil Clean	-	
Evap Coil Free of Frost	-	
Condensor Coil Clean	-	
Condensor Fins Straight	-	
Refr Sight Glass Dry	-	
Condensate Drain Installed	-	
Crankcase Heaters Operate	-	

Completed By: Dan Hertenstein

Notes:

National TAB

Project: 21 Sep Test

System/Unit: AHU/RTU

Asset: BLR1-AHU1 AREA:

Unit Data		
	Design	**Actual**
MFG	BOAHC	BOAHC
Model Num	QA	QA
Serial Num	-	445
Inventory Tag ID	-	445
Type	45	24
Series	-	242
Configuration	242	24
Num OA Filters 1	-	242
OA Filter Size 1	-	42
Num OA Filters 2	-	242
OA Filter Size 2	-	424
Num PreFilter 1	-	424
PreFilter Size 1	-	210
Num PreFilter 2	-	
PreFilter Size 2	-	11
Num Final Filter 1	-	1
Final Filter Size 1	-	242
Num Final Filter 2	-	24
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	24
Frame	-	424
Horsepower	424	42
Motor Rpm	242	424
Phase	242	242
Rated Voltage	424	242
Rated Amperage	4242	242
Frequency	-	424
Service Factor	-	242
Efficiency	-	42
Power Factor	-	424

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	24
Motor Sheave Size	-	242
Motor Bore Size	-	424
Motor Sheave SetPt	-	4242
Fan Sheave MFG	-	242
Fan Sheave Size	-	774
Fan Sheave Bore	-	2427
Belt CL Distance	-	
Num of Belts	-	424
Belt Size	-	424
Belt MFG	-	424
Belt Deflection	-	424
Belt Alignment	-	241244

Test Data		
	Design	**Actual**
SF CFM (Initial)	-	
SF CFM	-	
SF RPM (Initial)	-	
SF RPM	-	
RA CFM	-	
OA CFM	-	
Exhaust CFM	-	
Relief CFM	-	
RL Voltage	-	
RL Amperage	-	
SF Rotation	-	
VFD Max SetPt	-	
VFD Min SetPt	-	
SF Motor Freq(HZ)	-	
SF Flow Station (Kv)	-	
OA Flow Station (Kv)	-	
SF System SetPt	-	
RA Flow Station (Kv)	-	
Relief Flow Station (Kv)	-	
RA Damper Position	-	
RA Damper Type	-	
MA Damper Position	-	
MA Damper Type	-	
OA Damper Position	-	
OA Damper Type	-	
Min OA Damper Position	-	
Min OA Damper Type	-	
Econo Damper Position	-	
Econo Damper Type	-	
Relief Damper Position	-	
Relief Damper Type	-	
OA Enthalpy Setpt	-	
Brake Horse Power	-	

Condensor Fan		
	Design	Actual
Fan Alignment	-	4242
Fan Rotation	-	#$
Fan 1 Motor RLA	-	^^$
Fan 1 Motor RLV	-	E
Fan 2 Motor RLA	-	RER
Fan 2 Motor RLV	-	Rr

Gas Heat		
	Design	Actual
Gas Type	-	
Burner Type	-	
Burner Construction	-	
Input MBH (rated)	-	
Output MBH (rated)	-	
Gas Inlet Pres (wc)	-	
Gas Low Fire Pres (wc)	-	
Gas High Fire Pres (wc)	-	
Pilot Ignition Status (pass/fail)	-	
Single or Dual Bank	-	
Staged or Modulating	-	
Heater Operates (y/n)	-	
Combustion Blower Operates (y/n)	-	
Flame Status (pass/fail)	-	
High Limit Temp Cut-off SetPt	-	
Inlet Temp SetPt	-	
Discharge Temp SetPt	-	
Temp Rise SetPt	-	
Air Flow Switch SetPt	-	
Air Flow Switch Actual	-	
Air Flow Switch CTRL Voltage	-	
Air Switch Proved (Pass/Fail)	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	
Flame Modulates (y/n)	-	

Electric Heat		
	Design	Actual
KW (TOTAL)	2424	424
Num of Stages	42	424
Voltage	42	242
Stage 1 RLA	-	2
Stage 2 RLA	-	42
Stage 3 RLA	-	422
Stage 4 RLA	-	42
Stage 5 RLA	-	42
Stage 6 RLA	-	
EAT (db/wb)	24242	2
LAT (db/wb)	22	424
Coil Delta T	-	242
Inlet SP	-	242
Discharge SP	-	
Coil Delta SP	-	
High Limit Temp Cut-off SetPt	-	4242
Inlet Temp SetPt	-	422222
Discharge Temp SetPt	-	4242
Temp Rise SetPt	-	42424
Airflow Switch SP	-	
Airflow Switch CTRL Voltage	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	

Performance Data		
	Design	Actual
Return Duct SP	-	
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Supply Duct SP	-	
Total ESP	-	
Fan Total SP	-	
Pre-Filter Delta SP	-	
PreHeat Coil Delta SP	-	
DX Coil Delta SP	-	
CHW Coil Delta SP	-	
HW Coil Delta SP	-	
Steam Coil Delta SP	-	
Final Filters Delta SP	-	
Heat Wheel (Exh) Delta SP	-	
Heat Wheel (Sup) Delta SP	-	
OA Temp (db/wb)	-	
RA Temp (db/wb)	-	
MA Temp (db/wb)	-	
SA Temp (db/wb)	-	
HW Coil Delta T	-	
CW Coil Delta T	-	
Coil Delta T	-	
Heat Wheel(Exh) Delta T	-	
Heat Wheel(Sup) Delta T	-	

Compressors		
	Design	Actual
Refrigerant Charge	-	ERR
Refrigerant Type	-	RR
Comp 1 RLA	-	rere
Comp 2 RLA	-	44
Comp 1 Suction Pres	-	47447
Comp 2 Suction Pres	-	442
Comp 1 Discharge Pres	-	
Comp 2 Discharge Pres	-	
Circuit 1 Superheat	-	
Circuit 2 Superheat	-	
Comp 1 Liquid Line Temp	-	
Comp 2 Liquid Line Temp	-	
Circuit 1 SubCooling	-	
Circuit 2 SubCooling	-	

Combustion Fan Motor Data		
	Design	Actual
Motor MFG	-	242
Frame	-	42
Horsepower	42	242
Phase	242	4242
Voltage	424	42
Amperage	-	242

Combustion Gas Duct		
	Design	Actual
Duct Type	-	
Gauge & Material	-	
Size	-	
Min Rise:Run	-	
Room properly ventilated	-	
Space pres condition	-	
Flue backdrafts eliminated	-	
Flue Terminates Properly	-	

Electrical		
	Design	Actual
Evap Fan Overload size/setpt	-	242
Cond Fan Overload size/setpt	-	42
VFD Phase Voltage (line)	-	242
VFD Min Setpt	-	77
VFD Max Setpt	-	242
Phase Brownout Dial Setpt (v)	-	44
Phase Brownout Volt Variance	-	4
Control Voltage (v)	-	242
System Fused (y/n)	-	
Fuse Size (amps)	-	24
Freeze Stat Setpt	-	42
Compressor Lockout Setpt	-	24

General		
	Design	Actual
Unit free of Damage	-	
Unit Completely Assembled	-	
Unit Leveled	-	
Curb & Unit Installed Air Tight	-	
Controls Complete	-	
Fan Rotation Correct	-	
Fan Belt Condition	-	
Unit Filters Clean	-	
Evap Coil Clean	-	
Evap Coil Free of Frost	-	
Condensor Coil Clean	-	
Condensor Fins Straight	-	
Refr Sight Glass Dry	-	
Condensate Drain Installed	-	
Crankcase Heaters Operate	-	

Completed By: Dan Hertenstein

Notes: