

# Marco's OPD-Scan III: This Refractive Cataract Surgeon's Best Friend

This diagnostic instrument provides critical data for proper IOL selection

When I was looking for a topographer and wavefront aberrometer, I sought technology that would provide me with the most useful data for my refractive cataract surgery practice. I also wanted the ability to help patients who had already undergone cataract surgery but were having trouble with their IOL implants.

I spoke to respected colleagues across the U.S. with practice styles similar to my own. Time and again, they referred me to the OPD-Scan III wavefront aberrometer. Initially, we purchased it for our main location in Birmingham, MI, but we came to rely on it so much for clinical evaluations that we purchased a second unit 2 years later for our satellite

office in Troy, MI. Between the two locations, our three ophthalmologists, two optometrists, and 25 staff see about 2,000 patients each month.

## Irreplaceable Information

As a refractive cataract surgeon, I rely heavily on the OPD-Scan III. In seconds, I can determine the best lens implant for patients, taking into account their desire to be less dependent on glasses. I review these parameters with them, let them see what the scan shows, and I explain my thought process as we go through the data.



Dr. Page shows a patient her scans, which are networked into the exam lanes

# INTEGRATED

## Detailed Data That Can't Be Beat

The same panel that displays the pupil also reveals the angle alpha and angle kappa; these are subtle details that can make a big difference when considering IOLs with diffractive optics. Angle kappa isn't easy to recognize and is even harder to measure without an instrument like the OPD-Scan III.

I was met with the challenge of consulting a patient who also happened to be an ophthalmologist. He came to me for a cataract surgical evaluation and wanted mid-range multifocal lenses. These premium lenses require IOL centration which, in turn, depends on a certain visual axis, or angle kappa. My previous topographer would not have been able to supply the essential data I found using the OPD-Scan III — data which prevented me from making a big mistake.

The OPD-Scan III measured the patient's angle kappa at more than 700 microns, making him ineligible for multifocal lenses. He also had a 5.63-mm pupil in mesopic conditions, making the 5.0-mm optic on an accommodative IOL smaller than his mesopic pupil size, which would put him at risk for nighttime glare. These findings led to the patient choosing toric IOLs, a distance-vision lens for one eye and a near-vision lens for the other eye, and I avoided having to provide an IOL exchange.

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— Tim Page, MD

visual axis and needs to be extended, I can review the results on the OPD-Scan III with patients and discuss what steps we can take to fix the problem.

The OPD-Scan III also has a photopic and mesopic refraction that can help to determine a prescription for night myopia. I use this feature during refractive surgery evaluations so I can show patients preoperatively how their vision may be different at night, or explain how nighttime driving glasses may be helpful.

## An Ophthalmic Gem

The OPD-Scan III has been pivotal in helping me diagnose patients and choose proper IOLs. I don't recommend anything less. ●

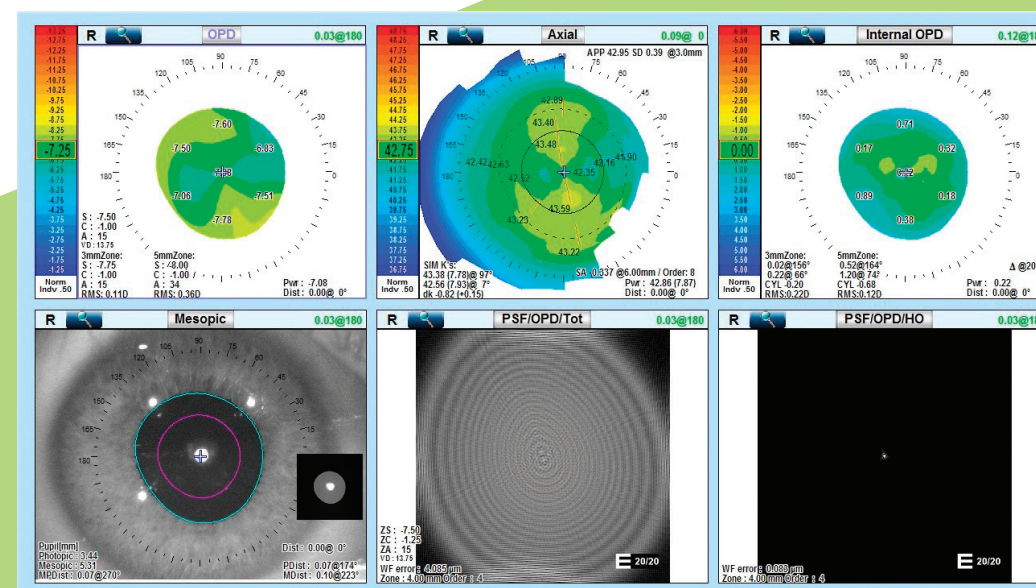
## Correcting Dysphotopsias from Prior Surgeries

As a specialist in complex anterior segment surgery, many patients are referred to me after cataract surgery with complaints of glare, halo, or other dysphotopsias with monofocal, multifocal, EDOF, toric, and accommodative IOLs. With the OPD-Scan III, I can almost always diagnose the problem. Whether it be a tilted IOL causing lenticular astigmatism, or a pupil that is larger than the optic, or a small YAG capsulotomy that is crossing the

First, I use topography to assess astigmatism. In addition, I note the degree of spherical aberration and use that data for IOL selection. Then, I consider the internal OPD and assess the trefoil to help validate the contribution of cataracts to any complaints of blurred vision. Patients also appreciate being provided with objective findings to substantiate their visual changes.

I also evaluate the point spread functions on the total OPD, and I show patients what contribution of distortion is coming from their cataracts versus from a corneal condition. I then consider the retro image with the photopic and mesopic pupil sizes to ensure that the mesopic pupil is not larger than the optic of the IOL that we are planning to use. If it is larger, I show the image and explain why I might not use a certain IOL or choose another.

The OPD can display a customized set of maps for patients



The OPD-Scan III integrated wavefront aberrometer

Oakland  
Ophthalmic  
Surgery



Tim Page, MD



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