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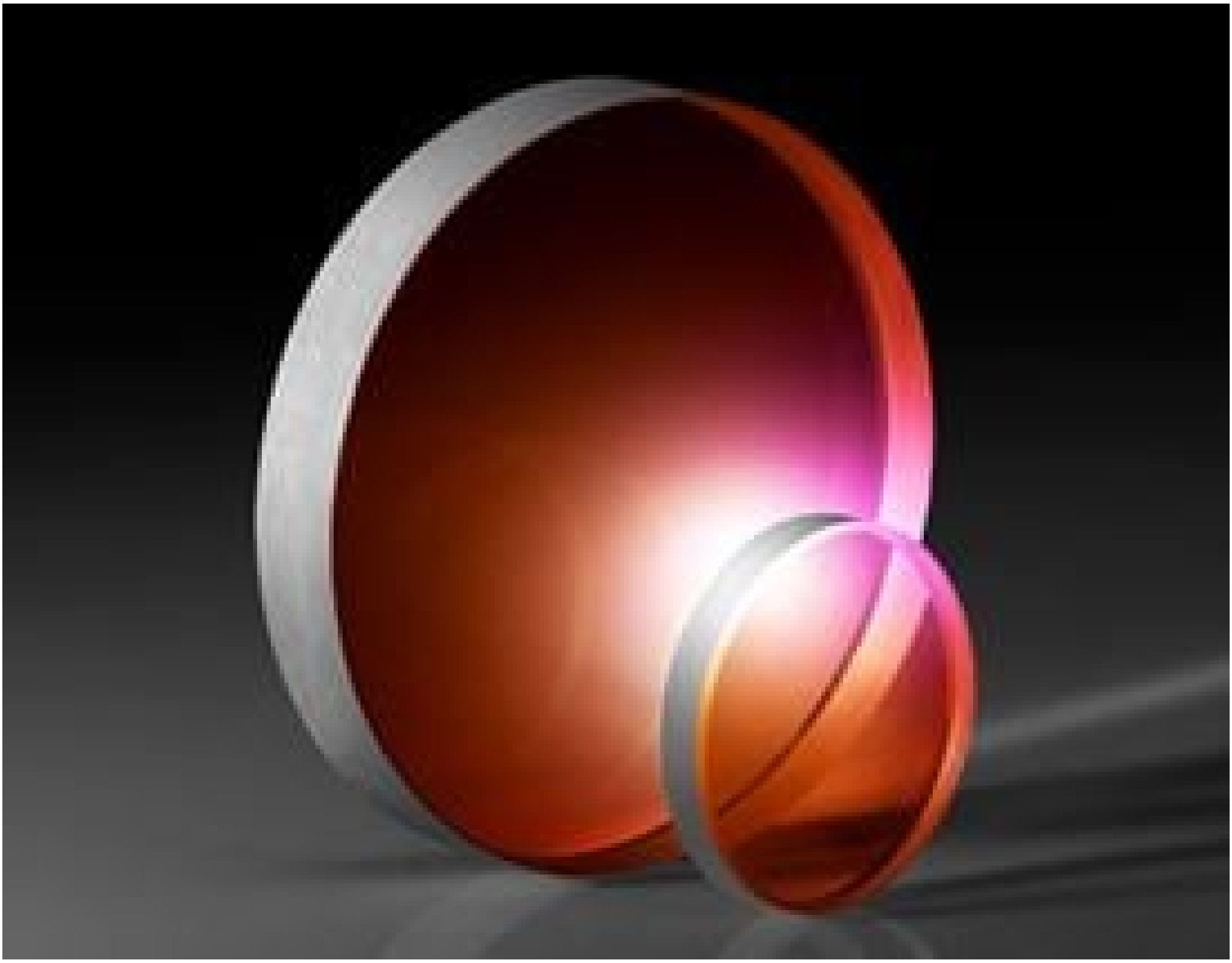
50.8mm Dia., 5mm Thick, 3° Wedge, ISP Optics Calcium Fluoride (CaF_2) Wedged Window | CF-WW3-50-5

See More by ISP Optics



Calcium Fluoride (CaF_2) Wedged Windows

Stock **#24-540** CLEARANCE **7 In Stock**

- 1 + **A$590**.40

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Volume Pricing	
Qty 1+	**A$590.40** each
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General

Type:

Protective Window

Model Number:

CF-WW3-50-5

Physical & Mechanical Properties

Bevel:

Protective as needed

Clear Aperture (%):
85

Clear Aperture CA (mm):
43.18

Diameter (mm):
50.80 +0.00/-0.13

Thickness (mm):
5.00 ±0.13

Edges:
Fine Ground

Knoop Hardness (kg/mm^2):
158.30

Poisson's Ratio:
0.26

Young's Modulus (GPa):
75.8

Optical Properties

Abbe Number (v_d):
94.99

Axis Orientation:
Random

Coating:
Uncoated

Index of Refraction (n_d):
1.495

Substrate:
Calcium Fluoride (CaF_2)

Surface Flatness (P-V):
2λ@633nm

Surface Quality:
60-40

Wavelength Range (nm):
200 - 7000

Wedge Angle (°):
3° ±0.25

Material Properties

Coefficient of Thermal Expansion CTE (10^{-6}/°C):
18.85

Density (g/cm^3):
3.18

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

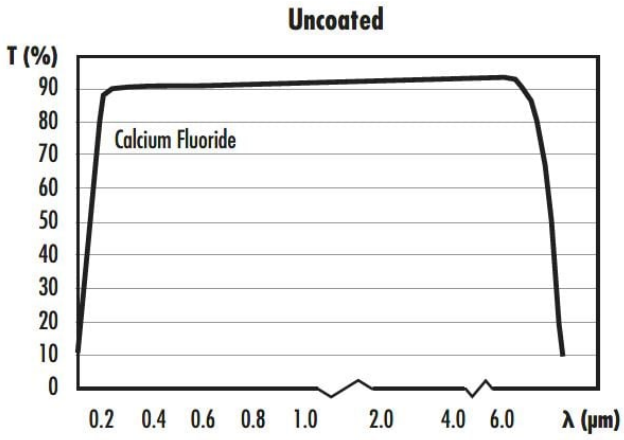
Reach 240:
Compliant

Product Details

- 30 Arcmin Wedge
- Low Absorption, High Transmission
- Ideal for Harsh Environments
- **Precision Flat Calcium Fluoride Windows** Also Available

ISP Optics Calcium Fluoride (CaF_2) Wedged Windows feature a 30 arcmin wedge to eliminate fringe patterns from etalon effects and to prevent cavity feedback. Calcium fluoride's combination of low absorption and high damage threshold make these windows a popular choice for free-space lasers. Its low refractive index allows it to be used without an anti-reflective coating. ISP Optics Calcium Fluoride (CaF_2) Wedged Windows feature low water solubility and offer superior hardness compared to other fluoride-based substrates, making them suitable for laser applications in harsh environments. Calcium Fluoride (CaF_2) Wedged Windows provide laser output protection from environmental effects and are ideal for beam sampling applications.

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

Custom

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.**