

Section 7.02 Lighting Standards

Intent – The Lighting Standards contained in this Section are intended to provide for the erection, design, or placement of *outdoor light fixtures* which: provide for illumination levels on individual *lots* which are adequate for the safe and efficient movement of individuals or vehicles to and from a *lot* and within a *lot* (i.e., areas that are dangerous if unlit, such as stairs, intersections or changes in *grade*); provide for uniform and consistent site lighting in terms of style of *outdoor light fixtures*, type of light (white light sources such as metal halide or yellow light sources such as high pressure sodium), and light levels throughout a *lot*; are designed to protect against the spillover of light onto abutting properties which may negatively impact occupants of abutting properties; and, are designed to protect against objectionable *glare* onto *public rights-of-way* which may impair the vision of motorists. This section does not address Street Lighting on public or private streets – refer to Town Policy P-004 Street Lighting for requirements associated with lighting on streets. [Amended Ordinance #10-11]

A. General Requirements.

All *outdoor light fixtures* on a *lot* shall comply with the following regulations:

1. *Minimum Setback* – Notwithstanding anything in this UDO to the contrary for the Use of Required Yards for any *district*, an *outdoor light fixture* may be located within a required *front yard, side yard, rear yard, front bufferyard, side bufferyard* or *rear bufferyard*, provided that the *outdoor light fixture* is located adjacent to the interior edge of such *yard* or *bufferyard*.
2. *Lighting Standards* – *Outdoor light fixtures* shall comply with the standards set forth in Table 7.02 - A: Lighting Standards.
3. *Gateway Corridor Light Source* – *Outdoor light fixtures* located on a *lot* in any R-MF-8, R-MF-15, NV, LB, TV, OR, CB, GB, BT, RT, or IT *district* within a *gateway corridor* shall utilize a white light source (including, but not limited to metal halide, LED or fluorescent induction), provided, however, low intensity architectural accent lighting (e.g., wall sconces, goose neck lights, etc.) located on or focussed on a building may utilize other light sources if specifically requested of and approved as an integral architectural element of a *development plan* for Architectural and Site Design Review. [Amended Ordinance #10-11, Ordinance #11-03]*
4. *Maximum Light Levels* – The maximum light level permitted anywhere on a *lot* shall not exceed fifteen (15) horizontal *maintained foot candles*, unless specifically authorized by a sub-Section of this Section 7.02. The maximum light level shall not exceed 0.2 horizontal *maintained foot candles* at property lines adjacent to residential districts, or on a lot occupied by a dwelling unit, and two (2) horizontal *maintained foot candles* at property lines adjacent to non-residential uses and rights-of-way. The maintenance factor used in the design process to calculate horizontal *maintained foot candles* shall not be lower than 0.72 for high

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pressure sodium fixtures and 0.64 for metal halide fixtures or other white light SOURCES. [Amended Ordinance #10-11]

5. Mounting of Fixtures – *Full cutoff, cutoff* and *semi-cutoff* fixtures shall be mounted parallel to the ground and shall utilize a rigid mounting arm with no built-in uptilt and no adjustment feature.
6. Height of Fixtures – *Parking area outdoor light fixtures* and *loading area outdoor light fixtures* shall be of uniform size, design and height.

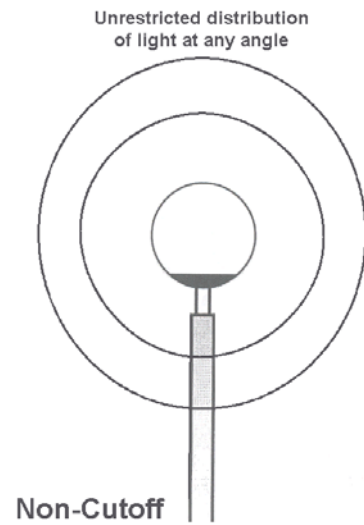
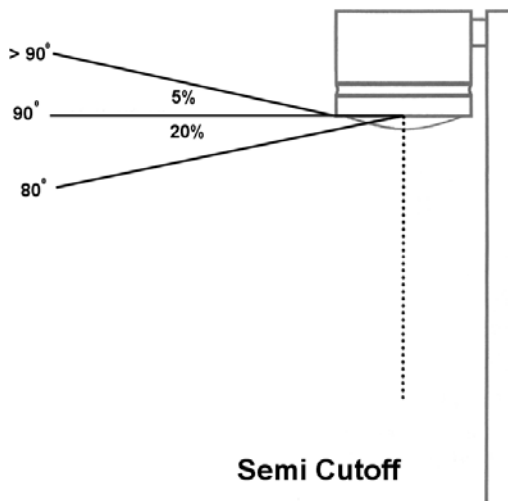
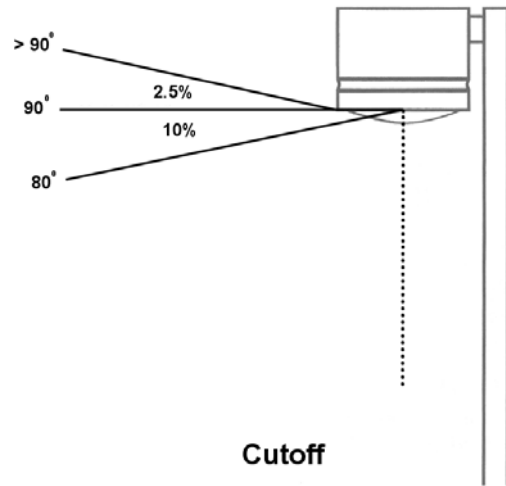
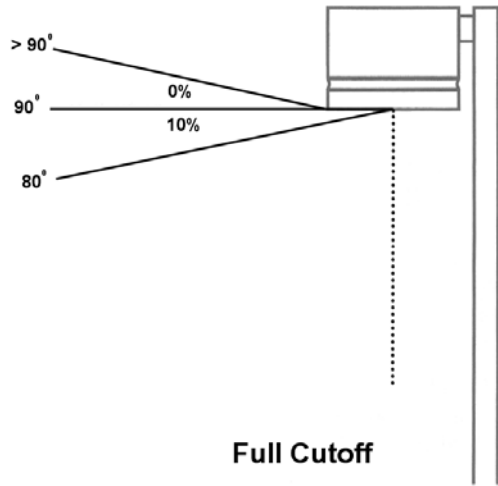
Table 7.02 – A: Lighting Standards [Amended Ordinance #10-11, Ordinance #11-03]*			
District ⁽¹⁾	Type of Fixture	Maximum Height of Pole and Base	Maximum Wattage
R-30, R-20, R-15, R-10, R-8	<i>Full Cutoff</i>	32'	400
	<i>Non Cutoff</i>	20'	100
R-MF-8, R-MF-15, NV, LB, TV, PUD	<i>Full Cutoff</i>	32'	400
	<i>Non Cutoff</i>	20'	100
OR, CB, GB (non-Gateway Corridor, no Bufferyard ⁽⁴⁾)	<i>Full Cutoff</i>	37'	400
	<i>Cutoff</i>	32'	400
	<i>Semi Cutoff</i>	27'	400
	<i>Non Cutoff</i> ⁽³⁾	16'	100
BT, RT, IT (non-Gateway Corridor, no Bufferyard ⁽⁴⁾)	<i>Full Cutoff</i>	37'	400
	<i>Cutoff</i>	32'	400
	<i>Semi Cutoff</i>	27'	400
OR, CB, GB (within a Gateway Corridor or lots which include a Bufferyard ⁽⁴⁾)	<i>Full Cutoff</i>	32'	400
	<i>Non Cutoff</i> ⁽³⁾	16'	100
BT, RT, IT (within a Gateway Corridor or lots which include a Bufferyard ⁽⁴⁾)	<i>Full Cutoff</i>	32'	400

⁽¹⁾ Note: R-30, R-20, R-15, R-10 and R-8 are *single family dwelling districts*. R-MF-8 and R-MF-15 are *multifamily dwelling districts*. NV = Neighborhood Village, LB = Local Business, TV = Town Village, OR = Office / Research Park, CB = Community Business, GB = General Business, BT = Business and Technology, RT = Research and Technology, IT = Industry and Technology, and PUD = Planned Unit Development.

[Amended Ordinance #10-11, Ordinance #11-03]*

⁽²⁾ *Non-cutoff outdoor light fixtures* shall be limited to *walkways*, outdoor seating areas or other areas approved for such fixtures as part of an Architectural and Site Design Review approval.

⁽³⁾ Bufferyard is a *minimum yard* on a non-residential land use on a lot which faces or abuts a residential *district* or residential portion of a PUD *District*.



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7. Power Supply – *Outdoor light fixtures* located on light poles shall be provided power by underground wiring.
8. Design of Fixtures – All *outdoor light fixtures* on a *lot, out lot, single use site, integrated center, business park* or *industrial park*, including those on free-standing light poles and those attached to *buildings*, security lights, and architectural lights, shall be of consistent or compatible style, pole height, mounting height, color, intensity, design and materials with other *outdoor light fixtures* within the *lot, out lot, single use site, integrated center, business park* or *industrial park*.
9. Wall Pack Lights – Wall pack *outdoor light fixtures* shall be subject to the following regulations:
 - a. Wall pack *outdoor light fixtures* located on a front or side façade of a *building* or *structure* located within a *gateway corridor* shall be *full cutoff*.
 - b. Wall pack *outdoor light fixtures* oriented toward an abutting residential *district* shall be *full cutoff*.
 - c. Low intensity, architectural style wall pack *outdoor light fixtures* may be used when approved as an integral architectural element of a *development plan* for Architectural and Site Design Review and are used to accent architectural elements of the *building* or *structure* or to illuminate entrance areas.
10. *Vehicular Canopy Light Fixtures* – *Outdoor light fixtures* located under a *vehicular canopy* of drive through *structures* (e.g., gasoline service station canopies, bank drive through *canopies*, etc.) shall be:
 - a. *full cutoff* fixtures with a maximum intensity of three-hundred and twenty (320) watts; and,
 - b. notwithstanding the provisions of sub-Section 7.02, A., 4., to the contrary, the maximum light level under the *vehicular canopy* shall not exceed twenty (20) horizontal *maintained foot candles*.
11. *Awning and Canopy Lighting* – *Awnings* and *canopies* used for *building* accents over doors, windows, *walkways*, and the like, shall not be internally illuminated (i.e., not lit from underneath or behind).
12. Flag and Statue Lights - *Outdoor light fixtures* used to illuminate flags, statues or other objects mounted on a pole, pedestal or platform shall use a very narrow cone of light (e.g., a maximum NEMA Beam 3X3, or comparable) for the purpose of confining the light to the object of interest and minimizing spill-light and *glare*.

13. *Glare on Public Right-of-Way* - Architectural or *sign* lighting shall be so directed and shielded that the light element is not visible from any point along an adjacent *public right-of-way*. (See Section 7.03, G., 7. – *Illuminated Signs*, for related regulations for *signs*.)

14. Floodlights – *Outdoor light fixtures* equipped with floodlights may only be permitted on a *lot* as follows:
 - a. Floodlights shall not be permitted:
 - (1) within the R-MF-8 *District*;
 - (2) within the R-MF-15 *District*;
 - (3) on any *lot* in a Commercial / Mixed Use *District* or any Industrial *District* with any portion of the *lot* located within a *gateway corridor*; or,
 - (4) within any *multifamily* or non-residential portion of a PUD *District*,

provided, however, that floodlights may be used in the above situations when specifically requested of and approved as an integral architectural element of a *development plan* for Architectural and Site Design Review and are used to accent architectural elements of the *building* or *structure*.
 - b. Floodlights, when permitted, shall be:
 - (1) located and directed away from the *lot line* at an angle of plus or minus fifteen (15) degrees of being perpendicular to the *lot line*;
 - (2) focussed on the primary *building* or the area of the *lot* located between the floodlight and the primary *building*; and,
 - (3) shielded to the extent that the main beam from the *luminaire* is not visible from or causes any *glare* onto adjacent properties or *rights-of-way*.

15. Lighting Plans – The following information, at a minimum, shall be provided for all lighting plans:
 - a. A site plan which includes the outline of *buildings*, *structures* and other *improvements* (e.g., *parking areas*, *loading areas*, *interior access drives*, etc.) on the *lot*.

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- b. A point-by-point indication of the maximum horizontal *maintained foot candles* superimposed on the site plan, indicating the location and aiming of *outdoor light fixtures* in compliance with the regulations of this Section.
- c. A description of the *outdoor light fixtures*, including but not limited to manufacturers or electric utility catalog specifications sheets, drawings or photometric report, which indicate the *outdoor light fixture* classification (e.g., *cutoff*, *semi-cutoff*, *full cutoff*, or *non-cutoff*), type of light (e.g., high pressure sodium, metal halide, LED, fluorescent induction) and wattage proposed for each *outdoor light fixture*. [Amended Ordinance #10-11]*

B. Special Regulations.

Notwithstanding anything in this Section to the contrary, the following special regulations shall apply to Sport and Athletic Field Lights, Areas of Outdoor Display and Loading Areas. Where a special regulation does not exist in this sub-Section 7.02, B., the regulations contained elsewhere in this Section 7.02 shall apply.

- 1. Sport and Athletic Field Lights - *outdoor light fixtures* for sport and athletic fields:
 - a. shall not exceed one-hundred and ten (110) feet in height above *grade*, provided, however, that for any *outdoor light fixture* located at a height of eight (80) feet above *grade* or higher, the applicant shall demonstrate that the additional height is necessary to reduce spill and *glare*;
 - b. shall be of a type and manufacturer that offers a spill and *glare* control package and shall be fitted with the manufacturer's spill and *glare* control package;
 - c. shall not exceed 0.3 horizontal *maintained foot candles* at the *lot line*;
 - d. shall be extinguished no later than one (1) hour after the end of the event; and,
 - e. may exceed the maximum lighting level set forth in this Section, subject to the approval of the *Town Council*, when needed to accommodate tournament level play. [Amended Ordinance #04-06]*

2. Areas of Outdoor Display or Sales of Merchandise – The maximum point light level permitted for areas of outdoor display or sales of merchandise (i.e., automobile dealerships and the like) on a *lot* shall not exceed twenty (20) horizontal *maintained foot candles*, provided, however, that *outdoor light fixtures* used to illuminate areas of outdoor display or sales of merchandise shall be reduced in light levels to an average level of 1.0 maintained horizontal foot candle (i.e., sufficient for security purposes) within thirty (30) minutes after the closing of business for the day.
3. *Loading Areas* – The maximum point light level permitted for those portions of a *lot* devoted to *loading areas* where materials or merchandise are loaded and unloaded shall not to exceed twenty (20) horizontal *maintained foot candles*.

C. Exempt Lights.

1. Holiday Decorations – Temporary *outdoor light fixtures* used for the observance of religious, national, or state holidays provided that such temporary lights shall not be installed more than thirty (30) days prior to the holiday and shall be removed not more than fifteen (15) days after the holiday and in accordance with the following requirements:
 - a. All temporary outdoor light fixtures shall utilize strings of single-strand, horizontal mini-bulb lights, that may include decorative globes, shades, lanterns, and so forth. [Amended Ordinance #13-09]
2. Trellis Lighting [Added Ordinance #13-09]

Lighting may be incorporated with the use of trellises, and awnings, in accordance with the following requirements:

 - a. Shall utilize strings of single-strand, horizontal mini-bulb lights, that may include decorative globes, shades, lanterns, and so forth.
 - b. Shall not be placed on a fence. [Added Ordinance #14-07]*
3. Public Lighting – All *outdoor light fixtures* originating from public areas and ways, including but not limited to parks, rights-of-way, public art or other public facilities, that are installed for the benefit of the public health, safety and welfare. [Renumbered Ordinance #13-09]
4. Fossil Fuel Lights – All *outdoor light fixtures* producing light directly from the combustion of fossil fuels (i.e., kerosene lanterns or gas lamps). [Renumbered Ordinance #13-09]

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5. Construction / Emergency Lighting – All *outdoor light fixtures* provided in connection with construction work or the abatement of an emergency situation necessitating said lighting, provided that the use of such *outdoor light fixtures* are discontinued during hours when construction activity or emergency abatement is not in progress and that such *outdoor light fixtures* are removed upon completion of the construction activity or the abatement of the emergency. [Renumbered Ordinance #13-09]
6. Internal Illumination of Signs – All *outdoor light fixtures* which are completely enclosed within a *sign cabinet* and which provide illumination only for a *sign face*. (See also Section 7.03, G., 7., – Illuminated Signs.) [Renumbered Ordinance #13-09]
7. *Single Family Dwelling* or *Two Family Dwelling Lots* – All *outdoor light fixtures* used for the illumination of personal property and that are not part of a *development plan, preliminary plan, master plan* or *project review*, provided, however, that such *outdoor light fixtures* shall be subject to Section 2.08, D., 7., – Performance Standards regarding *glare*. [Renumbered Ordinance #13-09]

D. Temporary Lights.

1. Temporary Lights Permitted – The following types of *outdoor light fixtures* may be approved on a temporary basis by the *Director* prior to placement or use.
 - a. Civic Events – Temporary *outdoor light fixtures* used for civic events.
 - b. Special Events – Temporary *outdoor lighting fixtures* for such activities as circuses, fairs, carnivals, sporting events, and the like.

Such temporary lights shall not be installed more than thirty (30) days prior to the civic event or *special event* and shall be removed not more than fifteen (15) days after the civic event or *special event*. Temporary *outdoor light fixtures* authorized by this Section shall not be permitted for more than three (3) occurrences during a calendar year.

2. Searchlights – Notwithstanding anything contained in Section 7.02, E. – Prohibited Lights of this UDO to the contrary, temporary *outdoor light fixtures* used in connection with a civic event or *special event* may include one (1) portable, rotating searchlight provided, however, that such temporary *outdoor light fixture*:
 - a. shall not be permitted for more than three (3) occurrences during a calendar year;
 - b. shall not be used for a period of more than two (2) consecutive days during a civic event or *special event*;
 - c. shall not be operated between the hours of 10:00 p.m. and 8:00 a.m.; and,

d. shall otherwise comply with all other applicable provisions of this Section.

E. Prohibited Lights.

1. Flashing lights – Any lights that flash, move, revolve, rotate, scintillate, blink, flicker, vary in intensity or color, or use intermittent electrical pulsation.
2. Floodlights – Floodlights not in compliance with the regulations set forth above, or other form of *outdoor light fixtures* (including but not limited to stringer lights) not specifically authorized by this Section, that are ground mounted or attached to light poles, and used to illuminate the site, *buildings* or *structures*.
3. Outdoor strings of lights, including but not limited to those outlining *lot lines*, *outdoor display* areas, rooflines, doors, windows, landscaping or edges of walls, provided, however, outdoor strings of lights may be allowed when:
 - a. complying with Section 7.02, C. 1., – Holiday Decorations;
 - b. located in the TV – Town Village *District* and specifically requested and approved as an integral element of a *development plan* for Architectural and Site Design Review; or,
 - c. located within or outlining an outdoor seating area in a NV, LB, TV or CB *District* and specifically requested and approved as an integral element of a *development plan* for Architectural and Site Design Review.
4. *Luminous tube lighting*, provided, however, that *luminous tube lighting* may be used when specifically requested of and approved as an integral architectural element of a *development plan* for Architectural and Site Design Review.