

Responsible Outdoor Lighting Policy

Policy Statement

The mission of the Forest Preserve District states that the District “acquire, hold and maintain lands within Kane County that contribute to the conservation of natural and historic resources” and to “preserve such lands for the environmental education, recreation, pleasure and well-being of all its citizens.” The natural and historic resources within Kane County are threatened by a number of different pressures, including the visibility of the night sky.

The effects of light pollution brightening the night sky has measurable negative impacts upon wildlife, human health, energy and climate change, as well as our night sky heritage. Of particular importance to the District, as a conservation agency, are the impacts that nighttime light pollution can have on the ecosystems present within the preserves. Artificial lights can disrupt breeding rituals of amphibians, confuse migratory birds that depend on moonlight and starlight to navigate, and create fatal attraction sources for insects drawn to light sources. In order to fulfill the District’s mission and better preserve the night sky across the District’s lands, the following policy has been enacted.

Purpose

This policy addresses the use of outdoor lighting within District property. Lighting standards will adhere to the principles and standards set forth by DarkSky International in all future outdoor lighting improvements and replacement projects from July 1, 2024 on.

Lighting Standards (Non-Outdoor Sports Lighting)

Approved luminaires must employ warm-toned 3000K CCT and lower light sources.

The uplight allowance is 0.5% of total output or 50 lumens; whichever is lower, with no more than 10 lumens in 90-100 degree UL zone.

Roadway and area luminaires must have a pre-or post-installation shielding option.

Luminaires are required to have fixed mounding to ensure they are installed as tested. A +/- 10-degree adjustment for leveling is permitted.

Luminaires must have dimming capability to 10% of full rating.

Luminaires must have Safety Certification by an independent laboratory.

Lighting Standards for Outdoor Sports

The maximum allowable correlated color temperature (CCT) of light sources illuminating the field of play is 5700K.

Only active sports fields are lighted after dusk and controls must be in place to turn off lights no later than 11:00 pm or two hours post close of business, whichever is later.

At least 85% of the total lumens generated by the downward-aimed sports lighting luminaires illuminating the field of play must fall inside the targeted area.

Prohibited Lighting for New Construction

Exhibit A

Strobe lights and laser lights, including laser light shows.

Flashing lights unless temporarily triggered by a security system and extinguished within 30 minutes or at a time of security response.

Lighting which is used to outline a building.

The use of uplighting, except when lighting the American flag or other government flag or government endorsed flag.

Definitions

CCT – Correlated Color Temperature – Measure in degrees Kelvin (K), the absolute temperature of a blackbody whose chromaticity most nearly resembles that of the light source. CCT is used as a simplified way to characterize the spectral properties of a light source and estimate the overall appearance of the light to the human eye. Higher values equate to a bluer color, with lower numbers appearing more yellow.

Lumen – A unit of luminous flux, a measure of the perceived power of visible light emitted by a source.

Luminaire – The complete lighting assembly consisting of one or more lamps, together with the attachment parts designed to distribute light, position and connect the lamp to the power supply.

UL Zone – The lower level of the uplight zone, at a measure of 90-100 degrees from the ground connection of the luminaire.