camber Pure

Limitless clarity



Redefining Progressive Vision

camber

Clarity Without Compromise

Vision defines how we connect with the world. Whether it's reading the fine details on a page, recognizing faces, navigating busy streets, or simply enjoying the colors of a sunset—**clarity matters.**

But for many progressive lens wearers, clarity comes with a compromise. Modern lens materials make glasses thinner, lighter, and tougher than ever, yet they can also introduce **chromatic aberration.** This subtle distortion blurs edges, creates distracting color fringes, weakens contrast, and leads to eye strain.

CamberPure neutralizes these effects, delivering clarity without compromise.



CHROMATIC ABERRATION IN STANDARD LENSES

*

"Around

65%

*of progressive lenses are made from **advanced materials** like polycarbonate and high-index."*

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A New Level of Optical Performance

CamberPure represents a major new advance in progressive lens design, delivering proven optical superiority across all materials.

CamberPure doesn't just correct vision; it transforms it. Every glance brings sharp lines, pinpoint detail, and maximum contrast. Halos and blur disperse, eyes relax; the effect is **pure clarity, all day, every day.**

* Progressive Lenses Market Global Outlook & Forecast 2022-2027 and internal IOT data



The Challenge: Why Chromatic Aberration Matters

Chromatic aberration happens when a lens fails to focus all colors to the same point. Instead of crisp lines, wearers see blurred edges or distracting color fringes—effects that become **especially pronounced in low Abbe lens materials, stronger prescriptions, and larger frames.**

Common symptoms include:

- → **REDUCED CLARITY AWAY FROM THE LENS CENTER**
- → **HEADACHES, FATIGUE, OR EYE STRAIN AFTER EXTENDED WEAR**
- → **REDUCED CONTRAST SENSITIVITY, MAKING FINE DETAILS HARDER TO SEE**
- → **PURPLE OR GREEN HALOS AROUND TEXT AND BRIGHT LIGHTS**

These effects can significantly reduce comfort and ease of adaptation for progressive lens wearers.

The Solution: The CamberPure Breakthrough

CamberPure lenses use advanced **Chromatic Aberration Reduction Technology**—a breakthrough that minimizes color distortion and eliminates distracting blur.

The result is vision with exceptional clarity, vivid contrast, and sharp detail.

How it works

→ Lenses are optimized point-by-point considering the **entire visible spectrum,** with each color wavelength optimized for maximum convergence.

→ The result: **colors align naturally,** delivering vision that is clearer, sharper, more precise, and more comfortable.

This technology improves optical clarity by reducing chromatic aberration in every lens material— from CR-39 to ultra-high-index—ensuring premium clarity for every wearer.





Significant Reduction in Chromatic Aberration

20%
reduction in chromatic aberration on average across all lens materials.

Up to **19%**
reduction in **1.67 INDEX LENSES**

Up to **18%**
reduction in **1.60 INDEX LENSES**

Synergy of Advanced Technologies

CamberPure unites multiple patented design and material technologies developed by IOT and Younger Optics to deliver next-level optical performance.



CLARITY
MATTERS



Together, these breakthroughs redefine what progressive lenses can deliver. This combination **is not simply additive—it's transformative.**

CHROMATIC ABERRATION REDUCTION TECHNOLOGY

→ Minimizes chromatic aberration for crisper, more natural vision.

PATENT PENDING: US 19/340,753.

VARIABLE BASE CURVE TECHNOLOGY

→ A continuously changing front-surface curve that expands near vision zones and enhances peripheral clarity.

LENS WITH CONTINUOUS POWER GRADATION. PATENT: US8042941

DIGITAL DESIGN TECHNOLOGY

→ Personalized lens optimization based on prescription, frame, and position of wear for truly custom performance.

OPHTHALMIC LENS OPTIMIZATION CONSIDERING WEARER'S ACCOMMODATION. PATENT: US-11609437-B2

POWER OPTIMIZATION METHODOLOGY

→ Maintains consistent power across the lens, reducing swim effect and ensuring faster, easier adaptation.

→ Symmetrical power control in the intermediate and near zones improves binocular balance and overall comfort.

PROGRESSIVE LENSES WITH VARIABLE REDUCTION OF PERIPHERAL MEAN SPHERE. PATENT: US10330950

Improved Optics in All Materials

CamberPure unlocks the potential for significantly enhanced Abbe Value performance using existing lens materials—pushing the boundaries of optical performance further than ever before.

The **Abbe Value** is a measure of a material's **dispersion**—how much the material spreads out different wavelengths of light. The higher the number, the lower the dispersion – and the clearer the vision quality.

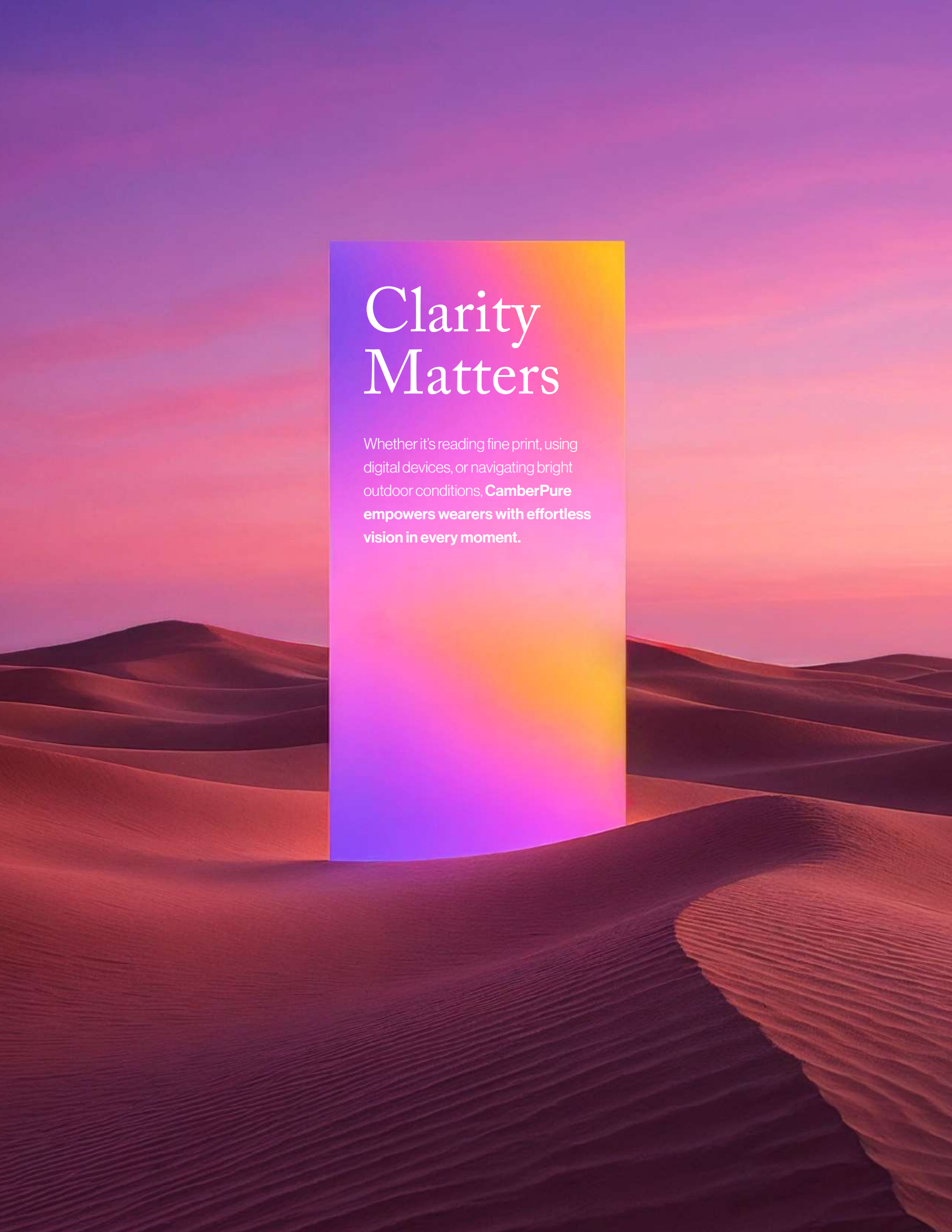
LENS MATERIALS	ABBE VALUE	EFFECTIVE ABBE VALUE WITH CAMBERPURE
Polycarbonate	30	↑~41
1.67 / 1.74	33	↑~41
1.60	43	↑~52
Trivex	45	↑~56
Hard Resin	58	↑~69

The data presented is based on mathematical hypotheses and theoretical models. It is not guaranteed to reflect real-world results and should be used for informational purposes only.



Whether you recommend plastic, polycarbonate or high index, with CamberPure your patients are guaranteed superior visual clarity.

Uncompromised quality.


Clarity
Matters
Whether it's reading fine print, using digital devices, or navigating bright outdoor conditions, **CamberPure empowers wearers with effortless vision in every moment.**

Benefits for Wearers: Clarity in Every Moment



SHARPER, MORE ACCURATE VISION

- → Minimize distracting blur around lights and text.
- → Crisp details at every distance and in all gaze directions, whether reading fine print or scanning the horizon.



NATURAL COLOR & CONTRAST PERCEPTION

- → Vivid, true-to-life colors without distortion.
- → Enhanced contrast sensitivity for richer, more defined visuals.
- → Greater enjoyment of everything from digital content to outdoor scenery.



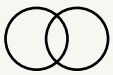
EFFORTLESS & FASTER ADAPTATION

- → Smoother, seamless transitions between lens zones.
- → Wider, more accessible near vision fields.
- → Faster adaptation for new progressive wearers.



SUPERIOR COMFORT FOR ALL-DAY WEAR

- → Reduced eye strain and fatigue, even during long hours at the computer or under challenging lighting.
- → Greater visual stability for active lifestyles and large frame styles.



LIGHTWEIGHT, STYLISH DESIGN

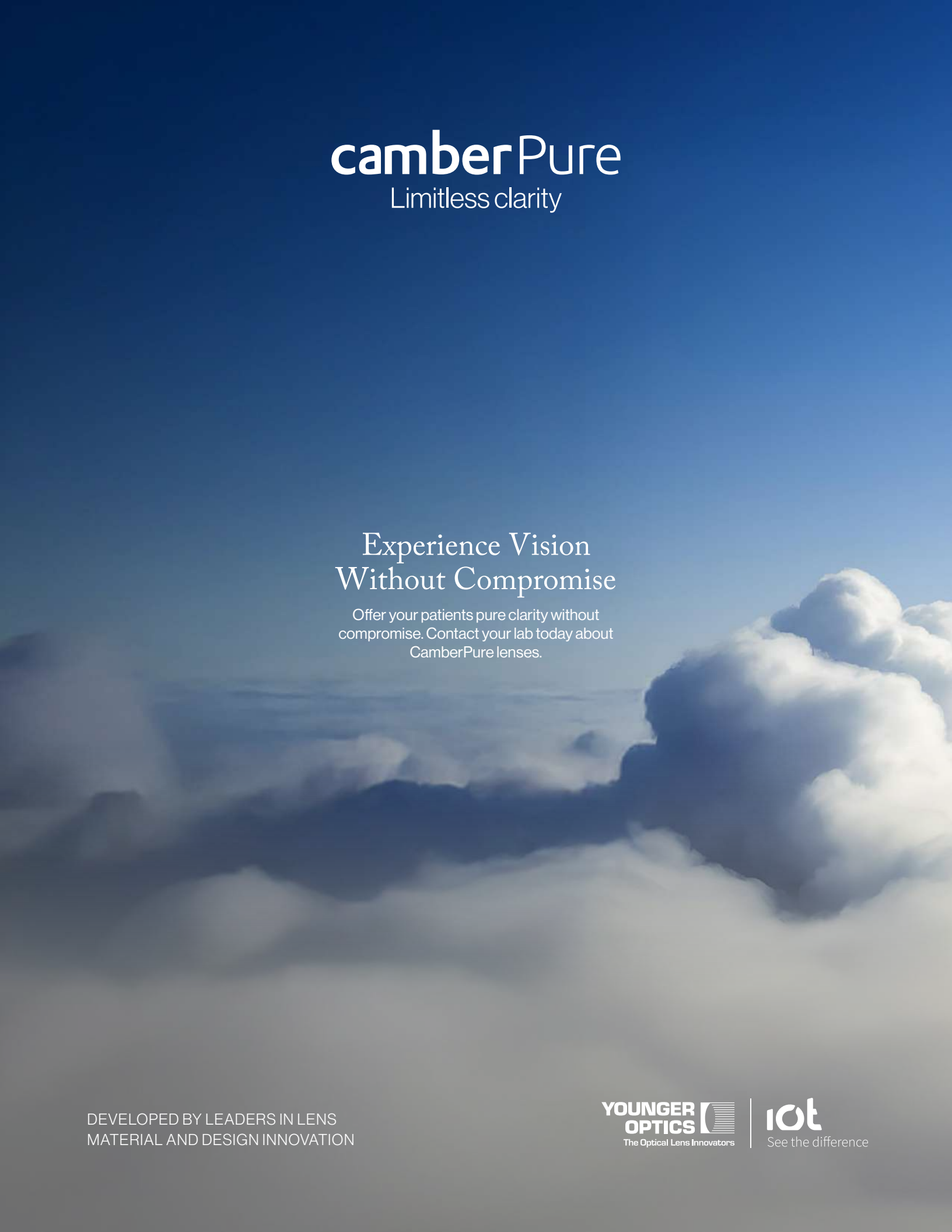
- → Thin, flat lenses without secrificing clarity.
- → Lenses that are both aesthetically pleasing and optically superior.

Ideal Wearers

CamberPure is recommended for:

THOSE SEEKING SUPERIOR VISUAL PERFORMANCE AND COMFORT	→ Professionals, avid readers, and high-prescription wearers who demand sharp, clear vision at all distances and gaze directions, with minimal distortion—vision that feels natural and effortless.
ALL PRESCRIPTION TYPES, ESPECIALLY MEDIUM TO HIGH	→ Especially recommended for wearers with mid to high prescriptions where chromatic dispersion is more pronounced, and who want enhanced clarity in every lens material.
DIGITAL-CONNECTED USERS	→ People who spend long hours on computers, tablets, or smartphones, needing distortion-free vision, reduced eye strain, and improved contrast sensitivity for prolonged digital comfort.
HIGH-CONTRAST ENVIRONMENTS	→ Active individuals exposed to bright or high-contrast settings, requiring consistent clarity across the entire lens.
COLOR-SENSITIVE INDIVIDUALS	→ Those affected by color fringing or halos, looking for true-to-life, natural color perception.
STYLE-CONSCIOUS WEARERS	→ Fashion-forward users who prefer thin, lightweight lenses or larger frames—where peripheral aberrations are more noticeable—without sacrificing performance or aesthetics.
EASY ADAPTATION TO PROGRESSIVE LENSES	→ New progressive lens wearers seeking faster adaptation and effortless visual comfort.




camberPure
Limitless clarity
Experience Vision
Without Compromise
Offer your patients pure clarity without compromise. Contact your lab today about CamberPure lenses.
DEVELOPED BY LEADERS IN LENS
MATERIAL AND DESIGN INNOVATION
YOUNGER OPTICS
The Optical Lens Innovators
See the difference