



***Prepared for:***

Retail Store T5 Example

***Prepared by:***

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GE Value\*Light is a tool aimed at assisting users in analyzing lighting retrofit options. It provides one comparative analysis of the costs of operating a lighting system(s) by calculating potential operating expenses, savings, payback, and ROI for proposed upgrades, and it provides results in yearly or aggregate format. To perform an analysis, GE Value\*Light assumes a fixed billing rate per kilowatt-hour of electricity (entered by the user) and estimates product life based on a variety of factors, including age, published ratings, and operating conditions entered by the user. While an effort has been made to use accurate assumptions in developing GE Value\*Light, neither this tool, nor the analyses generated by this tool, in any way constitutes or implies either a warranty of lamp or ballast performance or a guarantee of the actual costs or savings that will be realized. Use of this tool and the analyses generated by this tool are subject to the Terms of Use and Privacy Policy of GE.com.



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### Entire Project

Financial Analysis

	Base System(s)	Recommended System(s)
<b>Operating Costs (10-yr)</b>	\$59,800	\$23,568
<b>Available Savings over Base System(s)</b>		\$36,232
<b>Initial Investment</b>		\$5,151
<b>Payback Period</b>		1.7 yrs
<b>10-year Average ROI</b>		70%
<b>Net Present Value (NPV) of Savings Stream*</b>		\$18,726

\* NPV based on 10 yrs of savings at discount rate of 5.00%

Zone Analysis

Zone Analyzed	Base System(s)	Recommended System(s)
400W Metal Halide to 6-lamp F54T5	MVR400/C/U	F54T5/841/HO/EA/ALTO 49W

Data Summary

Analysis Period	10 years
Energy Rate	\$0.100/kWh
Project Location	Columbus, Ohio
Discount Rate (for NPV)	5.00%
Energy Inflation	3.00%
Labor Cost Inflation	3.00%



Entire Project

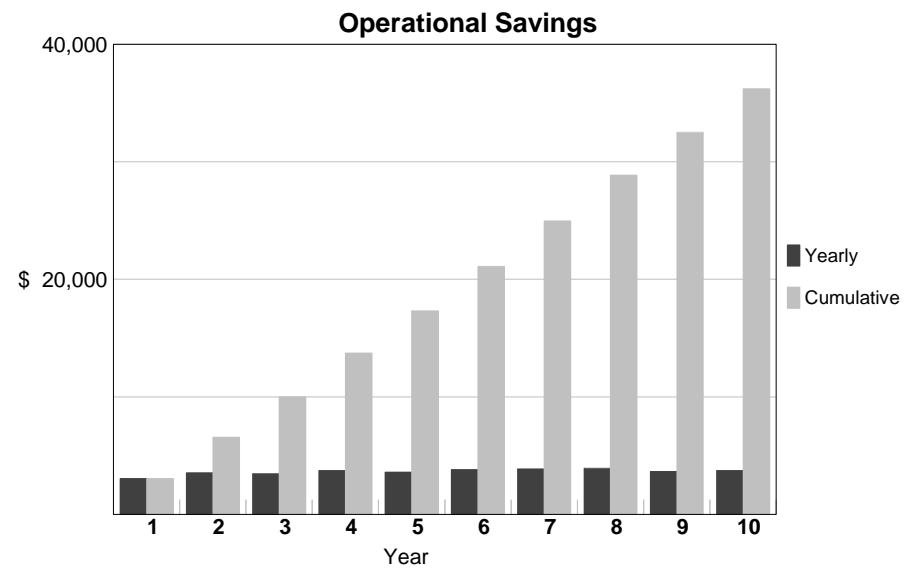
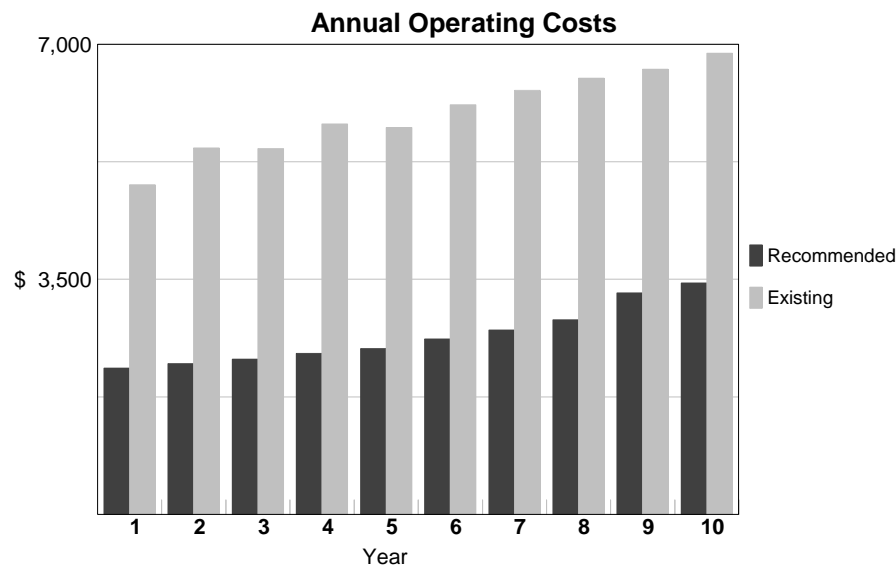
Total Project Investment

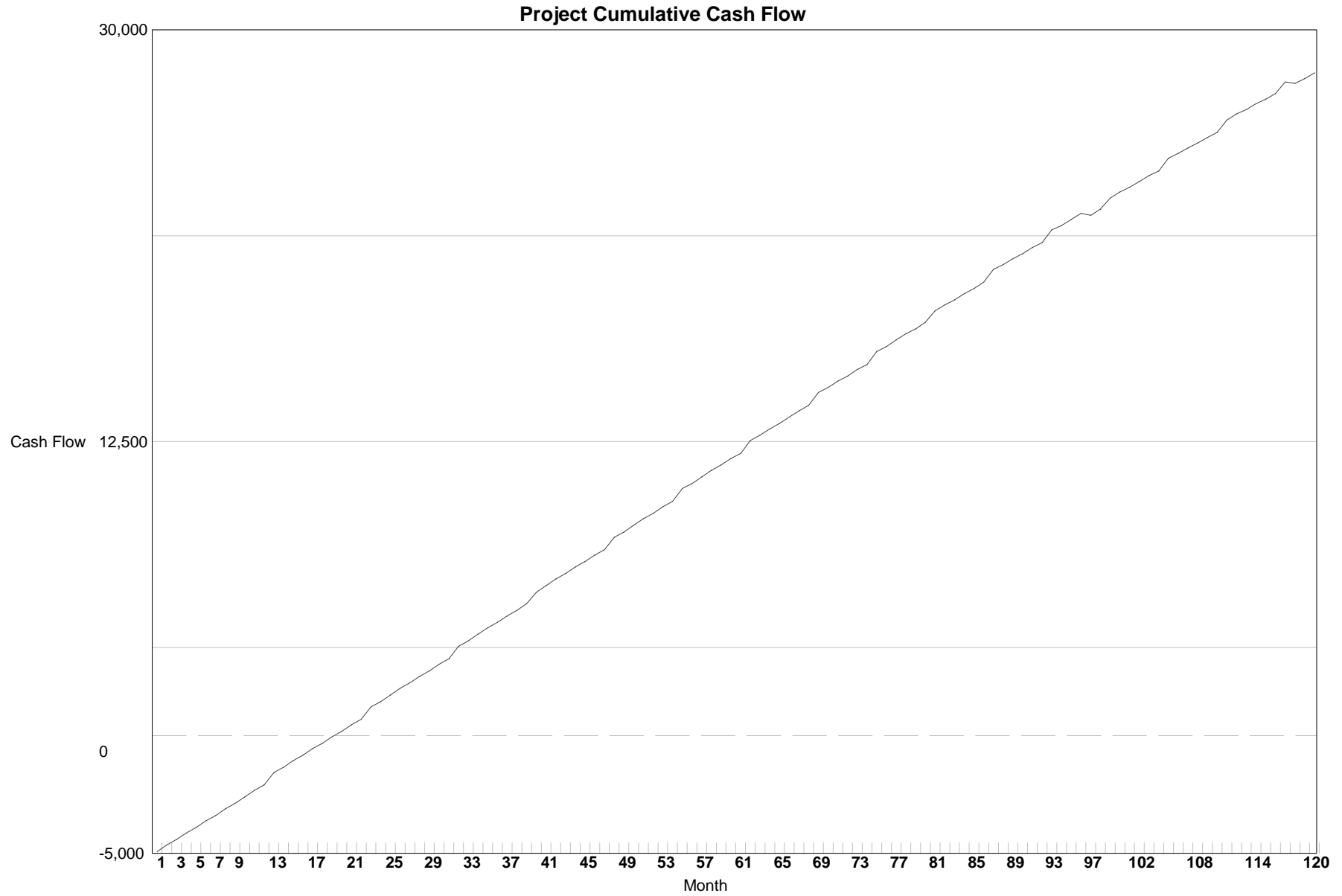
	Base System(s)	Recommended System(s)
Lamps		\$672.00
Ballasts		
Fixture		\$3,360
Additional Equipment		
Disposal of Existing Lamps		
Initial (Retrofit) Labor		\$3,500
Offsets / Rebates		(\$2,381)
<b>TOTAL</b>		<b>\$5,151</b>
<b>Average Annual Operating Expenses</b>	<b>\$5,980</b>	<b>\$2,312</b>
Lamps, Disposal and Labor	\$307	\$115
Ballasts and Labor	\$354	\$48
Energy	\$5,319	\$2,497
Estimated A/C Savings		\$347
<b>Average Annual Savings over Base System(s)</b>		<b>\$3,623</b>
Energy Usage (kWh)		21,780
Connected Load (kW)		6.0
Payback Period		1.7 yrs
10-year Average ROI		70%



	Lamps, Labor and Disposal		Ballasts and Labor		Energy			Annual Operating Costs		Operational Savings
	Recommended	Base	Recommended	Base	Recommended	Base	A/C Savings	Recommended	Base	
Year 1	\$0	\$270	\$0	\$0	\$2,178	\$4,640	\$303	\$1,875	\$4,910	\$3,034
Year 2	\$0	\$272	\$0	\$408	\$2,243	\$4,779	\$312	\$1,932	\$5,458	\$3,527
Year 3	\$0	\$319	\$0	\$208	\$2,311	\$4,922	\$321	\$1,989	\$5,449	\$3,460
Year 4	\$17	\$321	\$0	\$423	\$2,380	\$5,070	\$331	\$2,066	\$5,815	\$3,749
Year 5	\$17	\$324	\$0	\$216	\$2,451	\$5,222	\$341	\$2,128	\$5,762	\$3,634
Year 6	\$88	\$280	\$0	\$440	\$2,525	\$5,379	\$351	\$2,262	\$6,098	\$3,836
Year 7	\$144	\$329	\$0	\$449	\$2,601	\$5,540	\$362	\$2,383	\$6,317	\$3,935
Year 8	\$220	\$331	\$0	\$457	\$2,679	\$5,706	\$372	\$2,526	\$6,495	\$3,969
Year 9	\$299	\$286	\$238	\$467	\$2,759	\$5,877	\$384	\$2,913	\$6,630	\$3,718
Year 10	\$362	\$336	\$243	\$476	\$2,842	\$6,054	\$395	\$3,052	\$6,866	\$3,815
<b>Total</b>	<b>\$1,146</b>	<b>\$3,068</b>	<b>\$481</b>	<b>\$3,543</b>	<b>\$24,969</b>	<b>\$53,189</b>	<b>\$3,471</b>	<b>\$23,568</b>	<b>\$59,800</b>	<b>\$36,232</b>

Initial Investment = \$5,151





Note: The payback point is represented by the Cumulative Cash Flow line intersecting zero (0).



**Input Data Used for Zone: 400W Metal Halide to 6-lamp F54T5**

**General Data - Installation**

Energy Rate \$0.100/kWh  
 Analysis Period 10 years  
 Annual Burning Hours 3,618 hours  
 Nearest Location for A/C Columbus, Ohio

	Base System	Chosen Alternative
System Age (years)	10	10
No. of Fixtures	28	28
Lamp Type	MVR400/C/U	F54T5/841/HO/EA/ALTO 49W
Rated Lamp Life	15,000	35,000
Number of Lamps / Fixture	1	4
Lamp Cost (per lamp)	\$35.00	\$6.00
Ballast Type	M400MLTAC4M500K CWA	GE454MVPS90
Number of Ballasts / Fixture	1	1
Ballast Cost (per ballast)	\$75.00	\$80.00
Hours Per Start	14.0	14.0
Fixture		LITH IB 654LWD-JP18
Fixture Cost	\$0	\$120.00
Fixture Input Watts	458W	215W
Aux. Equip. Cost (per fixture)	\$0.00	\$0.00
Spot Relamping Labor / Lamp	\$10.00	\$10.00
Group Relamping Labor / Lamp	\$2.00	\$2.00
Optimum Group Relamping Interval	0	0
Actual Group Relamping Interval	0	0
Re-Ballasting Labor (per ballast)	\$125.00	\$125.00
Retrofit Labor / Fixture	\$15.00	\$125.00
Offset Per Fixture	\$0.00	\$85.05
Disposal Costs (per lamp)	\$0.00	\$0.00