



# 2006 Pima County Outdoor Lighting Code

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# **Chapter 1**

## **Administration**

### **Section 101**

#### **Title, Scope and Purpose**

**101.1 Title.** These provisions shall be known as the Outdoor Lighting Code for Pima County. They shall be cited as such and will be referred to herein as “this code”.

**101.2 Scope.** The provisions of the Pima County Outdoor Lighting Code apply to the construction, alteration, movement, enlargement, replacement and installation of outdoor lighting throughout Pima County.

**101.3 Purpose and intent.** The purpose of this code is to preserve the relationship of the residents of Pima County to their unique desert environment through protection of access to the dark night sky. Intended outcomes include continuing support of astronomical activity and minimizing wasted energy, while not compromising the safety, security, and well being of persons engaged in outdoor night time activities. It is the intent of this code to control the obtrusive aspects of excessive and careless outdoor lighting usage while preserving, protecting, and enhancing the lawful nighttime use and enjoyment of any and all property. It is recognized that portions of properties may be required to be unlit, covered, or have reduced lighting levels in order to allow enough lumens in the lighted areas to achieve light levels in accordance with nationally recognized recommended practices.

**101.4 Conformance with codes.** All outdoor illuminating devices shall be installed in conformance with the provisions of this code, the building code, the electrical code and the sign code of the authorizing jurisdiction as applicable and under appropriate permit and inspection.

### **Section 102**

#### **Applicability**

**102.1 General.** Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between the general requirements and a specific requirement, the specific requirement shall be applicable.

**102.2 Other laws.** Where any provision of federal, state, county, or city statutes, codes or laws conflicts with any provision of this code, the most restrictive shall govern unless otherwise regulated by law.

**102.3 Partial invalidity.** If any of the provisions of this code or the application thereof is held invalid, such invalidity shall not affect other provisions or applications of this code which can be given effect, and to this end, the provisions of this code are declared to be servable.

**102.4 Application of code.** The requirements of this code apply to any and all new and major additions to land uses, developments, buildings, or structures.

**102.4.1 Major additions.** If a major addition occurs on a property, the entire property shall comply with the requirements of this code. For purposes of this section, the following are considered to be major additions:

1. Additions of 25 percent or more in terms of additional dwelling units, gross floor area, seating capacity, or parking spaces, either with a single addition or with cumulative additions subsequent to the effective date of this provision.

2. Single or cumulative modification or replacement of outdoor lighting fixtures legally installed constituting 25 percent or more of the actual lumens for the property, no matter the actual amount of lighting already on a non-conforming site, constitutes a major addition for purposes of this section. Where existing outdoor lighting is modified or replaced and the resulting lighting fixture has a less lumen capacity than the previously existing fixture, the lumen capacity of the modified or replaced fixture shall not be included in the lumen calculations for determining a major addition, but the total of non-conforming lighting shall not be increased.

**102.4.2 Minor additions.** Additions or modifications greater than 10 percent but less than 25 percent to existing uses shall require a 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 lighting after the modifications are complete shall not exceed that on the site before the modifications, or that permitted by this code, whichever is larger.

**102.5 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 this code before the new use commences.

**102.6 Resumption of use after abandonment.** If a property or use with non-conforming lighting is abandoned as defined in Chapter 2 of this code, then all outdoor lighting shall be reviewed and brought into compliance with this code before the use is resumed.

**102.7 Alternate materials and methods of construction.** The provisions of this code are not intended to prevent the use of any design, materials or method of installation or operation not specifically prescribed by this code, provided any such alternate has been approved. The Building Official may approve any such proposed alternate provided he or she finds that it:

1. Provides at least approximate equivalence to the applicable specific requirements of this code, and;
2. Is otherwise satisfactory or complies with the intent of this code, and;
3. Has been designed or approved by a registered lighting or electrical engineer and is supported by calculations showing that the design submitted meets that intent of the code. This sub-section shall not have the effect of waiving the lumen caps of Chapter 4 of this code.

**102.8 Appeals.** Any person substantially aggrieved by any decision of the Building Official made in administration of this code has the right and responsibilities of appeal to the Advisory/Appeals Board of this jurisdiction.

## **Section 103 Exemptions**

**103.1 Exemptions.** All outdoor light fixtures lawfully installed prior to and operable on the effective date of the ordinance codifying this code are exempt from all requirements of this code.

**103.1.1 Alterations.** There shall be no change in use or lamp type, or any replacement or structural alteration made, without conforming to all applicable requirements of this code.

**103.1.2 Abandonment.** If the property is abandoned, or if there is a change in use of the property, the provisions of this code will apply when the abandonment ceases or the new use commences.

**103.1.3 Neon lighting.** Neon lighting is exempt from the requirements of Chapter 4 of this code when used for sign lighting, but not for other uses.

**103.1.4 Natural gas lighting.** Natural gas lighting is exempt from all requirements of this code.

**103.2 Temporary exemption.** Any person may submit a written request, on a form prepared by the jurisdiction, to the jurisdiction for temporary exemption request. A temporary exemption shall contain the following information:

1. Specific exemption(s) requested.
2. Type and use of outdoor light fixture involved.
3. Duration of time of the requested exemption.
4. Type of lamp and lamp lumens.
5. Total wattage of lamp or lamps and number of lamps to be used.
6. Proposed location on premises of the outdoor lighting fixture(s).
7. Previous temporary exemptions, if any, and addresses of premises there under.
8. Physical size of outdoor light fixture(s) and type of shielding provided.
9. Other data and information that may be required by the Building Official.

**103.2.1 Approval and duration.** The jurisdiction shall have five business days from the date of submission of the request for temporary exemption to act, in writing, on the request. If approved, the exemption shall be valid for not more than thirty days from the date of issuance of the approval. The approval shall be renewable at the discretion of the Building Official upon a consideration of all the circumstances. Each such renewed exemption shall be valid for not more than thirty additional days.

**103.2.2 Disapproval and appeal.** If the request for temporary exemption is disapproved, the person making the request will have the appeal rights provided in Section 102 of this code.

**103.3 Lighting in the public right-of-way.** Outdoor lighting installed in a public right-of-way is exempt from all requirements of this code.)

## **Section 104**

### **Permits and Plan Submission Requirements**

**104.1 Permits required.** Any owner or authorized agent who intends to install, construct, enlarge, alter, repair, move, or change any outdoor lighting within Pima County jurisdiction, the installation of which is regulated by this code, shall first make application to the Building Official for Pima County and obtain the required permit.

**104.2 Permit submission requirements.** The applicant for any permit required by any provision of the laws of this jurisdiction in connection with proposed work involving outdoor lighting fixtures shall submit (as part of the application for permit) evidence that the proposed work will comply with this code. The submission shall contain but shall not necessarily be limited to the following, all or part of which may be part or in addition to the information required elsewhere in the laws of this jurisdiction upon application for the required permit:

1. Plans indicating the location on the premises, and the type of illuminating devices, fixtures, lamps, supports, reflectors, and other devices, and a luminaire schedule as outlined in sub-section 104.2.1.
2. Description of the illuminating devices, fixtures, lamps, supports, reflectors, and other devices and the description may include, but is not limited to, catalog cut sheets by manufacturers and drawings (including sections where required).
3. Photometric data, such as that furnished by manufacturers, or similar showing the angle of cutoff or light emissions. Photometric data need not be submitted when the full cutoff performance of the fixture is obvious to the reviewing official.

**Exception:** When submittal includes a statement by a registered design professional that the design is in accordance with this code, the requirements of sub-sections 104.2(2) and 104.2(3) shall not apply.

**104.2.1 Luminaire schedule on plans.** There shall be a schedule on the plans to confirm compliance with the lumen cap per Table 401.1, and which includes the following information:

1. Each exterior luminaire type with the mean lumens for that type, the quantity of each type and whether the luminaire is full cut-off or unshielded.
2. The total of full cut-off and unshielded mean lumens for the parcel.
3. A statement of the lighting area, the size of the permitted parcel, and the maximum allowed full cut-off and unshielded mean lumens.

**Exception:** When a submittal includes a statement by a registered design professional stating that the existing site lighting is being modified less than 10 percent, it shall not be necessary to comply with sub-section 104.2.1.

**104.2.2 Special inspection note.** The plan submission shall contain a note indicating whether special inspection is required in accordance with Section 106.

**104.2.3 Additional submission.** The above required plans, descriptions and data shall be sufficiently complete to enable the plans examiner to readily determine compliance with the requirements of this code. If such plans, descriptions and data cannot enable this determination, the applicant shall additionally submit as evidence of compliance such reports or tests as will, provided that these tests shall have been performed and certified by a recognized testing agency.

**104.3 Subdivision plat certification.** If any subdivision proposes to have installed street or other common or public area outdoor lighting, the final plat shall contain a statement certifying that the applicable provisions of this code will be adhered to.

**104.4 Lamp or fixture substitution.** Should any outdoor light fixture or the type of light source herein be changed after the permit has been issued, a change request must be submitted to the design professional and Building Official for his or her approval, together with adequate information to assure compliance with this code, which must be received prior to substitution.

**104.5 Conditional use permit.** The lumen cap provisions of this code, as listed in Table 401.1, may be altered, varied, or modified by the issuance of a conditional use permit following a Type I procedure in accordance with the Conditional Use Procedures of Chapter 18.97 of the Pima County Code upon a finding by the Hearing Officer that such alteration, variance, or modification is necessary for the proposed use of the subject property because of increased security requirements, public safety, or public need and that the purpose and intent of this code are reasonably accommodated. In addition to the applicable notice requirements of Section 18.97.030 of the Pima County Code, written notice shall be given to the Pima County Outdoor Lighting Committee or its successor or equivalent and to owners of property within one thousand feet of the subject property.

## **Section 105 Prohibitions**

**105.1 Bottom mounted sign lighting.** Bottom mounted outdoor advertising sign lighting shall not be used.

**105.2 Mercury vapor lamps and fixtures.** The installation, sale, offer for sale, lease or purchase of any mercury vapor lamp for use as outdoor lighting is prohibited per ARS § 49-1104.

**105.3 Laser source light.** The use of laser source light or any similar high intensity light for outdoor advertising or entertainment, when projected above the horizontal, is prohibited.

**105.4 Searchlights.** The operation of searchlights for advertising purposes is prohibited in unincorporated areas of the county.

## **Section 106 Inspections**

**106.1 General.** The owner of a property, or the authorized agent of the owner, shall request all required inspections as noted on the permit issued under this code. All inspection requests shall be made at appropriate intervals as noted on the permit and it is the responsibility of the property owner or authorized agent of the owner to assure that all required inspections receive approval from the Building Official and that final inspection approval is obtained prior to placing the permitted outdoor lighting into service.

**106.2 Special inspection requirement.** In areas E3 and E3a, special inspection per Section 306 of the Administrative Code is required if the lumens per net acre are greater than 100,000.

## **Section 107 Violations**

**107.1 Unlawful acts.** It shall be unlawful for any person, firm, or corporation to erect, construct, alter, extend, repair, move, remove, install, use or demolish outdoor lighting equipment as regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

**107.2 Notice of violation** The Building Official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removing, demolition or use of any outdoor lighting in violation of this code or in violation of a detail statement or a plan approved hereunder, or in violation of a permit issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation. The property owner or authorized agent of the owner shall comply with the requirements of the notice of violation within the time period given on the notice for abatement of the violation.

**107.3 Prosecution of violations.** If the notice of violation is not complied with promptly, the Building Official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful use of outdoor lighting in violation of the provisions of this code or of the order or direction made pursuant thereto.

**107.4 Penalty.** Any violation of this code, or any portion of this code, shall be considered a civil infraction and is subject to penalties not to exceed the amount of the maximum fine for a class 2 misdemeanor in accordance with A.R.S. 11-808. Each day of continuance of the violation constitutes a separate violation. Maximum fines are \$750.00 for individuals and \$10,000.00 for corporations, associations, labor unions or other legal entities. Enforcement procedures shall be pursuant to those established by each authorizing jurisdiction.

## **Chapter 2**

### **Definitions**

#### **Section 201**

##### **General**

**201.1 Scope.** Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings indicated in this chapter.

**201.2 Interchangeability.** Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

**201.3 Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

#### **Section 202**

##### **Definitions**

**Class 1 Lighting.** All outdoor lighting used for, but not limited to, outdoor sales or eating areas, entrance canopies, on retail buildings, assembly of component parts or repair areas, advertising and other signs, recreational facilities, amphitheaters and other similar applications where color rendition is important to preserve the effectiveness of the activity. Designation of lighting as Class 1 requires a finding by the authorizing jurisdiction of essential function of color rendition for the application.

**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 of grounds is the primary concern.

**Class 3 Lighting.** Any outdoor lighting used for decorative effects including, but not limited to, architectural illumination, flag and monument lighting, and illumination of landscaping.

**Curfew.** A time established for listed lighting systems to be automatically extinguished.

**Development Project.** Any residential, commercial, industrial or mixed use subdivision plan or development plan which is submitted to the jurisdiction for approval or for permit.

**Direct Illumination.** Illumination resulting from light emitted directly from a lamp or luminaire, not light diffused through translucent signs or reflected from other surfaces such as the ground or building faces.

**Display Lot or Area.** Outdoor areas where active nighttime sales activities occur, and where accurate color perception by customers is required. To qualify as a display lot, one of the following specific uses must occur:

1. Automotive sales.
2. Assembly lots.
3. Swap meets.
4. Airport and automobile fueling areas.

**Special condition.** Uses not on this list must be approved as a display lot use by the authorizing jurisdiction.

**Full Cutoff Light Fixture.** A luminaire where no candela occur at or above an angle of 90 degrees above the nadir. This applies to all lateral angles around the luminaire. Such candela information shall be as determined by a photometric test report from a nationally recognized independent testing laboratory and as certified by the manufacturer. Any structural part of the luminaire providing full cutoff angle shielding shall be permanently attached.

**Installed.** The attachment, or assembly fixed in place, whether or not connected to a power source, or any outdoor light fixture.

**Lumen.** Unit of luminous flux; used to measure the amount of light emitted by lamps.

**Luminaire.** The complete lighting assembly, less the support assembly. For purposes of determining total light output from a luminaires lighting assemblies which include multiple unshielded or full cutoff lamps on a single pole or standard shall be considered as a single unit. Two or more units with lamps less than three feet apart shall be considered a single luminaires.

**Multi-class Lighting.** Any outdoor lighting used for more than one purpose, such as security and decoration, such that its use falls under the definition of two or more classes as defined for Class 1, 2 and 3 lighting.

**Net Acreage.** The remaining ground area after deleting all portions for proposed and existing public streets within a development, parcel, or subdivision.

**Opaque.** Opaque means that the material shall not transmit visible light.

**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 not be limited to:

1. Street lighting.
2. Parking lot lighting.
3. Building and structural lighting.
4. Landscaping lighting.
5. Recreational lighting.
6. Billboards and other signs (advertising or otherwise).
7. Product display area lighting.
8. Building overhangs and open canopy lighting.
9. Security lighting.
10. Searchlight, spotlight, flood lights, and laser lights.

**Outdoor Light Output - Total.** The total amount of light, measured in lumens, from all outdoor light fixture lamps. Total outdoor light output is calculated as follows:

1. For lamp types that vary in light output as they age (such as fluorescent and high intensity discharge lamps), the mean lumen output, as defined by the lamp manufacturer, shall be the lumen value used.
2. The total light output for each outdoor light fixture shall be based on the largest lamp that the outdoor light fixture is rated to accommodate. For the purpose of compliance with this section, the largest lamp rated for fluorescent and high intensity discharge fixtures shall be based on the installed ballast rating.

**Outdoor Recreation Facility.** An area designed for active recreation, whether publicly or privately owned, including, but not limited to baseball, soccer, football, golf, tennis, swimming pools, and race tracks of any sort.

**Person.** Any individual, tenant, lessee, owner, or any commercial entity including but not limited to firm, business, partnership, joint venture or corporation.

**Public right-of-way.** A road, street, alley or highway permanently dedicated to the public for public use.

**Temporary Lighting.** Lighting which does not conform to the provisions of this ordinance and which will not be used for more than one thirty (30) day period within a calendar year, with one thirty (30) day extension.



Temporary lighting is intended for uses which by their nature are of limited duration; for example holiday decorations. Civic events, or construction projects.

**Use – Abandonment of.** The relinquishment of a property, or the cessation of the use or activity by the owner or tenant for a period of six months, excluding temporary or short term interruptions for the purpose of remodeling, maintaining, or otherwise improving or rearranging a facility. A use shall be deemed abandoned when such use is suspended as evidenced by the cessation of activities or conditions which constitute the principal use of the property.

## **Chapter 3**

### **Lighting Areas**

#### **Section 301**

##### **Description of Lighting Areas**

**301.1 Lighting Areas.** All lighting areas discussed herein shall be as defined on the Pima County Lighting Area Map, attached hereto as Appendix A, and incorporated herein by this reference.

**301.1.1 Lighting Area E3.** Lighting area E3 is an urban area (city center), with primary land uses for commercial, business, industrial activity, apartments, surrounded by suburban residential areas.

**301.1.2 Lighting Area E3a.** Lighting area E3a is a special area around Mt. Lemmon defined as follows: the Pinal County line on the north, along the center line of Oracle Road, to the center line of Rillito Creek, to the center line of Tanque Verde Creek, then along the centerline of said Tanque Verde to a point 1500 feet north of the northwesterly most corner of the Saguaro National Monument East, then to said northwesterly corner, then along that border until it ends on the east side and bends east to the county line. All properties fronting on the east side of Oracle Road within the boundaries of lighting area E3a shall be deemed to be part of Area E3.

**301.1.3 Lighting Area E2.** Lighting area E2 is a rural residential and agricultural area, except that property located within lighting areas E2 on the Pima County Lighting Area Map that is zoned as a commercial category shall be deemed to be located within Lighting Area E3a; except that, in the case of rezoning, outdoor lighting levels and the purposes and intent of this code shall be a rezoning consideration and outdoor lighting levels may be restricted by the rezoning authority.

**301.1.4 Lighting Area E1a.** Lighting areas E1a are special areas around astronomical observatories and include all areas within 15 miles of the summit of Kitt Peak and 12.5 miles of the summit of Mount Hopkins, and those areas within any national park, monument, or forest boundary. In these areas, the preservation of a naturally-dark environment, both in the sky and in the visible landscape, is considered of paramount concern.

**301.1.5 Lighting Area E1b.** Lighting area E1b includes the circular area twenty-five miles in radius the center of which is the summit of Mount Hopkins.

**301.1.6 Lighting Area E1c.** Lighting area E1c includes the circular area thirty-five miles in radius the center of which is the summit of Kitt Peak.

**302.2 Properties in more than one lighting area.** A property located in more than one of the lighting areas described within this chapter shall be considered to be only in the more restrictive lighting area.

## **Chapter 4**

### **Illumination Levels and Shielding Requirements**

#### **Section 401**

#### **Total Outdoor Light Output and Shielding Requirements**

**401.1 General.** Table 401.1 gives requirements of the total light output permitted per acre for the different lighting areas and the fixture shielding requirements for class of lighting, lamp type, and lighting area. These requirements shall be met for all lighting installations subject to this code.

**401.2 Total outdoor light output.** Total outdoor light output shall not exceed the lumen limits given in Table 401.1. In the table, “total” means the sum of shielded and unshielded light.

**401.2.1 Determining compliance.** For determining compliance with this chapter the total lumens is the sum of the following:

1. One hundred percent of the lumens from outdoor light fixtures installed on grade, on poles, and installed on the top or sides of buildings of other structures.
2. Fifty percent of the lumens from underwater light fixtures unless the fixture is aimed at an angle of less than 45 degrees above the horizontal; in which case the calculated lumens is calculated at 10 percent of the rated lumens.

**401.3 Shielding requirements.** All light fixtures that are required to be shielded shall be installed in such a manner that the shielding is effective as described in the Definitions Chapter for Full Cutoff Light Fixture.

**401.3.1 Light trespass.** In the shielding requirements of this chapter, all light fixtures on the residential side of commercial property adjacent to residential property shall be full cutoff and shall be a maximum of 10 feet above grade at the property line and no higher than a line rising 20 degrees above the 10 feet until 100 feet from the property line, measured perpendicular to the lot line.

**401.3.2 House Side Shields.** All outdoor lighting fixtures closer to the lot line than the mounting height of the fixture, measured perpendicular to the lot line, adjacent to residential areas, shall have internal house-side shields.

**401.3.3 Fixtures within 25 feet of residential lot lines.** In addition, all residential and commercial luminaires shall be full cutoff within 25 feet of adjacent residential property lines, measured perpendicular to the lot line.

**401.4 Multi-class lighting.** Multi-class lighting must conform to the shielding and timing restrictions, if any, that apply to the most restrictive included class.

**401.5 Fixtures installed under canopies and overhangs.** Outdoor lighting fixtures shall not be counted in determining the total light output when they are full cut-off light fixtures installed under canopies, building overhangs, or roof eaves.

**Table 401.1  
Maximum Total Outdoor Light Output Requirements  
Lumen Caps: Mean Lumens per Net Acre (4)**

	Lighting Area as Defined in Chapter 3					
	E3	E3a	E2	E1c	E1b(5)	E1a(5)
<b>Commercial and industrial “Option 1” (1)(2) (mostly LPS lighting)</b>						
Total (full cut-off LPS, plus full cut-off non-LPS)	450,000	350,000	200,000	125,000	48,000	18,000
Limit on non-LPS full cut-off.	45,000	35,000	18,000	6,000	3,000	3,000
Limit on unshielded component (LPS or non-LPS)	12,000	9,000	6,000	3,000	3,000	0
<b>Commercial and industrial “Option 2” (1)(2) (full cut-off for all lighting)</b>						
All lighting must be full cut-off	300,000	150,000	65,000	25,000	25,000	12,500
Limit on unshielded component	0	0	0	0	0	0
<b>Commercial and industrial “Option 3” (1)(2) (full cut-off for most lighting)</b>						
Total (full cut-off plus unshielded)	200,000	100,000	50,000	25,000	12,500	12,500
Limit on unshielded component	12,000	9,000	6,000	3,000	3,000	0
<b>All residential zoning (3)(4)</b>						
Total (full cut-off plus unshielded)	55,000	39,000	24,000	15,000	12,000	12,000
Limit on unshielded component	12,000	9,000	6,000	3,000	3,000	3,000

**Notes to Table 401.1**

1. Use any one of the three options, 1, 2, 3 for the entire property.
2. This refers to all land-use zoning classifications for multiple family uses, commercial, and industrial sites.
3. This refers to all residential land-use zoning, including all densities and types of housing, such as single family detached and duplexes.
4. If LPS is used for residential lighting, then the total lumens in the table, for all areas, can be increased by 50 percent of full cut-off LPS lighting.
5. In addition to the lumen caps given in the table above, the maximum illumination level under any canopy in lighting Area E1a shall not exceed 30 lumens per square foot nor in Area E1b shall not exceed 55 lumens per square foot of the canopy area.
6. Flood or spot lamps shall be aimed no higher than 45 degrees to the horizontal (half-way between straight down and straight to the side) when the source is visible from any adjacent residential property.
7. Seasonal decorations using unshielded low-wattage incandescent lamps (not exceeding 7 watts each) shall be allowed from Thanksgiving to the 15<sup>th</sup> of January each year.
8. All Class 3 lighting shall be extinguished between 11:00 P.M. (or when the business closes, whichever is later) and sunrise the following day.
9. Unshielded fixtures (not full cut-off) shall not exceed 3,000 lumens each.
10. In lieu of calculating total lumens per Section 401.2, a single residential lot of any size shall be considered in compliance with the Lumen Cap if it has a maximum of 5 – 850 lumen (60 watt incandescent or 13 watt compact fluorescent) Full Cut-Off luminaires in Lighting Areas E3, E3a & E2 or a maximum of 4 – 550 lumen (40 watt incandescent or 9 watt compact fluorescent) in Areas E1c, E1b & E1a. If this option is utilized, no unshielded luminaires are allowed.

# Chapter 5 Sign Lighting

## Section 501 Outdoor Advertising Signs

**501.1 External illumination of on-site signs.** External illumination for on-site signs shall conform to all provisions of this code. In particular, such lighting shall be treated as Class 1 lighting and shall conform to the lamp source, shielding restrictions, and lumen caps of Chapter 4.

**501.2 Illumination of off-site advertising signs prohibited.** Electrical illumination of outdoor advertising off-site signs is prohibited, except that the use of lighting fixtures legally installed in Areas E2 and E3 prior to the effective date of this code may continue, provided such fixtures are mounted on the top of the sign structure and shall not be illuminated between the hours of 11:00 P.M. and sunrise the following day, and comply with all other provisions of this code.

**501.3 Internal illumination of signs.** Outdoor internally illuminated advertising signs shall not be counted toward the lumen cap described in Chapter 4. Outdoor internally illuminated advertising signs constructed with an opaque or colored background and translucent text and symbols are strongly preferred so as to reduce any potential detrimental effects due to these type of signs.

**501.4 Sign illumination curfew.** Illumination for all advertising signs, both externally illuminated and internally illuminated, shall be turned off at the curfew times listed in Table 501.4 or when the business activities cease, whichever is later. The means of controlling the specific “off” curfew shall be by a 24 hour timing device that includes stand-by power to maintain the time and program for a minimum of 6 hours.

**Table 501.4  
Illuminated Sign Curfews**

<b>Lighting Area</b>	<b>E3</b>	<b>E3a</b>	<b>E2</b>	<b>E1b or c</b>	<b>E1a</b>
Commercial and Industrial Zoning or Land Use (1)	12:00 A.M.	12:00 A.M.	11:00 P.M.	11:00 P.M.	X
All Residential Zoning or Land Use (1)	11:00 P.M.	11:00 P.M.	10:00 P.M.	9:00 P.M.	X

**Notes to Table 501.4**

1. “Land Use” refers to the predominant use of land surrounding the parcel on which the sign is located.
2. “X” means “not allowed”.

# Chapter 6

## Recreational Facilities

### Section 601

#### Illumination of Recreational Facilities

**601.1 Lighting not directly related to athletic areas.** All site lighting not directly associated with the athletic playing areas shall conform to the lighting standards described in this ordinance, including but not limited to the lamp type and lumens per acre limits of Chapter 4.

**601.2 Lighting for athletic fields Class 1.** Lighting for athletic fields, courts or tracks shall be considered Class 1 (Color Rendition), and shall be exempt from the lumens per acre limits of Chapter 4. All such lighting shall utilize full cut-off luminaires that are installed in a fashion that maintains the full cut-off characteristics unless certified by a registered engineer that such shielding is impractical. Every such lighting system design shall be certified by a registered engineer as conforming to all applicable restrictions of this ordinance. Where full cut-off fixtures are not utilized, acceptable luminaires shall include those which:

1. Are provided with internal and /or external glare control louvers and installed so as to limit direct up-light to less than 5 percent of the total lumens exiting from the installed fixtures and minimize off-site light trespass and;
2. Are installed and maintained with minimum aiming angles of 25 degrees downward from the horizontal. Said aiming angle shall be measured from the axis of the luminaire maximum beam candlepower as certified by independent testing agency.

**601.3 Curfew requirements.** All events shall be scheduled so as to complete all activity before the curfew listed in Table 601.3. 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. No recreational lighting is permitted in Area E1a. The means of controlling the specific “off” curfew shall be by a 24 hour timing device that includes stand-by power to maintain the time and program for a minimum of 6 hours. Timing devices for recreational facilities may include a manual override setting which returns to the established program within 2 hours.

**Table 601.3**  
**Sport Facility and Display Lot Curfews**

E3	E3a	E2	E1b or c	E1a
12:00 A.M.	11:00 P.M.	11:00 P.M.	10:00 P.M.	X

“x” means not allowed.

## **Chapter 7**

### **Outdoor Display Lots**

#### **Section 701**

#### **Illumination of Outdoor Display Lots**

**701.1 Lighting not associated with display lot.** All site lighting not directly associated with the display areas shall conform to the lighting standards described in this ordinance, including but not limited to the lamp type and the lumens per acre limits of Chapter 4.

**701.2 Lighting for display lots – Class 1.** Lighting for display lots shall be considered Class 1 (Color Rendition), and is exempt from the lumens per acre limits of Chapter 4. all such lighting shall utilize full cut-off luminaires that are installed in a fashion that maintains the full cut-off characteristics. Every such lighting system design shall be certified by a registered lighting or electrical engineer as conforming to all applicable restrictions of this code.

**701.3 Curfew requirements.** Class 1 display lot lighting exceeding the lumens per acre cap of Chapter 4 shall be turned off at the curfew times listed in Table 601.3 or within thirty minutes after closing of the business, whichever is later.

**701.4 Security lighting for display lots.** Class 2 display lot lighting is permitted for security and safety lighting and is exempted from the turn-off requirements of Table 601.3.

## **Appendix “A” Pima County Lighting Area Map**

Map areas can be located at <http://www.dot.pima.gov/gis/maps/mapguide/>