

SECTION 8.12 LIGHTING

8.12-1. Purpose

It is the purpose of this section to encourage through the regulation of outdoor illuminating devices, lighting practices and uses, the minimization of light pollution, light trespass, unnecessary glare and sky glow in Shutesbury in order to preserve and enhance the natural, historical, and aesthetic character of the Town, while meeting the safety and welfare needs of residents.

8.12-2. Background

The Five Principals for Responsible Outdoor Lighting from the Illuminating Engineering Society (IES) and International Dark Sky Association (IDA) state that outdoor lighting should do the following:

1. Be useful. All light should have a clear purpose.
2. Be targeted. Light should be directed only where needed.
3. Provide low light levels. Light should be no brighter than necessary.
4. Be controlled. Lighting should only be used when it is useful.
5. Have a warmer color. Use warmer white or amber lights where possible.

8.12-3. Definitions

- A. Direct Light: Light emitted directly by a lamp, off a reflector, or through a refractor of an outdoor light fixture.
- B. Light Pollution: Excessive, misdirected, or obtrusive artificial (usually outdoor) light.
- C. Glare: Light emitted from a light fixture with intensity great enough to produce annoyance, discomfort, or a reduction in a viewer's ability to see.
- D. Light Trespass: Direct light emitted by an outdoor lamp fixture that shines beyond the boundaries of the property on which the outdoor light fixture is installed.
- E. Sky Glow: The brightening of the nighttime sky that results from light directed or reflected upwards or sideways, creating a diffuse glow above a city or town.
- F. Lumens: A luminance metric unit for the amount of emitted light.
- G. Low Intensity Lighting: 800 lumens or below per fixture is considered low intensity.
- H. Kelvin: The spectrum of color temperatures is assigned numerical values, measured in degrees of Kelvin. These values describe the color emitted from lighting fixtures.
- I. Warm Temperature Lighting: Warm lighting has a color temperature of 3,000 Kelvin or less, is referred to as yellow, amber or red.

8.12-4. Design and Use

A. Control of Lighting

Design and use of lighting should control glare and prevent light trespass onto adjacent properties or public ways, curtail degradation of dark skies at night, and conserve energy resources while maintaining safety, visibility and security of individuals and property. To this end:

1. No outdoor lighting fixture shall produce a strong, direct light beyond the property boundaries which the lighting fixture is servicing. Use of direct light should only be where it is needed at the minimum intensity (lumens) necessary to serve the intended purposes.
 2. All lighting, regardless of rating and type, should be selected to significantly reduce light onto any abutting lot or parcel and to significantly reduce glare or light pollution perceptible to pedestrians or motorists, or persons on an abutting lot or parcel.
 3. Whenever possible, lighting should be either shielded, low intensity (under 800 lumens), dimmable or activated by motion detector. Lighting used between dusk and dawn should be, whenever possible, motion detection type.
 4. Lighting equipped with shielding should be capable of being properly aimed to maintain the shielding characteristics.
 5. Motion detection lighting, whenever possible, should have illumination settings of no more than ten minutes per incident.
 6. Lighting with dimming capability should be dimmed between dusk and dawn.
 7. Lighting shall be directed downward and only onto areas required. Light dispersion above a ninety-degree or horizontal plane above the fixture is prohibited.
 8. Except for streetlights, the maximum fixture height (as measured above finished grade) shall be 16 feet.
- B. Lighting for residential or business entrances and exits, or similar use shall be of warm temperature (no greater than 3,000 Kelvin) and low intensity (under 800 lumens) serving primarily as markers or as low-level illumination. If used in this manner, lighting need not be shielded, and need not be restricted to cut-off or motion-detector requirements.
- C. Customary holiday lighting is exempt if the installation is temporary. Such lighting should be installed to minimize glare and light trespass onto adjacent properties.
- D. When the installation or replacement of outdoor lighting is part of a Site Plan Review or Special Permit application, the Planning Board or Zoning Board of Appeals shall review and approve the lighting installation as part of its site plan with reference to this section.
- E. Street lights shall be designed so that illumination levels do not exceed what is appropriate to the task and location. Street lights may be installed if the purpose cannot be achieved by the installation of reflectorized roadway markers, lines, warnings, or informational signs; or other passive means. Street lights shall be designed and located to minimize light trespass, unnecessary glare and sky glow.
- F. Nighttime illumination of flags or monuments, not consistent with the requirements of this bylaw shall be prohibited.
- G. The following light sources are prohibited:
- Neon lights.
 - Metal halide, mercury vapor and quartz lamps.

8.12-5. Dispute Resolution and Enforcement

The town encourages residents to resolve any lighting concern that may constitute a violation of bylaw between the parties before pursuing formal enforcement.

A lighting complaint may be brought to the Select Board. If necessary, solely at the discretion of the Select Board, further action may be taken to assess the situation so that the Select Board can consider recommended action.

The Select Board shall have the authority to set and levy fines. Section 10.2 of the Zoning Bylaw shall also be applicable.

8.12-6. Effective Date

Outdoor lighting that is installed prior to April 27, 2024 and not subsequently and significantly improved, shall be exempt.