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# 38.1mm Dia. x 50.8mm FL, Uncoated, ISP Optics Calcium Fluoride (CaF<sub>2</sub>) PCX Lens | CF-PX-38-50

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Stock #24-804 CLEARANCE **4 In Stock**

1  €261<sup>00</sup>

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## Product Downloads

## General

Plano-Convex Lens **Type:**

CF-PX-38-50 **Model Number:**

## Physical & Mechanical Properties

**Diameter (mm):**

38.10 +0.00/-0.13

<3 **Centering (arcmin):**

16.00 ±0.20 **Center Thickness CT (mm):**

16.00 **Edge Thickness ET (mm):**

34.29 **Clear Aperture CA (mm):**

Protective as needed **Bevel:**

## Optical Properties

50.00 @ 5µm **Effective Focal Length EFL (mm):**

Uncoated **Coating:**

[Calcium Fluoride \(CaF<sub>2</sub>\)](#) **Substrate:**

60-40 **Surface Quality:**

λ **Irregularity (P-V) @ 632.8nm:**

±2 **Focal Length Tolerance (%):**

20.00 **Radius R<sub>1</sub> (mm):**

1.31 **f#:**

0.38 **Numerical Aperture NA:**

300 - 8000 **Wavelength Range (nm):**

## Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **Reach 240:**

## Product Details

- Greater than 90% Transmission from 0.35-7µm
- Low Index of Refraction
- Ideal for Integration into Infrared Systems

ISP Optics Calcium Fluoride Plano-Convex (PCX) Lenses provide greater than 90% transmission from 350nm to 7µm and feature a low refractive index, allowing them to be used without an Anti-Reflection (AR) coating. Calcium Fluoride features a high laser damage threshold and low stress birefringence, making them highly suitable for integration into infrared systems. Additionally, calcium fluoride features low solubility and offers superior hardness to comparable fluoride-based substrates, making these PCX lenses capable of withstanding harsh environments and exposure to the elements. ISP Optics Calcium Fluoride Plano-Convex (PCX) Lenses are ideal for demanding applications that require superior performance from the visible through the mid-wave infrared (MMR) spectra.

## Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools