

HOUSE CORRECTED REPRINT No. 4449

The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES, May 1, 1997.

The committee on Energy, to whom was referred the petition (accompanied by bill, House, No. 3418) of J. James Marzilli, Jr., and other members of the House for legislation to limit outdoor night lighting for the purpose of conserving energy and reducing light pollution, reports recommending that the accompanying bill (House, No. 4449) ought to pass.

For the committee,

DENNIS M. MURPHY.

The Commonwealth of Massachusetts

In the Year One Thousand Nine Hundred and Ninety-Seven.

AN ACT TO LIMIT OUTDOOR NIGHT LIGHTING, CONSERVE ENERGY AND
REDUCE LIGHT POLLUTION.

*Be it enacted by the Senate and House of Representatives in General
Court assembled, and by the authority of the same, as follows:*

1 SECTION 1. In this act the following words shall be defined as
2 follows:—

3 “Luminaire”, a lighting system, including a lamp or lamps
4 together with the parts designed to distribute the light, to position
5 and protect the lamps, and to connect the lamps to the power
6 supply.

7 “Lamp”, the component of a luminaire that produces the light.

8 (a) “Lumen”, a specific standard unit of measurement of lumi-
9 nous flux.

10 (b) “Full-Cutoff Luminaire”, a luminaire that allows no direct
11 light from the luminaire above a horizontal plane through the
12 luminaire’s lowest light emitting part.

13 (c) “Direct Light”, light emitted directly by a lamp off a
14 reflector, or through a refractor of a luminaire.

15 (d) “Glare”, direct light emitted by a luminaire that causes
16 reduced vision or momentary blindness.

17 (e) “Light Pollution”, general sky glow caused by the scattering
18 of artificial light in the atmosphere, much of which is caused by
19 poorly-designed luminaires.

20 (f) “Light Trespass”, light emitted by a luminaire that shines
21 beyond the boundaries of property on which the luminaire is
22 located.

23 (g) “Outdoor Light Fixtures”, outdoor artificial illuminating
24 devices, installed or portable, used for flood-lighting, general illu-
25 mination, or advertisement.

26 (h) “Permanent Outdoor Illuminaire”, any fixed luminaire or
27 system of luminaires that is outdoor and that is intended to be
28 used for seven (7) days or longer.

29 (i) "State Funds", any bond revenues or any money appropri-
30 ated or allocated by the Massachusetts Legislature.

31 (j) "Roadway Lightings", permanent outdoor luminaires that
32 are specifically intended to illuminate roadways for automotive
33 vehicles.

1 SECTION 2. Chapter 85, Section 2 of the General Laws is
2 hereby amended by inserting the following new section:—

3 Section 2½. No state funds shall be used to install any new per-
4 manent outdoor luminaire unless the following conditions are met:

5 (1) The new or replacement luminaire is greater than 1,800
6 lumens;

7 (2) If a lighting recommendation or regulation applies, the min-
8 imum illuminance specified by the recommendation or regulation
9 is used;

10 (3) If no lighting recommendation or regulation applies, the
11 minimum illuminance adequate for the intended purpose is used,
12 giving full consideration to energy conservation, glare and mini-
13 mizing light trespass.

14 (4) For roadway lighting, a determination is made that the pur-
15 pose of the lighting installation or replacement cannot be achieved
16 by installation of reflectorized roadway markers, lines, warnings
17 or information signs, or passive means; and

18 (5) Adequate consideration has been given to conserving
19 energy and minimizing glare, light pollution and light trespass.
20 The following exemptions of this act are permitted when:

21 (1) Federal laws, rules, and regulations take precedence over
22 these provisions;

23 (2) Fire, police, rescue or repair personnel need light for any
24 emergency situations and whenever deemed necessary;

25 (3) There are special requirements such as sports facilities and
26 monument or flag lighting; all such lighting shall be selected and
27 installed to shield the lamp(s) from direct view to the greatest
28 extent possible, and to minimize upward lighting and light tres-
29 pass;

30 (4) Historic or decorative consideration should be allowed for
31 not converting luminaires.

32 Section 2¾. The division of energy resources shall establish
33 and implement a system to ensure that the use of state funds for
34 street lighting complies with sections 2 and 2 and 1/2.

