



# Cal-Rite Corporation

## Certificate Of Calibration

Equipment Calibration was performed at the address below for



Certificate # 866.01  
Calibration

Date of Calibration

Thursday, May 15, 2025

Issue Date:

05/23/2025

### Instrument Profile

Manufacturer:		Position:	VERT-LINEAR	Next Calibration:	15-May-2026
Model:		Serial #:		Customer #:	N/A
Frame #:		Mounting:	CLAMP ON	G/L Measure:	Direct

### Instrument Calibration Results

Range Capacity mm/mm	Verified Range mm/mm	Uncertainty mm	Maximum Error mm/mm	ASTM Class
0.5	0.001 - 0.5	0.0026	-0.000170	B-1

### Calibration Apparatus Used

Inst.	Manufacturer	Serial Number	Model	Calib By	Cert Date	Date Due
116	EPSILON	A5403	3590VHR	EPSILON	9/18/2024	9/18/2025
362	MITUTOYO	B17288093	CD-8"ASX	ICS	8/27/2024	8/27/2026

Cal-Rite Corporation has calibrated the testing equipment described above in accordance with ISO/IEC 17025:2017, ANSI/NCSL Z540-1-1994 and 10-CFR-21. All calibration measurements are traceable to the International System of Units (SI) through NIST. The accuracy of the calibrating apparatus is equal to or better than 1/3 of the ASTM E83 classification criteria.

The uncertainty of the calibration process was estimated approximately at the 95% confidence level ( $k=2$ ).

When a decision rule is stated in the governing specification, the prescribed decision rule was used in the pass/fail determination unless otherwise noted. In all other cases where a statement of conformance is made, the determination of conformance is made solely on the measurements falling in or out of the applied tolerance. Measurement uncertainty is stated, but not used to determine pass/fail status.

This certificate relates only to the item calibrated.

Specification: ASTM E 83-23

QMS Revision: 3.01

**Service Comments:** Verified proper operation of extensometer. Calibrated instrument in accordance with ASTM standards. After the initial setup, all readings found and left within Class B-1 tolerance and repeatable. The extensometer is in good condition and functioning properly at this time.

As Found Condition: Initial Calibration

Service Order #:

SERVICE ENGINEER

As a mutual protection to the purchaser, the public, and ourselves, all Cal-Rite calibration reports are submitted as the confidential property of the purchaser, and any authorization for publication of statements, conclusions, or extractions from or regarding our reports is reserved pending our prior written approval.



Calibration Date: 5/15/2025

Next Calibration: 5/15/2026

Temp/Humidity: 70.3F/67.3%

## ASTM E83 REPORT

Unit Under Test Full Travel		Unit Under		Nominal	#1 Gage Length		#2 Gage Length		Measurement
Strain	Displacement	Test Resolution		Gage Length	Error		Error		Uncertainty
(mm/mm)	(mm)	(mm/mm)	(Class)	(mm)	%	(Class)	%	(Class)	(mm)
0.5	25	0.00001	B-1	50.000	0.000	B-1	0.000	B-1	0.048

AS FOUND						
Nominal Strain	Nominal Displacement	As Found Strain	As Found Displacement	Fixed Error	Relative Error	ASTM E-83
(mm/mm)	(mm)	(mm/mm)	(mm)	(mm/mm)	(% of Reading)	Class
0.000000	0.000000	0.000000	0.000000	0.00000	N/A	B-1
0.0010000	0.0500000	0.000970	0.048500	0.00003	3.00	B-1
0.0020000	0.1000000	0.001940	0.097000	0.00006	3.00	B-1
0.0040000	0.2000000	0.003920	0.196000	0.00008	2.00	B-1
0.0070000	0.3500000	0.006970	0.348500	0.00003	0.43	B-1
0.0100000	0.5000000	0.009910	0.495500	0.00009	0.90	B-1
0.0200000	1.0000000	0.019920	0.996000	0.00008	0.40	B-1
0.0400000	2.0000000	0.039930	1.996500	0.00007	0.18	B-1
0.0700000	3.5000000	0.069940	3.497000	0.00006	0.09	B-1
0.1000000	5.0000000	0.100000	5.000000	0.00000	0.00	B-1
0.2000000	10.0000000	0.199830	9.991500	0.00017	0.09	B-1
0.4000000	20.0000000	0.399920	19.996000	0.00008	0.02	B-1
0.5000000	25.0000000	0.500000	25.000000	0.00000	0.00	B-1

Calibration Procedure: CR101 Rev 17

Service Order #: [REDACTED]

[REDACTED]  
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Calibration Date: 5/15/2025

Next Calibration: 5/15/2026

Temp/Humidity: 70.3F/67.3%

AS LEFT							
Nominal Strain	Nominal Displacement	As Left Strain	As Left Displacement	Fixed Error	Relative Error	Repeat	ASTM E-83
(mm/mm)	(mm)	(mm/mm)	(mm)	(mm/mm)	(% of Reading)	%	Class
0.000000	0.000000	0.000000	0.000000	0.00000	N/A	0.00	B-1
0.001000	0.050000	0.000990	0.049500	0.00001	1.00	-2.04	B-1
0.002000	0.100000	0.001980	0.099000	0.00002	1.00	-2.04	B-1
0.004000	0.200000	0.003980	0.199000	0.00002	0.50	-1.52	B-1
0.007000	0.350000	0.006960	0.348000	0.00004	0.57	0.14	B-1
0.010000	0.500000	0.009960	0.498000	0.00004	0.40	-0.50	B-1
0.020000	1.000000	0.019940	0.997000	0.00006	0.30	-0.10	B-1
0.040000	2.000000	0.039930	1.996500	0.00007	0.18	0.00	B-1
0.070000	3.500000	0.069940	3.497000	0.00006	0.09	0.00	B-1
0.100000	5.000000	0.099970	4.998500	0.00003	0.03	0.03	B-1
0.200000	10.000000	0.199890	9.994500	0.00011	0.05	-0.03	B-1
0.400000	20.000000	0.399980	19.999000	0.00002	0.01	-0.02	B-1
0.500000	25.000000	0.500170	25.008500	-0.00017	-0.03	-0.03	B-1

Calibration Procedure: CR101 Rev 17

Service Order #: [REDACTED]

[REDACTED]  
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