



VARILUX® LENS TECHNOLOGIES

TECHNOLOGY

WEARER BENEFIT

		Varilux Comfort DRx™	Varilux® Comfort Max	Varilux® Comfort Max Fit	Varilux® Physio® extensee™ CE	Varilux® Physio® extensee™	Varilux® Physio® extensee™ track	Varilux® X Design	Varilux® X Fit	Varilux® X 4D	Varilux® XR design	Varilux® XR track
Customized Reading Area	Available in all Varilux lens designs	●	●	●	●	●	●	●	●	●	●	●
Dual Booster™ Technology	Enhanced magnification for a high quality of near vision, ideal for reading fine print				●	●						
Flex Optim™ Technology	Flexibility in posture for all-day-long vision comfort		●	●								
W.A.V.E. 2® Technology	Sharp vision, even in low light		●	●			●	●	●	●	●	●
Pupilizer™ Technology	Sharper vision & enhanced contrast in all light conditions				●	●	●					
SynchronEyes® Technology	Allows wearer to easily transition between near & far				●	●	●	●	●	●		
Nanoptix® Technology	Helps eliminate “off-balance” feeling						●	●	●	●	●	●
XR-motion™ Technology	Optimized binocular vision for a patient's natural visual behavior									●	●	
Xtend® Technology	Reduces head movement within arm's reach						●	●	●	●	●	●
Personalized & FIT Measurements ⁽¹⁾	Maximizes lens performance to incorporate frame size, shape, fit and physiological characteristics of the wearer			●		●		●	●		●	
Near Vision Behavior Measurement (NVB) <i>See chart below for the 4 different NVB measurements</i>	Up to 25% near vision width extension ⁽²⁾					●					●	
Essential Blue Series®	Everyday UV protection and blue-violet light filter in a visibly clear lens ⁽³⁾	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

● = Required ▲ = Optional

1. See chart below for personalized measurement reference.

2. Internal R&D simulations – 2022 – according to patient behavior - The extension of the near vision zone is based on the patient need/results on the Near Vision Behavior test.

3. Full UV protection in the lens and filters at least 20% of blue-violet light between 400 and 455nm as stated by ISO TR 20772:2018.

DIGITAL SURFACING TECHNOLOGIES

TECHNOLOGY

LENS

DualOptix™ <i>See back for reference</i>	Varilux® XR series Varilux® X Series™ Varilux® Physio® extensee™ Varilux® Comfort Max
Full Back Side	Varilux® Physio® extensee™ Classic Edition (CE) Varilux Comfort DRx™

PERSONALIZED/FIT/NVB MEASUREMENTS

Required: ● Default Measurements Accepted: ■
Optional: ▲

	PD and Fitting Height	Pantoscopic Tilt	Wrap Angle	Vertex Distance	Eye Rotation Center Distance	Natural Head Position/Gaze Lowering*	Leading Dominant Eye	H/E Ratio or Visual Behavior*	Stability Coefficient	Reading Distance*	Lateral Offset*
Varilux® XR track	●	●	●	●		●		●		●	●
Varilux® X 4D†	●	●	●		●	●	▲	▲	▲		
Varilux® X Fit	●	■	■	■							
Varilux® Physio® extensee™ track	●	●	●	●		●			●	●	
Varilux® Comfort Max Fit	●	■	■	■							

* 1 of 4 exclusive Near Vision Behavior measurements.

† Varilux X 4D lenses are exclusive to the Visioffice® System.

VARILUX® LENS TECHNOLOGY DEFINITIONS

Essential Blue Series® Lenses

Essential Blue Series is an added option like Crizal® and Transitions® on all *Varilux* lenses. It provides everyday UV protection and blue-violet light filtration in a visibly clear lens.⁽³⁾

DualOptix™ Digital Design

Dual-sided digital lens design which controls both focus and distortion, providing clear central vision and exceptionally well controlled peripheral vision. Customizes the design and optimizes the distribution of visual zones in the lens – near, far and in-between.

W.A.V.E. 2® Technology

Wavefront Advanced Vision Enhancement™ 2 customizes wavefront control to the patient's visual requirements, resulting in sharper vision at all distances and in all lighting conditions, even at night.

Pupilizer™ Technology

Utilizes *Varilux* AI twinning technology and a state-of-the-art dynamic pupil model that predicts pupil size variations throughout the day. Reduces high-order aberrations and minimizes wavefront distortions to improve sharpness and contrast in any light condition, even in low light.

Flex Optim™ Technology

Ensures that the progression profile is customized to the wearer in order to place the power where it provides the most useful vision. Exclusively available with Varilux® Comfort Max and Varilux® Comfort Max Fit lenses.

SynchronEyes® Technology

Calculates both right and left lenses as a pair, which provides wider fields of vision and allows the wearer to transition from near to far and every distance in between smoothly and effortlessly.

Dual Booster™ Technology

A patented dual-sided lens blank, engineered between the back and front surfaces to provide a magnification effect that enhances a patient's near vision, making it ideal for tasks like reading fine print.

Nanoptix® Technology

Revolutionary patented semi-finished blank with a unique shape that minimizes peripheral lens distortions, resulting in virtual elimination of the “off balance” feeling wearers experience in standard progressive lenses.

Xtend® Technology

Unique design calculation in Varilux® X Series™ and Varilux® XR series lenses that allows the wearer to see multiple distances through a single point in the lens, significantly extending vision within arm's reach so wearers no longer have to move their heads to find the “just the right spot” in the lens.

XR-motion™ Technology

Powered by behavioral artificial intelligence, it optimizes both lenses according to the visual behavior profile of the patient, providing sharp vision even in motion.

Personalized Measurements

Standard PAL measurements plus Pantoscopic Tilt, Wrap Angle and Vertex Distance or Eye Rotation Center Distance. Assures outstanding visual performance, regardless of how the frame fits.

Near Vision Behavior Measurement

A unique *Varilux* lens measurement that personalizes the near vision zone according to a patient's posture and visual behavior by simulating a reading task on an Eye-Ruler™ 2 tablet. The device generates a unique 7-digit alphanumeric code for each customer to ensure precise lens customization.

