

4 Fluorescent-to-LED Lighting Retrofit Options

LED lamps can reduce your energy and maintenance costs and improve your bottom line while providing quality light output and long lifetimes. LED lighting offers several advantages over traditional fluorescent lighting – including higher efficiency, lifetimes of up to three times longer, resistance to breakage, and they are mercury-free.

Several options exist for converting your fluorescent fixtures to LED – from simple/lower-cost options to higher-cost options that provide greater savings. This guide can help you find the right solution for your business!

RELAMP
LED option 1

EASIEST INSTALLATION

Replace the existing fluorescent bulbs with LED bulbs that are compatible with fluorescent ballasts.

annual savings per fixture

Conversion	Retail	Office	24-Hr Facility
4 Lamp to 4 LEDs	\$22	\$20	\$40
3 Lamp to 3 LEDs	\$17	\$16	\$31

Typical savings: 41-42%

REWIRE
LED option 2

QUICKEST PAYBACK

Disconnect and remove the existing fluorescent ballast, and replace the existing fluorescent bulbs with LED bulbs that use integrated/internal drivers.

annual savings per fixture

Conversion	Retail	Office	24-Hr Facility
4 Lamp to 4 LEDs	\$21	\$20	\$39
3 Lamp to 3 LEDs	\$16	\$15	\$30

Typical savings: 39-40%

RETROFIT
LED option 3

HIGHEST REBATE

Retrofit the existing fluorescent bulbs and ballasts with a prepackaged LED retrofit kit.

annual savings per fixture

Conversion	Retail	Office	24-Hr Facility
4 Lamp to Kit	\$29	\$28	\$54
3 Lamp to Kit	\$17	\$16	\$31

Typical savings: 41-55%

REPLACE
LED option 4

MOST EFFICIENT

Replace the existing fluorescent fixture with an LED fixture.

annual savings per fixture

Conversion	Retail	Office	24-Hr Facility
4 Lamp to Fixture	\$32	\$30	\$59
3 Lamp to Fixture	\$19	\$18	\$35

Typical savings: 47-60%

* Annual savings calculations are based on a fluorescent fixture using 32-watt T8 lamps, 4,719 retail operating hours, 4,439 office operating hours, 8,766 24-Hr Facility operating hours, and an electricity cost of \$0.10/kWh.

Additional Considerations



How Do The Options Compare?

LEDs come in a variety of brightness levels, color temperatures, and costs. LED performance and quality can also vary. Work with your lighting contractor to find the best solution for your needs.

	RELAMP Option 1	REWIRE Option 2	RETROFIT Option 3	REPLACE Option 4
Product Cost:	Green	Green	Yellow	Red
Installation Cost:	Green	Yellow	Green	Red
Light Distribution:	Yellow	Yellow	Yellow	Green
Lifetime:	Red	Yellow	Yellow	Green
Energy Savings:	Red	Red	Yellow	Green
Typical Payback:	Yellow	Green	Yellow	Red

Legend: ■ Good ■ Better ■ Best



How Bright? Consider the brightness level of your space, as different uses require different levels. Brightness is measured in Lumens, and higher Lumens indicate more light.



Warm or Cool?



Light appearance, which refers to the color of light produced, is measured in Kelvin. As seen above in the Kelvin Temperature Scale, WARMER colors are associated with LOWER Kelvin, and vice versa.



Utility Rebates

Not all LED products perform equally. We provide higher rebates for LED bulbs and fixtures that meet the performance, quality, and reliability requirements of the Design Lights Consortium™ or ENERGY STAR®.

DesignLights Consortium™ (DLC)

www.designlights.org

DLC promotes quality, high-performance, and energy-efficient LED lighting products for the commercial sector. Products must meet certain technical requirements to qualify. The DLC qualifies commercial LED luminaires, retrofit kits, and linear replacement lamps for inclusion in utility rebate and incentive programs.



ENERGY STAR®

www.energystar.gov

LED bulbs and fixtures that have earned the ENERGY STAR meet energy efficiency and performance guidelines set by the US Department of Energy and the U.S. Environmental Protection Agency. ENERGY STAR means high quality and performance, particularly in the areas of color quality, light output, light distribution, and lifetime.



ENERGY STAR LED products are subject to random testing every year to ensure they continue to meet the ENERGY STAR requirements. ENERGY STAR rates LED bulbs and fixtures that are mainly for residential applications, though they can also be installed in commercial facilities.