

**Today there are many lighting options available.** The right bulb for you depends on how much light you need, what color light you want, and its costs and features. This guide will help you compare!

## STEP 1 Decide How Much Light You Need

### Focus on Brightness.

Different amounts of light are needed for different uses. Instead of thinking about light bulbs based solely on the amount of energy they use, focus on their brightness level.

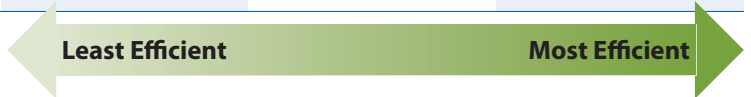
**Lumen is the measurement of brightness.** Higher lumen bulbs produce brighter light.

**Watt (W) is the measure of power consumption.** Lower wattage bulbs can lower your electric bills.

If you like your bulbs' current brightness, choose CFLs or LEDs with similar lumens to reduce your energy use. You may also consider a bulb that is not as bright to save more.



Brightness	Incandescent	CFL	LED
450 lumens ☀	40W	9-13W	4-8W
800 lumens ☀	60W	13-16W	8-13W
1100 lumens ☀	75W	17-23W	11-15W
1600 lumens ☀	100W	23-28W	16-20W



**Note:** Lumen output listed on packages may vary. For example, light bulbs listing anywhere from 800 to 860 lumens are similarly bright.

## STEP 2 Decide What Color Light You Want

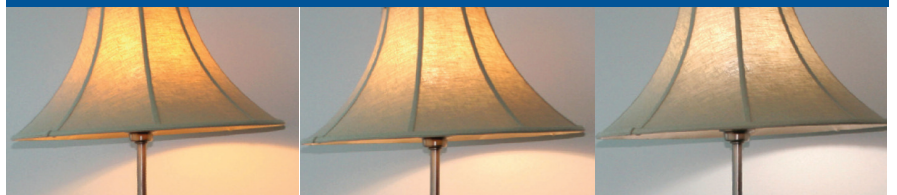
### Choose Light Appearance.

You'll be pleased with your new bulb by choosing a light appearance that you like.

All of these colors are available for LEDs and CFLs and at most brightness levels.

**Note:** Choose warm or soft white (2700-3000 K) to match the color of incandescent bulbs.

#### Different Colors, Same Brightness



**Soft White, Warm White**  
Living Room, Bedroom

**Bright White, Cool White**  
Kitchen, Bathroom, Dining Room

**Natural, Daylight**  
Office, Laundry, Workshop, Garage









# STEP 3

# Think About Costs and Benefits

## Compare Types of Light Bulbs.

You can think about product, replacement, and energy costs over 20 years for different bulb types. Why 20 years? Because LEDs can last that long. Some incandescent bulbs are being phased-out and will soon be unavailable. The pros and cons of LED and CFL bulbs will help you pick a bulb that is right for you.

Cost Over 20 Years	Bulb(s)	Energy	Pros (+) and Cons (-)
LED	 1 bulb in 20 years	 \$40 total cost	<ul style="list-style-type: none"> <li>+ Saves 85% of energy use over incandescent</li> <li>+ Lasts 25 times longer than incandescent</li> <li>+ Great for dimmed, recessed, or enclosed fixtures</li> <li>+ Performs well in cold temperatures</li> <li>- Higher bulb cost</li> </ul>
CFL	 3 bulbs in 20 years	 \$50 total cost	<ul style="list-style-type: none"> <li>+ Saves 75% of energy use over incandescent</li> <li>+ Lasts 10 times longer than incandescent</li> <li>- Recessed &amp; enclosed fixtures reduce bulb life</li> <li>- Contains mercury (recycling required)</li> <li>- Performs poorly in cold temperatures</li> </ul>
Incandescent	 22 bulbs in 20 years	 \$270 total cost	

**Note:** Cost comparison is based on a 20-year life-cycle and takes into account power consumption, hours of use per day, residential electric cost, bulb cost, and replacement cost. For detailed cost calculations and a full pro/con list, visit <http://Lighting.MnCERTs.org>.

## Buy Your New Bulbs.

The **Lighting Facts** label on all bulb packaging clearly shows light appearance and brightness. The label also includes the ENERGY STAR® logo when a bulb meets the required certification levels for high efficiency, performance, and reliability.

Lighting Facts		Per Bulb
<b>Brightness</b>	800 lumens	
<b>Estimated Yearly Energy Cost</b>	\$1.14	
Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use		
<b>Life</b>	22.8 years	
Based on 3 hrs/day		
<b>Light Appearance</b>		
Warm <span style="display: inline-block; width: 100px; border-bottom: 1px solid black; position: relative; top: -5px;"> <span style="position: absolute; left: 0; top: -5px;">▲</span> <span style="position: absolute; right: 0; top: -5px;">▼</span> </span> Cool		
2700 K		
<b>Energy Used</b>	9.5 watts	



# STEP 4

# Find Rebates and Resources



Contact Rochester Public Utilities at **507.280.1500** to learn about CONSERVE & SAVE® rebates and more ways to save at [www.rpu.org](http://www.rpu.org).



Also, visit the CERTs lighting website at <http://Lighting.MnCERTs.org> to learn more about lighting options and find bulb recycling locations.