

TM0447



Calibration Certificate



3590VHR Calibration stand

Doc #: 5464.011924.0947	Model: 3590VHR	XL-80 Laser, Calibrated	30-Mar-21
	Model S/N: A5464	S/N: 7X5897	Certificate Number: 7X5897-210330-00
	Calibration Date: 19-Jan-2024	Traceability Info	
Ambient Temperature: (°F) 69.7	Humidity: 30%	Model #	Certificate No.
		Cal Date	Cal Lab
		RUK27030	2017050069-LL03
		MTE/A163	20-65678
		XL80 REF5	56H186-201217-00
		24-May-2017	NPL
		13-Apr-2020	Nationwide
		17-Dec-2020	Renishaw
		As Found / As Left (PASS, No Change)	

For use in extensometer calibrations in accordance with ASTM E83, ISO 9513, or any other standards; the requirements of the standard should be used to determine the class to which any particular extensometer may be calibrated. This calibration stand was calibrated using a method developed at Epsilon Technology and detailed in the Calibration and Maintenance Procedure. The information on this certificate applies only to the item with the serial number listed above. Reference displacement and environmental conditions were measured using the laser interferometer listed on this certificate. The reference laser is routinely calibrated by an accredited laboratory, with traceability as indicated above.

Verified direction of travel is upward. Uncertainty of Calibration: U = 5.5µin, increasing to 16.9µin at 2.00in; coverage factor (k) of 2, expanded.

Results below are raw data and are not compensated for temperature or uncertainty. It is the responsibility of the end user to determine if it is appropriate for your specific application. If more than one calibration certificate exists, the most recent should be considered to supercede all previous certificates.

Full Range, 0-2.0 (in)

Laser (in)	3590VHR (in)	Error (in)
0.000000	0.000000	0.000000
0.200023	0.200016	-0.000007
0.400043	0.400032	-0.000011
0.600063	0.600052	-0.000011
0.800046	0.800028	-0.000018
1.000053	1.000028	-0.000025
1.200035	1.200009	-0.000026
1.400065	1.400044	-0.000021
1.600033	1.600023	-0.000010
1.800058	1.800050	-0.000008
2.000039	2.000024	-0.000015
1.000026	1.000004	-0.000023
0.000038	0.000063	0.000025

Small Increments, from ~1.0 (in)

Laser (in)	3590VHR (in)	Error (in)
0.000000	0.000000	0.000000
0.001038	0.001040	0.000003
0.002000	0.002002	0.000002
0.003045	0.003046	0.000001
0.005016	0.005013	-0.000002
0.010020	0.010017	-0.000003
0.015015	0.015011	-0.000004
0.020002	0.019998	-0.000004

Small Increments, from ~2.0 (in)

Laser (in)	3590VHR (in)	Error (in)
0.000000	0.000000	0.000000
0.001033	0.001032	0.000000
0.002014	0.002014	-0.000001
0.003019	0.003019	-0.000001
0.005034	0.005033	-0.000001
0.010012	0.010009	-0.000003
0.015000	0.014997	-0.000003
0.020006	0.020003	-0.000003

Small Increments, from ~0.0 (in)

Laser (in)	3590VHR (in)	Error (in)
0.000000	0.000000	0.000000
0.001044	0.001043	-0.000002
0.002028	0.002026	-0.000002
0.003048	0.003043	-0.000004
0.005030	0.005024	-0.000006
0.010038	0.010032	-0.000005
0.015018	0.015011	-0.000007
0.020018	0.020012	-0.000007

Meets manufacturer's accuracy specifications and ISO 9513 Class 0,5 and ASTM E83 Class B1 for gage lengths down to 6mm

Remarks:

Calibrated by: Rachel Hays
Epsilon Technology Corp.
3975 S. Hwy. 89, Jackson, WY 83001, USA

Date: 19-Jan-24 Verified by: [Signature]
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Date: 23-Jan-24

