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# 12.7mm Dia., 2mm Thick, 30' Wedge, ISP Optics Barium Fluoride (BaF<sub>2</sub>) Wedged Window | BF-WW-12-2

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Barium Fluoride (BaF<sub>2</sub>) Wedged Windows



Stock #24-511 **1 In Stock**

- 1 + €162.<sup>00</sup>

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## Product Downloads

### General

BF-WW-12-2 **Model Number:**

Protective Window **Type:**

Crystal **Type of Window:**

## Physical & Mechanical Properties

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

12.70 +0.00/-0.13 **Diameter (mm):**

2.00 ±0.13 **Thickness (mm):**

Protective as needed **Bevel:**

85 **Clear Aperture (%):**

Fine Ground **Edges:**

0.34 **Poisson's Ratio:**

53 **Young's Modulus (GPa):**

82.00 **Knoop Hardness (kg/mm<sup>2</sup>):**

30±15 arcmin **Wedge Angle (arcmin):**

## Optical Properties

Uncoated **Coating:**

[Barium Fluoride \(BaF<sub>2</sub>\)](#) **Substrate:**

1.478 @ 0.5µm 1.451 @ 5µm 1.401 @ 10µm **Index of Refraction (n<sub>d</sub>):**

60-40 **Surface Quality:**

81.78 **Abbe Number (v<sub>d</sub>):**

Random **Axis Orientation:**

2000 - 5000 **Wavelength Range (nm):**

2λ @ 10.6µm **Surface Flatness (P-V):**

## Material Properties

4.89 **Density (g/cm<sup>3</sup>):**

18.1 **Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):**

## Regulatory Compliance

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

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

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

## Product Details

- 30 Arcmin Wedge
- Excellent Transmission from 200nm - 12µm
- Resistant to High-Energy Radiation
- [Precision Flat Barium Fluoride \(BaF<sub>2</sub>\) Windows](#) Also Available

ISP Optics Barium Fluoride (BaF<sub>2</sub>) Wedged Windows feature a 30 arcmin wedge to eliminate etalon effects, improving readout in detection and spectroscopy applications. With a low index of refraction of 1.48, these windows provide high transmission from 200nm to 12µm without the need of an anti-reflection (AR) coating. Barium fluoride windows can be used up to 800°C in a dry environment, but prolonged exposure to moisture can degrade transmission in the vacuum ultraviolet range. ISP Optics Barium Fluoride (BaF<sub>2</sub>) Wedged Windows are ideal for infrared spectroscopy, thermal imaging, and general UV-IR detection applications. Barium fluoride is also a fast scintillator and can be used for the detection X-rays, gamma rays, or other high energy particles.

**Note:** These optical windows are very sensitive to thermal shock.

## Technical Information

