

City Code 408 section H

- 1 Outdoor floodlighting by flood light projection above the horizontal is prohibited except for lamps specifically exempted under sections H.11 and H.18 and properly adjusted motion sensing security lighting fixtures as defined in subsection F.14.*
- 2 All light fixtures which are required to be shielded shall be installed in such a manner that the shielding complies with the definition of fully shielded fixtures.*
- 3 All light fixtures, including security lighting, except street lamps, shall be aimed or shielded so that the direct illumination shall be confined to the property boundaries of the source. Particular care is to be taken to assure that the direct illumination does not fall onto or across any public or private street or road. Motion sensing lighting fixtures shall be properly adjusted, according to the manufacturer's instructions, to turn off when detected motion ceases.*
- 4 No new mercury vapor light fixtures nor replacement equipment other than bulbs shall be sold or installed for use as outdoor lighting within the City of Cottonwood after the effective date of this Code, and the use of mercury vapor light fixtures for outdoor lighting is prohibited after January 1, 2005.*
- 5 Search lights, laser source lights, strobe or flashing lights, motion or illusion lights or any similar high-intensity light shall not be permitted, except in emergencies by police and fire personnel at their direction or as permitted in subsection K-1.*
- 6 Class 1 lighting, including but not limited to, sales, service, commercial, assembly, repair, maintenance, and industrial areas, may only continue in operation until 10:00 p.m., or for as long as the area is in active use. This provision is not applicable to fixtures lawfully installed or implemented prior to the adoption of the Code.*
- 7 Class 2 lighting shall have no time restrictions except as specified by the Development Review Board for new projects.*
- 8 Class 3 lighting, except for flag pole lighting, must be extinguished after 10:00 p.m. or when the business closes, whichever is later, except that low-wattage holiday decorations may remain on all night from November 15 to January 15.*
- 9 Multi-class lighting, except for security lights, must conform to the time limitations of the most strict class.*
- 10 Except as permitted in subsections H.11, H.12 and H.13, total outdoor light output, excluding streetlights used for illumination of public rights-of-way, of any development project shall not exceed 100,000 lumens per net acre, averaged over the entire property. No more than 5,500 lumens per net acre may be accounted for by lamps in unshielded fixtures permitted in subsection H.18.*

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- 11 Lighting, in all cases, for all outdoor athletic fields, courts, tracks or ranges shall be considered Class 1 (Color Rendition). Lighting allowed in this subsection shall be subject to approval of the Development Review Board. When the proposed lumens per acre exceeds the limits of subsection H.10, the installation shall be designed to achieve no greater than the minimum illuminance levels for the activity as recommended by the Illuminating Engineering Society of North America (IESNA). The installation shall also limit off-site spill (off the parcel containing the sports facility) to a maximum of 0.5 fc at any location on any non-residential property, and 0.05 fc at any location on any residential property, as measurable from any orientation of the measuring device. Every such lighting system design shall be certified by an Arizona registered engineer as conforming to all applicable restrictions of this Code. 106 All events shall be scheduled so as to complete all activity by 10:00 p.m. Illumination of the playing field, court, track or range shall be permitted after 10:00 p.m. only to conclude a scheduled event that was unable to conclude before 10:00 p.m. due to unusual circumstances. Fully shielded lighting shall be required for fields designed for amateur, recreational or non-professional sports activity. For professional level sports facilities where fully shielded fixtures are not utilized, acceptable luminaries shall include those which:
- a. Are provided with internal or external glare control louvers, or both, and installed so as to minimize uplight and offsite light trespass as required in subsection F.10 above, and;
 - b. Are installed and maintained with aiming angles that permit no greater than two percent (2%) of the light emitted by each fixture to project above the horizontal.
- 12 Lighting for Outdoor Display Lots shall be considered Class 1 (Color Rendition), and shall conform to the lumens per acre limits of subsection H.10 except as follows:
- a. All such lighting shall utilize fully shielded luminaries that are installed in a fashion that maintains the fully-shielded characteristics. When the proposed lumens per acre exceed the limits of subsection H.10 the installation shall be designed to achieve no greater than the minimum illuminance levels for the activity as recommended by the Illuminating Engineering Society of North America (IESNA). The installation shall also limit off-site spill (off the parcel containing the display lot) to a maximum of 0.5 fc at any location on any non-residential property, and 0.05 fc at any location on any residential property, as measurable from any orientation of the measuring device. Every such lighting system design shall be certified by an Arizona registered engineer as conforming to all applicable restrictions of this Code. Outdoor Display Lot lighting exceeding the lumens per acre cap of Section H.10 shall be turned off at 10:00 p.m. or within thirty minutes after closing of the business or activity whichever is later. Lighting in the Outdoor Display Lot after this time shall be limited to Class 2 lighting, and shall conform to all restrictions of this Code applicable for this class, including the lumens per acre caps in Section H.10.
 - b. Lighting allowed in this subsection shall be subject to approval of the Development Review Board.
- 13 Lighting for Service Station or similar canopies shall be considered Class 1 lighting. All luminaries shall be flush with the lower surface of canopies and utilize flat glass or plastic covers. The total light output used for illuminating service station canopies, defined as the sum of under-canopy initial bare-lamp outputs in lumens, shall not exceed forty (40) lumens per square foot of canopy. All lighting mounted under the canopy, except internally illuminated signs, shall be included in the total. Fifty percent (50%) of the lumen output of all lamps mounted within or under a canopy, except internally illuminated signs, is included in the lumen caps in subsection H.10.
- 14 Lighting used for all externally illuminated signs shall conform to all restrictions of this Code, shall be fully shielded, and shall be turned off at 10:00 p.m. or when the business closes, whichever is later.

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15 All site lighting not directly associated with the special uses as permitted in subsections F.14, H.11, H.12, and H.13 shall conform to all lighting standards described in this Code.

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16 Outdoor internally illuminated advertising signs shall either be constructed with an opaque background and translucent letters and symbols or with a colored (not white, cream, off-white, yellow or other light color) translucent background, with either translucent or opaque letters and symbols. Opaque means only that the material must not transmit light from the internal illumination source: the color of such opaque backgrounds is not restricted by this section. Lamps used for internal illumination of such signs shall not be included in the lumens per net acre limit set in subsection H.10. All illuminated signs shall be turned off at 10:00 p.m. or when the business closes, whichever is later.

17 All outdoor neon lighting shall be fully shielded and shall be turned off at 10:00 p.m. or when the business closes, whichever is later.

18 The requirements for lamp source and shielding of light emissions for outdoor light fixtures are as follows:

Shielding/Use Code:

A = allowed, unshielded

F = allowed, fully shielded

LAMP TYPE	SHIELDING
Class 1, 2 and 3 lighting:	
All lamp types above 2050 lumens	F (See Note 1)
All types below 2050 lumens	A (See Note 2)
All neon tube lighting	F

Note 1. Examples of lamp types of 2050 lumens and below (the acceptability of a particular light is decided by its lumen output, not wattage. Check manufacturer's specifications):

- a. 100 Watt Standard Incandescent and less
- b. 100 Watt Midbreak Tungsten-Halogen (quartz) and less
- c. 25 Watt T-12 Cool White Fluorescent and less
- d. 18 Watt Low Pressure Sodium and less

Note 2. Lights shall be shielded whenever feasible to minimize light spilled into the night sky or adjacent properties. Unshielded lights (all types) are limited to a maximum of 5,500 lumens per net acre (see subsection H.10). Residential parcels and Development Projects containing one net acre or less are allowed 5,500 lumens of unshielded light (all Classes).



Thank you the Architectural Committee

Updated: 08/09/2018