

# ARC Steady 2.0

Clear Vision. Steady Focus.

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Less  
distortion

Smoother  
transitions

Sharp vision,  
even on the  
move



Caledonian  
Optical

## ARC STEADY 2.0.

### Personalised free-form progressive lens with the best and most advanced IOT technologies.



The lens of the 21st century. The century of robotics, teleworking, the circular economy... A time of sudden changes and rapid transformations that force us to continually update, improve and adapt to new times in order not to be left behind and, consequently, lose support, trust and competitiveness.

**ARC Steady** has been engineered in that century and for that century. **The lens that best suits our current lifestyle**, a hectic and intensive lifestyle that demands the top lens on the market. Its technologies meet, on the one hand, the visual needs of the **presbyopes who demand clear and stable vision**, even when they're engaged in highly dynamic activities and, on the other hand, **reduce swim effect**. Finally, on top of that, the optics and **aesthetics of ARC Steady lenses are impossible to beat**.

The unique design **Acu tech** technology applied in **Arc Steady** gets rid of the mean power errors at both edges of the lens. Thanks to this improvement, a significant reduction of the maximum astigmatism lobes is achieved, delivering a superior lens that provides better image stability and superior comfort.





**MFH** [Minimum fitting height]  
14mm | 15mm | 16mm | 17mm | 18mm

## IDEAL WEARER

- ✓ Those who want the most innovative solution and value the aesthetics of their lenses.
- ✓ People who are looking for a lens with huge visual fields and minimal distortion.
- ✓ Wearers with all types of prescription and addition powers, especially from medium to high.

## BENEFITS

- ✓ Daily use.
- ✓ Superior visual acuity.
- ✓ Improved quality of vision.
- ✓ Precise and comfortable focus for all working distances in any direction of gaze.
- ✓ Better performance in binocular vision.
- ✓ Higher image stability for reduced swim effect.
- ✓ Superior visual quality for viewing digital devices.
- ✓ Highly personalised lens.
- ✓ Improved aesthetics in many prescriptions.

## TECHNOLOGIES



ARC Steady lenses incorporate **Camber Technology, IOT Digital Ray-Path 2 and Acu tech™ technology**. With this technology, the swim effect is significantly reduced. Finally, on top of that, the optics and aesthetics of ARC Steady lenses are impossible to beat.

## Features



### Variable base curve

Due to the variation of the base curve, the lens is built from the start with a more ideal surface.



### Flatter lenses

Camber Technology allows the laboratory to select flatter base curves while still giving the patient the curve they need for maximizing their near vision zone.



### Personalisation

The design is further enhanced, when desired, by a complete set of individualization parameters that take into consideration the unique attributes of the frame and the preferences of the wearer. If no parameters are provided, IOT Digital Ray-Path 2 will utilize default values.



### Compensated power

Lens power differs from prescribed power. The design is calculated, point by point, to ensure wearers perceive the proper power when looking through their lenses at every distance and direction of gaze, including near distances for viewing electronic devices.



### Optimised for accommodative object space

IOT Digital Ray-Path 2 incorporates the intelligent use of the wearer's accommodation into the traditional calculations for reducing oblique aberrations, resulting in a superior personalised lens. Oblique aberrations are minimised more effectively than ever before.



### Consistency

The perceived power distribution remains stable, regardless of the prescription or base curve. This is especially beneficial for high prescriptions and large or wrapped frames.



### Strict control of mean power in distance area of the lens

Significantly reduces mean power error.



### Binocular balance improvement

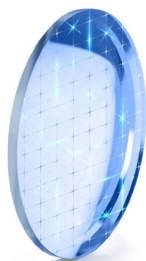
Mean power in intermediate and near areas of the lenses are entirely symmetrical.

## CAMBER TECHNOLOGY



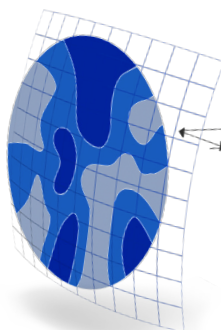
**Camber™ Technology combines complex surfaces on both sides of the lens to provide excellent vision correction.** The unique variable base curve on the front surface of the specially designed lens blank allows expanded reading zones and improved peripheral vision.

### Three essential components



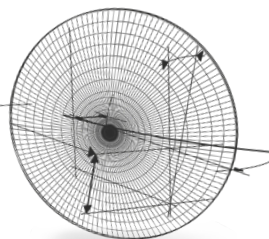
#### The Camber blank

The Camber lens blank improves on the spherical lens blank, by offering a continuously increasing base curve that is better suited for progressive prescriptions.



#### The Camber Rx design computation

Camber lens designs are mathematically compensated for peripheral aberrations and include the intelligent use of the wearer's accommodation to reduced aberrations across the entire field of vision.



#### Personalisation parameters

The Rx design computation is further enhanced by a complete set of individualization parameters that take into consideration the unique attributes of the frame and the preferences of the wearer.

### Conclusions



**100%**  
of wearers reported  
that near zone was  
easier to find with  
Camber lenses



**83%**  
of wearers  
experienced an easier  
adaptation with  
Camber lenses



**94%**  
of wearers reported  
that the near vision  
quality was equal  
or even better with  
Camber lenses

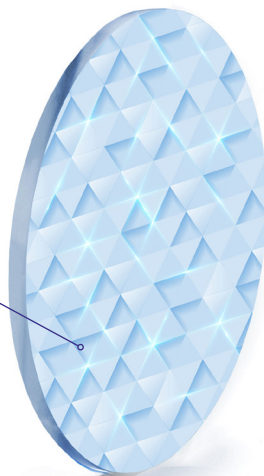


## IOT DIGITAL RAY-PATH 2 Technology, Pushing the limits of geometry in lens personalisation

ARC Steady lenses incorporate IOT Digital Ray-Path 2 Technology. **IOT Digital Ray-Path 2 pushes the limits of geometry in lens personalisation by incorporating the wearer's accommodative capacity in the final lens calculation to further minimise oblique aberrations.**

This technology incorporates this factor into each individual lens and considers the accommodative object space, the volume defined by the points within the clear visual range, for each gaze direction.

IOT Digital Ray-Path 2 works in synergy with nature. It utilizes the innate power of the human eye to refine the optimisation process for personalised lenses.



### Proven results

Oblique aberrations  
in TRADITIONAL  
LENSES



**11%**

of gaze directions are now  
optimised\* in traditional  
lenses

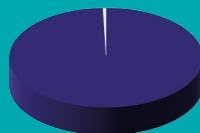
Oblique aberrations  
in PERSONALISED  
LENSES



**43%**

of gaze directions are now  
optimised\* in personalised  
lenses

Oblique aberrations  
in lenses optimised with  
IOT Digital Ray-Path 2



**99,5%**

of gaze directions are now  
optimised\* in lenses with  
IOT Digital Ray-Path 2

\* Taking into account the wearer's accommodation capacity. Blur <0.18 D.  
Theoretical study carried out on a single vision lens. [+3.00 +1.00 × 45°], Base 6 D, index 1.5.

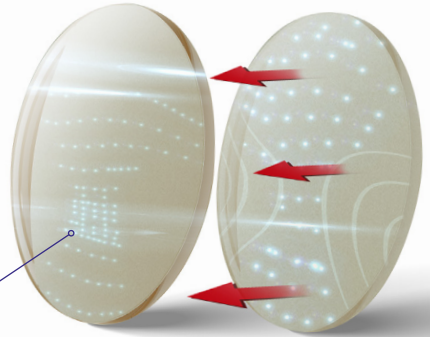
## ACU TECH TECHNOLOGY



**Acu tech™ technology focuses primarily on minimising the spherical peripheral power errors** to deliver patients a more focused and natural vision.

Acu Tech™ technology carefully balances the mean power required for intermediate and near vision, achieving a perfectly symmetrical and smooth distribution.

In addition to controlling for unwanted cylinder power, Acu Tech addresses unwanted changes to mean power in the lateral areas of the lens, providing superior progressive lenses for all lifestyles and market segments. Its evolution, Acu Tech, provides superior binocular visual performance for mid-range and near vision.



Acu Tech adds a substantial improvement in the wearer's binocular performance and provides a smoother visual experience as both eyes perceive identical powers for each gaze direction.

## Stability, stability, and more stability

Swim effect is a non-stable perception of the surroundings that causes discomfort, and reduces overall lens satisfaction, making adaptation more difficult. Lenses designed with Acu Tech provide wearers with more stable and natural vision.

## Proven results



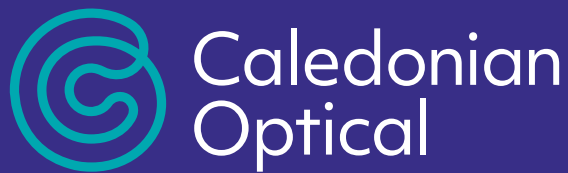
**88%**

wearers enjoyed excellent near vision



**81%**

wearers experienced a great near and intermediate vision



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*Caledonian Optical Ltd.  
Unit 4 Kirkhill Commercial Park.  
Dyce. Aberdeen, AB21 0LQ*

Tel: 01224 596 006  
Email: [info@caledonianoptical.com](mailto:info@caledonianoptical.com)  
[WWW.CALEDONIANOPTICAL.COM](http://WWW.CALEDONIANOPTICAL.COM)