

Cove Creek Club, Inc.

Lighting Design Guide and Requirements

8.22.24

Principles

In 2020, the International Dark-Sky Association partnered with the Illuminating Engineering Society to promote [five principles for responsible outdoor lighting](#) that meet human needs for artificial light at night in outdoor spaces while protecting the integrity of natural nighttime conditions to the greatest practical extent:

1. Use light only if it is needed
2. Direct light so it falls only where it is needed
3. Use light only when it is needed
4. Light only to the brightness needed
5. Minimize blue light to the amount needed

These principles appear from the model policies of the Model Lighting Ordinance (MLO). It is the result of extensive efforts by the International Dark-Sky Association (IDA) and the Illuminating Engineering Society (IES). They have also been tested in a number of municipal lighting policies actually written into law. Their provisions have generally withstood judicial review. The suggested language in this document flows from this set of principles.

Definitions

“Fully shielded” means lighting whose design prevents the direct emission of light at angles above the local horizontal. Fully shielded lighting generally consists of lighting products whose light sources (i.e., lamps) are concealed within an opaque housing and whose light emerges such that it is only directed toward the ground.

“Correlated color temperature” (CCT) means a numerical rating characterizing the color qualities of a light source. It is measured in units of kelvins (K). Under U.S. Energy Department rules, CCT must appear on the packaging of all new lighting products sold in the U.S.

“Light trespass” means a condition in which light emitted on one property is directly visible from any other property. Light trespass is defined to exist regardless of whether the receiving property owner finds the light objectionable.

Recommendations

Use light only if it is needed

- The purpose of outdoor lighting should be evident from its design, including placement, aiming angle, brightness and other characteristics.
- Note that this does not preclude the use of architectural, landscape and similar ‘aesthetic’ lighting, including lighting of water features and swimming pools, provided that their design minimizes any impacts on other property owners.

Direct light so it falls only where it is needed

- All outdoor lighting should be designed, installed and aimed such that it only illuminates its intended target and prevents emission of light into the night sky.
- Allowable outdoor lighting should strictly avoid creating conditions of light trespass.
- Private Lot owners must ensure that architectural, landscape and similar lighting is, to the greatest practical extent, confined to the surfaces and objects it intends to highlight.

Use light only when it is needed

- Continuous all night “security” lighting is not permitted
- Outdoor lighting can enhance nighttime security through the use of active controls such as timers and motion-sensing switches.
- Private Lot owners are obligated to properly maintain control equipment in good working order.
- Motion sensors should be adjusted according to manufacturers’ specifications in terms of both trigger sensitivity and trigger duration
 - Sensitivity should be set such that triggering occurs only upon sensing large objects such as animals and people
 - Trigger duration should not exceed five (5) minutes, at which point the lamp is extinguished
- Controls must fail into the “OFF” condition and not the “ON” condition.

Light only to the brightness needed

- Light should be neither too bright nor too dim for the task.
- Selecting the proper amount of light, along with properly directing the light and limiting the duration of its use, is important to minimize glare.

Minimize the emission of blue light

- Lighting should use lamps with the “warmest” color appearance possible.
- For general applications, the correlated color temperature of lamps should not exceed 3,000 kelvins.
- If it is not possible to determine the CCT of a lamp by visual inspection, consult manufacturer data sheets or product packaging for the specification of a particular lighting product.

Special lighting applications

Community area and club facilities will also adhere to these guidelines and requirements.