



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

UPA TECHNOLOGY INC.
 8963 Cincinnati-Columbus Rd
 West Chester, OH 45069
 Jerry Stem Phone: 513 755 1280

CALIBRATION

Valid To: November 30, 2020

Certificate Number: 1588.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,5}:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Coating Thickness Standards –			
Foil & Coated Plates	Up to 1400 µin	4.9 % (single layer) 5 % (second layer)	X-Ray fluorescence
Thickness Shims	Up to 20 mils	20 µin	Solatron P/N 50 2000 w/gage blocks
ETP Standards	(0.001 to 0.0018) in	5.6 %	CMI PTX
Coating Thickness Measuring Equipment –			
X-Ray Fluorescence Machines	Up to 1400 µin	4.9 %	ASTM B568
Eddy Current & Magnetic Induction Coating Thickness Testers ³	Up to 20 mils	5.1 %	ASTM E376

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Coating Thickness Measuring Equipment – (cont)			
Beta Backscatter Coating Thickness Testers ³	Up to 2000 µin	5.2 %	ASTM B567
Through Hole Conductivity Testers ³	(1 to 10 000) µΩ	0.8 %	Shunt standards

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, the value is defined as the percentage of reading.

⁵ This scope meets A2LA's P112 *Flexible Scope Policy*.



Accredited Laboratory

A2LA has accredited

UPA TECHNOLOGY INC.

West Chester, OH

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *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 April 2017).



Presented this 1st day of November 2018.

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

President and CEO
For the Accreditation Council
Certificate Number 1588.01
Valid to November 30, 2020

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