Alcon WaveLight Oculyzer:

The integrated, rotating **Scheimpflug camera** takes up to 50 pictures in real-time measurement with up to **138,000 measuring points**. The rotating measurement process captures images with a fine meshed dot matrix in the center, providing high-resolution data from the corneal center and enables a three-dimensional analysis.

In addition to integrating an even higher resolution camera than the Oculyzer™ diagnostic device, the WaveLight® Oculyzer™ II diagnostic device features the advanced Holladay/Holladay EKR Detail Report and the Belin/Ambrosio Enhanced Ectasia Display.

**The Holladay Report and Holladay EKR Detail Report supply data for calculating optimal IOL refractive power for patients who have undergone previous refractive corneal surgeries such as LASIK, PRK, and RK. It delivers comprehensive clinical comparative representation, such as:**

* EKRs (Equivalent Keratometer Readings) for optimized IOL-calculation
* Calculation of the actual relationship of the posterior corneal surface relative to the anterior corneal surface
* Evaluation and description of the overall refractive power of the cornea using EKRs in various zones

**As an additional safety feature, the Belin/Ambrosio Enhanced Ectasia Display delivers:**

* Sensitive early keratoconus/ectasia detection and evaluation
* Reliable detection of early stage forme fruste keratoconus
* Representation of height data of the anterior and posterior corneal surface in combination with a progression analysis of the corneal thickness
* Calculation of the corneal thickness progression analysis using concentric rings; starting at the thinnest point and extending to the periphery
* Easy evaluation of measurement data through intelligent software and display composition

**User-friendly software allows a variety of data analysis and data processing, including:**

* Corneal topography of anterior and posterior corneal surface for the preoperative planning of a refractive treatment, for postoperative evaluations, and improved calculation of intraocular pressure
* Keratoconus detection and quantification
* Cataract analysis supports objective quantification of lens density, visualization of the lens, visualization of PCO, and representation of Bowman’s layer
* 3D chamber analysis with indication of chamber angle, chamber depth, chamber volume and lens thickness for preoperative planning of phakic lens implantation, postoperative evaluation, and glaucoma screening
* Pachymetry function supports the preoperative planning of corneal surgery
* Export function to the WaveLight® Excimer Laser systems for preparation of Topography-Guided treatments
* Map comparison mode (eg, pre- and postoperative height maps)
* Refraction maps display mode

**Measurement range:**
3 to 38 mm corneal radius
9 to 99 D refraction

**Notebook Computer**
With operating software.

**OcuLink™ Software Module for WaveLight® Excimer Laser Systems**

The OcuLink™ software allows data transfer from the Oculyzer™ II diagnostic device to the WaveLight® Excimer Laser systems and enables customized Topography-Guided treatments.

Clinical indications for Topography-Guided treatments with the WaveLight® Oculyzer™ II diagnostic device are:

* Previous decentrations
* Enlargement of small optical zones
* Corneal scars
* Irregular ablations of previous treatments
* Central corneal irregularities

The WaveLight® Oculyzer™ II diagnostic device is only available in combination with a WaveLight® laser system.