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.

<table>
<thead>
<tr>
<th>Brightness</th>
<th>Incandescent</th>
<th>CFL</th>
<th>LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>450 lumens</td>
<td>40W</td>
<td>9-13W</td>
<td>4-8W</td>
</tr>
<tr>
<td>800 lumens</td>
<td>60W</td>
<td>13-16W</td>
<td>8-13W</td>
</tr>
<tr>
<td>1100 lumens</td>
<td>75W</td>
<td>17-23W</td>
<td>11-15W</td>
</tr>
<tr>
<td>1600 lumens</td>
<td>100W</td>
<td>23-28W</td>
<td>16-20W</td>
</tr>
</tbody>
</table>

**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.
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

<table>
<thead>
<tr>
<th>Bulb Type</th>
<th>Bulb(s)</th>
<th>Energy</th>
<th>Pros (+) and Cons (-)</th>
</tr>
</thead>
</table>
| **LED**   | 1 bulb in 20 years | $40 total cost | + Saves 85% of energy use over incandescent  
+ Lasts 25 times longer than incandescent  
+ Great for dimmed, recessed, or enclosed fixtures  
+ Performs well in cold temperatures  
- Higher bulb cost |
| **CFL**   | 3 bulbs in 20 years | $50 total cost | + Saves 75% of energy use over incandescent  
+ Lasts 10 times longer than incandescent  
- Recessed & enclosed fixtures reduce bulb life  
- Contains mercury (recycling required)  
- Performs poorly in cold temperatures |
| **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](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

- **Brightness:** 800 lumens
- **Estimated Yearly Energy Cost:** $1.14
  - Based on 3 hrs/day, 11¢/kWh
  - Cost depends on rates and use
- **Life:** 22.8 years
  - Based on 3 hrs/day
- **Light Appearance:**
  - Warm: 2700 K
- **Energy Used:** 9.5 watts

### 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](http://Lighting.MnCERTs.org) to learn more about lighting options and find bulb recycling locations.