

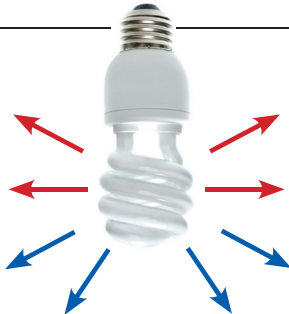
# Technical Specifications

— light output — wasted light output

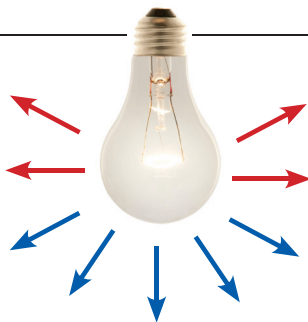
## CFL Energy saver & Incandescent lamp

Because of the structure of light emission, around 30-40 percent of the light is not actually output. The actual lumens output is only 60 to 70 percent.

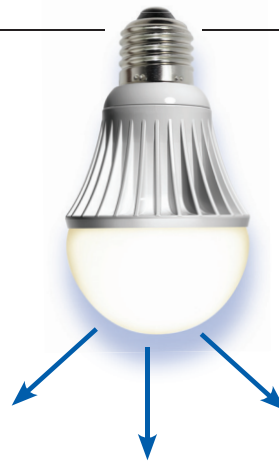
CFL energy saver



Incandescent lamp



TESS LED lamp



TESS LED bulb  
100 percent of the light is output.

## Comparing Incandescent and LED Bulbs

40 watt



60 watt



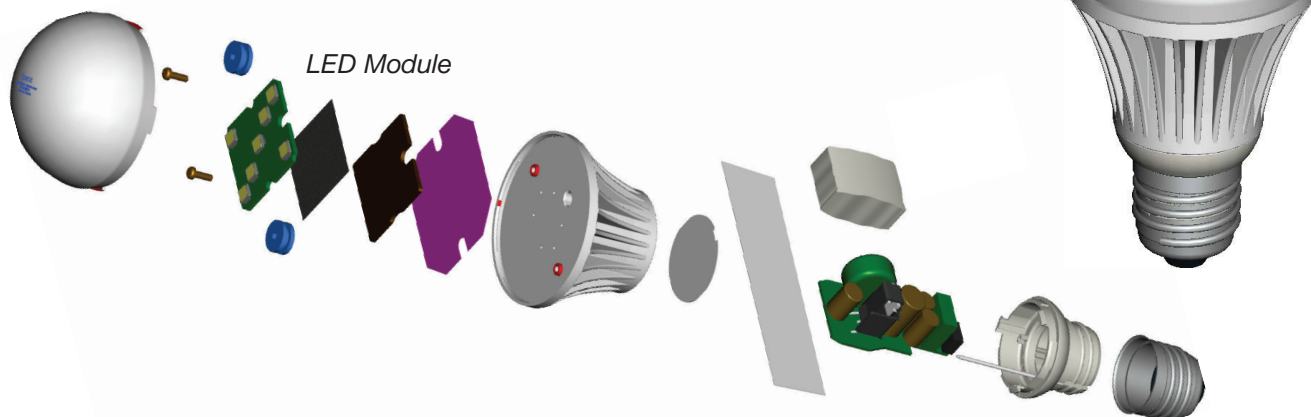
The lumen output of incandescent bulbs is only 60 to 70 percent of the available lumens.

A typical 60 watt incandescent bulb outputs about 700 lumens. In addition, the mounting of the bulb also affects the light output. An LED bulb from *FIRST* is roughly equivalent to a 60 watt bulb when mounted as a downlight and 40 watt if mounted in a table lamp.

(See illustration above)

Model #	Color	Wattage	Replaces	Color Temp.	Lumens Output	Efficiency (Lumens/W)
T-67004 S	Warm	7	up to 60W incandescent	2700K	450	64

- » LEDs are purchased from Cree U.S. and assembled on high-speed placement equipment by TESS.
- » TESS designed and produces the electronic board to power the LEDs at their plant.
- » The base, heat exchanger and globe come from local sources.
- » Assembly takes place at the plant near Taipei, Taiwan.
- » Bulbs are burned in for 8 hours after assembly and final test.
- » A serialized date code stamp is laser etched on the bulb base.



For more information about this program or the light bulb product, please refer to the *FIRST*® Green e-watt resources page at:  
[www.usfirst.org/e-wattresources](http://www.usfirst.org/e-wattresources)

