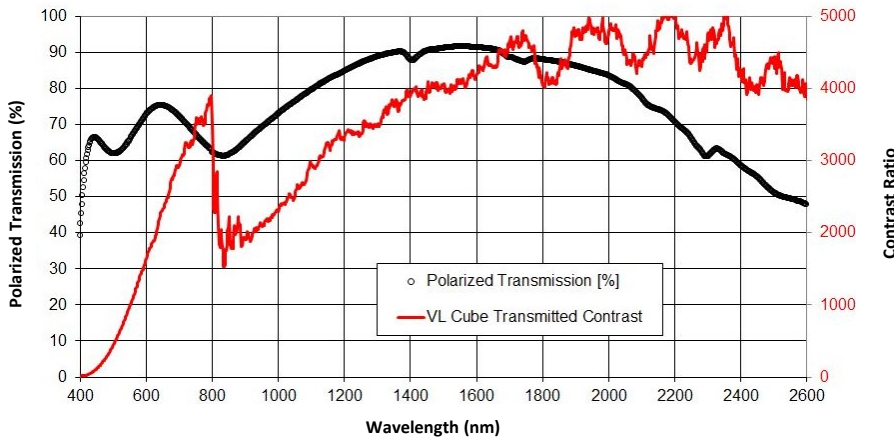


Wire Grid VersaLight™ Polarizing Beam Splitter

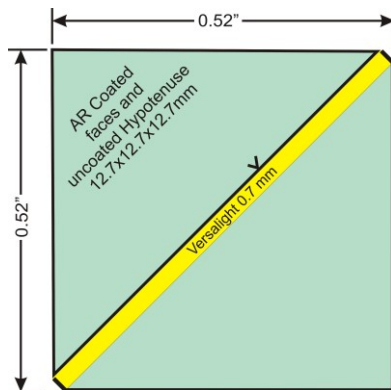
Meadowlark Optics presents its Versalight™ wire grid polarizing beam splitters. Manufactured for wavelength ranges between 420 and 2600 nm, this polarizer is ideal for broadband and wide field-of-view applications.

Wire grid polarizing beam splitters are manufactured out of our Versalight wire grid polarizer sandwiched between right angle prisms. No AR coatings are standard for maximum wavelength usage. Broadband AR coatings are available on the faces of the cube covering either visible (450 to 1100 nm) or IR (1000 to 2000 nm). Custom AR coatings available upon request. Please contact one of our Meadowlark Optics Sales Engineers for more information.

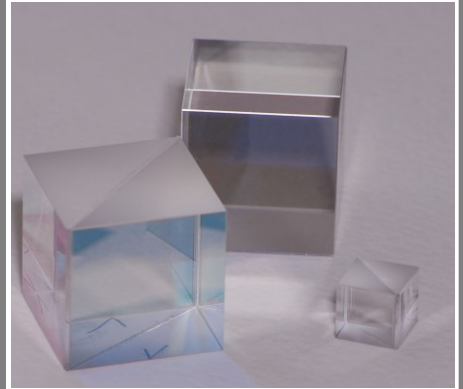
Transmission and Contrast vs. Wavelength



Typical measured contrast ratio (red) and transmission (blue) over relevant wavelength range.



Mechanical configuration of wire grid polarizer cube. One face of wire grid is index matched to right angle prism to avoid ghost reflections.



Key Features

• • •

420 to 2600 nm

Wide acceptance angle

Excellent transmitted contrast

Polarization Suite

• • •

Linear Polarizers

Precision Linear Polarizer

High Contrast Linear Polarizer

Ultra-High Contrast Linear Polarizer

Glan-Thompson Polarizer

Ultra Broadband Polarizer

MWIR Polarizer

Deep Ultraviolet Polarizer

Beamsplitting Polarizers

ICE Cube - Wire Grid Beam Splitter

Wire Grid Versalight Polarizer

Wire Grid Versalight Beam Splitter

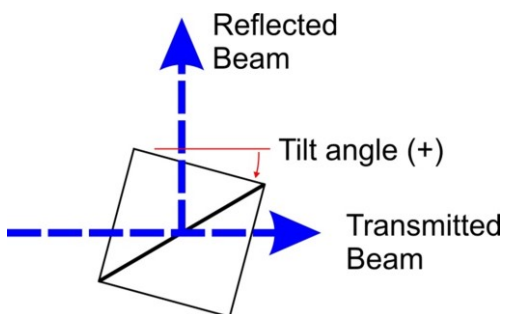
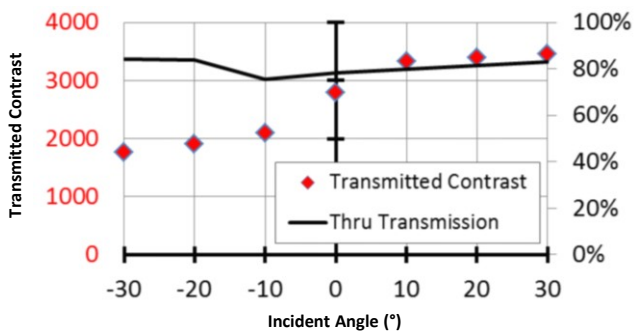
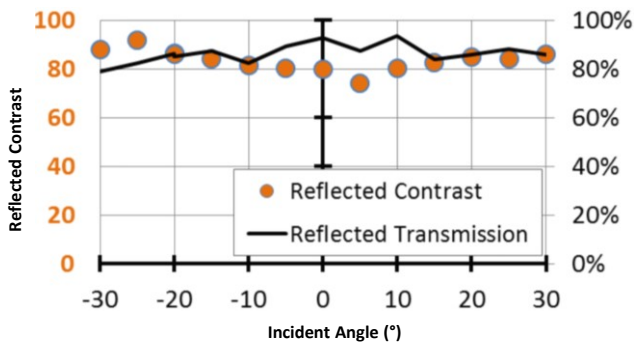
Laser Line Beamsplitting Polarizer

Broadband Beamsplitting Polarizer

Circular Polarizers

Dichroic Circular Polarizer

Beam Separator



SPECIFICATIONS

| | |
|--|--|
| Substrate Material | N-BK7 (or equivalent) |
| Average Reflectivity: 450-1100 nm -VIS 1000-2000 nm -IR 420-2600 nm -UNC | < 2.0% < 2.0% ~ 4.25% |
| Transmitted Wavefront Distortion | $\leq \lambda/2$ (P-V @ 633 nm) $\leq \lambda/8$ (RMS @ 633 nm) |
| Surface Quality | 80 – 50 scratch-dig |
| Beam Deviation (transmittance) | ≤ 5 arc min |
| Dimensional Tolerance | ± 0.020 in. |
| Acceptance Angle | $\pm 40^\circ$ |
| Operating Temperature | -40°C to + 75°C |

Many options, including custom sizes and shapes are available. Please contact one of our Meadowlark Optics Sales Engineers for more information.

ORDERING INFORMATION

| Unmounted | | |
|---|----------------------------|---|
| Dimension in. (mm) | Clear Aperture in. (mm) | Part Number |
| 0.52 x 0.52 x 0.50 (13.2 x 13.2 x 12.7 mm) | 0.40 (10.2 mm) | BV – 050 – VIS BV – 050 – IR BV – 050 – UNC |
| 1.02 x 1.02 x 1.00 (25.9 x 25.9 x 25.4 mm) | 0.80 (20.3 mm) | BV – 100 – VIS BV – 100 – IR BV – 100 – UNC |
| 2.02 x 2.02 x 2.00 (51.3 x 51.3 x 50.8 mm) | 1.60 (40.6 mm) | BV – 200 – VIS BV – 200 – IR BV – 200 – UNC |