



LIGHTING THE WAY TO A  
SUSTAINABLE FUTURE

Viridis is meeting the lighting needs of a changing world by offering a superior product, extraordinary service, at a competitive price. Viridis is not the future of lighting; it is lighting our future.

To schedule a complimentary energy audit or request additional information on the benefits of transitioning to a LED lighting solution call **1.888.514.LEDS** (5337) or email [info@viridislighting.com](mailto:info@viridislighting.com)



**1-888-514-LEDS**

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



Viridis specializes in the strategy, design, and implementation of LED lighting solutions for professional organizations looking to unlock untapped value and contribute to a better quality of life. Viridis delivers results through an integrated approach that brings together cost-effective, cutting-edge LED lighting technology, and outstanding customer service.

*"The economic benefits of investing in LEDs are clear as they save energy, reduce environmental impact and improve the quality of light... We believe that the cost savings and benefits of LED lighting are real and achievable today."*

– Charles Meeker, Mayor, City of Raleigh, NC

# LED Lights vs. Incandescent Light Bulbs vs. CFLs

Learn how LED lights, CFLs, and Incandescent Lights compare and contrast in terms of:

- Energy Efficiency
- Energy Usage
- Environmental Impacts
- Durability
- Light (Lumen) Output


## Viridis Energy Solutions

Capturing value from implementing a Viridis lighting solution requires a clear strategic approach in conjunction with key business metrics. The comparison chart highlights the differences between LED, Incandescent, and CFL light bulbs with regards to energy efficiency, usage, environmental impact, durability, and light output (Lumen).



"Full implementation of LEDs would cut Ann Arbor's public lighting energy use in half and reduce greenhouse gas emissions by 2, 2000 tonnes CO2e annually."

- Ann Arbor, Michigan, US City Report – 2008

Energy Efficiency & Energy Costs	 Incandescent Light Bulbs	 Compact Fluorescents (CFLs)	 Diodes (LEDs)
Life Span (average)	1,200 hours	8,000 hours	50,000 hours
Watts of electricity used (equivalent to 60 watt bulb). <small>LEDs use less power (watts) per unit of light generated (lumens). LEDs help reduce greenhouse gas emissions from power plants and lower electric bills</small>	60 watts	13-15 watts	6 - 8 watts
Kilo-watts of Electricity used (30 Incandescent Bulbs per year equivalent)	3285 KWh/yr.	767 KWh/yr.	329 KWh/yr.
Annual Operating Cost (30 Incandescent Bulbs per year equivalent)	\$328.59/year	\$76.65/year	\$32.85/year
Environmental Impact	 Incandescent Light Bulbs	 Compact Fluorescents (CFLs)	 Light Emitting Diodes (LEDs)
Contains the TOXIC Mercury	No	Yes - Mercury is very toxic to your health and the environment	No
RoHS Compliant	Yes	No - contains 1mg-5mg of Mercury and is a major risk to the environment	Yes
Carbon Dioxide Emissions (30 bulbs per year) <small>Lower energy consumption decreases CO2 emissions, sulfur oxide, and high-level nuclear waste.</small>	4500 pounds/year	1051 pounds/year	451 pounds/year
Important Facts	 Incandescent Light Bulbs	 Compact Fluorescents (CFLs)	 Light Emitting Diodes (LEDs)
Sensitivity to low temperatures	Some	Yes - may not work under negative 10 degrees Fahrenheit or over 120 degrees Fahrenheit	None
Sensitive to humidity	Some	Yes	No
On/off Cycling <small>Switching a CFL on/off quickly, in a closet for instance, may decrease the lifespan of the bulb.</small>	Some	Yes - can reduce lifespan drastically	No Effect
Turns on instantly	Yes	No - takes time to warm up	Yes
Durability	Not Very Durable - glass or filament can break easily	Not Very Durable - glass can break easily	Very Durable - LEDs can handle jarring and bumping
Heat Emitted	85 btu's/hour	30 btu's/hour	3.4 btu's/hour
Failure Modes	Some	Yes - may catch on fire, smoke, or emit an odor	Not typical
Light Output	 Incandescent Light Bulbs	 Compact Fluorescents (CFLs)	 Light Emitting Diodes (LEDs)
Lumens	Watts	Watts	Watts
450	40	9-13	4-5
800	60	13-15	6-8
1,100	75	18-25	9-13
1,600	100	23-30	16-20
2,600	150	30-55	25-28

# Why Viridis? Our Competitive Advantage

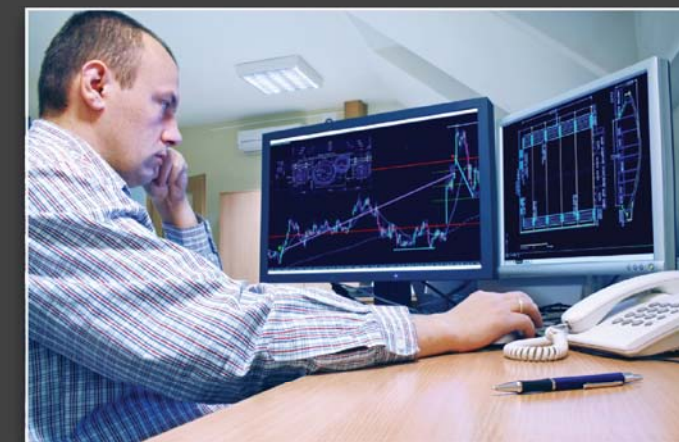
Viridis delivers a competitive advantage to organizations looking to transform the way they execute on standard business practices such as energy consumption and sustainability. Listed below are a few key reasons business leaders chose Viridis for their LED lighting solutions.



**Direct, Substantial ROI** – Implementation of effective, LED lighting solutions means tangible business results. Viridis has a proven track record for delivering immediate organizational impact through a substantial saving in annual operating cost, government rebates & tax incentive credits, and higher compliance standards for more efficiency. See table on page 2 for additional detail.



**Technology Strength** – Viridis has a turnkey, state-of-the-art, global supply chain that takes a cross-functional approach to providing the highest quality, cost effective product available on the market today. By focusing on product reliability and consistent worldwide logistics practices, customers receive the benefits of synchronized supply and demand.



**Experience** – With extensive knowledge, experience, and education in the energy industry, Viridis has built a solid reputation for making the transition to an LED lighting solution, seamless. All staff is professionally trained on the transition process, product selection, savings calculations (including ROI), plus existing Tax incentives, Power producer subsidies, loans and rebate programs.



**Research & Development** – With an in-house R&D team who specializes in LED engineering, Viridis offers a high level of product customization and stands by a commitment to offer a solution to any lighting infrastructure challenge that arises.