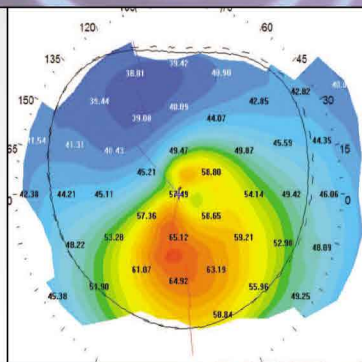




# OPD-Scan III

REFRACTIVE POWER / CORNEAL ANALYZER

OPTIMIZING PATIENT OUTCOMES

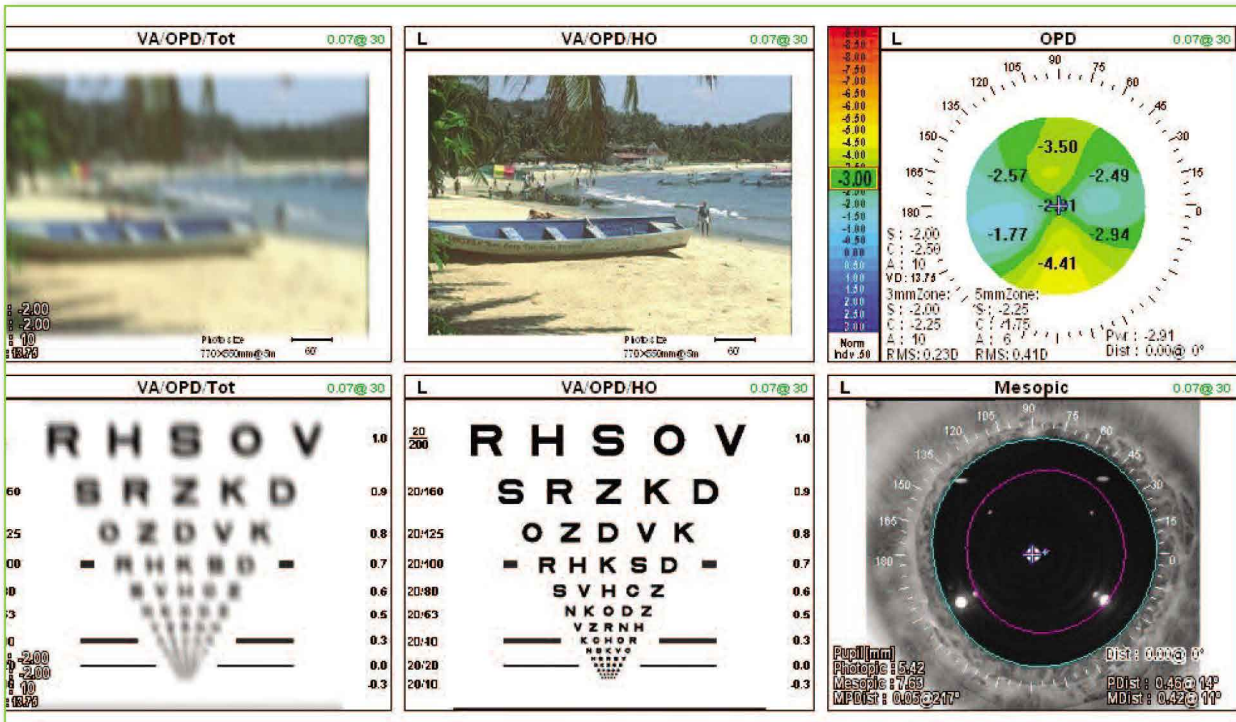


THE LEADER IN VISION DIAGNOSTICS®

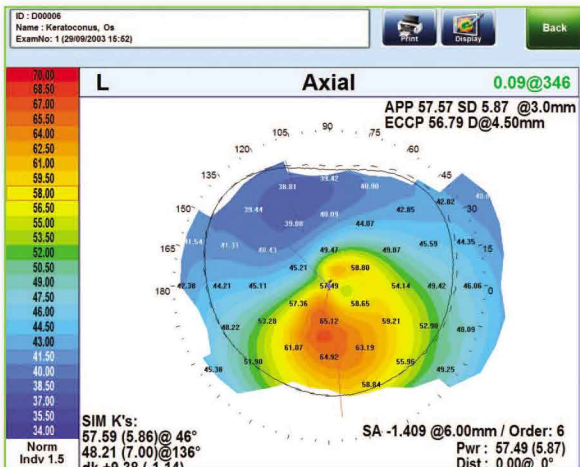
## ACCURATE DIAGNOSTICS

- Axial
- Numeric power display
- Visual Acuity
- Gradient
- PSF (Point Spread Function)
- Internal OPD, Eye Image
- Instantaneous
- MTF Graph
- White to White
- Numeric K display
- Zernike Graph (including Corneal)
- Difference Maps

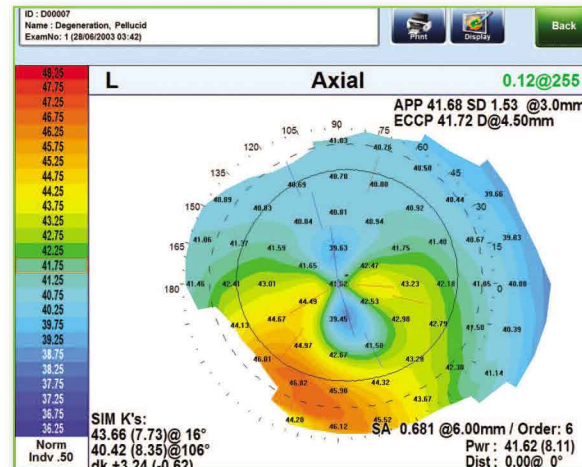
Over 20 diagnostic measurements are harvested in 10 seconds. Easy alignment and capture of data ensures accurate readings. Wavefront data is gathered out to a 9.5mm area allowing calculation of mesopic refractions in addition to extremely accurate day refractions. Blue light, 33 ring, placido disc topography is easier for patients to tolerate and is gathered in one second.



Options available include beach scene and ETRS chart. Great for patient education.



**Keratoconus**



**Pellucid Marginal Degeneration**



● IOL APPLICATIONS

- APP – Average Pupil Power
- Toric IOL Summary to mark axis pre-op
- Cataract Summary
- Corneal aberrations separated
- Accurately mark cornea based on landmarks
- ECCP–Effective Central Corneal Power for IOL power calculation
- White to White
- Retro Illumination Image – displays toric lens markings
- MTF Graph
- VA simulation chart post cataract surgery

Cataract and Refractive surgery has now been taken to another dimension. Detailed patient summaries are available in just a matter of seconds, Toric axis alignment maps to landmark pre-op iris positions are ready to view, and a retro illumination image showing toric IOL alignment markings are ready for your one-day post-op patient visit.

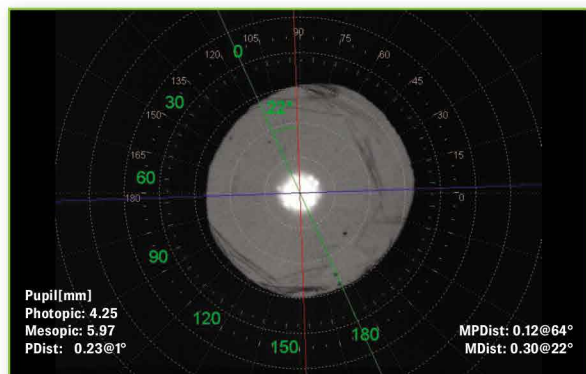
**RETRO ILLUMINATION IMAGES – THE DIFFERENCE IS BLACK AND WHITE.**



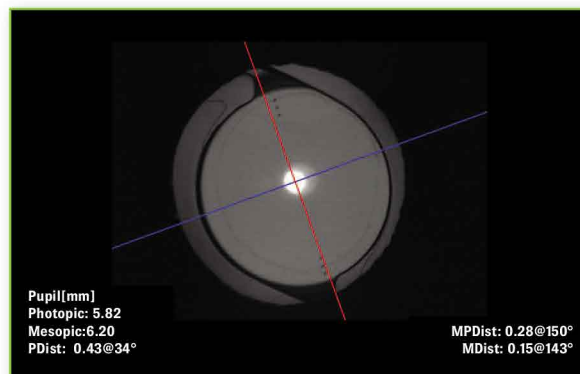
Post-op ReStor® IOL



Post-op YAG debris



Toric IOL post YAG off axis 22°



One day post-op Toric



Vacuoles-easy to show patient

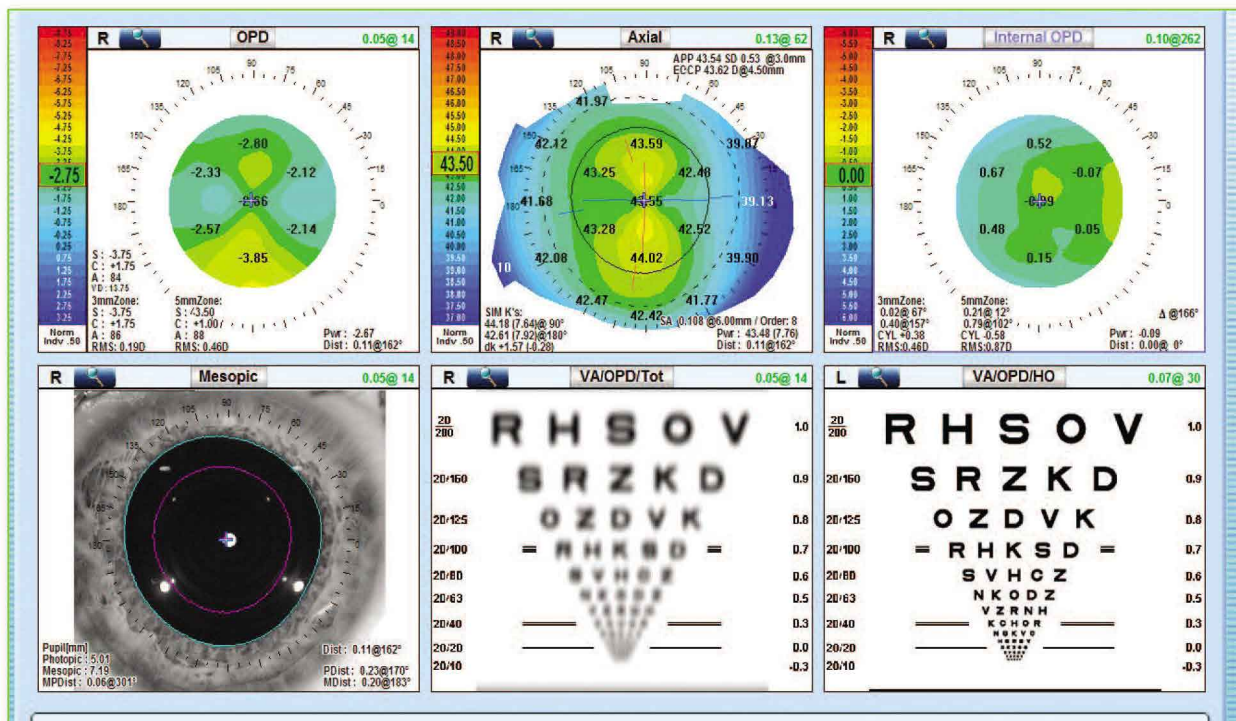


Cortical cataract documented in file

## DAY AND NIGHT WAVEFRONT REFRACTIONS

- VA –ETDRS chart
- Contact Lens summary
- WF Rx out to 9mm
- 30 Second Refraction®
- Easily integrates with EPIC and TRS 5100
- Automatic calculation of Night Rx
- Selects best starting point for refraction
- HD Eye Exam®

Day and night refractions can be displayed automatically showing any zonal changes in vision from the photopic to the mesopic pupils. Your patients can receive a state-of-the-art printout of their before and after correction chart or understand why they are not able to achieve 20/20. Welcome to the next generation of refractions!



Diagnostic summary displayed

HOA [um]: @6.00mm/Order = 8				
	T.Sph	T.Coma	T.Tre	HO
Total:	0.297	0.083	0.313	0.460
Cornea:	0.398	0.146	0.480	0.804
Internal:	0.123	0.156	0.496	0.721
Refraction: VD = 13.75mm				
	Sph	Cyl	Axis	RMS
WF@4.00:	7.75	+1.00	94	0.19D
WF@6.00:	-8.50	+1.25	98	0.46D
Diff	-0.75	+0.25	4	

Best starting Rx and night Rx displayed

### Summaries available as a map set include:

- Axial Overview
- Axial Cataract
- Instantaneous
- Cyl/Pupil Overview
- Cyl/Pupil Cataract
- Total
- WF Cornea HO/Ref
- WF Cornea HO
- WF Internal HO

### Captured in 10 seconds:

- 1 SA Cornea for Aspheric IOL selection
- 2 Lenticular – residual astigmatism
- 3 Angle Kappa
- 4 Pre/Post Toric IOL measurements
- 5 Pathologies (Keratoconus, Pellucid)
- 6 Mesopic/photopic pupil size
- 7 Retro illumination image
- 8 Zernike Graphs: total, cornea, internal
- 9 Corneal Refractive Power map
- 10 IOL tilt or decentration



● MULTI-MODALITY FUNCTIONS

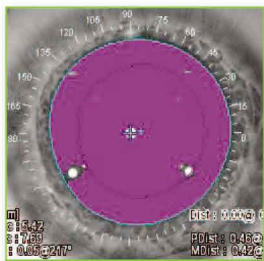
# OPD-Scan III

REFRACTIVE POWER/CORNEAL ANALYZER

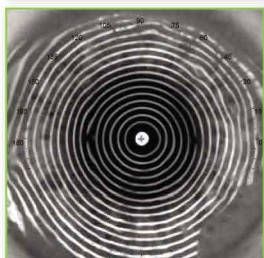


The new OPD-Scan III is the latest diagnostic/refractive instrument that serves the practice as an autorefractor, keratometer, pupillometer, corneal topographer and wavefront aberrometer.

Max 9.0 mm  
2,520 Data Points  
Min. Pupil: 2.2mm



Blue Placido  
Max 33 Rings  
11,880 Data Points



- 10 second eye measurement
- Auto alignment
- Auto tracking
- Auto chin rest
- Touch screen keyboard
- Verification after each measurement





## OPD-SCAN III SPECIFICATIONS

### ▶ POWER MAPPING

Spherical power range	-20.00 to +22.00 D
Cylindrical power	0.00 to ±12.00 D
Axis	0 to 180°
Measurement area	2.0 to 9.5 mm (7 zone measurement)
Data points	2,520 points (7 x 360)
Measuring time	<10 seconds
Measurement method	Automated objective refraction (dynamic skiascopy)
Mapping methods	OPD, Internal OPD, Wavefront maps, Zernike graph, PSF, MTF graph, Visual Acuity

### ▶ CORNEAL TOPOGRAPHY

Measurement rings	33 vertical, 39 horizontal
Measurement area	0.5 to 11.0 mm (r = 7.9)
Dioptric range	33.75 to 67.5 D
Axis range	0 to 359°
Data points	More than 11,880
Mapping methods	Axial, Instantaneous, "Refractive", Elevation, Wavefront maps, Zernike graph, PSF, MTF graph, Visual Acuity

### ▶ GENERAL INFORMATION

Working distance	75 mm
Auto tracking	X-Y-Z directions
Observation area	14 x 11 mm
Operating system	Windows embedded standard 2009
Display	10.4-inch color LCD touch panel
Printer	Built-in thermal type line printer for data print External color printer (optional) for map print
Power supply	100 to 240 Vac 50 / 60 Hz
Power consumption	110 VAC
Dimensions / Mass	286 (W) x 525 (D) x 530 (H) mm / 23 kg

CE Mark pending.  
Specifications & design are subject  
to change without notice.

Manufactured by Nidek.



marco.com ● 800.874.5274

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