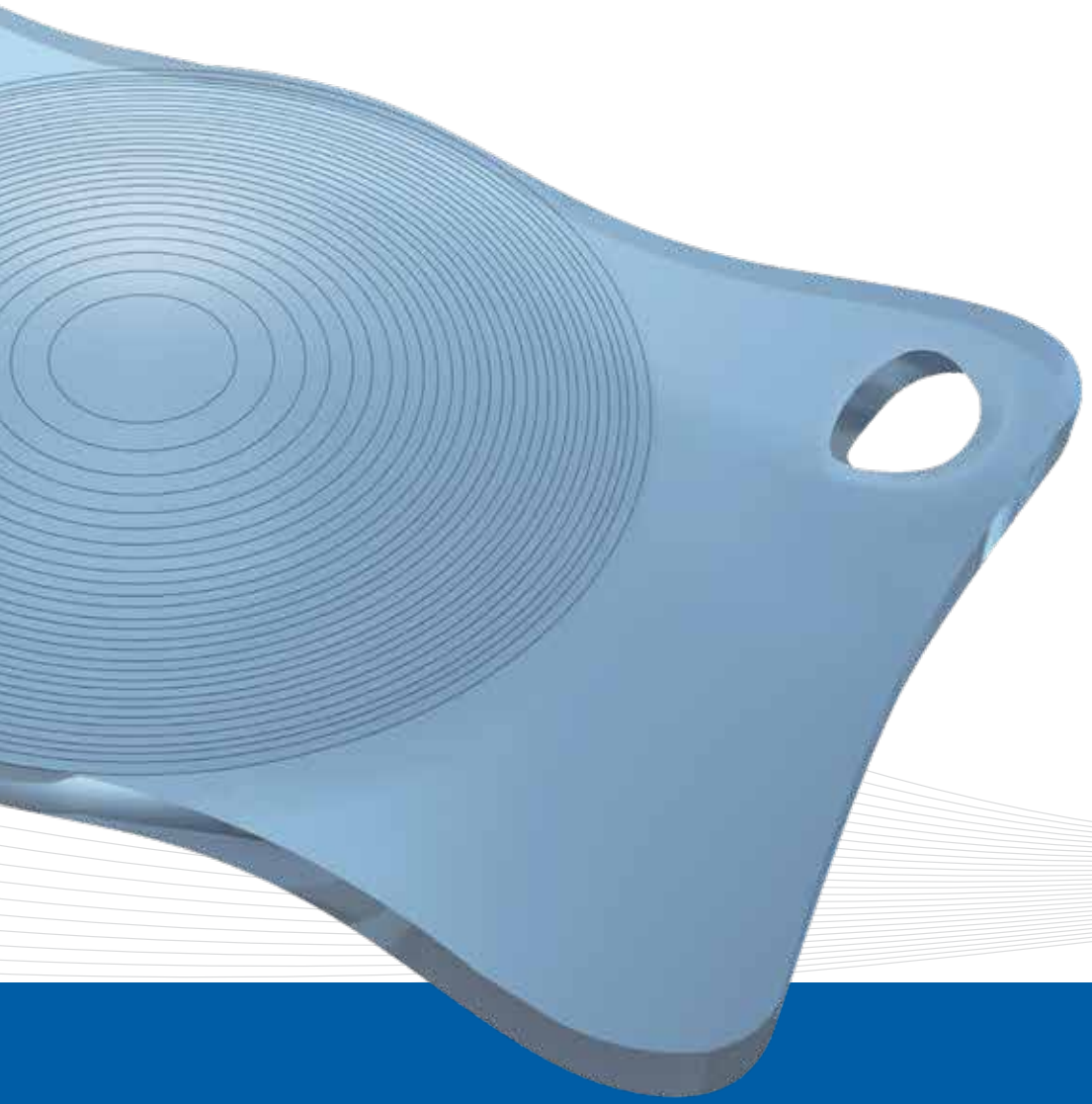


Acriva[UD] Reviol

Multifocal Intraocular Lens

Multifocal

VSY BIOTECHNOLOGY

Active-Diffractive Optic is Different

Do you know why???????

Maximum Light Transmission	Better Visual Quality
Pupil-independent Light Distribution	Increased Contrast Sensitivity
3.75D Near Addition	Improved Intermediate Vision
Visual Performance After Implantation	Enhanced Visual Acuity for All Distances
Ring Transition Zones	Limited Photic Phenomena
Exceptional Optic Engineering	Square Edge and Aspheric Design

Discover the Difference

1 Maximum Light Transmission

Better Visual Quality

Not all diffractive IOLs are the same. **Reviol's** unique Active-Diffractive zone design provides excellent light transmission at maximum range under any light condition.

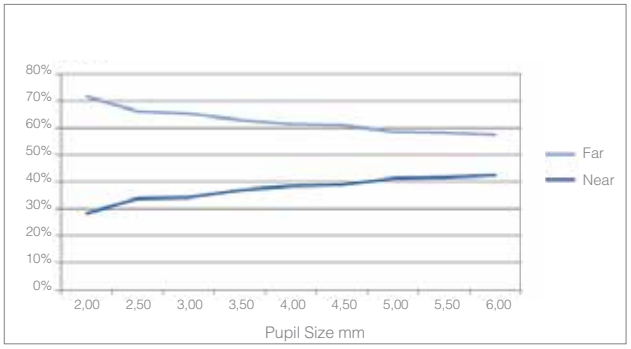
Diffractive Zones of Reviol

The performance of multifocal IOLs depends on their establishment of diffractive zones. The number, height, interval, and width of the rings affect patients' total visual outcomes under mesopic conditions. Diffractive multifocal IOL engineering is based on balanced light energy between foci. Narrow rings increase the near addition. Conversely, higher steps enable transfer of more energy to near focus[1].

2 Pupil-Independent Light Distribution

Increased Contrast Sensitivity

Reviol's Active-Diffractive optic preserves a better balance of 60% far and 40% near focus at 6mm pupil aperture. Balanced light distribution under any light condition increases contrast sensitivity.



Reviol's Light Distribution

Decreased contrast sensitivity in mesopic conditions has been reported in pupil-dependent multifocal IOLs[2]. A light distribution change of 90% for far focus and 10% for near focus at 6 mm pupil diameter explains this phenomenon. Lower energy transfer to near focus causes patients' poor visual acuity[3].

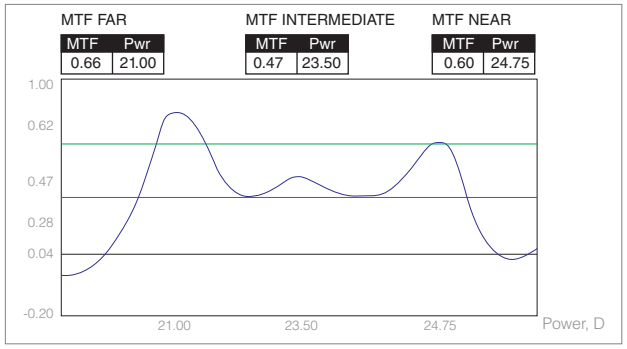
References
1- Portney V., Light distribution in diffractive multifocal optics and its optimization. J Cataract Refract Surg 2011; 37:2053-2059.
2- de Vries NE, Nuijts RM. Multifocal intraocular lenses in cataract surgery: literature review of benefits and side effects. J Cataract Refract Surg. 2013 Feb;39(2):268-78.
3- Petermeier K, Messias A, Gekeler F, Szurman P. Effect of +3.00 diopter and +4.00 diopter additions in multifocal intraocular lenses on defocus profiles, patient satisfaction, and contrast sensitivity. J Cataract Refract Surg. 2011 Apr;37(4):720-6.

Experience the Difference

3 3.75D Near Addition

Improved Intermediate Vision

3.75D near addition in **Reviol's** Active-Diffractive Optic has the appropriate balance to provide better intermediate visual acuity[4].

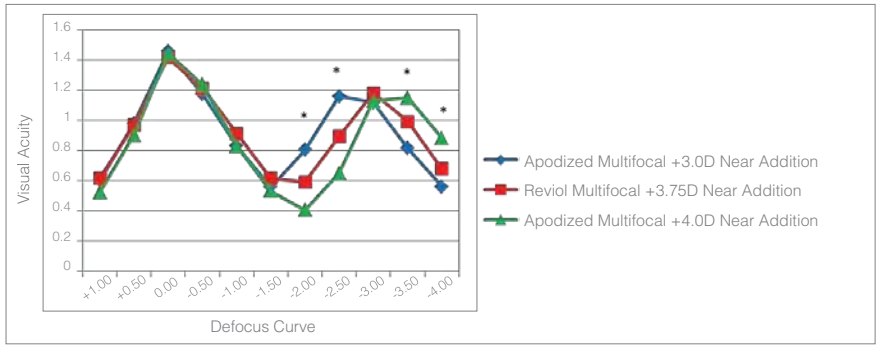


Near addition is crucial in energy distribution through near to distance focus. Insufficient near addition results in inadequate disparity between foci, causing blurred vision at intermediate focus. Excessive near addition eliminates focus overlapping and provides sharp near and distance vision. On the other hand reduced visual performance may result, causing difficulties in patient adaptation[3].

4 Visual Performance After Implantation

Enhanced Visual Acuity for All Distances

As demonstrated in the defocus curve graphic, **Reviol's** Active-Diffractive optic offers better intermediate vision than Apodized +4.0D multifocal IOLs, and better near visual performance than Apodized +3.0D multifocal IOLs[5].



*There were statistically significant differences in near and intermediate visual acuities among three groups. (P < 0.05)

The defocus curve was determined in a comparative study on 130 eyes of 87 patients. The study compared performances of Reviol +3.75D near addition, an apodized multifocal IOL +3.0D near addition, and an apodized multifocal IOL +4.0D near addition.[5]

References
3- Petermeier K, Messias A, Gekeler F, Szurman P. Effect of +3.00 diopter and +4.00 diopter additions in multifocal intraocular lenses on defocus profiles, patient satisfaction, and contrast sensitivity. J Cataract Refract Surg. 2011 Apr;37(4):720-6.
4- Can I., Ceran BB., Soyugelen G., Takmaz T. Comparison of clinical outcomes with 2 small-incision diffractive multifocal intraocular lenses. Journal of Cataract & Refractive Surgery 2012 Vol 38 No1
5- Data on file.

See the Difference

5 Ring Transition Zones

Limited Photic Phenomena

Reviol's progression zones are rounded in a unique manufacturing process.

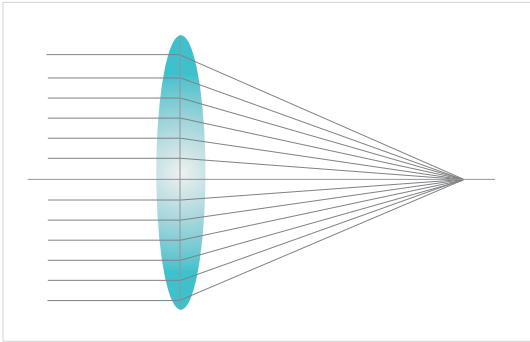
Photic Phenomena | Improved Vision

Sharper transition zones interact with photic phenomena as light refracts wildly.

6 Exceptional Optic Engineering

Aspheric Design

Ultra Definition optic design corrects spherical aberrations coming from cornea. **Reviol** IOLs have a slight negative asphericity which neutralizes positive spherical aberration of the cornea while preserving the depth of focus.



Ultra Definition Aspheric Optic

Corneal topography measurements on 71 cataract patients have shown that the average spherical aberration of the human cornea is +0.27 microns. With spheric IOL implantation, total ocular spheric aberration becomes increasingly positive. Poor contrast sensitivity has been reported in many cataract patients after implantation of spheric IOLs[6, 7].

Advantages of Ultra Definition Design

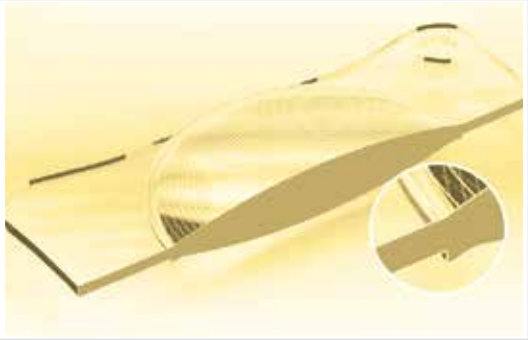
- Improved contrasts under mesopic conditions
- Preserved depth of focus
- Less sensitive to decentration

References
6- Holladay JT, Piers PA, Korayni G, et al. A new intraocular lens design to reduce spherical aberration of pseudophakic eyes. J Refract Surg. 2002, 18 (6):683-691.
7- Belluci R, Morselli S, Piers P. Comparison of wavefront aberrations and optical quality of eyes implanted with five different intraocular lenses. J Refract Surg. 2004 Jul-Aug;20(4):297-306.

7 360° All Enhanced Square Edge

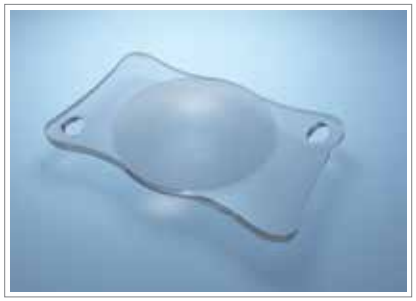
Real PCO Barrier

Reviol's innovative edge design greatly reduces PCO risks by creating a geometric and mechanical barrier against cell proliferation.



Recent studies conclude that the most important IOL-related factor in preventing PCO formation is a square edge on the posterior optic surface, exerting a mechanical barrier effect[8,9].

References
8 - Kohnen T, Maqdowski G, Koch DD. Scanning electron microscopic analysis of foldable acrylic and hydrogel intraocular lenses. J Cataract Refract Surg 1996; 22:1342-1350.
9- Werner L, Mamalis N, Pandey SK, et al. Posterior capsule opacification in rabbit eyes implanted with hydrophilic acrylic intraocular lenses with enhanced square edge. J Cataract Refract Surg 2004; 30:2403-2409.



MFM 611

BB MFM 611

BB T MFM 611

Material	Hydrophobic surface, acrylic with 25% water content, UV filter
Optic Size	6.00 mm
Optic Design	Biconvex
Haptic Size	11.00 mm
Haptic Design	Plate
Haptic Angle	0˚
Recommended Ac. A Constant	118.0
Recommended Op. A Constant	Srk-T : 118.3 - Srk-II : 118.5
Diopter Power Range	From 0.0D to +32.00D (0.50D increments)
Special Production	From +32.50D to +45.00D (0.50D increments)
Refractive Index Wet	20°C /35°C 1.462 / 1.462 ± 0.002
Recommended Injector & Cartridge System	Acrijet Green 1.8 (Up to 25.0D) Acrijet Green 2.0 (Up to 28.0D) Acrijet Green 2.2 (Up to 30.0D)

Material	Hydrophobic surface, acrylic with 25% water content, UV, violet, and blue filter
Optic Size	6.00 mm
Optic Design	Active-Diffractive Multifocal
Haptic Size	11.00 mm
Haptic Design	Plate
Haptic Angle	0˚
Recommended Ac. A Constant	118.0
Recommended Op. A Constant	Srk-T:118.3 - Srk-II:118.5
Diopter Power Range	From 0.0D to +32.00 D (0.50D increments)
Special Production	From +32.50D to +45.00D (0.50D increments)
Refractive Index Wet	20°C /35°C 1.462 / 1.462 ± 0.002
Recommended Injector & Cartridge System	Acrijet Green 1.8 (Up to 25.0D) Acrijet Green 2.0 (Up to 28.0D) Acrijet Green 2.2 (Up to 30.0D)

Material	Hydrophobic surface, acrylic with 25% water content, UV, violet, and blue filter
Optic Size	6.00 mm
Optic Design	Active-Diffractive Multifocal Toric
Haptic Size	11.00 mm
Haptic Design	Plate
Haptic Angle	0˚
Recommended Ac. A Constant	118.0
Recommended Op. A Constant	Srk-T:118.3 - Srk-II:118.5
Diopter Power Range	Spheric: From 0.0D to +32.00D (0.50D increments) Cylindric: From +1.00D to +10.00D (0.50D increments)
Refractive Index Wet	20°C /35°C 1.462 / 1.462 ± 0.002
Recommended Injector & Cartridge System	Acrijet Green 1.8 (Up to Sph 25.0D Cyl 5.0D) Acrijet Green 2.0 (Up to Sph 28.0D Cyl 5.0D) Acrijet Green 2.2 (Up to Sph 30.0D Cyl 5.0D)

Acriva[UD] Reviol

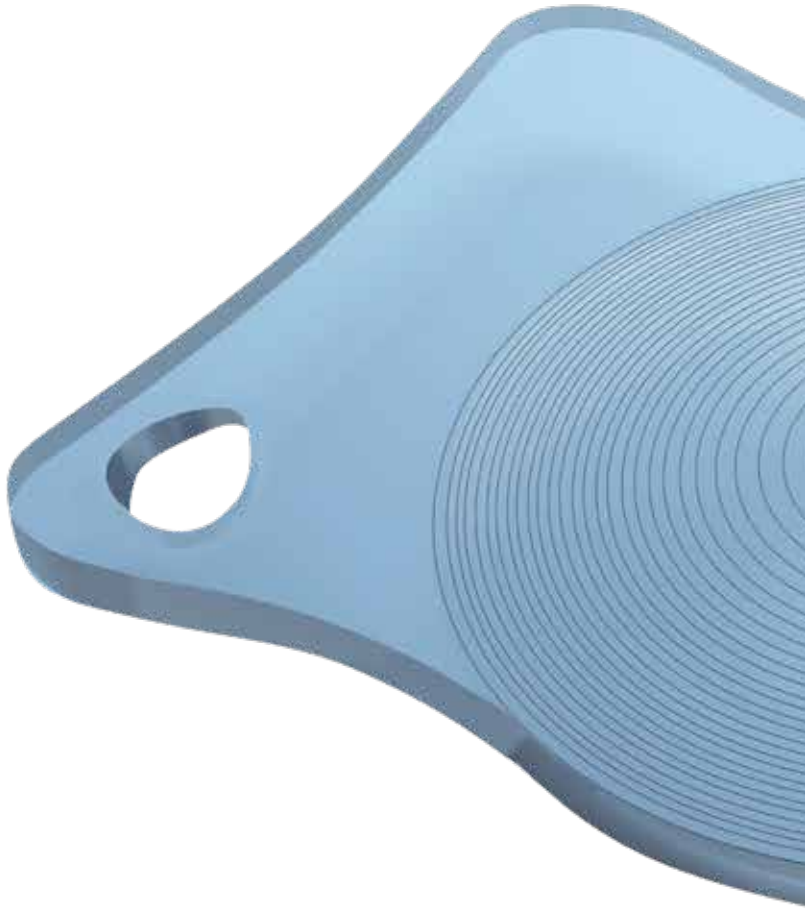
MFM 611

Acriva[UD] BB Reviol

BB MFM 611

Acriva[UD] BB Reviol Toric

BB T MFM 611



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