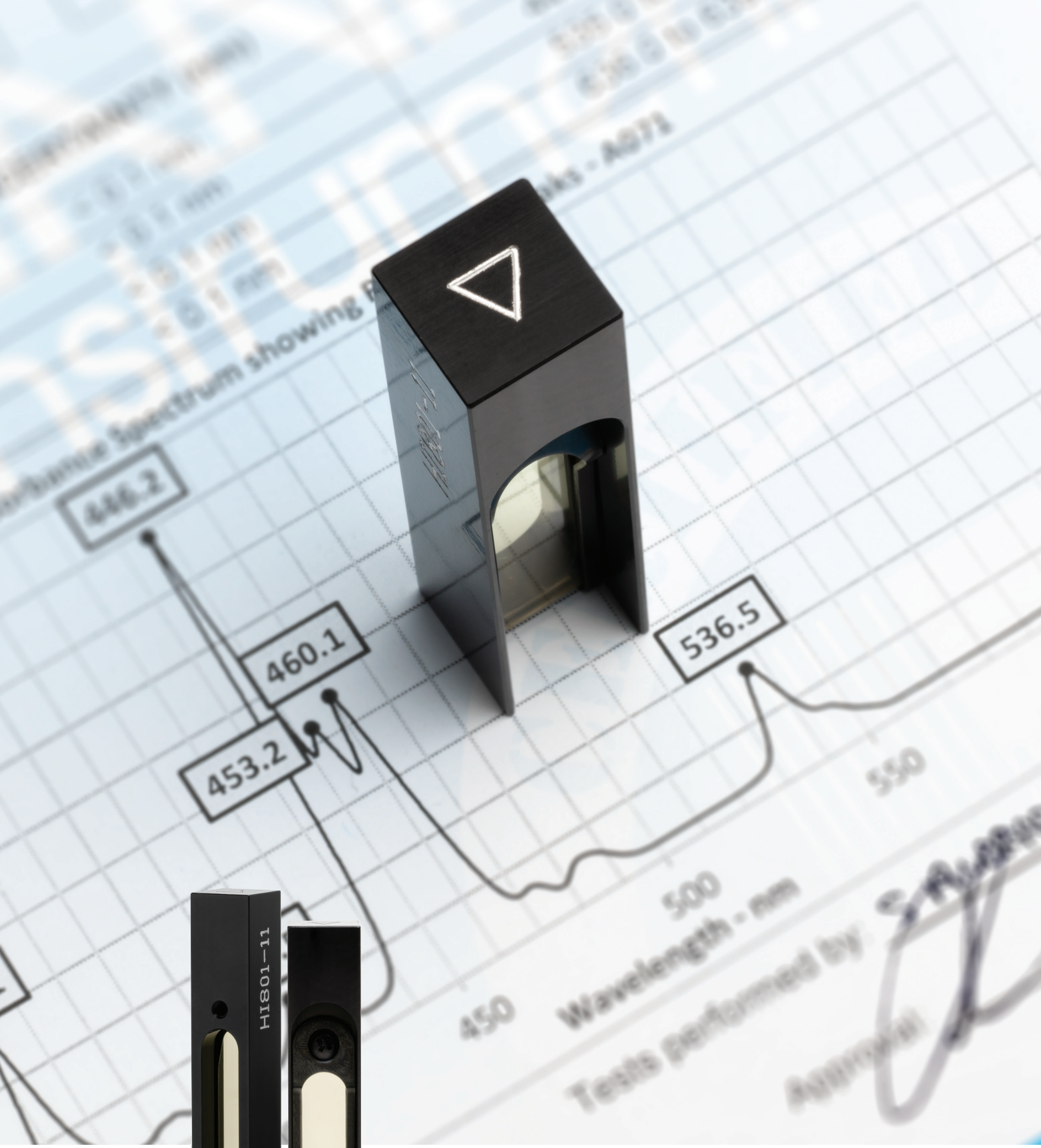
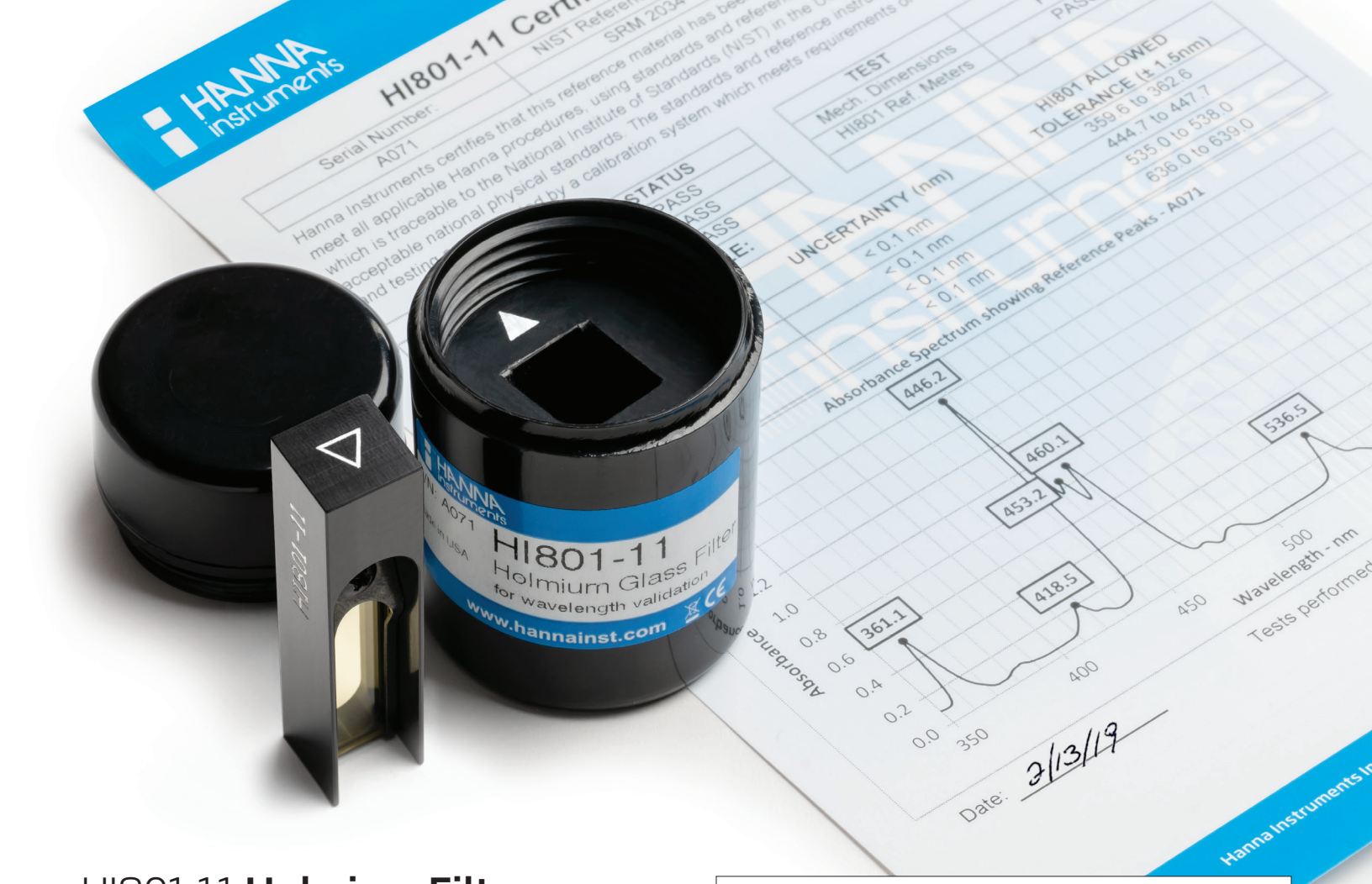


HI801-11 **Holmium Filter**

HANNA® instruments



HI801-11 **Holmium Filter**

The HI801-11 is a holmium oxide glass filter that is used to validate the wavelength accuracy of the HI801 iris spectrophotometer. The filter is mounted in a 10 mm square anodized holder and comes with a protective plastic holder that protects the filter when not in use.

- Glass filter mounted in anodized aluminum holder
- Fits all spectrophotometers that can accommodate 10 mm square cuvette
- Absorbance peaks measured at 361, 454, 536, and 638 nm.
- Holmium Oxide Filter
  - Supplied with certificate of analysis traceable to SRM2034
  - All values are certified and have an uncertainty of less than 0.1 nm
  - Packaged in light tight plastic cuvette holder

Specifications	HI801-11
Description	The HI801-11 is a holmium glass filter that is mounted in a 10 mm square anodized aluminum cuvette.
Peak Wavelengths @ 25°C	361, 446, 536, 637. Actual value traceable to SRM2034 found on COA
Peak Wavelength Uncertainty @ 25°C	<0.1 nm for all peaks
Dimensions	10 x 10 mm
Recommended use	Wavelength check of HI801 iris
Ordering Information	**HI801-11** is supplied with quality certificate with values that have an uncertainty of less than 0.1 nm.

Holmium

Holmium is a rare earth element that is silvery white and malleable. Holmium reacts with oxygen to form holmium oxide. Glasses that contain holmium oxide or holmium oxide solution are useful in the calibration of spectrophotometers due to their sharp absorption peaks in the visible spectrum. The National Institute of Technology (N.I.S.T.), formerly National Bureau of Standards (N.B.S.) uses a holmium oxide solution sealed into silica cuvettes as the standard reference material (SRM 2034) for traceability. The holmium oxide solution is prepared with holmium oxide dissolved in perchloric acid. This solution has many well-defined absorption bands. The SRM2034 was found to be stable for up to thirty years*

The HI801-11 is traceable to SRM2034 and is supplied with certificate of that identifies the peak absorbance values of the filter within 0.1 nm of uncertainty. The HI801-11 holmium oxide filter is used with the wavelength check mode found in the HI801 iris spectrophotometer. The filter is placed into the meter and the wavelength check mode is then used to verify the wavelength positioning. Once the check is complete the meter will display the wavelength peaks and they are compared to the values found on the certificate. The values should be within ±1.5 nm of the certified value.

* NIST Special Publication 260-192

HANNA® instruments

P/L HI801-111 02/19