



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ELLIOTT MATSUURA CANADA, INC.
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CALIBRATION

Valid To: December 31, 2018

Certificate Number: 2752.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Coordinate Measuring Machines (CMM) ³ –			ISO 10360-2, VDI/VDE 2617 sheet 2.1 (1986) with:
Length Measurement Errors	Up to 1100 mm Up to 1000 mm Up to 1000 mm	(0.1 + 0.4L) µm (0.37 + 0.41L) µm (0.37 + 0.41L) µm	ITP step bar, gauge blocks, “Alpha” gauge blocks
Roundness Measurement Error	Ring Nominal Diameter: 50 mm	0.13 µm	VDI/VDE 2617 sheet 2.2 (2000) with ring gauge
Scanning Error (MPE _{THP})	Sphere Nominal Diameter: 25 mm	0.042 µm	ISO 10360-4 with test sphere
Probing Error (MPE _{PFTU})	Sphere Nominal Diameter: 25 mm	0.042 µm	ISO 10360-5 with test sphere
Rotary Table as a Fourth Axis – Errors of Indication:			ISO 10360-3 with two test sphere on rotary table
(FR)	Height difference and Radius: 200 mm (nominal); Sphere Nominal Diameter: 30 mm	0.37 µm	
(FT)		0.37 µm	
(FA)		0.45 µm	

- ¹ This laboratory offers commercial and field calibration service.
- ² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.
- ³ Field calibration service is available for this calibration and this laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.
- ⁴ In the statement of CMC, L is the numerical value of the nominal length of the device measured in meters.



Accredited Laboratory

A2LA has accredited

ELLIOTT MATSUURA CANADA, INC.

Oakville, Ontario, CANADA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets *R205 - Specific Requirements: Calibration Laboratory Accreditation Program*. 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 8 January 2009).



Presented this 20th day of April 2017.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 2752.01
Valid to December 31, 2018

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.