CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Nikon Metrology, Inc.
12701 Grand River Road
Brighton, MI 48116

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

L1080-1
Certificate Number

ANAB Approval

Certificate Valid Through: 03/30/2021
Version No. 003 Issued: 07/10/2019

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

ANSI National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Nikon Metrology, Inc.
12701 Grand River Road
Brighton, MI 48116
Jeff Root
810-220-4360

CALIBRATION

Valid to: **March 30, 2021** Certificate Number: **L1080-1**

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Autocollimators	Up to 10’	0.7”	Procedure WI-305: Optical Wedge
Measurescopes [1]:			Procedure WI-304:
X, Y, Z Axis Length	(0 to 300) mm	2.1 µm	LTE Zerodur Line Scales
X and Y Axes Squareness	Up to 50 mm	1.5 µm	X-Y Zerodur Line Scale
Optical Comparators [1]:			Procedure WI-304:
Magnification	(10 to 100) X	0.4 % of magnified length[2]	Glass Line Scales
X, Y Axis Length	(0 to 300) mm	2.1 µm	LTE Zerodur Line Scales
X and Y Axes Squareness	Up to 50 mm	1.5 µm	X-Y Zerodur Line Scale
VMA Video Measuring System [1]:			Procedure WI-301:
X, Y Axis, X-Y Diagonal Length	(0 to 300) mm	3 µm	LTE Zerodur Line Scales
Z Axis Length	(0 to 700) mm	5 µm	Gauge Blocks
Video Probe	(2 to 40) mm	1 µm	Test Slide
	(0.022 to 8) mm	0.5 µm	

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
VMR & VMZ Video Measuring System [1]:			Procedure WI-301: LTE Zerodur Line Scales
X, Y Axis, X-Y Diagonal Length	(0 to 300) mm (0 to 700) mm	2.3 µm 3 µm	
Z Axis Length	(2 to 40) mm	1 µm	Gauge Blocks
Video Probe	(0.022 to 8) mm	0.5 µm	Test Slide

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope
2. Magnification length of 100 mm up to 200 mm.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. L1080-1.

Vice President