

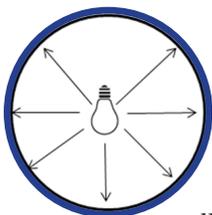
Bulb Type	Least Efficient ← → Most Efficient			
	Incandescent	Halogen	CFL	LED
450 Lumens	40w \$4.82/yr	29w \$3.49/yr	11w \$1.32/yr	9w \$1.08/yr
800 Lumens	60w \$7.23/yr	43w \$5.18/yr	13w \$1.57/yr	12w \$1.44/yr
1100 Lumens	75w \$9.03/yr	53w \$6.38/yr	20w \$2.41/yr	17w \$2.05/yr
1600 Lumens	100w \$12.05/yr	72w \$8.67/yr	23w \$2.77/yr	20w \$2.41/yr
Rated Life	1 Year	1-3 Years	6-10 Years	15-20 Years

Lighting accounts for 20-30% of electric bill

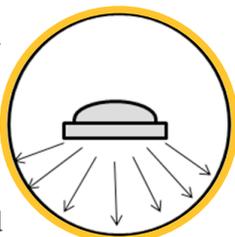
Estimated energy cost per year is based on 3 hours of use per day at 11 cents per kWh in an average single family home according to the Dept. of Energy



HID vs LED



HID Lamps - Source efficiency is typically 120 lumens/watt or higher. However, losses from trapped light, protective covers and lenses, inefficient ballasts and unfavorable operating temperature typically result in a measured system efficiency of 30 lumens/watt or less.



LEDs - Source efficiency can be 100 lumens/watt or higher. There are no losses from trapped light due to the focused output of the LED, and secondary optics and protective covers generally reduce output by only 25% or less. LED power drivers are also more generally efficient than HID ballasts, and reduce system efficiency by 10-15%. However, even when efficiency reductions due to high operating temperatures are included, LED system efficiency often remains above 50 lumens/watt or higher.



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LIGHTING**



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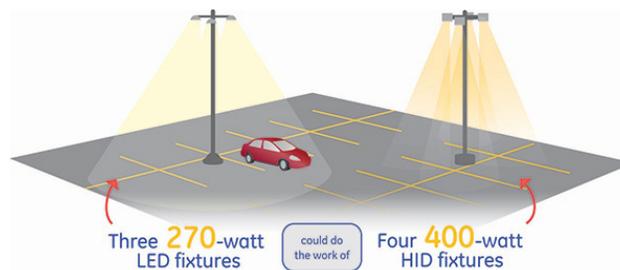
provides lighting, electrical, and renewable energy resources to our clients.

We offer project designs, product specification & distribution, project management, alternative energy solutions, maintenance programs, rebate administration, and recycling.

Have you thought about upgrading your parking lot lighting?

Leff National Accounts & Energy Solutions can help you:

- Decrease Labor Costs
- Decrease Operating Expenses
- Decrease Maintenance Costs
- Increase Safety
- Qualify for an Insurance Break?



Case Study: New LED illumination saves Collection Auto Group \$400,000 over five years.

THE SITUATION

Northeast Ohio-based Collection Auto Group represents 21 brands, including Mercedes-Benz, Maserati and Aston Martin. The company had the goal to convert all 14 of its locations to new LED outdoor lighting, while building new dealerships in an environmentally minded way.

THE SOLUTION

Evolve™ LED Area Lights drawing between 101 and 217 watts will replace predominantly 400- and 1,000-watt high-intensity discharge (HID) fixtures at Collection Auto Group dealerships. The bright, white illumination better captures the attention of passing drivers, properly represents the colors of vehicles thereby enhancing the customer experience, and helps improve lot security where millions of dollars of inventory is displayed outside.

Combining energy and maintenance reductions, the lighting swap will save Collection Auto Group nearly \$77,000 a year (based on a \$0.11 kWh rate and 12 hours of operation a day). GE's comprehensive outdoor LED lighting solution includes pole-mounted fixtures and wall packs attached to buildings, bathing the lots in crisp, uniform light.



Collection Auto Group

- \$77,000 annual savings
- \$400,000 saved over 5 years across 14 properties