

# LED Retrofit Cost Analysis

Investment Recovery: 0.89 Years  
 ROI = 89%

## Estimated Energy cost for existing fluorescent and metal halide lamps:

Location	Fixtures	Old Style Lamp type	Lamps/ fixture	Watts per lamp	Watts per ballast	Total Watts per fixture	Total kW	Hours active/yr	kWh/yr	Avg cost/kWh	Lighting cost/yr
Office	17	T8	3	34	10	112	1.90	2295	4370	0.0900	393.27
Warehouse	4	T12	2	65	10	140	0.56	8760	4906	0.0900	441.50
Warehouse	15	T5	4	51	10	214	3.21	8760	28120	0.0900	2530.76
Warehouse	6	MH	1	150	10	160	0.96	8760	8410	0.0900	756.86

Total estimated Yearly Electric cost for lighting: \$ 3,366  
 Estimated yearly maintenance cost: (lamps, ballasts and labor) \$ 600

## Estimated Energy Cost after LED Retrofit

Location	Fixtures	LED Lamp type	Lamps/ fixture	Watts per lamp	Watts per ballast	Total Watts per fixture	Total kW	Hours active/yr	kWh/yr	Avg cost/kWh	Lighting cost/yr
Office	17	T8	3	18	N/A	54	0.92	2295	2107	0.0900	189.61
Warehouse	4	T12	2	36	N/A	72	0.29	8760	2523	0.0900	227.06
Warehouse	15	T5	4	22	N/A	88	1.32	8760	11563	0.0900	1040.69
Warehouse	6	54W corn	1	54	N/A	54	0.32	8760	2838	0.0900	255.44

Total estimated cost for lighting after proposed LED upgrade \$ 1,713  
 Yearly savings \$ 2,253

## Material and Installation cost

Lamp	Location	Qty needed	Cost (\$)	Install time/ fixture (mins)	Labor (hrs)	Material Cost	Total Cost
T8	Office	51	15	15	4.3	765	1190
T8 - 8'	Warehouse	8	42	25	1.7	336	503
T5	Warehouse	60	22	25	6.3	1320	1945
54W Corn	Warehouse	60	20	25	2.5	1200	1450

Total Installation cost: \$ 5,088  
 Estimated rebate from Colorado Springs Utilities: \$ 2,544  
 Net Material and Installation Cost: \$ 2,544