

lighting innovation



Energy Efficient Lighting

Common Sense Solutions Impact Cost Savings



Energy Efficient Lighting

Impact high energy costs with:

Compact Fluorescent Lamps “CFL’s”

A cost effective solution to replacing incandescent light bulbs.

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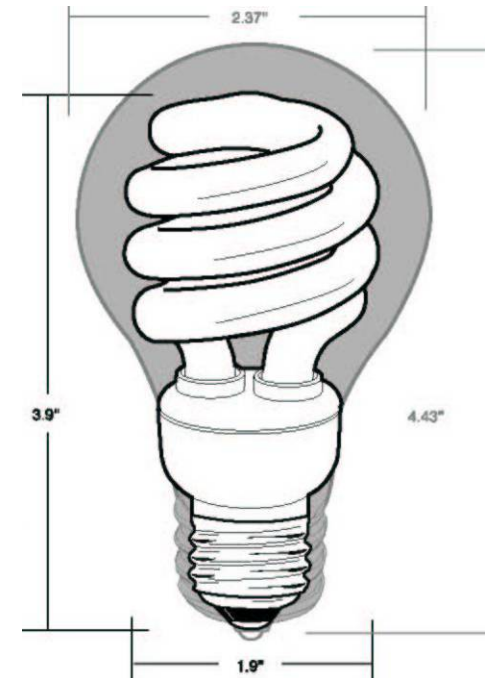


Energy Efficient Lighting

Compact Fluorescent Lamps “CFL’s”

CFL’s are:

- energy efficient – save up to 75%
- long life – typically 10,000 hours
- easy to use – replacements are nearly the same in size.





Energy Efficient Lighting

Energy efficient – save up to 75%

How efficient are light sources measured?

Lumens per Watt (LPW)

lumen = measure of light.

watt = measure of power.

Think of...

MPG (miles per gallon) = LPW (lumens per watt)



Energy Efficient Lighting

Energy efficient – save up to 75%

Typical efficiencies of light sources:

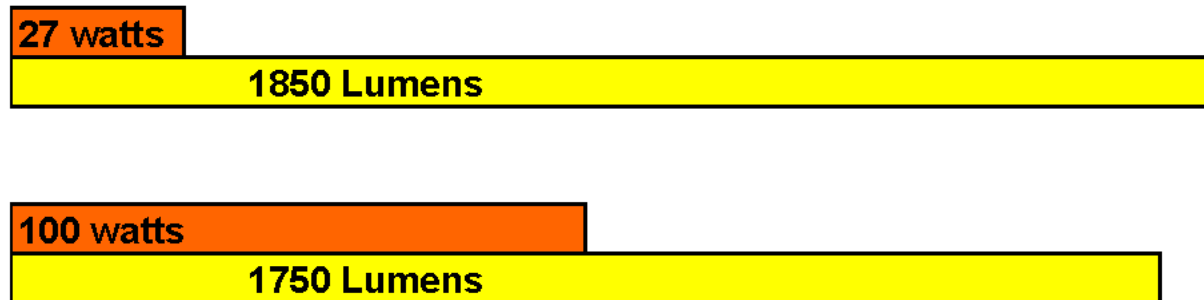
- ***Incandescent*** = 17 lumens per watt
- ***Halogen*** = 20 lumens per watt
- ***Compact Fluorescent*** = 60 lumens per watt



Energy Efficient Lighting

Energy efficient – save up to 75% Typical Cost of Lighting

TCP 27 watt CFL vs. typical 100 watt bulb:
More light for less energy costs.



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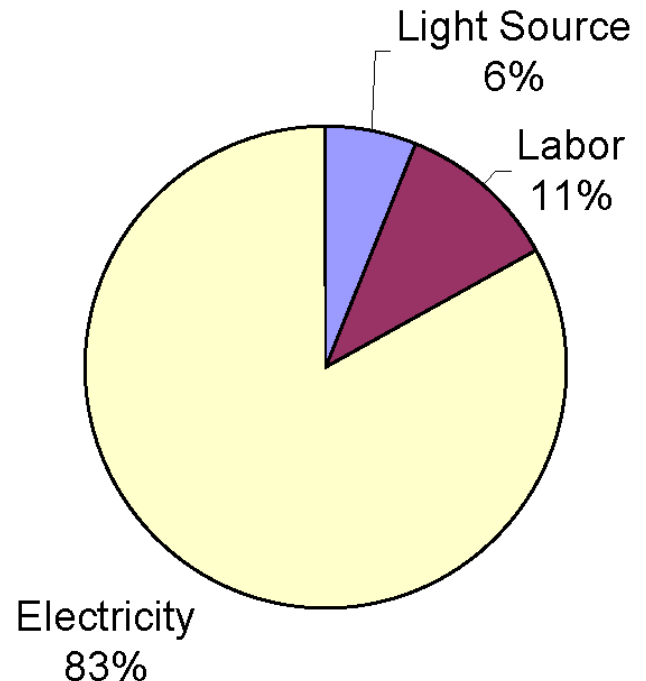


Energy Efficient Lighting

Energy efficient – save up to 75%

Typical Cost of Lighting

Electricity represents the most significant cost of lighting once it is installed. It makes good sense to save as much as possible.



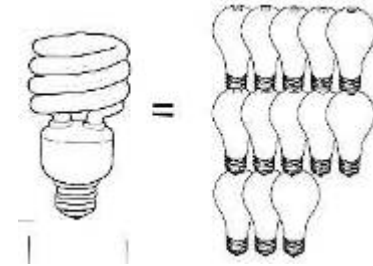
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Energy Efficient Lighting

Long Life – Typically 10,000 hrs.

One TCP 10,000 hour Springlamp last 13X longer than standard 750 hour light bulbs.



Benefit: Lower maintenance cost and expense.



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Energy Efficient Lighting

Easy to use – lot's of choices

Technology has clearly evolved making CFL's an excellent choice.

- **Compact ballast designs provide the ability to design products that are direct replacement to incandescent.**
- **Lamp and phosphor technologies provide excellent light output and high color rendering.**



Energy Efficient Lighting

Easy to use – lot's of choices

Technology has clearly evolved making CFL's an excellent choice.

- **Compact Fluorescent** = 60+ lumens/watt
- High color rendering (80+)
- Low energy cost. (25% of incandescent)
- 10,000 hour average rated life.



Energy Efficient Lighting

Easy to use – lot's of choices

- *Popular styles*
- *Popular wattages*

Reflector bulbs to replace up to 120 watt floods.





Energy Efficient Lighting

Easy to use – lot's of choices

- *Look like decorative incandescent*
- *Save over 75% in energy costs*

Decorative bulbs replace up to 75 watt incandescent.





Energy Efficient Lighting

Easy to use – lot's of choices

- *Springlamps and Circlines – easy replacement for standard light bulbs.*
- *Save over 75% in energy costs*

Easily replace up to 150 watt bulbs. Great for table and floor lamps where reading and visual tasks are being done.





Energy Efficient Lighting

Easy to use – lot's of choices



New “Fresh 2” Odor Eliminating CFL. Breaks down odors!

- **Breaks down odors – does not “cover” them up.**
- **Available in both Circline and Springlamp products.**
- **Active TiO₂ lasts for 3 years eliminating odors.**





Energy Efficient Lighting

Bottom Line: Return on Investment

Seeing the math.

	<u>100 watt bulb</u>	<u>27 watt CFL</u>
Product Cost:	\$0.50	\$7.00
Product Life:	750 hours	10,000 hours
Cost of bulb over 10,000 hrs.:	\$6.50	\$7.00
Watts of Energy Used:	100	27
Energy used over 10,000 hrs.:	1000 kwh	270 kwh
Cost of energy (at \$0.08kwh):	\$80.00	\$21.60
Labor (10 min. each, \$20/hr.):	\$43.34	\$3.34
Total Cost of Operation:	\$129.84	\$31.94
Return on Investment (months):	4	

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Energy Efficient Lighting

Cost of delay:

Annually at \$0.08kwh energy cost, each 100 watt bulb used in common areas (24/7 as demonstrated) will cost you

\$113.00

How long should you wait to change?



Energy Efficient Lighting

Resources available:

TCP Web Site: www.tcpi.com

- Look up product spec sheets.
- Calculate energy savings – on line.

E. Sam Jones

**Please contact Care Purchasing Services
at 1-800-543-3491.**