



## What is an outdoor lighting ordinance?

A written policy (usually at the local/municipal level) that specifies what type of light is acceptable within that community during nighttime hours. These may also be called a dark sky policy or ordinance.

## How can outdoor lighting ordinances help communities?

- Provide safe and secure outdoor environments for community
- Address light and energy equity
- Increase energy efficiency and reduce GHG emissions
- Mitigate light trespass and reduce light pollution
- Minimize environmental impact on wildlife and ecosystems

## What attributes do outdoor lighting ordinances have?

Outdoor lighting ordinances vary from one community to another, and range in their level of detail depending on needs in that area.

Below are five common attributes:

- **Shielding:** Internal or external opaque components used to block or deflect light
- **U Rating:** A rating system for outdoor lighting that describes how much uplight is produced.
  - Decorative lighting U2 Rating or lower = 100 lumens or less uplight
  - U1 = 20 lumens or less uplight
  - U0 = zero lumens or no uplight
- **3000K limit:** Maximum correlated color temperature (CCT) of 3000K
- **Integral controls capability:** Functionality to modify the luminaire’s light output and/or CCT with controls and/or sensors
- **Dimmability:** Ability to lower and raise the light output

- Shielding

- U Rating of U1 or less
- Shielding

- 3000K limit
- U Rating of U1 or less
- Shielding

- Integral Controls Capability
- Dimmability
- 3000K limit
- U Rating of U0
- Shielding

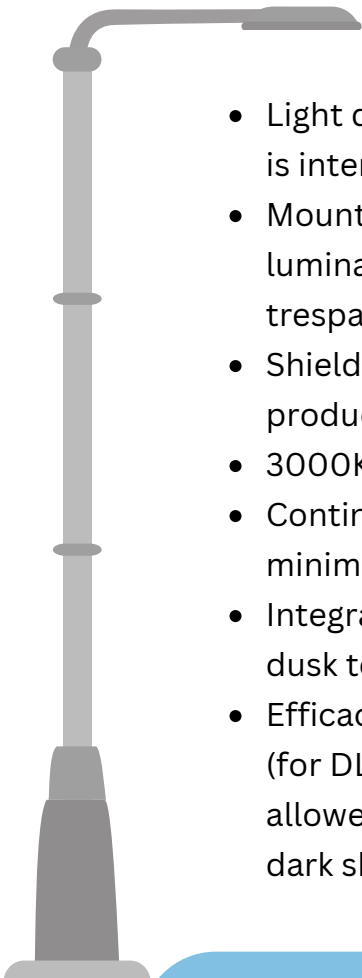
## How can communities select LED lighting that adheres to their outdoor lighting ordinance?



The DLC has two resources that can be used to select lighting that meets outdoor lighting ordinances:

- The DLC's LUNA Technical Requirements outline the characteristics of dark-sky friendly commercial LED lighting and can be referenced in ordinances.
- DLC's LUNA Qualified Products List (QPL) displays products that have applied for and met these requirements.

## How do LUNA qualified products minimize lighting energy use, minimize light pollution, and provide appropriate visibility for people?



- Light distribution requirements ensure that light is delivered where it is intended, minimizing wasted uplight.
- Mounting tilt angles are limited to less than +/- 10 degrees to ensure luminaires are parallel with the roadway surface to minimize light trespass and glare.
- Shielding is required as an available accessory or option for some products to minimize light trespass and glare.
- 3000K is the maximum allowable CCT to minimize light pollution.
- Continuous dimming to  $\leq 20\%$  of max output power is required to minimize light pollution and save energy.
- Integral Control capabilities must be disclosed (part night dimming, dusk to dawn timer, or dimming for unoccupied spaces).
- Efficacy must be at least 105 lm/W (for DLC standard) or 120 lm/W (for DLC premium) to ensure energy savings. Some products are allowed to have slightly lower efficacy to accommodate enhanced dark sky attributes, such as shielding or lower CCT.

Learn more at [www.designlights.org/our-work/luna/why-luna/](http://www.designlights.org/our-work/luna/why-luna/)