

WHAT YOU SHOULD KNOW ABOUT THE RISKS OF FLUORESCENT LIGHTING IN SCHOOLS

Discover how LED Lighting enhances students' grades, productivity, and behavior.





OVER 50% OF CHILDREN AND ADULTS WITH READING, LEARNING, OR ATTENTION PROBLEMS

have **Scotopic Sensitivity Syndrome** - a disorder which affects messages from the eye to the brain.



Fluorescent lighting contains many disruptive wave-lengths of light, which adversely affect

the transfer of messages from the eye to the brain. Filtering out these specific wave lengths of light has been reported to help return vision to its natural unaltered state. Fluorescent lighting not only contains this disruptive factor, but also other unhealthy elements.

Unhealthy elements of fluorescent lighting:

- · Color Spikes: Fluorescent lights emit waves of pronounced color spikes that can lead to the inability of the brain to process colors properly or make eyes very sensitive to artificial light sources. Fluorescent lighting used in schools often does not contain the full spectrum of colors that occur in natural sunlight or full spectrum LED lighting. This causes distractions between the eye and the brain, which can lead to reading, writing, and behavioral disorders.
- Mercury: Fluorescent lamps contain Mercury, a dangerous chemical which is toxic to humans and the environment. It is particularly harmful to children and unborn babies.
- UV Radiation: A by-product of Mercury is UV-A and UV-B radiation which deteriorates and yellows fixture lenses, fabrics, plastics, and printed surfaces such as signage and artwork.
- · Heat: Fluorescent lamps emit infrared heat which increases the temperature in a room, thus causing the cooling system in a facility to work harder. The Energy Focus LED lamp produces a better quality and more light using 50% less power with no heat factor, thereby saving the building 50% or more on energy and cooling costs.

IS YOUR CHILD **EXPERIENCING SCOTOPIC SENSITIVITY SYNDROME?**





14% of the population is affected by Scotopic Sensitivity Syndrome, making reading

and writing difficult. Many children may have difficulty reading because the words on the page appear to be moving, washing out, melting, and flipping. Though these children may have difficulty reading and writing, their intellectual level is high. This disability causes parents and teachers to assume the child is being inattentive in class or needs more reading and writing practice when, in fact, all the child needs is proper eye therapy which can be facilitated by replacing outdated fluorescent lighting with innovative LED lighting.



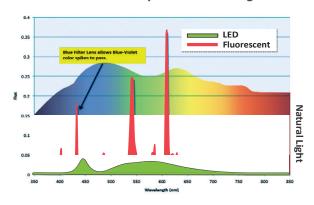
The reasons for enhancing learning environments with LED lighting:



Many teachers have been known to put blue lenses on their fluorescent fixtures or turn their classroom fluorescent fixtures off and, instead, bring their own incandescent lights from home. They do this

because the fluorescent fixtures cause headaches, fatigue, and other light sensitivity issues that alter the students' behavior in an unfavorable manner. In many cases, these teachers also experience these same disruptive sensitivities to light. The reason for these symptoms is due to the science of what our eyes see in sunlight versus what they see under artificial light as seen in the following chart.

LED – best comparison to sunlight



In daily life, this can cause children and adults to process colors improperly and has been linked in studies to those individuals experiencing headaches, fatigue, blurred vision, eyestrain, and reduced visual performance. LED lighting is closest to natural sunlight with smooth color curves, thus eliminating these irritating visual conditions.

The proof is in the grades.

Standardized tests were used in a Colorado school study to compare the impact of fluorescent vs. LED lighting and the effect on children's performance and behavior. The results:

- Test scores improved by more than 25%
- Children's attention was more focused and they finished their tests much faster
- Students acknowledged that their school surroundings were more enjoyable



Better vision means fewer headaches, happier students, and better grades.



EAG-LED Global Lights is a leading provider of energy efficient LED lighting fixtures, with over a hundred years of combined LED experience. The Eagle holds more than 70 lighting related patents.

As a company continually on the cutting edge of LED technological advancements, our product development team continues to create the highest lumen output LED products on the market. We also offer cash back to your business and rebate options.







www.eag-led.com 13046 Race Track Road Tampa, FL 33626 Tel (813) 463-2420

