

How to Protect the Night Sky & Prevent Light Pollution

Humboldt County, Eureka, and Arcata have outdoor lighting regulations.

1. Use lights with lower brightness - 1,100 lumens is best!

Lighting Facts Per Bulb	
Brightness	1100 lumens
Estimated Yearly Energy Cost	\$1.56
Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use	
Life	13.6 years
Based on 3 hrs/day	
Light Appearance	
Warm  Cool	
2700 K	
Energy Used	13 watts

All commercial light bulbs are now labelled with lumens, which is a better indicator of brightness, whereas the more familiar “watts” better represents the amount of energy a light bulb uses.



2. Use warm light bulbs - 2,700 K or less

Color temperature, describes how “warm” or “cool” a light source appears. Color temperature is measured in kelvins. Lower kelvins (K) are “warmer” in appearance, while higher Kelvins (K) are “cooler” in appearance.

3000 K warm white, like tungsten-halogen lamps	2700 K warm white, light 100W, like incandescent lamps	2600 K warm white, like 60W incandescent lamps
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3. Use fully shielded (or full cutoff) fixtures that point light down and minimize glare.



list of Dark Sky approved light fixtures



Why are dark skies important?

Migratory Birds Travel at Night...

...to use stars for navigation, avoid predators, fly in calmer air, avoid overheating, and to have opportunities to refuel during the day. For example: Snowy Plovers, Marbled Godwits, hummingbirds, warblers, thrushes, sparrows, vireos, and buntings.



Snowy Plover



Marbled Godwit



Varied Thrush



Wilson's Warbler



Light pollution disrupts our circadian rhythm...

Studies have shown the level and duration of darkness we experience before sleep is more important than the amount of time spent in bed. Melatonin, the hormone that helps you sleep, can be suppressed by exposure to blue light. Artificial light at night has been found to contribute to certain cancers, heart disease, diabetes, obesity, mood disorders, and insomnia. (International Dark Sky Discovery Center, 2025)

...and plants' natural rhythms

Light pollution alters plant growth, timing of flowering, and resource allocation. This has cascading effects on the migratory patterns of pollinators and seed-dispersers that rely on nectar, pollen, seeds, and fruits for food.



Adapting Your Outdoor Light Fixtures To Protect the Night Sky & Prevent Light Pollution



Replace outdoor bulbs with low brightness (1,100 lumens or less) and low color temperature light (2,700 K or less).



For existing fixtures, use adaptive light shields, such as Parshield's which clip onto flood lights to reduce glare.

Parshield® OUTDOOR FLOODLIGHT SHIELDS

The dark sky friendly shield for PAR bulbs

Be good neighbors, use Parshield® glare visors!

Controls glare
Reduces light trespass
Directs light where you need it

Glare
Trespass
Sky glow

The advertisement features a dark blue background with a yellow shield on the left. A red circle with a diagonal slash is over a floodlight. On the right, a floodlight is shown with a green shield attached, casting a yellow beam of light. The text is in white and yellow.

Parshield website



Use light bulbs with motion sensors, or replace your existing fixture with a motion detector fixture. OR add a timer between the outlet and

plug.

motion sensors!



plug-in timer!

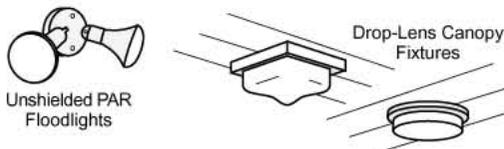
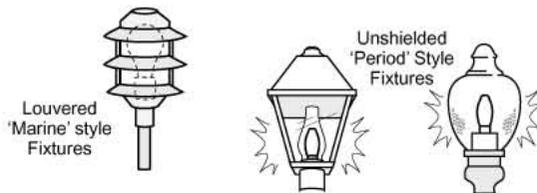
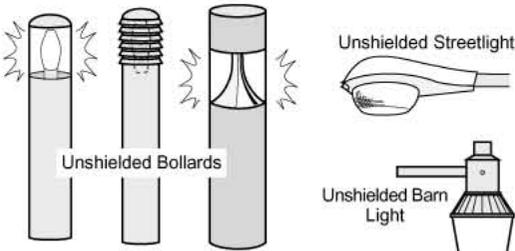
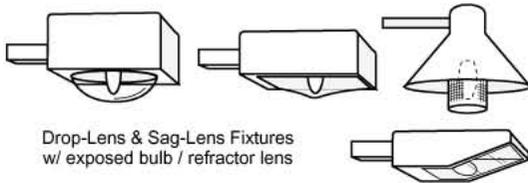
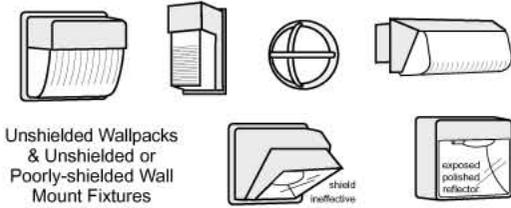
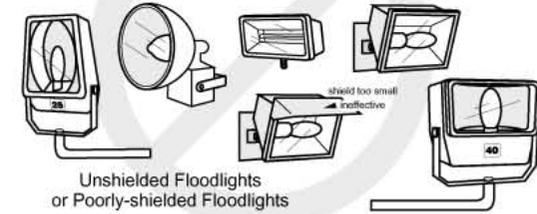


Good Lights for Good Nights

Help eliminate light pollution. Select the best fixture for your application using this guide. Use the lowest wattage bulb appropriate for the task and turn off the light when it's not being used.

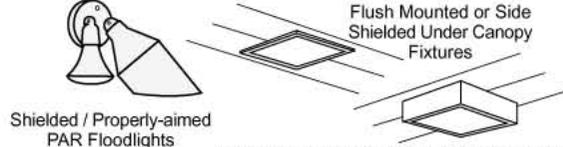
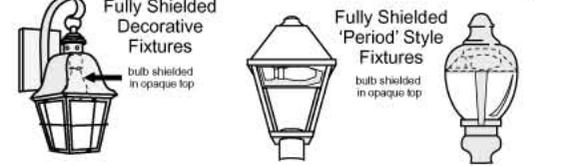
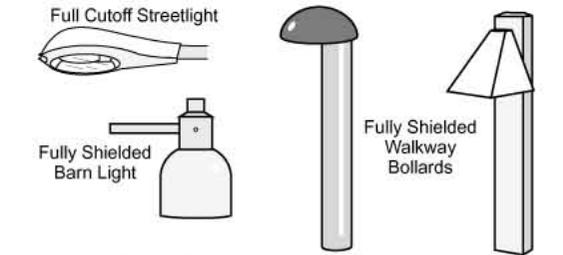
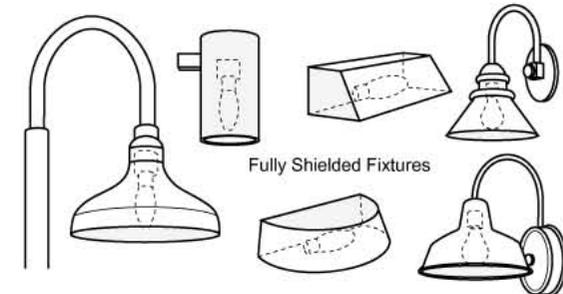
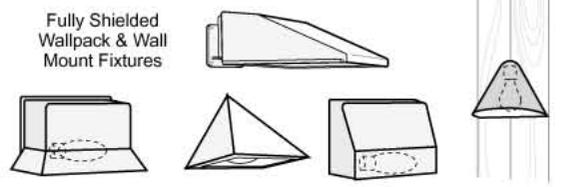
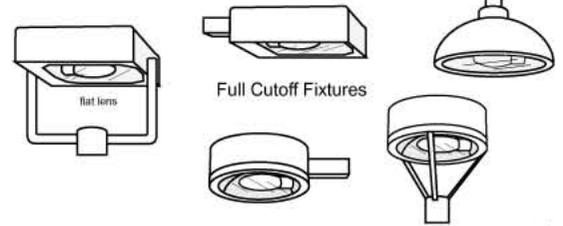
Unacceptable / Discouraged

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



Rendered for the Town of East Hampton, NY by Bob Crelin ©2/05

presented by the
Dark Sky Society
www.darksksociety.org