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# 4mm Dia., Uncoated, ISP Optics Calcium Fluoride (CaF<sub>2</sub>) Hemispherical Lens | CF-HS-4

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Stock #24-715 CLEARANCE 2 In Stock

⊖ 1 ⊕ S\$270<sup>00</sup>

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**General**

Half-Ball Lens Type:  
 CF-HS-4 Model Number:

**Physical & Mechanical Properties**

4.00 ±0.01 Diameter (mm):  
 2.00 ±0.05 Center Thickness CT (mm):

2.00 Radius R (mm):

## Optical Properties

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

300 - 8000 Wavelength Range (nm):

1.434 Index of Refraction (n<sub>d</sub>):

60-40 Surface Quality:

## Regulatory Compliance

Compliant RoHS 2015:

View Certificate of Conformance:

Compliant Reach 240:

## Product Details

- High Numerical Apertures
- Ideal for Fiber and LED Coupling
- Available with Fused Silica, Si, CaF<sub>2</sub>, or ZnSe Substrates

ISP Optics Hemispherical (Half-Ball) Infrared (IR) Lenses are ideal for LED and fiber coupling of visible and infrared (IR) light sources. Hemispherical lenses are made by cutting a spherical (ball) lens in half, facilitating easier mounting compared to spherical (ball) lenses. These lenses are available with Fused Silica, Silicon, Calcium Fluoride, or Zinc Selenide substrates to provide coverage for applications from the ultraviolet to the long-wave infrared. ISP Optics Hemispherical (Half-Ball) Infrared (IR) Lenses feature high numerical apertures for applications including fiber coupling, microscopy, and IR laser measurement. The lenses with Silicon substrates are available as either standard hemispherical lenses or hyper-hemispherical lenses.

**Note:** Special care should be taken when handling Zinc Selenide as it is a toxic material. Always wear rubber or plastic gloves to avoid risk of contamination.

## 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