Ho Ho Whoa! LED Holiday Lights Save How Much Energy?

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December 12, 2017

The holidays are supposed to be a joyful, festive time, but high energy bills can put a damper on residential and business customers' fun. LEDs are a great way for home or business owners to keep energy use down without sacrificing their favorite holiday lighting traditions. LED holiday lights are:

- *Energy efficient.* They use 80% to 90% less energy than conventional incandescent strings of lights do, saving customers money on their winter energy bills.
- *Long-lasting.* They can last up to 10 times longer than incandescent lamps.
- *Safe.* They stay cool to the touch, reducing the risk of fire and burnt fingers.
- *Sturdy.* The bulbs are made of epoxy, not glass, so they are much more durable than other lights.
- *Easy to install.* You can connect as many as 25 strings of LEDs end-to-end without overloading a wall socket.

> Whether your customers have modest light installations or over-the-top laser shows, they'll see noticeable savings on their energy bills if they use LEDs. Tweet this!

LED holiday lights come in a variety of colors, shapes, and lengths and are available at many home improvement, wholesale, drug, and grocery stores. Although they might be more expensive than incandescent lights at the time of purchase, LEDs are big money savers in the long run. Whether your customers have modest light installations or over-the-top laser shows, they'll see noticeable savings on their energy bills if they use LEDs. The tables below show some quick stats.

Typical energy-usage costs for a minimal light display

Item	Incandescent watts	LED watts
10 strings of light	408	48
2 outdoor decorations	164	38
1 garland	42	4
1 wreath	21	4
Total	**635 ($10.78/month)**	**94 ($1.59/month)**

Typical energy-usage costs for a moderate light display

Item	Incandescent watts	LED watts
500-foot C9 string on roof	3,500	480
200-foot C9 string in yard	1,400	192
30 strings for wrapping 2 trees	1,224	144
15 strings for walkway trees	613	72
1 wreath	63	14
Total	**6,800 ($115.26/month)**	**902 ($15.32/month)**

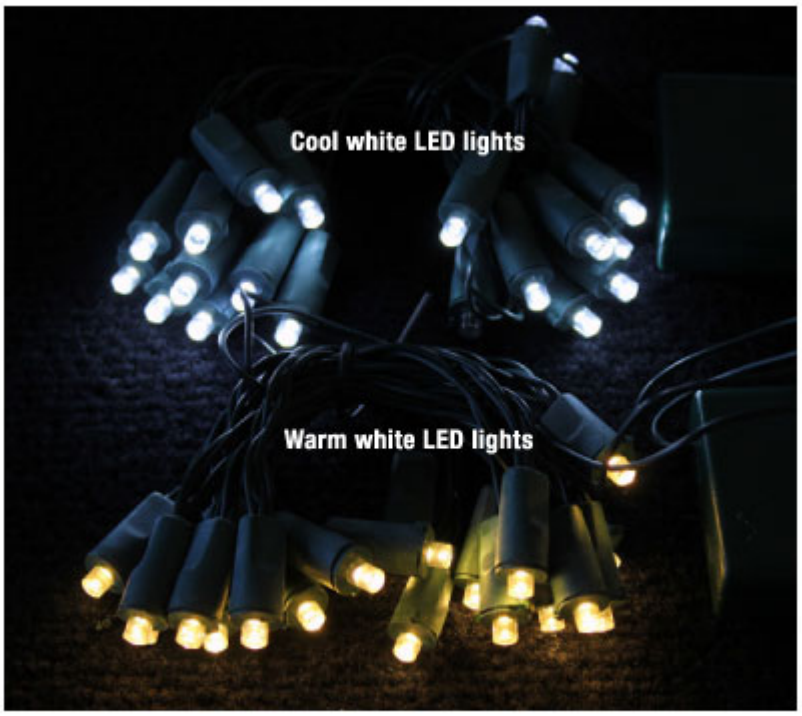
Typical energy-usage costs for a major light display

Item	Incandescent watts	LED watts
95 icicle lights	6,056	458
800-foot C9 string on roof	5,600	768
500-foot C9 string in yard	3,500	480
30 strings for wrapping 2 trees	1,224	144
15 strings for walkway trees	612	72
5 motifs	554	277
10 strings for a light tree	408	48
150-foot spool of rope light	378	120
Total	**18,332 ($310.73/month)**	**2,367 ($40.11/month)**

The brightness and color of LED lights have also come a long way in the past few years and are now visually appealing. For white lights, you can choose between cool white, which is a bright icy-blue white, or warm white, which has a yellow tint and is the closest to a white incandescent replacement.

Cool white versus warm white LEDs

Cool white LEDs are brighter and have a slight blue tint. Warm white LEDs are the closest in color to white incandescent holiday lights.



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Many utilities offer holiday light exchange programs, where customers can trade in their old incandescent Christmas lights for new LEDs. This year, Southern California Edison (SCE) and Southern California Gas Co. (SoCalGas) are teaming with the Western Riverside Energy Partnership to host the 2017 Holiday LED Light Exchange & Energy Efficiency Kit Give-Away (PDF). SCE encourages customers to exchange two strands of old incandescents for two strands of new LEDs. At the same event, SoCalGas offers customers free energy-efficiency kits. Colorado Springs Utilities also runs a light-exchange program. Customers can drop off their old incandescent lights and receive up to $15 off new LED lights.

Now if we could only get Rudolph on board.


Source: Wikimedia Commons