

# Lighting and Light Pollution

## What is the purpose of the lighting ordinance?

The purpose of the lighting ordinance is to provide regulations of general applicability for property throughout the city in order to protect the health, safety, and welfare of the community and its residents by limiting glare, light trespass and conserving energy while enhancing night sky visibility, and ensuring a starry night sky. Visit [www.darksky.org](http://www.darksky.org) for more information.

## What is light pollution?

Light pollution is any adverse effect of artificial light including, but not limited to, glare, light trespass, sky glow, energy waste, compromised safety and security, and impacts on the night environment.

## What kind of fixtures should I use?

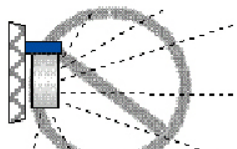
Use light fixtures that shine the light down where needed instead of wastefully in all directions. These fixtures are called fully-shielded fixtures.

## What can I do to reduce light pollution?

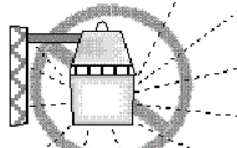
- Use light fixtures that shine the light down where it is needed
- Use lights only when needed
- Have lights be no brighter than needed
- Choose warmer-colored light bulbs

## EXAMPLES OF SOME COMMON LIGHTING FIXTURES

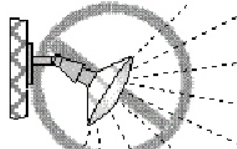
### POOR



Typical "Wall Pack"

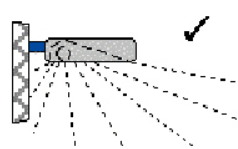


Typical "Yard Light"

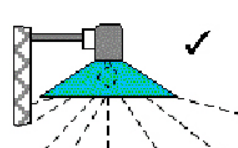


Area Flood Light

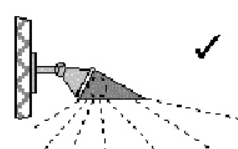
### GOOD



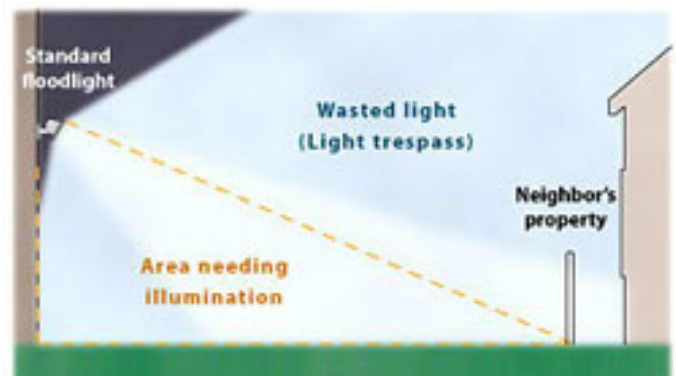
Typical "Shoe Box" (forward throw)



Opaque Reflector (lamp inside)



Area Flood Light with Hood



Source: Sky and Telescope

Shield and redirect fixtures so light does not shine onto your neighbor's property, as shown above.

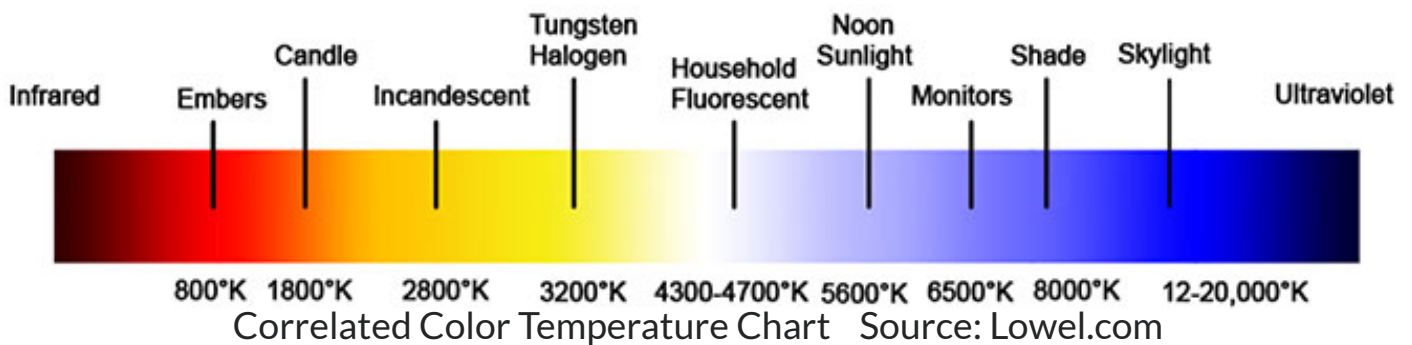
Source: NELPAG



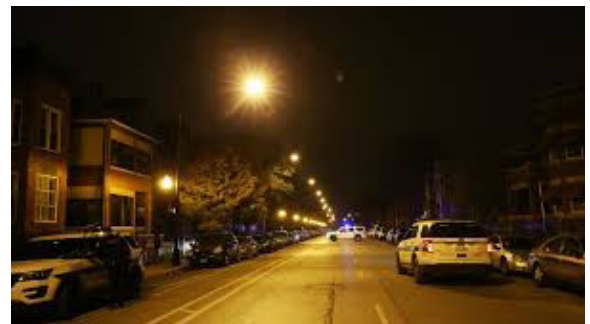
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## What is Correlated Color Temperature?

Correlated Color Temperature (CCT) is a measure of how warm or cool the color of light appears. A higher CCT means a cooler color. A lower CCT means a warmer color. The CCT is measured in Kelvin (K) is often mentioned on the packaging of a new lamp.



To minimize the amount of blue light at night, choose lights that are 3,000K or lower. 3000K appears a bright yellow, often called soft white or warm white. A warmer color gives a softer appearance than cooler-colored lights, as shown in the pictures below.



## Additional Resources

International Dark Sky Association: [www.darksky.org](http://www.darksky.org)

Dark Sky Society: [www.darkskysociety.org](http://www.darkskysociety.org)

Dark Skies Awareness: [www.darkskiesawareness.org](http://www.darkskiesawareness.org)

Lighting Research Center: [www.lrc.rpi.edu](http://www.lrc.rpi.edu)

Illuminating Engineering Society: [www.ies.org](http://www.ies.org)

## City Hall

Address:

7738 Commerce Circle  
Greenfield, MN 55373

Hours:

Monday - Thursday  
7:00 a.m. to 5:30 p.m.  
Friday Closed

Contact: 763-477-6464

[cityhall@ci.greenfield.mn.us](mailto:cityhall@ci.greenfield.mn.us)

<https://www.ci.greenfield.mn.us/>



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