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## 50mm Dia. XP-NIR Commercial Grade NIR Polarizing Film



Stock **#73-349** **20+ In Stock**

- 1 + £40<sup>00</sup>

**ADD TO CART**

### Volume Pricing

Qty 1-9	£40.00 each
Qty 10+	£32.00 each
Need More?	<a href="#">Request Quote</a>

**i** Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Linear Polarizer

**Type:**

**Note:**

Delivered with protective film on both sides  
Polarization axis indicated by notch cut into edge  
(circular parts) or stripe on protective film  
Pressure Sensitive Adhesive (PSA) on one side

### Physical & Mechanical Properties

50.00 +/-0.3 **Diameter (mm):**

0.21 +/- 0.025 **Thickness (mm):**

Polarizing Film **Construction:**

## Optical Properties

Uncoated **Coating:**

>160:1 from 800-1000nm (Average, Typical) **Extinction Ratio:**

XP-NIR Polarizing Film **Substrate:** □

800 - 1000 **Wavelength Range (nm):**

>99.0 @ 860nm **Polarization Efficiency (%):**

35 +/- 3.0 @ 860nm **Transmission, Single (%):**

## Environmental & Durability Factors

**Heat Resistance (°C x Hours):**  
105C x 500h (dry) Change in single transmittance @ 870nm <+/-5%  
60C x 1000h (90% humidity) Change in single transmittance @ 870nm <+/-5% from initial value, change in polarization efficiency @ 870nm <-3% from initial value

**Cold Resistance (°C x Hours):**  
-40C x 1000h Change in single transmittance @ 870nm <+/-5% from initial value  
Change in polarization efficiency @ 870nm <-3% from initial value

## Regulatory Compliance

**RoHS 2015:**  
Compliant

**Certificate of Conformance:**  
View

**Reach 250:**  
Compliant

## Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- Optimized Performance Between 800-1000nm
- Ideal for Sensing and Inspection Applications
- Available in Sizes up to 600 x 900mm
- [Near-Infrared \(NIR\) Linear Polarizing Film](#) and [High Contrast Near-Infrared \(NIR\) Polarizing Film](#) also Available for Broadband IR Applications

Commercial Grade NIR Polarizing Film (XP-NIR) offers a cost-effective solution for polarization applications in the 800-1000nm range. This film offers contrast ratios of >160:1 (Average) and >99% polarization efficiency in the specified range, and its high environmental resistance makes it a great choice for demanding environments. Commercial Grade NIR Polarizing Film (XP-NIR) is delivered with a pressure sensitive adhesive (PSA) on one side and is available in circular or rectangular sizes, with up to a 50mm diameter or a 600 x 900mm format. This film is ideal for commercial sensing, inspection, and LIDAR applications.

**Note:** Custom sizes available up to 1000mm

## Technical Information

Commercial Grade NIR Polarizing Film (XP-NIR)



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