TECHSPEC®

3.0mm Dia. x 4. ...-Convex Lens

YAG-BBAR Coated Plano-Convex (PCX) Lenses

Stock **#88-775** **15 In Stock**

Other Coating Options

- 1 +

€76,50

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Volume Pricing	
Qty 1-9	**€76,50** each
Qty 10-24	**€68,50** each
Qty 25-49	**€61,00** each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:step
- Curve:pdf
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Curve (xslx):xlsx
- Zemax:zar
- Zemax:zmx
- eDrawing:eprt
- Code V:seq
- EO Spec Sheet
- **Download All**

General

Type:	Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):	3.00 +0.0/-0.025	**Centering (arcmin):**	30-45, typical
Center Thickness CT (mm):	1.80 ±0.05	**Edge Thickness ET (mm):**	1.47
Clear Aperture CA (mm):	2.5	**Bevel:**	Protective as needed

Optical Properties

Effective Focal Length EFL (mm):	4.50 @ 587.6nm	**Back Focal Length BFL (mm):**	3.5
Coating:	YAG-BBAR (500-1100nm)	**Coating Specification:**	R_{abs} <0.25% @ 532nm R_{abs} <0.25% @ 1064nm R_{avg} <1.0% @ 500 - 1100nm
Substrate: ⓘ	**N-LASF44**	**Surface Quality:**	20-10
Power (P-V) @ 632.8nm:	1.5λ	**Irregularity (P-V) @ 632.8nm:**	λ/4
Focal Length Tolerance (%):	±1	**Radius R_1 (mm):**	3.62

f/#:	1.5	**Numerical Aperture NA:**	0.33
Wavelength Range (nm):	500 - 1100	**Damage Threshold, By**	5 J/cm^2 @ 532nm, 10ns

Regulatory Compliance

RoHS 2015:	**Compliant**	**Conformance:**	
Reach 235:	**Compliant**		

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

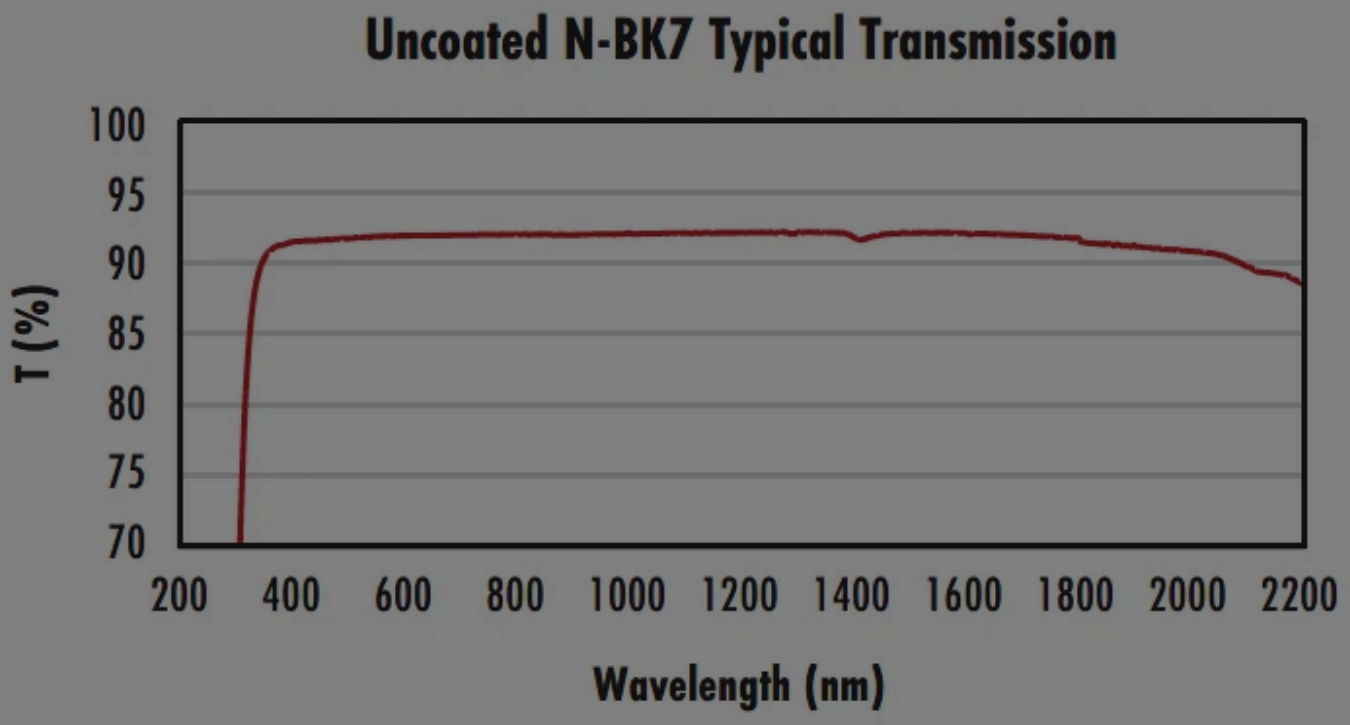
Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

Product Details

- Optimized for R<0.25% @ Both 532nm and 1064nm
- AR Coated to Provide <1.0% Reflectance per Surface for 500 - 1100nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: **Uncoated**, **MgF_2**, **VIS 0°**, **VIS-NIR**, **NIR I**, **NIR II**, and **VIS-EXT**

TECHSPEC® YAG-BBAR 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® YAG-BBAR 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 **MgF2**, **VIS 0°**, **VIS-NIR**, **NIR I**, **NIR II**, and **VIS-EXT**.

Technical Information



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

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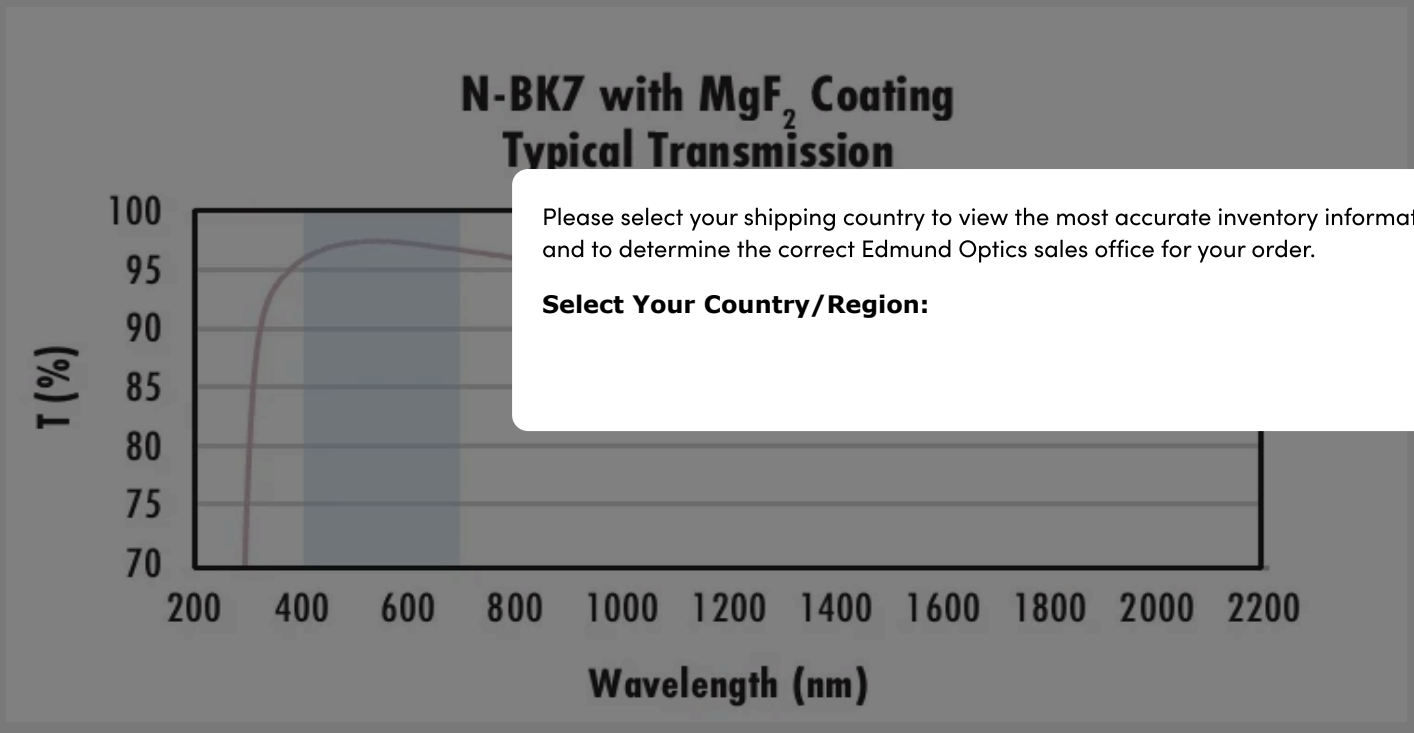

ical transmission of a 3mm thick N-BK7 window w
MgF2 (400-700nm) coating at 0° AOI.

he blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

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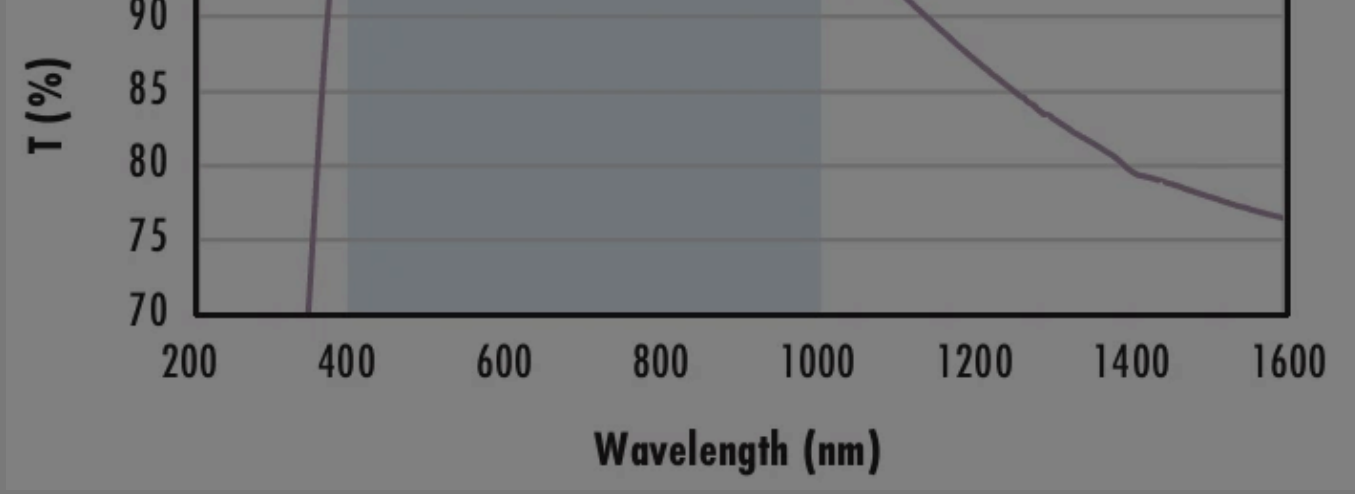

Typical transmission of a 3mm thick N-BK7 window w
VIS-EXT (350-700nm) coating at 0° AOI.

The blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

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

The blue shaded region indicates the coating desig
wavelengh range, with the following specification:

$R_{abs} \leq 0.25\%$ @ 880nm
$R_{avg} \leq 1.25\%$ @ 400 - 870nm
$R_{avg} \leq 1.25\%$ @ 890 - 1000nm

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

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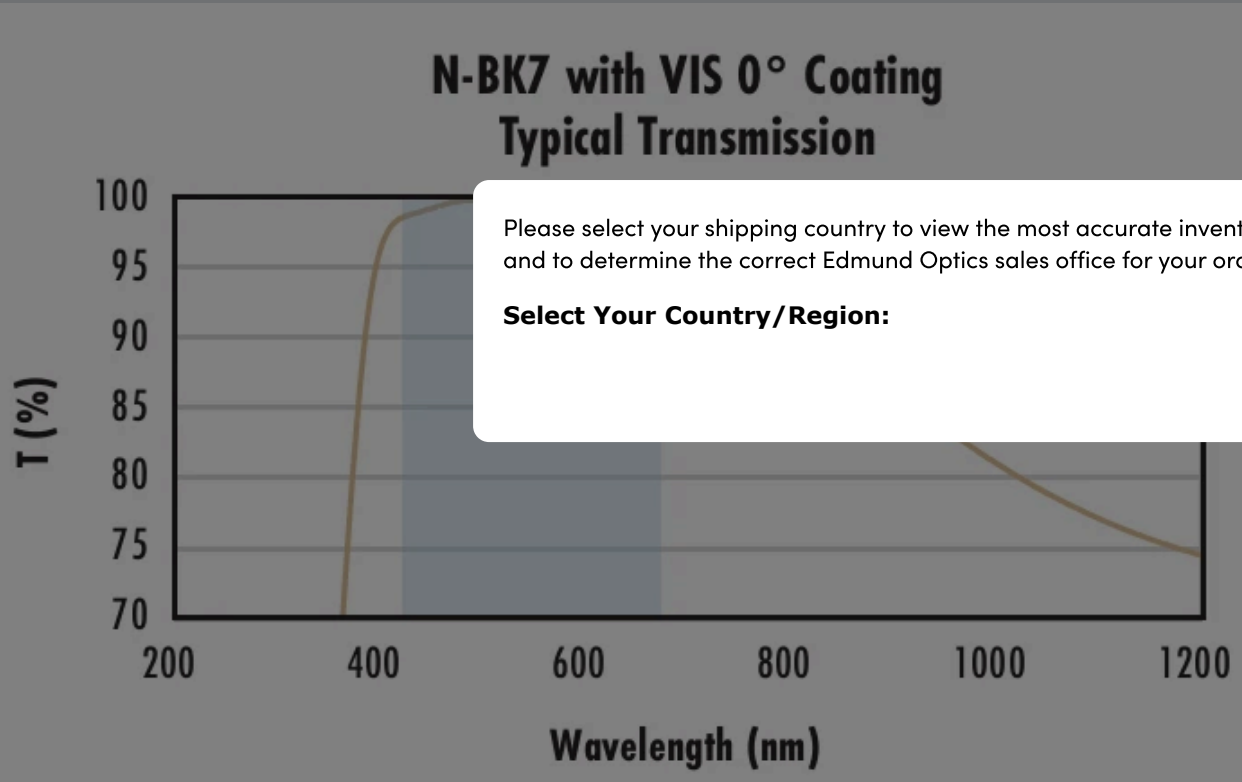

al transmission of a 3mm thick N-BK7 window wit
0° (425-675nm) coating at 0° AOI.

he blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

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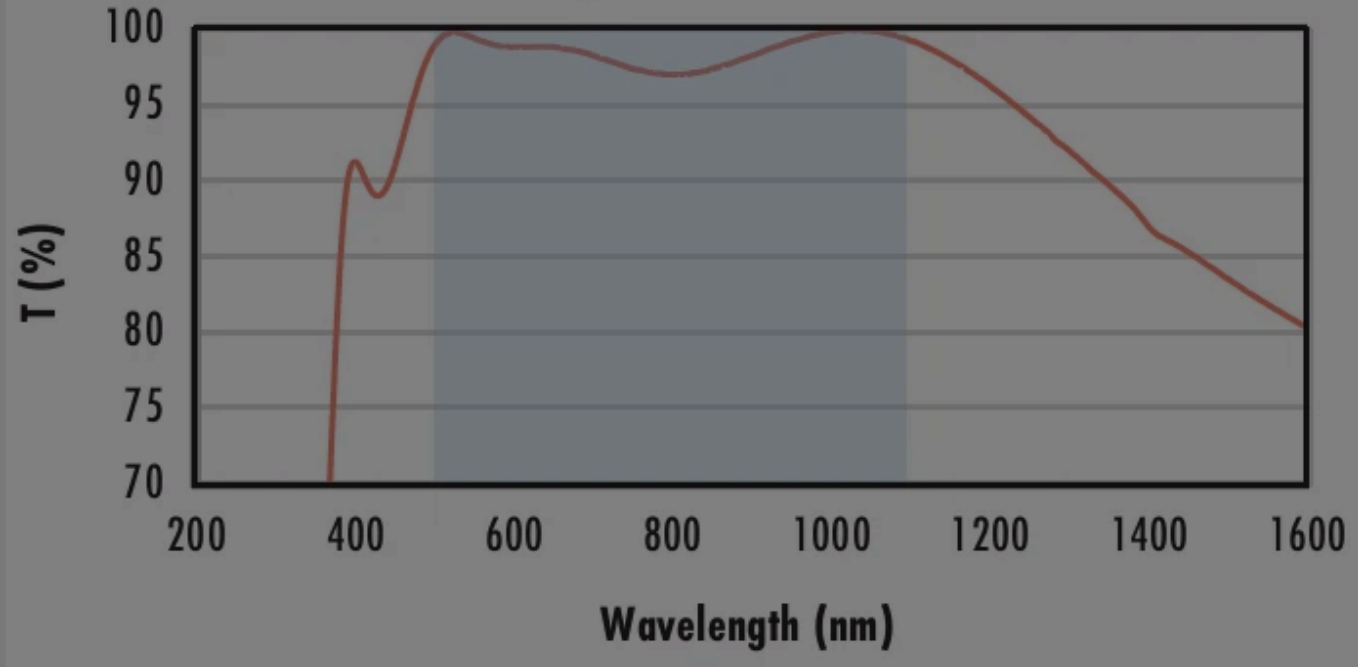

Typical transmission of a 3mm thick N-BK7 window w
YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating desig
wavelengh 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 fo
reference only.

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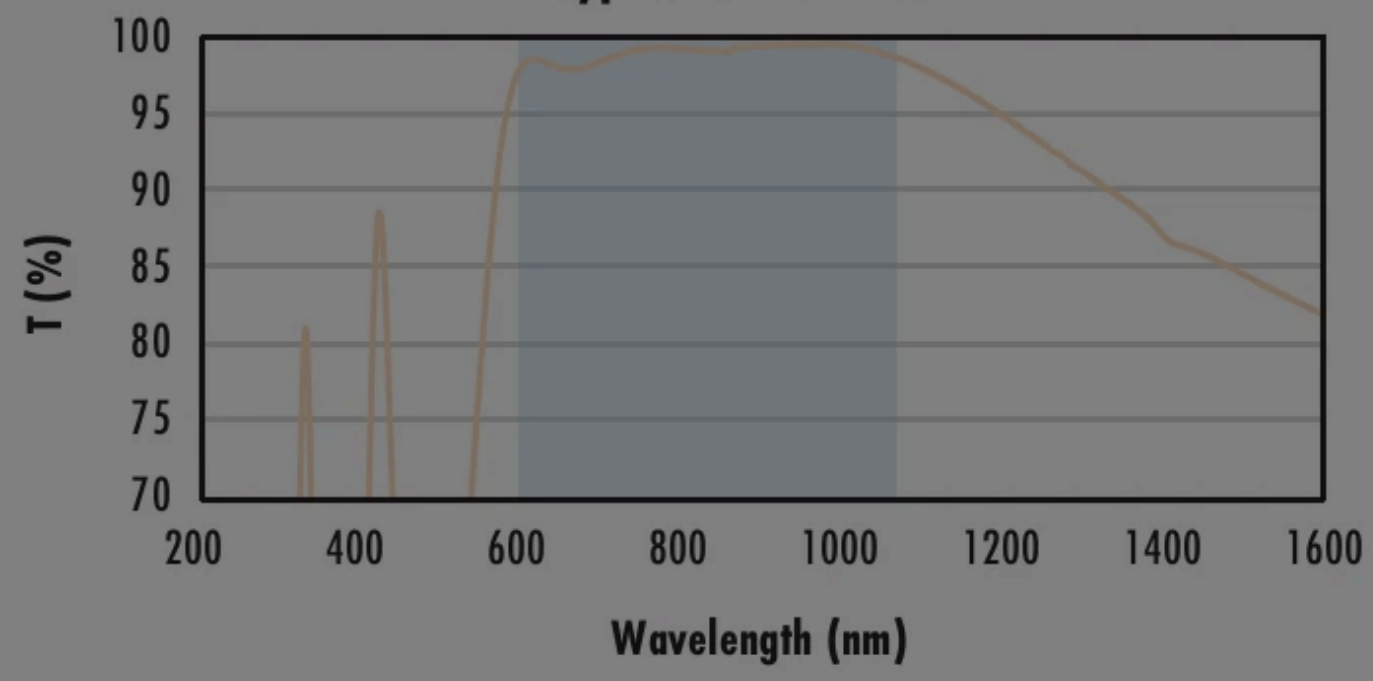

Typical transmission of a 3mm thick N-BK7 window witl
I (600 - 1050nm) coating at 0° AOI.

The blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

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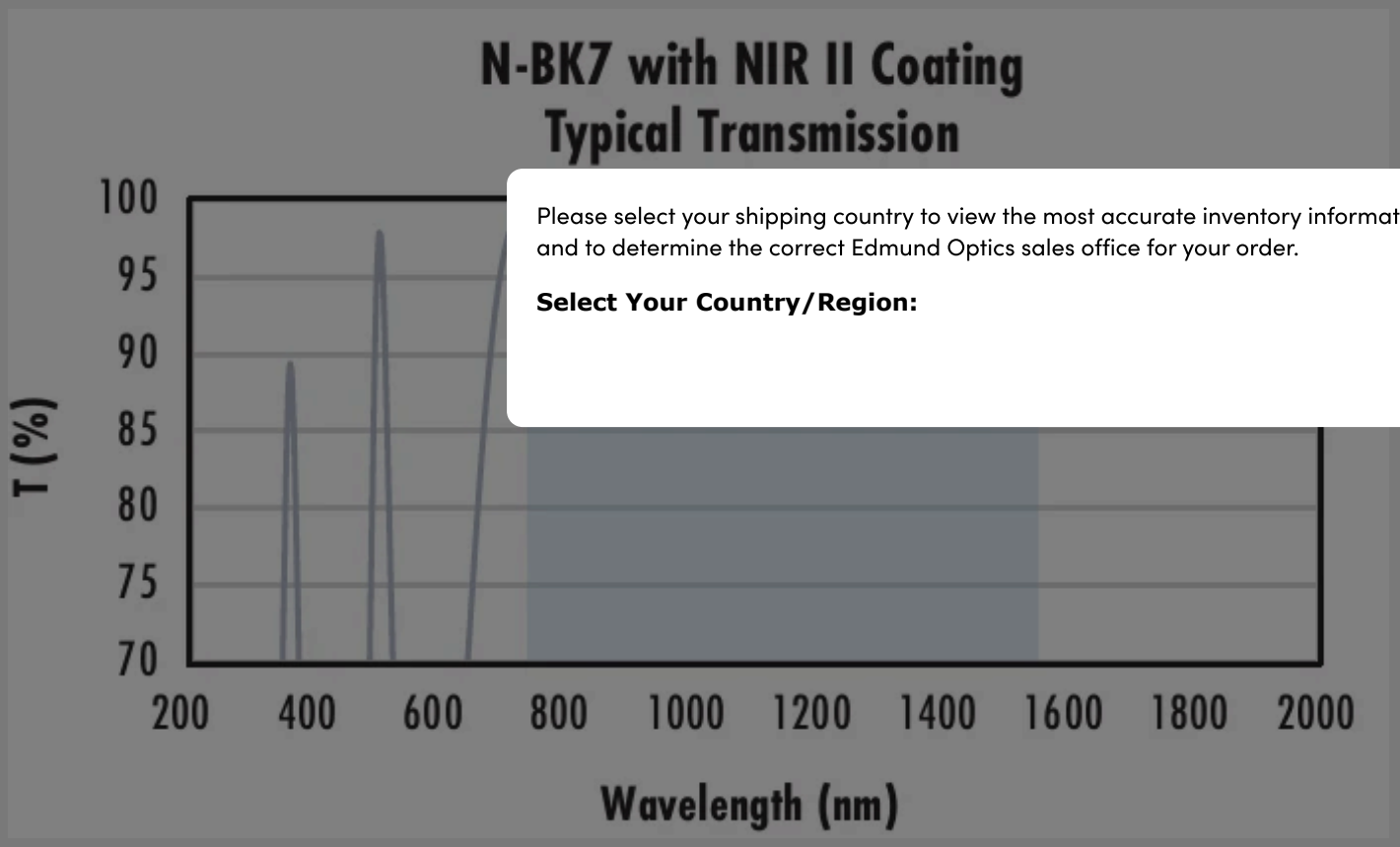

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al transmission of a 3mm thick N-BK7 window witl
II (750 - 1550nm) coating at 0° AOI.

he blue shaded region indicates the coating desig
wavelengh 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 fo
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#12-869 - Small Lens Clamp for 1-3mm Dia. Optics
€160,00

Qty

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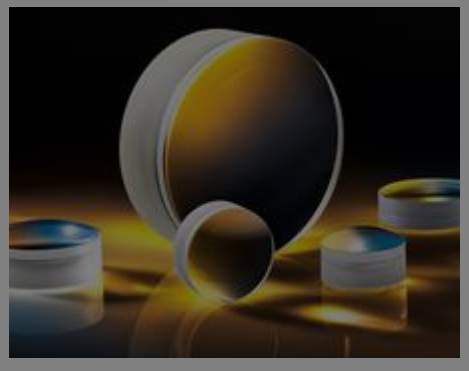

#49-270 - 3mm Dia. x 4.5mm FL, VIS 0° Coated, Achromatic Lens
€133,00

Qty

#57-607 - Air Blower with Compressor
€35,25

Qty

#36-427 - Norland Optical Adhesive NOA 68, 1 oz. Application Bottle
€41,50

Qty

#45-933 - 2.0mm Diameter, N-BK7 Half-Ball Lens
€54,00

Qty

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Media Type

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APPLICATION NOTE

APPLICATION NOTE
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An Introduction to Optical Coatings

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