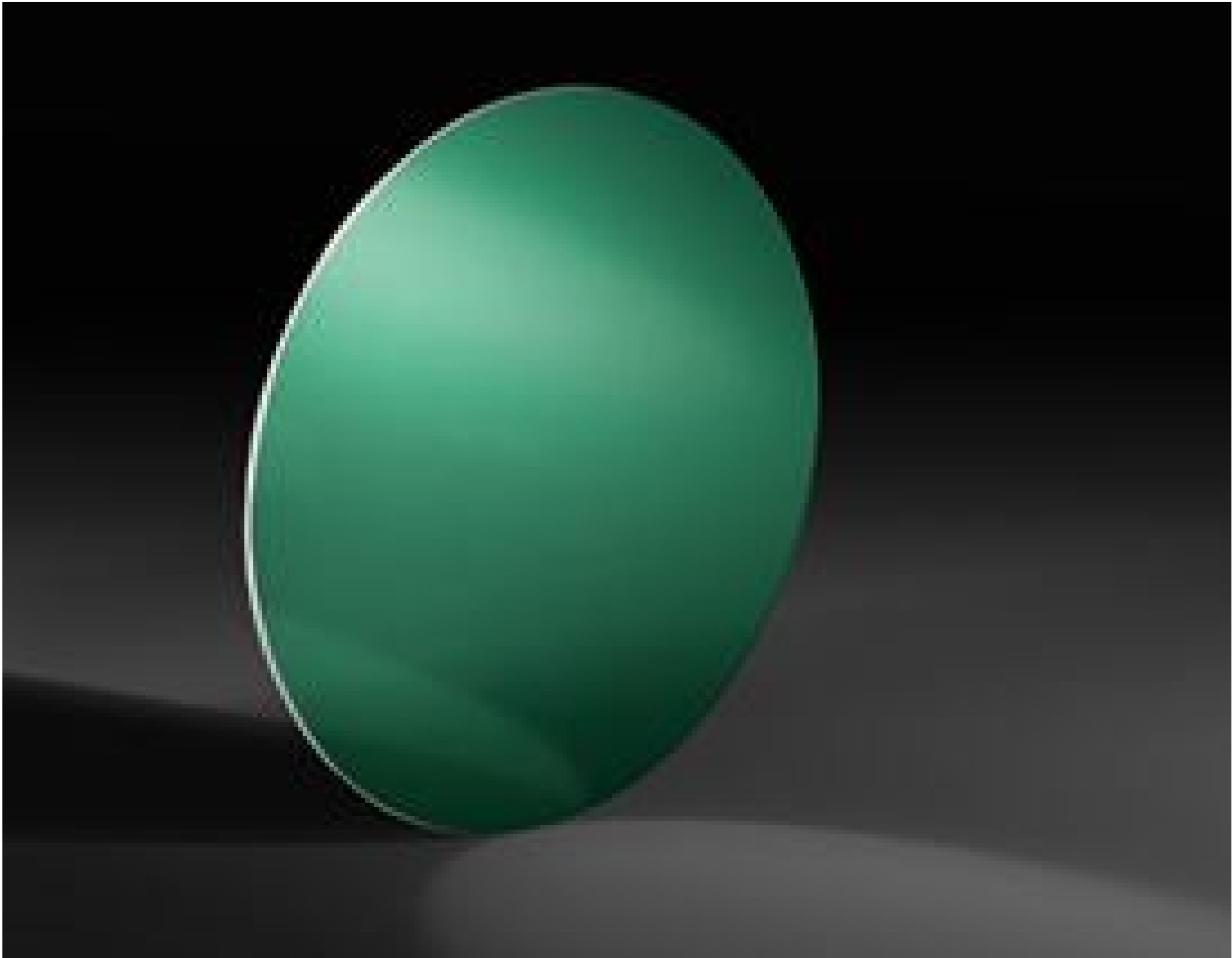


## 12.5mm Dia., Protective Overcoat Wire Grid Polarizer



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

-

1

+

S\$512<sup>.27</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-10       | S\$512.27 each                |
| Qty 11+        | S\$436.10 each                |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

### SPECIFICATIONS

#### 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 |                             |
|----------------------------------|-----------------------------|
| 10.5                             | Clear Aperture CA (mm):     |
| 12.50                            | Diameter (mm):              |
| 0.70 ±0.07                       | Thickness (mm):             |
| ±0.2                             | Dimensional Tolerance (mm): |
| Wire Grid                        | Construction:               |
| ±1.0                             | Alignment Tolerance (°):    |

| Optical Properties                                     |                                                                                              |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 0 ±20                                                  | Angle of Incidence (°):                                                                      |
| BBAR (400-700nm)                                       | Coating:                                                                                     |
| 348:1 @ 450nm<br>885:1 @ 550nm<br>1229:1 @ 650nm       | Extinction Ratio:                                                                            |
| Corning Eagle XG                                       | Substrate:  |
| 80-50                                                  | Surface Quality:                                                                             |
| 87                                                     | Transmission (%):                                                                            |
| ±2.5 @ 420 - 700nm                                     | Transmission Tolerance (%):                                                                  |
| R <sub>avg</sub> <1% @ 400 - 700nm (Back of Substrate) | Coating Specification:                                                                       |
| 420 - 700                                              | Wavelength Range (nm):                                                                       |

| Material Properties        |                    |
|----------------------------|--------------------|
| 31.7 x 10 <sup>-7</sup> °C | Thermal Expansion: |

| Environmental & Durability Factors |                             |
|------------------------------------|-----------------------------|
| -40 to +200                        | Operating Temperature (°C): |

| Regulatory Compliance |                             |
|-----------------------|-----------------------------|
| Compliant             | RoHS 2015:                  |
| Compliant             | Reach 224:                  |
| View                  | Certificate of Conformance: |

## 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.