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**TECHSPEC® 6.0mm**

**Standard Plano-Convex Lens**

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

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Options

1

€54<sup>,50</sup>

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Volume Pricing	
Qty 1-9	€54,50 each
Qty 10-24	€49,00 each
Qty 25-49	€43,75 each
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Prices shown are exclusive of VAT/local taxes

Product Downloads	
STEP:step	PDF Drawing:pdf
ISO 10110 Drawing	
IGES:igs	Zemax:zar
Zemax:zmx	eDrawing:eprt
Code V:seq	EO Spec Sheet

General			
<b>Type:</b>	Plano-Convex Lens		
Physical & Mechanical Properties			
<b>Diameter (mm):</b>	6.00 ±0.025	<b>Centering (arcmin):</b>	<3
<b>Center Thickness CT (mm):</b>	1.80 ±0.05	<b>Edge Thickness ET (mm):</b>	0.84
<b>Clear Aperture CA (mm):</b>	5.4	<b>Bevel:</b>	Protective as needed
Optical Properties			
<b>Effective Focal Length EFL (mm):</b>	10.00 @ 587.6nm	<b>Back Focal Length BFL (mm):</b>	8.82
<b>Coating:</b>	VIS 0° (425-675nm)	<b>Coating Specification:</b>	R <sub>avg</sub> ≤0.4% @ 425 - 675nm
<b>Substrate:</b>	<a href="#">N-BK7</a>	<b>Surface Quality:</b>	40-20
<b>Power (P-V) @ 632.8nm:</b>	1.5λ	<b>Irregularity (P-V) @ 632.8nm:</b>	λ/4
<b>Focal Length Tolerance (%):</b>	±1	<b>Radius R<sub>1</sub> (mm):</b>	5.17
<b>f/#:</b>	1.67	<b>Numerical Aperture NA:</b>	0.30

**Wavelength Range (nm):** 425 - 675

**Damage Threshold, By Design:** 5 J/cm<sup>2</sup> @ 532nm, 10ns

## Regulatory Compliance

Certificate of Conformance: [View](#)

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## Need different specs or modifications?

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](#).

## Product Details

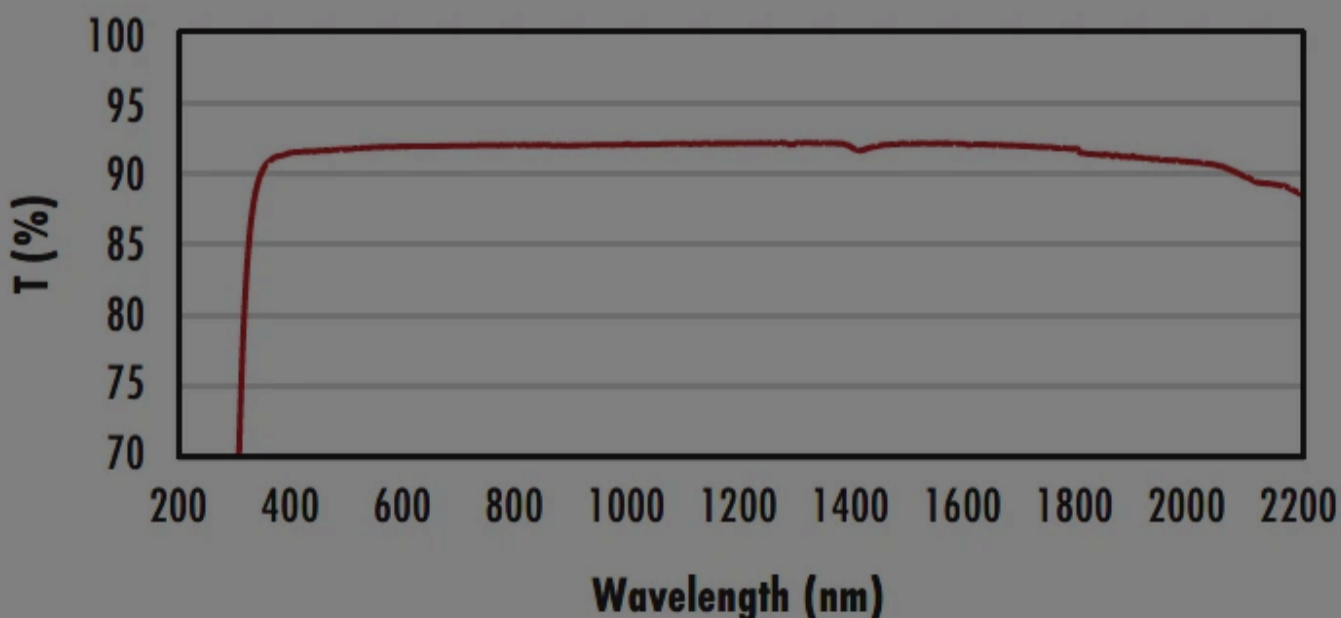
- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)

TECHSPEC® VIS 0° Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. Plano-Convex lenses are ideal for a multitude of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms. TECHSPEC® VIS 0° Coated Plano-Convex (PCX) Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered [uncoated](#) or with broadband anti-reflective (BBAR) coatings, which include [MgF<sub>2</sub>](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#).

These coated lenses can be utilized in a host of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

## Technical Information

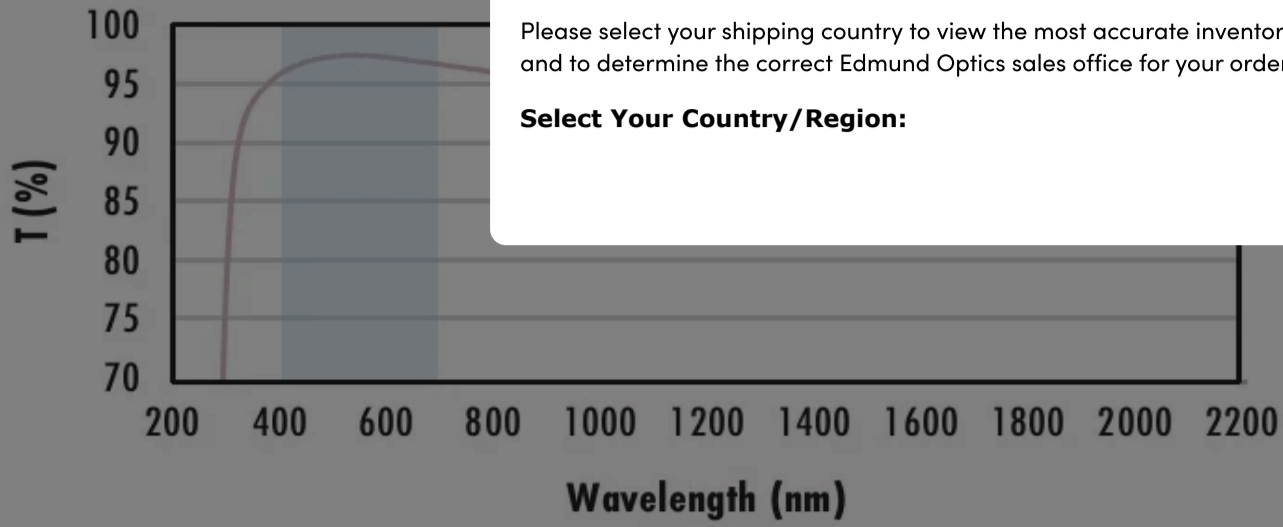
### Uncoated N-BK7 Typical Transmission



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

[Click Here to Download Data](#)

### N-BK7 with MgF<sub>2</sub> Coating Typical Transmission



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**Select Your Country/Region:**

Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

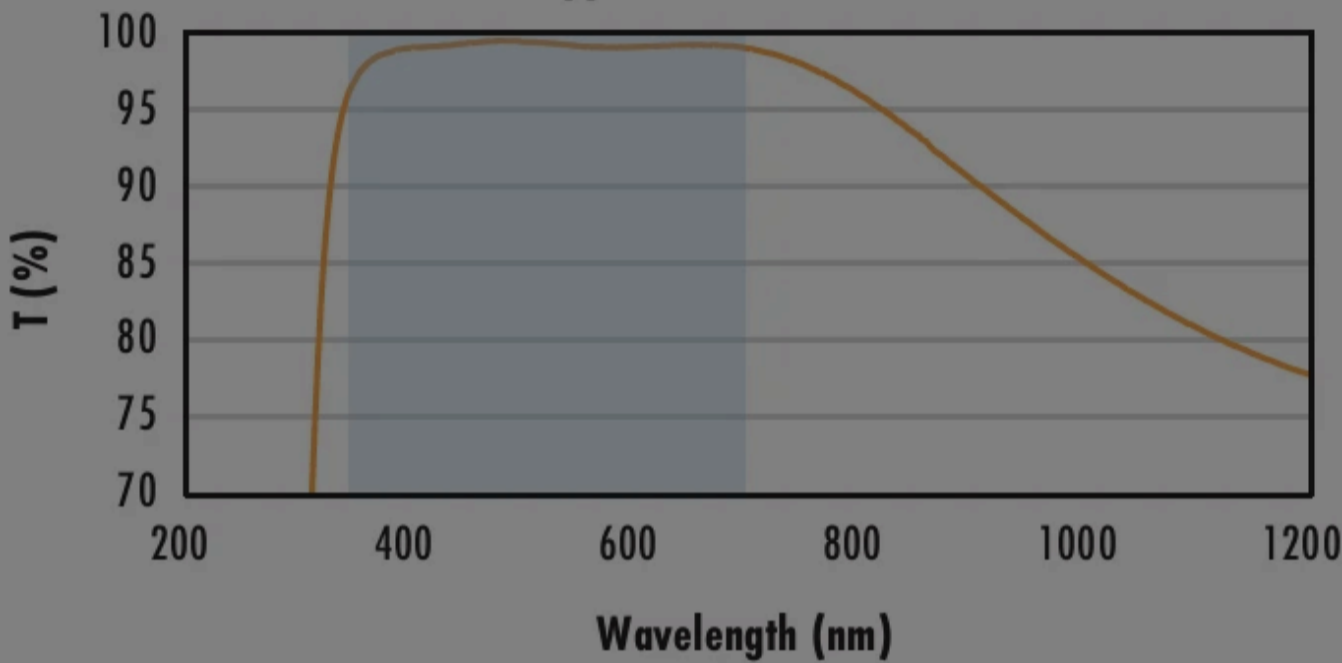
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### N-BK7 with VIS-EXT Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

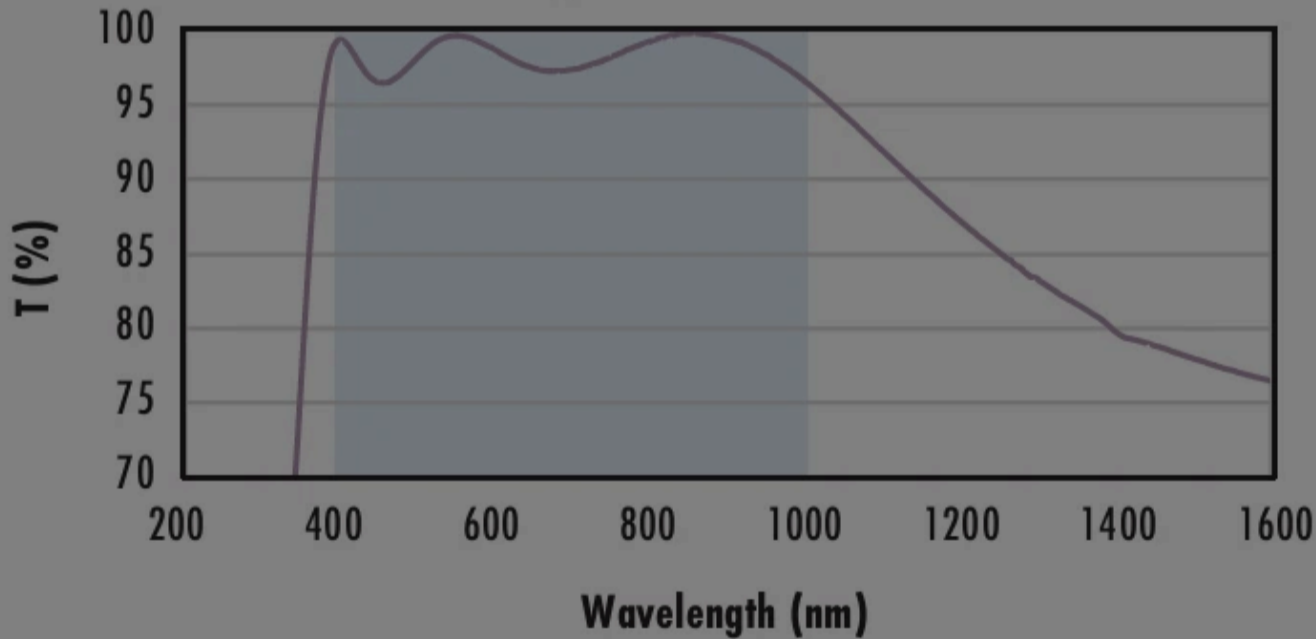
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

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### N-BK7 with VIS-NIR Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

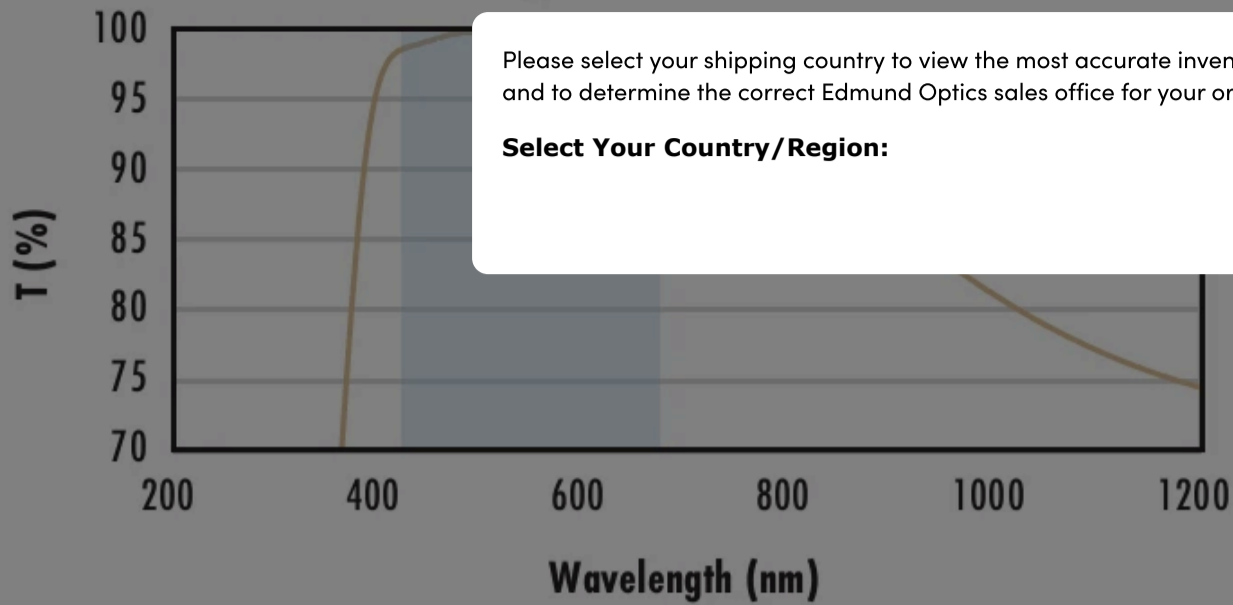
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$\begin{aligned} R_{abs} &\leq 0.25\% \text{ @ } 880\text{nm} \\ R_{avg} &\leq 1.25\% \text{ @ } 400 - 870\text{nm} \\ R_{avg} &\leq 1.25\% \text{ @ } 890 - 1000\text{nm} \end{aligned}$$

Data outside this range is not guaranteed and is for reference only.

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### N-BK7 with VIS 0° Coating Typical Transmission



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**Select Your Country/Region:**

Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

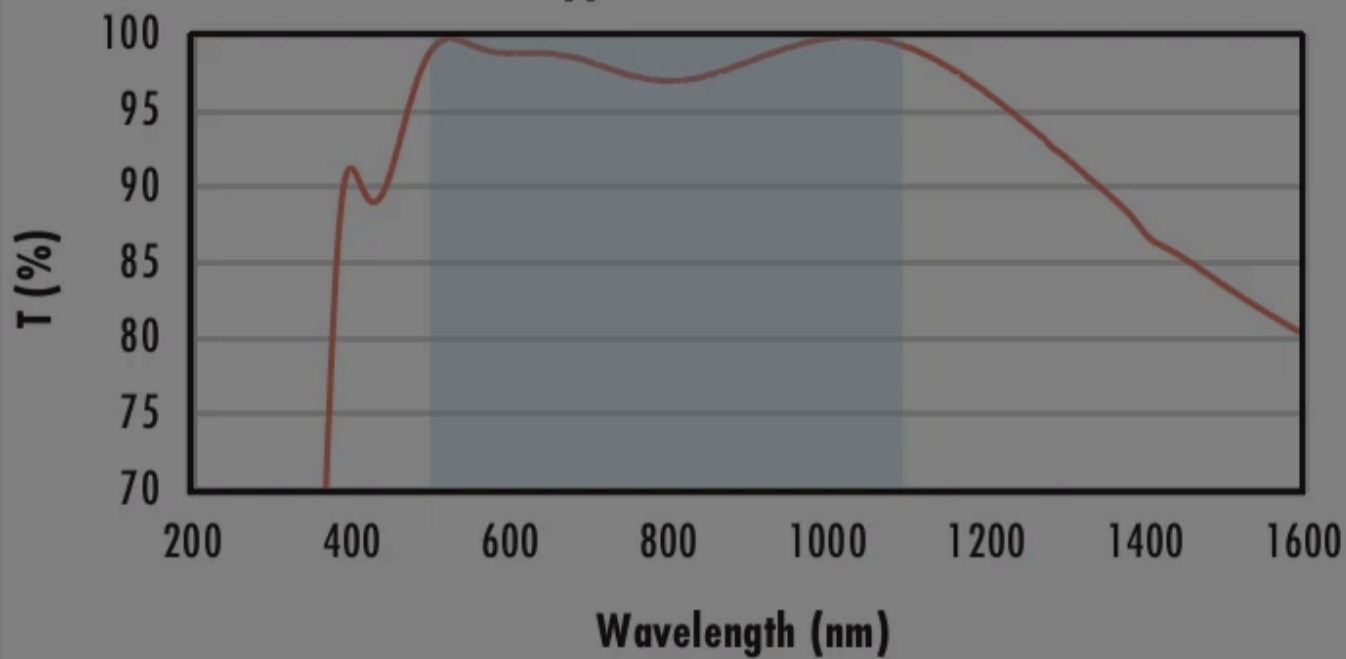
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### N-BK7 with YAG-BBAR Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}$$

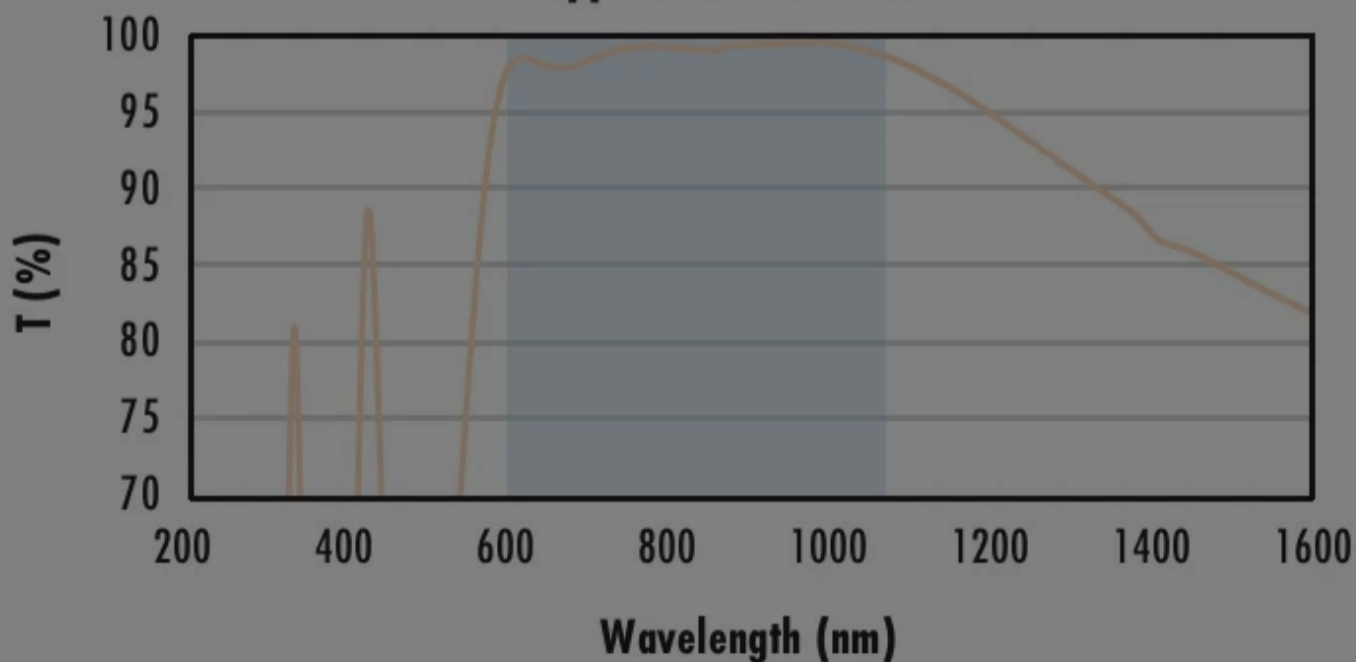
$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$

$$R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### N-BK7 with NIR I Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

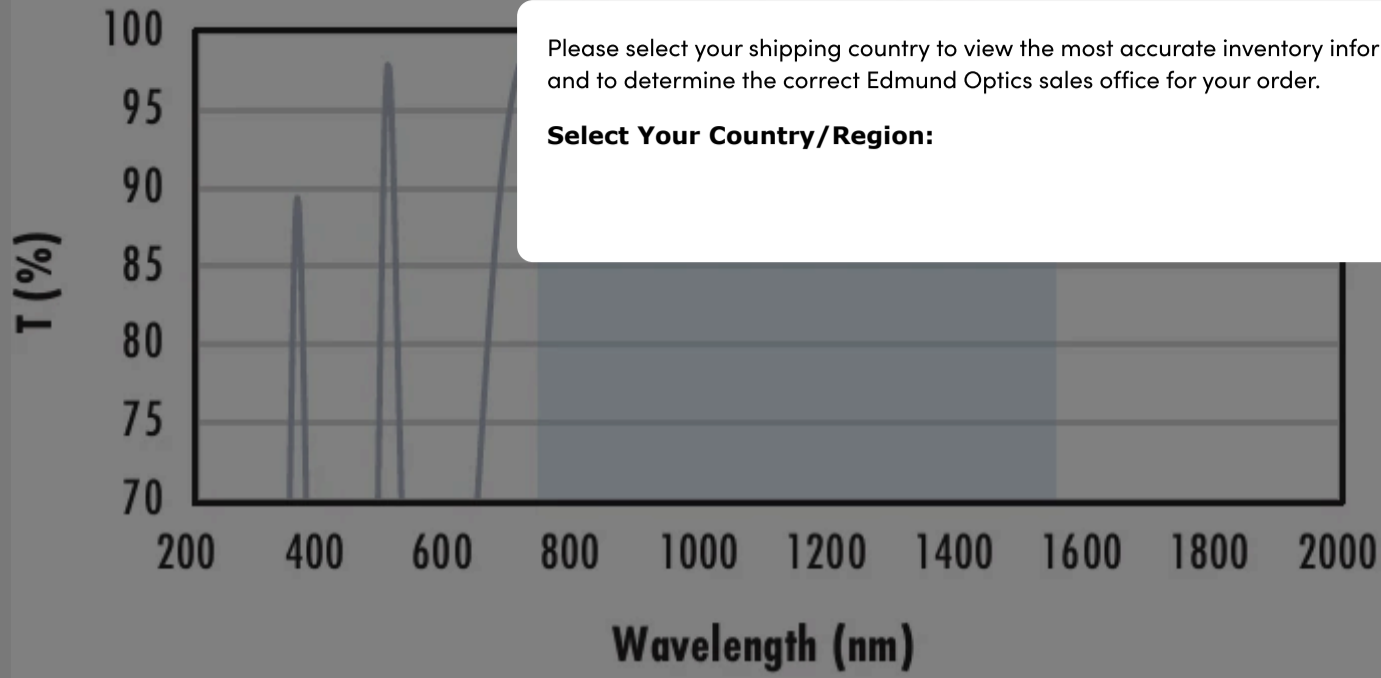
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

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## N-BK7 with NIR II Coating Typical Transmission



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Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

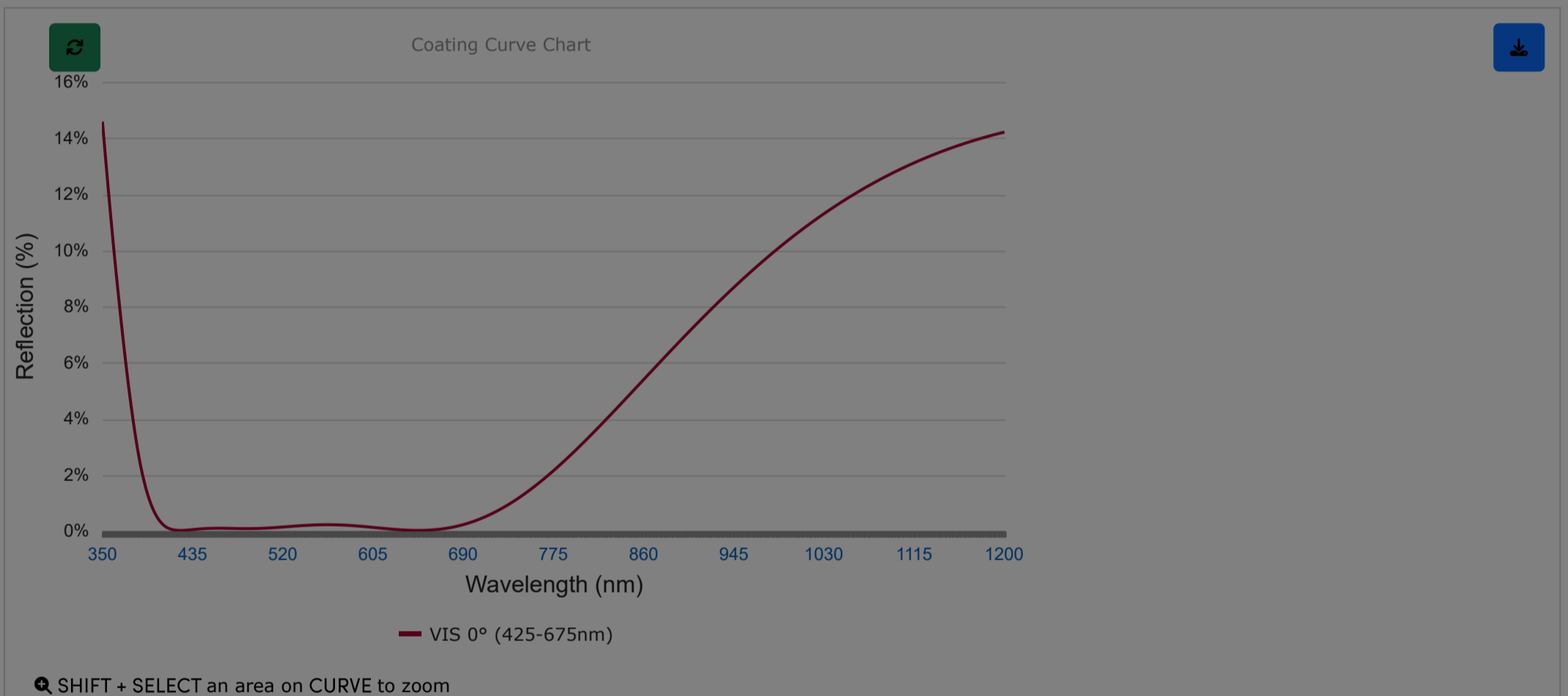
- $R_{abs} \leq 1.5\%$  @ 750 - 800nm
- $R_{abs} \leq 1.0\%$  @ 800 - 1550nm
- $R_{avg} \leq 0.7\%$  @ 750 - 1550nm

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

## Coating Curves

VIS 0° (425-675nm)



Please note that coating performance outside each product's specified design range is theoretical and may vary.

## Related Products



C, S, and T-Mount Circular Optic Mounts



Optic Component Mounts



VIS 0° Coated Achromatic Lenses



VIS 0° Coated Double-Convex (DCX) Lenses

## Frequently Purchased Together



#45-302 - 12.0mm Dia. x 15.0mm FL,  
Uncoated, Plano-Convex Lens  
€34,00

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#45-355 - 5.0mm Dia. x 15.0mm FL,  
MgF<sub>2</sub> Coated, Plano-Convex Lens  
€47,50


#47-479-INK - 6mm Dia. x 9mm FL,  
VIS 0° Inked, Double-Convex Lens  
€56,00


#47-914-INK - 6mm Dia. x -6mm  
FL, VIS 0°, Inked, Double-  
Concave Lens  
€54,50

## Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
<input type="button" value="MORE+"/>	6.0mm Optic Dia., Optic Mount	Fixed		#64-552	€32,75 <a href="#">Request Quote</a>	2 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>

Check out our full selection of mounts [here](#).

## Resources

### Media Type

- Application Note
- Technical Tool
- Trending in Optics
- FAQ
- Glossary
- Video

APPLICATION NOTE

Anti-Reflection

APPLICATION NOTE

Ap

APPLICATION NOTE

Understanding  
Optical  
Specifications

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APPLICATION NOTE

Lens Geometry  
Performance  
Comparison

TECHNICAL TOOL

SAG Calculator

TRENDING IN OPTICS

Future of  
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