

Chapter 5

OUTDOOR LIGHTING

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10-5-010: PURPOSE

The purpose of the Outdoor Lighting regulations is to:

- A. To prevent the degradation of the nighttime visual environment by production of unsightly, annoying, or dangerous glare;
- B. To minimize light pollution for the enjoyment of Coalville City residents and visitors;
- C. To create lighting practices that promote the health and safety of Coalville City residents and visitors;
- D. To prevent the unnecessary waste of energy and resources in production of excessive light or wasted light;
- E. To prevent interference of the use or enjoyment of property which is not intended to be illuminated at night and the loss of the scenic view of the night sky due to increased urban sky-glow and light trespass.

10-5-020: APPLICABILITY

All exterior outdoor lighting installed after the effective date of this Chapter in all zones in Coalville City shall conform to the requirements established by this Chapter.

- A. These regulations do not apply to indoor lighting, except Window Display Lighting.
- B. Should this Chapter be found to conflict with other sections of this Code, or a Development Agreement, Settlement Agreement or other agreement or regulation, the more restrictive shall apply.

10-5-030: APPLICATION AND REVIEW PROCEDURES

Lighting Plans Required: All Development Project permit applications or submittals that propose exterior outdoor lighting or street lighting shall include a lighting plan that shows evidence that the proposed lighting fixtures and light sources comply with this Chapter and shall include the following:

- A. Plans or drawings indicating the proposed location of lighting fixtures, height of lighting fixtures on the premises, and type of illumination devices, lamps, supports, shielding and reflectors used, with installation and electrical details.
- B. Illustrations, including but not limited to a manufacturer's catalog cut sheets of all proposed lighting fixtures. For commercial, and industrial uses, photometric cut-sheet diagrams of proposed lighting fixtures are also required. In the event photometric diagrams are not available, the applicant must provide enough information regarding the light fixture, lumens, degrees kelvin, and shielding mechanisms for the Planning Commission or Community Development Director to be able to determine compliance with the provisions of this Chapter.
- C. A table showing the total number of proposed exterior lights, by fixture type, degrees kelvin, lumens, and lamp type.

10-5-040: DEFINITIONS

For purposes of these regulations the following terms, phrases, and words shall have the meaning herein given:

- A. **COLOR TEMPERATURE (KELVINS):** Color temperature (correlated color temperature) is a way to describe the light appearance provided by a light fixture and is a gauge of how yellow or blue the color of light emitted from a light source appears. It is measured in degrees of kelvin on a scale from 1,000 to 10,000.
- B. **DEVELOPMENT PROJECT:** Any residential, commercial, industrial or mixed-use subdivision plan, development plan or building permit application which is submitted to the City for approval.
- C. **DIFFUSE:** To spread or scatter widely, or thinly.
- D. **DIRECT ILLUMINATION:** Illumination resulting from light emitted directly from a lamp or luminaire, not light diffused through translucent fixtures or reflected from other surfaces such as the ground or building facades.
- E. **DISPLAY LOT or AREA:** Outdoor areas where active nighttime sales activity occurs and where accurate color perception of merchandise by customers is required. To qualify as a display lot, one of the following specific uses must occur: automobile sales, boat sales, tractor sales, building supply sales, gardening or nursery sales, assembly lots, swap meets. Uses not on this list must be approved as display lot uses by the City.

- F. FLOOD LAMP or LIGHT: A specific form of lamp designed to direct its output in a specific direction (a beam) with a diffusing glass envelope
- G. FULL CUT-OFF LIGHT FIXTURE: A luminaire light distribution where no light is emitted above the horizontal.
- H. FULLY SHEILDED 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 as determined by photometric cut-sheets as certified by the manufacturer. Any structural part of the light fixture providing this shielding must be permanently affixed.
- I. GLARE: A light ray emanating directly from a lamp, reflector or lens such that it falls directly on the eye of the observer.
- J. INSTALLED: The attachment, or assembly fixed in place, whether or not connected to a power source, of any outdoor light fixture.
- K. LIGHT POLLUTION: Any adverse effect of manmade light.
- L. LIGHT TRESPASS: Light falling where it is not needed or wanted, typically across property boundaries.
- M. LUMENS: The measurement of the total amount of visible light (to the human eye) from a lamp or light source. The higher the lumen rating the "brighter" the lamp or light source will appear. The acceptability of a light fixture is determined by its Lumen output, not wattage.
- N. LUMINAIRE: The complete lighting assembly, less the support assembly. For purposes of determining total light output from luminaire, lighting assemblies which include multiple unshielded or partially shielded lamps on a single pole or standard shall be considered as a single unit.
- O. OPAQUE: Opaque means that a material does not transmit light from an internal illumination source.
- P. OUTDOOR LIGHT FIXTURE: An outdoor illuminating device, outdoor lighting or reflective surface, lamp or similar device, permanently installed or portable, used for illumination or advertisement. Such devices shall include but are not limited to lights used for:
 - 1. Parking lot lighting;
 - 2. Roadway lighting;
 - 3. Buildings and structures;
 - 4. Recreational areas;
 - 5. Landscape lighting;

6. Signs (advertising or other);
 7. Product display area lighting;
 8. Building overhangs and open canopies.
- Q. OUTDOOR RECREATION FACILITY: An area designed for active recreation, whether publicly or privately owned, including, but not limited to, baseball diamonds, soccer and football fields, golf courses, tennis courts and swimming pools.
- R. PERSON: Any individual, tenant, lessee, owner, or any commercial entity including, but not limited to firm, business, partnership, joint venture or corporation.
- S. SPECIAL USES/EVENTS: Uses and Events because of their temporary nature, uniqueness or public purpose, that warrant special lighting consideration. Special Uses and Events include schools and events, community events, churches, publicly owned buildings, civic centers and events, filming activities, or similar uses and events.
- T. SPOT LAMP or LIGHT: A specific form of lamp designed to direct its output in a specific direction (a beam) and with a clear or nearly clear glass envelope.
- U. TEMPORARY LIGHTING: Lighting which will not be used on a continuous or permanent basis which by their nature are of limited duration, such as holiday lighting decorations, civic events or construction projects.
- V. TRANSLUCENT: Permitting light to pass through but diffusing it so that the light source is not directly visible.
- W. WINDOW DISPLAY LIGHTING: Window display lighting includes glass enclosures, top of window or side valance lighting at the exterior frontage walls of a building. They are often designed with elaborate displays intended to attract and draw customers instore.
- X. TOTAL OUTDOOR LIGHT OUTPUT: The total outdoor light output is the maximum total amount of light, measured in lumens, from all outdoor light fixtures. For lamp types that vary in their output as they age (such as high-pressure sodium, fluorescent and metal halide), the initial output, as defined by the manufacturer, is the value to be considered.

10-5-050: LIGHTING STANDARDS AND FIXTURES

A. Full-Cutoff Fixture Requirements:

1. Unless specifically exempted by this Chapter, all outdoor lighting shall use full cutoff fixtures and shall be installed so light is directed downward with no light emitted above the horizontal plane of the fixture.

2. Lighting shall not be placed at a location, angle, or height that directs illumination or horizontal trespass outside the property boundaries where the light fixtures are located.
3. In order to qualify as a "full-cutoff" fixture, a light fixture top and sides must be opaque material so that light only escapes through the bottom of the fixture. Any glass or diffuser on the bottom of the fixture must be flush with the fixture (no drop lenses). Merely placing a light fixture under an eave, canopy, patio cover, or other similar cover does not qualify as full cutoff.
4. In certain cases, such as but not limited to steep topography, significant changes in grade, development near or within identified ridgelines may require additional shielding to mitigate glare or light trespass. Requirements for additional shielding will be considered as part of the lighting plan review process.
5. Lighting intensities shall be controlled so that neighboring areas will not be adversely affected by reflectivity including glare, indirect illumination or light trespass.

B. Prohibited Lighting: The following types of lights are prohibited:

1. Floodlights or spotlights affixed to buildings or poles for the purpose of lighting parking lots or sales display areas where the light source is directly visible.
2. Search lights, laser source lights or any similar high intensity lighting is prohibited except in emergencies by police and fire personnel or at their direction.
3. Flashing, blinking, intermittent or other lights that move or give the impression of movement, unless approved with a sign permit.
4. Neon or luminous tube lighting except as permitted in the Sign Regulations of Chapter 9.
5. Window Display Lighting between the hours of 10 p.m. and 7 a.m.
6. Completely transparent light fixture materials, such as clear glass.
7. Single, or multiple light bulb fixtures that directly emit light.

- C. **Kelvins (Color Temperature) Per Fixture:** The maximum correlated color temperature for Outdoor Light Fixtures is as follows:
1. All lighting shall make use of lamps with correlated color temperature not exceeding 4,000 degrees kelvin, except for roadway lighting as specified in Section 10-5-060:E herein. Color temperature in the range of 2,700 to 4,000 degrees kelvin is recommended.
 2. The correlated color temperature of lighting may exceed 4,000 degrees kelvin in situations where the City determines that accurate color rendition is crucial to public safety or the activities of law enforcement. In no case shall the correlated color temperature of such critical lighting exceed 6,000 degrees kelvin.
- D. **Lumens (Brightness) Per Fixture:** The maximum lumens allowed for Outdoor Light Fixtures are as follows:
1. For single-family and multi-family residential uses, fixtures up to 2,500 Lumens output per lamp.
 2. For commercial and industrial, fixtures up to 4,000 lumens output per lamp.
 3. Total Outdoor Light Output: Total outdoor light output, excluding streetlights used to illuminate public rights-of-way and under gas station canopy lighting, shall not exceed the following limits averaged over the entire project:
 - a. For single-family detached dwellings and duplexes, the maximum total outdoor light output shall not exceed 25,000 lumens per parcel.
 - b. For commercial, industrial and multi-family dwelling units, the maximum total outdoor light output shall not exceed 150,000 lumens per acre.

10-5-060: SPECIFIC REQUIREMENTS FOR LIGHTING APPLICATIONS

- A. **Light Trespass:** Fixtures shall be located at the necessary distance from property boundary lines to ensure light does not trespass onto adjacent property.
- B. **Wall Mounted Area Lighting:** All wall mounted or building mounted fixtures shall not exceed twelve feet (12') above Finished Grade, measured directly below the light fixture. In cases where there is second story access directly from the outdoors, a single fixture may be placed above or adjacent to the access.
- C. **Parking Lot Lighting:**
1. Pole top mounted fixtures shall not be mounted higher than twenty feet (20') above Finished Grade, as measured to the top of the fixture.
 2. All parking lot lighting shall include Full Cut-Off Fixtures.

3. All pole mounted parking lot lights shall be set back from property lines a distance equal to two (2) times the height of the pole.
4. Pole mounted fixtures shall be limited to two (2) light sources per pole.
5. Spot lighting of parking lots from a building, pole or other structure is prohibited.
6. On parking lots greater than one-fourth (1/4) acre in size, programmable full cut-off fixtures shall be used. These fixtures shall be dimmable and paired with motion sensors that are incorporated into the lighting system. Commercial businesses located within the Highway (HC) Zone are exempt from this requirement.

D. Walkway/Pathway Lighting: All pathway pole top fixtures shall not be mounted higher than ten feet (10') above Finished Grade directly below the fixture, as measured to the top of the fixture.

E. Roadway Lighting:

1. Residential Street Lighting shall not exceed fourteen feet (14') above Finished Grade to the top of the fixture. All residential streetlights shall utilize lamp types that are full cut-off with correlated color temperature not exceeding 4,000 degrees kelvin.
2. Major Roadway lighting, including arterial and collector roads, shall not exceed twenty feet (20') above Finish Grade to the top of the fixture. All major roadway lighting fixtures shall utilize lamp types that are full cut-off with correlated color temperature not exceeding 5,000 degrees kelvin.

F. Gas Station Canopy Lighting:

1. Lighting levels of gasoline station canopies shall be limited to illuminating the activities taking place under the canopy, not to attract attention to the business.
2. Gas station canopies may be illuminated provided all light fixtures are mounted on the undersurface of the canopy and all light fixtures are full cut-off. The undersurface of the canopy shall be a nonreflective material and non-gloss color.
3. Under gas station canopy lighting shall be exempt and not included in the total outdoor light output calculation for the property in which the canopy is located.

G. Soffit Lighting:

1. For Detached Single-Family Dwellings if lighting with fixtures mounted in the soffit of a building, the fixture shall not be mounted above twelve feet (12') in height, as measured from the fixture to Finish Grade.
2. For Commercial, Industrial and Multi-Family Dwellings, if lighting with fixtures mounted in the soffit of a building, the fixture shall not be mounted above twenty feet (20') in height, as measured from the fixture to Finish Grade.
3. Light fixtures mounted in soffits shall be recessed so that the lens cover is recessed or flush with the bottom surface of the soffit and/or shielded by the fixture.

H. Outdoor Recreation and Athletic Facility Lighting: Recreational lighting shall minimize the Glare of spill light and up-light by using louvers, hoods, or shielding.

1. Recreational lighting shall only illuminate the field or court area avoiding any direct illumination beyond those areas or into adjoining properties
2. Pole mounted recreational lighting shall be limited to twenty feet (20') in height.
3. Pole mounted recreational lighting must be set back a minimum of fifty feet (50') from adjacent residential properties.
4. Lighting for outdoor sports fields and courts shall be shut-off no later than eleven o'clock (11:00) P.M.
5. Lighting for non-field and non-court areas shall conform to the provisions of this Chapter.

Exemption-Public Recreational Facilities: Because of their unique requirements for nighttime visibility and limited hours of operation, lighting fixtures for public baseball diamonds, playing fields and tennis courts may exceed the twenty-foot (20') height limit subject to the following:

- a. All applications for pole height greater than twenty feet (20') shall be reviewed by the City Staff and approved by the City Council.
- b. In no case shall any lighting fixture exceed sixty feet (60') in height as measured from the top of the fixture to the adjacent grade.
- c. Lighting fixtures shall be subject to all other requirements in this Chapter.

I. Towers:

1. All monopole, antenna, tower or support facility lighting not required by the Federal Aviation Administration (FAA) or the Federal Communication Commission (FCC) is prohibited.
2. When lighting is required by the FAA or the FCC, such lighting shall not exceed the minimum requirements of those agencies. Collision markers should have a dual mode for day and night to minimize impact to the night sky and migrating birds.
3. All other lighting used on the property not regulated by the FAA or FCC shall conform to this Chapter.

10-5-070: EXEMPTIONS: The following lighting shall be exempt from the requirements and review standards of this Chapter, provided such lighting does not create dangerous glare on adjacent streets or properties, is maintained, and does not constitute a public hazard or nuisance:

1. Exemptions to Full Cut-off Fixture Requirements:
 - a. Fixtures having a total light output less than one thousand (1,000) lumens (allowing a maximum of a 60-watt incandescent or a 15-watt compact fluorescent bulb) are exempted from the full cut-off requirement provided:
 - i. The fixture has a top that is completely Opaque such that no light is directed upwards.
 - ii. The fixture has sides that completely cover the light source and are made of Opaque or semi Opaque material. Fixtures with Opaque sides may have incidental decorative perforations that emit small amounts of light.
 - iii. Semi Opaque material such as dark tinted glass or translucent plastic may be used if the light source is not discernable behind the material.
 - iv. The direct light source is not visible beyond the property on which the fixture is located.
2. Low voltage lights used to illuminate pathways, provided the lights are installed no more than eighteen inches (18") above finish grade.
3. Holiday lighting. Holiday lighting which is temporary (45 days before a holiday and 15 days after a holiday) shall be exempt from the provisions of this Chapter.
4. Traffic control signals and devices.
5. Temporary emergency lighting in use by law enforcement or government agencies or at their direction.
6. The lighting of federal or state flags, provided that the light is a narrow beam aimed and shielded to illuminate only the flag. Flag lighting should use

appropriate illumination levels to light the flag, while at the same time fulfilling the purposes of this Chapter.

7. Historic lighting in the Historic Downtown Commercial District if the lighting is consistent with the exterior lighting provisions of the Coalville City Architectural Design Guidelines.
8. Architectural lighting intended to accent or draw attention to architectural features of a building or structure within the property boundary and not trespass off-site.
9. Landscape lighting intended to accent or draw attention to landscape elements of the property and not trespass off-site.
10. Agriculture lighting. Lighting for agriculture activities or agricultural buildings is exempt from the requirements of this chapter, provided such lighting is directed downward and shielded to prevent Glare on adjacent streets or properties.
11. Special Uses and Events Lighting. Uses, events and buildings, defined as Special Uses/Events, may include lighting to illuminate buildings and other structures or activities.

10-5-080: PENALTY

Any person found guilty of violating any of the provisions, rules and regulations of this Chapter, is guilty of a Class "C" misdemeanor, pursuant to Utah Code Annotated, as amended. Each violation shall be subject up to a \$100 fine for each day the violation continues beyond the correction notice date issued by the City for such violation.

10-5-090: APPEALS

Any Person aggrieved by an administrative action by the Staff or Planning Commission may appeal the decision to the City Council who shall have authority to reverse, affirm or modify the decision of the Staff or Planning Commission.