



# PROTECT THE NIGHT

**Light pollution negatively impacts**

human health  
wildlife behavior  
ability to see celestial objects



**Light Pollution interferes with stargazing**

**The Bortle Scale measures the night sky brightness (BT is a 4)**

# Light pollution harms wildlife

Light pollution can mimic, mask or confuse natural light signals, causing:

mistimed  
activity, growth  
or breeding

disturbed sleep  
and circadian  
rhythms

disorientation  
and poor  
navigation

attraction to  
artificial lights

encounters  
with new  
predators

reduced  
survival and  
reproduction



By turning off excess lighting, we can help to provide migrating birds safe passage between their nesting and wintering grounds.



INTERNATIONAL DARK-SKY ASSOCIATION

# Simple improvements

Use Yellow /  
Amber colored  
bulbs in outdoor  
fixtures

Only turn on  
outdoor lights  
when needed

# DARK SKY LIGHTING CAN HELP



Link to  
DarkSky.org

20% to 50% of outdoor residential lighting goes directly into the sky and contributes to light pollution due to poor shielding. Improve your home with 'dark sky' lighting fixtures available at stores like Home Depot, Amazon, Perigold, etc...

Be aware that some claim to be dark sky compliant when they are not. Dark Sky compliant fixtures are fully shielded and do not emit light above the horizontal plane.

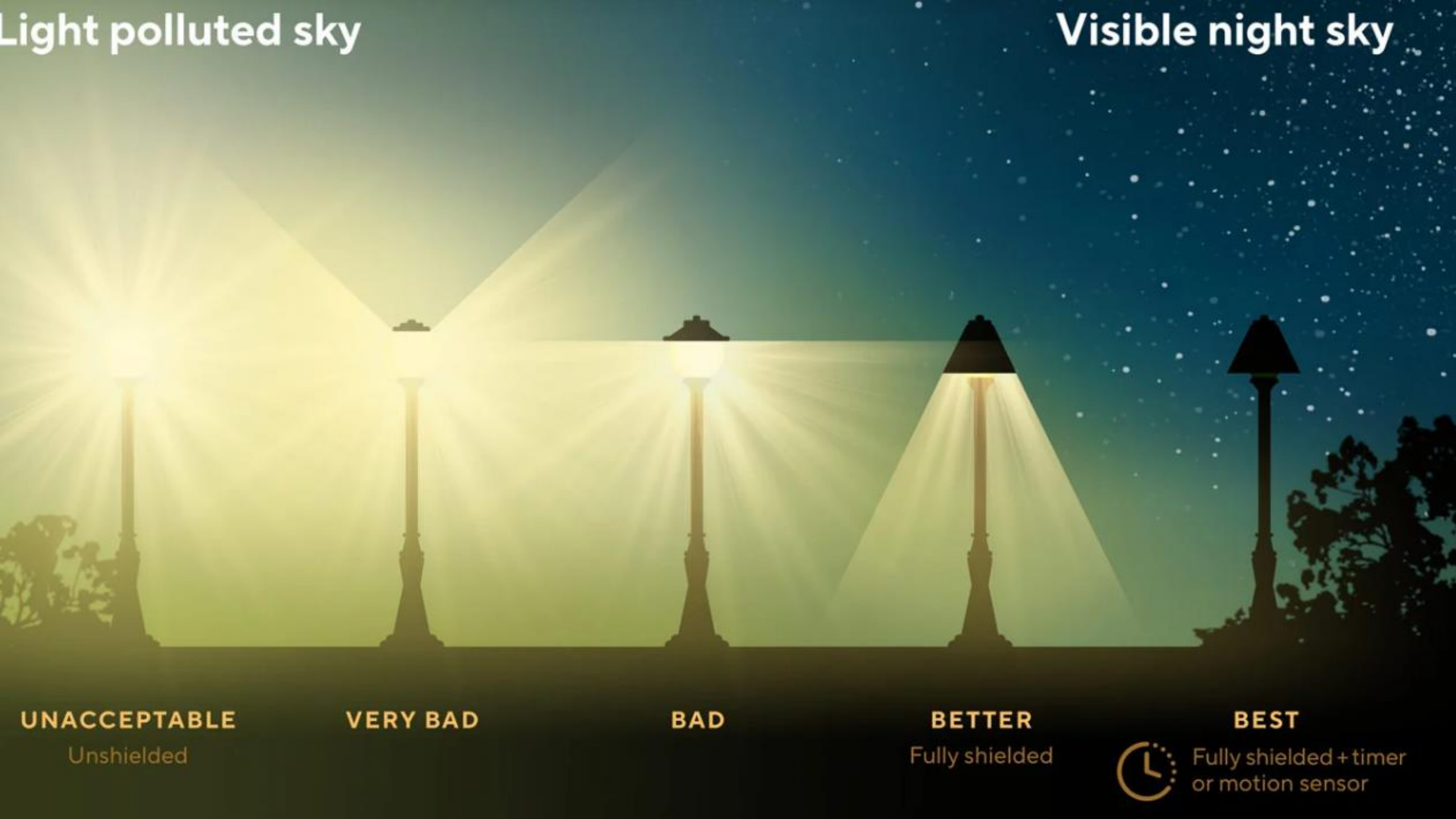


**DARK SKY LIGHT FIXTURE EXAMPLES**



Light polluted sky

Visible night sky



**UNACCEPTABLE**

Unshielded

**VERY BAD**

**BAD**

**BETTER**

Fully shielded

**BEST**



Fully shielded + timer  
or motion sensor

# Five Lighting Principles for Responsible Outdoor Lighting



DarkSky



Illuminating  
ENGINEERING SOCIETY

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.





## Light trespass (Spillover):



## Poor Lighting Reduces Safety and Security

Glare from bright, unshielded lights actually decreases safety. See how glare in the closest photo makes it hard to see the man at the gate? Glare creates deep shadows, making it more difficult to see. The bright light shines into your eyes, constricting your pupils. This diminishes your eyes' ability to adapt to low-light conditions. So, is that bright light really making this area safer?

