



10641 Highway 36  
Covington, GA  
30014

[www.sunbeltbuilders.com](http://www.sunbeltbuilders.com)

t 770.786.3031  
f 770.786.3046

## NEWTON COUNTY CENTRALIZED STORAGE FACILITY

Mechanical Repair Services  
P.O. Box 883  
Watkinsville, GA 30677  
ph: 706-546-5003  
Eddie Powell  
[mechanicalrepairserviceinc@gmail.com](mailto:mechanicalrepairserviceinc@gmail.com)

### 23-0000 HVAC Test & Balance Report

**ATLANTA TEST & BALANCE INC**  
**3890 HIGHWAY 17**  
**PO BOX 2495**  
**CLARKESVILLE, GA 30523**  
**706-754-0065**

**Test and Balance Report**

**For**

**CENTRALIZED STORGE FACILITY**  
**NEWTON COUNTY BOARD OF COMMISSIONERS**  
**1113 USHER STREET**  
**COVINGTON, GA 30014**

**Mechanical Contractor: MECHANICAL REPAIR SERVICE, INC.**

**Architect: GM ARCHITECT**

**Mechanical Engineer: TOTAL ENGINEERS**

The data presented in this report is a record of system measurements and final adjustments that have been obtained in accordance with the current edition of the NEBB Procedural Standard for Testing, adjusting and Balancing of Environmental Systems. The measurements shown, and the information given, in this report are certified to be accurate and complete, at the time and date information was gathered. Any variances from design quantities, which exceed NEBB tolerances, are noted in this report.



TAB Supervisor  
**NEBB** Certification no. **3143**  
Date: 5/22/2025

Firm Certification Number: 3143

Firm Name: Atlanta Test & Balance Corporation

Certification: Testing, Adjusting and Balancing of Environmental Systems

Certified Professional Name: BRIAN KUKNYO

Expiration Date: 12/31/25



ATLANTA TEST & BALANCE INC  
HVAC TESTING & BALANCING

3890 HIGHWAY 17 PO BOX 2495  
CLARKESVILLE, GA 30523

Tel. 706-754-0065

## PROJECT SUMMARY

CLIENT: \_\_\_\_\_ DATE: \_\_\_\_\_  
JOB: \_\_\_\_\_ JOB #: \_\_\_\_\_

[illegible]

BY: BRIAN KUKNYO

ATLANTA TEST & BALANCE, INC.  
3890 Highway 17, PO Box 2495  
Clarkesville. Ga 30523

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ATLANTA TEST & BALANCE INC  
3890 HIGHWAY 17 # 2495, CLARKESVILLE, GA 30523  
Tel 706-754-0065

Project: NEWTON CO. ADMIN STORAGE FACILITY

25127

AIR MOVING EQUIPMENT TEST SHEET

System	PU-1	
Equipment Location	PAD	
Area Served	STORAGE	
Equipment Manufacturer	CARRIER	
Model	50JC-V06M1ASA30A0	
Serial Number	4424C10357	

	Specified	Actual		Specified	Actual	
Total CFM-Fan	1750	1831				
Total CFM-Outlet	1750	1831				
R/A CFM	1500	1590			0	
O/A CFM	250	241				
Total Static Press.(Total/Ext)	-/0.60	1.12	0.98		0	0
Inlet Pressure	-	0.71	0.57			
Discharge Pressure	-	0.41				
Fan RPM	-	D.D.				
EDB / EWB	-/-	71.3 / 60.1				
LDB / LWB	-/-	53.7 / 51.2				

	Specified	Actual		Specified	Actual	
Motor Manufacturer	-	-				
Motor HP	-	-				
Phase	1	1				
Voltage	208-230	219				
Amperage	7.2	6.8				
Motor RPM	-	D.D.				
Motor Service Factor	-	1.15				
Starter Heater Elements	-	T.P.				

Motor Sheave & No. Grooves	D.D.	
Fan Sheave & No. Grooves	D.D.	
Belts	D.D.	

Remarks



**ATLANTA TEST & BALANCE INC**  
 3890 HIGHWAY 17 #2495, CLARKESVILLE, GA 30523  
 TEL 706-754-0065

Project: NEWTON CO. ADMIN. STORAGE FACILITY

25127

**FAN DATA SHEET**

System	EF-1	EF-2
Equipment Location	CEILING	CEILING
Area Served	RR	MORGUE
Equipment Manufacturer	GREENHECK	GREENHECK
Model	SP-B90-QD	SP-B200-QD
Serial Number	175258854-0020	192889293-0002

	Specified	Actual	Specified	Actual
Total CFM-Fan	70	75	-	181
Total CFM-Outlet	70	75	-	181
Total Static Press (Total/Ext.)	0.25	0.21	-	0.29
Inlet Pressure	-	-	-	-
Discharge Pressure	-	0.21	-	0.29
Fan RPM	-	D.D.	-	D.D.

	Specified	Actual	Specified	Actual
Motor Manufacturer	-	-	-	-
Motor HP	-	-	-	-
Phase	1	1	1	1
Voltage	115	119	115	121
Amperage	0.19	0.15	2.7	2.5
Motor RPM	-	D.D.	-	D.D.
Motor Service Factor	-	1.0	-	1.0
Starter Heater Elements	-	T.P.	-	T.P.

Motor Sheave & No. Grooves	D.D.	D.D.
Fan Sheave & No. Grooves	D.D.	D.D.
Belts	D.D.	D.D.

Remarks

Date

5/22/25

Technician NA

Page

3



**ATLANTA TEST & BALANCE INC**

**3890 HIGHWAY 17 - PO BOX 2495 CLARKESVILLE, GA 30523**

CLARKESVILLE, GA 30523

**Tel. 706-754-0065**

## INSTRUMENT CALIBRATION

[illegible]



## Certificate of Calibration

Company Information		Equipment Information		Event Result:	PASS
ATLANTA TEST & BALANCE		ID Number:	M09529	As Found:	PASS
3890 HIGHWAY 17		Manufacturer:	Shortridge	As Left:	PASS
CLARKSVILLE, GEORGIA 30523		Model:	ADM-860C	Issue Date:	03/28/2025
Order:	WO38256	Serial Number:	M09529	Cal Date:	03/28/2025
PO Number:	ATB03202025	Alternate I.D.:		Due Date:	03/28/2026
Gage Location:	NONE SPECIFIED	Description:	AIRDATA MULTIMETER	Environment:	Temp: 70 °F RH: 40 %
Cal Location:	LAB			Size / Range:	0 TO 60 INH2O

Event Result: PASS - Gage Meets Specifications / FAIL - Gage did not meet specifications / LTD - Limited Calibration / ADJ - Passed after adjustment / ROV - Report of Value

### Notes & Comments:

Asset Notes:

Comments:

### Expanded Uncertainty Details:

± 0.0018% of Reading + 0.28 INH2O

### Standards Used:

Asset/Standard	Description	Serial Number	Cal Date	Due Date
JJM001	Thermo Hygrometer	SY52D16608077	9/3/2024	9/30/2025
RA0667	PRESSURE LOOP CALIBRATOR	12262987	8/22/2024	8/31/2025

### Procedures Used:

Name	Description	Rev Level	Rev Date
P-101	PRESSURE GAGE	3.40	5/25/2021

Test Points:		Pressure		Checkpoints Marked: A = Adjusted, F = Out of Tolerance		
Seq.	Standard.	UOM	Tolerance -	Tolerance +	As Found	As Left
1	12.0000	inH2O	11.7590	12.2410	11.9800	11.9800
2	24.0000	inH2O	23.5190	24.4810	23.9500	23.9500
3	36.0000	inH2O	35.2790	36.7210	35.8900	35.8900
4	48.0000	inH2O	47.0390	48.9610	47.9300	47.9300
5	60.0000	inH2O	58.7990	61.2010	59.8600	59.8600
6	12.0000	inH2O	11.7590	12.2410	11.9700	11.9700

Transcat is accredited by ANSI National Accreditation Board to ISO/IEC 17025:2017 and ANSI/NC SL Z540-1-1994. Transcat certifies that the above listed instrument at the time of calibration meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). The calibrations within the certificate are traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or through NIST accepted intrinsic standards of measurement, or derived by the ratio type of self-calibration techniques. This calibration complies with ANSI/NC SL Z540-1-1994 and ISO/IEC 17025:2017. The measurement results relate only to the items tested or calibrated. Transcat is responsible for all information within the certificate except for customer provided information. Customer provided data is clearly identified. Transcat is not responsible for any effects that customer provided data has on the results. Measurement uncertainties are calculated in accordance with the method described in EA-4/02 and NIST TN1297 using a coverage factor of k = 2, corresponding to a confidence level of approximately 95%. Uncertainties were not considered in all Pass / Fail criteria. This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the calibration organization issuing this report.

Calibrated At:

Facility Responsible:

Calibrated By:

☒ Electronically Signed By:

Reviewed By:

☒ Electronically Signed By:

11402 Reading Road  
Cincinnati, OH 45241

11402 Reading Road  
Cincinnati, OH 45241

JAMES MILLS  
CALIBRATION TECHNICIAN - 3/28/2025 12:15:28 PM

Rebecca Kramer  
CALIBRATION TECHNICIAN - 3/28/2025 2:09:25 PM

Issue Date: 03/28/2025

Certificate ID: 14-914480

Revision: 0

Page 1 of 1

# Shortridge Instruments, Inc. HydroData Multimeter Calibration Equipment

Order Number: 241130 Serial Number: W24104 Test Type: Initial As-Received Final

## DIFFERENTIAL / GAGE PRESSURE STANDARDS

HDM #01-L S/N: 41744/42459	Heise Model: PPM-1	Mfgd by Dresser Industries	Calibrated by Ashcroft	Calibration Date: 09/30/24	Due Date: 09/2025
HDM #03-L S/N: 41745/42460	Heise Model: PPM-1	Mfgd by Dresser Industries	Calibrated by Ashcroft	Calibration Date: 08/01/24	Due Date: 07/2025
HDM #11-L S/N: 45651/48600	Heise Model: PPM-1	Mfgd & Calibrated by Ashcroft, Inc.		Calibration Date: 04/24/24	Due Date: 04/2025
Rated Accuracy: 0.06% fs		Range: 0.0 to 15.0 in wc		Resolution: 0.001 in wc	
Used at Set Points: 3.0; 14.0 for all models.				Uncertainty: < 0.00651 in wc	
HDM #01-R S/N: 41744/42457-1	Heise Model: PPM-1	Mfgd by Dresser Industries	Calibrated by Ashcroft	Calibration Date: 10/01/24	Due Date: 09/2025
HDM #03-R S/N: 41745/42458	Heise Model: PPM-1	Mfgd by Dresser Industries	Calibrated by Ashcroft	Calibration Date: 08/02/24	Due Date: 07/2025
HDM #11-R S/N: 45651/48599	Heise Model: PPM-1	Mfgd & Calibrated by Ashcroft, Inc.		Calibration Date: 04/25/24	Due Date: 04/2025
Rated Accuracy: 0.06% fs		Range: 0.0 to 150.0 in wc		Resolution: 0.01 in wc	
Used at Set Points: 25.0; 31.0; 140.0 for all models.				Uncertainty: < 0.07540 in wc	
HDM #02-L S/N: 41747/42464	Heise Model: PPM-2	Mfgd by Dresser Industries	Calibrated by Ashcroft	Calibration Date: 09/26/24	Due Date: 09/2025
HDM #04A-L S/N: 44806/47224	Heise Model: PPM-2	Mfgd & Calibrated by Ashcroft, Inc.		Calibration Date: 07/30/24	Due Date: 07/2025
HDM #12-L S/N: 45652/48602	Heise Model: PPM-2	Mfgd & Calibrated by Ashcroft, Inc.		Calibration Date: 04/22/24	Due Date: 04/2025
Rated Accuracy: 0.05% fs		Range: 0.0 to 1400 in wc		Resolution: 0.1 in wc	
Used at Set Points: 225.0; 275.0; 1025 for HDM-250 and HDM-300		Used at Set Points: 250.0; 305.0 for HDM-150		Uncertainty: < 0.479 in wc	
HDM #02-R S/N: 41747/42462	Heise Model: PPM-2	Mfgd by Dresser Industries	Calibrated by Ashcroft	Calibration Date: 09/26/24	Due Date: 09/2025
HDM #04A-R S/N: 44806/47216	Heise Model: PPM-2	Mfgd & Calibrated by Ashcroft, Inc.		Calibration Date: 07/30/24	Due Date: 07/2025
HDM #12-R S/N: 45652/48601	Heise Model: PPM-2	Mfgd & Calibrated by Ashcroft, Inc.		Calibration Date: 04/22/24	Due Date: 04/2025
Rated Accuracy: 0.05% fs		Range: 0.0 to 8320 in wc		Resolution: 1 in wc	
Used at Set Points: 1620; 2000; 4500; 6930 for HDM-250		Used at Set Points: 1620; 2000; 4500; 8300 for HDM-300		Used at Set Points: 2000; 4150 for HDM-150	

## TEMPERATURE STANDARDS

RTD Simulator S/N: 249	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 04/11/24	Due Date: 04/2028
RTD Simulator S/N: 250	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 04/11/24	Due Date: 04/2028
RTD Simulator S/N: 253	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 04/11/24	Due Date: 04/2028
RTD Simulator S/N: 254	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 08/20/24	Due Date: 08/2028
RTD Simulator S/N: 256	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 08/20/24	Due Date: 08/2028
RTD Simulator S/N: 257	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 08/20/24	Due Date: 08/2028
RTD Simulator S/N: 292	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 01/15/24	Due Date: 01/2028
RTD Simulator S/N: 293	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 01/15/24	Due Date: 01/2028
RTD Simulator S/N: 294	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 01/15/24	Due Date: 01/2028
RTD Simulator S/N: 313	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 03/25/22	Due Date: 03/2026
RTD Simulator S/N: 314	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 03/25/22	Due Date: 03/2026
RTD Simulator S/N: 315	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 03/25/22	Due Date: 03/2026
RTD Simulator S/N: 316	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 06/06/22	Due Date: 05/2026
RTD Simulator S/N: 317	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 05/23/22	Due Date: 05/2026
RTD Simulator S/N: 318	Model RTD-1000/500	Mfgd by General Resistance	Calibrated by IET Labs	Calibration Date: 05/23/22	Due Date: 05/2026
Rated Accuracy: 0.025% of setting		Range: 100.00 $\Omega$ to 11111.10 $\Omega$		Resolution: 0.01 $\Omega$	
				Uncertainty: $\leq$ 32 ppm	

Thermometer #1 S/N 8A089/Thermistor S/N A410660	Model 1504/5610	Mfgd by Hart Scientific	Calibrated by Fluke	Calibration Date: 04/09/24	Due Date: 04/2026
Thermometer #2 S/N 8B104/Thermistor S/N 871507	Model 1504/5610	Mfgd by Hart Scientific	Calibrated by Fluke	Calibration Date: 12/07/22	Due Date: 11/2024
Thermometer #5 S/N B11780/Thermistor S/N B10505	Model 1504/5610	Mfgd by Hart Scientific	Calibrated by Fluke	Calibration Date: 06/27/24	Due Date: 06/2026
Thermometer #6 S/N B11782/Thermistor S/N B10509	Model 1504/5610	Mfgd by Hart Scientific	Calibrated by Fluke	Calibration Date: 09/21/24	Due Date: 09/2026
Thermometer #7 S/N B49938/Thermistor S/N B482202	Model 1504/5610	Mfgd and Calibrated by Fluke		Calibration Date: 02/05/24	Due Date: 02/2026
Rated Accuracy (combined): 0.0324° F		Range: 32° F to 176° F		Resolution: 0.001° F	
				Combined Uncertainty with Baths: $\leq$ 0.040° F	

Temp Transfer Standard S/N M00136 Model ADM-870	Mfgd & Calibrated by Shortridge Instruments, Inc.	Calibration Date: 10/25/24	Due Date: 10/2025
Temp Transfer Standard S/N M96100 Model ADM-870	Mfgd & Calibrated by Shortridge Instruments, Inc.	Calibration Date: 03/21/24	Due Date: 03/2025
Rated Accuracy: 0.03° F	Range: 33° F to 158° F	Resolution: 0.01° F	Uncertainty: < 0.023° F
Total combined Uncertainty for MultiTemp and TemProbe testing : ≤ 0.046° F			

This form must remain with the Certificate of Calibration corresponding to the Order Number listed above.

Shortridge Instruments, Inc.

7855 East Redfield Road Scottsdale, Arizona 85260  
(480) 991-6744 • Fax (480) 443-1267 • www.shortridge.com

CO ID: 016587 HDM-250 HYDRODATA MULTIMETER CERTIFICATE OF CALIBRATION S/N: W24104  
 Customer: ATLANTA TEST & BALANCE, INC. City: CLARKESVILLE State: GA  
 Model #: HDM-250 PO #: \_\_\_\_\_ Calibration Due Date: \_\_\_\_\_ Order #: 241130

Rh 27 % Ambient Temperature 68 °F Barometric Pressure 28.64 in Hg

HDM Pressure Standard Heise #1-L	Used at Set Points: 3.0; 14.0	S/N 41744/42459	_____
HDM Pressure Standard Heise #3-L	Used at Set Points: 3.0; 14.0	S/N 41745/42460	_____
HDM Pressure Standard Heise #11-L	Used at Set Points: 3.0; 14.0	S/N 45651/48600	✓
HDM Pressure Standard Heise #1-R	Used at Set Points: 25.0; 31.0; 140.0	S/N 41744/42457-1	_____
HDM Pressure Standard Heise #3-R	Used at Set Points: 25.0; 31.0; 140.0	S/N 41745/42458	_____
HDM Pressure Standard Heise #11-R	Used at Set Points: 25.0; 31.0; 140.0	S/N 45651/48599	✓
HDM Pressure Standard Heise #2-L	Used at Set Points: 225.0; 275.0; 1025	S/N 41747/42464	_____
HDM Pressure Standard Heise #4A-L	Used at Set Points: 225.0; 275.0; 1025	S/N 44806/47224	_____
HDM Pressure Standard Heise #12-L	Used at Set Points: 225.0; 275.0; 1025	S/N 45652/48602	✓
HDM Pressure Standard Heise #2-R	Used at Set Points: 1620; 2000; 4500; 6930	S/N 41747/42462	_____
HDM Pressure Standard Heise #4A-R	Used at Set Points: 1620; 2000; 4500; 6930	S/N 44806/47216	_____
HDM Pressure Standard Heise #12-R	Used at Set Points: 1620; 2000; 4500; 6930	S/N 45652/48601	✓

DIFFERENTIAL PRESSURE TEST (in wc)  
 TEST METER TOLERANCE =  $\pm 2.0\% \pm 0.3$  in wc

Approx Set Pt	Standard	Test Meter	% Diff
3.0	3.06	3.0	-1.96
14.0	14.03	14.1	.50
25.0	25.03	25.1	.28
31.0	31.00	31.2	.65
140.0	143.36	142.2	-.81
225.0	226.3	225.6	-.31
275.0	283.0	282.7	-.11
1025	1031.3	1028	-.32
1620	1654	1641	-.79
2000	2000	2000	.00
4500	4523	4502	-.46
6930	6953	6916	-.53

GAGE PRESSURE (P<sub>2</sub>) TEST (in wc)  
 TEST METER TOLERANCE =  $\pm 2.0\% \pm 0.3$  in wc

Approx Set Pt	Standard	Test Meter	% Diff
3.0	3.05	3.0	-1.64
14.0	14.03	14.1	.50
25.0	25.03	25.2	.68
31.0	31.00	31.2	.65
140.0	143.11	142.8	-.22
225.0	225.1	225.6	.22
275.0	282.0	282.9	.32
1025	1032.7	1032	-.07
1620	1656	1647	-.54
2000	2049	2044	-.24
4500	4537	4527	-.22
6930	6980	6964	-.23

Shortridge Instruments, Inc.  
 7855 East Redfield Road Scottsdale, Arizona 85260  
 (480) 991-6744 • Fax (480) 443-1267 • [www.shortridge.com](http://www.shortridge.com)

## HDM-250 HYDRODATA MULTIMETER CERTIFICATE OF CALIBRATION

S/N: W24104  
Order #: 241130TEMPERATURE TEST - HYDRODATA MULTIMETER (° F)  
TEST METER TOLERANCE =  $\pm 0.2^\circ \text{ F}$ 

RTD Simulator: S/N 249	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 250	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 253	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 254	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 256	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 257	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 292	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 293	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 294	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 313	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 314	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 315	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 316	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 317	Set Point: 35.6° F	95° F	154.4° F
RTD Simulator: S/N 318	Set Point: 35.6° F	95° F	154.4° F

RTD Simulator Temperature Equivalent Set Point	Test Meter	Diff
35.60	35.7	.1
95.00	95.1	.1
154.40	154.3	-.1

All meters are set to zero prior to taking pressure readings.

NOTES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Procedure used: Procedure for Differential Pressure, Gage Pressure, and Temperature Calibration of HydroData Multimeters SIP-CP10 Revision: 05  
Dated: 07/31/14. There were no additions to or deviations from the specified calibration procedure during the calibration process.

This instrument has been calibrated using Calibration Standards which are traceable to NIST (National Institute of Standards and Technology). Calibration accuracy ratio is 4:1 for pressures and temperature. Quality Assurance Program and calibration procedures meet the requirements for ANSI/NC SL Z540-1, ISO 17025, MIL-STD 45662A and manufacturer's specifications. Calibration accuracy is certified when meters are used with properly functioning accessories only. Uncertainties are expressed in expanded terms (twice the calculated uncertainty). This report shall not be reproduced, except in full, without the written approval of Shortridge Instruments, Inc. Results relate only to the item calibrated.

Limitations on use: See Shortridge Instruments, Inc. Instruction Manual for the use of HydroData Multimeters

The enclosed HDM Calibration Standards form is an integral part of this calibration and must remain with this Certificate of Calibration. Any calibration due date shown is specified by the customer.

Calibration Technician(s): B. Lu Calibration Date: 11/21/2024Calibration Approved by: D. Babb Title: Carl Super Date: 11/21/2024

Shortridge Instruments, Inc.  
7855 East Redfield Road Scottsdale, Arizona 85260  
(480) 991-6744 • Fax (480) 443-1267 • www.shortridge.com



## Certificate of Calibration

Company Information		Equipment Information		Event Result:	PASS
ATLANTA TEST & BALANCE		ID Number:	102623023	As Found:	PASS
3890 HIGHWAY 17		Manufacturer:	Cooper Instrument	As Left:	PASS
CLARKSVILLE, GEORGIA 30523		Model:	SRH77A	Issue Date:	04/11/2025
Order:	WO38256	Serial Number:	102623023	Cal Date:	03/28/2025
PO Number:	ATB03202025	Alternate I.D.		Due Date:	03/28/2026
Gage Location:	NONE SPECIFIED	Description:	HUMIDITY / TEMPERATURE INSTRUMENT	Environment:	Temp: 71 °F RH: 38 %
Cal Location:	LAB			Size / Range:	-40 to 300 °F 10 to 95 %Rh

Event Result: PASS - Gage Meets Specifications / FAIL - Gage did not meet specifications / LTD - Limited Calibration / ADJ - Passed after adjustment / ROV - Report of Value

### Notes & Comments:

Asset Notes:

Comments: This certificate is an amendment to a previous certificate. Thermo-hygrometer probe was removed from calibration certificate per customer. 4/11/2025 MMG

### Expanded Uncertainty Details:

$\pm (0.14 + 0.0016T) ^\circ\text{F}$

$\pm (1.25 + 0.011) \% \text{Rh}$

$\pm 0.54 ^\circ\text{F}(\% \text{Rh})$

### Standards Used:

Asset/Standard	Description	Serial Number	Cal Date	Due Date
JJM001	Thermo Hygrometer	SY52D16608077	9/3/2024	9/30/2025
RA0680	Temperature Bath	A99336	8/9/2024	8/31/2025

### Procedures Used:

Name	Description	Rev Level	Rev Date
P-102	TEMPERATURE DEVICES	2.50	5/25/2021
P-103	RELATIVE HUMIDITY	2.10	8/6/2019

### Test Points: Immersion Probe

Checkpoints Marked: A = Adjusted, F = Out of Tolerance

Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left	Description
1	32.00	°F	31.70	32.30	32.2	32.2	PN: 1075
2	150.00	°F	149.25	150.75	150.0	150.0	PN: 1075
3	249.83	°F	248.58	251.08	249.9	249.9	PN: 1075

### Test Points: Contact Probe

Checkpoints Marked: A = Adjusted, F = Out of Tolerance

Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left	Description
4	32.00	°F	30.00	34.00	32.1	32.1	PN: 4011
5	150.00	°F	148.00	152.00	150.0	150.0	PN: 4011
6	200.00	°F	198.00	202.00	200.1	200.1	PN: 4011

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## Certificate of Calibration

**Calibrated At:**

11402 Reading Road  
Cincinnati, OH 45241

**Facility Responsible:**

11402 Reading Road  
Cincinnati, OH 45241

**Calibrated By:**

☒ Electronically Signed By:

JAMES MILLS

CALIBRATION TECHNICIAN - 3/28/2025 10:44:34 AM

**Reviewed By:**

☒ Electronically Signed By:

Megan Guyer

Assistant Service Manager - 4/11/2025 4:07:26 PM



## Certificate of Calibration

Company Information		Equipment Information		Event Result:	PASS
ATLANTA TEST & BALANCE		ID Number:	4011-3	As Found:	PASS
3890 HIGHWAY 17		Manufacturer:	Cooper Instrument	As Left:	PASS
CLARKSVILLE, GEORGIA 30523		Model:	4011	Issue Date:	03/28/2025
Order:	WO38256	Serial Number:	N/A	Cal Date:	03/28/2025
PO Number:	ATB03202025	Alternate I.D.		Due Date:	03/28/2026
Gage Location:	NONE SPECIFIED	Description:	TEMPERATURE PROBE	Environment:	Temp: 71 °F RH: 38 %
Cal Location:	LAB			Size / Range:	-25 to 212 °F

Event Result: PASS - Gage Meets Specifications / FAIL - Gage did not meet specifications / LTD - Limited Calibration / ADJ - Passed after adjustment / ROV - Report of Value

### Notes & Comments:

Calibrated to: Manufacturer Specification

Asset Notes:

Comments:

### Expanded Uncertainty Details:

± (0.14 + 0.0016T) °F

### Standards Used:

Asset/Standard	Description	Serial Number	Cal Date	Due Date
JJM001	Thermo Hygrometer	SY52D16608077	9/3/2024	9/30/2025
RA0680	Temperature Bath	A99336	8/9/2024	8/31/2025

### Procedures Used:

Name	Description	Rev Level	Rev Date
P-102	TEMPERATURE DEVICES	2.50	5/25/2021

Test Points:		Contact Probe		Checkpoints Marked: A = Adjusted, F = Out of Tolerance			
Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left	Description
1	32.000	°F	30.000	34.000	32.1	32.1	PN: 4011
2	150.000	°F	148.000	152.000	150.0	150.0	PN: 4011
3	200.000	°F	198.000	202.000	200.4	200.4	PN: 4011

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Facility Responsible:

Calibrated By:

☒ Electronically Signed By:

Reviewed By:

☒ Electronically Signed By:

11402 Reading Road  
Cincinnati, OH 45241

11402 Reading Road  
Cincinnati, OH 45241

JAMES MILLS

CALIBRATION TECHNICIAN - 3/28/2025 10:44:34 AM

Rebecca Kramer

CALIBRATION TECHNICIAN - 3/28/2025 2:07:42 PM

Issue Date: 03/28/2025

Certificate ID: 14-914469

Revision: 0

Page 1 of 1





## Certificate of Calibration

Company Information		Equipment Information		Event Result:	PASS
ATLANTA TEST & BALANCE		ID Number:	1075-3	As Found:	PASS
3890 HIGHWAY 17		Manufacturer:	Cooper Instrument	As Left:	PASS
CLARKSVILLE, GEORGIA 30523		Model:	1075	Issue Date:	03/28/2025
Order:	WO38256	Serial Number:	N/A	Cal Date:	03/28/2025
PO Number:	ATB03202025	Alternate I.D.		Due Date:	03/28/2026
Gage Location:	NONE SPECIFIED	Description:	Temperature Probe	Environment:	Temp: 71 °F RH: 38 %
Cal Location:	LAB			Size / Range:	-40 to 300 °F

Event Result: PASS - Gage Meets Specifications / FAIL - Gage did not meet specifications / LTD - Limited Calibration / ADJ - Passed after adjustment / ROV - Report of Value

### Notes & Comments:

Calibrated to: Manufacturer Specification

Asset Notes:

Comments:

### Expanded Uncertainty Details:

$\pm (0.14 + 0.0016T) ^\circ\text{F}$

### Standards Used:

Asset/Standard	Description	Serial Number	Cal Date	Due Date
JJM001	Thermo Hygrometer	SY52D16608077	9/3/2024	9/30/2025
RA0680	Temperature Bath	A99336	8/9/2024	8/31/2025

### Procedures Used:

Name	Description	Rev Level	Rev Date
P-102	TEMPERATURE DEVICES	2.50	5/25/2021

Test Points:		Immersion Probe		Checkpoints Marked: A = Adjusted, F = Out of Tolerance			
Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left	Description
1	32.000	°F	31.700	32.300	32.2	32.2	PN: 1075
2	150.000	°F	149.250	150.750	150.0	150.0	PN: 1075
3	250.000	°F	248.750	251.250	249.9	249.9	PN: 1075

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11402 Reading Road  
Cincinnati, OH 45241

Facility Responsible:

11402 Reading Road  
Cincinnati, OH 45241

Calibrated By:

☒ Electronically Signed By:

JAMES MILLS

CALIBRATION TECHNICIAN - 3/28/2025 10:44:34 AM

Reviewed By:

☒ Electronically Signed By:

Rebecca Kramer

CALIBRATION TECHNICIAN - 3/28/2025 2:07:14 PM

Issue Date: 03/28/2025

Certificate ID: 14-914507

Revision: 0

Page 1 of 1



## Certificate of Calibration

Test Points:		Resistance					Checkpoints Marked: A = Adjusted, F = Out of Tolerance
Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left	
14	100.0	Ohm	98.0	102.0	100.0	100.0	
15	200.0	Ohm	196.0	204.0	199.9	199.9	

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11402 Reading Road  
Cincinnati, OH 45241

**Facility Responsible:**

11402 Reading Road  
Cincinnati, OH 45241

**Calibrated By:**

☒ Electronically Signed By:

SEAN BRADY

CALIBRATION TECHNICIAN - 3/28/2025 9:35:44 AM

**Reviewed By:**

☒ Electronically Signed By:

Rebecca Kramer

CALIBRATION TECHNICIAN - 3/28/2025 12:36:12 PM



## Certificate of Calibration

Company Information		Equipment Information		Event Result:	PASS
ATLANTA TEST & BALANCE		ID Number:	51772491MV	As Found:	PASS
3890 HIGHWAY 17		Manufacturer:	Fluke	As Left:	PASS
CLARKSVILLE, GEORGIA 30523		Model:	323	Issue Date:	03/28/2025
Order:	WO38256	Serial Number:	51772491MV	Cal Date:	03/28/2025
PO Number:	ATB03202025	Alternate I.D.	N/A	Due Date:	03/28/2026
Gage Location:	NONE SPECIFIED	Description:	TRUE RMS CLAMP METER	Environment:	Temp: 71 °F RH: 37 %
Cal Location:	LAB			Size / Range:	AS LISTED

Event Result: PASS - Gage Meets Specifications / FAIL - Gage did not meet specifications / LTD - Limited Calibration / ADJ - Passed after adjustment / ROV - Report of Value

### Notes & Comments:

Asset Notes:

Comments:

### Expanded Uncertainty Details:

$\pm (0.022 + 0.00034X) \text{ VAC}$   
 $\pm (0.0017 + 0.000022X) \text{ VDC}$

$\pm (0.0024 + 0.00004X) \Omega$   
 $\pm (0.57 + 0.0062X) \text{ AAC}$

### Standards Used:

Asset/Standard	Description	Serial Number	Cal Date	Due Date
RA0071	Multi-Product Calibrator	6310012	4/18/2024	4/30/2025
RA0661	Thermo Hygrometer	N/A	12/2/2024	12/31/2025

### Procedures Used:

Name	Description	Rev Level	Rev Date
P-128	CURRENT METERS	1.00	8/6/2019

### Test Points: DC Voltage

Checkpoints Marked: A = Adjusted, F = Out of Tolerance

Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left
1	10.0	VDC	9.8	10.2	10.0	10.0
2	100.0	VDC	99.3	100.7	100.1	100.1
3	250.0	VDC	248.3	251.7	250.4	250.4
4	500.0	VDC	497.3	502.7	501.1	501.1

### Test Points: AC Voltage @ 60 Hz

Checkpoints Marked: A = Adjusted, F = Out of Tolerance

Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left
5	10.0	VAC	9.8	10.2	10.0	10.0
6	100.0	VAC	98.2	101.8	100.2	100.2
7	250.0	VAC	246.8	253.2	250.6	250.6
8	500.0	VAC	494.2	505.8	501.4	501.4

### Test Points: AC Current @ 60 Hz

Checkpoints Marked: A = Adjusted, F = Out of Tolerance

Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left
9	10.0	AAC	9.7	10.3	10.1	10.1
10	50.0	AAC	48.4	51.6	50.3	50.3
11	100.0	AAC	97.3	102.7	100.6	100.6
12	200.0	AAC	195.6	204.4	201.5	201.5

### Test Points: Resistance

Checkpoints Marked: A = Adjusted, F = Out of Tolerance

Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left
13	40.0	Ohm	39.2	40.8	40.0	40.0



## Certificate of Calibration

accepted intrinsic standards of measurement, or derived by the ratio type of self-calibration techniques. This calibration complies with ANSI/NC SL Z540-1-1994 and ISO/IEC 17025:2017. The measurement results relate only to the items tested or calibrated. Transcat is responsible for all information within the certificate except for customer provided information. Customer provided data is clearly identified. Transcat is not responsible for any effects that customer provided data has on the results. Measurement uncertainties are calculated in accordance with the method described in EA-4/02 and NIST TN1297 using a coverage factor of  $k = 2$ , corresponding to a confidence level of approximately 95%. Uncertainties were not considered in all Pass / Fail criteria. This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the calibration organization issuing this report.

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Cincinnati, OH 45241

**Facility Responsible:**

11402 Reading Road  
Cincinnati, OH 45241

**Calibrated By:**

☒ Electronically Signed By:

JAMES MILLS

CALIBRATION TECHNICIAN - 3/28/2025 10:44:34 AM

**Reviewed By:**

☒ Electronically Signed By:

Rebecca Kramer

CALIBRATION TECHNICIAN - 3/31/2025 12:53:06 PM



## Certificate of Calibration

Company Information		Equipment Information		Event Result:	PASS
ATLANTA TEST & BALANCE		ID Number:	DT-10S	As Found:	PASS
3890 HIGHWAY 17		Manufacturer:	DigT	As Left:	PASS
CLARKSVILLE, GEORGIA 30523		Model:	DT-10S	Issue Date:	03/28/2025
Order:	WO38256	Serial Number:	N/A	Cal Date:	03/28/2025
PO Number:	ATB03202025	Alternate I.D.		Due Date:	03/28/2026
Gage Location:	NONE SPECIFIED	Description:	STROBOSCOPE	Environment:	Temp: 71 °F RH: 37 %
Cal Location:	LAB			Size / Range:	60 - 99,999 RPM

Event Result: PASS - Gage Meets Specifications / FAIL - Gage did not meet specifications / LTD - Limited Calibration / ADJ - Passed after adjustment / ROV - Report of Value

### Notes & Comments:

Asset Notes:

Comments:

### Expanded Uncertainty Details:

± 0.3% of Reading + 0.002 RPM

### Standards Used:

Asset/Standard	Description	Serial Number	Cal Date	Due Date
RA0661	Thermo Hygrometer	N/A	12/2/2024	12/31/2025
RA0699	UNIVERSAL COUNTER	MY64130003	8/6/2024	8/31/2025

### Procedures Used:

Name	Description	Rev Level	Rev Date
P-122	TACHOMETER	1.10	8/6/2019

### Test Points:

Checkpoints Marked: A = Adjusted, F = Out of Tolerance

Seq.	Standard	UOM	Tolerance -	Tolerance +	As Found	As Left
1	300.000	rpm	299.970	300.030	299.999	299.999
2	3000.000	rpm	2999.700	3000.300	2999.991	2999.991
3	15000.000	rpm	14998.500	15001.500	14999.994	14999.994

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### Calibrated At:

11402 Reading Road  
Cincinnati, OH 45241

### Facility Responsible:

11402 Reading Road  
Cincinnati, OH 45241

### Calibrated By:

☒ Electronically Signed By:

SEAN BRADY

CALIBRATION TECHNICIAN - 3/28/2025 10:10:33 AM

### Reviewed By:

☒ Electronically Signed By:

Rebecca Kramer

CALIBRATION TECHNICIAN - 3/28/2025 12:38:31 PM

Issue Date: 03/28/2025

Certificate ID: 14-914385

Revision: 0

Page 1 of 1