



## 103RD GENERAL ASSEMBLY

### State of Illinois

2023 and 2024

SB3501

Introduced 2/9/2024, by Sen. Laura Ellman

#### SYNOPSIS AS INTRODUCED:

New Act

Creates the Responsible Outdoor Lighting Control Act. Includes legislative findings. Defines terms. Provides that all new, renovated, or retrofitted luminaires purchased with State funds after the effective date of the Act or installed after the effective date of the Act on a structure or land that is owned, supported, funded, leased, or managed by the State must follow specified outdoor lighting control requirements. Includes various exceptions to compliance. Allows the Attorney General, a municipality, or a county to enforce the Act by filing an action for injunctive relief in a circuit court. Provides that the Department of Central Management Services shall make available a resource guide for the public to add lighting to homes and businesses consistent with the requirements for luminaires on a structure or land that is owned, supported, funded, leased, or managed by the State under the Act, and provides that the guide must include references to publicly accessible websites of advocacy groups approved by the State that provide education, guidance, and specifications relating to the implementation of responsible lighting principles. Provides that, if the Act conflicts with any other federal law, State law, or local ordinance controlling lighting, outdoor luminaries, signage, outdoor advertising, displays, or devices that is more stringent than the Act, then the federal law, State law, or local ordinance controls to the extent it is more stringent than the Act. Effective 60 days after becoming law.

LRB103 36511 AWJ 66617 b

1 AN ACT concerning safety.

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 the  
8 public policy of the State and the duty of each person is  
9 to provide and maintain a healthful environment for the  
10 benefit of this and future generations and that the  
11 General Assembly shall provide by law for the  
12 implementation and enforcement of this policy.

13 (2) The House of Representatives has resolved in House  
14 Resolution 884 of the 96th General Assembly to (i) express  
15 its support for improved night preservation practices in  
16 Illinois, (ii) encourage State agencies to adopt suitable  
17 outdoor lighting practices based on the principles of  
18 applying artificial light only where it is needed, when it  
19 is needed, and to only the levels needed using the best  
20 safety and energy-efficient standards available, and (iii)  
21 encourage the Illinois Sustainable Technology Center of  
22 the University of Illinois to provide artificial outdoor  
23 illumination engineering assistance to State agencies,

1 municipalities, and businesses that seek to implement  
2 responsible outdoor lighting to conserve and preserve the  
3 important natural phenomenon of night.

4 (3) The Senate has resolved in Senate Resolution 65 of  
5 the 103rd General Assembly that local governments in  
6 Illinois should abide by the International Dark-Sky  
7 Association (now known as Dark Sky International)  
8 guidelines and lighting principles to help mitigate the  
9 effects of light pollution produced by outdoor lighting.

10 (4) The State should promote responsible outdoor  
11 lighting.

12 (5) Government structures, facilities, places, and  
13 spaces should serve as models of best practices for  
14 private structures, facilities, places, and spaces. These  
15 government structures, facilities, places, and spaces  
16 should encourage residents, business owners, and others to  
17 join in transitioning to responsible lighting.

18 Section 10. Definitions. As used in this Act:

19 "ANSI/IES standards" means the American National Standards  
20 Institute and Illuminating Engineering Society's lighting  
21 guidelines, also known as the IES Lighting Library Standards  
22 Collection.

23 "Correlated color temperature" means the measure of the  
24 approximate spectrum of the color of light of an object as  
25 perceived by the eye, measured in degrees Kelvin.

1 "Fully shielded" means a luminaire that is constructed in  
2 such a manner that all light emitted, either directly from the  
3 lamp or indirectly by reflection or refraction from any part  
4 of the luminaire, is projected below the horizontal plane  
5 aligned with the bottom of the luminaire aperture, where no  
6 part of the lamp protrudes outside of the luminaire or shield.

7 "Glare" means light emitted by a luminaire that causes  
8 visual discomfort, reduced visibility of objects, or produces  
9 momentary blindness.

10 "IES U0 rating" means the luminaire classification system  
11 developed by the Illuminating Engineering Society that ranks  
12 and defines how many lumens of light a luminaire emits  
13 backwards, upwards, and in glare.

14 "Lamp" means the component of a luminaire that produces  
15 light.

16 "Light pollution" means the scattering of artificial light  
17 into the nighttime environment caused by excessive or  
18 improperly positioned artificial outdoor lighting resulting in  
19 sky glow, light trespass, or glare.

20 "Light trespass" means light emitted by a luminaire that  
21 shines beyond the boundaries of the property on which the  
22 luminaire is intended to illuminate.

23 "Luminaire" means a complete installed or portable  
24 illuminating device, including a lamp, together with the parts  
25 designed to distribute the light, such as a reflector or  
26 refractor, parts to position and protect the lamps, and parts

1 to connect the lamps to the power supply.

2 "Lumen" means a standard unit of measurement of luminous  
3 flux.

4 "Lux" means a standard unit of luminous flux expressed in  
5 lumens per square meter.

6 "Nadir" means the point directly below the center of a  
7 luminaire in respect to the ground.

8 "Ornamental lighting" means a luminaire that has a  
9 historical or seasonal holiday purpose that serves a  
10 historical or seasonal holiday purpose only.

11 "Outdoor luminaire" means installed or portable outdoor  
12 artificial illuminating devices used for flood lighting,  
13 roadway and area lighting, general illumination, or  
14 advertisement.

15 "Permanent outdoor luminaire" means exterior lighting or a  
16 system of lighting that is used in place for 7 days or longer.

17 "Reflective roadway markings" means lines and markers with  
18 reflective properties intended to promote vehicular and  
19 pedestrian safety.

20 "Reflective signage" means roadway and informational  
21 signage that has reflective properties to aid with vehicular  
22 and pedestrian safety.

23 "Responsible lighting principles" means the use of modern  
24 lighting technologies, including shielding, an upper limit on  
25 color temperature (2,700 Kelvin), on-off controls, dimming  
26 controls, and motion sensors.

1 "Roadway lighting" means permanent outdoor luminaires that  
2 are specifically intended to illuminate roadways for safe  
3 vehicular and pedestrian traffic.

4 "Sky glow" means the brightening of the night sky due to  
5 inefficiently and improperly lit areas.

6 Section 15. Outdoor lighting control. All new, renovated,  
7 or retrofitted luminaires purchased with State funds after the  
8 effective date of this Act or installed after the effective  
9 date of this Act on a structure or land that is owned,  
10 supported, funded, leased, or managed by the State, including  
11 roadways, facilities, properties, nonhabitable structures,  
12 monuments, and public right-of-way spaces, including  
13 sidewalks, with the intended purpose of outdoor illumination  
14 must follow the following outdoor lighting control  
15 requirements:

16 (1) Permanent outdoor luminaires must be fully  
17 shielded with an IES U0 rating and produce less than 1% of  
18 its emitted light above 80 degrees from the downward  
19 vertical direction of nadir. Light should not be emitted  
20 at an angle above 60 degrees from the downward vertical  
21 direction of nadir.

22 (2) Luminaires must avoid light trespass by not  
23 exceeding an illuminance of 0.05 lux as measured at ground  
24 level both horizontally and vertically at the property  
25 boundary.

1           (3) Luminaires must have a correlated color  
2 temperature less than or equal to 2,700 Kelvin. In  
3 residential areas, dark sky locations, or environmentally  
4 sensitive areas, such as State parks and outdoor  
5 recreation facilities, correlated color temperature should  
6 be no more than 2,200 Kelvin.

7           (4) Luminaires must be turned off or dimmed by at  
8 least 50% of ANSI/IES standards (i) after 11:00 p.m. or  
9 one hour after closure of business or event, whichever is  
10 earlier, (ii) when motion is no longer detected, or (iii)  
11 if no lighting is needed when a human task can be achieved  
12 at night without the addition of lighting.

13           (5) Outdoor lighting must be minimized to no more than  
14 10% above ANSI/IES standards or United States Department  
15 of Transportation recommendations.

16           (6) Facade lighting must be minimized to no more than  
17 10% above ANSI/IES standards, must project downward, and  
18 must not violate the light trespass limits in paragraph  
19 (2).

20           (7) Light trespass from the interior of a building or  
21 structure shall be minimized by lowering window shades  
22 after dark or by turning off lighting when not in use.

23           (8) When the installation or replacement of roadway  
24 lighting is planned, the appropriate authority must  
25 determine whether reflective roadway markings or  
26 reflective signage is appropriate and safe for the

1 situation in lieu of outdoor lighting. Reflectorized  
2 roadway markings, lines, warning signs, informational  
3 signs or other passive means must be used for roadway  
4 lighting, except at intersections of 2 or more streets or  
5 highways, unless it is determined that adequate safety  
6 cannot be achieved by reflective means.

7 (9) No artificial lighting above 0.05 lux, as measured  
8 at ground level both horizontally and vertically, may  
9 trespass onto land or waterways designated or managed as  
10 habitat, reserve, natural area, open space, or wilderness.

11 (10) Even if they do not meet the other requirements  
12 of this subsection, outdoor luminaires emitting fewer than  
13 600 lumens are allowed if extinguished between the hours  
14 of 11:00 p.m. and sunrise.

15 (b) Whenever possible, existing luminaires on a structure  
16 or land that is owned, supported, funded, leased, or managed  
17 by the State shall be repositioned or shielded to minimize  
18 upward-directed light, glare, and light trespass.

19 Section 20. Exceptions. This Act does not apply if:

20 (1) the luminaires are on a structure or land that is  
21 owned, supported, funded, leased, or managed by the State  
22 in a county or municipality that, by ordinance or  
23 resolution, has adopted provisions that are equal to or  
24 more stringent than the provisions of this Act;

25 (2) a federal law or regulation preempts this Act;



1           (3) a State agency determines a safety or security  
2 need exists that cannot be addressed by any other method;

3           (4) fire, police, rescue, or repair personnel need  
4 light for temporary emergencies or road repair work;

5           (5) it has been determined that a reasonable safety  
6 and security interest exists at correctional or hospital  
7 facilities that cannot be addressed by another method as  
8 long as it complies with existing standards,  
9 specifications, or policies;

10          (6) navigational lighting systems and other lighting  
11 are necessary to comply with Federal Aviation  
12 Administration airside operations or nautical safety;

13          (7) lamps greater than 2,700 Kelvin are used on active  
14 sports grounds or show grounds, but only for the duration  
15 of a practice, match, or event. Lamps emitting greater  
16 than 2,700 Kelvin under this paragraph must be positioned,  
17 angled, or shielded to prevent direct glare and light  
18 trespass onto neighboring property or properties, and the  
19 positioning, angling, or shielding must limit upward light  
20 emission to only the amount necessary to light the  
21 sporting or grounds activity;

22          (8) flagpoles installed after the effective date of  
23 this Act are lit by means of a downward-facing lamp and  
24 using a lamp of 2,700 Kelvin or lower;

25          (9) flagpoles installed on or before the effective  
26 date of this Act are upward-lit by partially shielded or

1 unshielded luminaires using a lamp of 2,200 Kelvin or  
2 lower to minimize the impact of glare, light trespass, and  
3 sky glow and are converted to conform to requirements upon  
4 retrofitting;

5 (10) the luminaries are existing decorative and  
6 ornamental lighting that serve historical purposes, but  
7 replacement luminaries for the existing decorative and  
8 ornamental lighting must meet the standards of this Act;  
9 or

10 (11) the luminaries are temporary seasonal holiday  
11 lighting lasting no longer than 45 days surrounding the  
12 holiday season.

13 Section 25. Enforcement. This Act may be enforced by the  
14 Attorney General, a municipality, or a county filing an action  
15 for injunctive relief in a circuit court.

16 Section 30. Resources. The Department of Central  
17 Management Services shall make available a resource guide for  
18 the public to add lighting to homes and businesses consistent  
19 with the requirements for luminaires on a structure or land  
20 that is owned, supported, funded, leased, or managed by the  
21 State under this Act. The guide must include references to  
22 publicly accessible websites of advocacy groups approved by  
23 the State that provide education, guidance, and specifications  
24 relating to the implementation of responsible lighting

1 principles.

2       Section 35. Other laws. If this Act conflicts with any  
3 other federal law, State law, or local ordinance controlling  
4 lighting, outdoor luminaries, signage, outdoor advertising,  
5 displays, or devices that is more stringent than the Act, then  
6 the federal law, State law, or local ordinance controls to the  
7 extent it is more stringent than the Act.

8       Section 99. Effective date. This Act takes effect 60 days  
9 after becoming law.