Report By:

National TAB
1329 E. KEMPER ROAD
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NATIONAL TAB

Comfort. Under control.

Report: Test, Adjust, & Balance

Date: 1/28/2022

PROJECT

Shake Shack (Lee's Summit) - Commissioning

2051 NW Lowenstein Drive

Lee's Summit, MO 64081

Client

24 Union Square East, 5th Fl

New York, NY 10003

National TAB

Project: Shake Shack (Lee's Summit) - Commissioning

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National TAB

Project: Shake Shack (Lee's Summit) - Commissioning

System/Unit: AHU/RTU

Comfort. Under control.

Asset: AHU1 AREA:

Unit Data		
	Design	**Actual**
MFG	Trane	Trane
Model Num	YCD120	YCD120
Serial Num	-	456655
Inventory Tag ID	-	
Type	-	
Series	-	
Configuration	-	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num OA Filters 2	-	
OA Filter Size 2	-	
Num PreFilter 1	-	
PreFilter Size 1	-	
Num PreFilter 2	-	
PreFilter Size 2	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Rated Voltage	-	
Rated Amperage	-	
Frequency	-	
Service Factor	-	
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave MFG	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	
Belt MFG	-	
Belt Deflection	-	
Belt Alignment	-	

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	-	
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)	-	
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	-	
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	-	

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	-	

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	-	

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	-	

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Notes:

National TAB

Project:Shake Shack (Lee's Summit) - Commissioning

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

AHU1/

Asset	Area Served							
AHU1-SGRD1		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		KARNES	CD					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD2		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD3		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD4		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD5		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD6		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD7		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD8		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD9		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-SGRD10		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		

Diffuser Ret/Exh (GRD)

AHU1/

Asset	Area Served							
AHU1-EGRD1		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-EGRD2		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-EGRD3		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		
AHU1-EGRD4		MFG	Model Num	Type	Size	DESIGN CFM	AK	VEL(1)
		karnes	cd					
		CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design		

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Asset	Area Served	Notes

National TAB

Project: Shake Shack (Lee's Summit) - Commissioning

System/Unit: AHU/RTU

Comfort. Under control.

Asset: AHU2 AREA:

Unit Data		
	Design	**Actual**
MFG	Trane	Trane
Model Num	YCD120	YCD120
Serial Num	-	
Inventory Tag ID	-	
Type	-	
Series	-	
Configuration	-	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num OA Filters 2	-	
OA Filter Size 2	-	
Num PreFilter 1	-	
PreFilter Size 1	-	
Num PreFilter 2	-	
PreFilter Size 2	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Rated Voltage	-	
Rated Amperage	-	
Frequency	-	
Service Factor	-	
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave MFG	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	
Belt MFG	-	
Belt Deflection	-	
Belt Alignment	-	

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	-	
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)	-	
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	-	
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	-	

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	-	

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	-	

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	-	

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Notes:

Asset	Area Served	Notes

National TAB

Project: Shake Shack (Lee's Summit) - Commissioning

System/Unit: AHU/RTU

Comfort. Under control.

Asset: AHU3 AREA:

Unit Data		
	Design	**Actual**
MFG	Trane	Trane
Model Num	YCD120	YCD120
Serial Num	-	
Inventory Tag ID	-	
Type	-	
Series	-	
Configuration	-	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num OA Filters 2	-	
OA Filter Size 2	-	
Num PreFilter 1	-	
PreFilter Size 1	-	
Num PreFilter 2	-	
PreFilter Size 2	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Rated Voltage	-	
Rated Amperage	-	
Frequency	-	
Service Factor	-	
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave MFG	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	
Belt MFG	-	
Belt Deflection	-	
Belt Alignment	-	

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	-	
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)	-	
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	-	
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	-	

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	-	

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	-	

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	-	

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Notes:

Asset	Area Served	Notes

National TAB

Project: Shake Shack (Lee's Summit) - Commissioning

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	Captive-Aire	Captive-Aire
Model Num	DU85HFA	DU85HFA
Serial Num	-	
Type	-	
Series	-	
Configuration	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	
Service Factor	-	
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave MFG	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt MFG	-	
Belt Size	-	
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	**Actual**
CFM	-	
Fan RPM	-	
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	

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Notes:

Asset	Area Served	Notes

National TAB

Project: Shake Shack (Lee's Summit) - Commissioning

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF2 AREA:

Unit Data		
	Design	**Actual**
MFG	Captive-Aire	Captive-Aire
Model Num	DU85HFA	DU85HFA
Serial Num	-	
Type	-	
Series	-	
Configuration	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	
Service Factor	-	
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave MFG	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt MFG	-	
Belt Size	-	
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	**Actual**
CFM	-	
Fan RPM	-	
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	

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Notes:

Asset	Area Served	Notes

National TAB

Project: Shake Shack (Lee's Summit) - Commissioning

System/Unit: FAN - Supply

Comfort. Under control.

Asset: SF1 AREA:

Unit Data		
	Design	**Actual**
MFG	Captive-Aire	Captive-Aire
Model Num	A1-D250-G10	A1-D250-G10
Serial Num	-	
Type	-	
Series	-	
Configuration	-	
Num Filters Size 1	-	
Filter Size 1	-	
Num Filters Size 2	-	
Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	
Service Factor	-	
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	**Actual**
Motor Sheave MFG	-	
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave MFG	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt MFG	-	
Belt Size	-	
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	**Actual**
CFM	-	
SF RPM	-	
SF Rotation	-	
Motor RPM	-	
Motor Frequency	-	
SF System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	
Fan Inlet SP	-	
Fan Discharge SP	-	
Freeze Stat Setpt	-	
Total Fan SP	-	
Brake Horse Power	-	
Compressor Lockout Setpt	-	

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

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

Gas Heat		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Gas Type	-	
Burner Type	-	
Burner Construction	-	
Input BTUH (rated)	-	
Output BTUH (rated)	-	
Gas Inlet Pres	-	
Gas Low Fire Pres	-	
Gas High Fire Pres	-	
Gas Valve Low Fire CTRL Voltage	-	
Low Fire Temp Rise (F)	-	
Gas Valve High Fire CTRL Voltage	-	
High Fire Temp Rise (F)	-	
Pilot Ignition Status (pass/fail)	-	
Gas Valve Pilot Ignition CTRL Voltage	-	
Flame Proving Switch Type	-	
Flame proof CTRL Voltage	-	
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 Air Temp SetPt	-	
Discharge Air Temp SetPt	-	
Temp Rise SetPt	-	
Air Flow Switch SP SetPt	-	
Air Flow Switch SP Actual	-	
Air Flow Switch CTRL Voltage	-	
Air Flow Switch Proved (Pass/Fail)	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	
Flame Modulates Properly	-	

Chilled Water Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
GPM CIRCUIT 1	-	
Water Inlet Temp (F)	-	
Water Discharge Temp (F)	-	
Water Coil Delta P	-	
GPM CIRCUIT 2	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Evaporator DX Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
Refrigeration Type	-	
Circuit 1 SetPt (F)	-	
Circuit 1 EAT (db/wb)	-	
Circuit 1 LAT (db/wb)	-	
Circuit 2 SetPt (F)	-	
Circuit 2 EAT (db/wb)	-	
Circuit 2 LAT (db/wb)	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Evaporative Cooler		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
EAT SetPt (F)	-	
Filter Media Size (hxl)	-	
Filter Media Area	-	
Filter Media Face Velocity	-	
EWT (F)	-	
LWT (F)	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Electric Coil		
	Design	Actual
KW	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
BTUH	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
Voltage	-	
Heat Stage 1 RL (A)	-	
Heat Stage 2 RL (A)	-	
Heat Stage 3 RL (A)	-	
Heat Stage 4 RL (A)	-	
Heat Stage 5 RL (A)	-	
Heat Stage 6 RL (A)	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	
High Limit Temp Cut-off SetPt	-	
Temp Rise SetPt	-	
Discharge Temp SetPt	-	
Inlet Air Temp SetPt	-	
Air Flow Switch SP	-	
Air Flow Switch CTRL Voltage	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	
Coil Staging Functional	-	

Hot Water Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
GPM CIRCUIT 1	-	
EWT (F)	-	
LWT (F)	-	
Water Coil Delta P	-	
GPM CIRCUIT 2	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Steam Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
Steam Coil-Circuit 1 Delta P	-	
Steam Inlet Temp (F)	-	
Steam Discharge Temp (F)	-	
Steam Coil-Circuit 2 Delta P	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

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	-	

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	-	
Refrigerant Sight Glass Dry	-	
Condensate Drain Installed	-	
Crankcase Heaters Operate	-	

Condensor DX Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
Refrigeration Type	-	
Circuit 1 SetPt (F)	-	
CIRCUIT 1 EAT (db/wb)	-	
CIRCUIT 1 LAT (db/wb)	-	
Circuit 2 SetPt (F)	-	
CIRCUIT 2 EAT (db/wb)	-	
CIRCUIT 2 LAT (db/wb)	-	

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

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Notes:

Asset	Area Served	Notes