

**SHAW VISION**<sup>®</sup>  
powered by **EGMA**

# Why is dynamic aniseikonia so important?

Clinical trials indicate that solving dynamic issues is the single most important aspect of patient comfort with a pair of glasses. Conventional lenses induce aniseikonia by the very nature of their monocular design.

Simply put, the image in each eye is a different size – both are clear but the brain has trouble putting different-sized images together. And when they move around, the dynamic aniseikonia makes it even harder to fuse the images. Studies have shown that it is the dynamic aniseikonia that causes many of the symptoms. And all an OD has been able to do is tell the patient, “You’ll get used to it.”

**We don’t think that’s good enough.**

Tolerance of static and dynamic aniseikonia varies widely from patient to patient but fortunately it can be predicted through vergence testing. Our recommended method is to use Risley prisms to determine the motor fusion limits. (Base down to break OD, base up to break OD, base in to break OU, base out to blur/break OU.) This establishes the vergence (motor fusion) facility in both lateral and vertical meridians in primary gaze at distance.

With the SHAW lens design tool, the optometrist can then predict the patient’s motor fusion facility and design a lens that falls within those values. Solving aniseikonia can make a noticeable difference for a surprising number of patients.

## What is dynamic aniseikonia?

Dynamic aniseikonia (anisophoria) is the difference in the ability to make compensated eye movements to achieve foveal fixation of a peripheral target object.

It is generally the result of the spectacle correction of anisometropia, meridional aniseikonia due to asymmetrical astigmatism, curvature at the spectacle plane due to the frame’s face form angle and/or prescribed prism. Other causes include extraocular muscle paresis and oculomotor anomalies.

## Customized for how your eyes work together.

**Conventional lenses don’t take into account the fact that your eyes work together as part of an integrated visual system. SHAW lenses are the only lenses customized to take advantage of how your eyes work with each other to give you the best vision possible. And this makes the SHAW lens the most comfortable glasses you’ve ever worn... guaranteed.**

### Unique Measurements

Only your optometrist can make the complex measurements we use to design a SHAW lens. Your optometrist is the best source for quality eyeglasses.

### Bigger Binocular Field of View

As you can see in the comparison below, you’ll experience a bigger field of binocular view (blue) and less double vision (pink) with the SHAW lens all the way from one edge to the other.



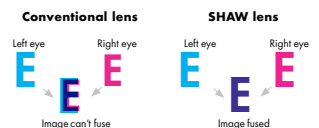
This person was having trouble reading comfortably with her conventional progressive lens. By balancing the images, SHAW lenses gave her clear vision for reading and enhanced binocular vision overall. The improvement in comfort was dramatic.

### Best Glasses – Guaranteed

You’ll notice the difference as soon as you put them on. If you don’t, we’ll make it right or you don’t pay. It’s that simple.

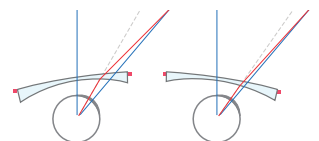
### Image Size Matching

The patent-pending SHAW lens design method reduces the disparity in image size to give you the most comfortable vision possible. Even a small difference can cause big problems. You’ll find your eyes experience less stress with SHAW lenses.



### Prismatic Effect Compensation

As your eyes move across the lens, traditional lenses create all kinds of distortion and double vision. This is because your eyes aren’t working together.



SHAW lens design makes it easier and faster for your eyes to maintain clear single vision as they move across the visual field – especially through the edges of the lenses. This increases the usable area of the lenses and reduces swim in your peripheral gaze.



International Patent Pending  
PCT/CA2012/000743

### Distortion Elimination

Our advanced binocular digital design reduces unwanted distortion in the periphery. This can make all the difference – especially for contact lens wearers who don’t like wearing glasses.



### Optimized Reading Zone

Reading is an essential skill and one of life’s pleasures. We design each person’s lenses to ensure a comfortable reading zone.



**Cherry Optical, Inc is an Authorized Shaw Vision Manufacturing Laboratory. To become a distributor of Shaw Vision lenses go to [shawlens.com](http://shawlens.com) and register your practice to open an account. You’ll receive all the tools you need to start prescribing. Have questions? Please contact Shaw Vision directly at (877) 796-9944.**

  
**Cherry Optical, Inc**  
PRODUCING VISION TO THE HIGHEST DEFINITION

# Differentiate your practice.

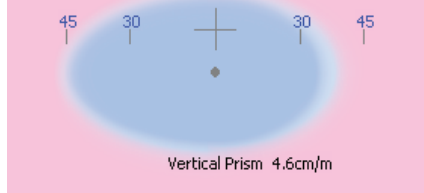
Show your patients the difference you and the SHAW lens can make to their vision – before they buy!

Eyeglasses are becoming commoditized. With online optical the message is that eyeglasses are simple devices. We both know that is far from the truth. Using the SHAW lens app, you can demonstrate the outcome that you and the SHAW lens can make to their vision. It's a great tool to help you demonstrate the difference you bring. And because of our passion to optometry, the SHAW lens is only available from an authorized independent optometry practice.

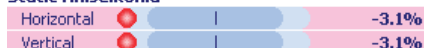
## Conventional lens

### Binocular Field of View

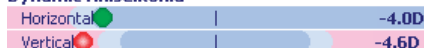
Aniseikonia uncorrected  
40% Binocular



### Static Aniseikonia



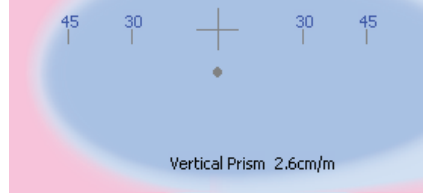
### Dynamic Aniseikonia



## SHAW lens

### Binocular Field of View

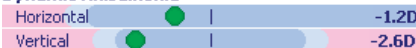
Static Aniseikonia Solved  
80% Binocular



### Static Aniseikonia



### Dynamic Aniseikonia



The final design screen contains all the information for the optometrist to make an informed decision on lens design. Included is a direct comparison of the binocular field of vision of the SHAW lens and a conventional lens (dark blue = adapt, pink = never adapt), and a comparison of static and dynamic aniseikonia (blue bar indicates measured patient limits, dot indicates lens performance within those limits, green = good, yellow = OK, red = bad)

Binocular vision maintained Binocularly stressed Binocularly absent (diplopic)



## When to use the Shaw Lens.

All glasses create aniseikonia to one degree or another. And some patient's adapt easily, while others do not. It's hard to test for, and, you can't predict its impact simply by looking at a prescription. But with the SHAW lens method you don't have to guess.

Use motor fusion limits with our lens design tool and you can see predicted patient binocular vision problems and solutions. Use it for every patient and know for sure when to use a SHAW lens. In fact, the University of Waterloo and the University of Auckland both use the SHAW lens algorithm as a best practice for every patient.

These case studies give a good understanding of where the SHAW lens technology has already had some big impact on patient comfort. You can see more at [shawlens.com](http://shawlens.com).

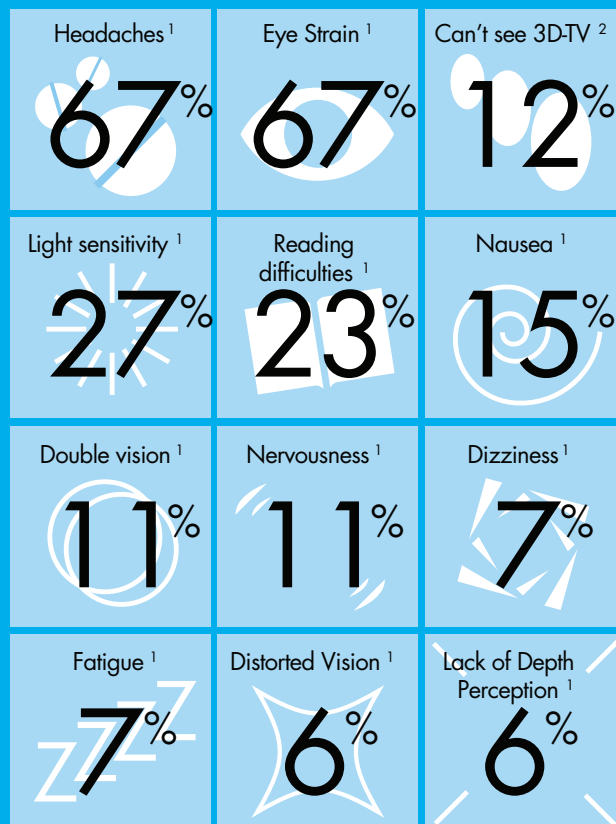
- Amblyopia
- Anisometropia
- Antemetropia
- Astigmatism
- Contact Lens Wearers
- Prismatic correction
- Refractive surgery
- Presbyopes (new to glasses)

Patient symptoms can indicate negative effect of their current glasses.

- Headaches
- Eye strain
- Distortions in peripheral gaze
- Trouble reading
- Double vision
- Inability to see the 3D in 3DTV

But why guess? Perform the SHAW lens method for all patients and know for sure. You can see when a SHAW lens will make a difference for a patient, and when it won't. After all, less aniseikonia is always better.

## Symptoms of Aniseikonia



<sup>1</sup> B. E. Bannon, W. Triller, Aniseikonia - a clinical report covering a ten year period. Am. J. of Optometry, 1944. 171.  
<sup>2</sup> 3D Vision Council. Vision Institute, 2011