

PhysIOL

ADVANCED OPTICAL SOLUTIONS



[FAR]



[INTERMEDIATE]



[NEAR]

FINE TECHNOLOGY

by PhysIOL

Innovative trifocal
technology

When
freedom
becomes
reality

FINE

TECHNOLOGY

by PhysiOL

The first and original patented diffractive trifocal optic

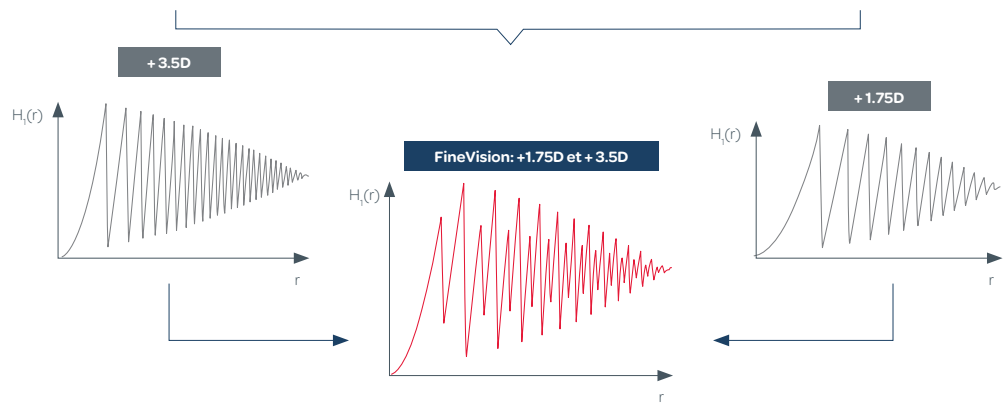
Combination of 2 profiles

The combination of two profiles* offers the patient an intermediate vision without impairing near and distance visual acuities.

This concept was designed in order to reduce the loss of light energy that any diffractive system causes.

* Patented in Belgium: BE1019161 (A5), Europe: EP2503962 (B1), International: WO2011092169 (A1), United States of America: US 8,636,796 (B2), China: ZL201180002694.7, Japan: 5480980, Australia: 2011209315, Hong-Kong: HK 1177133

Profile n°1	Diffraction orders	Profile n°2
FAR (eg. +20D)	Order 0 (determined by IOL curvature)	FAR (eg. +20D)
NEAR +3.5D	Order 1	INTERMEDIATE +1.75D
LOST (not usable) +7.0D	Order 2 (always Order 1 doubled)	NEAR +3.5D



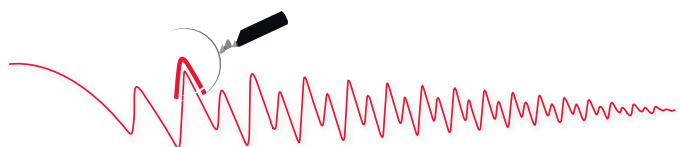
What do studies say ?

"The second order of profile n° 2 reinforces order 1 of profile n° 1. This gain of energy provides more than 86% of useful light energy depending on the pupil aperture."

Reference:
Data on file with PhysiOL.

Combination of 2 technologies

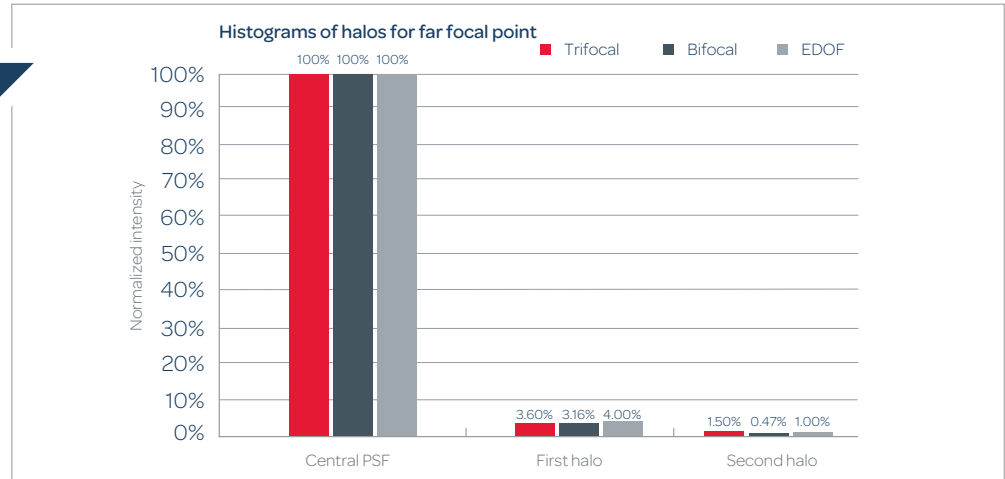
The Fine technology is the first and only optic that combines both **Convolution** and **Apodization** technologies on the entire optic surface.



Innovative trifocal technology

Convolution and Apodization benefits

Convolution reduces and limits photopic phenomena.

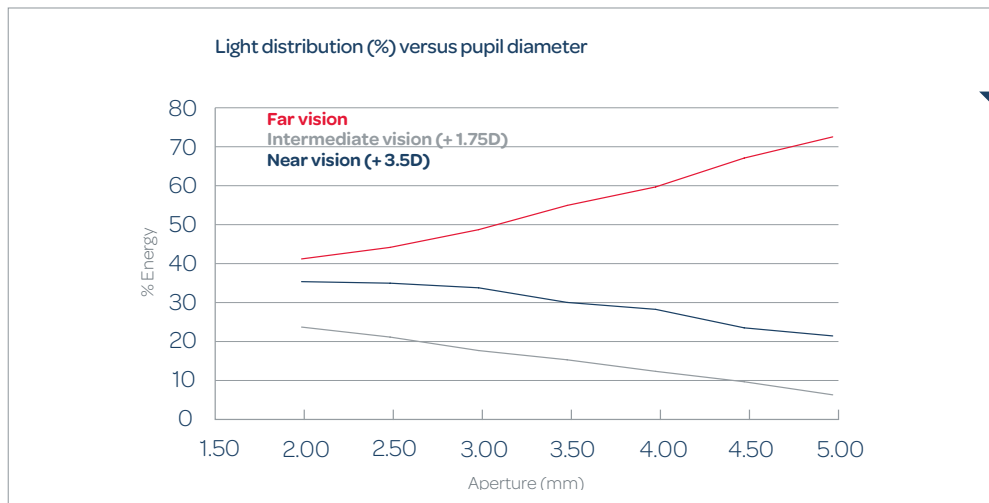


What do studies say ?

"The PSFs (Point of Spread Function) data show similar halos intensity for Fine technology and EDOF IOL."

Reference:
Data on file with PhysIOL.

Apodization optimizes the percentage of energy for far vision with the opening of the pupil.

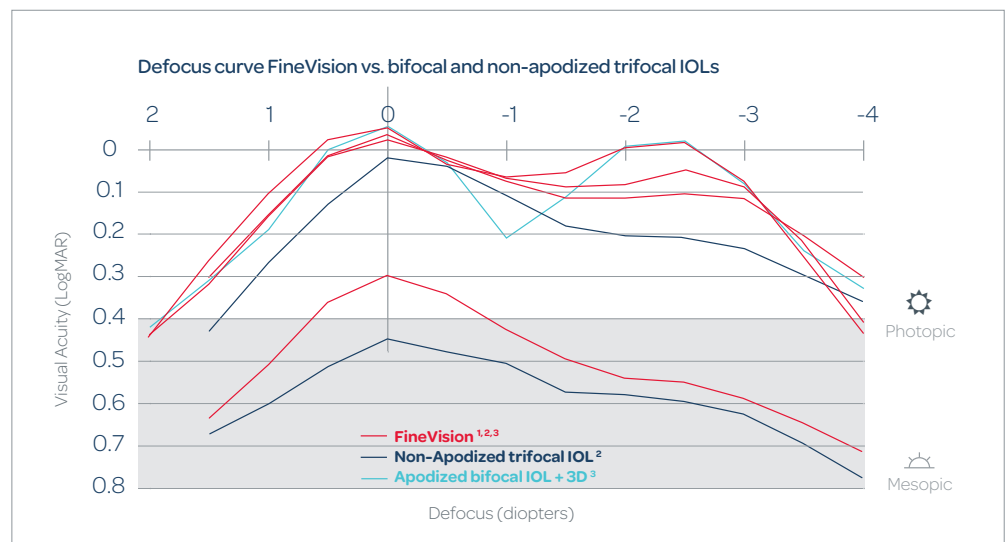


What do studies say ?

"To match the eye's natural reflex, the percentage of energy allocated to the far vision increases with the opening of the pupil."

Reference:
D. Gatinel, et al.: Design and qualification of a diffractive trifocal optical profile for intraocular lenses, JCRS 2011; 37 : 2060-2067.

FINE technology: best visual acuities at all distances



References:

1. Cochener et al.: Clinical outcomes with a trifocal intraocular lens: a multicenter study, JRS 2014; 30 (11): 62-768.
2. J. M. Martínez de la Casa, SEO 2014: Análisis de la calidad visual tras implantación de lentes intraoculares difractivas trifocales.
3. N. JC Bauer, R. MMA Nuijts, F. van den Biggelaar, A. Vanderhallen, M. Willems, ESCRS 2013: Visual function after bilateral implantation of Finevision vs Restor multifocal IOLs.

PhysIOL Fine solutions

	
<p>FINEVISION TRIFOCAL OPTIC</p>	<p>FINEVISION TORIC TRIFOCAL OPTIC</p>
<p>Trifocal diffractive optic Non-preloaded injection system Micro F: 10D to 35D power Pod F: 6D to 35D power Additional power: +1.75D for intermediate vision and +3.50D for near vision</p>	<p>Toric trifocal diffractive optic Double C-loop platform Non-preloaded injection system 6D to 35D power Additional power: +1.75D for intermediate vision and +3.50D for near vision 1 to 6D cylinder power (IOL plane)</p>
	

Other PhysIOL advanced optical solutions

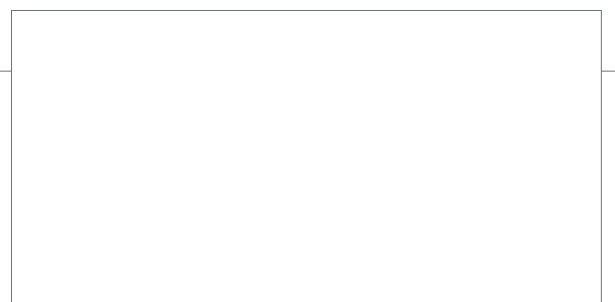
PODEYE G-FREE
MONOFOCAL OPTIC

MICROPURE G-FREE 1.2.3
MONOFOCAL OPTIC

ANKORIS TORIC
MONOFOCAL OPTIC

MICRO+ 1.2.3
MONOFOCAL OPTIC

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