

[See all 30 Products in Family](#)

**TECHSPEC® 50mm Dia. x 100mm FL Uncoated Calcium Fluoride PCX Lens**



TECHSPEC Calcium Fluoride Plano-Convex (PCX) Lenses

Stock **#88-168** **5 In Stock**

⊖ 1 ⊕ C\$742<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	C\$742.00 each
Qty 6-25	C\$592.20 each
Qty 26-49	C\$554.40 each
Need More?	<a href="#">Request Quote</a>

Product Downloads

**General**

Plano-Convex Lens **Type:**

**Physical & Mechanical Properties**

50.00 +0.00/-0.10 **Diameter (mm):**

<3 **Centering (arcmin):**

Center Thickness CT (mm):  
9.00 ±0.1

Edge Thickness ET (mm):  
1.65

Clear Aperture CA (mm):  
45

Bevel:  
Protective as needed

## Optical Properties

Effective Focal Length EFL (mm):  
100.00 @266nm

Back Focal Length BFL (mm):  
93.85

Coating:  
Uncoated

Substrate:   
Calcium Fluoride (CaF<sub>2</sub>)

Surface Quality:  
40-20

Power (P-V) @ 632.8nm:  
λ

Irregularity (P-V) @ 632.8nm:  
3λ/2

Radius R<sub>1</sub> (mm):  
46.21

f#:  
2.00

Numerical Aperture NA:  
0.25

Wavelength Range (nm):  
200 - 7000

Axis Orientation:  
Random

## Regulatory Compliance

RoHS 2015:  
[Compliant](#)

Reach 219:  
[Compliant](#)

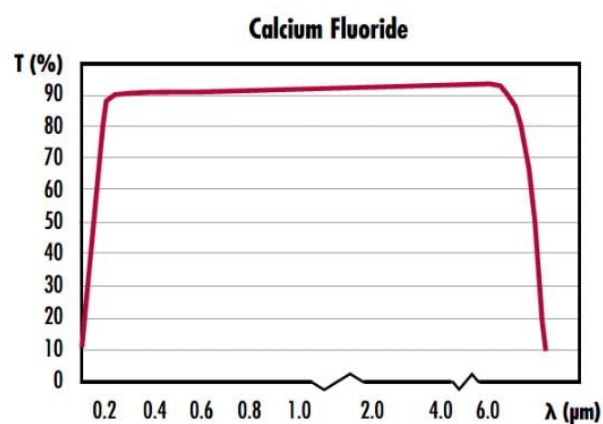
Certificate of Conformance:  
[View](#)

## Product Details

- Low Index of Refraction
- Vacuum Grade UV Substrate
- Uncoated, VIS-NIR, and NIR II Broadband AR Coating Options

TECHSPEC® Calcium Fluoride Plano-Convex Lenses are ideal for demanding applications that require superior performance from the ultraviolet through the mid-wave infrared spectra. The lenses' low refractive index, high laser damage threshold, and low axial and radial-stress birefringence are highly suitable for use with Excimer lasers or 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. TECHSPEC® Calcium Fluoride Plano-Convex Lenses are offered in 12.5mm, 25mm, and 50mm diameters. The lenses are available uncoated, VIS-NIR, or with NIR II broadband AR coating options.

## Technical Information



## 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

## Compatible Mounts

---

;