

SENATE, No. 1610

STATE OF NEW JERSEY 221st LEGISLATURE

PRE-FILED FOR INTRODUCTION IN THE 2024 SESSION

Sponsored by:

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District 16 (Hunterdon, Mercer, Middlesex and Somerset)

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District 32 (Hudson)

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SYNOPSIS

Requires outdoor lighting fixtures installed or replaced by, or on behalf of State, or at projects receiving State funds, to meet certain criteria.

CURRENT VERSION OF TEXT

Introduced Pending Technical Review by Legislative Counsel.



(Sponsorship Updated As Of: 4/8/2024)

1 AN ACT concerning certain outdoor lighting fixtures and
2 supplementing Title 52 of the Revised Statutes.

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4 **BE IT ENACTED** by the Senate and General Assembly of the State
5 of New Jersey:

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7 1. As used in this act:

8 “Energy conservation” means the reduction of energy costs and
9 resources by use of methods including, but not limited to, the use of
10 light fixtures with the lowest feasible wattage or a photo-sensitive
11 or timer switch.

12 “Full cutoff fixture” means a luminaire whose luminous intensity
13 in candelas at or above an angle of 90 degrees above nadir does not
14 numerically exceed 2.5 percent of the luminous flux, in lumens, of
15 the lamp or lamps in the luminaire, and the luminous intensity, in
16 candelas, at or above a vertical angle of 80 degrees above nadir
17 does not numerically exceed 10 percent of the luminous flux of the
18 lamp or lamps in the luminaire.

19 “Fully shielded luminaire” means a luminaire that allows no
20 direct light emissions above a horizontal plane through the lowest
21 light-emitting part of the luminaire.

22 “Glare” means direct light emitting from a luminaire that is
23 significantly greater than luminance to which the eyes are adapted
24 which causes reduced vision or momentary blindness.

25 “Illuminance” means the unit measure of light at a surface.

26 “Lamp” means the component of a luminaire that produces the
27 specific form of radiant energy that is observed as light.

28 “Light trespass” means light emitted by a luminaire that shines
29 beyond the boundaries of the property on which the luminaire is
30 located.

31 “Lumen” means an international standard unit of luminous flux
32 representing the quantity of visible light output.

33 “Luminaire” means the complete lighting unit fixture consisting
34 of a lamp, or lamps and ballasts, together with the parts designed to
35 distribute light, including, but not limited to, a reflector, lens, and
36 diffuser, to position and protect the lamps, and to connect the lamps
37 to the power supply.

38 “Luminous flux” means the measure of the perceived power of
39 the light in lumens.

40 “Outdoor lighting fixture” means any type of fixed or movable
41 lighting equipment that is designed or used for illumination
42 outdoors. “Outdoor lighting fixture” shall not include lighting
43 equipment that is required by law to be installed on motor vehicles,
44 or lighting required for the safe operation of aircraft or installed at
45 an aviation facility.

46 “Project” means the acquisition, construction, improvement,
47 reconstruction, or repair of all or part of any building, facility,
48 structure, or real property.

1 “State agency” means any of the principal departments in the
2 Executive Branch of State Government, and any division, board,
3 bureau, office, commission, or other instrumentality created by a
4 principal department and any independent State authority,
5 commission, instrumentality, or agency established by law.

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7 2. a. Commencing on the effective date of this act, an outdoor
8 lighting fixture installed or replaced by, or on behalf of, a State
9 agency, or as part of a project that receives funds from a State
10 agency, shall comply with the following specifications:

11 (1) the luminaire shall be a fully shielded luminaire;

12 (2) the outdoor lighting fixture shall emit only as much light as
13 necessary for the intended purpose and shall not exceed the
14 minimum illuminance level recommended for that purpose by the
15 Illuminating Engineering Society of North America or the Federal
16 Highway Administration;

17 (3) the outdoor lighting fixture shall use a full cutoff fixture
18 when the output of light is greater than 1,800 lumens; and

19 (4) full consideration has been given to energy conservation,
20 and reducing glare, minimizing light trespass and light pollution,
21 and preserving the natural night environment.

22 b. The provisions of subsection a. of this section shall not apply
23 in the following circumstances:

24 (1) the outdoor lighting fixture is used on a temporary basis
25 because emergency personnel require additional illumination for
26 emergency procedures;

27 (2) the outdoor lighting fixture is used on a temporary basis for
28 nighttime work; or

29 (3) a compelling safety interest exists that cannot be addressed
30 by another method.

31 c. Notwithstanding the provisions of this section to the contrary,
32 in the case of outdoor lighting fixtures installed along any roadway
33 in the State, the Department of Transportation shall assess whether
34 the purpose of the outdoor lighting fixture can be achieved by the
35 installation of reflective road markers, lines, warning or
36 informational signs, or other effective passive methods in lieu of the
37 installation of outdoor lighting fixtures.

38 d. The State Treasurer shall provide guidance to every State
39 agency concerning the requirements of this act.

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41 3. Notwithstanding the provisions of any other law, or rule or
42 regulation adopted pursuant thereto, to the contrary, the Director of
43 the Division of Purchase and Property in the Department of the
44 Treasury, the Director of the Division of Property Management and
45 Construction in the Department of the Treasury, or any State agency
46 having authority to contract for the purchase of goods or services,
47 shall comply with the requirements of this act.

1 4. This act shall take effect on the first day of the third month
2 next following the date of enactment.

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STATEMENT

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7 This bill would require outdoor lighting fixtures installed or
8 replaced by, or on behalf of, a State agency, or at projects receiving
9 public moneys from a State agency, to meet certain criteria in order
10 to reduce light pollution.

11 The bill would require outdoor lighting fixtures installed or
12 replaced by, or on behalf of, a State agency, or as part of a project
13 that receives funds from a State agency, to comply with the
14 following: (1) the luminaire is a fully shielded luminaire; (2) the
15 outdoor lighting fixture emits only as much light as necessary for
16 the intended purpose and shall not exceed the minimum illuminance
17 level recommended for that purpose by the Illuminating
18 Engineering Society of North America or the Federal Highway
19 Administration; (3) the outdoor lighting fixture uses a full cutoff
20 fixture when the output of light is greater than 1,800 lumens; and
21 (4) full consideration has been given to energy conservation,
22 reducing glare, minimizing light trespass and light pollution, and
23 preserving the natural night environment.

24 The bill would not apply if the: the outdoor lighting fixture is
25 used on a temporary basis because emergency personnel require
26 additional illumination for emergency procedures; the outdoor
27 lighting fixture is used on a temporary basis for nighttime work; or
28 a compelling safety interest exists that cannot be addressed by
29 another method.

30 In addition, in the case of outdoor lighting fixtures installed
31 along roadways, the bill requires the Department of Transportation
32 to assess whether the purpose of the outdoor lighting fixture can be
33 achieved by the installation of reflective road markers, lines,
34 warning or informational signs, or other effective passive methods
35 in lieu of the installation of outdoor lighting fixtures.

36 The provisions of the bill would take effect on the first day of the
37 third month after the bill is enacted into law.

38 At least 18 other states have enacted laws intended to reduce
39 light pollution in order to promote energy conservation, public
40 safety, aesthetic interests, and astronomical research capabilities.
41 Taking actions to address light pollution will reduce energy usage
42 and energy costs, while also helping to protect and preserve New
43 Jersey's natural nighttime environment. Unshielded outdoor lights
44 are responsible for emitting pollutants and wasted light, and over-
45 lighting during non-daylight hours neither improves visibility nor
46 increases nighttime safety. This bill would help to remove
47 unnecessary lighting and utilize efficient light sources in order to
48 save money and improve the natural nighttime environment.