



## Lighting Information

### Incandescent

An incandescent bulb emits light by heating a tungsten filament surrounded by various inert gases to about 4000°F. These bulbs light well and cost little, but die quickly and are highly inefficient, releasing 90 percent of their energy as heat.

### Compact Fluorescent Lamp (CFL)

Inside a CFL, an electric current is driven through a tube filled with argon and a small amount of mercury vapor. This creates invisible UV light, which excites a phosphor coating that reacts by emitting visible light.

### Light-Emitting Diode Lamp (LED)

LEDs are composed of two conjoined sections of a semiconductor material. When an LED is energized, movement of electrons across the diode causes emission of photons—or light. LED lamps are efficient, produce little heat and have extremely long life spans, but are costly.

### Learn about Lumens

The brightness of a light bulb is actually measured in lumens. Watts are simply a measure of the amount of electricity a bulb needs to operate. New Lighting Facts labels make purchasing new energy efficiency bulbs easier for consumers.

### Learn about Temperature Scale

- Light color is measured on a temperature scale referred to as Kelvin (K).
- Lower Kelvin numbers mean the light appears more yellow; higher Kelvin numbers mean the light is whiter or bluer.
- Most ENERGY STAR® qualified bulbs are made to match the color of incandescent bulbs at 2700- 3000K.
- For a whiter light, look for bulbs marked 3500-4100K.
- For bluer white light, look for bulbs marked 5000-6500K.

### How Much Light Do I Need?

Old Incandescent Bulbs (Watts)	ENERGY STAR Bulb Brightness (Minimum Lumens)
40	450
60	800
75	1,100
100	1,600
150	2,600