

LED Calculator – Calculate Your LED Retrofit Savings

Form

Number of fixtures to be replaced

units

Old fixture (to be replaced)

Wattage: Watt

Price per unit: US\$

Lifespan: ▼

Incandescent / Halogen: 1,250 hours

Metal Halide: 6,000 hours

Fluorescent/CFL: 8,000 hours

Pulse Start Metal Halide (PSMH): 15,000 hours

High Pressure Sodium (HPS): 20,000 hours

LED fixture (new fixture)

Wattage: Watt

Price per unit: US\$

Lifespan: ▼

LED: 50,000 hours

Energy rate (electricity cost)

▼

The average residential price of electricity in the U.S. in 2015 was 12.66¢/kWh.

To find the price per kWh (Kilo Watt hour) for your state and sector, check your energy bill or go to the EIA website.

Hours of operation

▼

▼

Results

Number of light units to be replaced to LED units: 1 unit

	Old fixture	LED fixture
Initial cost	\$1.00	\$50.00
Wattage	75 Watt	9 Watt
Electricity cost (12.6¢/kWh)	\$41.39 per year	\$4.97 per year
Lifespan (continuous use)	1,250 hours	50,000 hours
Lifespan when used for 12 hours a day, 7 days a week	3 months 13 days	11 years 4 months 30 days
No. of times an old fixture to be replaced each year	3.50 times	—
No. of times an old fixture to be replaced during the LED fixture's lifespan (11 years 4 months 30 days)	40 times	—
Cost of replacements each year ([Incand. bulb cost] × [Number of replacement per year])	\$3.50	—
Annual labor cost for re-lamping ([Labor cost per re-lamping] × [Number of replacement per year])	\$0.00 per year	—

Other factors (optional)

Labor cost for re-lamping:

(no labor cost)▼

Calculate savings

Total annual cost

(\$44.90 per year)

[[Cost of replacing fixtures] + [Electricity] + [Labor cost]]

(same as the annual electricity cost)

Total cost

(\$513)

(after 11 years 4 months 30 days)

\$106

Total savings /w LED fixture (ROI)

(\$513 - \$106 = \$407)

(after 11 years 4 months 30 days)

Break-even point

(1 year 2 months 22 days)

(The amount of time necessary to save as much money as you invested initially)