Digital eye strain can be reduced with blue blocking glasses

Blue light is not just entering your eye from natural sources like the sun. Our eyes are also absorbing blue light for digital sources on a daily basis. Over time, our eyes are exposed to various sources that emit this blue-violet light in LED lighting, tablets, TVs, computer screens and smart phones. There's no doubt our exposure to blue-violet light is on the increase. This cumulative and constant exposure to the blue-violet light is going to accumulate over time and has the potential to cause damage to the retinal cells, which is going to slowly lead to retinal cell death and can in turn lead to Macular Degeneration.



Key Points About Blue Light

- * Blue light is everywhere.
- * HEV light rays make the sky look blue.
- * The eye is not very good at blocking blue light, so we need blue blocking glasses
- * Blue light exposure may increase the risk of macular degeneration.
- * Blue light contributes to digital eye strain.
- * Blue light protection may be even more important after cataract surgery.
- * Not all blue light is bad, so we don't have to block 100% blue light but only 25% noxious blue light
- * Blue light will causes retinopathy, blue blocking glasses could help us to protect our eyes
- * Blue light can affect circadian rhythms, lead to sleep difficulties, bad mood

About East Optical One-Piece Blue Protection Glasses

Just as UV light is dangerous to our skin, it's also dangerous to our eyes. So it's important that we protect them from UV damage. UV light affects the front of the eye (cataract formation), while blue light causes damage to the back of the eye (risk of AMD). East Optical new design could protect your eyes from both UV and noxious BLUE LIGHT (Kindly refer to our test report on Page4 of this PDF)



1. The traditional blue blockers do not discriminate in the blue light spectrum. They just block all the blue light. Our new designed blue blocking reading glasses allowed them to zoom in on the light that needed to be blocked and the light that needed to get through. So this new lens design really is very specific for more selective light.

2. As polycobonate lens is famous for super light, super thinner, super clear, super strong, both temples and the lens are made of polycarbonate, which means besides protect your eyes from UV and noxious blue light, it also brings you an extra great experience during wearing it.

3. We are using high quality hard coating liquid to make sure the lens with great effect of anti-scratch and high quality lens coating machine to enhance the lens transmittance.

- 4. Our blue blocking function could help you to stay away from eye strains and preventive against cataract.
- 5. The one piece design could save the cost of the glasses and help you to buy the product at the most competitive price.

6. When you buy a pair of reading glasses it is not easy for you to tell the lens strength after you peel off the power sticker, but we marked the strength on the right bottom of the lens, which helps you remember your own strength easily.



CHECK IF YOU NEED BLUE PROTECTION GLASSES?

Are you using your phone, iPad constantly?

Are you using your digital device primarily for texting, e-mailing, watching movie and web browsing?

Are you taking electronic devices into the bedroom before sleep?

Are you using LED lights during your daily life?

Are you afraid it is too expensive to buy a pair of blue blocking reading glasses?

- A convenient way to solve all your problem as above is to use EAST OPTICAL blue light blocking reading glasses.

CHOOSING READING GLASSES STRENGTH:

If you don't have a prescription from an eye care professional, use this timeline as a guide to find your lens strength. Since age is the main determining factor in the onset of presbyopia, choosing your reading glasses strength according to the guide is easy but make require some tweaking for reading distance.

40 years old -start with a +1.00

45 years old +1.50

50 years old +2.00

60 years old +2.50 - +3.00

If you do have a prescription from an eye care professional, ask them whether non-prescription reading glasses is right for you and if so what reading glasses strength they would recommend.

READING GLASSES LENS STRENGTH...JUST A FEW MORE THINGS YOU SHOULD KNOW

What strength reading glasses you need depends on at what distance you view your reading material...

This is important because the strength of your needed lens power is determined by the distance at which you look at your close work. Working at a computer screen at 18" will require a different lens power than working at a screen that is 28" away. Reading at a laptop will require different lens strength than reading a hand held book. If you spend a lot of time at a computer, reading or working at some other close distance, it's a good idea to measure your reading distances before you get your eyes examined. Discuss this with your doctor so that you get a correction that works best for you. Today we view computer screens/reading material at several different distances. Pinpointing your main reading distance will help you find the most precise lens strength. It is very common to have several reading distances.

Scan Name: PC ONE-PIECE BLUE PROTECTION GLASSES W/ AR COATING +1.00

European Standard: EN 1836:2005 A1(2007). Results:

Luminous Transmittance (Tv)	92	.051%
Mean UV Transmittance		
Solar UVA (315-380 nm)	0.10	5%
Solar UVB (280-315 nm)	0.00	1%
Spectral Transmittance (315-350	nm)	0.082%
Total Solar UV (280-380 nm)	0.0	68%

Blue Light Transmittance

These lenses transmit 75.531% of blue light (380-500 nm). * Block about 25% blue light.

Spectral Transmittance (500-650 nm)		PASS (>18.410%)		
Recognition of Signal Lights				
Red Signal	1.019 PAS	5 (>= 0.8)		
Yellow Signal	1.013 PAS	SS (>= 0.8)		

Blue Signal	0.986 PASS (>= 0.4)
Green Signal	0.993 PASS (>= 0.6)

Table of Wavelength(nm) vs Sample Transmission Data(%T)

nm	T(%)	nm	T(%) r	ım T	(%) nm	T(%)	
280.0	0.001	410.0	4.362	540.0	90.753	670.0	96.926
290.0	0.001	420.0	47.258	550.0	91.870	680.0	96.197
300.0	0.002	430.0	75.087	560.0	93.123	690.0	95.391
310.0	0.000	440.0	80.979	570.0	93.636	700.0	94.572
320.0	0.000	450.0	85.431	580.0	93.438	710.0	93.929
330.0	0.000	460.0	88.183	590.0	93.155	720.0	93.901
340.0	0.000	470.0	87.192	600.0	93.021	730.0	93.980
350.0	0.840	480.0	86.504	610.0	93.089	740.0	94.419
360.0	0.120	490.0	88.395	620.0	93.305	750.0	95.027
370.0	0.218	500.0	91.036	630.0	93.734	760.0	95.409
380.0	0.102	510.0	91.962	640.0	94.669	770.0	95.450
390.0	0.071	520.0	91.366	650.0	95.969	780.0	95.163
400.0	0.070	530.0	90.468	660.0	96.819	790.0	94.504

