



Patient Work Up

Accurate and stable refraction is critical

- Soft contact wearers should discontinue contact lenses for at least 2 weeks or more
- Hard contact wearers should discontinue contact lenses for 3 weeks or more
- Full refraction - Manifest / Cycloplegic
- Cylinder up to 2.5, LRI, LASIK or PRK for additional astigmatic treatment (bioptics)
- Stable refraction is key

Measure AC depth—from the natural lens to the endothelial surface of the cornea

- Need at least a 3.0mm or greater from the natural lens to the corneal endothelium
- When determining AC depth ensure that the corneal thickness is not included
- Important when entering ACD in STAARVISION calculator this value should be the AC depth plus the corneal thickness

Usual IOL measurements

- Ks, Axial length
- Accurate and Stable Refraction CRITICAL!
- Back Vertex Distance (assumed 12.0)

White to white (Caliper method recommended)

- Recline patient and measure under magnification
- Compare number to IOL Master, Orbscan or Pentacam
- Repeat measurements to minimize any differences

(OCT AC Angle)

Gonioscopic assessment of the angle, Grade II or higher

- The final position of the ICL will decrease the chamber angle by at least 1 grade; therefore the AC chamber angle should be \geq grade II
- Observation using the Shaffer System where Grade 4 = 45° to 35° angle or "Wide Open" and Grade 0 = 0° or "Narrowed to a Slit"

Corneal endothelial cell density (ECD) assessment

- ECD can be assessed using a specular photomicroscope with analysis of photographic images or by estimation of the endothelial mosaic using the method of endothelial specular reflection at the slit-lamp

Effective optical zone for myopia correction

- With its position behind the cornea and close to the nodal point the effective optical zone of the ICL at the corneal plane is approximately 1.25 times its actual optic diameter

ICL Power Diopters	Optic Size	Equivalent Optic Zone Corneal Plane
-3.0 to -10.0	5.80 mm	7.30 mm
-10.5 to -11.5	5.50 mm	6.93 mm
-12.0 to -14.0	5.25 mm	6.62 mm
-14.5 to -16.0	4.90 mm	6.17 mm

Patient Post Operative Assessment

Post-operative Visian ICL vault assessment

- Adjust the light beam of the slit-lamp to form a narrow slit
- Use bright illumination
- Adjust the angle of the beam to be approximately 45° to the position of the observer
- Focus on the central cornea and estimate its thickness
- Shift the focus deeper into the anterior chamber until the ICL is visualized
- Slight changes in the angle of the light source to the observer and/or shifting the oculars from the centerline can be helpful in visualizing the ICL
- Estimate the vault or space between the posterior surface of the ICL and the patient's crystalline lens
- Alternating your focus between the cornea and the ICL/ crystalline lens will allow estimation of the vault which is typically expressed as a percent of the corneal thickness

