## ANSI National Accreditation Board

## CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

Applied Image Inc. 1653 East Main Street Rochester, NY 14609

Fulfills the requirements of

## ISO/IEC 17025:2017

In the field of

## CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.


[^0]

# SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 

Applied Image Inc.
1653 East Main Street
Rochester, NY 14609
Gary Reif 585-482-0300 ext. 230

## CALIBRATION

Valid to: October 30, 2025
Certificate Number: AC-2818

Length - Dimensional Metrology

| Parameter/Equipment | Range | Expanded Uncertainty of <br> Measurement (+/-) | Reference Standard, <br> Method, and/or <br> Equipment |
| :---: | :---: | :---: | :---: |
|  | Up to $200 \mu \mathrm{~m}$ <br> $(200$ to 400$) \mu \mathrm{m}$ | $0.43 \mu \mathrm{~m}$ <br> $(400$ to 800$) \mu \mathrm{m}$ <br> $(800$ to 1600$) \mu \mathrm{m}$ | $0.73 \mu \mathrm{~m}$ <br> $1.3 \mu \mathrm{~m}$ <br> $1.5 \mu \mathrm{~m}$ |
|  | Up to 25.4 mm | $0.49 \mu \mathrm{~m}$ | Filar Microscope |

Photometry and Radiometry

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
| :---: | :---: | :---: | :---: |
| Spectral Reflection Aspect of Bar Code Measurement ${ }^{2,3}$ | $\begin{array}{r} (0.25 \text { to } 100) \% \mathrm{R} \\ 660 \mathrm{~nm} \end{array}$ | $(0.35+0.014 R)$ \%R | Automated Bar Code Verification System (Judge) |
| $45^{\circ}: 0^{\circ}$ or $0^{\circ}: 45^{\circ}$ Spectral Reflection Photometry ${ }^{3}$ (Status A Density) | (V Filter) Up to 1.25 D $(1.25$ to 2.1$) \mathrm{D}$ (C Filter) Up to 1.25 D $(1.25$ to 2.1$) \mathrm{D}$ (M Filter) Up to 1.25 D $(1.25$ to 2.1$) \mathrm{D}$ (Y Filter) Up to 1.25 D $(1.25$ to 2.1$) \mathrm{D}$ | 0.011 D 0.033 D 0.012 D 0.034 D 0.0095 D 0.026 D 0.0094 D 0.031 D | Color Reflection Densitometer |
| $45^{\circ}: 0^{\circ}$ or $0^{\circ}: 45^{\circ}$ Spectral Reflection Photometry 2,3 | $\begin{array}{r} (0.25 \text { to } 100) \% R \\ 660 \mathrm{~nm} \end{array}$ | $(0.066+0.007 R) \% \mathrm{R}$ | Spectral <br> Reflectometer |
| Spectral Transmission Photometry 2,3 | $\begin{aligned} & \text { Up to } 100 \% \mathrm{~T} \\ & \text { (250 to } 400) \mathrm{nm} \\ & (401 \text { to } 700) \mathrm{nm} \\ & (701 \text { to } 900) \mathrm{nm} \\ & (901 \text { to } 1000) \mathrm{nm} \\ & \hline \end{aligned}$ | $\begin{gathered} (0.15+0.0041 T) \% \mathrm{~T} \\ (0.22+0.00066 T) \% \mathrm{~T} \\ (0.4-0.00072 T) \% \mathrm{~T} \\ (0.67+0.0027 T) \% \mathrm{~T} \\ \hline \end{gathered}$ | Transmission Spectro-photometer |
| Transmission Density ${ }^{3}$ (Orthochromatic Filter) | $\begin{gathered} \text { Up to } 3.7 \mathrm{D} \\ (3.701 \text { to } 4.5) \mathrm{D} \end{gathered}$ | $\begin{aligned} & 0.025 \mathrm{D} \\ & 0.059 \mathrm{D} \end{aligned}$ | Transmission Densitometer |

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. $L=$ length in mils or mm.
2. $R=$ value in $\% \mathrm{R} ; T=$ value in $\% \mathrm{~T}$.
3. The following are non-SI terms: $\% \mathrm{~T}$ is percent transmission; $\% \mathrm{R}$ is the percent reflectance; and D is the optical density.
4. The angle is determined by the measurement of two points on a line in the $x-y$ plane. The $x-y$ values are used to calculate the angle using the arctan( $x-y$ ). The distance between the two points affect the uncertainty as indicated. $L$ is the length of the measured line in mm .
5. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2818.

[^1]
[^0]:    Jason Stine, Vice President
    Expiry Date: 30 October 2025
    Certificate Number: AC-2818

[^1]:    Jason Stine, Vice President

