



Bulb Up

A simple guide to upgrading your lighting and saving big



It's time to Bulb Up and get turned on to energy-efficient bulb replacements.

Incandescent light bulbs are currently being phased out of the marketplace. This is a good thing. Because while they may be cheap and familiar, incandescent bulbs are incredibly inefficient when compared to more modern CFL and LED bulbs. Not only do they waste energy, they actually cost far more over their lifetime than their more efficient replacements.

Lumens are the new watts

The brightness of today's bulbs is measured in lumens (lm). Lumens measure the amount of light a bulb produces, unlike watts, which measure power consumption.

Use this handy chart to get the brightness right.

WATTS	=	LUMENS
40	=	450
60	=	800
75	=	1100
100	=	1600
150	=	2600

Types of light bulbs

You have a lot more choices today when it comes to light bulbs. Here are the most common types of lighting technology used in homes.

EFFICIENT

CFL Compact Fluorescent Lamp



CFLs use 1/5 to 1/3 the amount of energy as incandescent bulbs.

They may cost a little more up front, but more than make up for it by saving around five times the purchase price over their lifetime. CFLs come in a wide range of styles to fit your every need.

LED Light Emitting Diode



LEDs use less energy than even CFLs, but it's their long lifespan - up to 25 years - that really sets them apart.

LEDs can also have a higher sticker price, but more than make up for it in everyday energy savings and longevity. Like CFLs, LEDs also come in a range of shapes, sizes, and styles.

INEFFICIENT

Incandescent



This is the original light bulb technology and the style you typically think of when you hear the words "light bulb." The major drawback is that **90 percent of the energy consumed is wasted as heat**, making them an incredibly inefficient option.



Halogen

Halogen bulbs are a form of incandescent lighting that is slightly more efficient than your standard bulb. In this case, more efficient doesn't mean a whole lot, as CFLs are nearly three times more efficient than halogen bulbs.

Whether you're looking for a globe-covered light bulb, dimmable, decorative or outdoor, there is an energy-efficient CFL or LED specifically made to fit your needs.



Selecting light color by location

In addition to varying degrees of brightness (measured in lumens), light bulbs also come in a range of light colors. Not color in the sense of red, purple, or green — but color temperature. Bulbs that give off a soft, yellowish glow are considered warm, while those that emit crisp, blue light are considered cool. Light color is measured in Kelvin (K). The higher the Kelvin, the cooler the light. Use the chart to find the Kelvin range of particular light colors and the areas of your home they're typically used.

LOCATION	IDEAL LIGHTING	KELVIN (K)
Living room, den, bedroom, or hallway	Soft white (warm, yellowish glow)	2,500–3,000K
Kitchen, bathroom, or work area	Bright white (crisp, white light)	3,500–4,100K
Reading area, detail-oriented workspace, or outdoor	Daylight (cool, bluish light similar to natural sunlight)	5,000–6,500K

Reading the Lighting Facts label

The Lighting Facts label is required on the majority of light bulb packaging, providing a handy reference for making the most energy-efficient choice.

Light Output/Lumens

Measures light output. The higher the number, the more light is emitted.

Energy Costs

Estimated annual energy cost of each bulb included in the package based on the average initial wattage, a usage rate of 3 hours per day, and 11 cents (\$0.11) per kWh.

Bulb Life

The life of each bulb included in the package, expressed in years rounded to the nearest tenth (based on 3 hours operation per day).

Light Appearance

Measures light color. “Cool” colors give off a crisp, bluish light and have higher Kelvin temperatures (3,600-5,500K); “warm” colors give off a soft, yellowish glow and have lower Kelvin temperatures (2,700-3,500K).

Energy Used

The wattage for each bulb included in the package, expressed as “Energy Used” in average initial wattage.

Lighting Facts Per Bulb	
Brightness	820 lumens
Estimated Yearly Energy Cost	\$7.23
Based on 3 hrs/day, 11¢/kWh	
Costs depend on rates and use	
Life	1.4 years
Based on 3 hrs/day	
Light Appearance	
Energy Used	60 watts

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Look for the ENERGY STAR® to save big

Light bulbs that have earned the ENERGY STAR label meet strict energy efficiency and quality requirements set by the Environmental Protection Agency (EPA). They're built to save energy — and that saves you money.



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