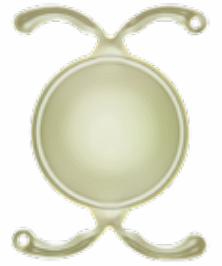




FINE VISION

3focal optic Far Intermediate Near



**THE FIRST TRIFOCAL
DIFFRACTIVE IOL**

PhysIOL

FINEVISION: UNIQUE CONCEPT

► Combination of 2 profiles**

Profile n°1	Orders	Profile n°2
FAR (eg. +20 D)	Order 0 (determined by curvature of the IOL)	FAR (eg. +20 D)
NEAR +3.5 D	Order 1	INTERMEDIATE +1.75 D
LOST (not usable) +7.0 D	Order 2 (always the double of Order 1)	NEAR +3.5 D*

Profile n°1 + Profile n°2 → TRIFOCAL IOL

Order 0 of Profile n°1 & n°2 → **DISTANCE (eg. 20.0 D)**

Order 1 of Profile n°2 → **INTERMEDIATE +1.75 D**

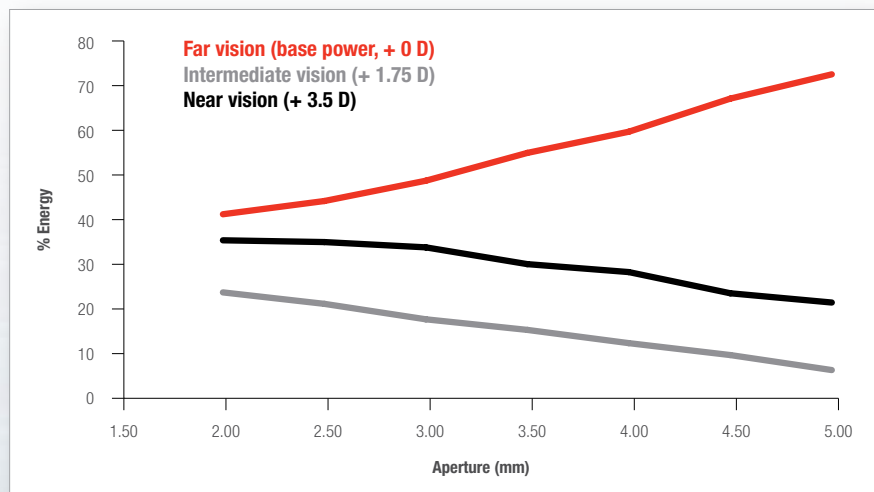
Order 1 of Profile n°1 & Order 2 of Profile n°2 ! → **NEAR +3.5 D**

* 4% out of the "20% loss" is reintegrated into useful vision

** Patented BE1019161(A5), EP2503962(A1), WO2011092169(A1), US2012283825(A1)

► Light distribution (%) versus pupil diameter¹

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



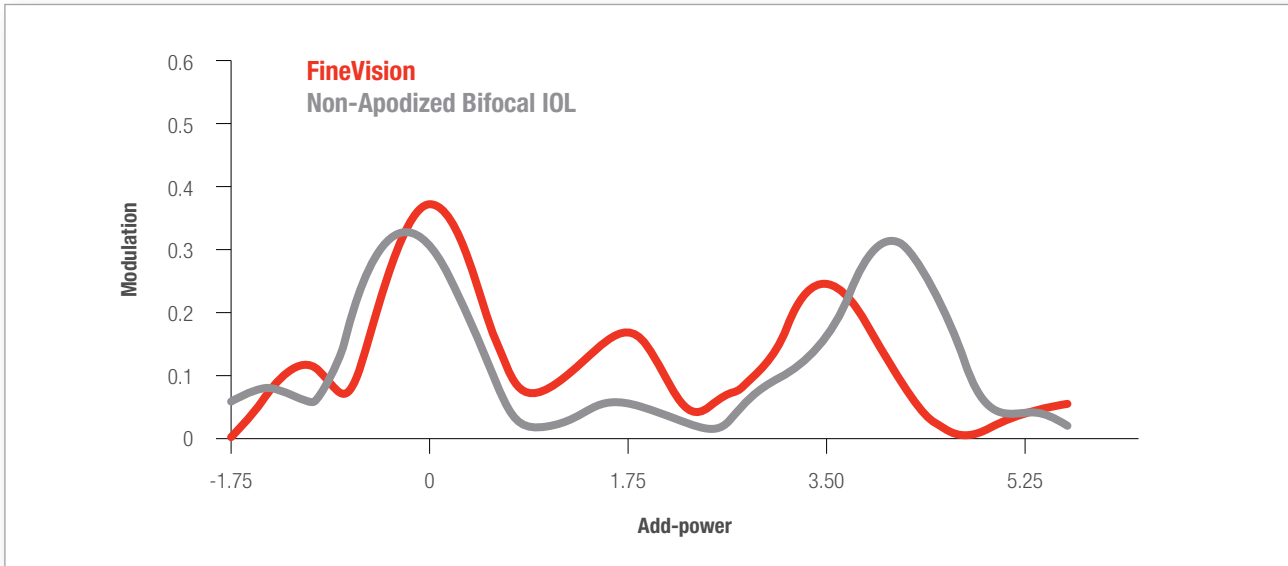
► Convolution of the FineVision optic



FINEVISION: THEORETICAL RESULTS

► Superposition ISO EYE MODEL at 3.0 mm 50 CY/DEG²

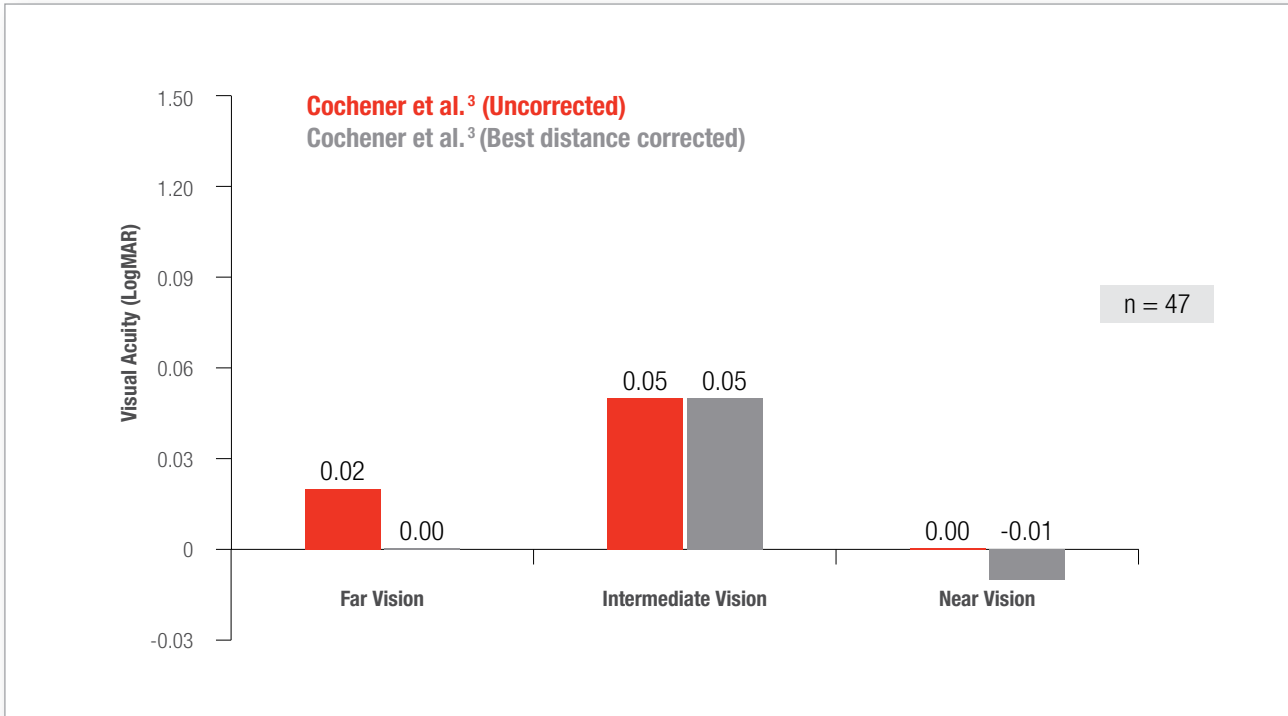
As expected, FineVision provides a real focus point for the intermediate vision.



► USAF Resolution Target Test at 3.0 mm²

	PhysIOL FineVision	Apodized Bifocal IOL	Non-Apodized Bifocal IOL	Refractive Bifocal IOL
Far				
Near				
Intermediate				

► Results of binocular Visual Acuities for far, intermediate and near vision



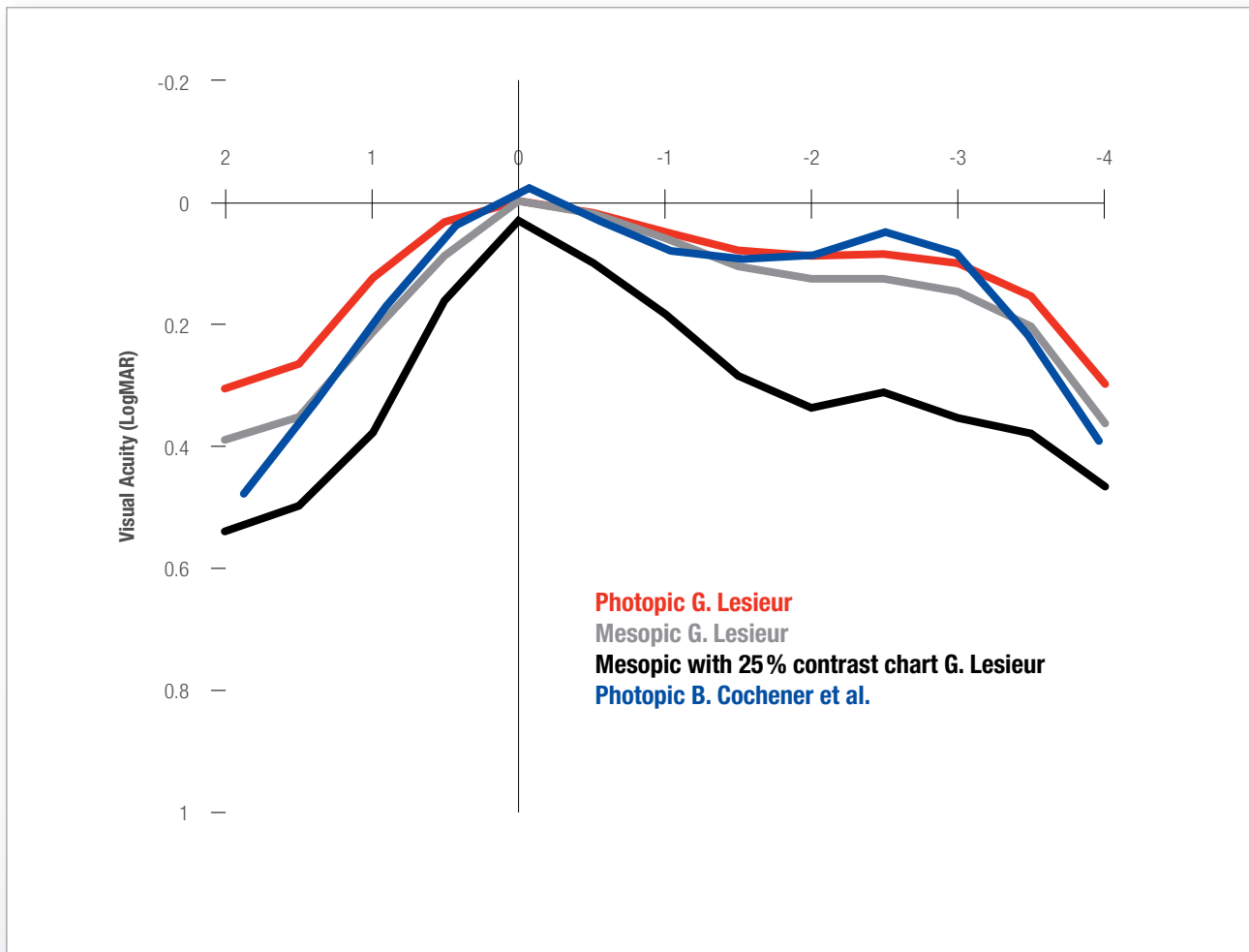
► Cumulative UIVA and UNVA binocular ⁶

100 % of the patients obtain a “J2 or better” for intermediate and near vision



CLINICAL RESULTS

► Defocus curve FineVision^{3,5}



► Some comments:^{7,9}

- *"I think the FineVision lens has the potential to outrun other lenses."*
- Dr. G. Auffarth (Germany)
- *"I am already convinced that the FineVision is the best diffractive multifocal IOL on the market."* - Pr. B. Cochener (France)
- *"The FineVision is the best thing that has happened to my surgical technique in the past years."* - Dr. J. Vryghem (Belgium)
- *"We consider this technology a step forward in the available multifocal lens designs. My patients are happier with their intermediate vision, and the near vision is made more adequate than with any other multifocal lens. Besides, the night vision complaints have decreased."* - Pr. J. Alió (Spain)
- *"So far, all patients are completely independent of glasses."* - Dr. S. Daya (UK)

► Limited complaints⁸



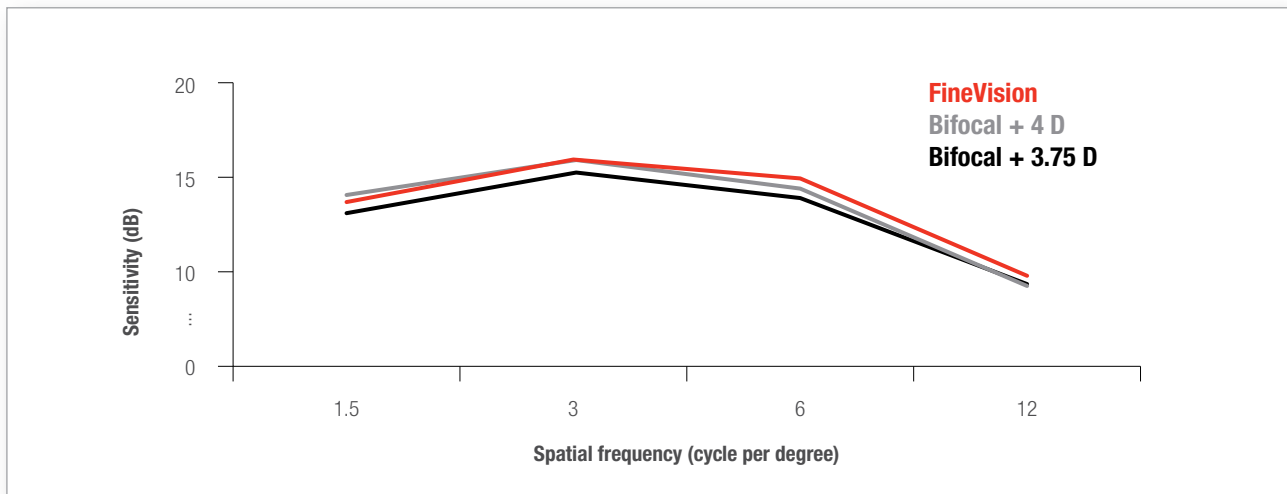
► Patient satisfaction and complaints versus other multifocal IOLs¹⁰

	FineVision	Bifocal + 3.75 D	Bifocal + 4 D
Spectacle independence	98 %	94 %	92 %
Satisfaction rate	93 %	92 %	92 %
Would redo the surgery	100 %	100 %	100 %
Halos	20 %	20 %	25 %
Glare	20 %	30 %	25 %
Night vision	20 %	25 %	40 %

► *“I was extremely surprised to see so few side effects. Driving at night is no longer a problem...”⁹*

TOLERANCE

► Contrast sensitivity in photopic conditions ¹⁰



► FineVision specifications

Technical name	 Micro F		 Pod F	
Material	25 % hydrophilic acrylic		26 % hydrophilic acrylic	
Overall diameter	10.75 mm		11.40 mm	
Optic diameter	6.15 mm		6.00 mm	
Optic	Biconvex aspheric (-0.11 μ SA) trifocal diffractive FineVision			
Filtration	UV and blue light			
Refractive Index	1.46			
Angulation	5°			
Injection system	Microincision injection			
Incision	≥ 1.8 mm		≥ 2.0 mm	
Power	+ 10 D to + 35 D (0.5 D steps)		+ 6 D to + 35 D (0.5 D steps)	
Suggested constants*	Interferometry	Ultrasound	Interferometry	Ultrasound
Hoffer Q: pACD	5.35	5.26	5.59	5.35
Holladay 1: Sf	1.60	1.48	1.83	1.57
SRK II: A	119.1	118.9	119.31	119.06
SRK/T: A	118.8	118.6	118.95	118.73
Haigis**: a0 ; a1 ; a2	1.36 ; 0.4 ; 0.1	1.04 ; 0.4 ; 0.1	1.36 ; 0.4 ; 0.1	1.13 ; 0.4 ; 0.1
Square edge	360°			

* Estimates only; surgeons are recommended to use their own values based upon their personal experience. Refer to our website for updates.

** Not optimized.

PHYSIOL AT A GLANCE

► Experienced IOL manufacturer

Created in 1986, PhysiOL has evolved from the University of Liège, Belgium, and serves the world of ophthalmology by designing, manufacturing and marketing innovative intraocular lenses responding to the strictest quality requirements.

► Attractive and fast evolving product offer

PhysiOL offers attractive and efficient solutions, in line with the fast evolution of surgical techniques:

- 2006** YellowFlex: the first hydrophilic acrylic IOL with blue-light filtration for better retinal protection
- 2007** SlimFlex-m 123 : preloaded IOL for a fast, safe and reproducible implantation without lens handling
- 2007** MicroSlim: designed for injection through incisions as small as 1.8 mm
- 2008** Micro AY and Slim AY 123 : aspheric lenses for improving contrast sensitivity and preserving depth of field
- 2009** Poly A 123 and Poly AY 123 : preloaded IOLs for all dimensional situations
- 2010** Micro A 123 and Micro AY 123 : the first preloaded IOLs for injection through 1.8 mm incisions
- 2010** FineVision : the first trifocal diffractive IOL
- 2012** PodEye : a hydrophobic acrylic glistening-free IOL;
Ankoris : a new hydrophilic toric IOL design with optimal rotational stability
- 2014** FineVisionToric: the new trifocal diffractive toric IOL

► International ambition

Our products are marketed in the Belux and France through our own commercial structure and worldwide through a specially selected distribution network in more than 45 countries.

References :

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All studies were made with Micro F

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