CROMWELL

1300 East 6th Street | Little Rock, AR 72202
Phone: 501.372.2900
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Submittal Review Form

Job Title: Anduril

Job No: 2023-047

Submittal No: 230593-1 HVAC TAB

By: JDG

Date: 03-28-2024

Reviewing is only for conformance with the design concepts of the Project and compliance with the information given in the contract documents. The Contractor is responsible for dimensions to confirmed or correlated at the site; for information that pertains solely to the fabrication process, or the means, methods, techniques, sequences, and procedures of construction; and for the coordination of the work of all other trades.

Item No.	Description	No Exception Taken	Make Corrections Noted	Revise and Resubmit	Not Accepted	Comments
1	TAB	X				

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 1/11/2024
Return Request: 1/22/2024
Project: Anduril Industries – Bldgs. 301, 400, 600
Supplier: Ivey Mechanical/System Analysis
Manufacturer:
Submittal: Testing, Adjusting, & Balancing
Submittal Number: 23 05 93-01
Drawing # and Installation: Plumbing Drawings

ARCHITECT
William Thomas Moore, AIA
1300 E. 6th Street
Little Rock, AR 72202
501-372-2900

ENGINEER
Cromwell
1300 E. 6th Street
Little Rock, AR 72202
501-372-2900

GENERAL CONTRACTOR

MECHANICAL SUBCONTRACTOR
Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

tad@comfortar.com

Division 23

Ivey Submission #15

Buildings 301,400, and 600

Specification Section 23 05 93 – TAB

Submitted Date: 2/14/2024

Owner:

Anduril Industries

488 East McHenry Rd.

McHenry, MS 39561

Mechanical Engineer:

Cromwell Architects Engineers, Inc.

1300 East 6th Street

Little Rock, AR 72202

Ivey Mechanical Company
514 North Wells Street
P.O. Box 610
Kosciusko, MS
662.289.3646
Fax: 662.289.3713

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

AABC

TEST & BALANCE SUBMITTAL

PROJECT:	**ANDURIL INDUSTRIES - BLDG 300,301,302,400,600**
LOCATION:	**MCHENRY, MS**
CONTRACTOR:	**IVEY MECHANICAL - MS**
ENGINEER:	**ROBERT L. SEAY**
ITEM:	**TEST & BALANCE**
DATE:	**02/12/2024**
JOB NO:	**2402044**

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AABC

Associated Air Balance Council

Annual Membership Certificate

Awarded to

Systems Analysis, Inc.

as a member in good standing of the Associated Air Balance Council for the year

2024

This member has met all requirements for membership and is entitled to all rights and privileges of AABC certification. This certificate is renewable on an annual basis and expires December 31, 2024.

Gaylon Richardson, *President*

ASSOCIATED AIR BALANCE COUNCIL
AABC
2024

Raymond R. Bert, *Executive Director*

AABC

Associated Air Balance Council

Annual Certificate

Awarded to

William R. DiGiorgio, Sr., TBE

Systems Analysis, Inc.

In recognition of their qualification as a

Certified Test and Balance Engineer

under the rules, regulations, and requirements of the Association Air Balance Council. The above named is fully authorized to perform total system balance in accordance with the standards as established by the AABC and as a member of the Associated Air Balance Council for the year

2024

This registration number **92-05-31** *is fully recognized by the bylaws and charter of this professional association. Certification is renewable on an annual basis after examination of the agency's record for the preceding year. This certificate expires December 31, 2024.*

ASSOCIATED AIR BALANCE COUNCIL ★ AABC ★ 2024 ★

Gaylon Richardson, *President*

Raymond R. Bert, *Executive Director*

AABC

Associated Air Balance Council

Annual Certificate

Awarded to

Jason L. Parker, TBE

Systems Analysis, Inc.

In recognition of their qualification as a

Certified Test and Balance Engineer

under the rules, regulations, and requirements of the Association Air Balance Council. The above named is fully authorized to perform total system balance in accordance with the standards as established by the AABC and as a member of the Associated Air Balance Council for the year

2024

This registration number **13-05-90** *is fully recognized by the bylaws and charter of this professional association. Certification is renewable on an annual basis after examination of the agency's record for the preceding year. This certificate expires December 31, 2024.*

ASSOCIATED AIR BALANCE COUNCIL ★ AABC ★ 2024 ★

Gaylon Richardson, *President*

Raymond R. Bert, *Executive Director*

AABC

Associated Air Balance Council

Annual Certificate

Awarded to

Christopher White, TBE

Systems Analysis, Inc.

In recognition of their qualification as a

Certified Test and Balance Engineer

under the rules, regulations, and requirements of the Association Air Balance Council. The above named is fully authorized to perform total system balance in accordance with the standards as established by the AABC and as a member of the Associated Air Balance Council for the year

2024

This registration number **00-05-49** *is fully recognized by the bylaws and charter of this professional association. Certification is renewable on an annual basis after examination of the agency's record for the preceding year. This certificate expires December 31, 2024.*

ASSOCIATED AIR BALANCE COUNCIL ★ AABC ★ 2024 ★

Gaylon Richardson, *President*

Raymond R. Bert, *Executive Director*

PERSONNEL QUALIFICATIONS

SYSTEMS ANALYSIS INC

Systems Analysis, Inc. is well established in the HYAC System Testing. We are certified by the Associated Air Balance Council (AABC) and National Environmental Balancing Bureau (NEBB).

Systems Analysis, Inc. has the following key personnel for test activity:

W. R. DiGiorgio - Education from the University of Alabama. Extensive experience with Systems Analysis, Inc. includes marketing, field management and corporate management. He has been with SAI since 1981, its beginning. A member of Associated Air Balance Council (AABC). He is a certified AABC Test Engineer (TBE 95-03-31)

Christopher A. White - hold his BSME from Mississippi State University. He is a Certified AABC Test Engineer (TBE 00-05-49), Certified with NEBB (3252) as well as an AABC Cleanroom Certified Engineer. He has been with Systems Analysis, Inc. since 1992. He is a registered Professional Engineer in the States of Alabama, Arkansas, Florida, Mississippi, North Carolina, South Carolina, Tennessee and Texas.

Jason L. Parker – Is a previous business owner with a certification in Project Management for Administrators. He has been in the Test and Balance industry since 2003. He is a Certified AABC Test Engineer (TBE 13-05-90). A certified ACG commissioning authority and is a Certified Energy Management Professional.

TEST EQUIPMENT

Systems Analysis, Inc. maintains a vast inventory of modern technical measuring equipment on all Test and Balance projects and Systems Commissioning. All test instruments are calibrated in accordance with AABC Procedural Standards.

Below is a partial list of standard equipment:

1. Electronic Digital Micromanometers and Flow Hoods
2. Digital Air Pressure and Pressure Differential Instruments
3. Digital Water Pressure and Pressure Differential Instruments
4. Sound Level Meter with Octave Band Analyzer
5. Laptop Computers for DDC Control Systems
6. Solid State Digital Multi-Station Temperature Indicators
7. Solid State Electronic Tachometers

Available Equipment:

1. IRD Mechanalysis Vibration Equipment Testing
2. Ultra Sonic Non-Invasive Water Flow Measuring Equipment
3. Bacharach Flue Gas
4. Combustion Analysers
5. IAQ Testing Components

INSTRUMENT LIST

INSTRUMENT	MANUFACTURER	MODEL	SERIAL NO.	RANGE	CALIBRATION DATE
HYDRODATA	SHORTRIDGE	HDM-250	W13040	-10 – 150 psi	02/08/2023
FLOWHOOD	SHORTRIDGE	8400	M92147	25 – 2500 cfm	03/17/2023
MULTIMETER	SHORTRIDGE	ADM-860		0.0001 – 60.00 in.w.c	
VANE/ ANEMOMETER	ALNOR	RVA801	A04185	50-2500fpm	06/21/2023
TACHOMETER	SHIMPO	MT-200	B21BB3008P	0 – 99,999 rpm	10/24/2022
VOLT METER	FLUKE	336	83706361	0-600VAC	03/16/2023
TEMP METER	COOPER ATKINS	SRH77A	011118017	-40 – 300 F	03/16/2023

Note: If applicable, Instrument List will be updated at time of final report.

CONSTANT AHU TEST PROCEDURE

This procedure applies to the following:

All constant volume systems that have one zone control per air-handling unit.

This procedure does not apply to the following:

Ductless type air-conditioning units.

Operation:

AHU system must be in operation before the test and balance technician begins the procedure. All controls must be installed, calibrated, and fully operational.

Inspection:

Inspect the system to determine if it is complete and operable. If not, then end the procedure, list the deficiencies, and proceed when they are corrected.
Verify all controls are installed, calibrated and fully operational
Verify that no adverse system effects or duct leakage that will affect this procedure.

Procedures

1. Check the fan for proper operating conditions and that the motor is below full-load amperage.
2. Measure the airflow quantity of the supply, return and outside air by pitot tube traverse, if possible. If pitot is not possible, then us the sum of the outletsas the fan total.
3. Set the fan speed to obtain 105% of design airflow.
4. Proportionally balance the air distribution system. Adjust the main, submains and branch ducts until system first. Then adjust the terminal outlets and inlets until all are within design parameters.
5. Record all final measurements.

Report

List items not corrected on the deficiency report form and submit it with the report. Record all test and name plate data on approved AHU data sheet.

VARIABLE AHU TEST PROCEDURE

This procedure applies to the following:

VAV air handling units with ductwork

This procedure does not apply to the following:

Constant volume single zone air handling units
Small direct drive fan coil units
Unit ventilators or units without ductwork
Unit heaters without ductwork

Operation:

AHU system must be in operation before the test and balance technician begins the procedure. All controls must be installed, calibrated, and fully operational.

Inspection:

Inspect the system to determine if it is complete and operable. If not, then end the procedure, list the deficiencies, and proceed when they are corrected.
Verify:

- Drives are installed properly and are of the correct size and type
- All controls are installed, calibrated and fully operational
- VFDs are fully setup with correct minimum and maximum speed settings per unit submittal.
- Coils are piped correctly

Procedures

1. Set each terminal box according to the Terminal Unit Test Procedure.
2. After all VAV terminals have been adjusted, set terminals to full cooling maximum setpoint as required to satisfy the design diversity of the system.
3. With the proper diversity established, adjust the supply fan capacity to provide total design airflow. Locate a traverse position in a straight section of duct to determine fan air flow. Adjust fan speed to obtain design air flow. If there are no suitable locations for a traverse use the sum of outlet or inlet quantities to determine the air flow.
4. Measure and adjust outside total airflow and then return total airflow to design capacity.
5. Proportionally balance return air system to design.
6. Verify critical terminal unit.

7. Measured and record the static pressure at the sensor for control.
8. Record all final conditions: airflows, static pressure profile, volts, amps, speeds, control settings and coil capacity tests.

Report

List items not corrected on the deficiency report form and submit it with the report. Record all test and name plate data on approved AHU data sheet.

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

Terminal Unit VAV Test Procedure

The following procedures should be used:

1. Measure and verify static pressure controller is at setpoint and calibrated.
2. Set volume controller to design maximum setpoint.
3. Identify and check that all manual outlet dampers are open.
4. Test the total airflow delivered by one of the following methods:
    a. Perform and duct traverse.
    b. Sum the flow of airflows measured at the outlets.
5. Calibrate the controller per the manufacturer's methods using the total airflow measured.
6. Balance all connected outlets.
7. Set the volume controller to minimum and repeat calibration.
8. Record all settings and kfactors.
9. Set the volume controller to the Heat setting, measure and record the heating temperatures EAT/LAT for electric reheat or take temperatures after HW flow is set.
10. Return terminal to normal operation.

ENERGY RECOVERY UNITS TEST PROCEDURE

This procedure applies to the following:

Air-to-air heat recovery unit in all HVAC systems

This procedure does not apply to the following:

Other device configurations

Operation:

The systems must be put in operation by others.
Access must be provided by others.

Inspection:

Inspect the system to determine if it is complete and operable. If not, then end the procedure, list any deficiencies, and proceed when they are corrected.

Procedures:

1. Verify that the seals are properly installed and adjusted.
2. Measure by pitot tube traverse the air entering the exhaust section and leaving the outside air section for total airflow, not including purge flow.
3. Measure and record the dry and wet bulb of the air entering and leaving the exhaust side and the outside air side.
4. Measure and record the pressure drop on each side of the recovery wheel.

Report:

List any uncorrected deficiencies that affected the test results on the deficiency report form. Record all test and name plate data on approved air apparatus sheet.

FANS TEST PROCEDURE

This procedure applies to the following:

Built-up fan systems
Single fans with ductwork
Exhaust fans with ductwork
Return/relief fans with ductwork

This procedure does not apply to the following:

Small direct-drive fans
Roof-type exhaust fans without ductwork
Propeller fans without ductwork

Operation:

Fan systems must be in operation before the test and balance technician begins the procedure.
All controls must be installed, calibrated, and fully operation.

Inspection:

Inspect the system to determine if it is complete and operable. If not, then end the procedure, list the deficiencies, and proceed when they are corrected.
Verify that the back-draft dampers are installed properly and are open when the fan is on.

Procedure:

1. Check the fan for proper operating conditions with motor below full-load amperage.
2. Measure and balance air distribution if the total is within tolerance. If not, then investigate and make adjustments as necessary.
3. Locate a traverse position in a straight section of duct, if possible with duct configuration to determine total airflow.
4. Adjust fan speed to within tolerance of design airflow. Measure the power requirements before and after adjustment.
5. Record final air distribution flow rate.

Report:

List any uncorrected deficiencies that affected the test results on the deficiency report form. Record all test and name plate data on approved fans sheet.

DUCTLESS UNIT TEST PROCEDURE

This procedure applies to the following:

Ductless fan coils units
Ductless blower coil units
Ductless split units, VRF, BCU and CRAC

This procedure does not apply to the following:

Other unit configurations

OPERATION:

1. The system must be put in operation by others.
2. Access must be provided by others.

INSPECTION:

Inspect the system to determine if it is complete and operable. If not, then end the procedure, list any deficiencies, and proceed when they are corrected.

Use the following procedures for ductless unit configuration:

1. Use manufacturer's rated airflow (SCFM) unless ducted, then use a duct traverse to determine airflow. If duct traverse is impossible, then use summation of outlet readings.
2. Set outside air flow if required to design specifications.
3. Measure entering and leaving air dry and wet bulb temperatures.
4. Measure and record all unit data.
5. Measure and record motor operating amperage/voltage and compare against full-load nameplate, if accessible.
6. Verify that controls operate properly and in correct sequence. Note any deficiencies and record.

REPORT:

Record all test data on an approved ductless fan coil data sheet including required data from the Report contents procedure.

Include components that do not meet design requirements on a deficiency form.

UNIT HEATER TEST PROCEDURE

This procedure applies to the following:

Electric Unit Heaters
Gas Fired Unit Heaters
Hot Water Unit Heaters
Steam Unit Heaters

This procedure does not apply to the following:

Other terminal configurations

Operation:

The systems must be put in operation by others.
Access must be provided by others.

Inspection:

Inspect the system to determine if it is complete and operable. If not, then end the procedure, list any deficiencies, and proceed when they are corrected.

Procedures:

Use the following procedures for electric unit heaters:

1. Use manufacturer's rated airflow unless ducted, then use a duct traverse to determine airflow.
2. Measure entering and leaving air dry temperatures.
3. Measure and record all unit data.
4. Measure and record heating kW, amps, and volts.

Use the following procedures for gas fired unit heaters:

1. Use manufacturer's rated airflow unless ducted, then use a duct traverse to determine airflow
2. Measure the entering and leaving air dry bulb temperature.
3. Record fuel type

Use the following procedures for hot water unit heaters:

1. Use manufacturer's rated airflow unless ducted, then use a duct traverse to determine airflow.
2. Measure and record all unit data.
3. If a flow station is installed, then measure and record water flow.
4. Measure and record the water pressure drop across the coil and compare to the design. Only rely upon pressure drop for flow determination if other measurements are impossible to obtain.
5. If flow measurement is unobtainable then measure entering and leaving water temperatures.
6. Measure entering and leaving air dry bulb temperatures.

Use the following procedures for steam unit heaters:

1. Use manufacturer's rated airflow unless ducted, then use a duct traverse to determine airflow.
2. Measure the entering and leaving air dry bulb temperature.

Report:

List any uncorrected deficiencies that affected the test results on the deficiency report form. Record all test and name plate data on approved unit heater sheet.

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TEST AND BALANCE REPORT

ANDURIL INDUSTRIES
BUILDINGS: 300,301,302,400,600

MCHENRY, MS

February 12, 2024

SAI PROJECT NUMBER

2402022

CONTRACTOR

IVEY MECHANICAL - MS

ENGINEER

ROBERT L. SEAY

SYSTEMS ANALYSIS INCORPORATED
105 Trade Center Dr Birmingham, AL 35244
PH(205) 802-7850 TOLL FREE (800)-448-4053
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AABC

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

Test Summary

Job Number: 2402022

ANDURIL INDUSTRIES
BUILDINGS: 300,301,302,400,600

All tests were performed in accordance with the plans and specifications of this project and in accordance with AABC National Standards Seventh Edition, 2015.

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

ERU/ERV TEST REPORT

PROJECT	MARK NUMBER	JOB NUMBER
TESTED BY	**AREA SERVED**	**DATE TESTED**

---	**CODE #**	

Equipment Manufacturer	
Model	
Serial Number	

	SUPPLY		EXHAUST	
	Specified	Actual	Specified	Actual
TOTAL CFM - FAN				
TOTAL CFM - OUTLET				
EXHAUST AIR CFM				
OUTSIDE AIR CFM				
TOTAL S.P.				
FAN RPM				

	Specified	Actual	Specified	Actual
MOTOR MANUFACTURER				
FRAME #		---		---
NAMEPLATE MOTOR HP				
VOLTS/PHASE | AMPS	---		---	
MOTOR RPM				
BHP				
FAN SPEED (HZ)				
STATIC SETPOINT				

	Direct Drive	Belt Drive	Direct Drive	Belt Drive
MOTOR SHEAVE & BORE	---	---	---	---
FAN SHEAVE & BORE	---	---	---	---
BELTS				
CENTER DISTANCE				

Remarks

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

AIR APPARATUS TEST REPORT

PROJECT	MARK NUMBER	JOB NUMBER
TESTED BY	**AREA SERVED**	**DATE TESTED**

---	**CODE #**	

FAN DATA			
MANUFACTURER			
MODEL NUMBER			
SERIAL NUMBER			
FAN SHEAVE TYPE	---		
FAN SHEAVE | SIZE	---		
FAN BORE	---		
BELTS - QTY. | TYPE | SIZE		--	

MOTOR DATA		
MOTOR MAKE		
MOTOR HP | FRAME	---	---
VOLTS/PH | AMPS	---	
MOTOR SHEAVE TYPE	---	
MOTOR SHEAVE | @P.D.	---	
MOTOR BORE	---	
CENTER DISTANCE		

	DESIGN	ACTUAL
FAN RPM		
MOTOR RPM		
MOTOR BHP		0.00
VOLTS	---	
AMPS		
FILTER STATUS	----------	---
FAN SPEED (HZ)	----------	
STATIC SETPOINT		

	DESIGN	ACTUAL
OUTSIDE AIR CFM		
RETURN AIR CFM	0	0
TOTAL CFM - FAN		

	EAT (F)	LAT (F)
COOL (d.b. / w.b)		
HEAT		

STATIC PRESSURE		
TOTAL		0.00
FAN DISCHARGE	----------	
FAN INLET	----------	
UNIT DISCHARGE	----------	
RETURN	----------	
EXTERNAL		0.00

Location	Size (in.)		Dia. (in.)	Area (sqft)	FPM		CFM		Damper %	Airflow Calibration	Notes
	Height	Width			Design	Actual	Design	Actual			
MIN OSA											

REMARKS

SAI
SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TRAVERSE TEST REPORT

PROJECT

MARK NUMBER

JOB NUMBER

TESTED BY

DATE TESTED

Mark	Location	Size (in.)		Dia. (in.)	Area (sqft)	FPM		CFM		additonal data	Notes
		Height	Width			Design	Actual	Design	Actual		

REMARKS

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TERMINAL UNIT TEST REPORT

PROJECT

MARK NUMBER

JOB NUMBER

TESTED BY

DATE TESTED

Unit Static Pressure

Terminal Unit	Code	Inlet Size	Cal Factor	DES MAX CFM	ACT MAX CFM	DES MIN CFM	ACT MIN CFM					Remarks
			TOTALS	0	0	0	0					

REMARKS

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TRAVERSE TEST REPORT

PROJECT	JOB NUMBER

TESTED BY	DATE TESTED

Mark	Location	Size (in.)		Dia. (in.)	Area (sqft)	FPM		CFM		Corrected Airflow		Notes
		Height	Width			Design	Actual	Design	Actual	Factor	Actual CFM	

REMARKS

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TERMINAL UNIT OUTLET REPORT

PROJECT	JOB NUMBER
TESTED BY	DATE TESTED

MARK #	ROOM NUMBER	OUTLET	DESIGN CFM	ACTUAL CFM

MARK #	ROOM NUMBER	OUTLET	DESIGN CFM	ACTUAL CFM

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

FAN COIL UNIT TEST REPORT

PROJECT

JOB NUMBER

TESTED BY

DATE TESTED

MARK #	ROOM	CODE	MODEL	FAN SPEED	SUPPLY CFM		OSA CFM		COOLING (F)		HEATING (F)		NOTE
					DES	ACT	DES	ACT	EAT	LAT	EAT	LAT	

Notes:

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TRAVERSE TEST REPORT

PROJECT

MARK NUMBER

JOB NUMBER

TESTED BY

DATE TESTED

Mark	Location	Size (in.)		Dia. (in.)	Area (sqft)	FPM		CFM		additonal data	Notes
		Height	Width			Design	Actual	Design	Actual		

REMARKS

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

AIR OUTLET REPORT

PROJECT	JOB NUMBER
TESTED BY	DATE TESTED

MARK #	ROOM NUMBER	OUTLET	DESIGN CFM	ACTUAL CFM

MARK #	ROOM NUMBER	OUTLET	DESIGN CFM	ACTUAL CFM

REMARKS

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TEMPERATURE TEST REPORT

PROJECT	JOB NUMBER
TESTED BY	DATE TESTED

MARK NO.	KW	DES VOLTS	ACT VOLTS	DES AMPS	ACT AMPS	EAT (°F)	LAT (°F)	Notes

Remarks

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

EXHAUST FAN TEST REPORT

PROJECT	JOB NUMBER
TESTED BY	DATE TESTED

MARK NUMBER				
CODE #				

FAN LOCATION	-----	-----	-----	-----
AREA SERVED				
FAN MANUFACTURER				
MODEL NUMBER				
MOTOR MAKE				
MOTOR HP | FRAME	--- ---	--- ---	--- ---	--- ---
VOLTS / PH	---	---	---	---
AMPS				
MOTOR RPM				
MOTOR SHEAVE / SIZE				
MOTOR BORE	---	---	---	---
FAN SHEAVE / SIZE				
FAN BORE	---	---	---	---
BELTS / QTY				
CENTER DISTANCE				
SPEED SETTING				

	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
FAN CFM								
FAN RPM								
T.S.P.								
ACTUAL VOLTS								
ACTUAL AMPS								

Remarks

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

TRAVERSE TEST REPORT

PROJECT

MARK NUMBER

JOB NUMBER

TESTED BY

DATE TESTED

Mark	Location	Size (in.)		Dia. (in.)	Area (sqft)	FPM		CFM		additonal data	Notes
		Height	Width			Design	Actual	Design	Actual		

REMARKS

SYSTEMS ANALYSIS, INC.
TEST AND BALANCE AGENCY

AIR OUTLET SHEET

PROJECT	JOB NUMBER
TESTED BY	**DATE TESTED**

MARK #	ROOM NUMBER	OUTLET	DESIGN CFM	ACTUAL CFM

MARK #	ROOM NUMBER	OUTLET	DESIGN CFM	ACTUAL CFM

REMARKS