

Fourier Technology

The Master Key to
Advanced Presbyopia Correction



ALSEE **Fourier**

100% Glistening-Free Hydrophobic
Fourier Optic **PRELOADED** IOL System

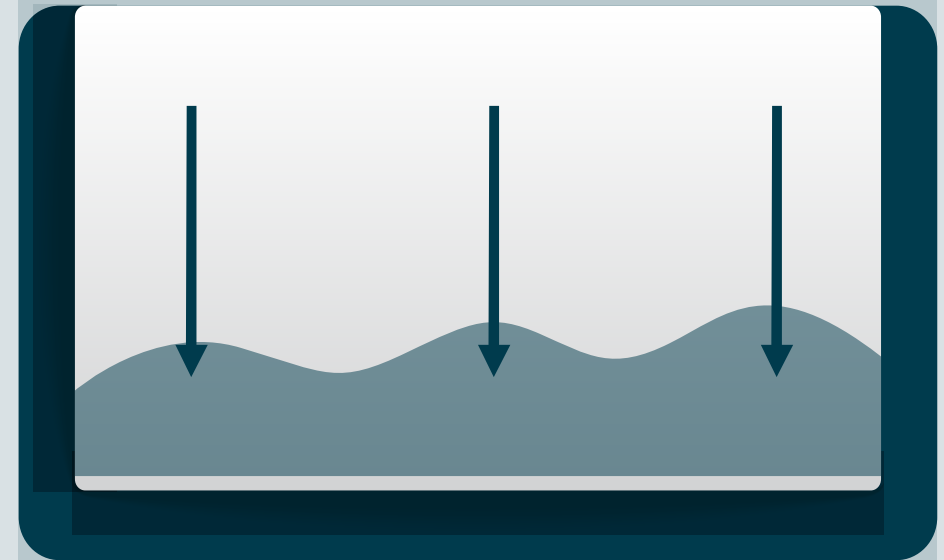


ALSANZA
Medizintechnik und Pharma GmbH

Fourier Optic's Undulatory Diffraction Profile

The advanced **Fourier Optic Technology** utilizes a unique undulatory diffractive profile to redefine visual outcomes.

This advanced technology ensures optimal functionality through improved light management.

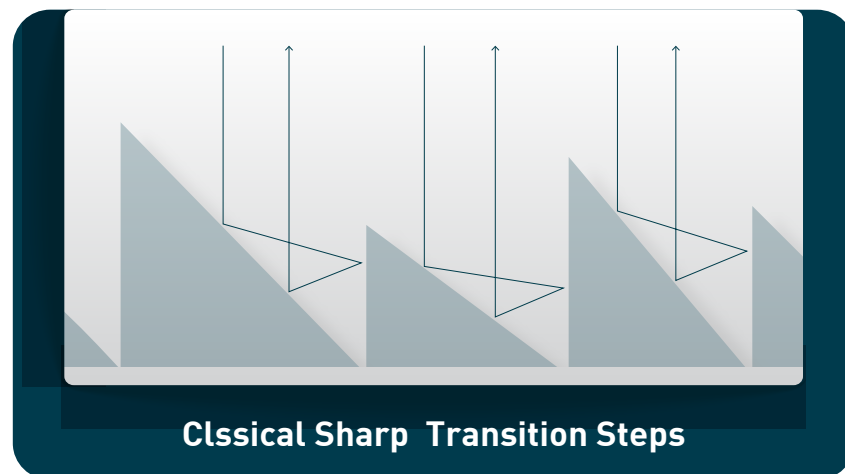


Key Advantages

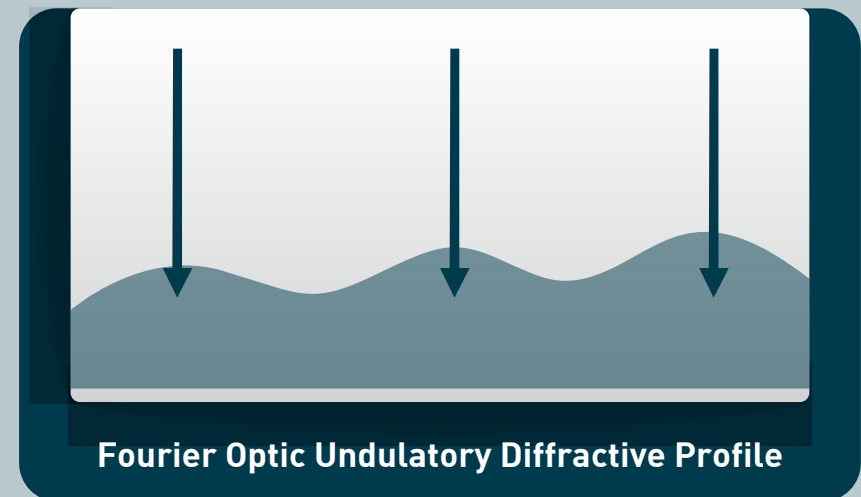
- Minimal Dysphotopsia
- High Light Transmission
- Continuous Focus

Minimal Dysphotopsia

Traditional overlapping Fresnel diffractive IOL designs consist of **sharp steps**, which cause a certain amount of light to **scatter in undefined directions**, resulting in **halo and glare**.



The **smooth, undulatory diffractive profile** of Fourier Optic **reduces light scattering**, **minimizing halo and glare** in low-light conditions for a more **comfortable night driving experience**.

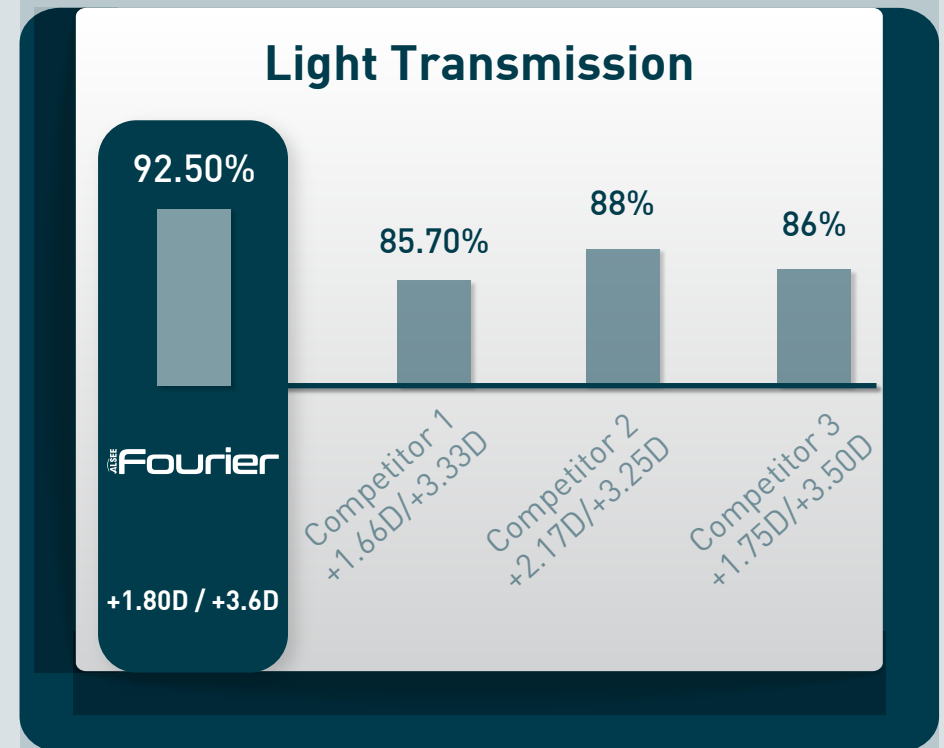


High Light Transmission

The **undulatory pattern** of **Fourier Optics** enables **up to 92.5% light transmission to the retina**, ensuring superior optical efficiency.

This advanced design significantly **enhances contrast sensitivity**, offering sharper, more vivid vision compared **to IOLs with traditional trifocal optic designs**.

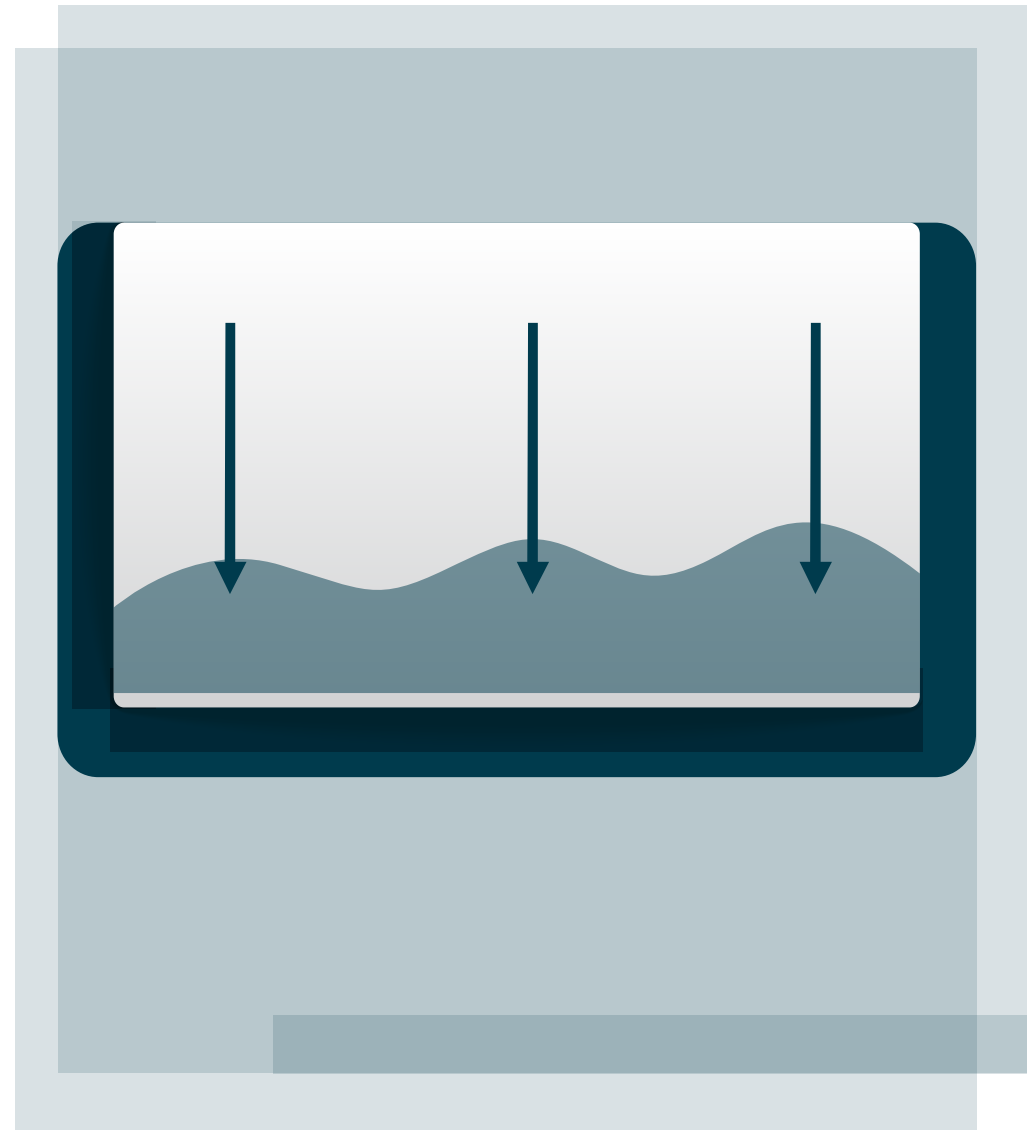
By minimizing light loss, it delivers exceptional visual experience across all lighting conditions.



Continuous Focus

The **undulatory diffractive profile** of Alsee Fourier ensures **uniform and balanced light distribution**, delivering **continuous focus** across a wide range of lighting conditions.

This design provides a **more natural visual experience**, reducing visual disruptions in everyday activities.



Superiority of Fourier Optic over Traditional Trifocal Designs

TRADITIONAL TRIFOCAL DESIGNS

- ▶ Lower light transmission Fourier to retina
- ▶ More Halo & Glare
- ▶ Loss of contrast sensitivity in mesopic conditions



TO

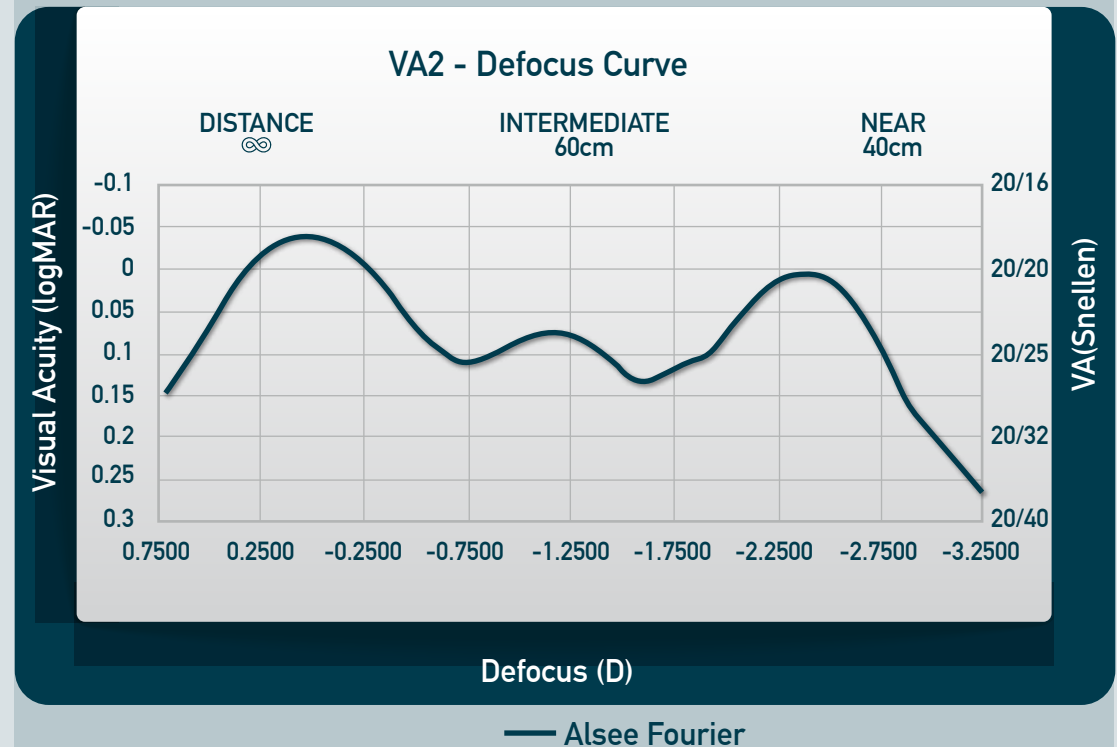
FOURIER OPTIC IOL

- ▶ Higher light transmission
- ▶ Minimised Halo
- ▶ Enhanced contrast sensitivity even under mesopic conditions



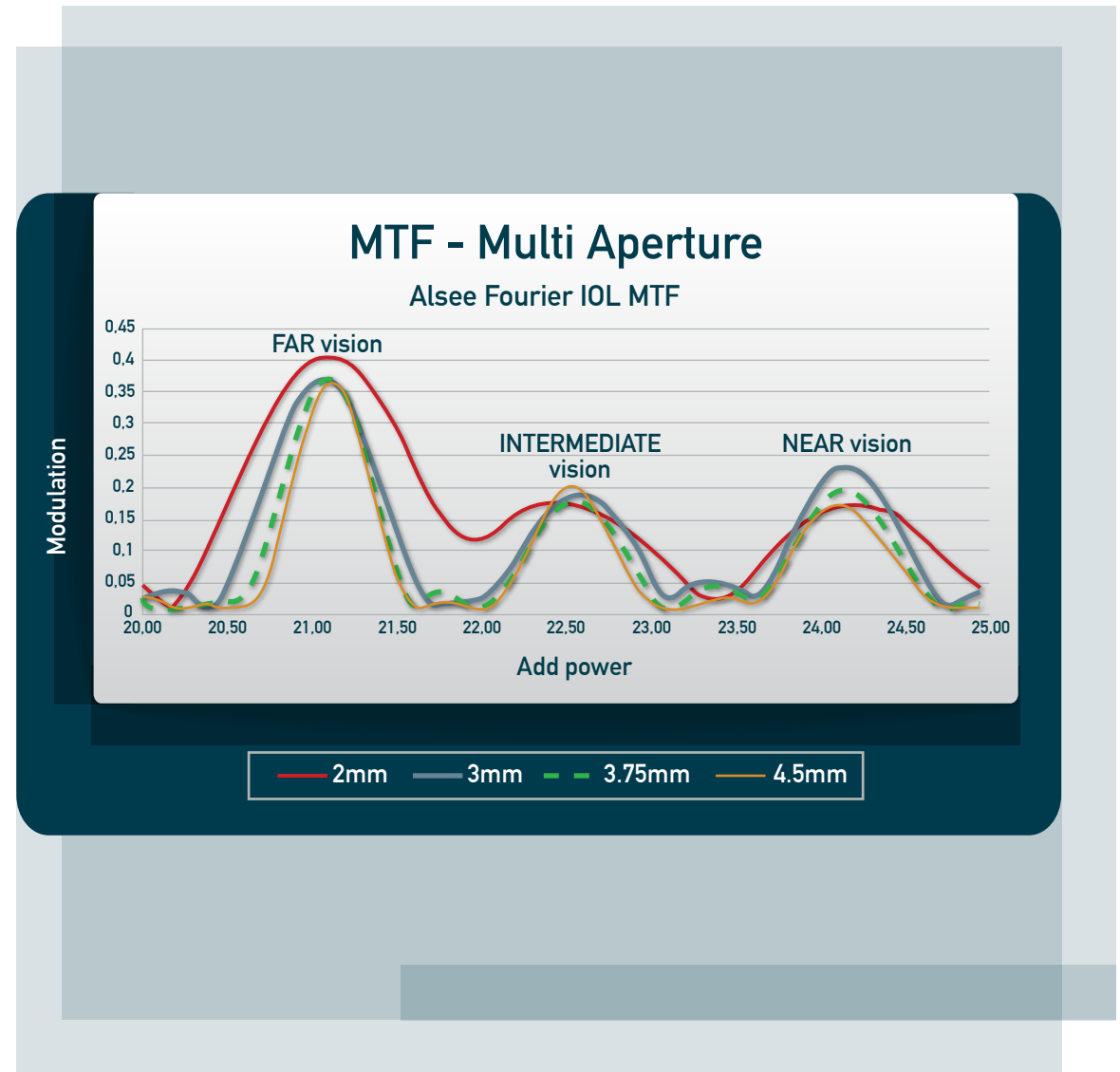
VA - Defocus Curve

Alsee Fourier ensures excellent trifocality offering improved intermediate vision for enhanced clarity at mid-range distances, making everyday tasks like working on a computer easier and more comfortable.



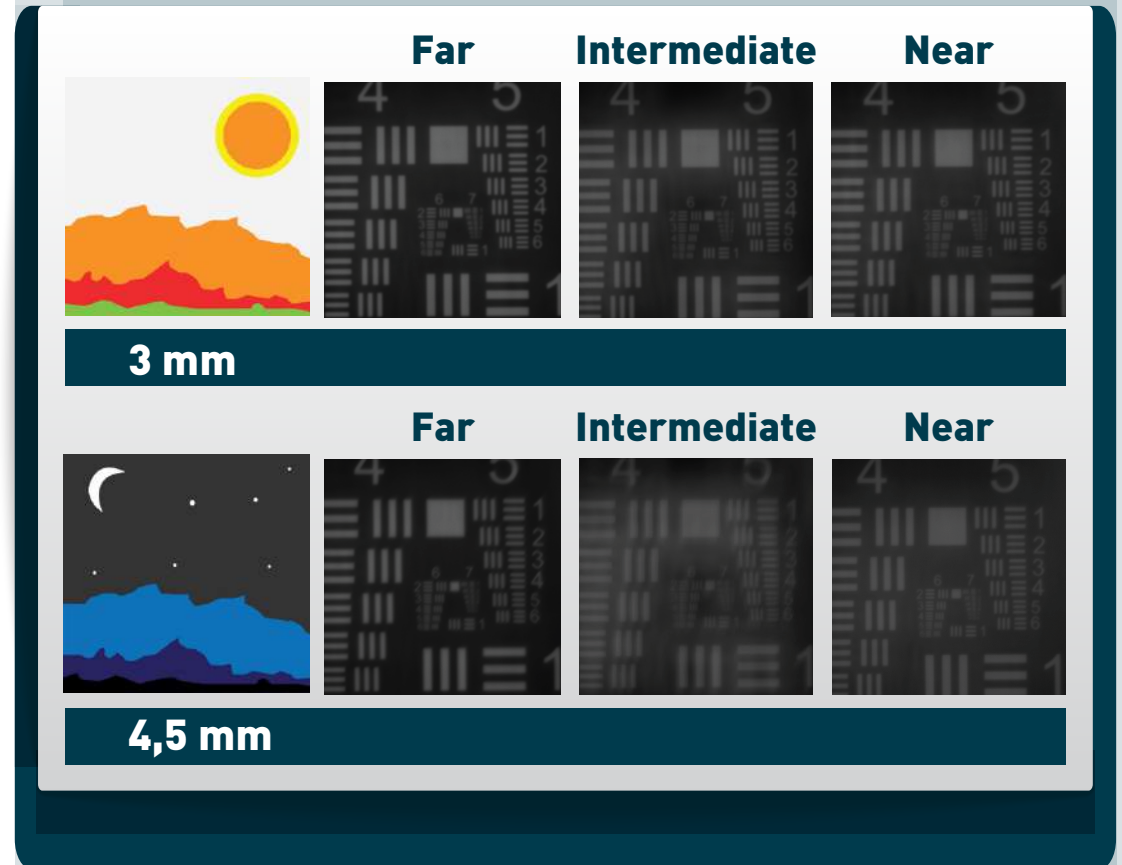
Enhanced visual quality without compromising contrast

Alsee Fourier offers good contrast sensitivity across all distance range, even under mesopic conditions.



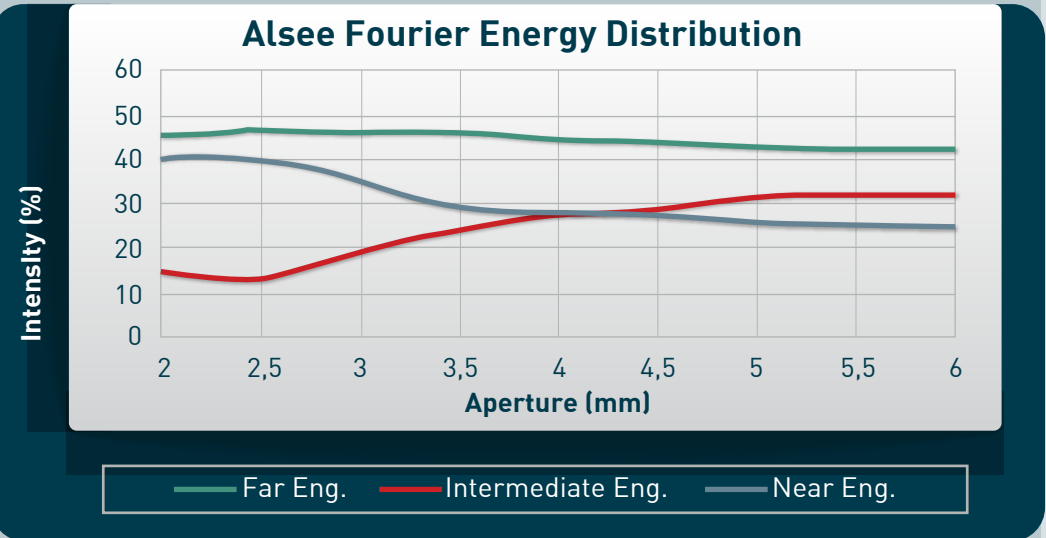
High-Resolution Vision

Alsee Fourier ensures images with good optical resolution at far distances in all light conditions.

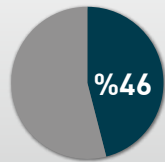


Optimized Light Distribution

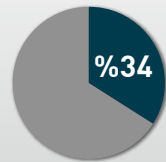
Fourier Optics is designed to provide **higher light efficiency** and **contrast sensitivity**. The **far vision** is strong at all distances, while **light for near and intermediate vision** is provided where it is most useful for the human eye, with **near vision** being very strong in **photopic conditions** and with a stronger **intermediate vision** for **darker environments**.



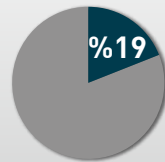
Aperture (mm)	Far	Near	Intermediate
3	%46	%34	%19



Far

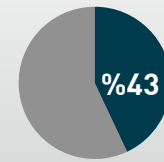


Near

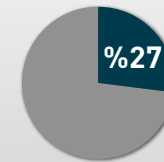


Intermediate

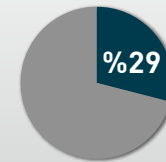
Aperture (mm)	Far	Near	Intermediate
4,5	%43	%27	%29



Far



Near



Intermediate

Product Name	Alsee Fourier Preloaded
Material	Hydrophobic Acrylic (Glistening Free)
Optic Type	Fourier Optic
Haptic Type	Arms2FIT
Haptic Thickness(wet)	0.30 mm
Optic Diameter	6.0 mm
Overall Length (mm)	13.0 mm
Addition Range	+1.80 D Int / +3.60 D Near
Available Diopter Range	10.00 D to 30.00 D (with 0.5 D steps)
Refractive Index	1.53
Spectral Transmittance	< 10% @ 380 nm ≥ 85% @ 410 nm
Op. A Constant	Aconst Manu: 118 SRK II: 118,9 SRK/T: 118,9 Haigis A0: 1,243 Haigis A1: 0,4 Haigis A2: 0,1 pACD: 5,46 Holladay/SF: 1,67 Lens Factor: 1,83
Storage Conditions	Store between -2°C and +45°C
Shelf - Life	4 years
Light Filtration	UV Filter
Injector Type	Single-use, fully preloaded IOL injection system 2.2 mm incision



Product Name	Alsee Fourier Toric Preloaded			
Material	Hydrophobic Acrylic (Glistening Free)			
Optic Type	Fourier Optic Toric			
Haptic Type	Arms2FIT			
Haptic Thickness(wet)	0.30 ± 0.02 mm			
Optic Diameter	6.0 ± 0.15 mm			
Overall Length (mm)	13.0 ± 0.20 mm			
Addition Range	+18 D Int / +3.60 D Near			
Available Diopter Range	18.00 D to 23.00 D with 0.5 D increments			
Available Toric Models	FT3	FT4	FT5	FT6
	1.50 D	2.25 D	3.00 D	3.75 D
Refractive Index	1.53			
Spectral Transmittance	< 10% @ 380 nm ≥ 85% @ 410 nm			
Op. A Constant	Aconst Manu: 118 SRK II: 118,9 SRK/T: 118,9 Haigis A0: 1,243 Haigis A1: 0,4 Haigis A2: 0,1 pACD: 5,46 Holladay/SF: 1,67 Lens Factor: 1,83			
Storage Conditions	Store between -2°C and +45°C			
Shelf - Life	4 years			
Light Filtration	UV Filter			
Delivery System				
Injector Type	Single-use, fully preloaded IOL injection system 2.2 mm incision			





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