



LIGHTING COST SAVINGS ANALYSIS

Thursday, May 13, 2010

Customer Name: **Cost Savings of 1 LED Tube**
 Contact: _____
 Address: _____
 City, State Zip: _____
 Project Type: **Retrofit Indoor Fluorescent Lighting w/ LED**
 (Target Area) **One (1) 48" T8 Fluorescent Lamp**

Prepared By:
ACT Corp

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Usage: 24 hrs / day @ 7 days / wk = 8736 hours / year	
Time Frame: 10 years	Cost per kWh: \$0.095

Category	Current Lighting System	ACT Corp. Lighting System	Notes
Type of Light	48" (32w) T8 Fluorescent Lamp	ACT LED HO T8 48" (15w) Tubes	
Number of lights in target area	1 <i>light(s)</i>	1 <i>light(s)</i>	
Rated power of each light	40 <i>watts</i>	15 <i>watts</i>	
Power conversion/efficiency factor	65 %	95 %	
Actual power used per light	62 <i>watts</i>	16 <i>watts</i>	45.7 Watts SAVINGS per Lamp
Useful life of each light	12,000 <i>hours</i>	50,000 <i>hours</i>	Lasts at least 38000 Hours Longer
Actual usage life span of each lamp	1.37 <i>years</i>	5.72 <i>years</i>	More time between relamping
Time needed to change each light	10.00 <i>minutes</i>	10.00 <i>minutes</i>	
# of people on task	1 <i>person</i>	1 <i>person</i>	
Labor rate including benefits	\$42.50 <i>per hour</i>	\$42.50 <i>per hour</i>	
Light changes per 10 year time frame	7	2	No relamping for over 10 years
Cost per light	\$2.80	\$58.80	
Number of Ballasts	1	0	No ballasts required for LED
# of times ballast is replaced during a 10 yr. period	3	0	No ballasts required for LED
Cost per Ballast	\$28.50	\$0.00	No ballasts required for LED
Total Electricity Used	538 <i>kWh</i>	138 <i>kWh</i>	Significantly less electricity is used
Electricity (kWh) Saved Per Year	0 <i>kWh</i>	400 <i>kWh Savings/Yr</i>	
Electricity cost per light	\$51.07 <i>per Year</i>	\$13.10 <i>per Year</i>	Saves \$38 per lamp per year
Total Cost of Electricity Used	\$51.07 <i>per Year</i>	\$13.10 <i>per Year</i>	Saves \$38 per Yr in Electricity Costs
Ballast replacement cost per year (Avg.)	\$8.55 <i>per Year</i>	\$0.00 <i>per Year</i>	
Avg Annual Labor Cost per year 10 years	\$4.96 <i>per Year</i>	\$1.42 <i>per Year</i>	
Total Avg. Annual Cost:	\$64.58 <i>per Year</i>	\$14.52 <i>per Year</i>	Significantly Lower Costs!!!

Avg Annual Reduced Operating Costs: \$50.06 per Year	Does not include ballasts or increases in electrical & labor costs
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Economic Payback	Cost for ACT LED Lights: \$58.80
	LESS - State & Federal Incentives: \$0.00
	Actual Project Cost: \$58.80
	Payback Term: 1.17 years
	10 Year Cost Savings: \$441.80

Cost of Waiting { \$4.17 / month \$50.06 / year
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	Current Lighting System	ACT LED	
Carbon Footprint*	0.334 CO ₂ Tonnes/Yr.	0.086 CO ₂ Tonnes/Yr.	
Carbon Footprint Reduction:		0.248	CO₂ Tonnes / Year
			Carbon footprint reduced.

*Assumes Emission Factor of 1.37 (electricity /kWh)
 Source: Energy Information Administration. Electric Power Annual 2005, Table 5.1 (October 2006)
 2204.6 lbs per metric ton (Tonne)
 Source: http://wiki.answers.com/Q/How_many_pounds_equal_a_ton

Please contact us for any assistance needed:

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