

ARTICLE 10 HEIGHT AND AREA REGULATIONS

Section 1023 Outdoor Lighting and Illumination. 65 repealed 201 374

A. Definitions: For the purposes of this section, exterior lighting is defined and regulated by the following definitions and categories:

1. Footcandle (fc) - A unit of illuminance equal to the light from one candle projected on a one foot square surface at a distance of one foot from the candle. One foot-candle equals one lumen.
2. Fully Shielded (Full Cut-Off) - A fixture shielded with an opaque material so that light rays emitted by the fixture are projected only below a horizontal plane running through the lowest point on the fixture where light is emitted.
3. Lumens – The Standard International (SI) unit of luminous flux
4. Luminaire (Light Fixture) - A complete lighting unit consisting of a lamp or lamps and ballast(s) (when applicable) together with the parts designed to distribute the light, position and protect the lamps, to connect the lamps to the power supply.
5. Opaque - Impervious to the passage of light.
6. Partially Shielded (Partial Cut-Off) - A fixture that allows light rays to be emitted up and down and shielded with an opaque material in such a manner to prevent the luminaire from being seen.
7. Safety Lighting - Low-level lighting used to illuminate vehicular and pedestrian circulation.
8. Security Lighting - Lighting that is fully shielded that is intended to provide bright illumination during emergency situations only.
9. Translucent – A material through which light can pass but the light source cannot be seen.
10. Trespass Lighting - Spill light that encroaches onto neighboring properties.
11. Visual Enjoyment Lighting - Lighting intended to illuminate outdoor living areas.

~~{add definition of lumens, match hillside}~~ All types of outdoor ~~electrical lighting and electrical illumination~~ Luminaires are subject to the following limitations:

—No lamp or lighting or illumination device shall provide light in excess of 0.75 foot candles of projected brightness measured at the nearest property line. ~~When a light source is indicated as twenty five (25) watt incandescent, it shall not exceed two hundred fifty (250) lumens and when a light source is indicated as seventy five (75) watt incandescent, it shall not exceed seven hundred fifty (750) lumens.~~

1. Each lighting or illuminating device shall be set back from the nearest property line a minimum of ten (10) feet or a distance equal to or greater than the height of the device above natural or excavated grade, whichever is greater.

EXCEPTION: A lighted entry marker may be placed on each side of a driveway entrance. The entry markers shall not be placed within the Town right-of-way or private road areas and the total height of the marker and light shall not exceed four (4) feet above finished grade adjacent to the driveway. The light source shall not exceed ~~the equivalent projected brightness of a twenty five (25) watt incandescent bulb~~ 300 lumens.

3. The following light sources shall not exceed a height of thirty-six (36) inches above natural or excavated grade, whichever is lower, and shall not exceed ~~the equivalent projected brightness of a twenty five (25) watt incandescent bulb~~ 300 lumens:

- a. All lighting or illumination of landscape;
- b. Accent or aesthetic lighting of buildings or structures;
- c. Any illumination device that directs light above a horizontal plane.

4. Lighting used for security and safety shall be an integral part of and attached to the building. The light source and reflecting device shall be shielded or hooded with an opaque cover so that it is not visible from off the property and shall not be higher than twenty (20) feet above natural or excavated grade, which-ever is lower. ~~Each security/safety light is limited to the equivalent projected brightness of a seventy five (75) watt incandescent bulb~~ The light source shall not exceed 1200 lumens. Limited use of security/safety lighting is encouraged to prevent excessive ambient light. ~~{define limited use of security/safety better? —encouraged}~~

5. Required entry lighting at doors and garages shall be Partially Shielded luminaires .

6. Pole lights associated with an outdoor living area. Must meet downlighting criteria. Luminaire height cannot exceed 7.5'. Must meet setbacks for the main house.

7. Rope lighting shall not exceed 80 lumens per lineal foot and must be shielded so the individual luminaires are not visible.

~~4.8.~~ Temporary holiday lighting shall be permitted between October 15th and January 15th. All other decorative colored Luminaires (with an exception for underwater luminaires) or bulbs and string are prohibited.

~~5.9.~~ Tennis court lighting shall be hooded or shielded so that the light source and reflecting device is not visible from off the property. No lighting or illumination device shall project light in excess of 0.75 foot candles of brightness measured at the nearest property line. The maximum height of tennis court lighting shall not exceed twenty (20) feet above the court surface or natural grade whichever is lower.

~~6.10.~~ On Hillside lots there shall be no lighting permitted in the undisturbed areas of the property. Exterior lighting shall be kept to the minimum amount needed for the safe use of the property and all permitted lighting shall comply with all terms of this section.

ARTICLE 22 HILLSIDE DEVELOPMENT REGULATIONS

Section 2208 **OUTDOOR LIGHTING ⁵⁵⁸**

~~A.B.~~ Purpose: The intent of these lighting requirements is to preserve the low light level conditions that are inherently characteristic of the desert. The objective is to allow only the quantity and level of lighting necessary for safety, security and the enjoyment of outdoor living while protecting against direct glare and excessive lighting; protecting the ability to view the night sky; and preventing light trespass.

~~B.C.~~ Definitions: For the purposes of this section, exterior lighting is defined and regulated by the following definitions and categories:

~~1.12.~~ Footcandle (fc) - A unit of illuminance ~~of~~ equal to the light from one candle projected on a one foot square surface at a distance of one foot from the candle. One foot-candle equals one lumen / ft² (lumen / sq. ft.) or 10.76 lx (lux).

13. Fully Shielded (Full Cut-Off) - A fixture shielded with an opaque material so that light rays emitted by the fixture are projected only below a horizontal plane running through the lowest point on the fixture where light is emitted.

~~2.14.~~ Lumens – The Standard International (SI) unit of luminous flux

~~3. — Lumens — The Standard International (SI) unit of luminous flux. { add back in }~~

~~4.15.~~ Luminaire (Light Fixture) - A complete lighting unit consisting of a lamp or lamps and ballast(s) (when applicable) together with the parts designed to distribute the light, position and protect the lamps, to connect the lamps to the power supply.

5.16. Opaque - Impervious to the passage of light.

6.17. Partially Shielded (Partial Cut-Off) - A fixture that allows light rays to be emitted up and down and shielded with an opaque material in such a manner to prevent the bulb from being seen.

7.18. Safety Lighting - Low-level lighting used to illuminate vehicular and pedestrian circulation. [{Include paths/trails? Add definition}](#)

8.19. Security Lighting - Lighting that is fully shielded that is intended to provide bright illumination during emergency situations only.

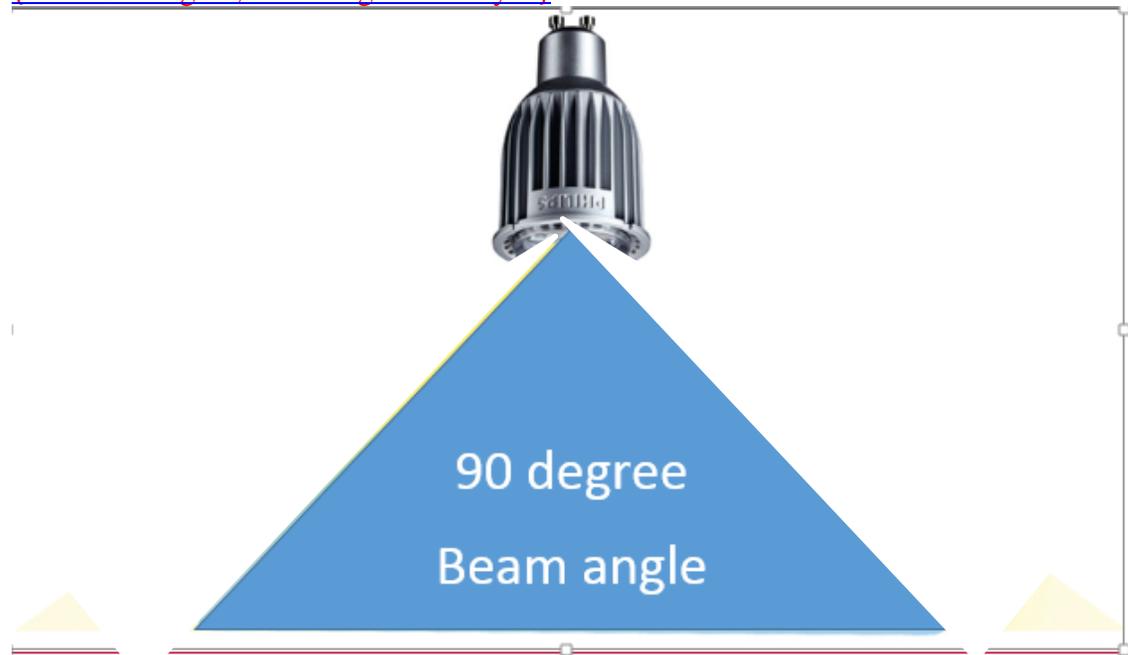
~~9. Spill Light - The amount of light that illuminates beyond the range or primary area that the fixture is intended to light.~~

10.20. Translucent - A material through which light can pass but the light source cannot be seen.

11.21. Trespass Lighting - Spill light that encroaches onto neighboring properties.

~~22. Visual Enjoyment Lighting - Lighting intended to illuminate outdoor living areas.~~

FIGURE 9 – Light Source Beam Angle
~~{Label 90-degree, beam angle sideways?}~~



C. Design Standards:

1. All building mounted ~~Luminaires light fixtures~~ shall be fully shielded. Recessed lights in exterior soffits, eaves, or ceilings shall have a a beam angle not greater than 90 degrees~~45° cutoff~~. At the main entry of the primary structure and garage entrances, a maximum of two (2) translucent fixtures may be permitted as long as the total lumens, per fixture, do not exceed a maximum of 750-1200 lumens. All other entrances, excluding garage doors, shall be limited to no more than one (1) fixture. Maximum illuminance per fixture is not to exceed 1200 lumens.
2. All ~~Luminaires fixtures~~, unless otherwise allowed, shall be directed downward and properly aimed on the targeted areas to maximize their effectiveness and minimize the total number of lighting fixtures.
3. Building mounted ~~Luminaires lighting~~ must be directed downward away from adjacent lots, streets, undisturbed areas, and open spaces, and may not be used to light walls or building elements for decorative purposes.
4. There shall be no lighting permitted in areas identified as “undisturbed areas” of the property pursuant to the plans submitted under Section 2207 III.A.
5. The maximum lighting intensity shall not exceed 0.25 footcandle when measured at the property line.
6. Lighted entry markers may be placed on each side of the driveway entrance and one side of an entry walkway. Repetitive rows of Luminaires along driveways or walkways accessing public streets is not allowed. Random placement of Luminaires along entry driveways and walkways may be allowed. A repetitive line up of lights along driveways or walkways accessing public streets shall not be allowed. Some random lighting of driveways or walkways accessing public streets may be allowed by the Hillside Building Committee. Driveway/walkway Luminaires lights must be located on the "downhill" side and aimed toward the "uphill" side, must be fully shielded from below and only light the driveway or walkway surface. Entry markers shall not be placed within the Town right-of-way or private road areas and the total height of the marker and luminaire shall not exceed four (4) feet above finished grade adjacent to the driveway and walkway. The light source shall not exceed 300 lumens~~Driveway and walkway lights shall not exceed a maximum of 0.25fc at any point beyond 10 feet from the fixture.~~
7. Luminaires ~~Each lighting or illuminating device~~ shall be set back from the nearest property line a minimum of ten (10) feet except for entry marker lighting~~or a distance equal to or greater than the height of the device above~~

~~natural or excavated grade, whichever is greater. As an exception a lighted entry marker may be placed on each side of the driveway entrance. The entry marker shall not be placed within the Town right of way or private road areas and the total height of the marker and light shall not exceed four (4) feet above finished grade adjacent to the driveway. The light source shall not exceed the equivalent projected brightness of 250 lumens. {what is entry lighting? Driveway }~~

D. Luminaire (Light Fixture) All luminaires shall be subject to the following limitations:

1. Shall not exceed ~~750-1200~~ lumens when attached to a structure and confined to the immediate vicinity of a building entrance or outdoor living area of the residence.
2. Shall not exceed ~~250-300~~ lumens for all other uses.
3. Shall not exceed ~~150-300~~ lumens for landscape up-lighting.
- 3.4. ~~Security Luminaire lighting shall be on only when needed and may be controlled by a timer that limits operation to 10 minutes per incident. The light source shall not exceed 1200 lumens. Motion sensor/detector light fixtures are permitted for security lighting. Security lighting must be controlled separately from all other lighting. Security lights must be on timers that regulate their operation time to a maximum of 10 minutes and limited to lamps with a maximum of 750 lumens.~~
- 4.5. Rope lighting shall not exceed ~~3.6 watts~~ 80 lumens per lineal foot ~~for an incandescent rope light.~~

E. Mounting Luminaires ~~Exterior fixtures shall be mounted:~~

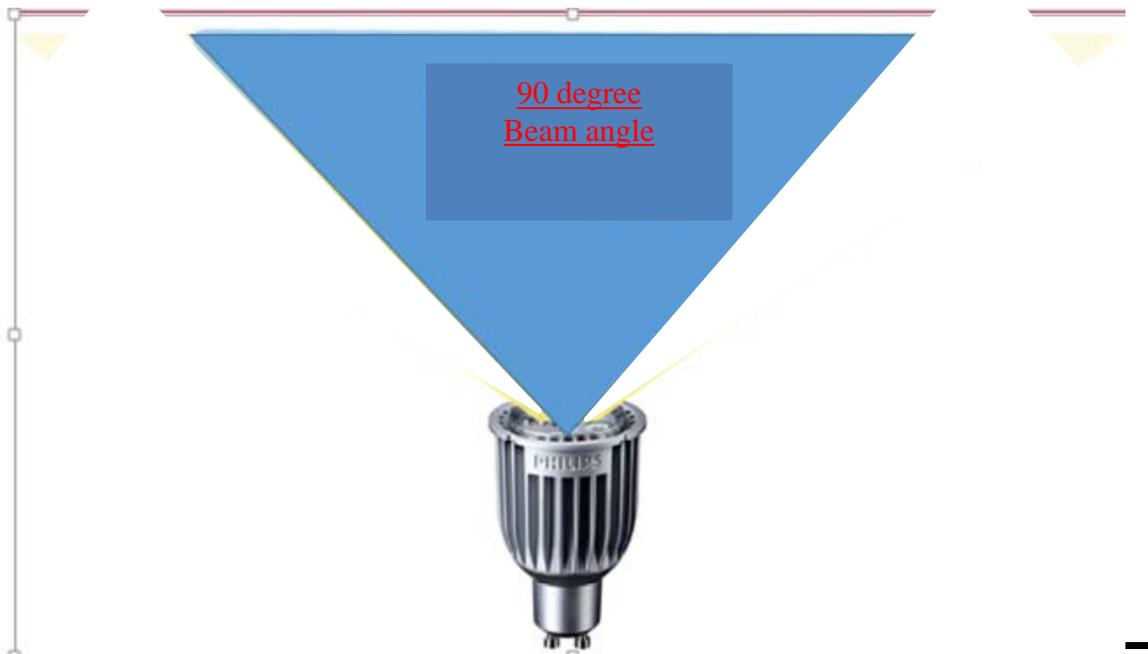
1. ~~Post-mounted Luminaires shall not to exceed 36 inches above the ground.~~
2. ~~Tree mounted Luminaires shall not exceed 8 feet above the finished grade. {Is this down lights? Limit number, Clarify? Definition?}~~
3. ~~Wall mounted Luminaires not to exceed 8 feet above finished grade and shielded in such a manner as to avoid creating concentrated light (hot spots) on the structures to which they are mounted.~~
4. ~~Security Luminaires shall not exceed 12 feet above finished grade. {affixed to structure, conflict on height and angle/shielding?} D.4 and E.4 match~~

- ~~1. In the ground or on a post not to exceed 36 inches above the ground. When exterior fixtures are affixed to existing trees, the height of the fixture shall not exceed 8 feet above the finished grade.~~
- ~~2. In or on a building wall not to exceed 8 feet above finished grade and shielded in such a manner as to avoid creating concentrated light (hot spots) on the structures to which they are mounted. Security lighting may be mounted on the structure to a height of not more than twelve (12) feet.~~

F. Landscape Up-lighting:

1. The number of fixtures is limited to one fixture per 1000 square feet of allowable disturbed area.
2. ~~The light source beam angle shall not exceed 90 degrees. The lamp must be recessed to provide a minimum 45° cut-off from the vertical plane.~~

~~**FIGURE 9 - TYPICAL UPLIGHT WITH 45° CUT-OFF**~~



G. Prohibitions In addition to the limitations noted above, the following ~~lights or lighting effects~~Luminaires are strictly prohibited: ~~{add in flashing language}~~

1. ~~Decorative c~~Colored lamps or bulbs ~~(with the exception for underwater luminaires)~~ and string and unshielded rope lights; except ~~that~~ temporary holiday lighting ~~shall be permitted~~ between ~~November~~ October 15th and January 15th. ~~{Exclude under water luminaires; define color with Kelvins like signs? Allow light that is not white?}~~

1.

2. Tennis court and sport court lighting.

3. ~~Any T~~Temporary lighting that violates the provisions of this lighting section.

4. Exterior ~~lights~~Luminaires, except security lighting, that illuminate the adjoining mountainside such that the mountainside is visible from off the property ~~between sunset and sunrise~~at any time.

H. Amendments:

1. Should the applicant desire to substitute outdoor light fixtures or lamps after a permit has been issued, the applicant must submit all changes to the Town Engineer for approval, with adequate information to assure compliance with this ordinance.

ARTICLE 25 SIGNS

Section 2506. Lighting:³⁸⁸

~~Lighting shall not be flashing, intermittent or scintillating; shall not be moving, animated or create noise in any manner.~~

~~A. Signs may be illuminated with illumination confined to the area of the sign.~~

~~A.B. All light sources shall be fully shielded so they do not create a nuisance or hazard.~~

~~B.C. Back lighting of freestanding letters mounted on a wall shall be limited to 100 lumens per square foot of sign area and the letters shall be fabricated so that the illumination source is not visible. ~~light source cannot be seen from off the property.~~~~

~~— External sign lighting shall be shielded so that the illumination source is not visible from any adjacent street or property and does not shine beyond the sign area it is intended to illuminate. Indirect lighting of signs shall be limited to two (2) seventy five (75) watt incandescent bulbs per sign. If the sign is double faced, the same type and amount of lighting may be used on each side. The seventy five (75) watt incandescent bulbs shall be limited to seven hundred~~

~~fifty (750) lumens per bulb, and shall be completely shielded from view at the nearest property line, and shall not exceed 0.75 foot candles of projected illumination measured at the nearest property line.~~

D. Signs that are illuminated shall not exceed 0.75 foot candles of projected brightness measured at the nearest property line.

E. On externally lit signs, the color temperature of lighting shall be no more than 3000 Kelvins.

F. Lighting shall not be flashing, intermittent, or fluttering; shall not be moving, animated or create noise in any manner.

G. Signs may be illuminated only during the hours that the associated establishment is open for business.

~~C.H.~~ Signs that are internally illuminated shall not exceed 0.75 foot candles of projected brightness measured at the nearest property line. ~~Backlit non-opaque panels are not permitted.~~

SPECIAL USE PERMIT GUIDELINES

Section 2 Lighting

The following lighting guidelines shall apply to all non-residential properties requiring a Special Use Permit.

a. Outdoor lighting shall be permitted so long as:

- i. the light emitting element is shielded so that no beam of light extends above a horizontal plane placed at the lowest level of any exposed portion of the light emitting element; and
- ii. the light emitting element and reflecting device of all lighting or illumination units is hooded or shielded so that it is not visible from any adjacent lot or real property; and
- iii. such outdoor lighting or illuminating units do not direct light, either directly or through a reflecting device, upon any adjacent real property.
- iv. uplighting shall be permitted so long as no ~~light emitting device~~ Luminaire is greater than ~~25 watts or emits more than 250 lumens~~ 300 lumens.

b. Outdoor pole lighting shall be permitted subject to the provisions of subsection A.8.a of this section so long as:

8. the height of such lights or illumination does not exceed 16 feet measured from the natural ground level; and
 9. Each lighting or illuminating device shall be set back from the nearest property line a distance equal to or greater than the height of the device above natural ground level.
- c. Outdoor light levels, measured in foot candles in accordance with Illuminating Engineering Society of North America (IESNA) standards, shall not exceed the following levels in the locations specified:
- i. parking lots – 1.6.
 - ii. entrance roadways, interior driveways and drop off areas – 5.0.
 - iii. adjacent to service buildings and loading docks – 5.0.
 - iv. in conjunction with architectural lighting adjacent to all other structures – 3.0.
 - v. outdoor pool decks and function areas – 5.0.
 - vi. outdoor dining areas – 10.0.
- d. No outdoor lighting shall be permitted within any setback area adjacent to a residential property unless:
- i. the lighting measured at the property line does not exceed 0.5 foot candles; and
 - ii. all light emitting elements are less than three (3) feet in height.