

Eine neue Blaufilter IOL mit neuem asphärischen ABC-Optikdesign

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Hoya FY-60AD

Technical details

- Material: optic / hydrophobic acrylic haptics / blue PMMA
- IOL-Type: single piece IOL
- Total size: 12.5 mm
- Optic zone: 6.0 mm
- Optic: biconvex
- Angulation: 5°
- Index: 1.52
- Range: +6.00D to +30.00D (step edge up to +24.00D)

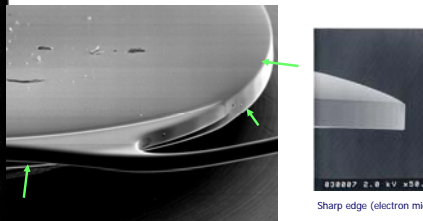
Hoya FY-60AD

Technical details

- Edge Thickness: 0.20mm (+20.00dpt)
(YA-60BB: 0.25mm +20.00dpt)
- A-constant: 118.4
- Haigis: a0 = 1.10, a1 = 0.4, a2 = 0.1
- Hoffer Q: pACD= 5.32
- Holladay-1: sf= 1.53
- SRKT: A= 118.7
- SRKII: A= 119.0
- Aspheric side: Anterior surface
- Asphericity: middle -0.18
- Sterilization: EO
- Incision size: >= 2.5 mm



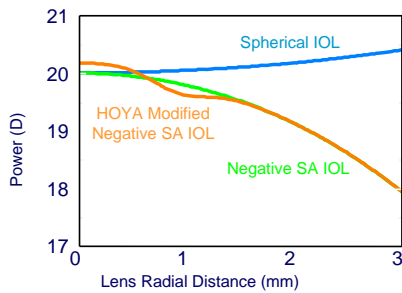
Edge Technology



Sharp edge (electron micrograph: x 100)

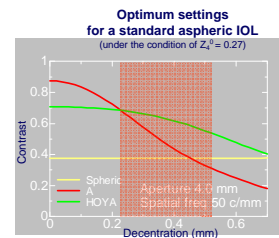
Posterior optic enhanced 360° sharp edge and step edge design (up to +24.00)

Power distributions (+20.0 D)



ABC=Aspheric Balanced Curve - Design

Laboruntersuchungen



Indications for use

Application:

Injector System: Yellow Valley fold specified hand piece ISH003 with cartridge Type-E1

Recommended Incision: Corneal ≥ 2.5 mm



Yellow handpiece

E-1 cartridge

Preloaded

First results

with the Hoya FY-60AD

Patients: 17 (34 eyes)

2 Surgeons (UM, HK)

Age: 69 ± 13 years

Implanted lens power: 21.0 ± 2.0 D

First results (after 4 weeks)

Postoperative Refraction:

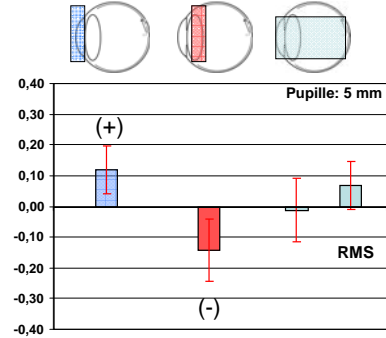
Sph: 0.20 ± 0.5 D

Cyl : -0.50 ± 0.8 D

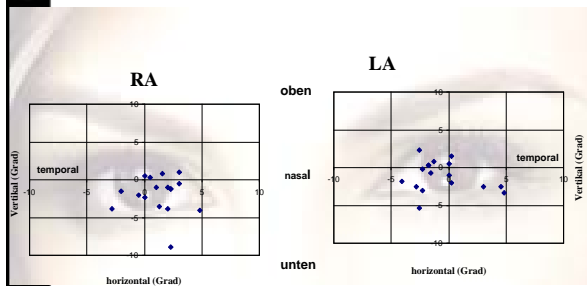
Uncorrected Visual Acuity: 0.8 ± 0.3

Bestcorrected Visual Acuity : 1.1 ± 0.2

Sphärische Aberration



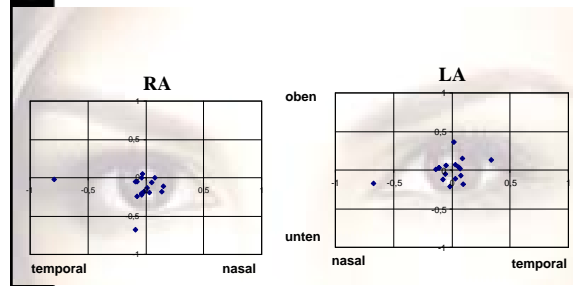
Winkel kappa



Horizontal: 1.23 ± 1.9
Vertikal: -1.90 ± 2.43

Horizontal: -0.58 ± 2.6
Vertikal: -1.14 ± 2.00

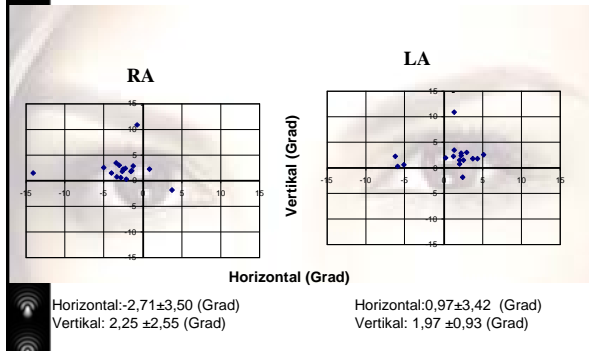
Dezentrierung



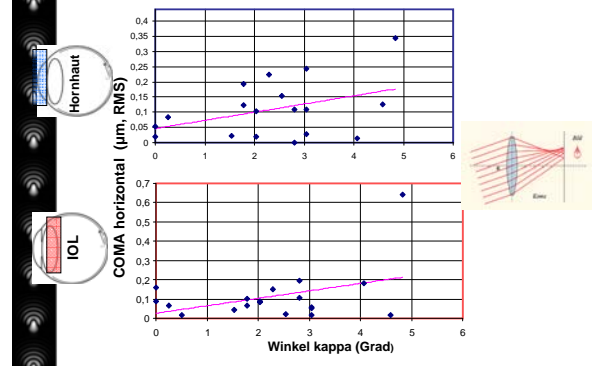
Horizontal: -0.05 ± 0.20 mm
Vertikal: -0.14 ± 0.16 mm

Horizontal: -0.02 ± 0.20 mm
Vertikal: 0.00 ± 0.14 mm

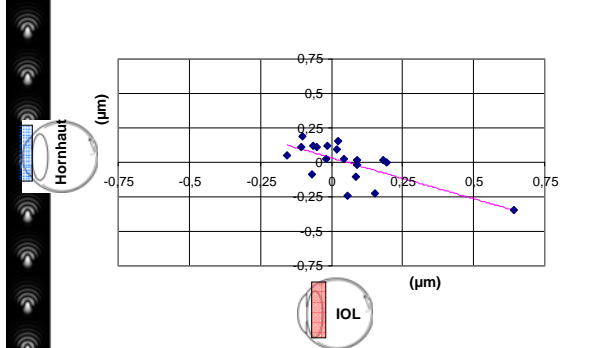
Verkipfung



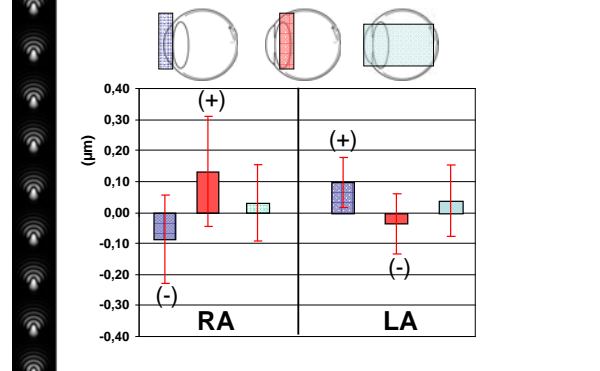
Einfluss von Winkel kappa



Kompensation der cornealen horizontalen Coma



Coma horizontal !



Zusammenfassung

- Die neue asphärische Hoya-Linse zeigt ein sehr gutes Zentrierungsverhalten
- Die sphärische Aberration der Hornhaut wird signifikant reduziert
- Bemerkenswert ist, dass die laterale corneale Coma sowie die laterale lenticuläre Coma signifikant abhängig sind vom Winkel kappa und sich zudem kompensieren.
- Die totale Coma ist reduziert.