

SB2763



103RD GENERAL ASSEMBLY

State of Illinois

2023 and 2024

SB2763

Introduced 1/16/2024, by Sen. Laura Ellman

SYNOPSIS AS INTRODUCED:

New Act

Creates the Responsible Outdoor Lighting Control Act. Restricts State money from being used to install or replace permanent outdoor lighting units unless certain conditions are met. Provides that specified lighting units that were installed prior to the effective date of the Act and that produce light pollution need not be replaced until the end of the life of the lamp. Provides that these requirements apply to all lighting on or in all newly constructed, renovated, and retrofitted State-owned, State-supported, State-funded, or State-related rights-of-way, roadways and sidewalks, spaces, facilities, properties, nonhabitable structures, monuments, and flagpoles. Sets forth exemptions. Effective January 1, 2025.

LRB103 36055 LNS 66142 b

A BILL FOR

1 AN ACT concerning lighting.

2 **Be it enacted by the People of the State of Illinois,**
3 **represented in the General Assembly:**

4 Section 1. Short title. This Act may be cited as the
5 Responsible Outdoor Lighting Control Act.

6 Section 5. Findings. The General Assembly finds that:

7 (1) Article XI of the Illinois Constitution states
8 that the public policy of the State and the duty of each
9 person is to provide and maintain a healthful environment
10 for the benefit of this and future generations and that
11 the General Assembly shall provide by law for the
12 implementation and enforcement of this public policy.

13 (2) The House of Representatives of the State of
14 Illinois has resolved to:

15 (A) express its support for improved night
16 preservation practices in the State;

17 (B) encourage State agencies to adopt suitable
18 outdoor lighting practices based on the principles of
19 applying artificial light only where it is needed,
20 when it is needed, and to the levels it is needed,
21 using the best safety and energy-efficient standards
22 available; and

23 (C) encourage the Illinois Sustainable Technology

1 Center to provide artificial outdoor illumination
2 engineering assistance to State agencies,
3 municipalities, and businesses that seek to implement
4 responsible outdoor lighting in order to conserve and
5 preserve the important natural phenomenon of night.

6 (3) The Illinois Senate has resolved that local
7 governments in the State should abide by guidelines and
8 lighting principles of the International Dark-Sky
9 Association (now known as Dark Sky International) to help
10 mitigate the effects of light pollution produced by
11 outdoor lighting.

12 Section 10. Intent. It is the intent of the General
13 Assembly that governmental structures, governmental
14 facilities, governmental places, and governmental spaces serve
15 as models of best practices for private structures, private
16 facilities, private places, and private spaces, in order to
17 encourage residents, business owners, and others to implement
18 responsible lighting principles.

19 Section 15. Definitions. As used in this Act:

20 "BUG rating" means a luminaire classification system that
21 was developed by the Illuminating Engineering Society (IES)
22 and that ranks and defines how many lumens of light a lighting
23 unit emits backward, upward, and in glare.

24 "Correlated color temperature" or "CCT" means the color of

1 light perceived by the eye as measured in kelvin (k) units,
2 with warmer colors appearing toward the red end of the
3 spectrum and having lower kelvin temperatures and cooler
4 colors appearing toward the blue end of the spectrum and
5 having higher kelvin temperatures.

6 "Foot-candle" or "fc" means a measurement that is
7 expressed in lumens per square foot.

8 "Fully shielded" means, when used to describe a lighting
9 unit, that the lighting unit is constructed in such a manner
10 that all light emitted, either directly from the lamp or
11 indirectly by reflection or refraction from any part of the
12 lighting unit, is projected below the horizontal plane, with
13 the downward-pointing beam of light casting within an angle of
14 60 degrees from the vertical, and with no part of the lamp
15 protruding outside of the lighting unit or shield.

16 "Glare" means light emitted by a lighting unit that causes
17 visual discomfort, reduced visibility of objects, or momentary
18 blindness and reduced safety and security.

19 "Lamp" means the component of a lighting unit that
20 produces light.

21 "Light pollution" means the scattering of artificial light
22 into the nighttime sky, caused by excessive or improperly
23 positioned artificial outdoor lighting, resulting in sky glow,
24 light trespass, and glare.

25 "Light trespass" means an occurrence in which light that
26 is emitted by a lighting unit shines beyond the boundaries of

1 the property that the lighting unit is intended to illuminate.

2 "Lighting unit" means a complete artificial illuminating
3 device, installed or portable, including a lamp, together with
4 the parts designed to distribute the light, such as a
5 reflector or refractor, parts to position and protect the
6 lamps, and parts to connect the lamps to the power supply.

7 "Lumen" means a specific standard unit of measurement of
8 luminous flux.

9 "Lux" means a unit of luminous flux on a surface
10 orientated toward a light source that is expressed in lumens
11 per square meter.

12 "Ornamental lighting" means a lighting unit that serves a
13 historical or seasonal holiday purpose only.

14 "Outdoor lighting units" means an outdoor artificial
15 illuminating device, installed or portable, used for
16 floodlighting, roadway and area lighting, general
17 illumination, or advertisement.

18 "Partially shielded lighting unit" means a lighting unit
19 that projects or directs its light parallel to or above the
20 horizontal plane that may be emitted either directly from the
21 lamp or indirectly by reflection or refraction from any part
22 of the lighting unit, producing significant light pollution.

23 "Permanent outdoor lighting unit" means any lighting unit
24 or system of lighting units that is outdoors and that is used
25 for 7 days or more.

26 "Reflective roadway markings" means the lines and markers

1 with reflective properties intended to promote vehicular and
2 pedestrian safety.

3 "Reflective signage" means the roadway and informational
4 signage that has reflective properties to aid with vehicular
5 and pedestrian safety.

6 "Responsible lighting principle" means the principle of
7 using the best available advanced lighting technologies,
8 including shielding, an upper limit on correlated color
9 temperature of 2,700 K, on-off controls, dimming controls, and
10 motion sensors.

11 "Roadway lighting" means permanent outdoor lighting units
12 that are specifically intended to illuminate roadways for
13 vehicular traffic.

14 "Sky glow" means the brightening of the night sky over
15 inefficiently and improperly lit areas.

16 "Wall pack lights" means the lighting units that are fixed
17 to a building's exterior, usually on a wall that faces outward
18 from a building.

19 Section 20. Outdoor lighting control.

20 (a) State money may not be used to install or replace
21 permanent outdoor lighting units unless all of the following
22 conditions are met:

23 (1) The permanent outdoor lighting unit must be fully
24 shielded and:

25 (A) have an IES rating of B0 and G0 on the BUG

1 rating system and emit no light above an angle of 60
2 degrees from the downward vertical direction; and

3 (B) have an IES rating of U0 on the BUG rating
4 system and emit zero lumens upward.

5 (2) Outdoor lighting units must be placed to avoid
6 light trespass and must not exceed illuminance of 0.05 fc
7 or 0.5 lux at the property boundary.

8 (3) Any wall pack lights must be fully shielded to an
9 angle of no more than 60 degrees from the downward
10 vertical direction to eliminate glare and light trespass.

11 (4) The lighting units must have a correlated color
12 temperature of less than or equal to 2,700 K. In
13 residential areas, the CCT of the lighting unit should not
14 exceed 2,200 K. In dark sky locations or environmentally
15 sensitive areas, such as Department of Natural Resource
16 State parks and outdoor recreation facilities, the CCT
17 should not exceed more than 2,200 K. No lighting units
18 shall have a correlated color temperature that exceeds
19 2,700 K.

20 (5) The use of outdoor lighting must be minimized to
21 only that which is needed for comfort and safety while
22 still maintaining compliance with responsible lighting
23 principles. Low-intensity facade lighting is permitted as
24 long as the light projects downward and no lighting spills
25 beyond the facade being lit. Between 11 p.m. and 6 a.m.,
26 lighting units must be turned off or dimmed.

1 (6) The lighting units in locations that are not in
2 use after 11 p.m., including in environmentally sensitive
3 areas, such as State parks, must use timers that are set to
4 turn off after 11 p.m. or must use motion sensors.

5 (7) Light trespass from the interior of a building or
6 structure must be minimized by lowering window shades
7 after sunset or by turning off lighting when not in use.

8 (8) At the time of installation or replacement, the
9 appropriate authority must determine whether reflective
10 roadway markings or reflective signage is appropriate and
11 safe for the situation in lieu of outdoor lighting.
12 Reflective roadway markings, lines, warning signs,
13 informational signs, or other passive means must be used
14 for roadway lighting, except at intersections of 2 or more
15 streets or highways, unless it is determined that adequate
16 lighting cannot be achieved by reflective means.

17 (b) A lighting unit with a lamp that has a correlated color
18 temperature that is greater than 2,700 K, that is installed
19 prior to the effective date of this Act, and that produces
20 light pollution does not need not be replaced until the end of
21 the life of the lamp but must comply with subsection (c).

22 At the end of the life of an existing lamp, partially
23 shielded lighting units must be fitted with a new lamp that
24 complies with paragraph (4) of subsection (a) and must be
25 remediated, either by repositioning or by full shielding, so
26 that the lighting unit complies with paragraphs (1) through

1 (3) of subsection (a).

2 If a State-funded entity possesses unshielded or partially
3 shielded lighting units on the effective date of this Act, the
4 unshielded or partially shielded lighting units shall be:

5 (1) immediately remediated upon the end of the life of
6 the lamp with a new lamp that complies with paragraph (4)
7 of subsection (a); and

8 (2) remediated either by repositioning the lighting
9 unit or by fully shielding the lamp so that it complies
10 with paragraphs (1) through (3) of subsection (a).

11 If the State-funded entity chooses to replace current,
12 unshielded or partially shielded lighting units before the end
13 of the life of the lamp, the entity may not purchase new,
14 unshielded or partially shielded lighting units as
15 replacements. If the entity does purchase new, unshielded or
16 partially shielded lighting units as replacements, the entity
17 may not receive State assistance for the cost of the new
18 lighting units.

19 (c) Wherever possible, existing partially shielded and
20 unshielded lighting units shall be repositioned to minimize
21 upward-directed light, glare, and light trespass.

22 (d) The requirements of subsection (a) shall apply to all
23 lighting units on or in all newly constructed, renovated, and
24 retrofitted State-owned, State-supported, State-funded, or
25 State-related rights-of-way, roadways and sidewalks, spaces,
26 facilities, properties, nonhabitable structures, monuments,

1 and flagpoles.

2 (e) The requirements of subsection (a) do not apply:

3 (1) If federal laws, rules, or regulations preempt
4 State laws, rules, or regulations.

5 (2) If fire, police, rescue, or repair personnel need
6 light for temporary emergencies or road repair work.

7 (3) If it has been determined that a reasonable safety
8 and security interest exists at correctional and hospital
9 facilities that cannot be addressed by another method
10 without increasing the cost or reducing the effectiveness
11 of the lighting as long as it complies with existing
12 standard specifications or policies.

13 (4) To navigational and other lighting systems
14 necessary for aviation and nautical safety.

15 (5) To municipalities that already comply with this
16 Section.

17 (6) To lighting units on active sports or show grounds
18 may use lamps greater than 2,700 K, but only for the
19 duration of a specific practice, match, or event. Lighting
20 units shall be positioned, angled, or shielded to prevent
21 direct glare and light trespass onto neighboring property
22 or properties. The shielding shall limit upward light
23 emission to only the amount necessary to light the
24 sporting or grounds activity.

25 (7) To new flagpoles that are lit by means of a
26 downward-facing lamp and shall use a lamp of 2,200 K or

1 lower. Existing flagpoles that are upward-lighted by
2 partially shielded or unshielded lighting units shall use
3 a lamp of 2,200 K or lower to minimize the impact of glare,
4 light trespass, and sky glow. When appropriate, existing
5 flagpoles shall be converted to new flagpole requirements.

6 (8) To existing ornamental lighting that serves
7 historical purposes and seasonal holiday lighting that is
8 temporary to the season. New ornamental lighting shall
9 strive to comply with the restrictions of this Section
10 regarding shielding and must comply with the requirements
11 of this Section regarding lamps. To the extent that it is
12 available and feasible, ornamental lighting that serves a
13 seasonal holiday purpose should be use lamps of 2,700 K or
14 lower.

15 Section 25. Resources. The Department of Central
16 Management Services shall make available a resource guide for
17 the public to add compliant lighting to homes and businesses.
18 The guide shall include references to publicly accessible
19 Internet websites of advocacy groups approved by the State
20 that provide education, guidance, and specifications relating
21 to the implementation of responsible lighting principles.

22 Section 30. Other laws. This Act shall not supersede any
23 other federal or State law controlling lighting; outdoor
24 lighting units or signage; or outdoor advertising, displays,

1 or devices.

2 Section 99. Effective date. This Act takes effect January
3 1, 2025.