



# SAVE ENERGY



# IMPROVE EDUCATION

IDEAL ENERGY + YOUR SCHOOL



WORKING WITH  
IDEAL ENERGY

# SIMPLE & EFFORTLESS



**Ideal Energy** specializes in LED lighting retrofits for educational facilities throughout the Midwest.

We offer the following solutions tailored to your school:

- On-Site Energy Evaluation
- New Lighting Proposal
- Project Management
- We prepare all applicable rebate forms



The regions **trusted** electrical source.

[myidealenergy.com](http://myidealenergy.com)





# HOW CAN WE HELP YOUR SCHOOL OR UNIVERSITY?



Ideal Energy understands the **unique needs of schools and universities**. Lighting is critical in the classroom to create the best environment for learning possible. It is also crucial for safety around the campus both inside and out. Gymnasiums and sports venues create yet other unique needs when it comes to lighting.

We have energy saving solutions to address all of these areas and more.

- LED lighting offers significant savings of up to 70% of current energy usage.
- We help your school make the most of its lighting and improve the learning experience.
- Substantial rebates are available in most locations for LED retrofits.
- Our solutions let you achieve the right mix of energy cost savings and visual impact.







STUDIES HAVE SHOWN LONG-TERM EXPOSURE TO FLUORESCENT LIGHTING CAN BE A FACTOR IN A CHILD'S BEHAVIOR AND ACADEMIC PERFORMANCE.

# FLUORESCENT LIGHTING & ACADEMIC PERFORMANCE

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.



# PROBLEMS WITH FLUORESCENT LIGHTING



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.

## CLASSROOM 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.

## SCOTOPIC SENSITIVITY

Over 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.

## MOOD AND EXPERIENCE

Quality lighting creates a specific mood for a classroom that is an integral part of learning, and enhances not only products but the entire experience of the store.

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.

## 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.<sup>1</sup>

### 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.

<sup>1</sup> LED Classroom Improves Education - Matt Gronbeck, March 15, 2013

# SAVINGS EXAMPLE



Here's how switching from traditional lighting to new, energy efficient LED lighting saves your school money:

## ANNUAL COST TO OPERATE

Fluorescent 32 Watt T8 Bulb

**\$14.27**

15 Watt LED

**\$6.69**

[SAVING YOU \$7.58 PER BULB]

Fluorescent 40 Watt T12 Bulb

**\$17.84**

18 Watt LED

**\$8.03**

[SAVING YOU \$9.81 PER BULB]

250 Watt HID

**\$120.45**

70 Watt LED

**\$33.72**

[SAVING YOU \$86.73 PER BULB]

\*Based on 11¢ electric rate, 4056 hours indoor lights use and 4380 hours for outdoor lights use.







# A FEW OF OUR SOLUTIONS



Our lighting can be designed to help save energy and create pleasing, comfortable environments. Here are a few of our solutions:



## HI-CLOUD

Sets the standard for LED High Bays. Perfect replacement for existing metal halides. Can replace up to a 1,000W metal halide with a 300W Hi-Cloud.



## LED TUBES

Perfect Replacement for existing 4' and 8' T8 and T12 Fluorescent Lamps. Works with or without a ballast. Improve your existing lighting while cutting energy costs. Works with existing fixture to save you money on installation.



## LED RETRO FIT

Retrofit kits for a wide range of metal halide lights. Advantage of LED while utilizing existing fixtures. Perfect parking lot lighting solution.



## WALL PACK

LED lighting for outdoor building lighting. Improved lighting and security for your commercial building.









SAVE ENERGY *and* IMPROVE EDUCATION



The regions **trusted** electrical source.

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