



## Zusman Eye Care Center Acquires New State-of-the-Art Technology

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Zusman Eye Center is proud to announce their recent investment in state-of-the-art technology, the OPD (Optical Path Difference) Scan. Other than optometrist Doug Radish at Deep Creek Eye Care, Neil Zusman, M.D. is the first (and only) surgeon in Charlotte County to acquire the new technology, which is becoming popular at leading eye centers around the country.

“This instrument allows us to have more information than ever before, which will lead to even better surgical outcomes for our cataract patients” reports Dr. Zusman. “It also gives us the data we need to be more precise when planning procedures utilizing the new generation of premium lens implants for cataract surgery. It will enable us to better match the implant to the patient’s eye. This allows us to achieve the best fit.”

The OPD-Scan utilizes several different modalities for testing, including precise imaging of cornea problems, cataracts, new digital eyewear prescriptions, and possible solutions for previously decreased night vision. All of this is made possible through the use of a new type of measurement called “wavefront analysis”, which utilizes the next generation of adaptive optics.

Adaptive optics refers to the use of advanced techniques to correct for optical aberrations through any transparent media. Originally developed for use in telescopes to correct for the distorting effects of the atmosphere, adaptive optics is now being applied to evaluating the structure and function of the human eye.

The instrument is particularly valuable for providing information when planning cataract surgery. The new generation of premium intra-ocular lenses (IOLs) provides the possibility of the best vision the patient has experienced in decades. In order to fully take advantage of the new IOL designs, the surgeon must take into account a number of different factors, including:

- the size and shape of the cornea, including any irregularities such as astigmatism
- the minimum and maximum pupil sizes under varying lighting conditions
- the actual pathway light takes through the eye as it travels to the retina
- the distance of that pathway from the center of the pupil, measured to 0.01mm
- identification of landmarks within the eye to aid in exact placement and rotation of IOL
- any additional distortions in the eye, such as spherical aberrations Of particular interest to Dr. Zusman is also the ability of the OPD- Scan to “reverse engineer” the shape of any eye that might have previously undergone refractive surgery, such as LASIK. When planning for the implantation of the

newer lenses, the surgeon needs to know the original characteristics of the eye, as well as its current condition. The OPD is able to provide numeric values needed for new calculations used to determine the ultimate type and power of lens to be used.

Dr. Zusman states, "There are millions of people who have enjoyed excellent corrected vision as a result of refractive surgery. Thanks to the OPD, we have the information to assist us in helping those individuals to continue to experience the best possible vision as they approach the time of life where cataract surgery becomes necessary."

Surgeons without the information provided by the OPD-Scan are left to estimate the original characteristics of the eye, which ultimately affects the precision and predictability of the final outcome.

After the surgery, Dr. Zusman can also use the OPD to measure the exact placement of the new lens, and be able to evaluate the improvement in the patient's vision

In summary, Zusman Eye Care Center is thrilled to offer the new OPD technology, particularly to patients who will be undergoing cataract surgery.

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Since 1988, Dr. Zusman, Board Certified in Ophthalmology, provides a range of services from routine eye exams to medical and surgical treatment of eye diseases. [Zusman Eye Care Center in Port Charlotte, FL](#) prides itself on offering state of the art equipment in a modern, comfortable office setting. Dr. Zusman has been named a "Top Florida Doctor" (Florida Monthly) and a "Most Recommended Physician" by National Consumers Survey for Florida.

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