

### **Section 13. Appeals.**

Any person substantially aggrieved by any decision of the designated official made in administration of the Code may appeal that decision to the Advisory/Appeals Board of this jurisdiction.

### **Section 14. Law Governing Conflicts.**

Where any provision of federal, state, county, township or city statutes, codes, or laws conflicts with any provision of this Code, the most restrictive shall govern unless otherwise regulated by law.

### **Section 15. Violation and Penalty.**

It shall be a civil infraction for any person to violate any of the provisions of this Code. Each and every day or night during which the violation continues shall constitute a separate offense. A fine shall be imposed of not less than fifty dollars nor more than seven hundred dollars for any individual or not less than 100 nor more than ten thousand dollars for any corporation, association, or other legal entity for each offense. The imposition of a fine under this Code shall not be suspended.

### **Section 16. Severability.**

If any of the provisions of this Code or the application thereof is held invalid, such invalidity shall not affect other provisions or applications of this Code which can be given effect, and to this end, the provisions of this Code are declared to be severable.

### **Section 17. Definitions.**

As used in this Code, unless the context clearly indicates otherwise, certain words and phrases shall mean the following:

17.1. **Abandoned.** Abandonment shall be determined as provided in Section \_\_\_\_\_ of the City/Town's Zoning Ordinance.

17.2. **Area Lighting.** All outdoor lighting used for, but not limited to, illumination for walkways, roadways, equipment yards, parking lots, outdoor security, outdoor sales or eating areas, assembly or repair areas, advertising and other signs, and recreational facilities where GENERAL ILLUMINATION for utility, safety or security of the grounds is the primary concern.

- 17.3. **Astronomical Resource Zone.** Areas surrounding major astronomical research observatories, where sky glow and spectrum of outdoor lighting have the greatest impact on astronomical research due to proximity.
- 17.4. **Billboard.** Any sign designed for use with changeable advertising copy and which is normally used for the advertisement of goods produced or services rendered at locations other than the premises on which the sign is located.
- 17.5. **CCT.** See **Correlated Color Temperature.**
- 17.6. **Correlated Color Temperature.** (of a light source) The temperature (in Kelvins, abbreviated K) of a black-body radiator (e.g. the tungsten filament in an incandescent lamp) that radiates light of comparable hue to a light source. Higher CCT sources appear bluer or “cooler,” lower CCT sources appear yellower or “warmer.”
- 17.7. **Decorative Lighting.** Any outdoor lighting used for, but not limited to, architectural illumination, flag and monument lighting, and illumination of trees, bushes, etc.
- 17.8. **Development Project.** Any residential, commercial, industrial or mixed use subdivision plan or development plan which is submitted to the City for approval.
- 17.9. **Direct Illumination. Illumination** resulting from light emitted directly from a lamp or **luminaire**, not light diffused through translucent signs or reflected from other surfaces such as the ground or building faces.
- 17.10. **Directly Visible.** Allowing a direct line-of-sight to the light source or lamp.
- 17.11. **Display Area.** Outdoor areas where active nighttime sales activity occurs AND where accurate color perception of merchandise by customers is required. Recognized **display area** uses include automobile and recreational vehicle sales, boat sales, tractor sales, building supply sales, gardening or nursery sales, swap meets. Uses not listed here must be approved as display lot uses by the Planning Director.
- 17.12. **Frontage Row of Vehicle Display Area.** That portion of a **display area** used for vehicles located adjacent to the parcel frontage. Includes only the front row of vehicles adjacent to the parcel frontage; does not include the driving area located behind the parked vehicles or the remainder of the **display area** not adjacent to the frontage. (Figure 17.12)

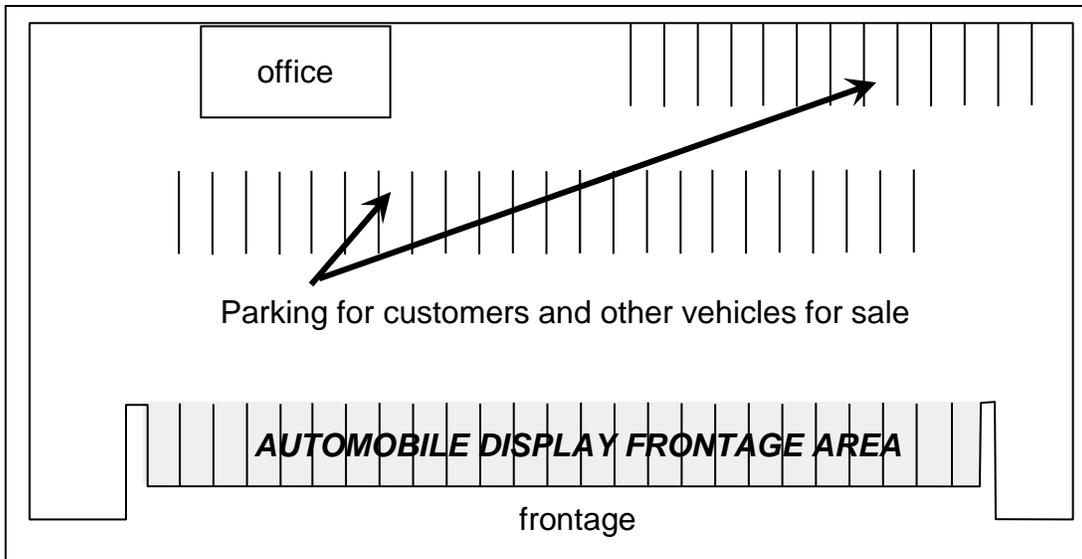


Figure 17.12. *Frontage Row of Vehicle Display Area*

17.13. **Flood Lamp.** See **Spot Lamp.**

17.14. **Footcandle.** The standard imperial unit used to measure **illuminance**, or the amount of light falling onto a surface, such as a roadway or athletic field. One **footcandle** equals one **lumen** per square foot. One **footcandle** equals approximately 10 **lux**.

17.15. **Fully Shielded (Light Fixture).** A lighting fixture constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the **luminaire**, is projected below the horizontal. Any structural part of the light fixture providing this shielding must be permanently affixed and part of the fixture, not part of any surrounding building or architectural elements.

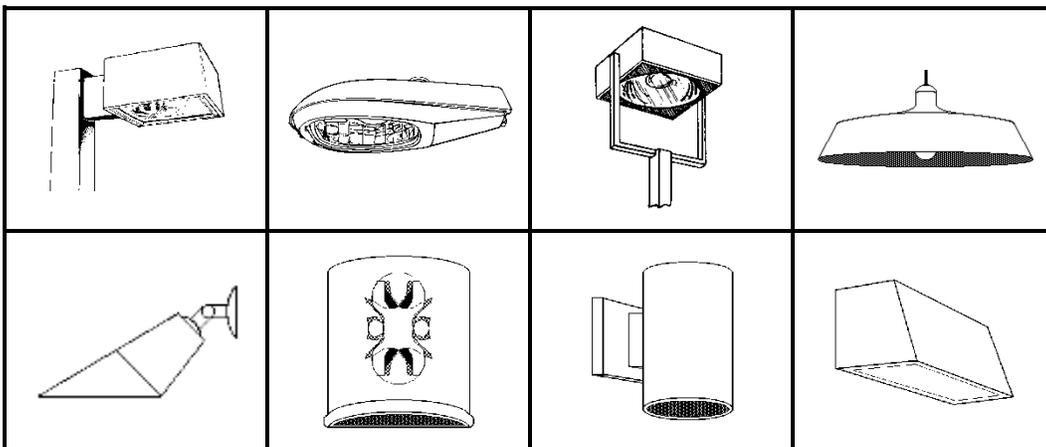


Figure 17.15a. Examples of fully shielded fixtures.

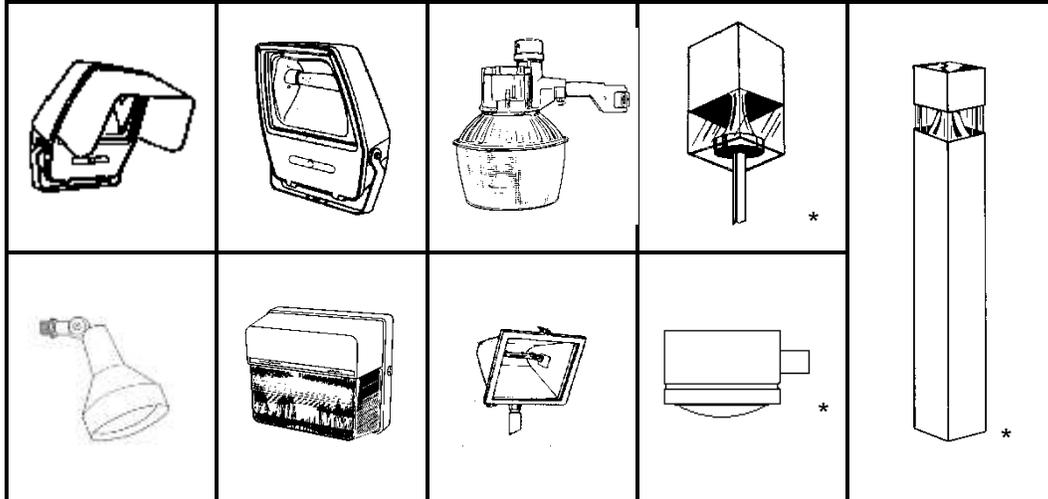


Figure 17.15b. Examples of fixtures that are NOT **fully shielded** (\*even though the lamp in these fixtures is shielded from direct view when viewed from the side or above, reflective surfaces and/or lens covers are directly visible from the side).

17.16. **High-Pressure Sodium.** A gas-discharge lamp that uses sodium (among other elements) in a tube under high pressure to produce light.

17.17. **HPS. High-pressure Sodium.**

17.18. **Illuminance.** The amount of light falling onto a unit area of surface (luminous flux per unit area) - measured in **footcandles** or **lux**.

17.19. **Installed.** The attachment, or assembly fixed in place, whether or not connected to a power source, of any **outdoor light fixture**.

17.20. **Lamp, non-Amber.** Any lamp type except **low-pressure sodium, narrow spectrum amber LED, high-pressure sodium, and PC amber LED**. Includes but is not limited to fluorescent, **metal halide**, white **LED** and incandescent.

17.21. **LED.** Light emitting diode.

17.22. **LED, PC Amber.** A “phosphor converted” light emitting diode with a spectrum similar to that shown in Figure 17.22, and more specifically with radiant intensity at any wavelength outside of the range of 535 to 695 nanometers being 10% or less of the intensity at the peak, and a **scotopic to photopic ratio** of 0.70 or less.

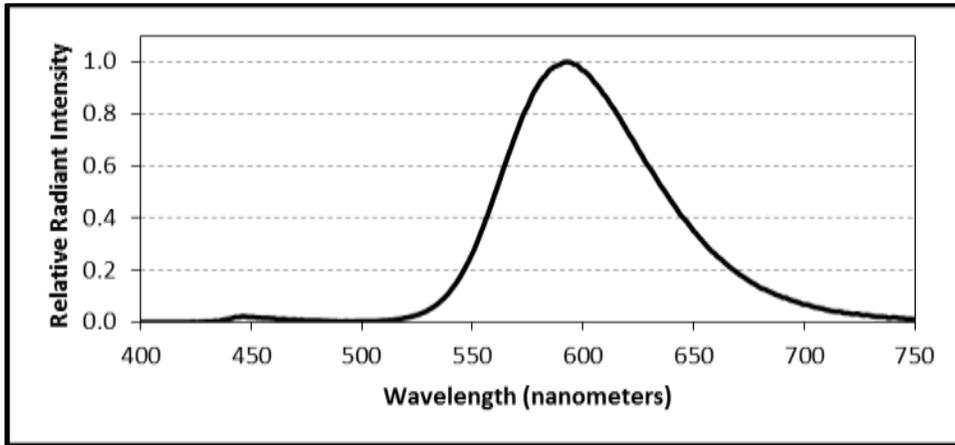


Figure 17.22. Representative **PC Amber LED** spectrum.

17.23. **LED, Narrow-Spectrum Amber.** A light emitting diode with a spectrum similar to that shown in Figure 17.23, and more specifically with peak radiant intensity between a wavelength of 585 and 595 nanometers, and radiant intensity at any wavelength outside of the range of 570 to 615 nanometers being 10% or less of the intensity at the peak.

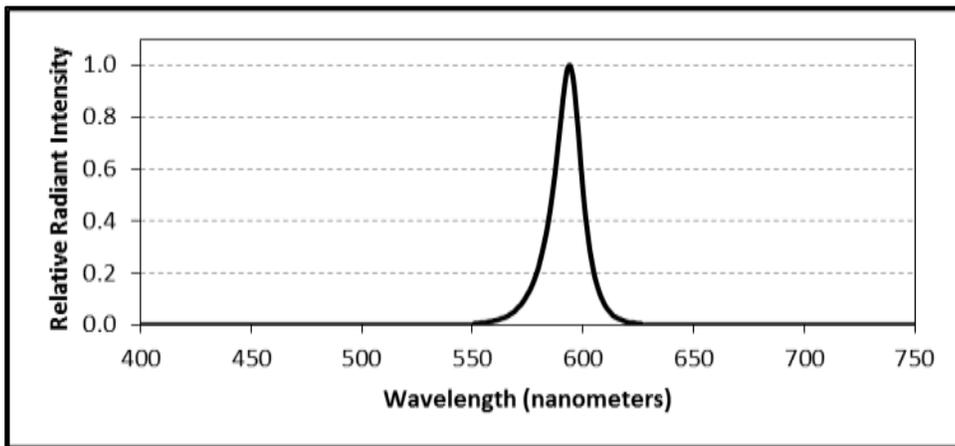


Figure 17.23. Representative **Narrow-Spectrum Amber LED** spectrum.

17.24. **Light Fixture.** See **Luminaire.**

17.25. **Light Trespass.** Light falling across property boundaries, on property not containing the originating light source.

17.26. **Lighting Zones.** The three **lighting zones** are defined on the Lighting Zone Map, by this reference made a part of this Code. Guidelines used to guide the delineation of the **lighting zones** are:

A. **Lighting Zone LZ 1.** This Zone includes rural areas, undeveloped or primarily residential, with typically small commercial centers surrounded by low density residential uses or open space.

B. **Lighting Zone LZ 2.** This Zone includes predominantly suburban residential areas, including neighborhood commercial or industrial areas mostly surrounded by residential areas, and urban areas in cities and towns.

C. **Lighting Zone LZ 3.** This Zone includes urban areas in large cities with primary land uses for commercial, business and industrial activity, including multi-family residential areas mostly surrounded by commercial areas.

17.27. **Low-Pressure Sodium.** A gas-discharge lamp that uses sodium in a tube under low pressure to produce light.

17.28. **LPS. Low-pressure sodium.**

17.29. **Lumen.** Unit of **luminous flux**; used to measure the amount of visible light emitted by lamps.

17.30. **Luminaire.** A complete lighting assembly (including the lamp, housing, reflectors, lenses and shields), less the support assembly (e.g. pole, mounting bracket or support arm); a **light fixture**. Includes **luminous tubes**, lamps or similar devices, permanently **installed** or portable, used for illumination, decoration, or advertisement. Such devices shall include, but are not limited to lights used for:

- A. parking lot or **parking garage** lighting;
- B. roadway and driveway lighting;
- C. pedestrian or walkway lighting;
- D. entryway lighting;
- E. buildings and structures;
- F. recreational areas;
- G. landscape lighting;
- H. **billboards** and other signs (advertising or other);
- I. product **display area** lighting;
- J. building or structure decoration;
- K. building overhangs and open canopies.

For purposes of determining **total outdoor light output** from a **luminaire** (see Table 5.2), lighting assemblies which include multiple lamps within a single **luminaire** or on a single pole or standard shall be considered as a single unit (Figure 17.30).

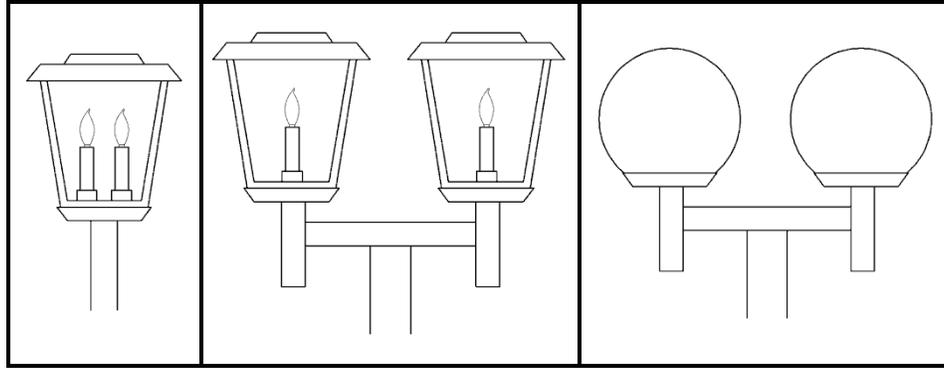


Figure 17.30. **Light fixtures** with multiple lamps in a single fixture (left) and on a single pole (center, right)

- 17.31. **Luminance.** The intensity of light reflected or emitted from a unit area of surface, such as a sign face - measured in **nits**.
- 17.32. **Luminous Flux.** The radiant power of visible light energy emitted from a light source; visible light. Measured in Lumens.
- 17.33. **Luminous Tube.** A glass tube filled with a gas or gas mixture (including neon, argon, mercury or other gasses), usually of small diameter (10-15 millimeters), caused to emit light by the passage of an electric current, and commonly bent into various forms for use as decoration or signs. A "neon" tube. Does not include common fluorescent tubes.
- 17.34. **Lux.** The standard metric unit used to measure **illuminance**, or the amount of light falling onto a surface, such as a roadway or athletic field. One **lux** equals one **lumen** per square meter. One **lux** equals approximately 0.1 **footcandles**.
- 17.35. **Metal Halide.** A gas-discharge lamp that uses mercury and a variety of metal halides to produce light.
- 17.36. **Neon Tube.** See **Luminous Tube**.
- 17.37. **Net Acreage.** The remaining area after deleting all portions for proposed and existing streets and any **Frontage Row of Vehicle Display Area(s)** within a parcel, subdivision, or multiple contiguous parcels proposed for development.
- 17.38. **Nit.** The standard unit used to measure the **luminance** of a surface, such as of a sign. Equivalent to candela per square meter.
- 17.39. **Opaque.** **Opaque** means that a material does not transmit light from an internal illumination source. Applied to sign backgrounds, means that the area

surrounding any letters or symbols on the sign allows no light from any internal source to shine through it.

17.40. **Outdoor Light Fixture.** See **Luminaire.**

17.41. **Outdoor Light Output, Total.** The initial total amount of light, measured in **lumens**, from all **outdoor light fixtures**, with adjustments as described herein. Includes all lights and **luminous tubes** used for **area** and **decorative lighting**, and lights used for external illumination of signs, but does not include lights used within **internally illuminated signs**, **luminous tubes** used in neon signs, or seasonal lighting from typical low-output lamps permitted between November 15th and January 15th. For all lamp types, the initial output, as defined by the manufacturer, is the value to be considered. For non-**LED** lights (e.g. **high-pressure sodium**, **low-pressure sodium**, **metal halide**, fluorescent), the initial **lumen** output of the lamp as listed by the lamp manufacturer is used; for **LED** lights, the initial **lumen** output of the fixture as listed by the fixture manufacturer, multiplied by 1.4, is used. For determining compliance with Section 5.2 [**Total Outdoor Light Output**] of this Code, the light from non-**LED** lamps, **LED** fixtures, and **luminous tubes** is to be included in the total output as follows:

A. **outdoor light fixtures** and **luminous tubes installed** on poles (such as parking lot **luminaires**) and light fixtures **installed** on the sides of buildings or other structures, when not shielded from above by the structure itself as defined in parts B, C or D below, are to be included in the **total outdoor light output** by simply adding the initial **lumen** outputs of the lamps and tubes;

B. **outdoor light fixtures** and **luminous tubes installed** under canopies, buildings (including **parking garage** decks), overhangs or roof eaves where all parts of the lamp, tube or **luminaire** are located at least five (5) feet but less than ten (10) feet from the nearest edge of the canopy, building edge or overhang are to be included in the **total outdoor light output** as though they produced only one-quarter (0.25) of the lamp's or tube's rated initial **lumen** output;

C. **outdoor light fixtures** and **luminous tubes installed** under canopies, buildings (including **parking garage** decks), overhangs or roof eaves where all parts of the lamp, tube or **luminaire** are located at least ten (10) feet but less than thirty (30) feet from the nearest edge of the canopy, building edge or overhang are to be included in the **total outdoor light output** as though they produced only one-tenth (0.10) of the lamp's or tube's rated initial **lumen** output.

D. **outdoor light fixtures installed** under canopies, buildings (including **parking garage** decks), overhangs or roof eaves where all parts of the lamp, tube or **luminaire** are located thirty (30) or more feet from the nearest edge of

the canopy, building edge or overhang are not to be included in the **total outdoor light output**. Such lamps must however conform to the lamp source and shielding requirements of Section 5.

- 17.42. **Parking Garage.** A multi-level or covered structure for parking that is open to the outside air. Includes parking facilities under buildings when the area is open to the outside at more locations than just the automobile entries and exits.
- 17.43. **Person.** Any individual, tenant, lessee, owner, or any commercial entity including but not limited to firm, business, partnership, joint venture, or corporation.
- 17.44. **Scotopic to Photopic Ratio.** The ratio of the dark-adapted (scotopic) to light-adapted (photopic) luminous flux of a lamp source. This ratio is determined by the lamp spectrum, and supplied by manufacturer of the lamp. Typical values for several lamp types are shown in Table 17.44.

Table 17.44. Scotopic to Photopic Ratios for Selected Lamps

Lamp type	Scotopic to Photopic Ratio
<b>Low-pressure sodium</b>	0.2
<b>Narrow-spectrum Amber LED</b>	0.2
<b>PC Amber LED</b>	0.4
<b>High-pressure Sodium</b>	0.6

- 17.45. **Searchlight.** A lighting assembly designed to direct the output of a contained lamp in a specific tightly focused direction (a beam) with a reflector located external to the lamp, and with a swiveled or gimballed mount to allow the assembly to be easily redirected. Such lights are used commonly to sweep the sky for advertisement purposes.
- 17.46. **Sign, Externally Illuminated.** A sign illuminated by light sources from the outside.
- 17.47. **Sign, Internally Illuminated.** A sign illuminated by light sources enclosed entirely within the sign cabinet and not directly visible from outside the sign.
- 17.48. **Sign, Multicolor Changeable-Copy LED.** A sign composed of **LEDs** of more than one color and programmable to allow changing displays.
- 17.49. **Sign, Multicolor Fixed-Copy LED.** A sign composed of **LEDs** of more than one color with a fixed (not changeable or programmable) copy display.
- 17.50. **Sign, Neon.** A sign including **luminous tubes** formed into text, symbols or decorative elements and directly visible from outside the sign cabinet.

- 17.51. **Sign, On-Site Advertising.** A sign used primarily to advertise goods or services offered on the same parcel on which the sign is located. Such a sign may include incidental non-advertising information (for example time and temperature; does not include publicly owned signs providing general interest information exclusively (such as road names or highway conditions).
- 17.52. **Sign, Single-Color LED.** A sign composed of single-color **LEDs**, including signs with fixed and changeable copy.
- 17.53. **Sports Class I / II / III / IV.** Level of sports play as defined by the Illuminating Engineering Society of North America. This level is primarily determined by the number and distance of spectators; the higher recommended illumination levels facilitate the spectator's ability to view the action. **Sports Class IV** is the most common level, and is typical of municipal and amateur league and social level sports, with minimal accommodations for spectators, typically including bleachers located close to the field. **Sports Class III** includes increased accommodation for spectators. **Sports Class II** and **Sports Class I** apply to large sports facilities where thousands of spectators may be located hundreds of feet from the field, and television broadcasting may be a consideration.
- 17.54. **Spot Lamp.** A specific form of lamp designed to direct its output in a specific direction (a beam) with a reflector formed from the glass envelope of the lamp itself. Such lamps are so designated by the manufacturers and are often used in residential outdoor area lighting (Figure 17.54).

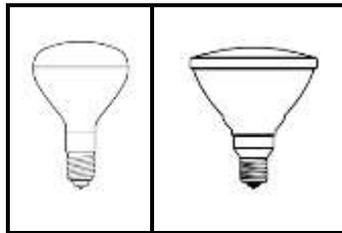


Figure 17.54. **Spot lamps**

- 17.55. **Temporary Lighting.** Lighting which does not conform to the provisions of this Code and which will not be used for more than one thirty (30) day period within a calendar year, with one thirty (30) day extension. Temporary lighting is intended for uses which by their nature are of limited duration; for example holiday decorations, civic events, or construction projects.
- 17.56. **Unshielded (Light Fixture or Luminous Tube).** A **lighting fixture** or **luminous tube** constructed or installed in such a manner that a fraction of the light emitted by the lamp or tube, either directly from the lamp, tube or a diffusing element, or (in the case of a lamp in a **fixture**) indirectly by reflection

or refraction from any part of a ***luminaire***, is projected above the horizontal (see Figure 17.15b).