

COCHISE COUNTY LIGHT POLLUTION CODE

Section 1. Administration

1.01 Purpose

To achieve effective and efficient lighting, while preserving the safety, security and well-being of County residents and visitors. To protect and enhance the lawful nighttime use and enjoyment of all property through protection of access to the dark night skies, and to encourage the conservation of energy and other resources. To specify and encourage lighting practices and systems that will minimize the adverse man-made light pollution effects of sky-glow, glare and light trespass.

1.02 Conformance with Applicable Codes

All outdoor electric illuminating devices shall be installed in conformance with the provisions of this Code, the Cochise County Zoning Regulations, Cochise County Subdivision Regulations, and any applicable building codes.

Where any provision of any of the Arizona Revised Statutes, or any Federal Law, or any related Cochise County regulation conflicts with the requirements of this Light Pollution Code, the most restrictive shall govern.

1.03 Approved Material and Methods of Installation

The provisions of this Code are not intended to prevent the use of any material or method of installation not specifically proscribed by this Code, provided any such alternate has been approved. The County Zoning Inspector may approve any such alternate provided he finds that proposed design, material or method:

- A. Provides approximate equivalence to those specific requirements of this Code, or
- B. Is otherwise satisfactory and complies with the intent of the Code.

1.04 Applicability

- A. New Uses, Buildings and Additions or Modifications.

The requirements of this Code shall apply to any and all new uses and to additions to existing land uses, developments, buildings, or structures.

1. If a major addition occurs on a property with a non-residential use, the entire property shall comply with the requirements of this Code. For purposes of this section, major additions are additions of 50 percent or more in terms of additional dwelling units, gross floor area or seating capacity, either with a single addition or with cumulative additions subsequent to the effective date of this provision.

2. Minor additions (defined as additions or modifications less than 50 percent of existing uses) on a property with a non-residential use shall require the submission of a complete inventory and site plan detailing all existing and any proposed new outdoor lighting. Any new lighting on the site shall meet the requirements of this Code with regard to shielding and lamp type; the total amount of lumens after the modifications are complete shall not exceed that on the site before the modification, or that permitted by this code, whichever is larger.

B. Change of Use. Whenever the use of any existing building, structure, or premises is changed to a new use, all outdoor lighting shall be reviewed and brought into compliance with all provisions of this Code before the new use commences.

C. Resumption of Use after Abandonment. If a property or use with non-conforming lighting is abandoned as defined in Section 2, then all outdoor lighting shall be reviewed and brought into compliance with all provisions of this Code before the use is resumed.

Section 2. Definitions

Abandonment: The discontinuation of use for a period of one year or more.

Class 1 Lighting: All outdoor lighting used for, but not limited to, outdoor sales or eating areas, assembly or repair areas, recreational facilities and other similar activities where COLOR RENDITION is important. Class 1 lighting includes metal halide, quartz halogen and similar light sources.

Class 2 Lighting: All outdoor lighting used for, but not limited to, illumination for walkways, roadways, equipment yards, parking lots and outdoor security where GENERAL ILLUMINATION for safety or security is the primary concern.

Class 3 Lighting: All outdoor lighting used for DECORATIVE effects, including but not limited to, architectural illumination, flag and monument lighting, and illumination of vegetation.

Color Rendition : the ability of a light source to faithfully reproduce the colors seen in an object.

Decorative: Lighting which is used for non-utilitarian purposes such as lighting building exteriors, fountains, flags, landscaping, holiday and seasonal decorations (Class 3 lighting).

Footcandle: a unit of illumination produced on a surface, all points of which are 1 foot from a uniform point source of one candle.

General Illumination: Outdoor lighting used for, but not limited to, illumination for walkways, roadways, equipment yards, parking lots, and outdoor security where safety or security of the grounds is the primary concern (Class 2 lighting).

Glare: The sensation produced by a bright light source within the visual field that is sufficiently brighter than the level to which the eyes are adjusted, causing discomfort and/or loss in visual performance or visibility.

IESNA: Illuminating Engineering Society of North America.

Illuminance: The amount of light falling onto a surface area, measured in footcandles (lumens per square foot) or lux (lumens per square meter). For conversion purposes, 1 footcandle (fc) is equal to 10.76 lux (lx).

Installed: The attaching, or assembling in place of any outdoor light fixture.

Light Fixture, Full Cut-off: (See Light Fixture, Fully Shielded)

Light Fixture, Fully Shielded: A light fixture constructed, installed and maintained in such a manner that all light emitted by the fixture, either directly from the lamp or indirectly by reflection or refraction from any part of the fixture, is projected below a horizontal plane running through the lowest part of the fixture.

A practical way to determine if a fixture or tube is fully shielded: if the lamp or tube, any reflective surface, or lens cover (clear or prismatic) is visible when viewed from above or directly from the side, from any angle around the fixture or tube, the fixture or tube is not fully shielded.

Light Trespass: Stray electric light in excess of the levels specified in Section 4.01 falling where it is not wanted or needed. Direct or reflected light that has its source on one site, and illuminates areas beyond the property boundaries. Light trespass is typically produced by stray light from unshielded or misdirected outdoor lighting, and includes glare from direct viewing, as well as “off-site spill” light.

Lumen: A unit used to measure the total amount of light that is produced by a luminaire.

Luminaire: A light fixture, including the complete lighting assembly (including lamps, housings, reflectors, lenses and shields), but excluding the support assembly.

Off-Site Spill: Any combination of glare, uplight (sky glow) and/or light trespass applicable, but not limited to, structure exterior lighting, roadway/street lighting, pedestrian malls, parks, recreational facilities, outdoor display lots, parking lots, service stations, billboards and signage.

Opaque: Opaque means a material that does not transmit light from an internal illumination source.

Outdoor Light Fixtures: Outdoor electric illuminating devices, outdoor fixtures, lamps and other devices; searchlights, spot lights, flood lights, permanently installed or portable, used for illumination, emergency, security or commercial purposes. Such devices shall include, but are not limited to, lights for:

- a. parking lots
- b. roadways
- c. buildings and structures
- d. recreational areas and facilities
- e. landscaping decorative effects
- f. billboards and signs (advertising and other)
- g. product display areas

Outdoor Recreational Facility: An area designed for active recreation, whether publicly or privately owned, including but not limited to parks, baseball or softball diamonds, soccer and football fields, golf courses, tennis courts, and roping/equestrian arenas.

Person: Shall mean any private individual, tenant, lessee, owner, or any commercial entity including but not limited to companies, partnerships, joint ventures or corporations.

Residential Lighting: Residential refers to outdoor lighting for single or multiple household dwellings (duplexes).

Sky-glow: The undesirable and unnecessary emission of light rays, directly or indirectly, into the night sky.

Use, Non-Residential: The use of land for a purpose other than single-family dwelling units or a duplex.

Watt: The unit used to measure the electrical power consumption (not the light output) of a lamp.

Section 3: Procedures for Lighting Compliance

3.01 Applications

A. Any individual applying for a building or use permit under the Cochise County Zoning Regulations intending to install outdoor light fixtures shall as a part of said application submit evidence that the proposed work will comply with these provisions.

B. All other individuals intending to install, replace or improve any outdoor light fixture shall comply with the provisions of this Code, and if a permit is required by the Zoning Regulations or Building Codes, submit an application to the County Zoning Inspector providing evidence that the proposed work will comply with these provisions.

3.02 Contents of Application or Submission

The following plans and descriptions shall be sufficiently complete to enable the County Zoning Inspector to readily determine whether the project will be in compliance with the requirements of this Code. If such plans and descriptions are not sufficient to enable this ready determination, by reason of the nature or configuration of the devices, fixtures or lamps proposed, the applicant shall submit evidence of compliance prepared by a certified illumination engineer. The submission shall contain:

A. Plans indicating the location on the premises, and the type of all illuminating devices, existing and proposed.

B. Description of the existing and proposed illuminating devices, fixtures, lamps, supports and other devices, and the initial lumen output. This description shall include but is not limited to, manufacturers' catalog cuts, photographs, diagrams and/or drawings.

3.03 Issuance of Permits

Upon compliance with these lighting provisions, as well as the other requirements for permit issuance, the County Zoning Inspector shall issue a permit. The appeal procedures of the Zoning Regulations for decisions of the County Zoning Inspector shall apply in the event of any dispute as to the application of these regulations.

3.04 Amendment to Permit

Substitution of outdoor light fixtures or lamps after a permit has been issued requires County Zoning Inspector approval prior to installation. Amendments to permits for the installation of outdoor light fixtures require adequate information to assure compliance with this Code, pursuant to §3.02.

Section 4. General Requirements

4.01 Light Trespass and Glare

- A. All fixtures and lamps shall be located, installed, directed, shielded and maintained to avoid light trespass and to minimize direct light and/or glare on neighboring properties and roadways.
- B. For a receiving residential site, the level of light trespass, shall not exceed 0.2 footcandles as measured with the meter's sensor perpendicular to the light source at a height of five feet above the ground and located five feet inside the receiving property line. For a receiving non-residential site, the level of light trespass shall not exceed 0.5 footcandles under the same parameters.

4.02 Height

- A. Residential Sites: The overall height of lighting fixtures (including the base) shall not exceed 20 feet above ground level, except for residential sites with a minimum parcel size of 4 acres or larger, lighting fixtures which are located 50 feet or more from any property line shall not exceed 30 feet in height (including the base) above ground level.
- B. Non-Residential Sites: Except as provided herein for specific uses, the overall height of lighting fixtures (including the base) on all non-residential sites shall not exceed 30 feet above ground level, except in the GB, LI and HI zoning districts, the overall height of lighting fixtures located at least 100 feet from any property line shall not exceed 35 feet in height above ground level (including the base).

4.03 Lighting Types, Shielding and Curfew Requirements

A. Lighting Types

1. All street lights shall be fully shielded.
2. Low Pressure Sodium lamps are the preferred lamp type for minimizing adverse effects on astronomical observations.

B. General Shielding Requirements

1. All light fixtures required to be fully shielded shall be installed and maintained in a fashion that maintains the fully shielded characteristics.
2. All upward-directed lighting is prohibited, except
 - a. The lighting of one flagpole. The light shall be focused on the flag and shall not exceed 2000 lumens. Off-site glare and light trespass shall be eliminated by the use of shielding. Flags that include advertising, business trademarks or symbols, or other forms of commercial communication may not be illuminated at any time.
 - b. Low voltage or solar landscape lighting not exceeding 10 watts per fixture.

C. Shielding Requirements for Residential Uses

1. For residential uses, any lamp type with output of 1,000 lumens or more shall be fully shielded.
2. Lighting for multiple household dwellings (other than a duplex) is not considered residential, and must comply with all requirements for Non-Residential lighting, including, but not limited to lumen caps and curfews for decorative lighting.
3. All light fixtures located within 25 feet of the property line adjacent to a residential use shall use fully shielded luminaires.

D. Shielding and Curfew Requirements for Non-Residential Uses

1. Any Class 1 (Color Rendition), Class 2 (General Illumination) or Class 3 (Decorative Illumination) lamp type shall be shielded in accordance with Table 4.1.
2. All Class 1 (Color Rendition) and Class 3 (Decorative Illumination) lighting shall be extinguished between 11 p.m. (or when the business closes, whichever is later) and sunrise, except:
 - a. Seasonal decorations using typical unshielded low-wattage incandescent lamps shall be permitted from Thanksgiving to January 15.
 - b. Low voltage landscape lights rated at 10 watts or less.
 - c. Self-contained solar lights rated at 10 watts or less.
3. All light fixtures located within 25 feet of the property line adjacent to a residential use shall use fully shielded luminaires.

4.04 Total Outdoor Light Output

- A. Total outdoor light output shall not exceed the limits in Table 4.1. (The values in this table are upper limits and not design goals; design goals should be the lowest levels that meet the requirements of the task to reduce glare and reduce energy costs.)
- B. Shielded, properly aimed (no more than 45 degrees, or half way between straight down and horizontal) incandescent or PAR flood lights not to exceed 2,000 lumens per bulb and controlled by a motion sensor device shall be exempt from lumen caps, provided fixtures remain on for short periods only, and not to remain on over 10 minutes after the area has been vacated.
- C. Low voltage seasonal decorations, permitted between Thanksgiving and January 15, are not counted toward these limits.
- D. Total outdoor light output for various zoning districts is specified in Table 4.1. These maximums are referred to as lumen caps.

4.05 Special Use Permit for Waivers

Any application or lighting installation not meeting all requirements of this Code, including, but not limited to height, shielding, curfew or lumen caps shall require a Special Use Permit, and must demonstrate that the proposed lighting will not cause off-site glare or light trespass. The Special Use Permit application shall be accompanied by the lighting system design, and prior to final inspection or use, the installation shall be certified by a knowledgeable Arizona Registered professional or other certified lighting specialist as achieving the minimum illuminance level for the specific activity as recommended by the Illuminating Engineering Society of North America (IESNA) and conforming to all other applicable provisions of this Code.

Table 4.1
 MAXIMUM TOTAL OUTDOOR LIGHT OUTPUT STANDARDS
 LUMEN CAPS

<u>All Uses in Commercial and Industrial Zoning Districts (NB, GB, LI, HI)⁵</u>	
Total shielded	150,000 lumens per acre ^{1, 4, 5}
Unshielded	3,000 per acre ^{2, 3, 5}
<u>Non-Residential Uses in Residential and Rural Zoning Districts⁶</u>	
Total shielded	75,000 lumens per acre ^{1, 4, 5}
Unshielded	3,000 per acre ^{2, 3, 5}
<u>Residential Uses in Residential and Rural Zoning Districts -</u>	
Total shielded plus unshielded	
Lots one acre or larger	20,000 lumens per acre ⁵
Unshielded	2,000 lumens per acre ^{2, 3}
Lots less than one acre	10,000 lumens per residence
Unshielded	2,000 lumens per residence ^{2, 3}

¹ Lumens for all signs are to be included in these caps except as provided in Section 6.02.

² Any lamp with output of 1,000 lumens or more shall be fully shielded
 Examples of lamp types of 1000 lumens and below (The acceptability of a particular light is decided by its lumen output, not wattage; values listed are approximate; check manufacturer's specifications):

- (a) 60 Watt Standard incandescent and less
- (b) 60 Watt Tungsten-Halogen (quartz) and less
- (c) No available High-pressure Sodium or Metal Halide
- (d) 15 Watt Fluorescent and less
- (e) 13 Watt Compact Fluorescent and less

³ Does not include the 2,000 lumen lighting exception for flagpoles (Section 4.03B 2) and incandescent or PAR floodlights on a motion sensor (4.04 B).

⁴ Class 1 (color rendition) and 3 (decorative) lighting and signs to be extinguished between 11 PM (or close of business, whichever is later) and sunrise.

⁵ Acreage refers to the developed area of the site, including, but not limited to area used for buildings, structures, storage and service areas, parking, loading, driveway areas, required setback areas and required landscaping related to the use, but not areas that are only cleared.

⁶ General Agriculture (as defined in the Cochise County Zoning Regulations) shall be considered a non-residential use for the purpose of determining maximum lumens allowed on that portion of the property dedicated to ranching or general agricultural use.

Section 5. Prohibitions

5.01 Searchlights, Laser Lights

The operation of searchlights and/or laser lights for advertising or commercial purposes is prohibited.

5.02 Recreational Facilities

No outdoor recreational facility, public or private, including those with non-conforming lighting shall be illuminated after 11 p.m. except to conclude a specific scheduled event that was unable to conclude before the curfew due to unusual circumstances.

5.03 Mercury Vapor

The installation of new mercury vapor outdoor light fixtures is prohibited. The use of legal, non-conforming (installed prior to March 3, 1982) mercury vapor light fixtures is prohibited after January 1, 2011.

Section 6. Signage

6.01 External illumination

External illumination for signs shall conform to the shielding restrictions and lumen caps of Table 4.1. All upward-directed sign lighting is prohibited.

6.02 Internal illumination

A. Outdoor internally illuminated signs must be constructed with an opaque or dark-colored background and lighter text and symbols, except for any approved change panel. Signs shall be adequately sealed and maintained to prevent light leakage. Internally illuminated signs with opaque or dark colored backgrounds shall not be counted toward the lumen cap.

B. Neon signs shall be treated as internally illuminated signs for the purpose of this Code. Neon lighting extending beyond the sign area shall be considered Class 3 decorative lighting, and shall be subject to the standards applicable for such lighting including, but not limited to, the shielding standards and lumen caps of Table 4.1.

6.03 Other illuminated panels

Other internally-illuminated panels or decorations not considered to be signage according to Code , such as illuminated canopy margins or building faces shall be considered Class 3 Lighting and shall be subject to the standards applicable for such lighting including, but not limited to, the shielding standards and lumen caps of Table 4.1.

6.04 Curfew

Illumination for advertising signs, both externally and internally illuminated, shall be turned off at 11 p.m., or when the business closes, whichever is later. Signs subject to curfews are encouraged to have automatic shut-off timers. Internally illuminated signs with an opaque or dark-colored background and lighter text and symbols are not subject to the curfew, provided at least 50% of the sign is dark colored.

Section 7. Permanent Exemptions

7.01 Nonconforming Fixtures

Except as provided in Section 1.04, all outdoor light fixtures existing and legally installed after March 3, 1982 and prior to December 1, 2005, with the exceptions found in Section 5.02 (curfew for outdoor recreation facilities) and 5.03 (mercury vapor), may remain “non-conforming” indefinitely; provided, however, that no change in use, fixture replacement, structural alteration, or restoration after abandonment of outdoor light fixtures shall be made unless it thereafter conforms to the provisions of these regulations.

7.02 Fossil Fuel Fixtures

Light produced by the combustion of natural gas or other utility-type fossil fuels is exempt from the lumen cap and shielding requirements of this Code.

7.03 Equipment and Signal Lights

Equipment and signal lights necessary for agricultural equipment or required by state or federal regulations shall be by the least obtrusive means that meets the applicable operating or regulatory requirements.

7.04 Federal and State Facilities

Those facilities and lands owned, operated or protected by the U.S. Federal Government or the State of Arizona and political subdivisions thereof are exempt by law from all requirements of these provisions. Voluntary compliance with the intent of this Code at those facilities is encouraged.

7.05 Emergency operations of a public or private utility company

Temporary lighting to facilitate immediately necessary repairs or similar emergency actions of a public or private utility company necessary to continue or resume service, provided the emergency does not exceed 48 hours without authorization from the Zoning Inspector. Lights shall be arranged to reflect light away from and prevent glare to adjoining residential properties and public rights of way to the extent feasible.

7.06 Other emergency lighting

Temporary lighting to facilitate immediately necessary repairs or similar emergency actions provided the emergency does not exceed 48 hours without authorization from the Zoning Inspector. Lights shall be arranged to reflect light away from and prevent glare to adjoining residential properties and public rights of way to the extent feasible.

7.07 Agricultural operations

Temporary lighting to facilitate harvesting or similar actions necessary for general agricultural use (as defined in the Zoning Regulations) provided the night time operation does not exceed 5 days without authorization from the Zoning Inspector. Lights shall be arranged to reflect light away from and prevent glare to adjoining residential properties and public rights of way to the extent feasible.

7.08 Special Exemption

The Zoning Inspector may grant a special exemption to the requirements of this Code only upon a written finding that there are extreme geographic or geometric conditions warranting the exemption and that there are no conforming fixtures that would suffice.

Section 8. Temporary Exemptions

8.01 Requests for Temporary Exemptions

Any individual as defined herein may submit a written request on a form prepared by the Planning Department to the County Zoning Inspector for a “temporary exemption” to the requirements of this Code, such exemption to be valid for thirty (30) days, renewable at the discretion of the County Zoning Inspector. The request for Temporary Exemption shall contain at least the:

- A. Specific exemptions requested.
- B. Specific reasons why the requirements listed in this Code cannot be met.
- C. Type and use of exterior light involved.
- D. Duration of time for requested exemption.
- E. Type and number of lamps and calculated lumens.
- F. Total lumens of lamp or lamps.
- G. Proposed location and height of exterior lights.
- H. Previous temporary exemptions, if any.
- I. Physical size of exterior light and type of shielding provided.

In addition to the data above, the County Zoning Inspector may request any additional information to allow a reasonable evaluation of the Request for Temporary Exemption.

8.02 Appeals for Temporary Exemptions

The County Zoning Inspector, within fifteen (15) days from the date of the properly completed Request for Temporary Exemption, shall approve or reject the Request in writing. If rejected, the individual making the Request shall have the right of appeal to the appropriate Board of Adjustment as any other appeal of the County Zoning Inspector’s decisions.

8.03 Private Security Lighting/ Lighting Installed by an Electric Utility

Non-compliant lighting that was installed in good faith by an electric utility shall be brought into conformance with this Code within five (5) years of adoption; however, individual light fixtures which are the subject of a citizen complaint or County enforcement action shall be brought into conformance within thirty (30) days of notification of the property owner.

Section 9. Special Activities

9.01 Outdoor Recreational Facilities

A. Shielding: All outdoor recreational facilities shall utilize fully-shielded luminaires that are installed in a fashion that maintains the fully-shielded characteristics

B. Height: The maximum height for pole-mounted luminaires for outdoor recreational facilities is 40 feet.

C. Lighting for public and private outdoor athletic fields, courts, tracks or arenas, shall be considered Class 1 (Color Rendition).

D. Facility lighting shall meet shielding, lumen caps, height limits and all other restrictions of this Code:

A Special Use Permit is required. As part of the Special Use Permit application process, the lighting system design and installation shall be certified by a knowledgeable Arizona Registered professional or other certified lighting specialist as achieving the minimum illuminance level for the specific activity as recommended by the Illuminating Engineering Society of North America (IESNA) and conforming to all other applicable provisions of this Code, and shall be installed and maintained so as to minimize uplight and offsite light trespass, and with aiming angles that permit no greater than 5 percent of the light emitted by each fixture to project above the horizontal.

E. Off-site spill: The facility shall limit off-site spill to the maximum extent possible and shall not cause light trespass onto residentially zoned or developed properties.

F. Curfew: All events shall be scheduled to complete activity before 11 p.m. Illumination of the playing field, court or track shall be permitted after the curfew only to conclude a scheduled event that was unable to conclude before the curfew due to unusual circumstances.

G. All lighting not directly associated with the playing field (e.g. parking lot lighting, concession stand lighting, etc.) shall use Class 2 lighting and shall conform to all requirements of Section 4 of this Code.

9.02 Outdoor Display Lots

Lighting for display lots shall be considered Class 1 (Color Rendition), and shall be in compliance with the following standards:

- A. Shielding: All display lot lighting shall utilize fully-shielded luminaires that are installed in a fashion that maintains the fully-shielded characteristics.
- B. Height: The maximum height for pole-mounted luminaires for outdoor display lots is 40 feet.
- C. Display lot lighting shall meet shielding, lumen caps, height limits, and all other restrictions of this Code.

If meeting all Code requirements is infeasible, pursuant to Section 4.05 a Special Use Permit is required. As part of the Special Use Permit application process, the lighting system design and installation shall be certified by a knowledgeable Arizona Registered professional or other certified lighting specialist as achieving the minimum illuminance levels as recommended by IESNA and conforming to all applicable provisions of this Code.

- D. Curfew: Display lot lighting shall be turned off between 11 p.m. and sunrise or within 30 minutes after closing of the business, whichever is later. Lighting in the display lot after this time shall be considered Class 2 lighting and shall conform to all restrictions of this Code, including the lumen caps in Table 4.1.
- E. Off-site spill: The facility shall limit off-site spill to the maximum extent possible and shall not cause light trespass onto residentially zoned or developed properties

9.03 Service Station Under Canopy Lighting

Lighting for service station canopies shall be considered Class 1 lighting (Color rendition) and shall be subject to the curfew requirements in Section 4.03 (C) 2 of this Code.

- A. Shielding: All luminaires are to be flush with, or recessed into the lower surface of service station canopies and shall be fully shielded and utilize flat lenses to minimize light trespass.
- B. Total Under-Canopy Output: The total light output used for illuminating service station canopies is defined as the sum of all under-canopy initial bare lamp outputs in lumens and shall not exceed 40 lumens per square foot of canopy. Twenty-five percent (25%) of the lumens from fully shielded outdoor lighting fixtures installed under canopies shall be counted toward the lumens caps in Table 4.1.
- C. Illuminated canopy margins shall be considered Class 3 (Decorative) lighting.

9.04 Wireless Communications Towers

If tower lighting is required, it shall be the least obtrusive that meets FAA requirements.

Section 10. Enforcement

10.01 Violations deemed a Nuisance:

Any outdoor lighting established or maintained in violation of the Code is unlawful and constitutes a public nuisance.

10.02 Action to Enforce Regulations

For any violation of this Code, the County Attorney may, and upon order of the Board of Supervisors shall, commence all necessary actions or proceedings to enforce this Code including, but not limited to, actions to abate, enjoin or remove the violating outdoor lighting fixture.

10.03 Remedies

All remedies concerning this Code shall be cumulative and not exclusive. Conviction and punishment of any person hereunder shall not relieve such persons from the responsibility of correcting prohibited conditions or removing prohibited outdoor lighting fixture, and shall not prevent the enforced correction or removal thereof. In addition to the other remedies provided herein, any adjacent or neighboring property owner specially damaged by the violation of any provision of this Code may institute, in addition to any other appropriate remedy or proceeding an action for injunction, mandamus, or proceeding to prevent, abate or remove such unlawful outdoor lighting fixture.

10.04 Penalties

A. Any person, firm or corporation whether as principal, owner, agent, tenant, employee or otherwise, who violates any provisions of this Code or who violates or fails to comply with any order or regulation made hereunder shall be guilty of a misdemeanor, and upon conviction thereof, shall be punishable as provided for Class 2 misdemeanors by Arizona Revised Statutes. Such person, firm or corporation shall be deemed guilty of a separate offense for each and every day during which such violation or failure to comply with this Code is committed, continued, or permitted.

B. Paragraph A notwithstanding, each violation of this Code or failure to comply with any order or regulation hereunder may be processed by the Zoning Inspector as a violation subject to a civil penalty as provided by Arizona Revised Statutes, §11-808, and heard by a duly appointed hearing officer, pursuant to the written rules of procedure for such hearings, as approved by the Board of Supervisors.

10.05 Jurisdiction of Hearing Officer

The Hearing Officer who has been designated to hear zoning violation proceedings under the Cochise County Zoning Regulations shall also hear any violation proceedings under this Code.

10.06 Rules of Procedure

The rules of procedure for hearings on zoning violations before the County Hearing Officer shall apply to violation proceedings arising under this Code.

LAMP DATA

Lamp Wattage	Initial Lumens
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Lamp Wattage	Initial Lumens
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Incandescent

25 W	150
40 W	460
60 W	890
75W	1210
100 W	1750
150 W	2880
300 W	6360
1000 W	23800

Metal Halide

175 W	14000
250 W	20000
400 W	40000
1000 W	115000

PAR (Parabolic Aluminized Floods & Spots)

150 W	1740
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Compact Fluorescent

5 W	250
7 W	400
13 W	900
18 W	1200
26 W	1800
32 W	2900

HPS (High Pressure Sodium)

50 W	3300
70 W	5800
100 W	9500
150 W	16000
200 W	22000
250 W	30000
310 W	37000
400 W	50000
1000 W	140000

Tungsten-Halogen

250 W	4700
500 W	10700
1000 W	19000
1500 W	36000

LPS (Low Pressure Sodium)

18 W	1800
35 W	4800
55 W	8000
90 W	13500
135 W	22500
180 W	33000

Mercury Vapor

100 W	4000
175 W	8500
400 W	23000
700 W	44000
1000 W	61000

Fluorescent (Standard Cool-White, 1.5-inch tubes)

21 W	1190
30 W	2050
36 W	2450
39 W	3000
50 W	3700
52 W	3900
55 W	4600
70 W	5400
75 W	6300

These are standard values are based on manufacturers data and are to be used unless the applicant submits other verified lumen values.

Examples of fixtures that are NOT Fully Shielded

(Note: Some of these fixtures may be acceptable provided they don't exceed 1,000 lumens. See Table 4.1)

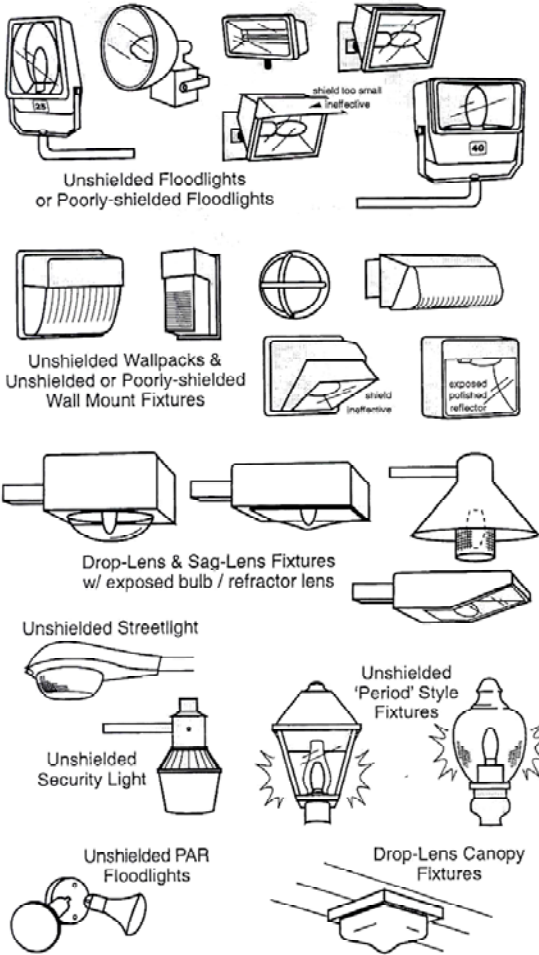
Examples of fixtures that are Fully Shielded

(Note: to be fully shielded these fixtures must be closed on top and mounted such that the bottom opening is horizontal)

Examples of Acceptable / Unacceptable Lighting Fixtures

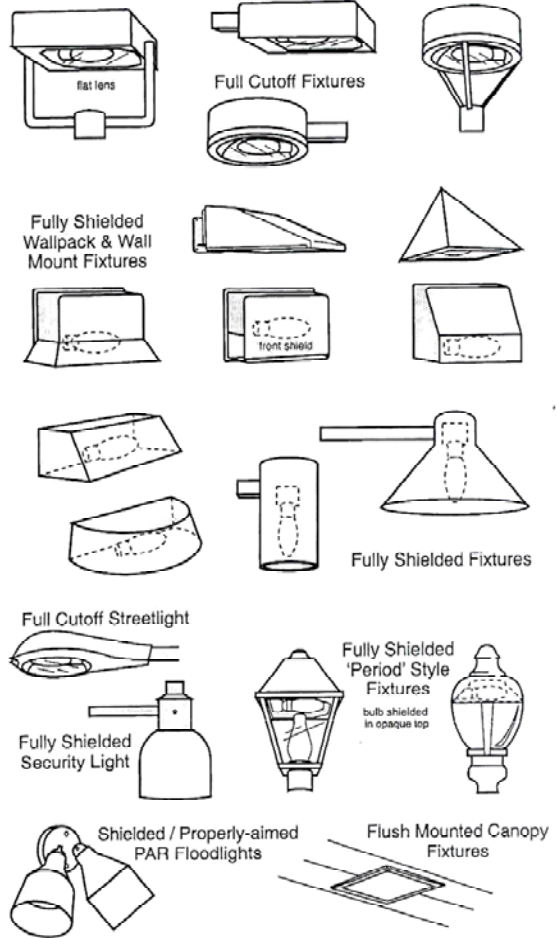
Unacceptable / Discouraged

Fixtures that produce glare and light trespass



Acceptable

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



BC 10/02