

CE  
2460

# EYECRYL<sup>TM</sup> Sert

Advanced Monofocal IOL

Inspired by  
*natural vision*

*mono* **MORE** *technology*

biotech

VISION CARE

## REDEFINING MONOFOCAL SEGMENT

- A new Advanced Monofocal IOL with Aspheric surface
- Continuous vision from distance to intermediate
- Spectacle independence for Intermediate Vision
- An extended range of vision:  $>1.75$  D at spectacle plane with Visual Acuity 0.2 LogMAR or better
- Intermediate vision up to 57 cm
- MICS (2.2 mm) compatible to reduce SIA
- Designed for fast neural adaptation
- Minimal glare and haloes
- ABBE no. 47



PLHFD6



PLHFD6T

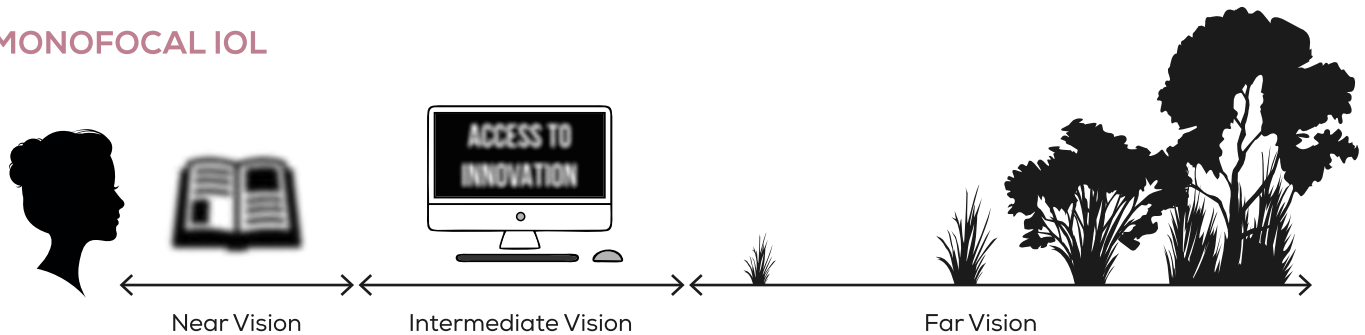
# ADDED INTERMEDIATE VISION:

*mono* **MORE** *technology*

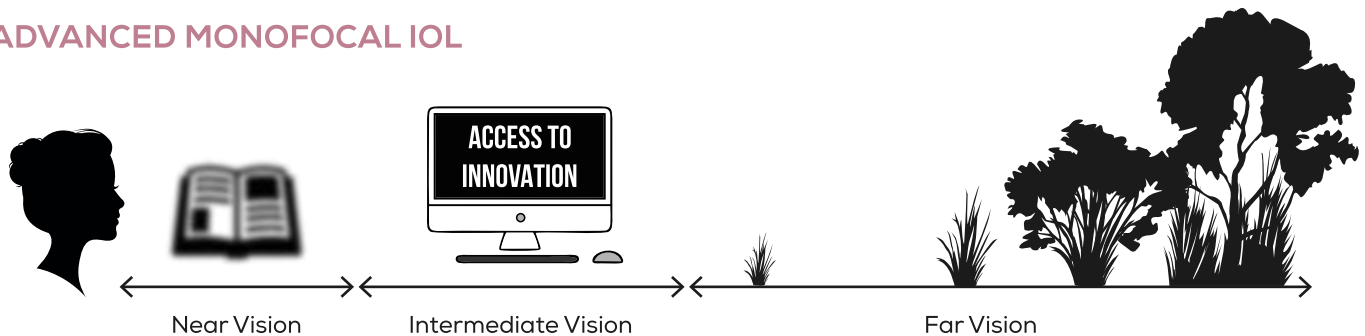
## UNIQUE ASYMMETRIC POWER DISTRIBUTION

- Designed for extended vision
- Optimized optical Zones to provide extended depth of focus
- Asymmetric power distribution to minimize pupil dependency
- Photic phenomena similar to Monofocal IOLs

### MONOFOCAL IOL

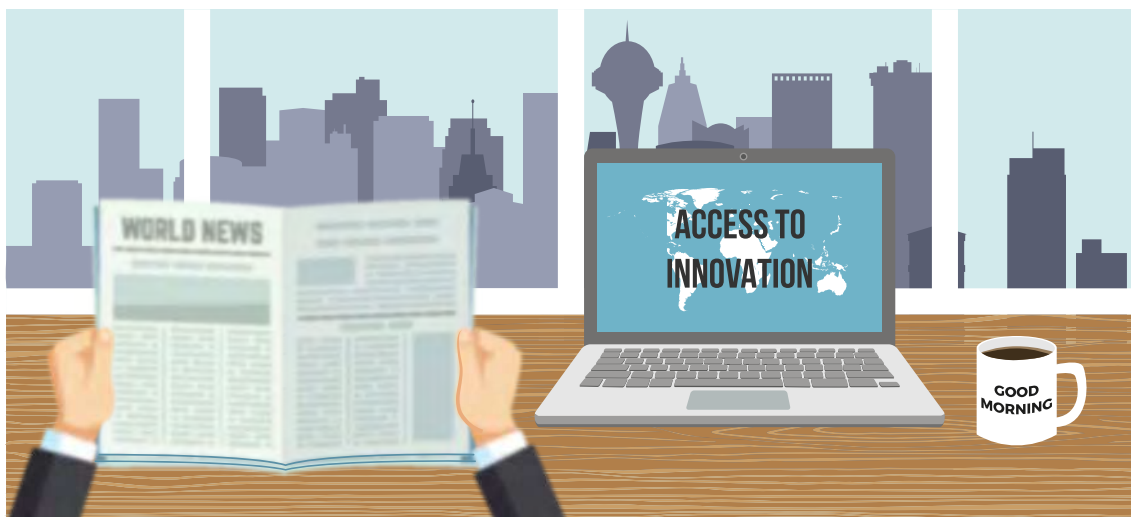


### ADVANCED MONOFOCAL IOL



# OPTIMIZED LIGHT ENERGY

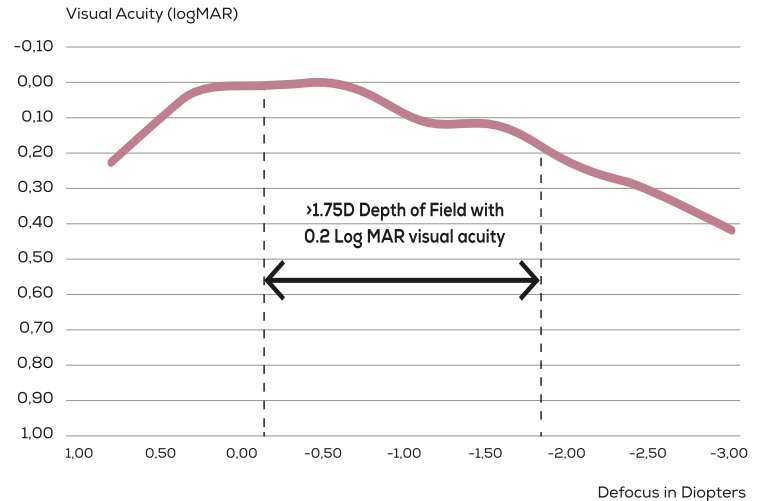
Optimized optical zones provide the extended depth of focus for Intermediate vision and asymmetric power distribution minimizes pupil dependency in all lighting conditions.



# DEFOCUS CURVE\*

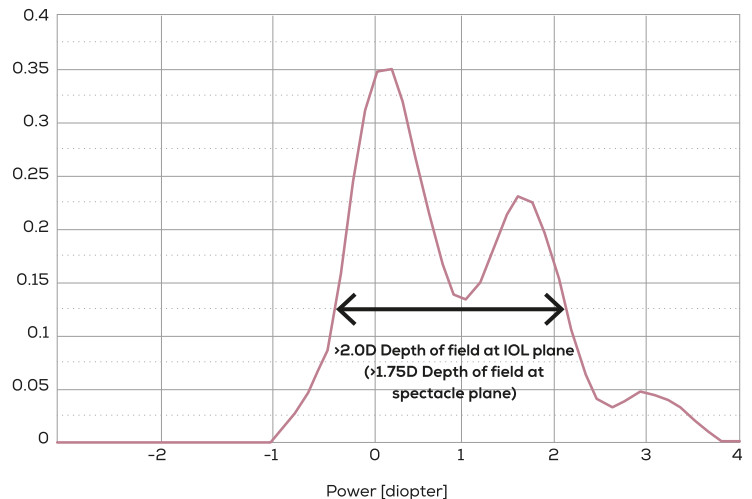
Extended Depth of focus for Intermediate vision without compromising far vision

- Continuous vision from Distance to Intermediate
- Great support for daily activities
- 0.2 lo MAR visual acuity even at +1.0D denotes tolerance range of IOL



# MODULATION TRANSFER FUNCTION\*

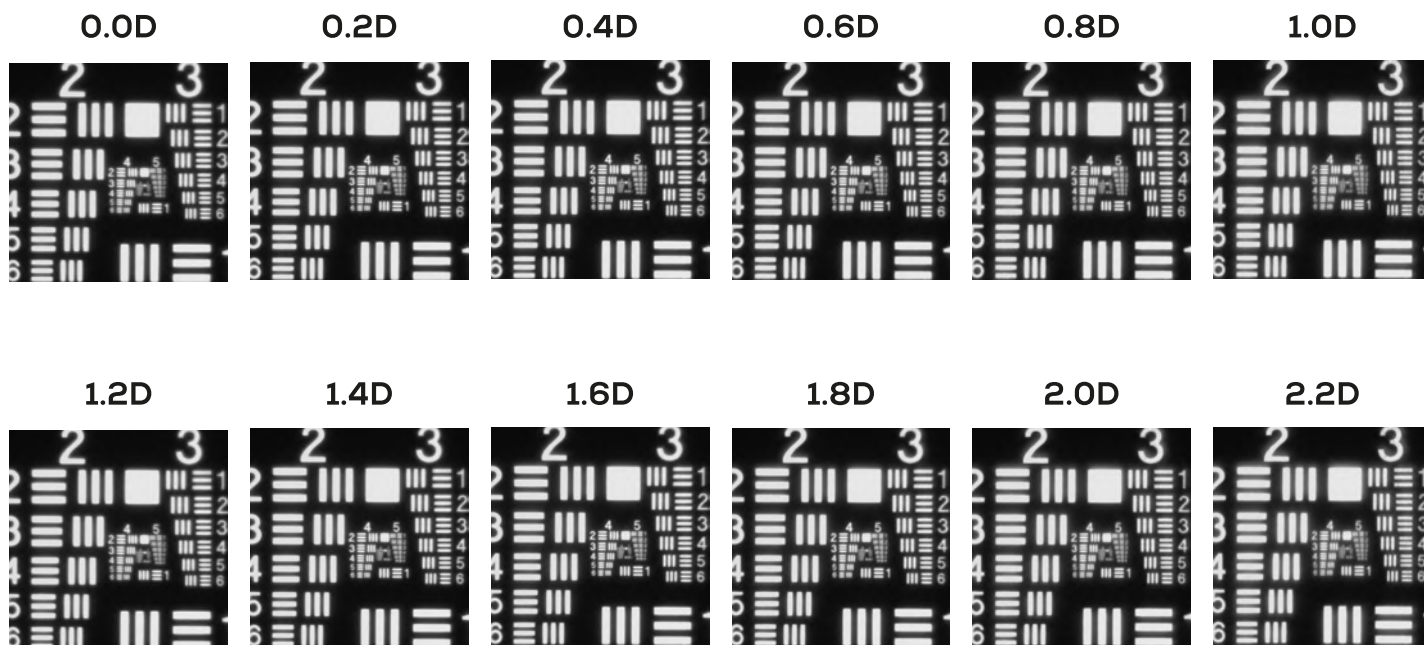
- Optimized energy distribution from Distance to Intermediate
- More than 0.3 MTF (50 lp/mm) @ 3.00 mm aperture
- Good contrast in all light conditions



# OPTICAL RESULTS\*

## USAF IMAGES AT 3.0 MM APERTURE

Optimized light distribution to maintain better resolution and good contrast sensitivity



# PRE-LOADED DELIVERY SYSTEM

SINGLE HAND IMPLANTATION WITH CONTROL OF SCREW TYPE INJECTOR:

## BEST OF BOTH WORLDS



## SIMPLE IOL IMPLANTATION USING FOLLOWING STEPS

STEP  
01



Push the blue injector plunger forward until the front push plate is flush against the injector housing.

STEP  
02



Inject adequate amount of any Biotech certified OVD having low to moderate viscosity, as shown here. The OVD should flow up to leading haptic of the IOL. Inject OVD from tip of the cartridge also, to fill the cartridge nozzle. Do not completely fill the chamber as this can move the IOL during insertion.

**STEP  
03**



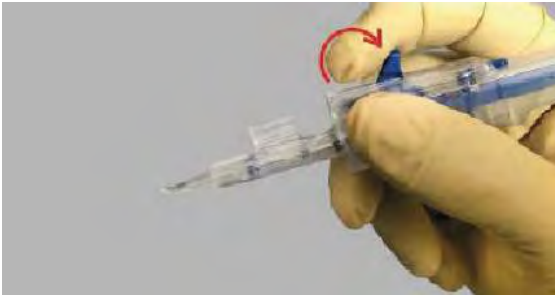
Close the cartridge flaps. Ensure that the flaps are locked with a "Click" sound.

**STEP  
04**



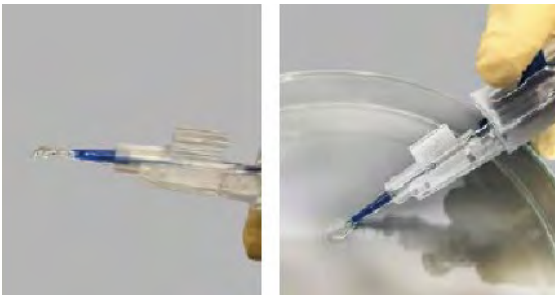
Push the blue injector plunger forward until the rear push plate is flush against the injector housing or until the drive wheel of the injector moves.

**STEP  
05**



Hold the delivery system with a "Pen Grip", as shown here and keep your index finger on Drive Wheel.

**STEP  
06**



Hold the system with the cartridge tip in a bevel down position. Now using your index finger, pull and rotate the drive wheel back slowly in order to push the lens forward until it is delivered.



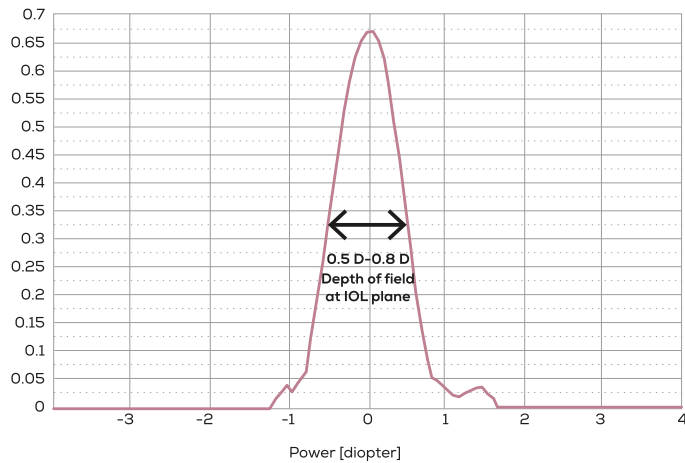
# MONOFOCAL IOL VS EYECRYL<sup>™</sup>Sert IOL

Advanced Monofocal IOL

## MTF COMPARISON\*

Monofocal IOL provides 0.5 D to 0.8 D depth of field and EYECRYL<sup>™</sup>Sert IOL provides more than 2.0 D depth of field (>1.75D depth of field at spectacle plane) which is helpful for Intermediate distance range of daily visual activities.

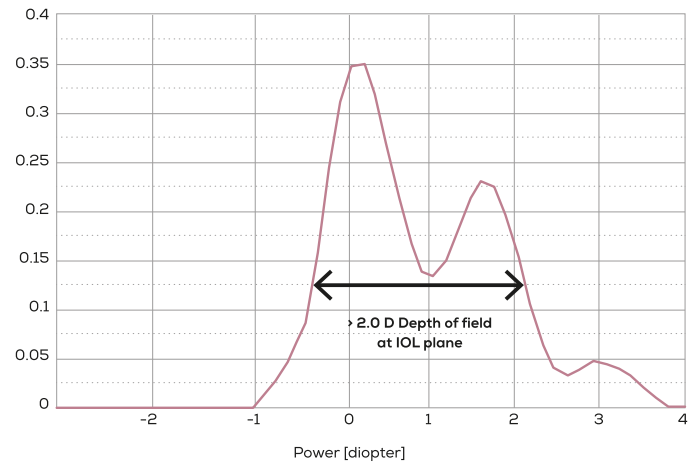
### MONOFOCAL IOL



Modulation Transfer Function @3.0 mm aperture

### EYECRYL<sup>™</sup>Sert IOL

Advanced Monofocal IOL



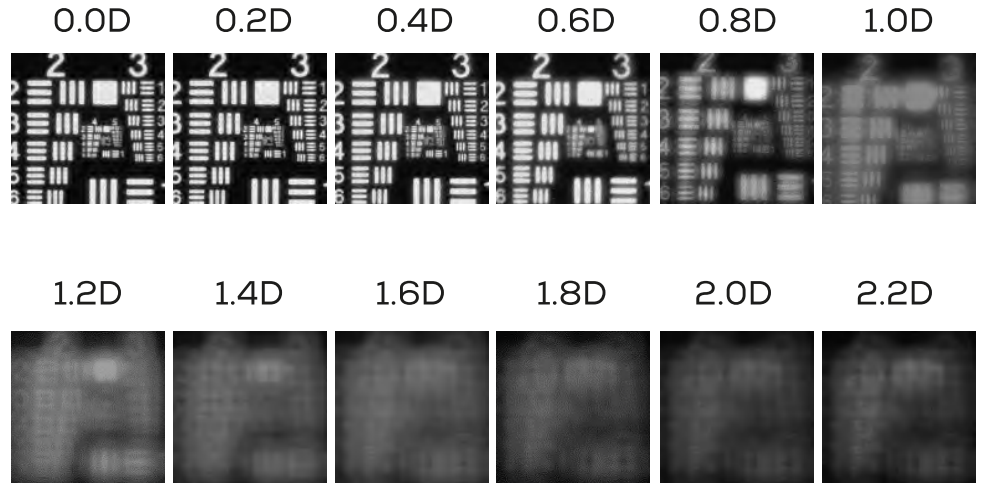
Modulation Transfer Function @3.0 mm aperture

# MONOFOCAL IOL VS. EYECRYL<sup>™</sup> Sert IOL

Advanced Monofocal IOL

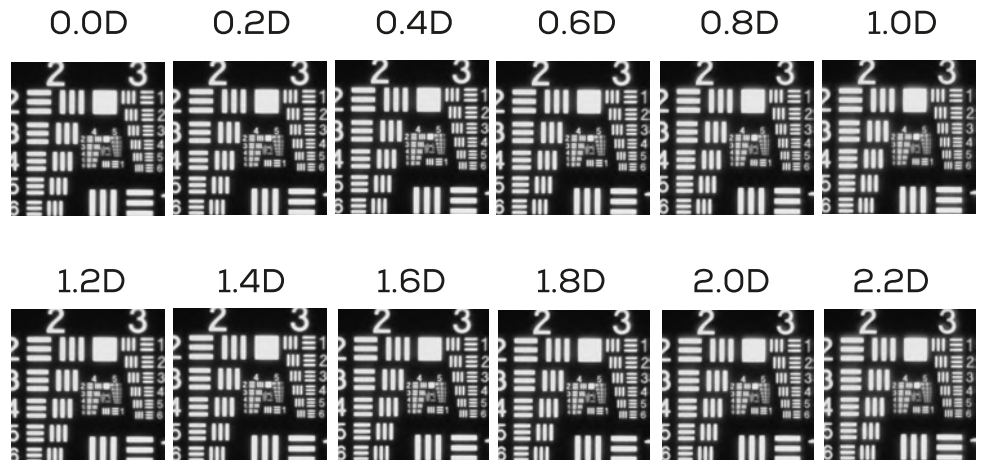
## USAF IMAGES COMPARISON\*

### MONOFOCAL IOL



### EYECRYL<sup>™</sup> Sert IOL

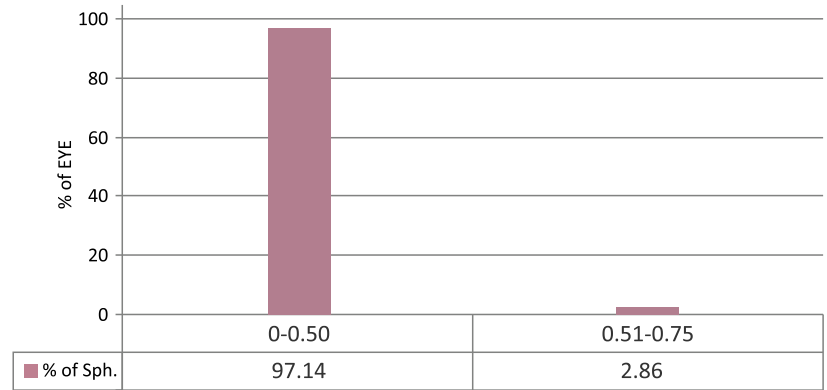
Advanced Monofocal IOL



# POST OPERATIVE OUTCOMES\* (n=70)

## SPHERICAL RESIDUAL

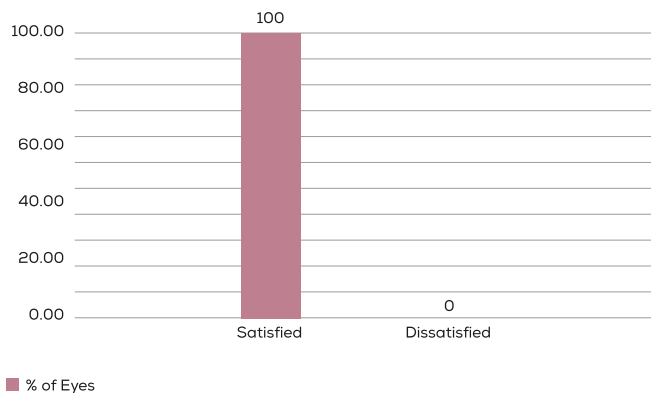
Post-operative spherical result shows that 97.14% of eyes were within  $\pm 0.50$ D spherical residual. All eyes were within  $\pm 0.75$ D spherical residual.



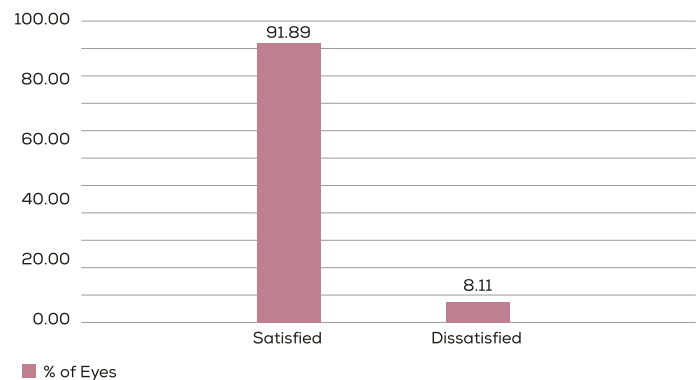
## SPECTACLE INDEPENDENCE FOR DIFFERENT DISTANCES\*

As per post-operative data, satisfaction for spectacle independence was found 100% for far vision & 91.89% for intermediate vision.

### FAR VISION



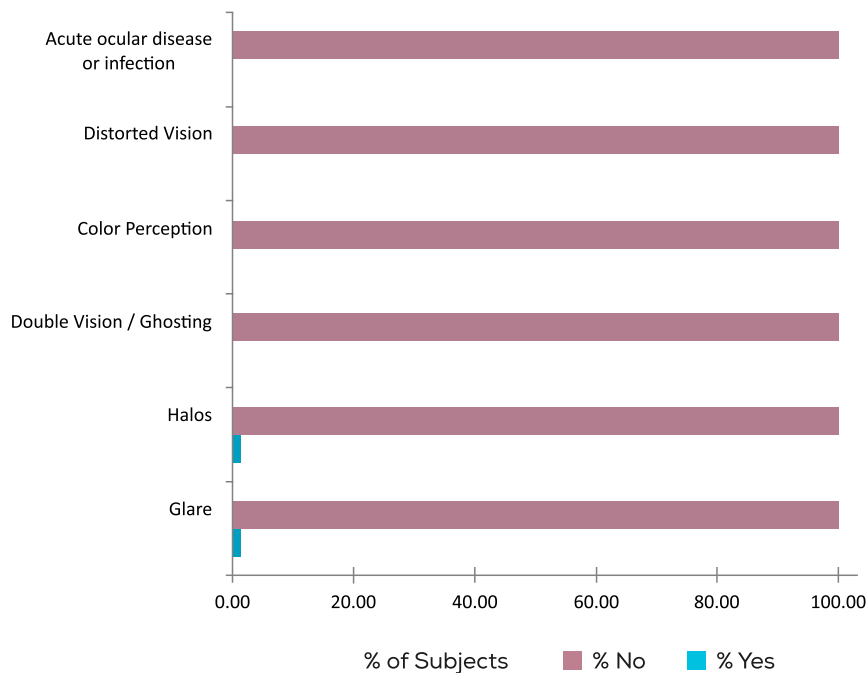
### INTERMEDIATE VISION



\*Data on File.

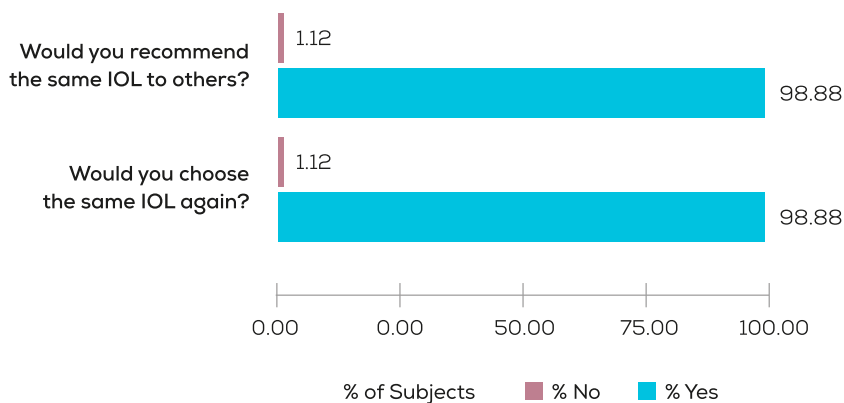
## PHOTIC PHENOMENON & VISUAL DISTURBANCE\*

No case of dysphotopsia or post-operative disturbance related to vision have been reported so far. With minimal glare and halos, photic phenomenon is similar to monofocal IOLs.



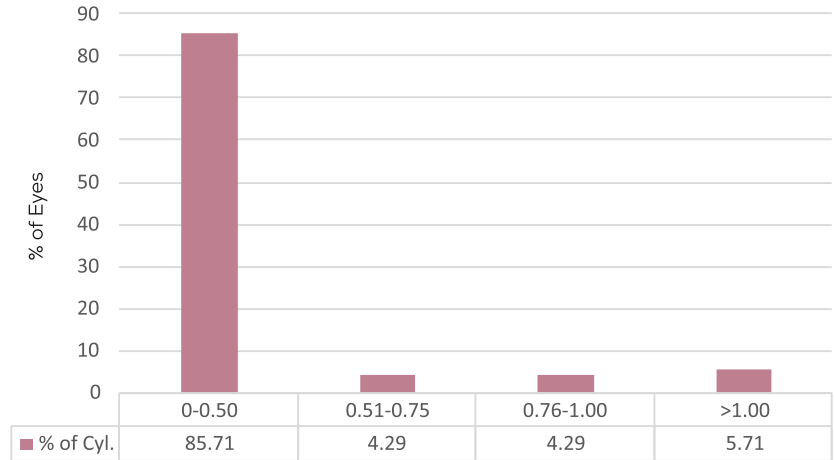
## PATIENT SATISFACTION\*

Patient satisfaction was found to be very high. 98.88% patients would choose the same IOL again and recommend it to others.



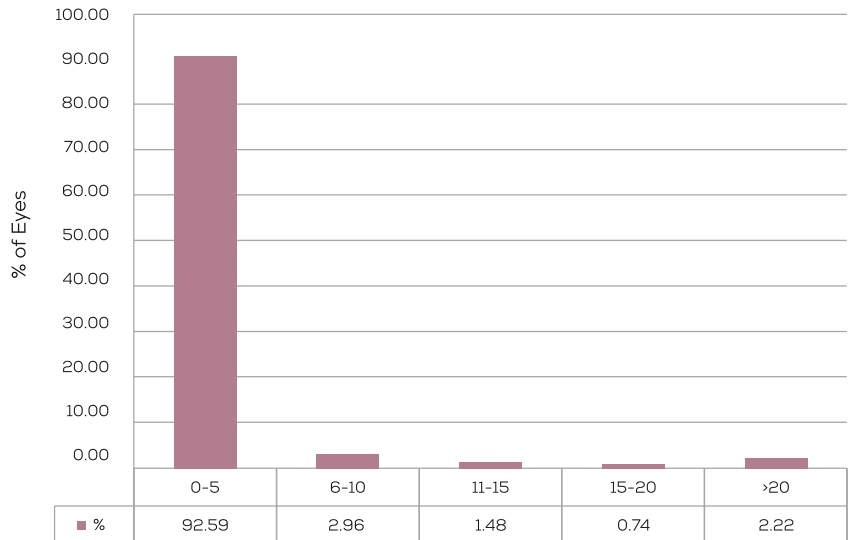
# REFRACTIVE CYLINDRICAL RESIDUAL

The cylindrical accuracy was within  $\pm 0.5D$  for 85.71% cases. These post-operative cylindrical results prove the excellent corneal astigmatism correction.



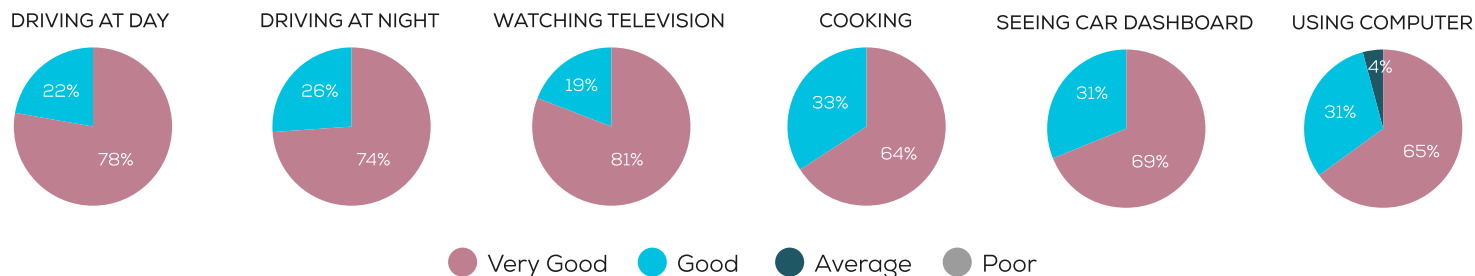
# IOL ROTATIONAL STABILITY

The lens has excellent rotational stability due to its advanced design and material. 92.59% patients having the rotation within 5 degrees proves the excellent rotational stability of the IOL.



# QUALITY OF VISION\*

100% patients were satisfied for their far prominent day to day activities e.g. driving at day & night, watching television etc. For activities required intermediate vision e.g. seeing car dashboard while driving, cooking & using computers, the satisfaction level was 100%, 100% and 96% respectively.



## MODELS AVAILABLE

Model	Labeled Cylinder Power	Cylindrical Power		Recommended Range of Corneal Astigmatism Correction
		At IOL Plane	At Corneal Plane*	
PLHFD6T	CYL D: 1.00 D	1.00 D	0.68 D	0.25 D to 0.86.0 D
PLHFD6T	CYL D: 1.50 D	1.50 D	1.03 D	0.87 D to 1.25 D
PLHFD6T	CYL D: 2.25 D	2.25 D	1.54 D	1.26 D to 1.75 D
PLHFD6T	CYL D: 3.00 D	3.00 D	2.05 D	1.76 D to 2.25 D
PLHFD6T	CYL D: 3.75 D	3.75 D	2.57 D	2.26 D to 2.75 D
PLHFD6T	CYL D: 4.50 D	4.50 D	3.08 D	2.76 D to 3.25 D
PLHFD6T	CYL D: 5.25 D	5.25 D	3.60 D	3.26 D to 3.75 D
PLHFD6T	CYL D: 6.00 D	6.00 D	4.11 D	3.76 D and above

To choose suitable EYECRYL SERT TORIC model, please logon to



SPECIFICATION	P L H F D 6	P L H F D 6 T
MATERIAL	Hydrophobic Acrylic Containing Natural Yellow Chromophore	
OPTIC TYPE	Single Piece 360° Square Edge with Aspheric Optic	
OPTIC SIZE	6.00 mm	
OVERALL SIZE	13.00 mm	
ANGULATION	0°	
ACD	5.28	
REFRACTIVE INDEX	1.524	
RECOMMENDED ULTRASOUND A-CONSTANT	SRK-T 119.00	
RECOMMENDED OPTICAL A-CONSTANTS	SRK-T 119.40	SRK-II 119.90
	Holl 1 Const SF: 1.99	HOFFER - Q ACD: 5.78
	Barrett: 2.09	HAIGIS: a0:1.574, a1:0.400, a2:0.100
DIOPTER RANGE	+7.0 D to +30.0 D (with 0.5 D step) & 0.00 D to +6.5 D and +30.5 D to +40.0 D will be available on customization on case to case basis as per manufacturing possibility"	
CYLINDER RANGE (For Toric Version)	1.0 D to 1.5 D (with 0.5 D step), 1.5 to 6.0 D (with 0.75 D step).	
	6.75 to 15.0 D (with 0.75 D step) customization as per manufacturing possibility	
IMPLANTATION SITE	Capsular Bag	
DELIVERY SYSTEM	Pre-loaded delivery system	
STERILIZATION	EO	



Scan For Biotech Connect App

**BIOTECH VISION CARE PVT. LTD.**

Block 1, Abhisree Corporate Park, Opp. Swagat Bunglow BRTS Stop  
Bopal - Ambli Road, Ahmedabad - 380 058 Gujarat India | Tel: +91 79 66823000

Email: Domestic: [indiasales@biotechhealthcare.com](mailto:indiasales@biotechhealthcare.com) | International: [intlsales@biotechhealthcare.com](mailto:intlsales@biotechhealthcare.com) | [www.biotechhealthcare.com](http://www.biotechhealthcare.com)