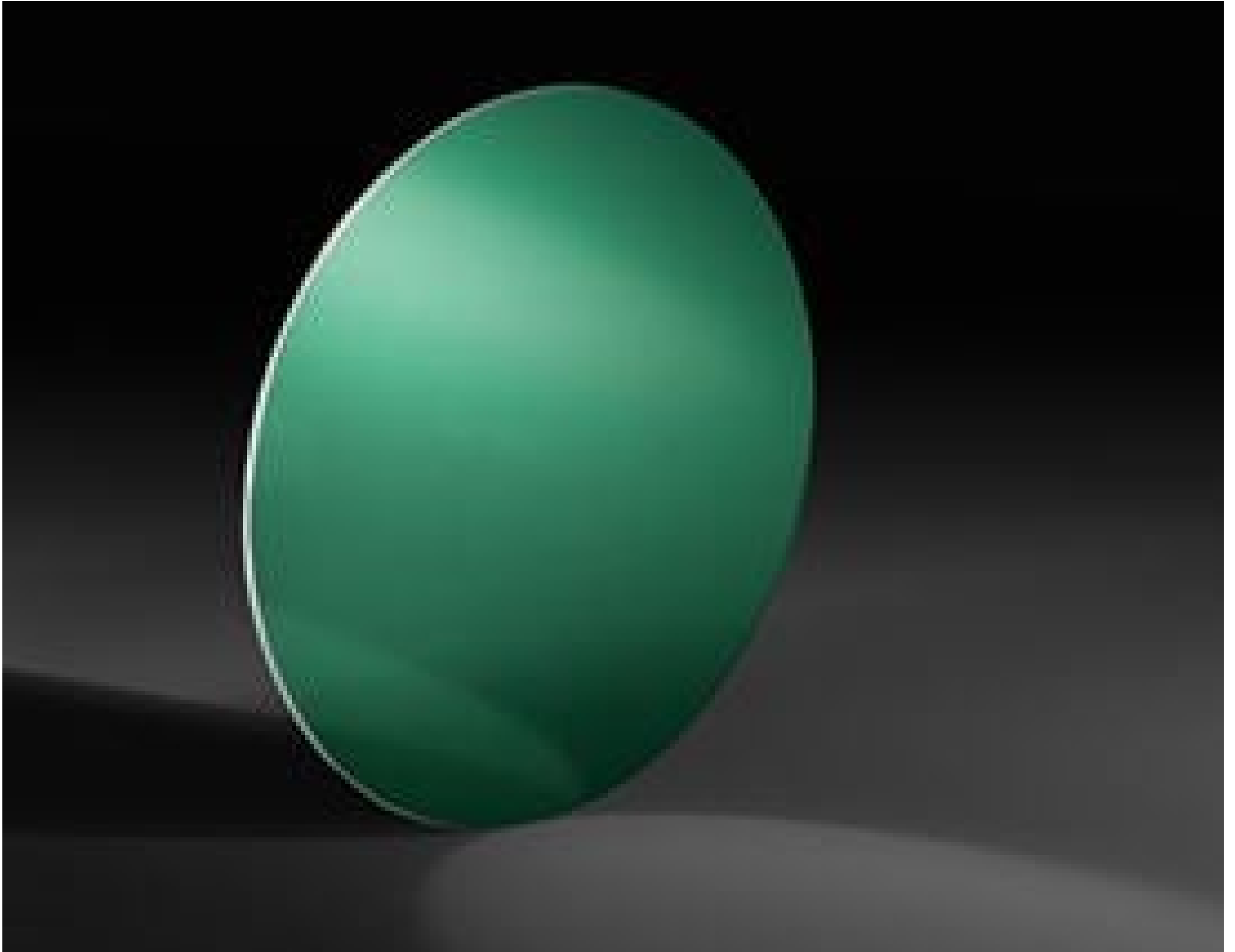


[See all 6 Products in Family](#)

## 12.5mm Dia., Protective Overcoat Wire Grid Polarizer



Stock **#12-648** **8 In Stock**

− 1 + S\$523<sup>.60</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-10	S\$523.60 each
Qty 11+	S\$446.60 each
Need More?	<a href="#">Request Quote</a>

### Product Downloads

#### General

Linear Polarizer **Type:**

**Note:**  
When the Reference Mark is orientated to the 3 or 9 o'clock position, the transmission axis runs left to right.

#### Physical & Mechanical Properties

Clear Aperture CA (mm):  
10.5

12.50	<b>Diameter (mm):</b>
0.70 ±0.07	<b>Thickness (mm):</b>
±0.2	<b>Dimensional Tolerance (mm):</b>
Wire Grid	<b>Construction:</b>
±1.0	<b>Alignment Tolerance (°):</b>

## Optical Properties

0 ±20	<b>Angle of Incidence (°):</b>
BBAR (400-700nm)	<b>Coating:</b>
348:1 @ 450nm 885:1 @ 550nm 1229:1 @ 650nm	<b>Extinction Ratio:</b>
<a href="#">Corning Eagle XG</a>	<b>Substrate:</b> <input type="checkbox"/>
80-50	<b>Surface Quality:</b>
87	<b>Transmission (%):</b>
±2.5 @ 420 - 700nm	<b>Transmission Tolerance (%):</b>
R <sub>avg</sub> <1% @ 400 - 700nm (Back of Substrate)	<b>Coating Specification:</b>
420 - 700	<b>Wavelength Range (nm):</b>

## Material Properties

31.7 x 10 <sup>-7</sup> /°C	<b>Thermal Expansion:</b>
-----------------------------	---------------------------

## Environmental & Durability Factors

-40 to +200	<b>Operating Temperature (°C):</b>
-------------	------------------------------------

## Regulatory Compliance

<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">Compliant</a>	<b>Reach 224:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>

## Product Details

- Reflect S-Polarized Light, Transmit P-Polarized Light
- Protective Overcoat for Easy Handling and Cleaning
- Lighter, Thinner Design than Traditional [Wire Grid Polarizers](#)
- Overcoat Temperature Stability up to 200°C

Protective Overcoat Wire Grid Polarizers are used to reflect s-polarized light while transmitting p-polarized light in the visible spectrum. These polarizers consist of a thin aluminum wire grid attached to a glass substrate that is treated with a hard, protective coating. The overcoat protects the wire grid structure from scratches or other damage due to mechanical stress while enabling lighter, thinner designs compared to traditional [Wire Grid Polarizers](#) that use cover glass. The protective coating on these polarizers allows for them to be easily handled and cleaned, unlike [bare wire grid polarizers](#) where handling and cleaning is not recommended. Protective Overcoat Wire Grid Polarizers can be used in environments with high temperatures up to 200°C for over 1000 hours with minimal impact on performance.

**Note:** Reference marks indicate the axis of polarization.