



Tokai Blue Coating

In our daily life, we are covered with bright lights such as our TV screens, PC monitors, smartphones, tablets and LED lights. Many of these sources emit a lot of 'blue colour light' to emphasize brightness.

However, more and more studies reveal that the use of blue colour light causes eye strain after long exposure.

The **Tokai Blue Coating** not only filters blue colour light but also ultraviolet rays, thus **reducing glare, improving contrast and relaxing the eyes.**

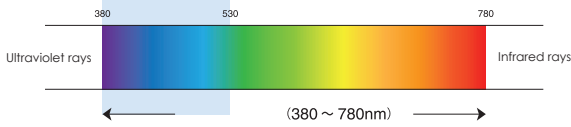


What is the 'Blue colour light' of digital devices which is said to cause glare and eye strain?

01 'Blue colour light' has strong energy

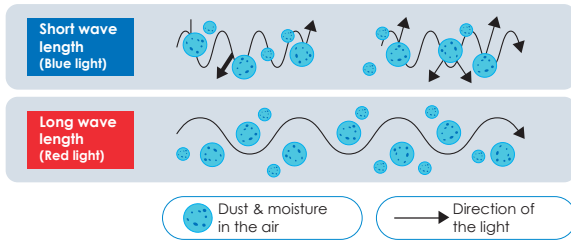
'Blue colour light' is light in the range of visible rays with a high frequency. It is light in-between 380nm to 530nm (violet to blue light).

Because blue colour light has a very short wavelength like ultraviolet rays, it may cause damage to the eyes.



02 'Blue colour light' disperse characteristics

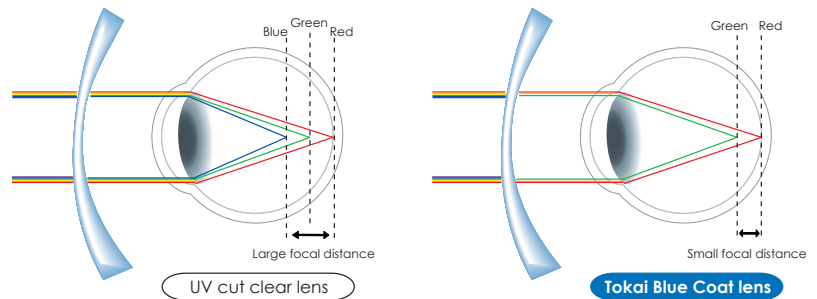
'Blue colour light' has the characteristics to disperse. Due to this fact, it has a higher possibility to hit particles (dust and moisture) in the air. These characteristics make 'blue light waves' cause glare and flicks, making the outline of images unclear.



03 'Blue colour light' causing blur

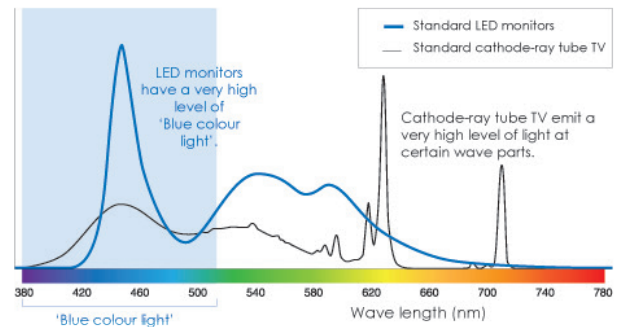
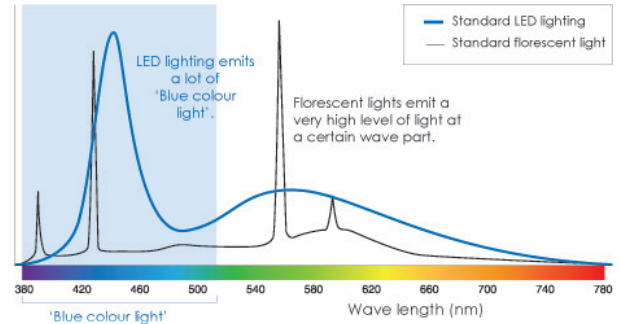
The focal length differs between different coloured light waves. When red colour is focusing on the retina, blue colour, focusses in front of the retina. This is why the sight may seem blurred.

By cutting these blue colour waves, the focal distance will be smaller and as result will provide a more clear vision.



04 'Blue colour light' in our daily life

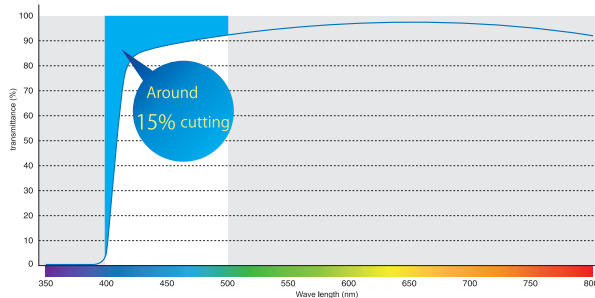
Bright lights of TV screens, PC monitors and LED lights are omnipresent in our life. Many of these lights emit a lot of 'blue colour light' to emphasize brightness.



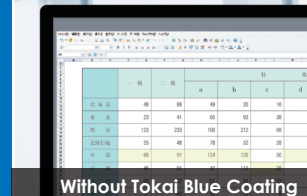
Around 15% of the glaring short wave lights are cut.

Keeping clear view by cutting around 15% short wave light which causes glares.

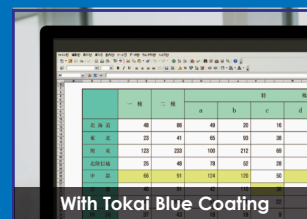
Spectral transmittance curve of Tokai Blue Coating.



* The spectral characteristics may change according to the material and the coating.



Without Tokai Blue Coating



With Tokai Blue Coating

* The effect may differ between individuals. The pictures are all images.

