

[See all 413 Products in Family](#)

TECHSPEC<sup>®</sup> 50.0mm Dia. x 500.0mm FL, VIS-EXT Coated Plano-Convex Lens



Stock **#88-768** 11 In Stock

☐ [Other Coating Options](#)

-

1

+

C\$109<sup>.20</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | C\$109.20 each                |
| Qty 10-24      | C\$98.00 each                 |
| Qty 25-49      | C\$87.50 each                 |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

50.00 +0.0/-0.025

|                      |                           |
|----------------------|---------------------------|
| <1                   | Centering (arcmin):       |
| 5.00 ±0.10           | Center Thickness CT (mm): |
| 3.79                 | Edge Thickness ET (mm):   |
| 49                   | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                                      |                                                       |
|--------------------------------------|-------------------------------------------------------|
| Optical Properties                   |                                                       |
| 500.00 @ 587.6nm                     | Effective Focal Length EFL (mm):                      |
| 496.70                               | Back Focal Length BFL (mm):                           |
| VIS-EXT (350-700nm)                  | Coating:                                              |
| R <sub>avg</sub> <0.5% @ 350 - 700nm | Coating Specification:                                |
| N-BK7                                | Substrate: <input type="checkbox"/>                   |
| 40-20                                | Surface Quality:                                      |
| 1.5λ                                 | Power (P-V) @ 632.8nm:                                |
| λ/4                                  | Irregularity (P-V) @ 632.8nm:                         |
| ±1                                   | Focal Length Tolerance (%):                           |
| 258.40                               | Radius R <sub>1</sub> (mm):                           |
| 10                                   | f/#:                                                  |
| 0.05                                 | Numerical Aperture NA:                                |
| 350 - 700                            | Wavelength Range (nm):                                |
| 5 J/cm² @ 532nm, 10ns                | Damage Threshold, By Design: <input type="checkbox"/> |

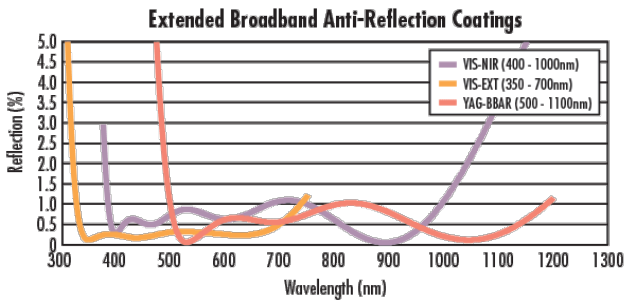
|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |
| Compliant             | Reach 235:                  |

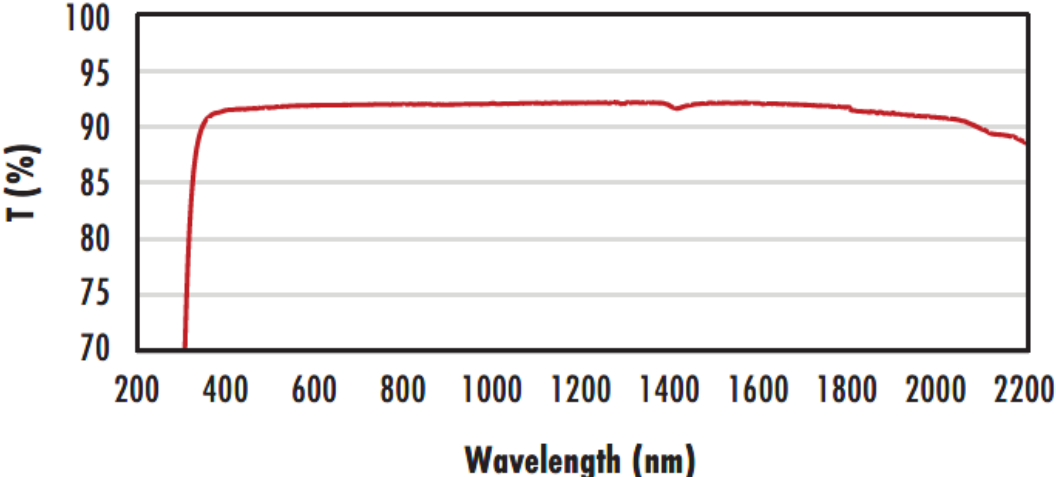
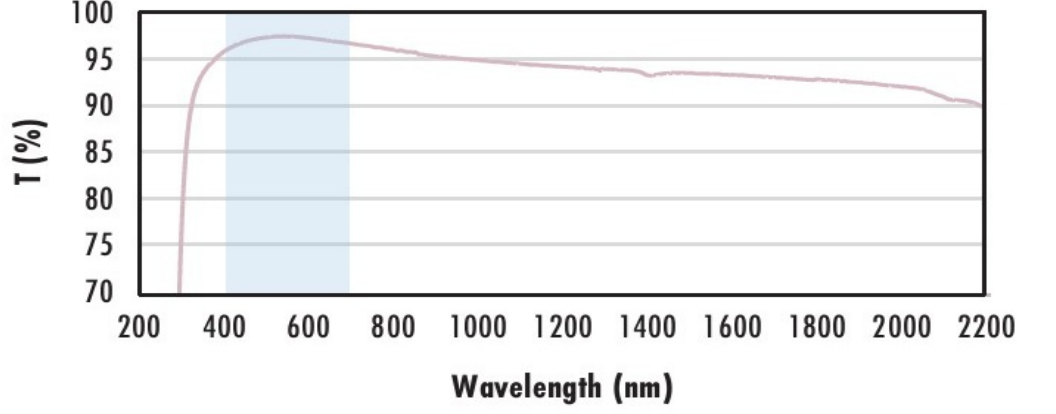
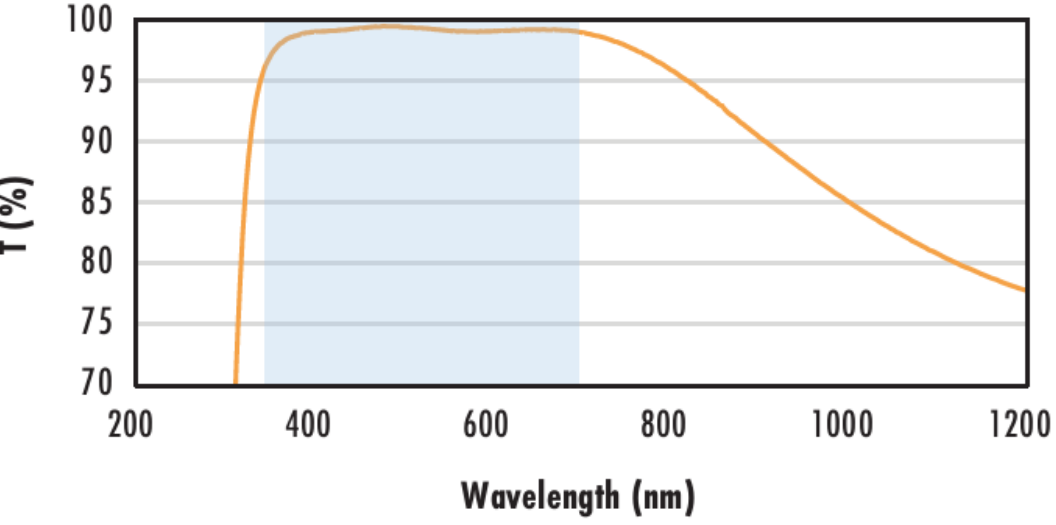
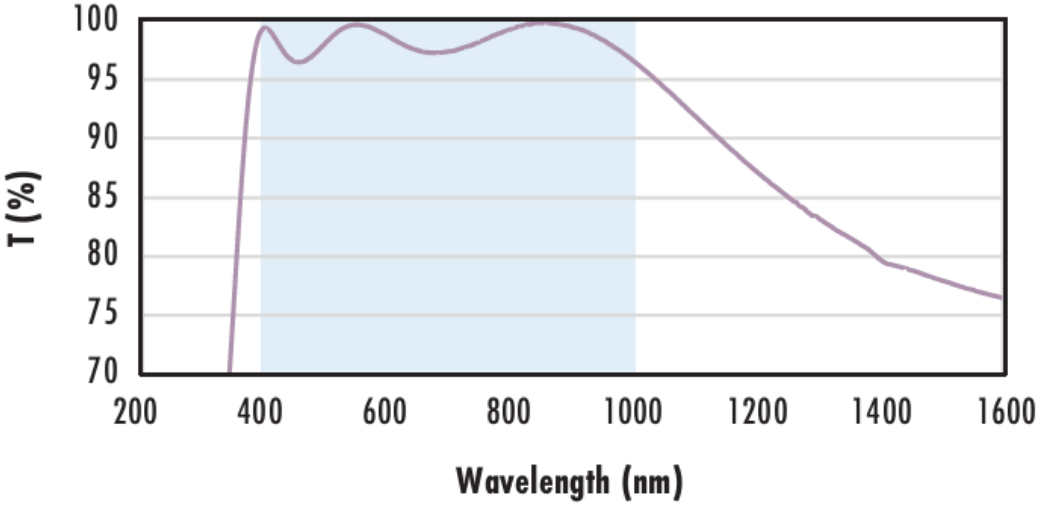
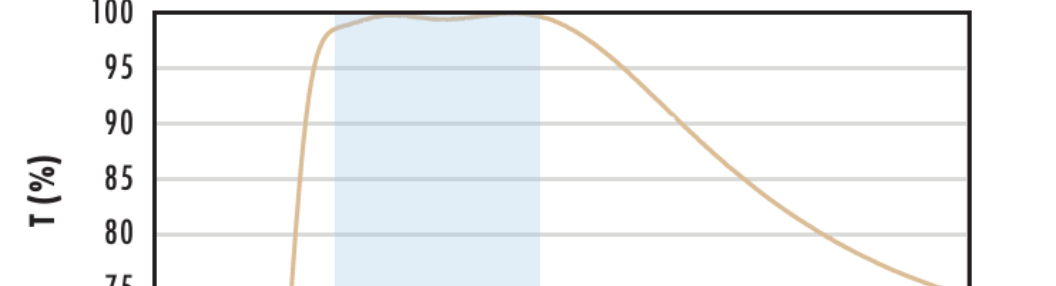
## Product Details

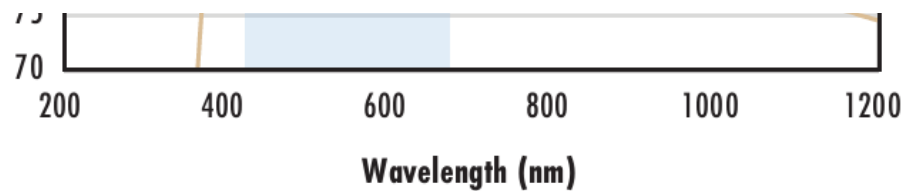
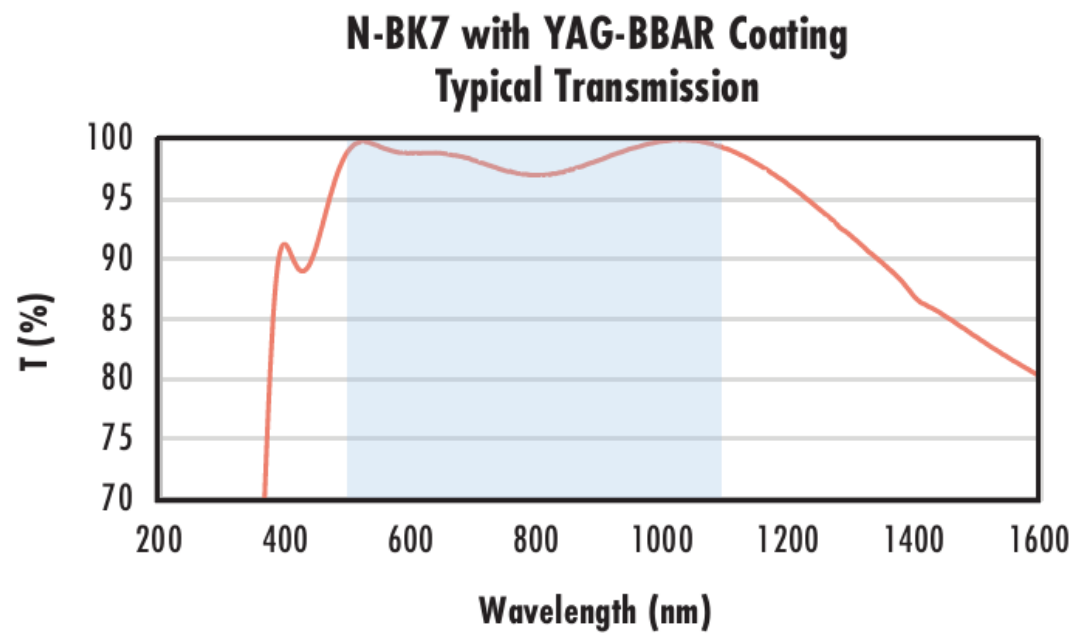
- Visible Broadband Anti-Reflection Coating with Extended UV Performance
- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [YAG-BBAR](#)

TECHSPEC® VIS-EXT 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. TECHSPEC® VIS-EXT 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 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [YAG-BBAR](#).

## Technical Information



|                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div data-bbox="231 68 1304 121" data-label="Page-Header">N-BK7</div> <div data-bbox="231 121 1304 691"><h3 data-bbox="525 148 1085 201">Uncoated N-BK7 Typical Transmission</h3></div> | <p data-bbox="1339 356 1841 403">Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV- NIR spectra.</p> <p data-bbox="1472 421 1709 445"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <div data-bbox="231 691 1304 1243"><h3 data-bbox="588 747 955 834">N-BK7 with MgF<sub>2</sub> Coating Typical Transmission</h3></div>                                                  | <p data-bbox="1339 836 1841 884">Typical transmission of a 3mm thick N-BK7 window with MgF2 (400-700nm) coating at 0° AOI.</p> <p data-bbox="1331 899 1850 946">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1436 961 1745 985"><math>R_{avg} \leq 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</p> <p data-bbox="1339 1000 1841 1047">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1062 1709 1086"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                        |
| <div data-bbox="231 1243 1304 1884"><h3 data-bbox="588 1261 1016 1356">N-BK7 with VIS-EXT Coating Typical Transmission</h3></div>                                                     | <p data-bbox="1331 1433 1850 1481">Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1331 1495 1850 1543">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 1558 1703 1581"><math>R_{avg} \leq 0.5\% @ 350 - 700\text{nm}</math></p> <p data-bbox="1339 1596 1841 1644">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1659 1709 1682"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                        |
| <div data-bbox="231 1884 1304 2493"><h3 data-bbox="583 1902 1005 1997">N-BK7 with VIS-NIR Coating Typical Transmission</h3></div>                                                     | <p data-bbox="1331 2021 1850 2068">Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1331 2083 1850 2131">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1472 2145 1709 2169"><math>R_{abs} \leq 0.25\% @ 880\text{nm}</math></p> <p data-bbox="1472 2169 1709 2193"><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math></p> <p data-bbox="1472 2193 1709 2217"><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></p> <p data-bbox="1339 2255 1841 2303">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 2318 1709 2341"><a href="#">Click Here to Download Data</a></p> |
| <div data-bbox="231 2493 1304 2896"><h3 data-bbox="592 2525 976 2614">N-BK7 with VIS 0° Coating Typical Transmission</h3></div>                                                       | <p data-bbox="1339 2659 1841 2706">Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1331 2721 1850 2769">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 2783 1703 2807"><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p data-bbox="1339 2822 1841 2870">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 2884 1709 2908"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                         |

[CLICK HERE TO DOWNLOAD DATA](#)

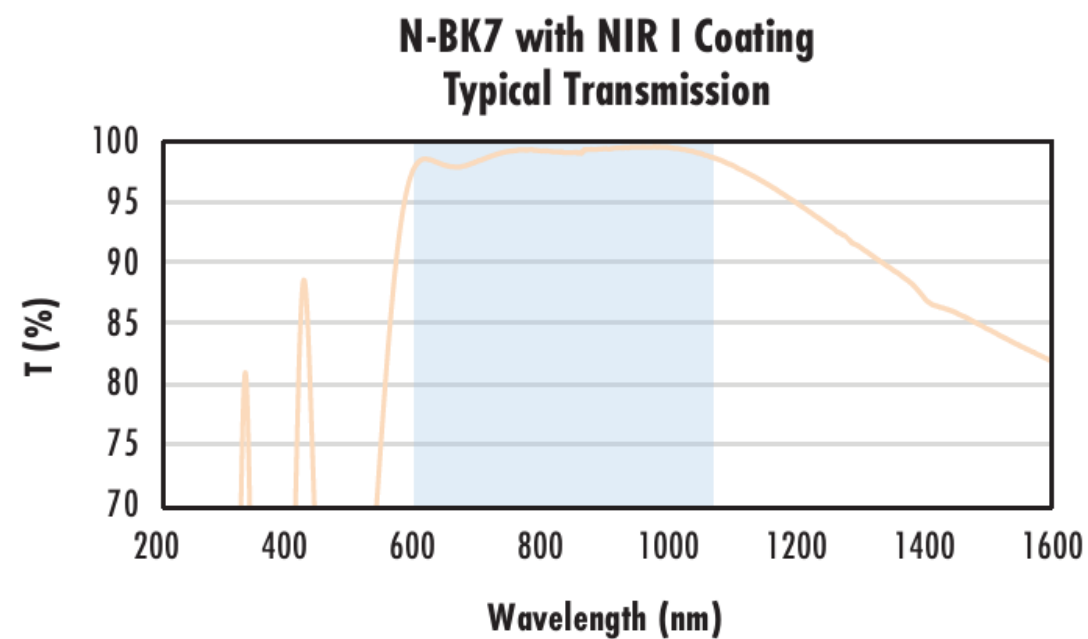
Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

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.

[Click Here to Download Data](#)



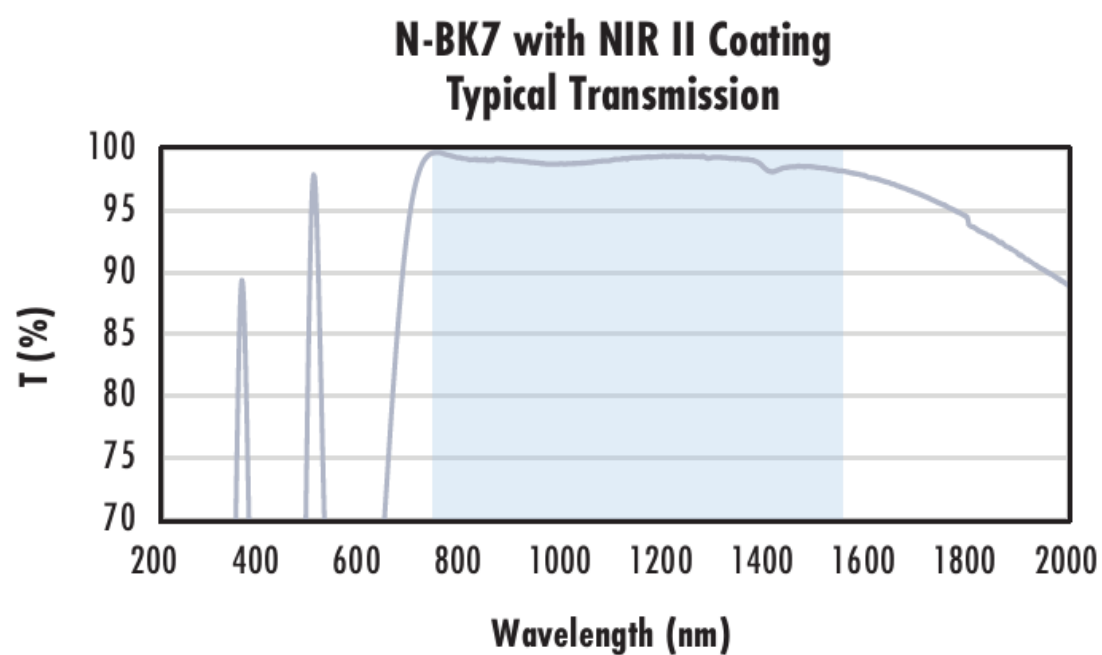
Typical transmission of a 3mm thick N-BK7 window with NIR I  
(600 - 1050nm) coating at 0° AOI.

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.

[Click Here to Download Data](#)



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](#)

## 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

