

Corneal Topography

Also known as videokeratography or corneal mapping, corneal topography represents a significant advance in the measurement of corneal curvature over the previously used method, keratometry.

Topography is a method of 'mapping' your eyes, specifically the cornea, using a very sophisticated computer and software. We use corneal topography to take and analyze thousands of measurements in just seconds. The data from the measurements is provided in the form of a colored map.

The test provides detailed, accurate information about the shape and curvature of the cornea. Just like topographical maps of a land mass, the colors on the corneal topograph show us how your cornea looks. Blue and green represents flatter areas of the cornea and orange and red represent steeper areas.

The corneal topograph is made by a computer linked to a lighted bowl with a pattern of concentric rings inside it. You're seated at the bowl with your forehead braced against a bar, and the technician lines you up properly and takes the picture. The procedure is painless and very fast.

We use the information from a corneal topograph to evaluate and correct astigmatism, monitor corneal disease and detect irregularities in the corneal shape. Measuring astigmatism is important for planning refractive surgery, fitting contact lenses and calculating intraocular lens power.

The topographical map and computerized analysis reveals any distortions of the cornea, such as from keratoconus or corneal scarring. This information is necessary if you're being considered for refractive surgical procedures, such as LASIK.