



Sen. Laura Ellman

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1 AMENDMENT TO SENATE BILL 3501

2 AMENDMENT NO. _____. Amend Senate Bill 3501 by replacing
3 everything after the enacting clause with the following:

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

1 outdoor lighting practices based on the principles of
2 applying artificial light only where it is needed, when it
3 is needed, and to only the levels needed using the best
4 safety and energy-efficient standards available, and (iii)
5 encourage the Illinois Sustainable Technology Center of
6 the University of Illinois to provide artificial outdoor
7 illumination engineering assistance to State agencies,
8 municipalities, and businesses that seek to implement
9 responsible outdoor lighting to conserve and preserve the
10 important natural phenomenon of night.

11 (3) The Senate has resolved in Senate Resolution 65 of
12 the 103rd General Assembly that local governments in
13 Illinois should abide by the International Dark-Sky
14 Association (now known as Dark Sky International)
15 guidelines and lighting principles to help mitigate the
16 effects of light pollution produced by outdoor lighting.

17 (4) The State should promote responsible outdoor
18 lighting.

19 (5) Government structures, facilities, places, and
20 spaces should serve as models of best practices for
21 private structures, facilities, places, and spaces. These
22 government structures, facilities, places, and spaces
23 should encourage residents, business owners, and others to
24 join in transitioning to responsible lighting.

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

1 "ANSI/IES standards" means the American National Standards
2 Institute and Illuminating Engineering Society's lighting
3 guidelines, also known as the IES Lighting Library Standards
4 Collection.

5 "Correlated color temperature" means the measure of the
6 approximate spectrum of the color of light of an object as
7 perceived by the eye, measured in degrees Kelvin.

8 "Fully shielded" means a luminaire that is constructed in
9 such a manner that all light emitted, either directly from the
10 lamp or indirectly by reflection or refraction from any part
11 of the luminaire, is projected below the horizontal plane
12 aligned with the bottom of the luminaire aperture, where no
13 part of the lamp protrudes outside of the luminaire or shield.

14 "Glare" means light emitted by a luminaire that causes
15 visual discomfort, reduced visibility of objects, or produces
16 momentary blindness.

17 "IES U0 rating" means the luminaire classification system
18 developed by the Illuminating Engineering Society that ranks
19 and defines how many lumens of light a luminaire emits
20 backwards, upwards, and in glare.

21 "Lamp" means the component of a luminaire that produces
22 light.

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

1 "Light trespass" means light emitted by a luminaire that
2 shines beyond the boundaries of the property the luminaire is
3 intended to illuminate.

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

9 "Lumen" means a standard unit of measurement of luminous
10 flux.

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

13 "Nadir" means the point on the ground that is directly
14 below the center of a luminaire.

15 "Ornamental lighting" means a luminaire that has a
16 historical or seasonal holiday purpose and that serves a
17 historical or seasonal holiday purpose only.

18 "Outdoor luminaire" means installed or portable outdoor
19 artificial illuminating devices used for flood lighting,
20 roadway and area lighting, general illumination, or
21 advertisement.

22 "Permanent outdoor luminaire" means exterior lighting or a
23 system of lighting that is used in place for 7 or more days.

24 "Reflective roadway markings" means lines and markers with
25 reflective properties intended to promote vehicular and
26 pedestrian safety.

1 "Reflective signage" means roadway and informational
2 signage that has reflective properties to aid with vehicular
3 and pedestrian safety.

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

8 "Roadway lighting" means permanent outdoor luminaires that
9 are specifically intended to illuminate roadways for safe
10 vehicular and pedestrian traffic.

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

13 Section 15. Outdoor lighting control. All new luminaires
14 purchased with State funds after the effective date of this
15 Act or installed after the effective date of this Act on a
16 structure or land that is owned, leased, or managed by the
17 Department of Natural Resources, including roadways,
18 facilities, properties, nonhabitable structures, monuments,
19 and public right-of-way spaces, including sidewalks, with the
20 intended purpose of outdoor illumination must follow the
21 following outdoor lighting control requirements:

22 (1) Permanent outdoor luminaires must be fully
23 shielded with an IES U0 rating and produce less than 1% of
24 its emitted light above 80 degrees from the downward
25 vertical direction of nadir. Light should not be emitted

1 at an angle above 60 degrees from the downward vertical
2 direction of nadir.

3 (2) Luminaires must avoid light trespass by not
4 exceeding an illuminance of 0.05 lux as measured at ground
5 level both horizontally and vertically at the property
6 boundary.

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

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

16 (5) 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 (6) 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 (7) 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 (8) 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 (b) Whenever possible, existing luminaires on a structure
12 or land that is owned, supported, funded, leased, or managed
13 by the State shall be repositioned or shielded to minimize
14 upward-directed light, glare, and light trespass.

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

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

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

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

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

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

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

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

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

21 (9) flagpoles installed on or before the effective
22 date of this Act are upward-lit by partially shielded or
23 unshielded luminaires using a lamp of 2,200 Kelvin or
24 lower to minimize the impact of glare, light trespass, and
25 sky glow and are converted to conform to requirements upon
26 retrofitting;

1 (10) the luminaries are existing decorative and
2 ornamental lighting that serve historical purposes, but
3 replacement luminaries for the existing decorative and
4 ornamental lighting must meet the standards of this Act;
5 or

6 (11) the luminaries are temporary seasonal holiday
7 lighting lasting no longer than 45 days surrounding the
8 holiday season.

9 Section 25. Other laws. If this Act conflicts with any
10 other federal law, State law, or local ordinance controlling
11 lighting, outdoor luminaries, signage, outdoor advertising,
12 displays, or devices that is more stringent than the Act, then
13 the federal law, State law, or local ordinance controls to the
14 extent it is more stringent than the Act.

15 Section 99. Effective date. This Act takes effect January
16 1, 2025."