

Optical Calibrating Strip Lamps

TUNGSTEN RIBBON FILAMENT STRIP LAMP



FEATURES

- Temperature Range: 1420°F - 4200°F or 800°C - 2300°C
- Accuracy: $\pm 5^\circ\text{F}$
- Source Type: Certified Tungsten Filament Strip Lamp
- Certificate of Calibration to NIST

DESCRIPTION

Optical Tungsten Ribbon Filament Strip Lamps are used to calibrate Optical pyrometers. The Lamp is built with a sapphire window spectral range that eliminates reflection. The whisker in the ribbon filament allows for improved linearity. Pyro supplies a certificate of calibration, which provides the observed amperes data of specific temperature points for the end user.

APPLICATIONS

- Optical Pyrometers / Pyrometric Calibration Source

SPECIFICATIONS

Window/Spectral Range:	Sapphire 0.3 - 3 μ
Bulb Description:	74.5 mm Diameter 240 mm Height 130 mm Height to Element Center E 40/45 Cap, uses mogul type socket 2.6 x 20 mm Ribbon Vertical element dim. 20-32a current rating 8-10.5 voltage rating

WHEN ORDERING SPECIFY: Fahrenheit or Centigrade Temperature Range; With or Without Magnifying Lens.

STRIP LAMP	AGED and CALIBRATED with Certificate of Calibration
Model STL-L	Low Range: 1400°F - 3400°F or 800°C - 1900°C
Model STL-H	High Range: 1400°F - 4200°F or 800°C - 2300°C

CALIBRATION

- Data for the lamp has been accomplished by comparison to standards whose accuracy are traceable to national standards maintained by the National Institute of Standards & Technology.
- In accordance with lamp specifications, all brightness temperatures are measured at a wavelength of 0.655 microns using a magnification lens. The maximum uncertainties of the values at 1800°F and 2000°F correspond to about $\pm 5^\circ\text{F}$. At higher and lower temperatures the maximum uncertainties are larger, increasing to about $\pm 10^\circ\text{F}$ at 1400°F and 3400°F.
- These supplied values apply when the lamp is operated vertically with its base down. The optical alignment must be made horizontally and perpendicular to the filament. The sighting must be made on the center of the filament across from the whisker line mark. In order to avoid errors in temperature readings due to excessive extraneous light being reflected from the filament, observations up to 1000°C should be made with a hood or shield covering the lamp and sighting through a hole in the shield. For temperatures above 1000°C, stray light will not affect temperature readings and the shield should be removed to permit dissipation of the heat from the lamp at elevated temperatures.

PYRO'S AUTHORIZED REPRESENTATIVE



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