

FOCUS ON VALUE



TECNIS Symphony™ OptiBlue™ IOLs build upon the benefits of the TECNIS™ platform to meet patients' needs¹

TECNIS Symphony™ OptiBlue™ IOLs are built on the strength of the **TECNIS™ platform**

Correction of spherical aberration to virtually zero, resulting in **sharp quality of vision**²

Low induction of chromatic aberration and **high image contrast, day and night**³

Observe less capsular phimosis to **minimize decreased vision and IOL decentration**⁴

TECNIS™ IOLs are **not associated with glistenings**⁵

Powered by **IntelliLight™**, an innovative combination of three proprietary technologies*



Violet Light Filter

Designed to mitigate dysphotopsia, including halo, glare and starburst.^{6,7}



Why filter violet (380-460 nm) but not blue (460-500 nm) light?

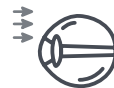
High-energy violet wavelengths **create more light scatter**, resulting in poor image quality. Blocking these wavelengths may reduce dysphotopsia.⁸⁻¹¹

Blue light transmission **aids image quality in low light**. Transmission decreases with age, which may reduce the ability to walk on uneven surfaces or read in dim light.^{11,12}



High-resolution Echelette

Extends the depth of focus for a continuous range of vision.¹ Advanced lathing helps reduce light scatter and halo intensity.⁶



Achromatic Technology

Achromatic design that corrects chromatic aberration to enhance image contrast, day and night.^{13,14}

* Proprietary technology in TECNIS Synergy™ IOLs and now available for TECNIS Symphony™ OptiBlue™ IOLs.

Johnson & Johnson VISION

TECNIS
Symphony™

OptiBlue™ IOL

Powered by **IntelliLight™**

TECNIS
Symphony™

OptiBlue™ IOL

Toric II

Powered by **IntelliLight™**

Powered by InteliLight™, the TECNIS Symphony™ OptiBlue™ IOL is the next generation in clarity and sharpness^{5,15}

Older adults lead active lifestyles, which may necessitate a variety of visual needs:^{16,17}

Low level of disturbing visual symptoms



Good vision in dim light



Wide range of vision

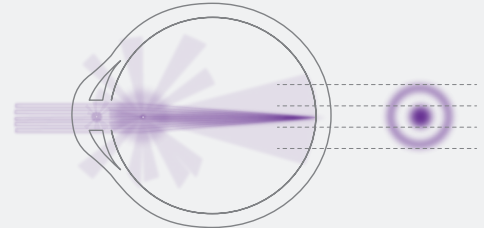


TECNIS Symphony™ OptiBlue™ IOLs, powered by InteliLight™, are **designed to mitigate dysphotopsia**^{6,7}



Halo, glare, and starburst (i.e., dysphotopsia) not only **interfere with vision** but can **reduce visual contrast** and impact a patient's ability to carry out certain activities.^{18,19}

Violet light wavelengths can increase halos, especially at night¹⁹

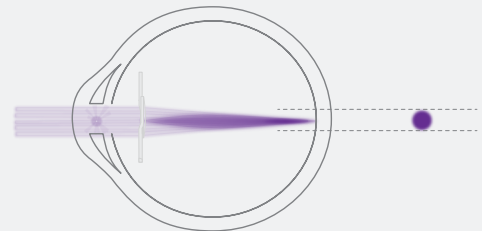


The violet-light filter of the TECNIS Symphony™ OptiBlue™ IOL reduces light scatter:†

19% improvement in straylight performance based on area under the curve (AUC) analysis of the straylight parameter.²⁰

7-11% improvement in straylight parameter based on a simulation study using a theoretical cornea eye model.⁷

TECNIS Symphony™ OptiBlue™ IOL blocks violet light, reducing halo intensity^{7,20}



* Artist rendition based on TECNIS Symphony™ OptiBlue™ MOA (Mechanism of Action) Video – EMEA 2021 (PP2021CT5311). † Compared with TECNIS Symphony™ IOLs without violet-light filter.

TECNIS Symphony™ OptiBlue™ IOLs are designed to mitigate dysphotopsias to provide high-quality vision^{1,7}

TECNIS Symphony™ OptiBlue™ IOLs deliver high image contrast, day and night^{14,21}

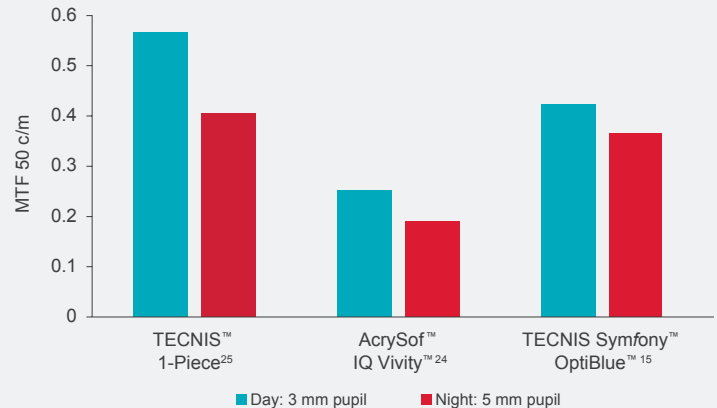
Image contrast provided by TECNIS Symphony™ OptiBlue™ IOLs was **more than 1.5x better** than with AcrySof™ IQ Vivity™ and **comparable to TECNIS™ Monofocal 1-Piece IOL**^{*14,22,23}



Contrast sensitivity loss contributes considerably to age-related visual decline, especially under dim light²⁴

Optimizing contrast sensitivity may be an important consideration for patient safety and functioning²⁵⁻²⁷

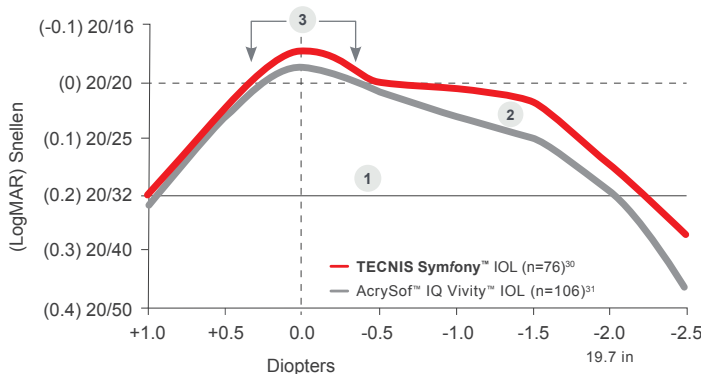
Image contrast performance (day and night)^{*14,22,23}



* Based on bench testing of the modulation transfer function (MTF), which has been measured for a set of lens models, in a similar manner, using the Average Cornea Eye (ACE) model in white light. The ACE model is designed to simulate the spherical and chromatic aberration of the average natural human cornea.¹⁴

TECNIS Symphony™ OptiBlue™ IOLs provide **superior performance across every distance** compared with AcrySof™ IQ Vivity™^{†15,28}

Binocular defocus curves demonstrate a wider range of continuous vision than AcrySof™ IQ Vivity™ IOL^{†15,28}



- 1 Mean visual acuity of **~20/32 or better from infinity to <20 inches** may allow patients to seamlessly move between different activities¹⁵
- 2 **~29% more AUC above 0.2 LogMAR (~20/32 Snellen)** compared with AcrySof™ IQ Vivity™^{§15,28}
- 3 **Tolerance to post-op refractive errors** due to a large landing zone is a key factor for high patient satisfaction^{15,29}

† Based on comparison of defocus curves; not a head-to-head study. Note that TECNIS Symphony™ OptiBlue™ IOL provides equivalent range of vision and tolerance to TECNIS Symphony™ IOL.³⁰
 ‡ Direct comparisons of defocus curves provide a detailed comparison of visual acuity at every level of defocus.^{31,32} The AUC metric provides an overview of visual range, accounting for the level of visual acuity within the range as well as the range itself. It represents the subjective experience better than intermediate and near visual acuities alone.³²

TECNIS Symphony™ IOL technology delivers continuous vision across the entire range¹

TECNIS Symphony™ OptiBlue™ IOLs may provide value

Additional features and benefits of TECNIS Symphony™ OptiBlue™ IOLs



TECNIS Symphony™ OptiBlue™ IOLs are preloaded and preassembled in the single-use, fully disposable **TECNIS Simplicity™ Delivery System**¹

- Provides a sterile, controlled, touch-free method of IOL delivery
- Reduces the number of steps required to prepare the IOL for insertion (compared with non-preloaded IOLs)



TECNIS Symphony™ OptiBlue™ IOLs are available on the **TECNIS™ Toric II Platform**¹

- Squared and frosted haptic design for increased friction in the capsular bag³³
- Exceptional rotational stability (**mean rotation of 0.94° at 3 months post surgery**)^{*34}
- Toric IOL implantation was shown to be cost effective in patients with astigmatism as a result of reduced spectacle needs after cataract surgery^{35,36}

* Based on data from 200 eyes after 3 months postoperative follow-up in a postmarket prospective, multicenter, single-arm, open-label study of the TECNIS™ Toric II 1-Piece IOL conducted in the US. Outcomes differ from the pivotal investigation data in the product labeling and were collected using different measurement methods, study design and clinical conditions.

**When choosing an IOL,
consider the quality of the patient's vision for life**

References

REFERENCES:

1. **TECNIS Symphony™ OptiBlue™ IOL with TECNIS Simplicity™ Delivery System, Models DXR00V/DXW150-375 DfU – INT – Z311520P, Rev. A, May 2021.** REF2021CT4162.
2. Piers P, et al. Use of adaptive optics to determine the optimal ocular spherical aberration. *J Cataract Refract Surg* 2007;33:1721-1726. REF2014CT0360.
3. DOF2018OTH4004 – Koopman B, Alarcon A. **TECNIS Eyhance™** and monofocal competitor IOLs MTF data. 7 Sep 2018.
4. Kahraman G, et al. Intraindividual comparison of capsule behavior of 2 hydrophobic acrylic intraocular lenses during a 5-year follow-up. *J Cataract Refract Surg* 2017;43(2):228-233. REF2018CT4047.
5. Data on File 150 – Sensor not associated with glistenings – Literature analysis. REF2014OTH0002.
6. Canovas C, et al. Optical and Visual performance of violet blocking intraocular lenses. *Invest Ophthalmol Vis Sci* 2019;60(9):3717-3717. REF2019CT4238.
7. DOF2020CT4011 – van der Mooren M. Effect of blocking violet light on light scatter in **TECNIS Symphony™** IOLs (v1.0). 7 Jan 2021.
8. Puell MC, Palomo-Alvarez. Effects of Light Scatter and Blur on Low-Contrast Vision and Disk Halo Size. *Optom Vis Sci* 2017;94(4):505-510. REF2019CT4288.
9. DOF2020OTH4005 – Comparison of Dysphotopsia Profiles Between Violet Light-Filtering and Non-Violet Light-Filtering IOL Models. 25 Sep 2020.
10. DOF2019CT4010 – Rosén R. Scotopic halo and MTF violet blocking. 26 June 2019.
11. Mainster MA. Violet and blue light blocking intraocular lenses: photoprotection versus photoreception. *Br J Ophthalmol* 2006;90(6):784-792. REF2014MLT0013.
12. Cuthbertson FM, et al. Blue light-filtering intraocular lenses: review of potential benefits and side effects. *J Cataract Refract Surg* 2009;35(7):1281-1297. REF2019CT4242.
13. DOF2014CT0003 – Weeber H. Chromatic aberration of the **TECNIS Symphony™** IOL. Aug 11, 2014.
14. DOF2020OTH4010 – Weeber H. MTF of **TECNIS Symphony™ OptiBlue™** lenses. 8 Oct 2020.
15. DOF2020OTH4004 – Clinical Investigation of the Safety and Effectiveness of the Next Generation **TECNIS Symphony™** IOL – Sonata POC – Objective Results. 29 Jan 2020.
16. Szanton SL, et al. Older adults' favorite activities are resoundingly active: findings from the NHATS study. *Geriatr Nurs* 2015;36(2):131-135. REF2021OTH4024.
17. Grzybowski A, et al. Methods for evaluating quality of life and vision in patients undergoing lens refractive surgery. *Graefes Arch Clin Exp Ophthalmol* 2019;257:1091-1099. REF2021CT4246.
18. Fiskus AD, et al. The prevalence of dysphotopsia in patients with recent cataract surgery. *Acta Medica Marisiensis* 2017;63:15-18. REF2021OTH4026.
19. Chang D, et al. Violet and Blue Light: Impact of High-Energy Light on Vision and Health. *J Ophthalmic Stud* 2020;3(2): dx.doi.org/10.16966/2639-152X.119. REF2021CT4248.
20. Faria-Ribeiro M, et al. Effect of blocking violet light in extended depth of focus intraocular lenses. *Invest Ophthalmol Vis Sci* 2020;61(7):586. REF2021CT4249.
21. DOF2018CT4007 – Weeber H. Chromatic aberration of the **TECNIS Symphony™** IOL. May 24, 2018.
22. DOF2020OTH4011 – Weeber H. MTF of Vivity lenses. 8 Oct 2020.
23. DOF2015CT0020 – Weeber H. MTF of the **TECNIS Symphony™** IOL, and other lens models. 29 June 2015.
24. Silvestre D, et al. Healthy Aging Impairs Photon Absorption Efficiency of Cones. *Invest Ophthalmol Vis Sci* 2019;60(2):544-551. REF2021CT4130.
25. Saftari LN, Kwon OS. Ageing vision and falls: a review. *J Physiol Anthropol* 2018;37(1):11. REF2021CT4250.
26. Sandlin D, et al. Association between vision impairment and driving exposure in older adults aged 70 years and over: a population-based examination. *Acta Ophthalmol* 2014;92(3):e207-12. REF2021CT4251.
27. Owsley C, et al. Association of Photopic and Mesopic Contrast Sensitivity in older drivers with risk of motor vehicle collision using naturalistic driving data. *BMC Ophthalmol* 2020;20(1):47. REF2021CT4122.
28. AcrySof™ IQ Vivity™ Extended Vision Intraocular Lenses (IOLs) Models: DFT015, DFT315, DFT415, DFT515 – DfU. REF2020OTH4142.
29. Son HS, et al. Prospective comparative study of tolerance to refractive errors after implantation of extended depth of focus and monofocal intraocular lenses with identical aspheric platform in Korean population. *BMC Ophthalmol* 2019;19: 187. REF2020CT4003.
30. DOF2020CT4010 – Effect of blocking violet light on image quality in **TECNIS Symphony™** IOLs. 2020.
31. Plaza-Puche AB, Alio JL. Analysis of defocus curves of different modern multifocal intraocular lenses. *Eur J Ophthalmol* 2016;26(5):412-417. REF2021CT4119.
32. Buckhurst PJ, et al. Multifocal intraocular lens differentiation using defocus curves. *Invest Ophthalmol Vis Sci* 2012;53(7):3920-3926. REF2021CT4118.
33. Takaku R, et al. Influence of frosted haptics on rotational stability of toric intraocular lenses. *Sci Rep* 2021;11:15099. REF2021CT4212.
34. DOF2021CT4019 – From Study NXGT-202-QROS: Clinical Investigation of Rotational Stability of the **TECNIS™** TORIC II Intraocular Lens. 20 Aug. 2021.
35. Pineda R, et al. Economic evaluation of toric intraocular lens: a short- and long-term decision analytic model. *Arch Ophthalmol* 2010;128(7):834-840. REF2019CT4342.
36. Laurendeau C, et al. Modelling lifetime cost consequences of toric compared with standard IOLs in cataract surgery of astigmatic patients in four European countries. *J Med Econ* 2009;12(3):230-237. REF2019CT4353.

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