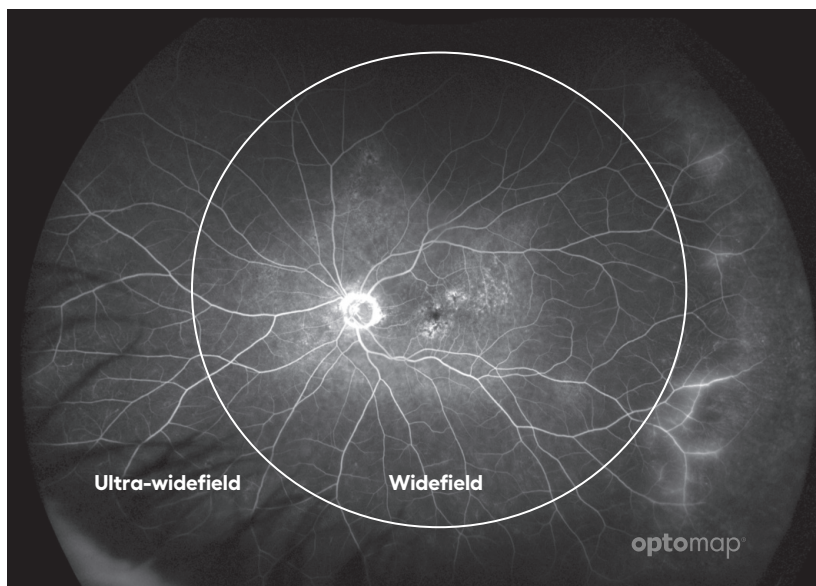
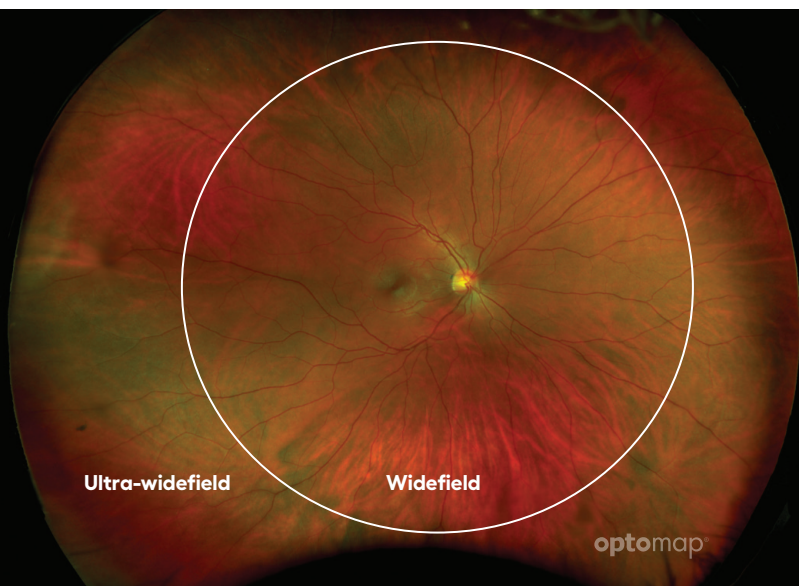


DEFINING ULTRA-WIDEFIELD



The International Widefield Imaging Study Group defined ultra-widefield as images showing retinal anatomy anterior to the vortex vein ampullae in all four quadrants.

- Widefield is defined as an image centered on the fovea and includes the retina in all four quadrants posterior to and including the vortex vein ampullae.¹
- Many large studies have underlined the importance of appropriately imaging the periphery to support the detection and management of disease in a variety of areas including: telemedicine screening^{2,3,4}, diabetic retinopathy^{5,6}, age-related macular degeneration⁷, vascular disease⁸, pediatric retinal disease⁹, inflammatory disease^{10,11,12} and even some systemic diseases.
- Consistently, **optomap** imaging has been demonstrated to capture the widest field of view in a single capture of any imaging technology.^{14,15,16,17}

“A single capture image which provides a view of the vortex veins in all four quadrants and beyond, thus meeting the widefield & ultra-widefield definitions, would offer enhanced efficiency in a real-world clinical setting versus a montage image, whether it be manual or automated.”

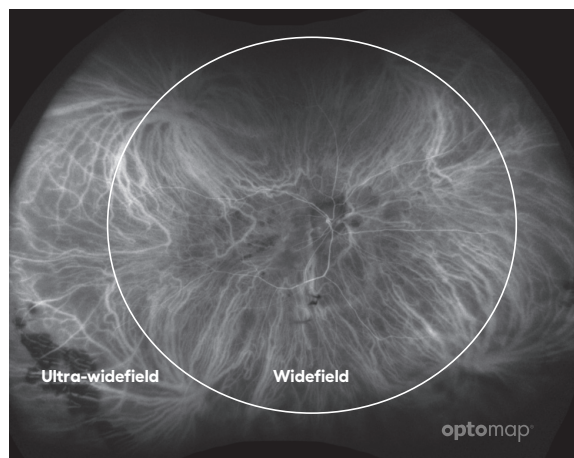
— International Widefield Study Group

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CLINICAL SUMMARY

Defining Ultra-Widefield



optomap icg image demonstrating 4 vortex ampullae which define the boundary between widefield and ultra-widefield.

- The International Widefield Imaging Study Group reviewed a set of images from various manufacturers to help support the generation of the following definitions when describing the field of view of retinal images¹:
 - Widefield** – centered on the fovea and includes the retina in all four quadrants posterior to and including the vortex vein ampullae
 - Ultra-widefield** – images showing retinal anatomy anterior to the vortex vein ampullae in all four quadrants
 - Pan-retinal** – ora to ora image of the retina either in the horizontal or vertical direction
- The new consensus-defined terms help clarify the part of the retina visible in each image and how many images comprise the field of view. This information is important for clinicians assessing which technologies can meet their clinical and research needs.
- Capturing a larger field of view encompassing more of the retinal periphery is increasingly becoming clinically more important.
- Given the clinical significance, a clinician must understand the impact on the practice of obtaining those images.
- Following the agreement on retinal imaging terms, the group then reviewed 100 indocyanine green angiograms (ICGs) of both normal and pathological eyes obtained on the Optos California. While the consensus group was device agnostic, it was determined “that images from the Optos California most consistently provide a complete view of the vortex veins and retinal periphery without the need of a montage. Furthermore, the accuracy and precision of quantification of the images has been validated and published.” Optos California is the standard and most widely used ultra-widefield technology, therefore these images were used to calculate the posterior border of the vortex ampullae.¹
- **optomap** imaging has been demonstrated to capture the widest field of view in a single capture of any imaging technology: more than 50% additional retinal area captured versus one single-capture widefield lens based system¹⁴, 110° more than a single capture widefield image and 65° more than the montaged ultra-widefield image from another lens based camera system¹⁶, more vortex veins visualized¹⁵ and statistically significantly more retinal surface area.^{17,18}

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