ALADDIN

Optical Biometry & Topography System

Essential data for premium IOL planning,
delivered in **one platform**



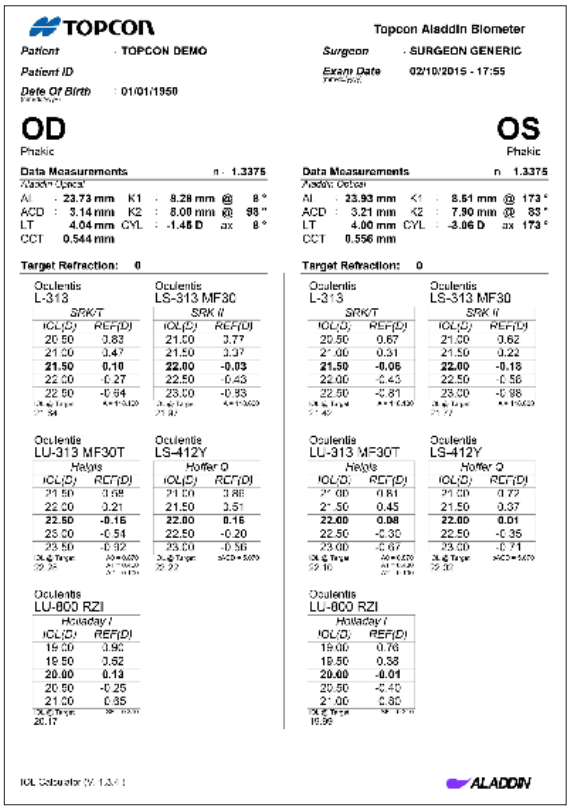
TOPCON Healthcare



OPTICAL BIOMETRY CORNEAL TOPOGRAPHY IOL PLANNING

ALADDIN™ HW3.0 is a fast, multimodal biometry platform that captures the complete data needed to calculate IOL power and identify premium IOL candidates, supporting confident cataract planning and refractive screening in busy clinical workflows.

STRUCTURED REPORTS FOR PRECISE IOL PLANNING



TOPCON

Topcon Aladdin Biometer

Patient : TOPCON DEMO
Patient ID
Date Of Birth : 01/01/1950
Surgeon : SURGEON GENERIC
Exam Date : 02/10/2015 - 17:55

OD Phakic

Data Measurements n : 1.3375
Alcon Optical
AL : 23.73 mm K1 : 8.28 mm @ 8 °
ACD : 3.14 mm K2 : 8.00 mm @ 98 °
LT : 4.04 mm CYL : -1.45 D ax 8 °
CCT : 0.544 mm

Target Refraction: 0

Oculentis L-313 SRK/T		Oculentis LS-313 MF30 SRK II	
IOL(D)	REF(D)	IOL(D)	REF(D)
20.50	0.83	21.00	0.77
21.00	0.47	21.50	0.37
21.50	**0.10**	**22.00**	**-0.03**
22.00	-0.27	22.50	-0.43
22.50	-0.64	23.00	-0.83

Oculentis LU-313 MF30T Haigis		Oculentis LS-412Y Hoffer Q	
IOL(D)	REF(D)	IOL(D)	REF(D)
21.50	0.58	21.00	0.88
22.00	0.21	21.50	0.51
22.50	**-0.15**	**22.00**	**0.15**
23.00	-0.51	22.50	-0.20
23.50	-0.92	23.00	-0.56

Oculentis LU-800 RZI Holladay I	
IOL(D)	REF(D)
19.00	0.96
19.50	0.62
20.00	**0.13**
20.50	-0.25
21.00	-0.85

OS Phakic

Data Measurements n : 1.3375
Alcon Optical
AL : 23.93 mm K1 : 8.51 mm @ 173 °
ACD : 3.21 mm K2 : 7.90 mm @ 83 °
LT : 4.00 mm CYL : -3.06 D ax 173 °
CCT : 0.556 mm

Target Refraction: 0

Oculentis L-313 SRK/T		Oculentis LS-313 MF30 SRK II	
IOL(D)	REF(D)	IOL(D)	REF(D)
20.50	0.67	21.00	0.62
21.00	0.31	21.50	0.22
21.50	**-0.06**	**22.00**	**-0.18**
22.00	-0.43	22.50	-0.56
22.50	-0.81	23.00	-0.98

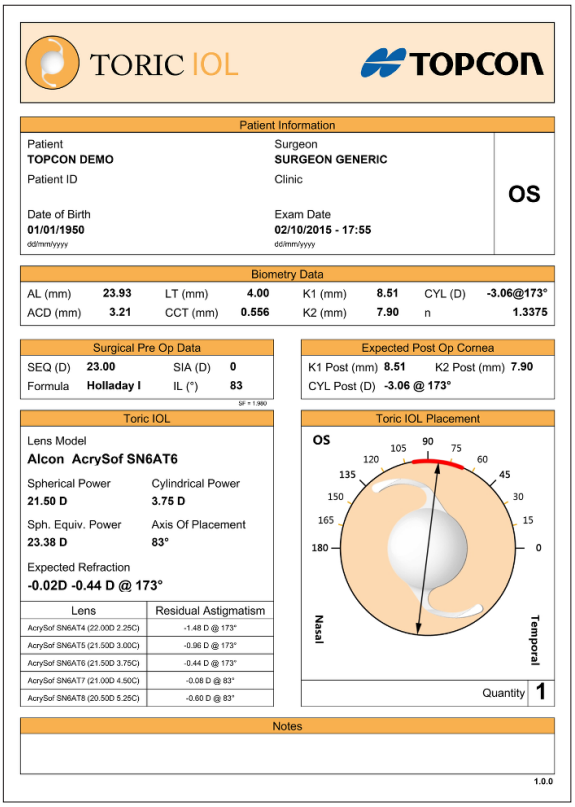
Oculentis LU-313 MF30T Haigis		Oculentis LS-412Y Hoffer Q	
IOL(D)	REF(D)	IOL(D)	REF(D)
21.00	0.61	21.00	0.72
21.50	0.45	21.50	0.37
22.00	**0.08**	**22.00**	**0.01**
22.50	-0.30	22.50	-0.35
23.00	-0.67	23.00	-0.71

Oculentis LU-800 RZI Holladay I	
IOL(D)	REF(D)
19.00	0.76
19.50	0.38
20.00	**-0.01**
20.50	-0.40
21.00	-0.80

ALADDIN

Full Biometry & Formula Comparison Report

- Consolidated biometric data in a structured OD/OS layout for easy comparison of multiple IOL formulas (e.g., Barrett)
- Customizable layouts aligned with surgeon preferences



TORIC IOL — TOPCON

Patient Information

Patient	Surgeon	
TOPCON DEMO	**SURGEON GENERIC**	
Patient ID	Clinic	**OS**
Date of Birth	Exam Date	
01/01/1950 dd/mm/yyyy	**02/10/2015 - 17:55** dd/mm/yyyy	

Biometry Data

AL (mm)	**23.93**	LT (mm)	**4.00**	K1 (mm)	**8.51**	CYL (D)	**-3.06@173°**
ACD (mm)	**3.21**	CCT (mm)	**0.556**	K2 (mm)	**7.90**	n	**1.3375**

Surgical Pre Op Data

SEQ (D)	**23.00**	SIA (D)	**0**
Formula	**Holladay I**	IL (°)	**83**

Expected Post Op Cornea

K1 Post (mm) **8.51** K2 Post (mm) **7.90**
CYL Post (D) **-3.06 @ 173°**

Toric IOL

Lens Model
Alcon AcrySof SN6AT6

Spherical Power **21.50 D**
Cylindrical Power **3.75 D**
Sph. Equiv. Power **23.38 D**
Axis Of Placement **83°**
Expected Refraction **-0.02D -0.44 D @ 173°**

Lens	Residual Astigmatism
AcrySof SN6AT4 (22.00D 2.25C)	-1.48 D @ 173°
AcrySof SN6AT5 (21.50D 3.00C)	-0.96 D @ 173°
AcrySof SN6AT6 (21.50D 3.75C)	-0.44 D @ 173°
AcrySof SN6AT7 (21.00D 4.50C)	-0.08 D @ 83°
AcrySof SN6AT8 (20.50D 5.25C)	-0.60 D @ 83°

Toric IOL Placement

OS
90 105 75 120 60 135 45 150 30 165 15 180 0
Nasal Temporal

Quantity 1

Notes

1.0.0

Toric IOL Planning Report

- Toric optimization with axial alignment and residual astigmatism calculation using advanced formulas, including Barrett Toric
- Predicted postoperative refraction displayed alongside calculation results

ALADDIN FEATURES

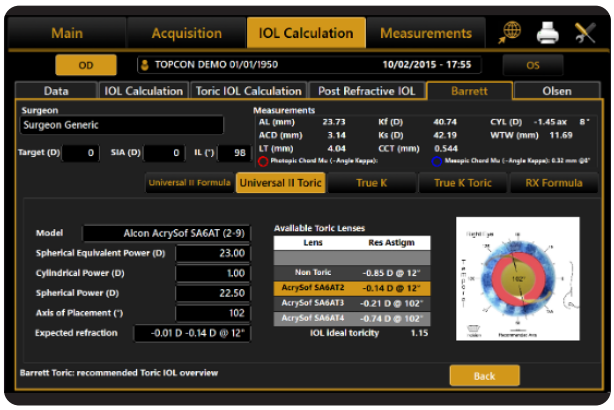
Keratometry Topography

Posterior & Anterior Biometry

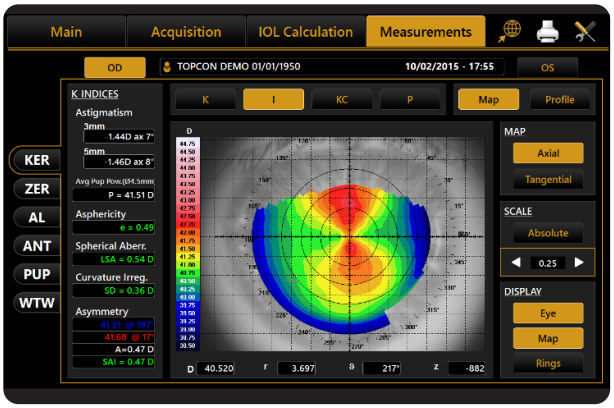
Extensive Spherical & Toric IOL Calculation Suite

White-to-White Measurement

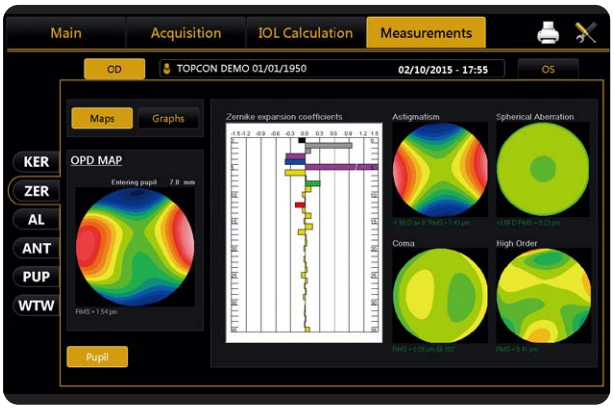
Integrated Measurements and Calculations for Confident IOL Selection



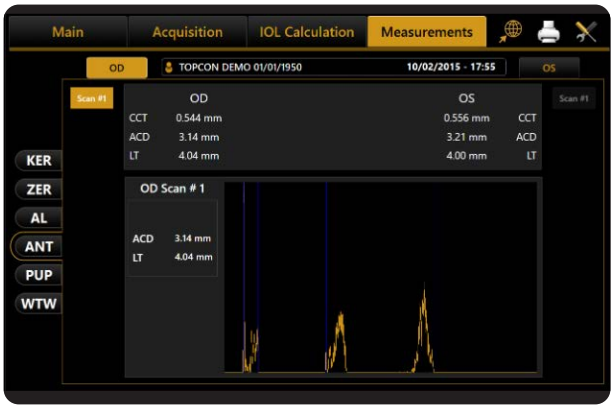
Full Barrett® Suite onboard for spherical, toric, and post-refractive IOL calculations



Placido-based topography for detailed corneal curvature and astigmatism assessment



Anterior Aberrometry Analysis (Zernike) to evaluate visual quality and support premium IOL selection



Interferometric technology with guided acquisition workflow for non-contact measurement and seamless capture of AL, CCT, ACD, and lens thickness



Dynamic and static pupillometry to assess pupil size and responsiveness under different lighting conditions



Customizable IOL database with adjustable surgeon-specific presets

Comprehensive Reports

Dynamic, Photopic & Mesopic Pupillometry

RX/AL Trends Module

Anterior Aberrometry Analysis (Zernike)

TECHNICAL SPECIFICATIONS

MEASUREMENT RANGE FOR IOL

Axial Length (Interferometry)	Super luminescent diode 850nm, 15 mm - 38 mm
Corneal Radii	5.00mm – 12.00mm / 28.00D - 67.50D
ACD Measurement	Interferometer 1.5mm – 6.5mm
White-to-White Measurement	8.00mm – 14.00mm
Pupillometry	Dynamic, Photopic & Mesopic, pupil size 0.5mm - 10mm
Lens Thickness (interferometry)	0.5mm – 6.5mm
CCT Measurement (interferometry)	0.300mm – 0.800mm

ON-BOARD CALCULATION FORMULAS

IOL formulas Post Refractive	Haigis, Hoffer Q, Holladay 1, SRK®II, SRK®T, Barrett, Universal II, Olsen
IOL formulas	Camellin Calossi and Shammas No History, Barrett True K, Barrett Rx

PLACIDO TOPOGRAPHY

Keratoscopic Cone	24 rings on a 43 dpt sphere, working distance 80mm, 14 LEDs
Points Analyzed	Over 100,000
Points Measured	6,144
Cornea Coverage	Up to Ø 9.8mm (on a 8mm sphere) 42.2D with N=1.3375
Guided Focus System	Yes

APEX KERATOMETRY (AK)

Apical Curvature	Yes
Apical Gradient of Curvature	Yes
Symmetry index	Yes

SOFTWARE FEATURES

Toric IOL Calculator	Generic Toric IOL, Barrett Toric calculator, Olsen Toric
Zernike Analysis	Pupil size 2.5mm - 7.5mm
Print To	USB printer, Network printer, PDF to shared network folder, PDF to USB drive

INSTRUMENT SPECIFICATIONS

Display	10.1" touch screen
Storage	320 GB HDD + 32 GB SSD
Operating System	Windows 10 Embedded OS
Processor	Intel® Celeron®
Internal Memory	4GB RAM
Power Input	AC 100 – 240V 50/60 Hz
Dimensions	320mm (W) x 490mm (H) x 470mm (L)
Weight	18 kg
Connections	LAN integrated, 2x USB
Supports	USB Barcode scanner, External USB keyboard / mouse
Marking	CE, ETL

REPORTS

Aladdin Report	Yes
Measurement Overview	Yes
Pupillometry	Yes
IOL	Yes
Generic Toric IOL	Yes

CATARACT PLANNING WORKFLOW

ALADDIN supports DICOM connectivity for standardized data exchange and archiving. Paired with the KR-800S, it enables continuity across the cataract workflow, from pre-operative diagnostics to surgical planning and post-operative evaluation.



KR-800S
Auto Kerato-Refactometer

PRE-OPERATIVE

- Spherical subjective refraction
- Glare testing
- Contrast testing
- Distance and near VAs with and without correction



ALADDIN
Optical Biometer

IOL PLANNING

- Axial length measurements
- Topography
- Pupillometry
- Zernike analysis
- IOL calculation



CATARACT SURGERY



KR-800S
Auto Kerato-Refractometer

POST-OPERATIVE

- Spherical subjective refraction
- Post-operative VA testing

VISIA IMAGING S.R.L. | Via Martiri della Libertà 95/e, 52027 San Giovanni Valdarno (AR), ITALY

IMPORTANT Subject to change in design and/or specifications without advanced notice. In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation. Medical device MDR Class IIa. Manufacturer: VISIA imaging S.r.l.

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