

Sen. Laura Ellman

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10300SB3501sam002

LRB103 36511 BDA 71338 a

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

Illinois, (ii) encourage State agencies to adopt suitable

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

- (3) The Senate has resolved in Senate Resolution 65 of the 103rd General Assembly that local governments in Illinois should abide by the International Dark-Sky Association (now known as Dark Sky International) guidelines and lighting principles to help mitigate the effects of light pollution produced by outdoor lighting.
- (4) The State should promote responsible outdoor lighting.
- (5) Government structures, facilities, places, and spaces should serve as models of best practices for private structures, facilities, places, and spaces. These government structures, facilities, places, and spaces should encourage residents, business owners, and others to join in transitioning to responsible lighting.

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

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

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

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

"Illuminating Engineering Society Backlight, Uplight, and Glare rating" or "IES BUG rating" means the luminaire classification system developed by the Illuminating Engineering Society that ranks and defines how many lumens of light a luminaire emits backwards, upwards, and in glare.

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

"Light pollution" means the scattering of artificial light into the nighttime environment caused by excessive or improperly positioned artificial outdoor lighting resulting in

- 1 sky glow, light trespass, or glare.
- 2 "Light trespass" means light emitted by a luminaire that
- 3 shines beyond the boundaries of the property the luminaire is
- 4 intended to illuminate.
- 5 "Luminaire" means a complete installed or portable
- 6 illuminating device, including a lamp, together with the parts
- 7 designed to distribute the light, such as a reflector or
- 8 refractor, parts to position and protect the lamps, and parts
- 9 to connect the lamps to a power supply.
- "Lumen" means a standard unit of measurement of luminous
- 11 flux.
- "Lux" means a standard unit of luminous flux expressed in
- 13 lumens per square meter.
- "Nadir" means the point on the ground that is directly
- below the center of a luminaire.
- 16 "Ornamental lighting" means a luminaire that has a
- 17 historical or seasonal holiday purpose and that serves a
- 18 historical or seasonal holiday purpose only.
- "Outdoor luminaire" means installed or portable outdoor
- 20 artificial illuminating devices used for flood lighting,
- 21 roadway and area lighting, general illumination, or
- 22 advertisement.
- "Permanent outdoor luminaire" means exterior lighting or a
- system of lighting that is used in place for 7 or more days.
- 25 "Reflective roadway markings" means lines and markers with
- 26 reflective properties intended to promote vehicular and

- 1 pedestrian safety.
- 2 "Reflective signage" means roadway and informational
- 3 signage that has reflective properties to aid with vehicular
- 4 and pedestrian safety.
- 5 "Responsible lighting principles" means the use of modern
- 6 lighting technologies, including shielding, an upper limit on
- 7 color temperature (2,700 Kelvin), on-off controls, dimming
- 8 controls, and motion sensors.
- 9 "Roadway lighting" means permanent outdoor luminaires that
- 10 are specifically intended to illuminate roadways for safe
- 11 vehicular and pedestrian traffic.
- "Sky glow" means the brightening of the night sky due to
- inefficiently and improperly lit areas.
- 14 Section 15. Outdoor lighting control. All new luminaires
- 15 purchased with State funds after the effective date of this
- 16 Act or installed after the effective date of this Act on a
- 17 structure or land that is owned, leased, or managed by the
- 18 Department of Natural Resources, including roadways,
- 19 facilities, properties, nonhabitable structures, monuments,
- and public right-of-way spaces, including sidewalks, with the
- 21 intended purpose of outdoor illumination must follow the
- 22 following outdoor lighting control requirements:
- 23 (1) Permanent outdoor luminaires must be fully
- shielded with an IES BUG rating and produce less than 1% of
- 25 its emitted light above 80 degrees from the downward

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vertical direction of nadir. Light should not be emitted at an angle above 60 degrees from the downward vertical direction of nadir.

- (2) Luminaires must avoid light trespass by not exceeding an illuminance of one lux as measured at ground level both horizontally and vertically at the property boundary.
- (3) Luminaires must have a correlated color temperature less than or equal to 2,700 Kelvin. In residential areas, dark sky locations, or environmentally sensitive areas, such as State parks and outdoor recreation facilities, correlated color temperature should be no more than 2,200 Kelvin.
- (4) Outdoor lighting must be minimized to no more than 25% above ANSI/IES standards or United States Department of Transportation recommendations.
- (5) Facade lighting must be minimized to no more than 25% above ANSI/IES standards, must project downward, and must not violate the light trespass limits in paragraph (2).
- (6) When the installation or replacement of roadway lighting is planned, the appropriate authority must determine whether reflective roadway markings or reflective signage is appropriate and safe for the situation in lieu of outdoor lighting. Reflectorized roadway markings, lines, warning signs, informational

signs or other passive means must be used for roadway lighting, except at intersections of 2 or more streets or highways, unless it is determined that adequate safety cannot be achieved by reflective means.

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

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

- (1) the luminaires are on a structure or land that is owned, supported, funded, leased, or managed by the State in a county or municipality that, by ordinance or resolution, has adopted provisions that are equal to or more stringent than the provisions of this Act;
 - (2) a federal law or regulation preempts this Act;
- (3) a State agency determines a safety or security need exists that cannot be addressed by any other method;
- (4) fire, police, rescue, or repair personnel need light for temporary emergencies or road repair work;
- (5) it has been determined that a reasonable safety and security interest exists at correctional or hospital facilities that cannot be addressed by another method as long as it complies with existing standards, specifications, or policies;
 - (6) navigational lighting systems and other lighting

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are necessary to comply with Federal Aviation Administration airside operations or nautical safety;

- (7) lamps greater than 2,700 Kelvin are used on active sports grounds or show grounds, but only for the duration of a practice, match, or event. Lamps emitting greater than 2,700 Kelvin under this paragraph must be positioned, angled, or shielded to prevent direct glare and light trespass onto neighboring property or properties, and the positioning, angling, or shielding must limit upward light emission to only the amount necessary to light the sporting or grounds activity;
- (8) flagpoles installed after the effective date of this Act are lit by means of a downward-facing lamp and using a lamp of 2,700 Kelvin or lower;
- (9) flagpoles installed on or before the effective date of this Act are upward-lit by partially shielded or unshielded luminaires using a lamp of 2,200 Kelvin or lower to minimize the impact of glare, light trespass, and sky glow and are converted to conform to requirements upon retrofitting;
- (10) the luminaries are existing decorative and ornamental lighting that serve historical purposes, but replacement luminaries for the existing decorative and ornamental lighting must meet the standards of this Act; or
 - (11) the luminaries are temporary seasonal holiday

- lighting lasting no longer than 45 days surrounding the 1
- 2 holiday season.
- 3 Section 25. Other laws. If this Act conflicts with any
- 4 other federal law, State law, or local ordinance controlling
- lighting, outdoor luminaries, signage, outdoor advertising, 5
- displays, or devices that is more stringent than the Act, then 6
- 7 the federal law, State law, or local ordinance controls to the
- 8 extent it is more stringent than the Act.
- Section 99. Effective date. This Act takes effect January 9
- 1, 2025.". 10