

Introducing New State-of-the-Art Technologies

IOT Digital Ray-Path 2 Technology

What is IOT Digital Ray-Path 2 Technology?

IOT Digital Ray-Path 2 is a new foundational technology for free-form digital lens designs. This technology is patent pending and only available from IOT.

How is IOT Digital Ray-Path 2 Technology an improvement over Digital Ray-Path?

IOT Digital Ray-Path 2 Technology allows for the intelligent use of the wearer's own accommodation within the calculation methodology. In other words, in addition to taking the physical elements of the position and rotation of the eye relative to the lens into account, we now also consider the eye's natural ability to accommodate or change focus. Patient benefits of this new technology include drastically reduced oblique aberrations across the entire visual field, greater comfort, and impeccable visual quality.

Digital Ray-Path Technology

Digital Ray-Path Technology minimizes aberrations in personalized lenses to provide improved visual quality at a specific distance associated with each direction of gaze. However, eliminating them completely is not mathematically possible. As a result, some residual power error remains, causing a slight blur.



IOT Digital Ray-Path 2 Technology

IOT Digital Ray-Path 2 harnesses the intrinsic potential of the visual system to refine the optimization process for personalized lenses. It analyzes oblique aberrations at various focal distances for each direction of gaze. **Minimization of oblique aberrations is balanced throughout the accommodative object space, providing extremely clear vision and precise focus.**



Lens Optimization with Digital Ray-Path Technology



Single vision lens, [+3.00 -1.00 x 90], 6 D base curve and 1.5 index

43% of any direction of gaze is fully optimized. The **wearer notices some peripheral blur**, though it is greatly reduced when compared to a traditional lens.

Lens Optimization with IOT Digital Ray-Path 2 Technology



Single vision lens, [+3.00 -1.00 x 90], 6 D base curve and 1.5 index

99.5% of any direction of gaze is fully optimized when the wearer accommodates slightly. IOT Digital Ray-Path 2 lenses have **virtually no full-field blur** in any gaze direction.

Steady Methodology and Steady Plus Methodology

Steady Methodology is a technological breakthrough in free-form, digital lenses. In addition to **controlling for unwanted cylinder power**, Steady Methodology addresses unwanted changes to mean power in the lateral areas of the lens. This **improves peripheral visual acuity**, reduces swim effect, and provides superior image stability and offers more comfortable vision.

Steady Plus Methodology represents an evolution of Steady Methodology. It carefully balances the needed sphere power to achieve a **perfectly symmetrical and smooth distribution** on both sides of the lens.

Distribution of spherical equivalent with Steady Methodology and Steady Plus Methodology

Rx: Plano Sph. +2.00

Traditional progressive lens

Lens with Steady Methodology

Lens with Steady Plus Methodology



New vs. Previous Lens Design Comparisons

New Lens Designs	New Lens Design Details	Previous Lens Designs
Camber Steady Plus Progressive	<p>Included technologies</p> <ul style="list-style-type: none"> IOT Digital Ray-Path 2 Technology NEW Steady Plus Methodology NEW Camber™ Technology <p>4 configurations available to fit your patient's visual needs</p> <ul style="list-style-type: none"> Camber Steady Plus Progressive Initial Configuration Camber Steady Plus Progressive Distance Vision Camber Steady Plus Progressive Intermediate Vision Camber Steady Plus Progressive Near Vision 	<p>Camber Progressive</p> <ul style="list-style-type: none"> Digital Ray-Path Technology Camber™ Technology <ul style="list-style-type: none"> Camber Steady Camber Distance Camber Mobile and Camber First Camber Near
Endless Steady Progressive	<p>Included technologies</p> <ul style="list-style-type: none"> IOT Digital Ray-Path 2 Technology NEW Steady Methodology NEW <p>4 configurations available to fit your patient's visual needs</p> <ul style="list-style-type: none"> Endless Steady Progressive Initial Configuration Endless Steady Progressive Distance Vision Endless Steady Progressive Intermediate Vision Endless Steady Progressive Near Vision 	<p>Ultimate Progressive</p> <ul style="list-style-type: none"> Digital Ray-Path Technology <ul style="list-style-type: none"> Ultimate Balanced Ultimate Distance Ultimate Mobile and Ultimate First Ultimate Near
Essential Steady Progressive	<p>Included technology</p> <ul style="list-style-type: none"> Steady Methodology NEW <p>4 configurations available to fit your patient's visual needs</p> <ul style="list-style-type: none"> Essential Steady Progressive Initial Configuration Essential Steady Progressive Distance Vision Essential Steady Progressive Intermediate Vision Essential Steady Progressive Near Vision 	<p>Everyday Progressive</p> <ul style="list-style-type: none"> Surface Power Technology <ul style="list-style-type: none"> Everyday Balanced Everyday Distance Everyday First Everyday Near
Endless Office Occupational	<p>Included technologies</p> <ul style="list-style-type: none"> IOT Digital Ray-Path 2 Technology NEW Camber™ Technology upon request <p>3 focal lengths available to fit your patient's visual needs</p> <ul style="list-style-type: none"> 1.3 m Clear vision from 35 cm (14 in) to 1.3 m (4.2 ft) 2 m Clear vision from 35 cm (14 in) to 2 m (6.5 ft) 4 m Clear vision from 35 cm (14 in) to 4 m (13.1 ft) 	<p>Office Reader II</p> <ul style="list-style-type: none"> Digital Ray-Path Technology Smart Add Technology <ul style="list-style-type: none"> 1.3 m 2 m 4 m
Endless Drive Progressive and Single Vision	<p>Included technology</p> <ul style="list-style-type: none"> IOT Digital Ray-Path 2 Technology NEW <p>Unique power distribution based on the driver's visual needs</p> <ul style="list-style-type: none"> Available in progressive and single vision A unique power distribution specifically adapted for driving A night vision zone designed to correct for night myopia 	<p>inMotion Progressive and Single Vision</p> <ul style="list-style-type: none"> Digital Ray-Path Technology
Endless Anti-fatigue Single Vision	<p>Included technology</p> <ul style="list-style-type: none"> IOT Digital Ray-Path 2 Technology NEW <p>3 power boosts available to fit your patient's visual needs</p> <ul style="list-style-type: none"> 0.50 D Those with mild symptoms of visual fatigue 0.75 D People with moderate symptoms of visual fatigue 1.00 D Pre-presbyopes and those with severe symptoms of visual fatigue 	<p>Acomoda II</p> <ul style="list-style-type: none"> Digital Ray-Path Technology Smart Add Technology <ul style="list-style-type: none"> 0.50 D 0.75 D 1.00 D
Endless Single Vision	<p>Included technology</p> <ul style="list-style-type: none"> IOT Digital Ray-Path 2 Technology NEW <p>The single vision lens designed for modern life</p> <ul style="list-style-type: none"> Impeccable visual quality and greater comfort for digitally connected wearers Optimized for the volume of accommodative space not just one point in the distance Designed to consider the wearer's accommodative ability to focus on all working distances and focal ranges 	<p>IOT Digital Single Vision</p> <ul style="list-style-type: none"> Digital Ray-Path Technology