

The **SPECTRALIS® Glaucoma Module Premium Edition** combines a proprietary technology called Anatomic Positioning System (APS) with a series of unique scan patterns to assess the optic nerve head, the retinal nerve fiber layer, and the ganglion cell layer. These scan patterns are precisely matched to the characteristics of fine structures relevant in glaucoma diagnostics.

The glaucoma module compares patients' eyes to a reference database of healthy eyes, and flags even very small deviations. The precision of the SPECTRALIS AutoRescan function allows confident identification and monitoring of structural changes from visit to visit.

Anatomic Positioning System (APS)

The **SPECTRALIS OCT family of products are the only systems to offer the unique Anatomic Positioning System (APS)**. APS is a navigational system like GPS that is based on points in the eye using two fixed, structural landmarks: the center of the fovea and the center of Bruch's membrane opening (BMO). The exclusive automated SPECTRALIS APS guides users to ensure that scans are aligned relative to the patient's individual **fovea-to-Bruch's membrane opening center (FoBMOC)** axis and thereby ensures consistent, accurate placement of subsequent scans and sectors for data analysis.

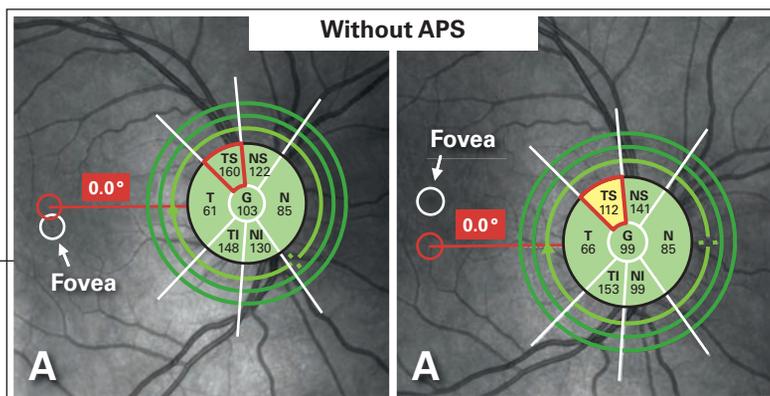
Without SPECTRALIS APS

OCT scans are not adjusted according to the unique FoBMOC axis of the eye, thereby providing highly variable sectorial results.

No Anatomic Positioning System (APS)

Individual eye anatomy **not aligned** with healthy control eyes in reference database (A)

- Normal tissue may appear thin
- Thin tissue may appear normal



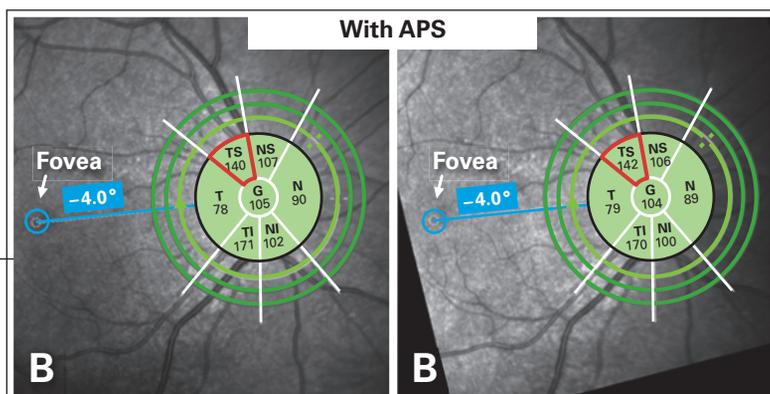
With SPECTRALIS APS

OCT scans are adjusted according to the unique FoBMOC axis of the eye, thereby providing highly repeatable sectorial results.

FoBMOC-aligned using APS

Individual eye anatomy **aligned** with healthy control eyes in reference database (B)

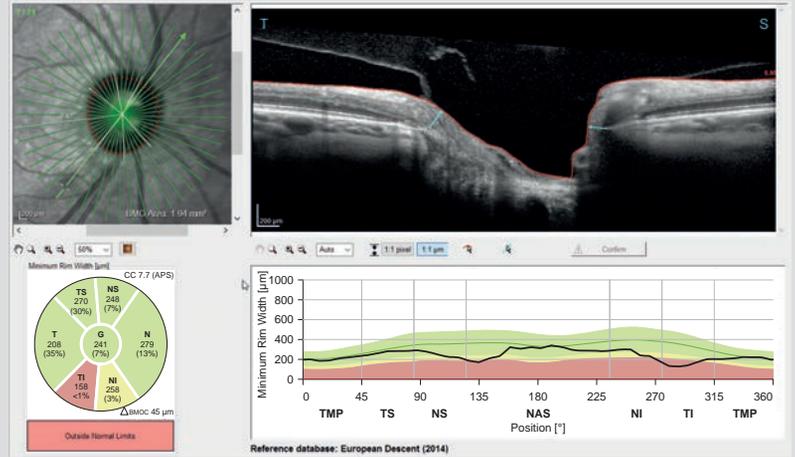
- Improved accuracy and reproducibility of measurements



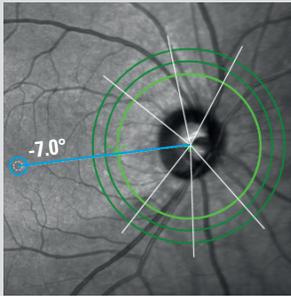
ONH Rim Analysis

A BMO-centered, 24-line high resolution radial scan is acquired to provide measurements of the ONH. Neuroretinal rim assessment is performed from the BMO to the nearest point on the internal limiting membrane (ILM) at 48 data points around the ONH. This shortest distance measurement is referred to as BMO-based minimum rim width (BMO-MRW).

The results are compared to a reference database of healthy eyes and presented in a Garway-Heath sector format, which allows for better structure and function correlation.

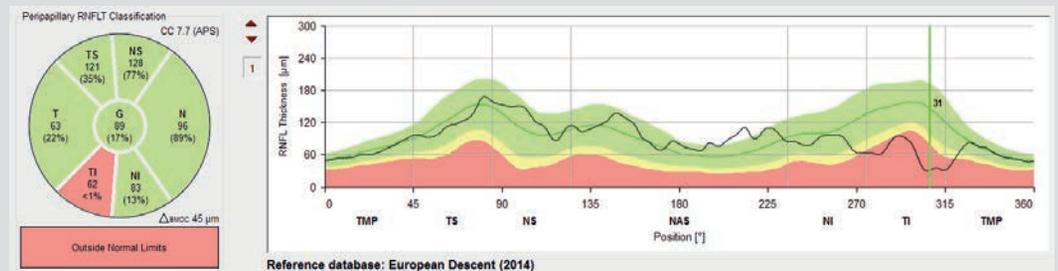
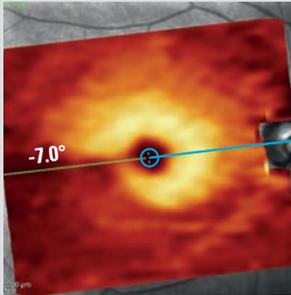


Comprehensive Analysis

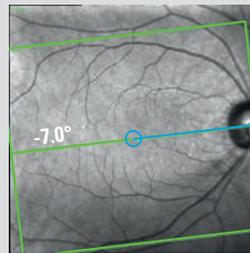
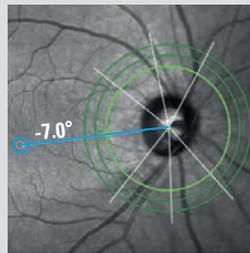
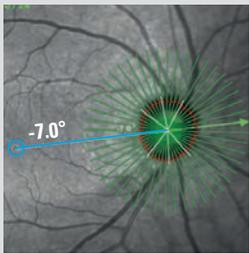


Three circle scans automatically centered on the BMO-demarcated optic nerve head are acquired to provide highly reproducible retinal nerve fiber layer thickness results. These thickness values are compared to a reference database that adjusts for both the BMO size and age. The Garway-Heath sector format allows for better correlation of RNFL thickness values to functional measurements.

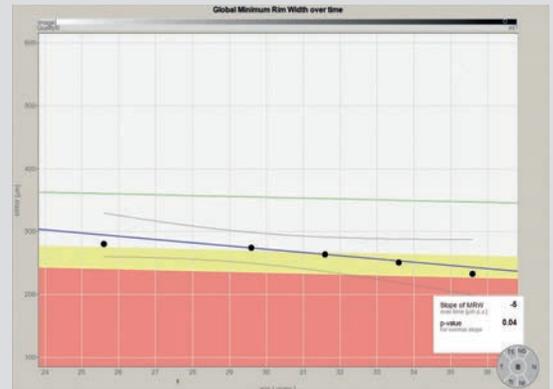
The multi-layer segmentation software allows for assessment of the isolated ganglion cell layer (GCL). These results allow for a thorough assessment of the macula region via a GCL thickness map.



Progression Analysis



APS-linked unique scan patterns provide ONH, RNFL, and ganglion cell thickness parameters. All parameters take into account the unique FoBMOC axis of individual eyes, providing accurate sectorial analysis along with a precise progression analysis.



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