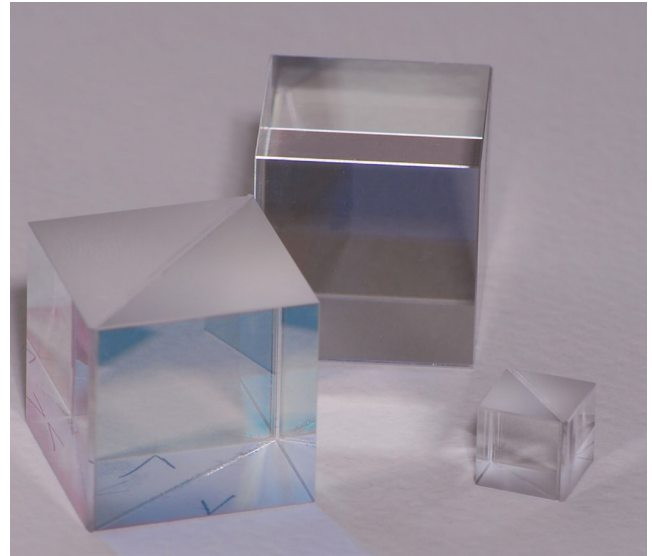


WIRE GRID POLARIZING BEAM SPLITTER

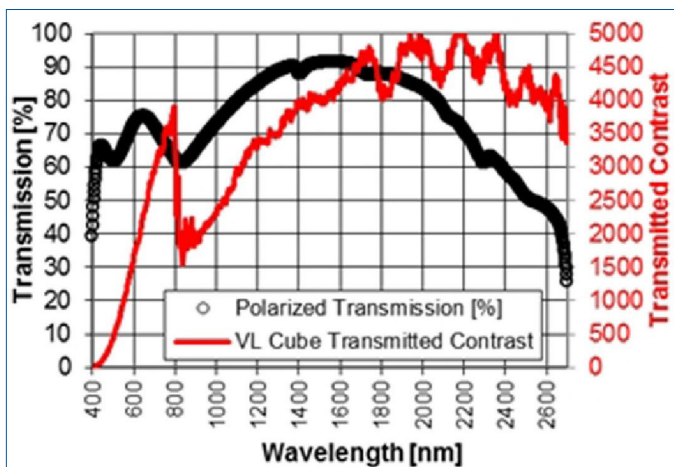
Meadowlark Optics presents its Versalight wire grid polarizing beam splitters. Manufactured for wavelength ranges between 420 and 2600 nm, this polarizer is ideal for broadband and wide field-of-view applications.

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 2400 nm.)

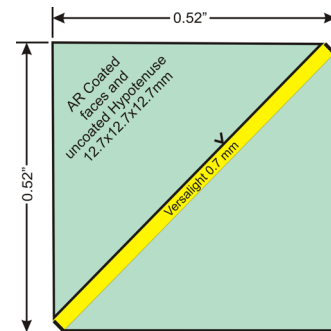
Please contact your Meadowlark Optics Sales Engineer for assistance with your custom needs.



Transmission and Contrast vs. Wavelength



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

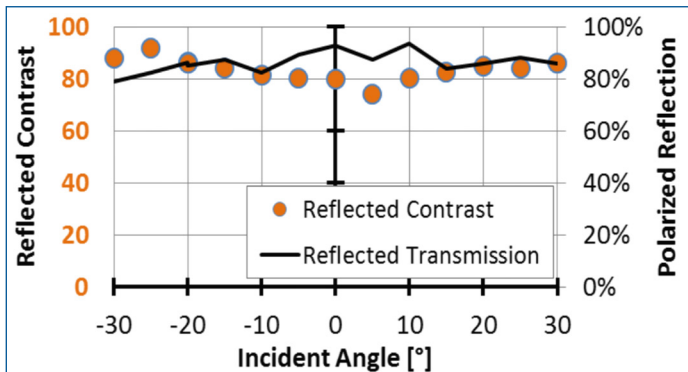


Mechanical configuration of wiregrid polarizer cube. One face of wire grid is index matched to right angle prism to avoid ghost reflections.

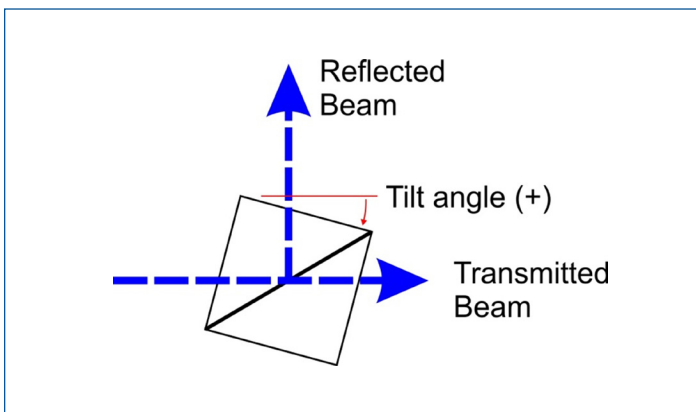
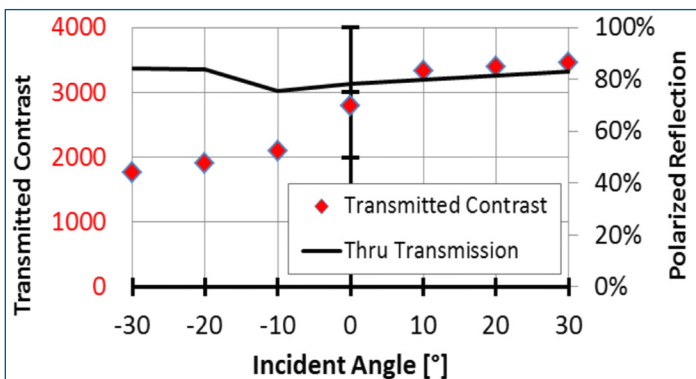
Key Features

- 420 to 2600 nm
- Wide acceptance angle
- Excellent transmitted contrast

Reflected Contrast vs. Incident Angle



Transmitted Contrast vs. Incident Angle



SPECIFICATIONS	
Substrate Material	N-BK7 (or equivalent)
Average Reflectivity: 450-1100 nm -VIS 1000-2400 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.

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