

## Why Choose Meadowlark Waveplates?

**Wide Range of Options** – This selection chart provides an at-a-glance view of our standard polarizers broken down into Circular, Linear and Beam splitting categories.

**Broad Wavelength Capabilities** – Our standard polarizers are designed for use in the 220 nm to 6 micron range (with custom options up to 15 microns).

**High Quality and Precision** – Meadowlark Optics is proud to continue providing our customers with industry-leading specifications including excellent surface quality, high extinction ratio, low transmitted wavefront distortion, and more.

**Custom Solutions** – Prism clusters, attached retarders, odd shapes and sizes – while we are delighted to provide you one of our standard components or systems, we are just as happy to customize a solution that more exactly fits your needs.

## About Meadowlark Optics

**Innovating since 1979** – Meadowlark Optics has provided world-class polarization optics and liquid crystal solutions for a variety of applications for 40 years. To ensure precision and top quality, our 20,000 SF headquarters and manufacturing facility boasts the latest in clean rooms, optical fabrication, and metrology equipment. Need help selecting the right product for your application? Contact one of our Solutions Engineers to discuss your requirements.




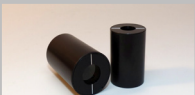








 meadowlark optics

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# POLARIZERS

== SELECTION GUIDE ==

	POLARIZER	FEATURES	WAVELENGTH	CONTRAST RATIO	TWD (P-V)	TWD (RMS)	ACCEPTANCE ANGLE	BEAM DEVIATION
Linear		<ul style="list-style-type: none"> <li>• Custom shapes and large apertures available</li> <li>• Ultraviolet, visible, near infrared versions</li> <li>• Most economical linear polarizer choice</li> </ul>	UV – NIR	UV: up to 500:1 VIS: up to 30,000:1 NIR: up to 10,000:1	UV: $\leq \lambda/2$ VIS: $\leq \lambda/5$ NIR: $\leq \lambda/2$	UV: $\leq \lambda/8$ VIS: $\leq \lambda/20$ NIR: $\leq \lambda/8$	$\pm 10^\circ$	UV: $\leq 2$ arc min VIS: $\leq 1$ arc min NIR: $\leq 2$ arc min
		<ul style="list-style-type: none"> <li>• High contrast</li> <li>• High transmission</li> <li>• Wavelength-specific design</li> </ul>	650 – 950 nm	up to 10,000:1	$\lambda/4$	$\leq \lambda/16$	$\pm 5^\circ$	$\leq 3$ arc min
		<ul style="list-style-type: none"> <li>• Broad spectral performance</li> <li>• High temperature resistance</li> <li>• Highest available contrast ratio</li> <li>• Excellent ultraviolet product option</li> </ul>	UV – MWIR	up to 10,000,000:1	UV: 1 $\lambda$ per 10 mm dia. VIS: 1 $\lambda$ per 10 mm dia. IR: 1 $\lambda$ per 10 mm dia. MWIR: design dependent	UV: $\leq \lambda/4$ VIS: $\leq \lambda/4$ IR: $1 \leq \lambda/4$ MWIR: design dependent	$\pm 5^\circ$	$\leq 5$ arc min
		<ul style="list-style-type: none"> <li>• Excellent extinction ratio</li> <li>• Broad spectral performance</li> <li>• Multilayer BBAR coatings also available</li> </ul>	UV – NIR	10,000:1 over central 2/3 of clear aperture	N/A	N/A	$\pm 5^\circ$	$\leq 3$ arc min
		<ul style="list-style-type: none"> <li>• Extremely broadband</li> <li>• Wide acceptance angle</li> <li>• Excellent transmitted contrast</li> <li>• Thin, compact design</li> </ul>	UV – NIR	up to 1,000,000:1	$\leq 3.5 \lambda$ per in.	$\leq 1 \lambda$ per in.	$\pm 40^\circ$	$\leq 6$ arc min
		<ul style="list-style-type: none"> <li>• Excellent contrast ratio</li> <li>• Thin profile</li> <li>• High transmission</li> <li>• Custom apertures &gt; 2 inches available</li> </ul>	MWIR – LWIR (3 – 6 $\mu\text{m}$ )	up to 10,000:1	1.5 $\lambda$ per in. (at 4 $\mu\text{m}$ )	$\leq \lambda/3$ per in. (at 4 $\mu\text{m}$ )	$\pm 20^\circ$	$\leq 2$ arc min
Beamsplitting		<ul style="list-style-type: none"> <li>• Broad spectral performance</li> <li>• Specularly reflective operation</li> <li>• High power handling capability</li> <li>• Visible and near infrared versions</li> </ul>	FS: UV – NIR Eagle: VIS – NIR	2,000:1 (typical transmission) 80:1 (typical reflection)	UV: $\sim \lambda/4$ per in. NIR: $\sim 5 \lambda$ per in. IR: $\sim 5 \lambda$ per in.	UV: $\sim \lambda/16$ per in. NIR: $\sim 1.25 \lambda$ per in. IR: $\sim 1.5 \lambda$ per in.	$\pm 40^\circ$	$\leq 1$ arc min
		<ul style="list-style-type: none"> <li>• 420 to 2600 nm</li> <li>• Wide acceptance angle</li> <li>• Excellent transmitted contrast</li> </ul>	420 – 2600 nm	2,000:1 (typical transmission) 80:1 (typical reflection)	$\leq \lambda/2$ (transmitted)	$\leq \lambda/8$	$\pm 40^\circ$	$\leq 5$ arc min
		<ul style="list-style-type: none"> <li>• High contrast</li> <li>• Low reflectance</li> <li>• High damage threshold</li> </ul>	VIS – NIR	up to 500:1 (typical transmission) up to 20:1 (typical reflection)	$\leq \lambda/5$ (transmitted)	$\leq \lambda/20$	$\pm 2^\circ$	Transmitted: $\leq 3$ arc min Reflected: $\leq 6$ arc min
		<ul style="list-style-type: none"> <li>• High contrast</li> <li>• High damage threshold</li> <li>• Broad spectral performance</li> </ul>	VIS – NIR	up to 500:1 (typical transmission) up to 20:1 (typical reflection)	$\leq \lambda/5$ (transmitted)	$\leq \lambda/20$	$\pm 2^\circ$	Transmitted: $\leq 3$ arc min Reflected: $\leq 6$ arc min
Circular		<ul style="list-style-type: none"> <li>• High isolation</li> <li>• Large diameters available</li> <li>• Achromatic versions for broadband performance</li> </ul>	VIS – NIR (specify wavelength)	N/A	VIS: $\leq \lambda/5$ NIR: $\leq \lambda/2$	VIS: $\leq \lambda/20$ NIR: $\leq \lambda/8$	$\pm 10^\circ$	VIS: $\leq 1$ arc min NIR: $\leq 2$ arc min
		<ul style="list-style-type: none"> <li>• High isolation</li> <li>• Excellent wavefront quality</li> <li>• Robust opto-mechanical design</li> </ul>	VIS – NIR	N/A	$\leq \lambda/5$ (transmitted)	$\leq \lambda/20$	$\pm 2^\circ$	$\leq 3$ arc min