

Ultra-High Contrast Linear Polarizers



Key Benefits

- Extremely high contrast greater than 10,000,000:1
- Unlaminated part usable to 400° C
- Wavelength ranges 340 to 5000 nm
- Absorptive Dichroic Glass

If you need extremely high contrast polarizers, then Meadowlark Optics now has the solution for you. Our UHP-UV series polarizers offer high contrast in the UV from 360 to 400 nm and our UHP-LNIR series polarizers offer high contrast over the exceptionally broad range from 650 to 5000 nm.

SPECIFICATIONS	
Polarizer Material	Dichroic Glass
Substrate Material	Ultraviolet Borofloat glass Visible D263T display float glass Infrared D263T display float glass Long near-infrared None
Transmitted Wavefront Distortion (at 632.8nm)	≤ 1λ per 10mm diameter
Surface Quality	40-20 scratch and dig
Beam Deviation	≤ 5 arc min
Reflectance (per surface)	~ 4.25% at normal incidence
Diameter Tolerance	
Mounted	±0.005 in.
Unmounted	+0/-0.010 in.
Temperature Range *	
Laminated	-20° C to +50° C
Specifications above are for laminated Ultra-high contrast polarizers. For unlaminated parts, please contact your Meadowlark Optics Sales Engineer.	
* unlaminated parts can survive -50° C to +400° C	

ORDERING INFORMATION			
Mounted and Laminated			
Diameter (in.)	Clear Aperture (in.)	Thickness (in.)	Part Number
1.00	0.40	0.25	UPM - 050 - UV
1.00	0.40	0.25	UPM - 050 - VIS
1.00	0.40	0.25	UPM - 050 - IR
1.00	0.70	0.35	UPM - 100 - UV
1.00	0.70	0.35	UPM - 100 - VIS
1.00	0.70	0.35	UPM - 100 - IR
Mounted and Unlaminated			
1.00	0.40	0.25	UPM - 050 - MIR
1.00	0.70	0.35	UPM - 100 - MIR
Unmounted and Laminated			
0.50	0.40	0.07	UHP - 050 - UV
0.50	0.40	0.07	UHP - 050 - VIS
0.50	0.40	0.07	UHP - 050 - IR
1.00	0.80	0.07	UHP - 100 - UV
1.00	0.80	0.07	UHP - 100 - VIS
1.00	0.80	0.07	UHP - 100 - IR
Unmounted and Unlaminated			
0.50	0.40	0.07	UHP - 050 - MIR
1.00	0.80	0.07	UHP - 100 - MIR
Custom anti-reflection coating options are available. Please call your Meadowlark Optics Sales Engineer for assistance.			
For example:			
UV covers 340-410nm with R ≤ 1.0%			
IR-AR1 covers 450-750 nm with R ≤ 0.5%			
IR-AR2 covers 550-850 nm with R ≤ 0.5%			
IR-AR3 covers 600-1200 nm with R ≤ 0.5%			
IR-AR4 covers 1200-1750 nm with R ≤ 0.5%			

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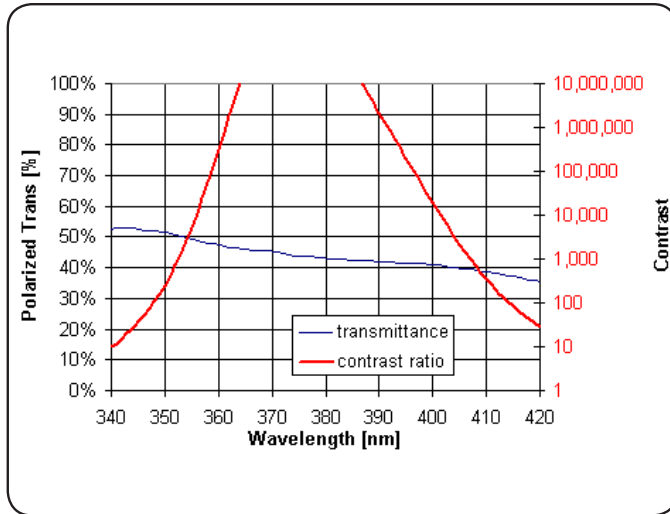


Fig. 1-8 Ultra-High Contrast UV Polarizer

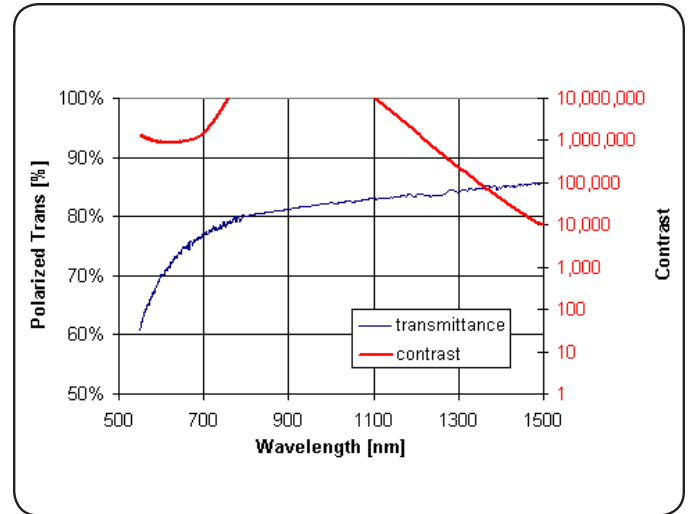


Fig. 1-9 Ultra-High Contrast VIS Polarizer

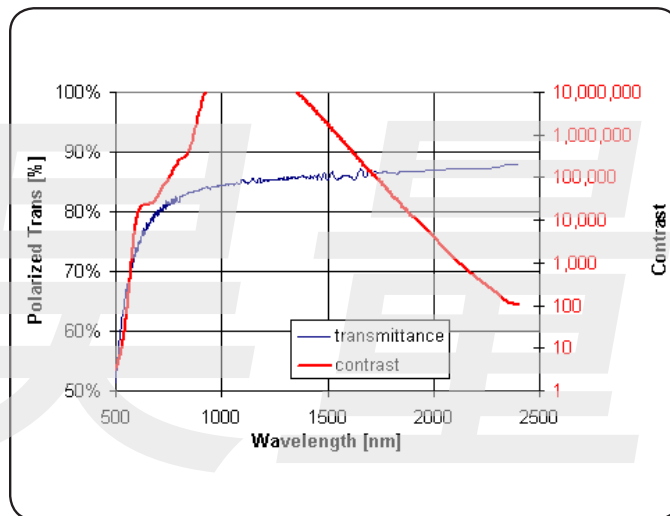


Fig. 1-10 Ultra-High Contrast IR Polarizer



Fig. 1-11 Ultra-High Contrast LNIR Polarizer