Illumination Technologies, Inc.

Innovative Photonic Solutions

CABI's

CoAxial Beamsplitter Illuminator

Lightguides

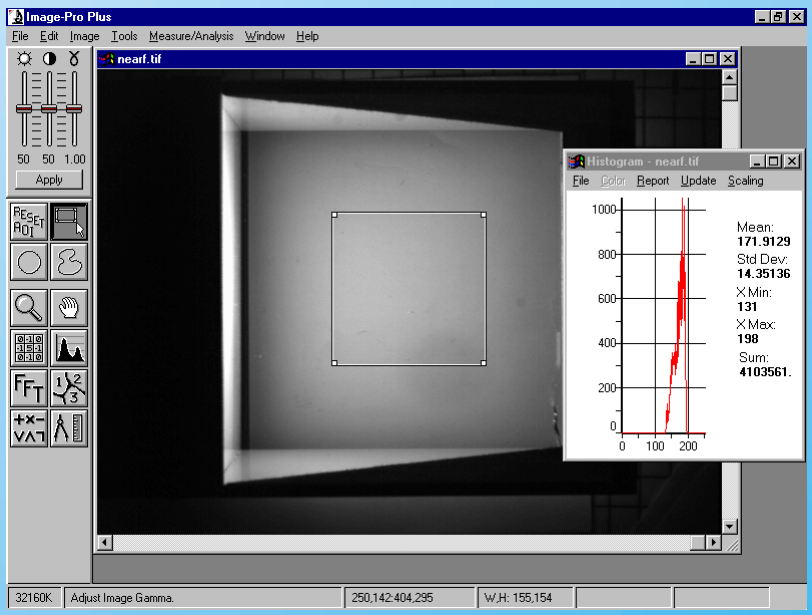
Illumination Technologies provides high quality **C**o-**A**xial **B**eamsplitter **I**lluminators (**CABI**). CABIs are very effective at providing high contrast between reflective and non-reflective components on flat surfaces. Superior output uniformity provides excellent machine vision performance. Both units have a protective dust cover to prevent damage to the beamsplitter

KEY FEATURES

- **CoAxial Lightsource**
- **High Intensity Output**
- **Protective Dust Cover**

APPLICATIONS

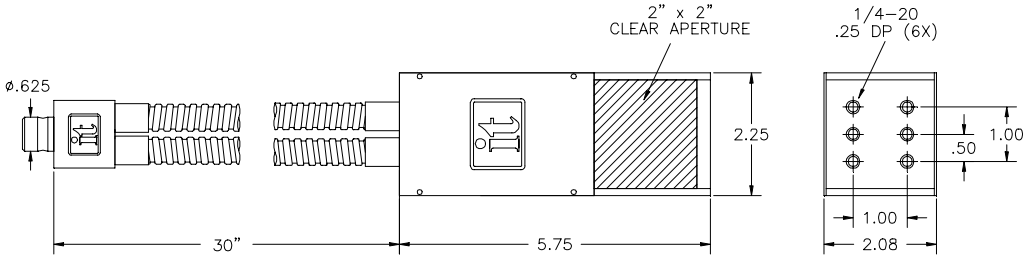
- **Machine Vision**
- **Semiconductors**
- **Electronics**
- **Printed Circuit Boards**
- **Surface Mount Components**
- **Leadframes**
- **Scribed, Indented and embossed feature enhancement**



The data above displays the typical intensity distribution for our line of CABIs. The 10% uniformity measurement is made over the central 25% of the viewing area and specified using the one sigma point. The working distance is set at 1/2 of the clear aperture. All uniformity and output measurements are made using an industry standard white reflectance target and an EKE lamp operating at full intensity. All units are 100% inspected and are furnished with compliance reports.

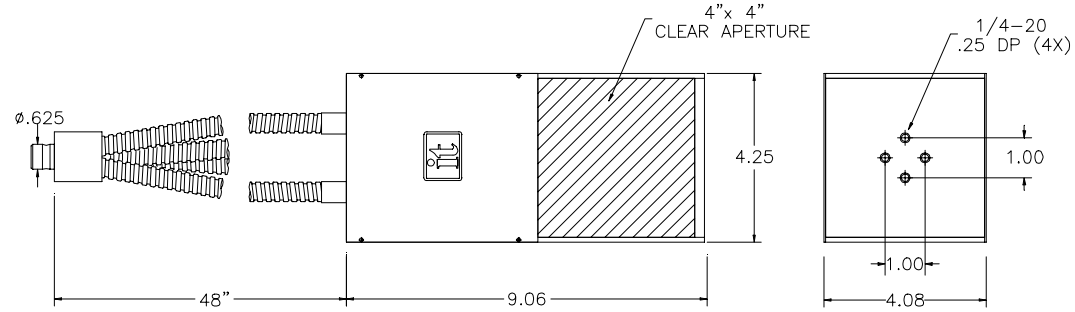
Detail Drawing

P / N 9820 *2"x 2" CABI*



High output intensity with excellent uniformity. Low profile design. Clear Aperature equals 2". Available with standard 60"cable lengths, or other custom lengths. Available in dual and quad configurations to utilize multiple lightsources for increased intensity and lamp lifetime. Custom configurations available including LED lightsources. Six mounting holes provided on light head.

P / N 9830 *4"x 4" CABI*



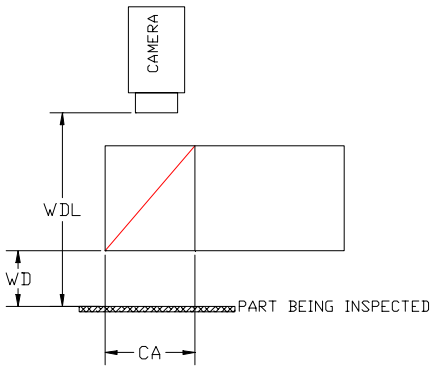
Excellent uniformity with larger field of view. Clear Aperature equals 4". Also available with custom cable lengths. Can be operated by two to four lightsources for increased intensity and lamp lifetime. Custom configurations including LEDs. Four mounting holes on light head.

Field of View Calculation

The Field of View for CABIs is ***always*** smaller than the Clear Aperture, and is a function of camera and CABI working distance. FOV is described by the formula shown here.

CA = Clear Aperture of CABI
WD = Working Distance of the CABI (Object to Bottom of CABI)
WDL = Working Distance of Camera (Object to Lens)

$$FOV = \frac{CA \times WDL}{CA + WD + WDL}$$



Proudly Distributed By:

Innovative Photonic Solutions

Illumination Technologies, Inc.
5 Adler Drive l East Syracuse l New York 13057 USA
TEL: 315-463-4673 l FAX: 315-463-1401 l Toll Free (North America): 800-738-4297
Web: http://www.illuminationtech.com l E-mail: info@illuminationtech.com