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TECHSPEC<sup>®</sup> 25.0mm Diameter x -25 FL, MgF<sub>2</sub> Coated, Plano-Concave Lens



Stock **#45-031** **5 In Stock**

[Other Coating Options](#)

-

1

+

₹3,095

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | ₹3,095 each                   |
| Qty 10-25      | ₹2,783 each                   |
| Qty 26-49      | ₹2,491 each                   |
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General

Type:

Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):

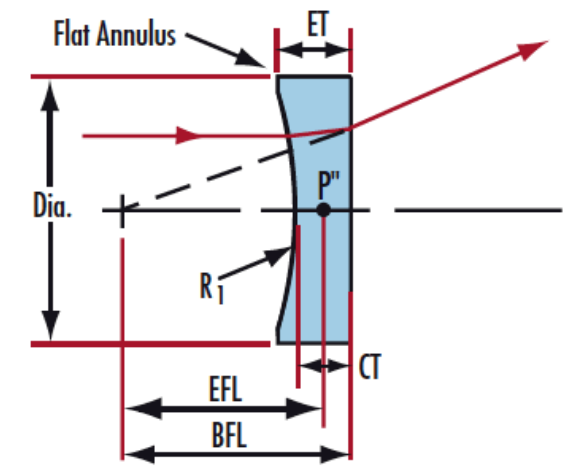
25.00 +0.0/-0.025

|                                                       |                                       |
|-------------------------------------------------------|---------------------------------------|
| Protective as needed                                  | Bevel:                                |
| Center Thickness CT (mm):                             | 3.50                                  |
| Center Thickness Tolerance (mm):                      | ±0.10                                 |
| Centering (arcmin):                                   | <1                                    |
| Clear Aperture CA (mm):                               | 24.00                                 |
| Edge Thickness ET (mm):                               | 7.75                                  |
| Optical Properties                                    |                                       |
| Effective Focal Length EFL (mm):                      | -25.00                                |
| Substrate: <input type="checkbox"/>                   | N-SF11                                |
| f#:                                                   | 1.00                                  |
| Numerical Aperture NA:                                | 0.50                                  |
| Coating:                                              | MgF <sub>2</sub> (400-700nm)          |
| Wavelength Range (nm):                                | 400 - 700                             |
| Back Focal Length BFL (mm):                           | -26.96                                |
| Coating Specification:                                | R <sub>avg</sub> ≤1.75% @ 400 - 700nm |
| Focal Length Specification Wavelength (nm):           | 587.6                                 |
| Focal Length Tolerance (%):                           | ±1                                    |
| Radius R <sub>1</sub> (mm):                           | -19.62                                |
| Surface Quality:                                      | 40-20                                 |
| Damage Threshold, By Design: <input type="checkbox"/> | 10 J/cm <sup>2</sup> @ 532nm, 10ns    |
| Power (P-V) @ 632.8nm:                                | 1.5λ                                  |
| Irregularity (P-V) @ 632.8nm:                         | λ/4                                   |
| Regulatory Compliance                                 |                                       |
| RoHS 2015:                                            | Compliant                             |
| Certificate of Conformance:                           | View                                  |
| Reach 235:                                            | Compliant                             |
| Country of Origin:                                    | Japan                                 |
| Imported By:                                          | Edmund Optics India Private Limited   |

## Product Details

- AR Coated to Provide <1.75% Reflectance per Surface for 400 - 700nm
  - Designed for 0° Angle of Incidence
  - Various Coating Options: [Uncoated](#), [VIS-EXT](#), [VIS 0°](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)
- TECHSPEC® MgF<sub>2</sub> Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC MgF<sub>2</sub> Coated Plano-Concave (PCV) Lenses are ideal for broadband applications. These lenses are also available [Uncoated](#), [VIS-EXT](#), [VIS 0°](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), or with [NIR II](#) AR coating options.

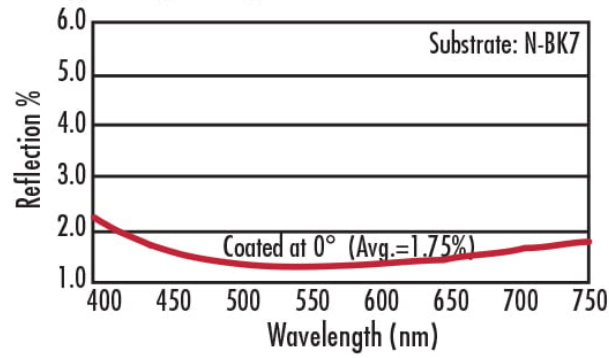
## Technical Information



#### MgF<sub>2</sub> Coating

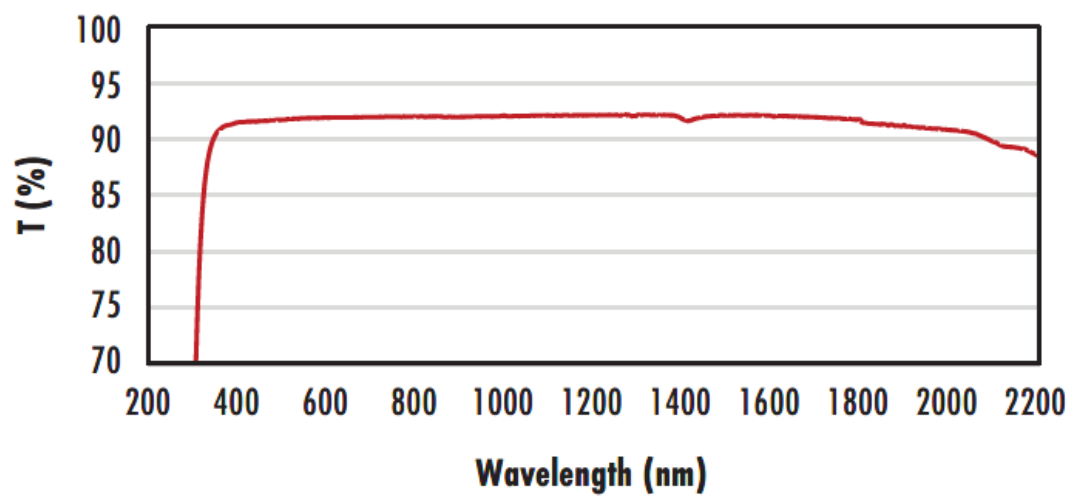
$R_{avg} \leq 1.75\%$  @ 400 - 700nm

Typ. Energy Density Limit: 10 J/cm<sup>2</sup> @ 532nm, 10ns



#### N-BK7

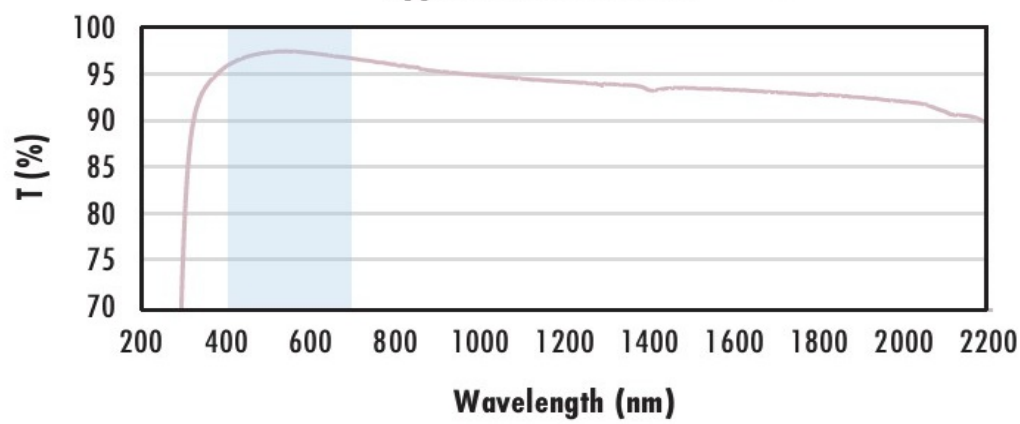
##### Uncoated N-BK7 Typical Transmission



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



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

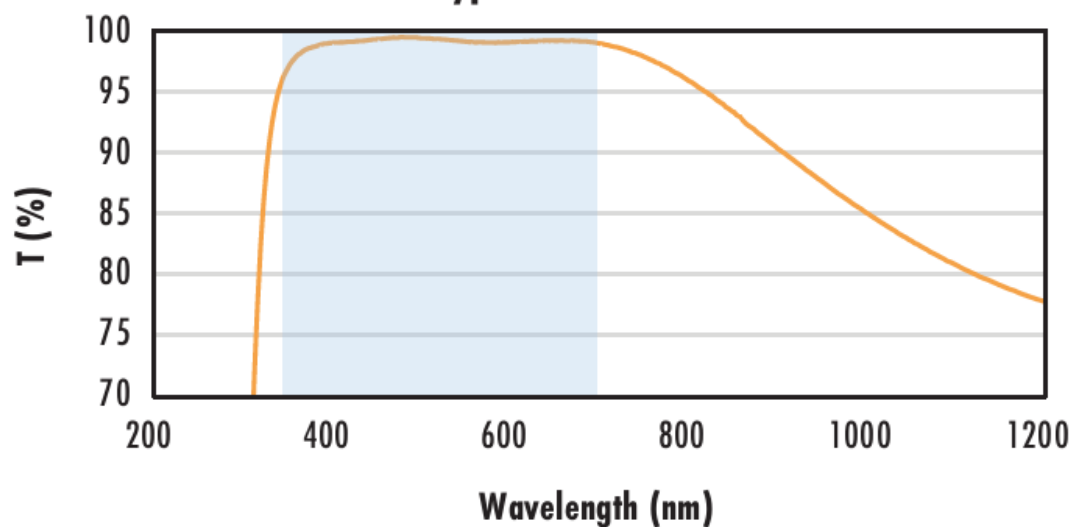
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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



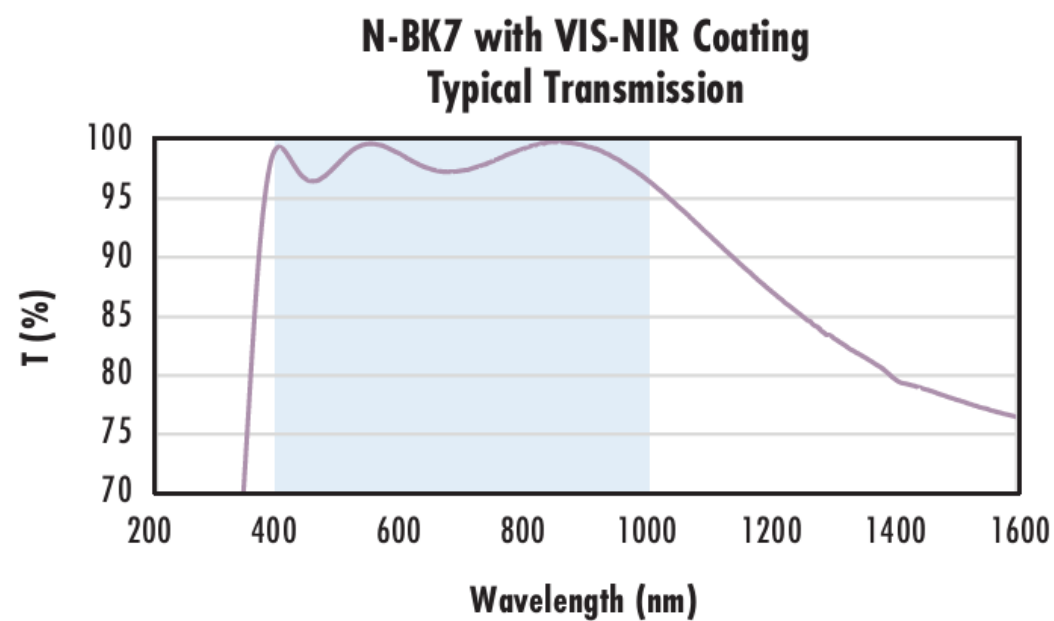
Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

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

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

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

[Click Here to Download Data](#)

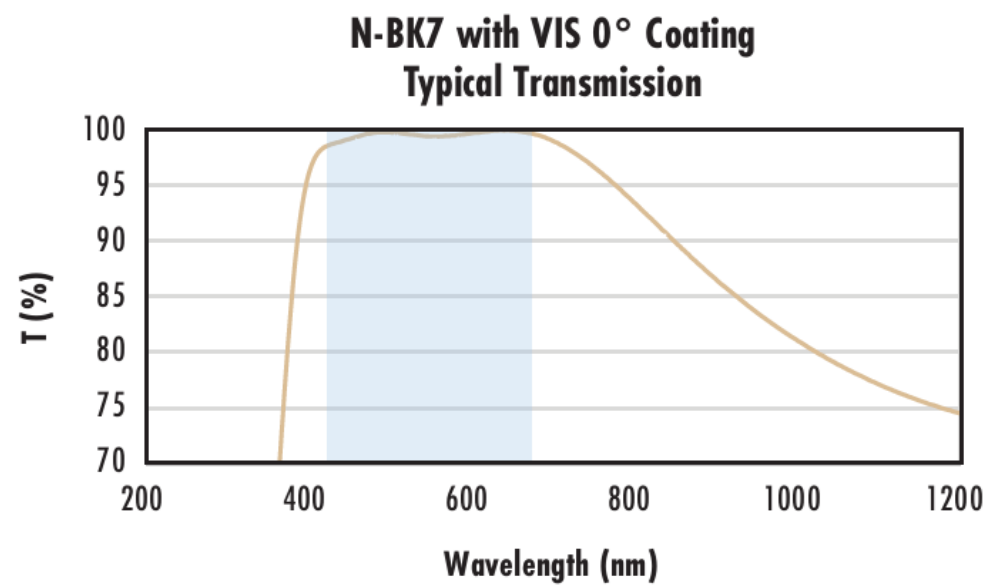


Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

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

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

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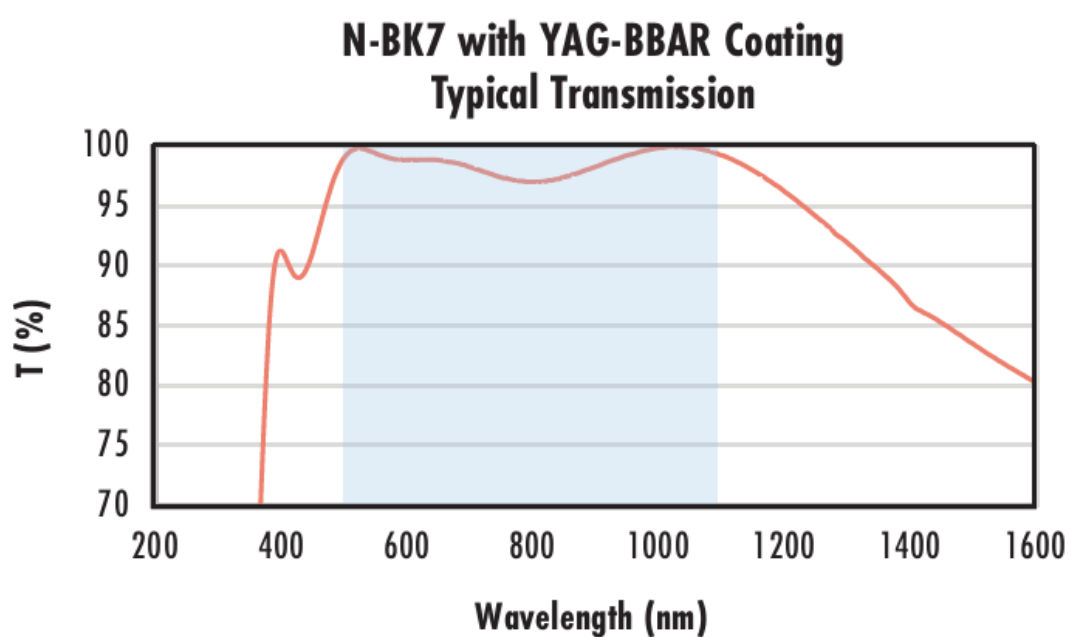
Typical transmission of a 3mm thick N-BK7 window with VIS 0°  
(425-675nm) coating at 0° AOI.

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

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

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

[Click Here to Download Data](#)



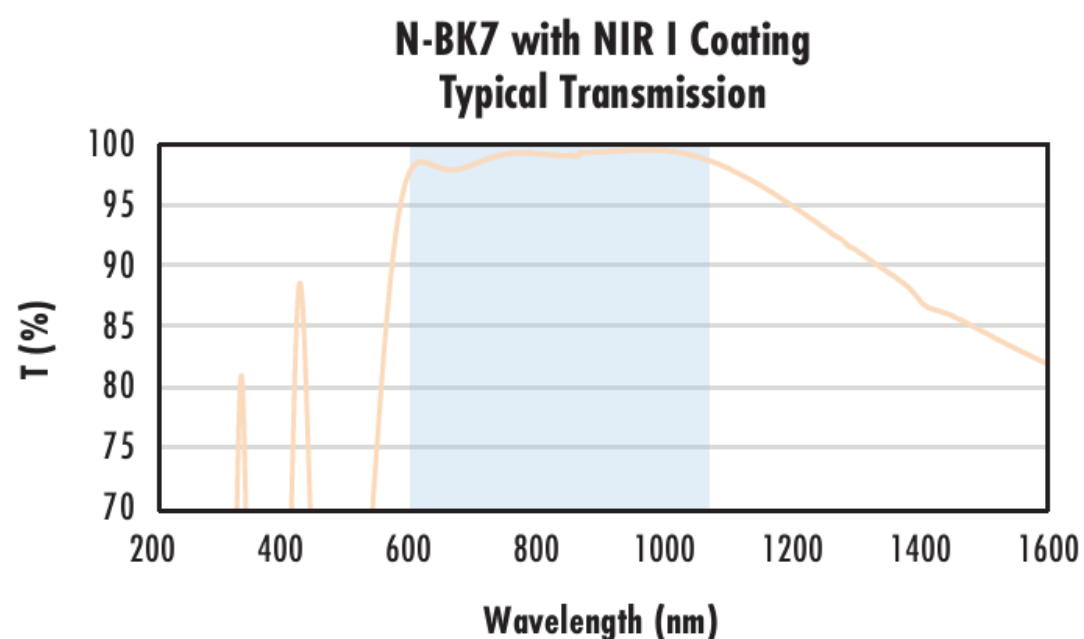
Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

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

$R_{abs} \leq 0.25\% @ 532nm$   
 $R_{abs} \leq 0.25\% @ 1064nm$   
 $R_{avg} \leq 1.0\% @ 500 - 1100nm$

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

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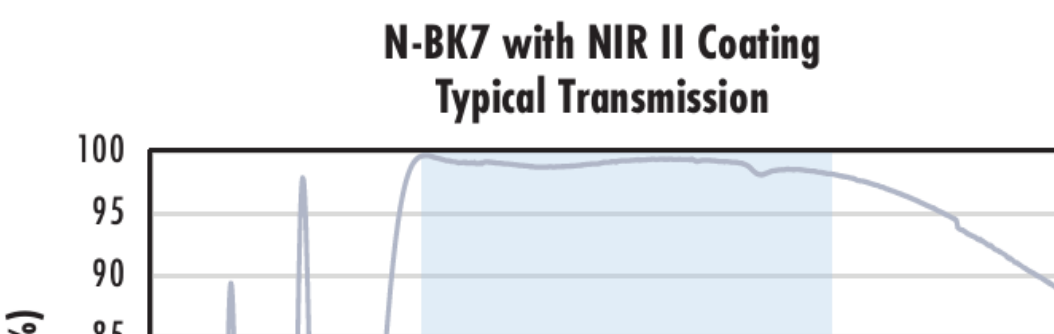
Typical transmission of a 3mm thick N-BK7 window with NIR I  
(600 - 1050nm) coating at 0° AOI.

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

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

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

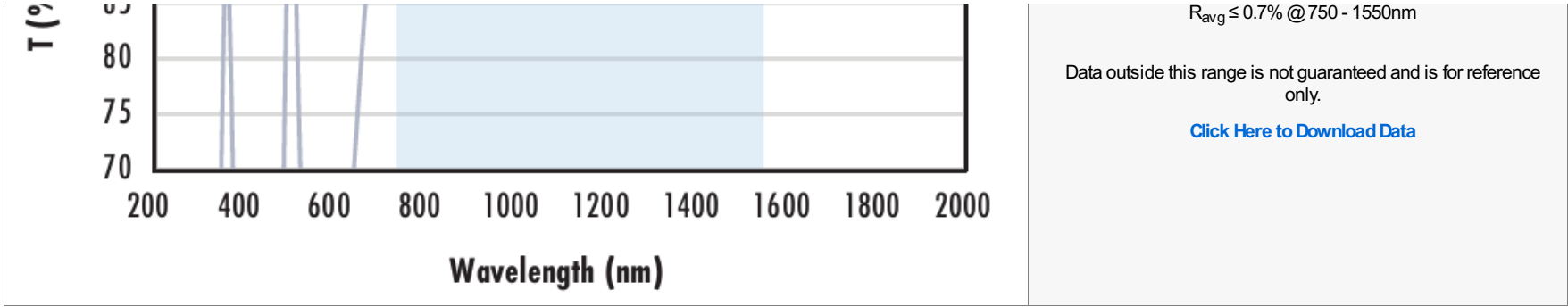
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Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

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

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



## Coating Curves

### 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](#).

## Compatible Mounts