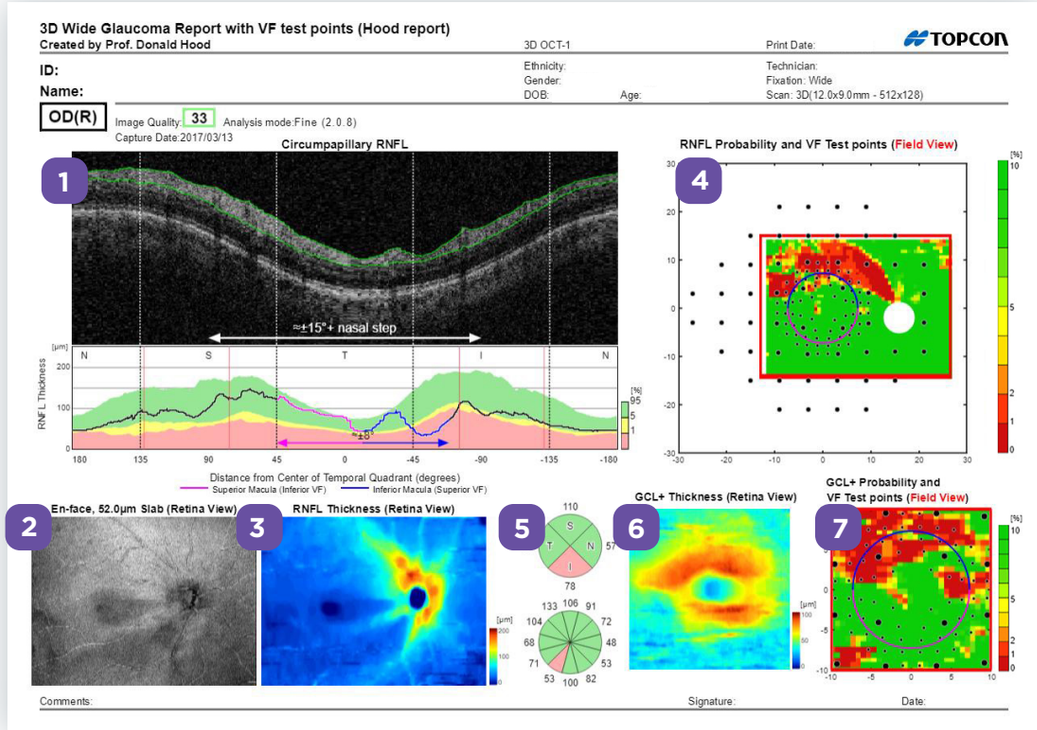
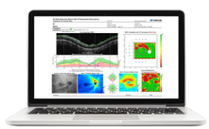
THE HOOD REPORT FOR GLAUCOMA

This glaucoma report has been developed in collaboration with Professor Donald C. Hood of Columbia University. It aids the decision-making process when determining which areas of the visual field should be examined for agreement between structural and functional loss.



Now available on
the **Maestro2** Robotic OCT/Fundus Camera and
the **Triton** Swept Source OCT/Fundus Camera



1 OCT B-Scan of Circumpapillary RNFL (cpRNFL) with Reference Database

The NSTIN plot positions the circumpapillary tomogram, cpRNFL thickness graph and associated reference database with the most vulnerable areas centrally, making it easier to identify potential abnormalities in the cpRNFL. The large tomogram enables the cpRNFL segmentation to be confirmed. Red vertical lines on the NSTIN graph represent the average location of major blood vessels. The pink and blue lines on the NSTIN graph represent the nerve fibers coming from the macular region (+8° and -8° from center of the visual field).

2 Wide Field OCT Enface Image (12mm x 9mm area)

The grayscale Enface image of a 52μm thick slab from the ILM down, provides a quick visualization of possible RNFL defects.

3 Wide Field RNFL Thickness Map (12mm x 9mm area)

The wide field RNFL thickness map provides a panoramic view of RNFL thickness, significantly increasing the amount of viewable data compared to a 6 x 6 or circle scan. Cooler colors represent thinner areas of the RNFL and warmer colors thicker areas of the RNFL.

4 Correlation of OCT RNFL Data (Structure) with Visual Field Test Locations (Function)

The RNFL probability map is an easy visual indicator for areas of significant RNFL thinning compared to the reference database. Green colors represent RNFL thickness values that are very likely to be normal. Yellow and red colors represent areas that correspond to the thinnest 5% and 1% of the reference database respectively and are therefore more likely to represent abnormality. The map is flipped vertically to anatomically correspond to visual field test points. 24-2 test points (large dots) and 10-2 test points (small dots) make it easier to see the relationship between structure and function. The pink and blue portions of the circle mark the outside of the area corresponding to the pink and blue lines in the center of the circumpapillary NSTIN RNFL Chart (1).

5 cpRNFL Thickness 4 Sectors and 12 Clock Hours with Reference Database

Sectors are color-coded to show how the average cpRNFL thickness over that sector compares to the reference database. Green areas represent cpRNFL thickness values that are likely to be normal. Yellow and red areas represent cpRNFL values that correspond to the thinnest 5% and 1% of the reference database respectively and are therefore more likely to represent abnormality.

6 GCL+ IPL Thickness Map

Provides a color-coded map of GCL+IPL thickness of a +/- 10 degree area surrounding the fovea.

7 Correlation of OCT GCL + IPL Data (Structure) with Visual Field Test Locations (Function)

The GCL+IPL probability map is flipped vertically to anatomically correspond to visual field test points. 24-2 test points (large dots) and 10-2 test points (small dots) make it easy to identify agreement between structural and functional loss, especially in the macular region. As with the RNFL probability map, yellow and red colors indicate GCL+ values at the thinnest end of the reference database. These areas are much more likely to be abnormal, particularly if the areas of structural loss coincide with functional loss.

TOPCON Healthcare
SEEING EYE HEALTH DIFFERENTLY

* Professor Donald C Hood, Department of Ophthalmology & Department of Psychology, Columbia Univ. New York
MCA#472442986