

Right Light Guide

for General Use Bulbs



CITY OF BUFFALO, MINNESOTA

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.

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 bulb's current brightness, choose a CFL or LED with similar lumens to reduce your energy use. You may also consider a bulb that is less bright to save more.

Note: Lumen output listed on packages may vary. Light bulbs listing anywhere from 800 to 860 lumens are similarly bright, for instance.



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

Least Efficient

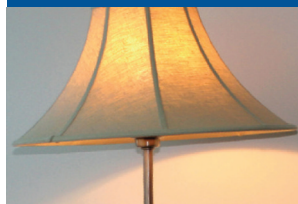
Most Efficient

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

← Warm Color

Light Appearance

Cool Color →

2700K

3000K

3500K

4100K







5000K

6500K

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 LEDs and CFLs 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"> + 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	<ul style="list-style-type: none"> + Saves 75% of energy use over incandescent + Lasts 10 times longer than incandescent - Recessed & enclosed fixtures reduce bulb life - Performs poorly in cold temperatures - Contains mercury (recycling required)
Incandescent	 22 bulbs in 20 years	 \$270 total cost	

Note: Cost comparison is based on a 20-year life 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	
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 Cool	
2700 K _____	
Energy Used	9.5 watts



STEP 4

Find Rebates and Resources



Contact Buffalo Utilities at 763-682-5370 or www.ci.buffalo.mn.us.

Learn, ask questions, and recycle CFLs
<http://Lighting.MnCERTs.org>
 Minnesotans building a clean energy future

