

±0.508	Thickness Tolerance (mm):
±0.127	Dimensional Tolerance (mm):
Birefringent Polymer Stack	Construction:
Optical Properties	
830	Design Wavelength DWL (nm):
Polymer Film on N-BK7	Substrate: ☐
0.5	Reflection (%):
$\lambda/2$	Retardance:
40-20	Surface Quality:
$\leq \lambda/5$ @ 632.8nm	Transmitted Wavefront, RMS:
$\lambda/350$	Retardance Tolerance:
1.00	Beam Deviation (arcmin):
500 W/cm ²	Damage Threshold, By Design: ☐
0	Retardance Order:

Threading & Mounting

6.35	Mount Thickness (mm):
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Environmental & Durability Factors

-20 to +50	Operating Temperature (°C):
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Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	REACH 241:

Product Details

- $\lambda/4$ and $\lambda/2$ Retardance
- Excellent Angular Field of View
- Birefringent Polymer Stack
- High Damage Threshold of 500 W/cm²

Precision Zero Order Waveplates (Retarders) feature carefully aligned birefringent polymer sheets laminated between two precision N-BK7 windows, and are available in standard $\lambda/4$ and $\lambda/2$ options for common visible and NIR wavelengths. These polymer waveplates (retarders) offer excellent angular field of view because they are true zero-order retarders. Also, they will experience less than 1% retardance change over a $\pm 10^\circ$ angle of incidence. Each Precision Zero Order Waveplates (Retarders) is mounted in a metal ring with the fast axis clearly marked.