iTrace Combination Ray Tracing Aberrometer/Topographer

The iTrace Combination Ray Tracing Aberrometer/Topographer (Tracey Technologies, Houston) combines ray tracing aberrometry wavefront analysis, advanced corneal topography, autorefration, pupilometry, and autokeratometry into one device. According to company literature, the iTrace measures quality of vision and visual function by projecting 256 near-infrared laser beams into the eye to measure forward aberrations. The iTrace assists cataract surgeons with premium IOL selection by providing corneal spherical aberration measurements. Patients can focus on a near or distant target in a binocular, open-field manner for a complete accommodative volume assessment. Furthermore, the device can confirm night vision symptoms with the multizone refraction data, which documents how refraction changes from light to dark environments.

Artificial Iris

The Artificial Iris (Dr. Schmidt Intraocularlinsen GmbH, St. Augustin, Germany) is a foldable, 360° silicone, custom-made iris prosthesis that closely matches the appearance of the natural iris and provides both functional and aesthetic restoration. According to company literature, the implant is available in two versions: with polymer fiber meshwork for fixation with sutures and without polymer fiber meshwork for sutureless ciliary sulcus placement. It can be implanted through an incision of approximately 3.2 mm. The Artificial Iris with fiber can also be cut into segments and sutured directly to the remnant of the iris in partial aniridia cases.