

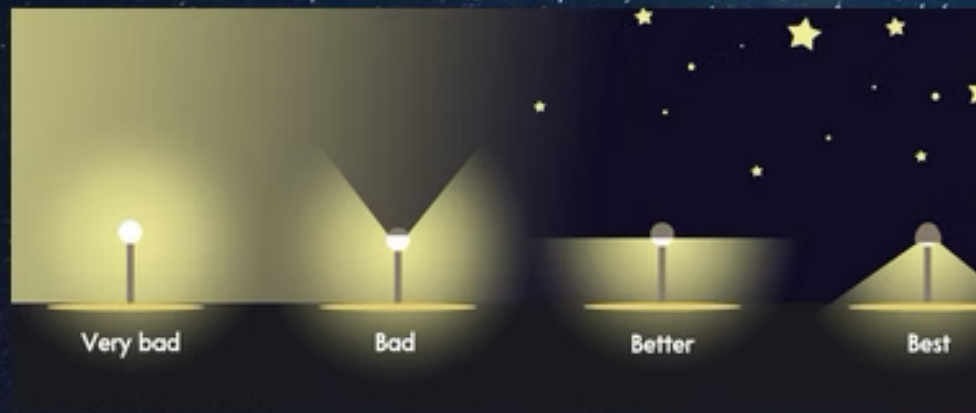
LOVING OUR DARK SKIES

How can you support dark skies?

1

Use **light fixtures** that are

- fully shielded
- downward-pointing
- motion-sensor controlled



Traditional

Dark-sky friendly



2

Use **light bulbs** that are

- yellow/amber (e.g., bug lights), or
- under 2700 Kelvin
- under 60 Watt equivalent

Cool White

5000K

Neutral White

4000K

Warm White

3000K

Extra Warm White

2700K



When planning outdoor lights, follow these 5 simple principals.

Five Lighting Principles for Responsible Outdoor Lighting



Responsible outdoor lighting is

1 Useful

Use light only if it is needed

All light should have a clear purpose. Consider how the use of light will impact the area, including wildlife and their habitats.



2 Targeted

Direct light so it falls only where it is needed

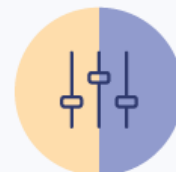
Use shielding and careful aiming to target the direction of the light beam so that it points downward and does not spill beyond where it is needed.



3 Low Level

Light should be no brighter than necessary

Use the lowest light level required. Be mindful of surface conditions, as some surfaces may reflect more light into the night sky than intended.



4 Controlled

Use light only when it is needed

Use controls such as timers or motion detectors to ensure that light is available when it is needed, dimmed when possible, and turned off when not needed.



5 Warm-colored

Use warmer color lights where possible

Limit the amount of shorter wavelength (blue-violet) light to the least amount needed.





Respect the night and your neighbors with community-friendly lighting.

When outdoor lights are too bright or poorly aimed, they don't just wash out the stars, they spill into your neighbors' windows, disrupt sleep, and harm wildlife.



DarkSky

Example of Dark Sky friendly light fixtures from the Town of Rockport.

On September 11, 2017 a Residential Lighting Bylaw was passed at Town Meeting. This bylaw applies to all buildings containing a residential use.

New luminaires and replacement luminaires must be of full-cutoff design and their light sources shall not exceed 2,750 K color temperature.

Residential dwelling: A structure or part of a structure that is used as a home or residence by one or more persons who maintain a household, whether single family, multifamily, or mixed use.

Full-cutoff (fully shielded): A luminaire that is constructed, and installed so that no light is emitted at any angle above a horizontal plane passing through the lowest light emitting part (including refractors, reflectors or other devices) of said luminaire to a point five (5) feet above grade at the property line as might be viewed at that height by an observer standing at that place.

Color temperature (of a light source): The temperature at which an opaque and non-reflective object will radiate light of a color comparable to that of the light source. Color temperature is expressed in degrees Kelvin (°K). Light sources with higher color temperatures contain more blue light than light sources with lower color temperatures, and appear brighter to the human eye, all other conditions being equal.

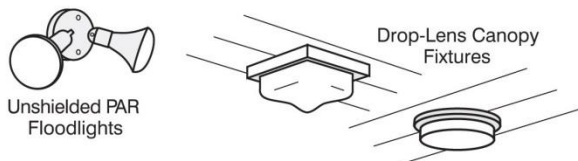
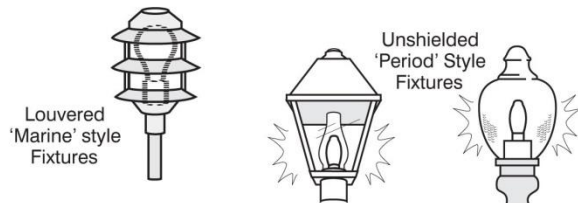
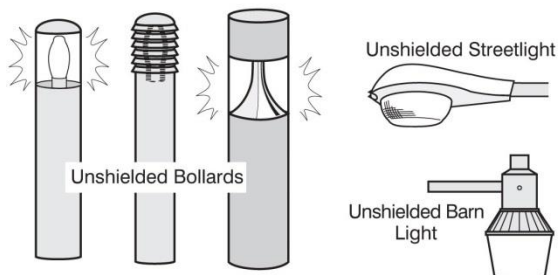
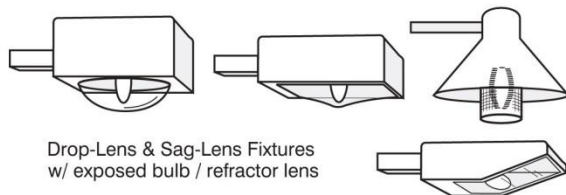
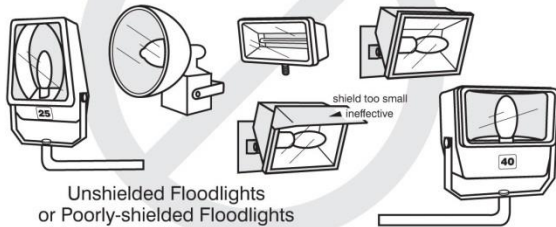
The full text of the bylaw (Chapter 14 Section 6 of the Rockport Code of Bylaw) can be viewed on the Town Website at rockportma.gov

See reverse side are examples of acceptable and non-acceptable light fixtures.

Examples of Acceptable / Unacceptable Lighting Fixtures

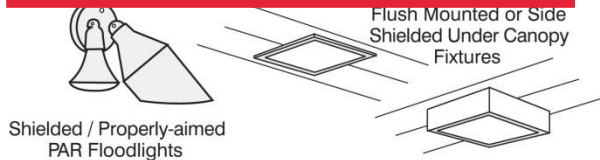
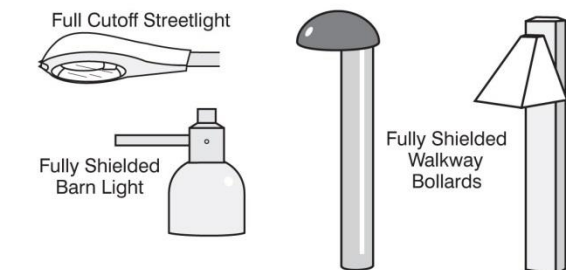
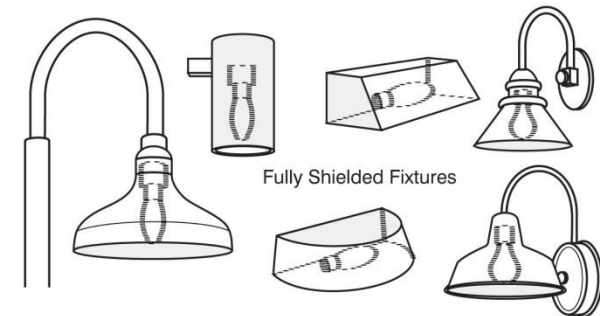
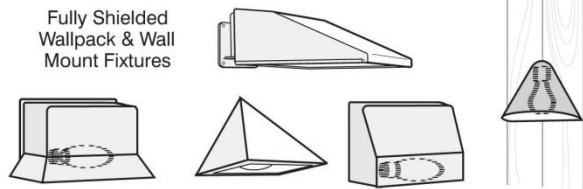
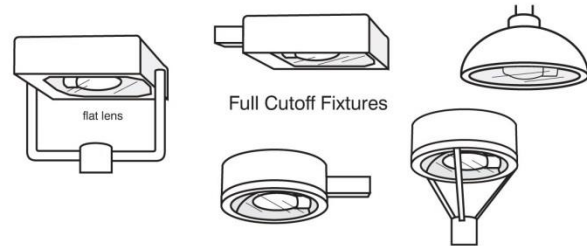
Unacceptable / Discouraged

Fixtures that produce glare and light trespass



Acceptable

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



Illustrations by Bob Crelin © 2005. Rendered for the Town of Southampton, NY. Used with permission.

All non-horizontal non-opaque material below the light source must be completely transparent, so as not to diffuse the light.