Blue Light Solutions

UV and HEV Filtration Options

KODAK Lenses offer two levels of filtration based on your needs.

- KODAK Total Blue Lenses are the hybrid (lens material + special AR) premium solution for
 individuals that want the maximum protection, spend time in bright sunlight environments
 or with extended exposure to digital devices and LED lighting. They block 100% of UV rays
 and up to 80% of HEV blue light* indoors and outdoors. KODAK Total Blue Polarized is ideal
 for water/snow activities where glare is the brightest.
- **KODAK UVBlue Lenses** also block 100% UV and 20% of HEV blue light** for everyday activities. An optimized blue cut lens material compatible with Crizal® or KODAK No-Glare Coatings.

KODAK Lens Designs	KODAK Total Blue	KODAK UVBlue	KODAK Total Blue Polarized
KODAK Unique DRO® HD	V	✓	✓
KODAK Unique™ HD	✓		✓
KODAK Unique DRO	✓	✓	✓
KODAK Unique	✓	✓	✓
KODAK Precise® Plus/Short Plus	✓	✓	
KODAK Precise PB/Short PB	✓	✓	✓
KODAK Easy 14/18	✓	✓	
KODAK SoftWear® (computer)	✓	✓	
KODAK PowerUp™ (anti-fatigue)	✓	✓	
KODAK Digital Single Vision	✓	✓	✓
Other Lens Designs			
DirecTek/Short	✓	✓	~
Navigator FBS/Short FBS	✓	✓	✓
Crossbows Custom V	✓	✓	
Crossbows Custom U	✓	✓	
Crossbows Basic Progressive		✓	
Crossbows Junior Progressive		✓	
Crossbows Custom SV		✓	
Single Vision	V	✓	V

^{1 -} www.health.harvard.edu/staying-healthy/blue-light-has-a-dark-side









See the Colors of Life

KODAK UVBlue Lens



^{2 -} Points de Vue, International Review of Ophthalmic Optics, N67, Autumn 2012

^{*} KODAK Total Blue Lenses target HEV wavelengths between 380-440nm effectively blocking UVA/UVB and filtering harmful blue light.

^{**} KODAK UVBlue Lenses are formulated to focus on HEV light between 400-455nm. Add a Crizal® or KODAK Anti-Reflective Coating to elevate the patient's experience.

The Good, The Bad and The Ugly

Good Blue Light

Blue light is an essential part of our daily rhythm, and controls our sleeping and waking patterns. It is important not to block all Blue Light.

Exposure to artificial 'Blue Light' during naturally dark periods after dusk or before dawn can effect the body's ability to switch off and produce natural hormones associated with the Circadian Rhythm.

Blocking all blue wavelengths also affects color perception.

HEV Blue Light

Filter High Energy Visible (HEV) Blue Light for more comfortable vision over extended exposure

HEV light is a portion of the spectrum that triggers glare and visual discomfort

Prolonged usage of digital devices has increased the average person's exposure to HEV Blue Light.

Various studies¹ have shown a link with AMD (Aged-Related Macular Degeneration), and disrupted sleep patterns.

UltraViolet Light

Protect against harmful UV radiation all day and everywhere

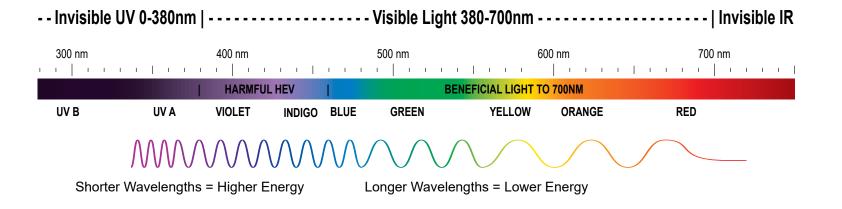
- ★ Up to 50% of UV rays can passthrough the clouds on an overcast day.²
- ★ Up to 40% of damage caused by UV rays occurs when we are not directly in the sun.²

We are all aware of the importance of applying sunblock to our skin to prevent sunburn. Those same harmful UV rays may have an impact on eye health, accelerating eye aging and may also contribute to a variety of severe eye conditions, including cataracts.

What is Blue Light?

Blue light is the portion of the electromagnetic spectrum with wavelengths between 380 and 500nm. As wavelengths increase in distance their energy diminishes the short wavelengths, at the blue end of the spectrum, have the most energy.

This darker indigo portion of the visible spectrum is also known as High Energy Visible (HEV) Light.



KODAK UVBlue Lens

Comfortable clear vision with added benefits.

KODAK UVBlue™ Lens provides protection from damaging UV rays and filters Harmful Blue Light using an optimized clear lens material.

With the use of a special material, KODAK UVBlue Lens lessens the amount of Harmful Blue Light to reach the eye, potentially allowing the eyes to focus for longer periods of time on digital devices with greater comfort.



KODAK UVBlue Lens offers:

100% protection from direct UV rays

Up to 2.5x more protection from Harmful Blue Light than standard plastic

- #Helps to decrease glare and improve visual comfort in front of digital screens
- *Optimized clear lens material in plastic, poly and 1.67 high index
- * Progressive, single vision and computer lens designs for all lifestyles and prescriptions
- * Add an anti-reflective coating to reduce reflections and increase clarity
- * Clear, comfortable vision in a lens with a brand consumers know and trust Kodak