

## UNITY® Lenses—Protect Your Patients From Harmful Blue Light



### Technology is all around us—and so is harmful blue light.

Americans on average spend over half their waking hours in front of digital screens such as computers, smartphones, tablets, and televisions. These devices emit high-energy blue light which has been shown to cause a number of health risks including disruption of the sleep cycle and the early onset of age-related macular degeneration (AMD).



### Harmful Effects

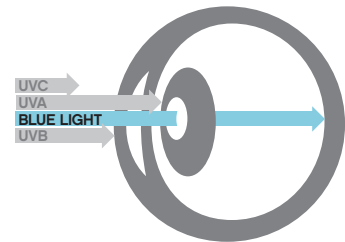
High energy blue light penetrates all the way to the back of the eye, increasing visual strain, disrupting sleep cycles and contributing to irreversible AMD.

### Risk Factors

Everyone is susceptible to the effects of blue light and should take precautions to minimize exposure. Those especially at risk are children, seniors, post-cataract patients, people with multiple risk factors for AMD, and people who constantly use digital devices.

### Sleep Cycle Disruption

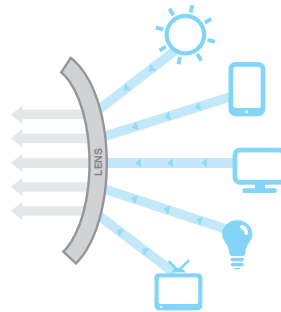
Major university studies have shown that blue light can disrupt the ability to fall asleep, interfering with circadian rhythms by suppressing the production of melatonin, a hormone that regulates waking and sleeping. Chronically shifted circadian rhythms have been linked to breast cancer, prostate cancer, diabetes, heart disease and obesity.



Most UV light is screened out by the cornea and lens, but blue light reaches all the way to the retina where it contributes to the early onset of AMD.

## UNITY lenses with BluTech™ blue light protection offer your patients:

- High-impact rated (ANSI 87.1/2003) lens material, making them especially ideal for children.
- Blocks UV and provides comprehensive blue light filtration without altering color perception.
- Both indoor and outdoor protection, appropriate for anyone who is exposed to high levels of blue light from both environmental (sunlight) and artificial sources (electronic devices, CFL light bulbs, etc.).



## UNITY lenses with BluTech blue light protection are available for indoor and outdoor use:

### INDOOR

Infused with ocular lens pigment, UNITY BluTech indoor lenses protect the eyes from harmful high-energy blue light radiated by fluorescent and CFL light bulbs, computer screens, tablets, smartphones, and televisions. These lenses have a slight coloration but maintain color integrity.

Index	Base Curve	Sphere	Cylinder	Add Powers
1.56	Plano, 2, 4, 6, 8	-6.00 to +4.00	Up to -4	+0.75 to +3.50

### OUTDOOR

Polarized UNITY BluTech outdoor lenses provide advanced protection from the sun's UV rays and harmful high-energy blue light—the kind that contributes to increased visual deterioration from macular degeneration. Outdoor lenses maintain color integrity.

Index	Base Curve	Sphere	Cylinder	Add Powers
1.56	2, 4, 6, 8	-6.00 to +4.00	Up to -4	+0.75 to +3.50

For more information, visit [vspopticsgroup.com/UNITY](http://vspopticsgroup.com/UNITY).

## UNITY lenses with blue light protection are available in:

- UNITY PLxtra, PLxtreme, and PLx Progressive Lenses
- UNITY SVxtra, SVxtreme, and SVx Single Vision Lenses
- UNITY CVx Computer Vision Lenses

### AMD Statistics:

- Leading cause of blindness for those over age 50 in the United States
- More common than Alzheimer's, breast cancer, prostate cancer, and Parkinson's Disease combined
- Affects 1 in every 5 families

**BLUTECH**  
LENSES