

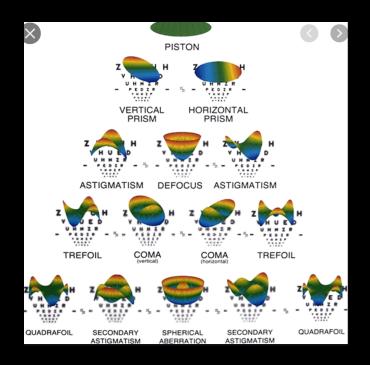
- 55yo male attorney
- OD: -2.75+.50x90
- OS: -3.00+.75x85
- Wants to golf sc
- Currently works sc





HIGHER ORDER ABERRATIONS

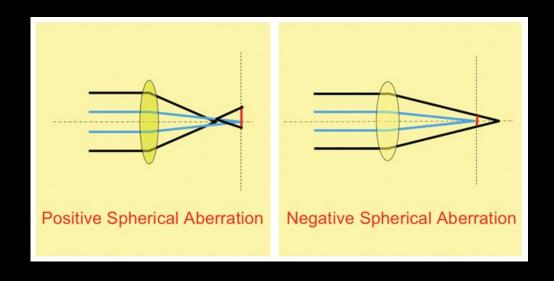
- Coma
- Trefoil
- Spherical aberration



? SPHERICAL ABBERATION

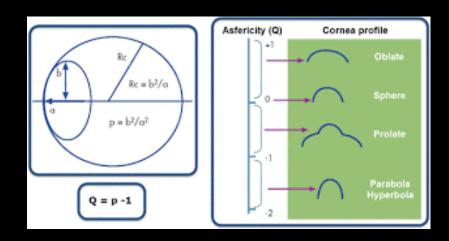
- Flatter in center, steeper periphery
- Normal cornea 0.27+/-0.10 mm

- Steeper in the center, flat in periphery
- Hyoperic LASIK



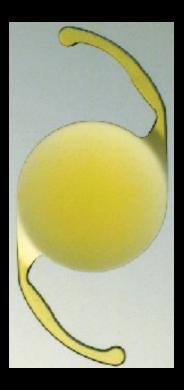
Q FACTOR

- Determines corneal shape
- Available on most newer topographers



ASPHERIC IOLS

- Posterior aspheric surface
- Counters the asphericity of the cornea
- Better contrast especially at night



• 52 yo nurse

• OD: +3.00+1.00x150

• OS: +3.25+1.25x30

• Is on a computer "all day"



WHAT IOL DO YOU RECOMMEND?

- Multifocal
- EDOF
- Accommodating

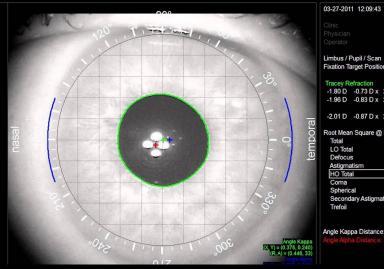
ANGLE ALPHA

• Difference between the visual axis and center of limbus

WF Summary Display



Problematic Alignment ID: Sample12 Group: Sample Set



Limbus / Pupil / Scan Fixation Target Position 11.59 / 4.34 / 3.50 mm

-2.01 D -0.87 D x 21° @ D <= 3.50 mm vD = 12.00 mm

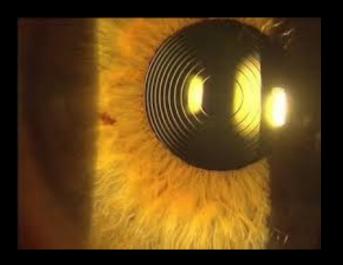
Root Mean Square @ D <= 3.50 mm

Total LO Total Defocus 1.086 µ 1.081 µ + 1.050 µ 0.256 μ x 111° 0.111 µ 0.047 µ x 198° + 0.033 µ 0.016 µx 92° 0.086 µ x 105°

Angle Kappa Distance: 0.446 mm @ 33°

DIFFRACTIVE MULTIFOCAL IOL

Centered



Decentered



• 63 yo retired teacher

• OD: -6.75+2.50x175

• OS: -5.50+2.25x180

Has been wearing mono CLs (OD dominant) for years.

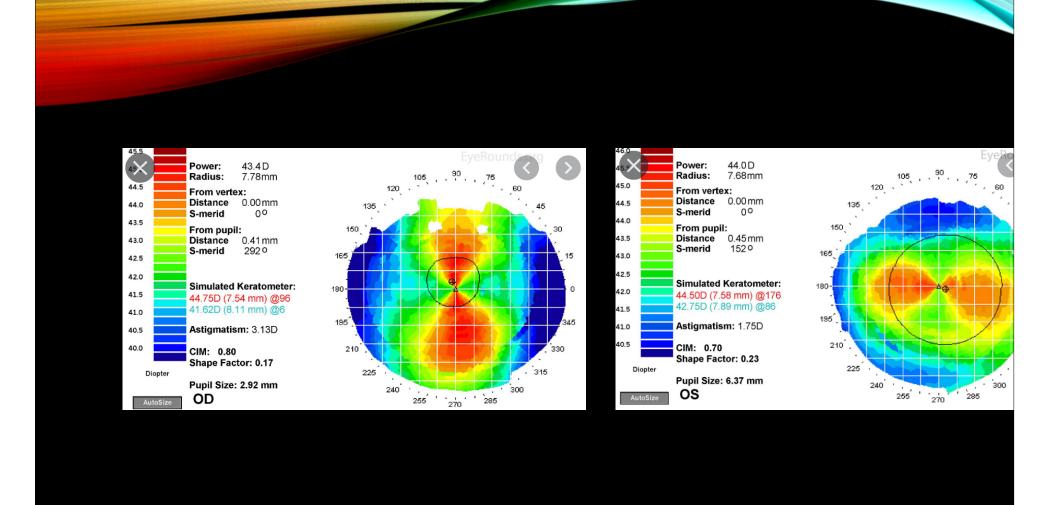




ASTIGMATISM

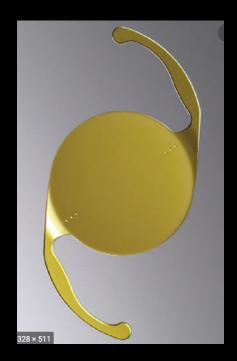
- lower order aberration
- shadowing
- monocular diplopia



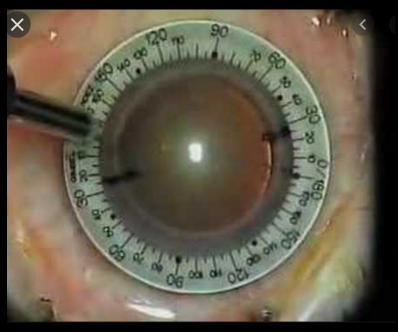


TORIC IOL

- Must measure at least 2 different ways
- Must position on axis
- No risk of nighttime halos







- 45 yo truck driver
- Drives a lot at night
- Hates wearing glasses
- OD: +4.25 +.50 x 175
- OS: +3.00 +.75 x 005



NEW TECHNOLOGY EDOF IOL

- X wave technology
- Not diffractive = no glare/halos
- Distance and intermediate
- Near with bright light

