AN ORDINANCE AMENDING TITLE 18 (BUILDING AND CONSTRUCTION), BY CREATING CHAPTER 18.18 (OUTDOOR LIGHTING ORDINANCE), OF THE EL PASO CITY CODE. THE PENALTY BEING AS PROVIDED IN SECTION 18.02.107 OF THE EL PASO CITY CODE.

WHEREAS, inappropriate use of outdoor lighting can deteriorate the natural nighttime environment and sky glow reduces the ability to observe the starry night sky; and

WHEREAS, glare affects the ability of drivers to observe objects or obstructions and most glare can be and should be prevented; and

WHEREAS, inefficient luminaires can spill unwanted light well outside the intended target area and energy is wasted when excessive levels of illumination are used; and

WHEREAS, BZAC has recommended, the CPC has concurred and the City Council is of the collective determination that this Outdoor Lighting Ordinance is appropriate for the City of El Paso as proposed; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL FOR THE **CITY OF EL PASO:** 

That Title 18 (Building and Construction), Chapter 18.18 (Outdoor Lighting Ordinance), of the El Paso Municipal Code, shall be and is hereby created to read as follows:

# **Outdoor Lighting Code**

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## ARTICLE 1 – PURPOSE, INTENT, COMPLIANCE AND APPLICABILITY

#### 18.18.010 Intent.

It is the intent of this Chapter to define practical and effective measures by which the obtrusive aspects of excessive and/or careless outdoor light usage can be minimized, while preserving safety, security, and the nighttime use and enjoyment of property. These measures will curtail the degradation of the nighttime visual environment by encouraging lighting practices that direct appropriate amounts of light where and when it is needed, increasing the use of energy-efficient sources, and decreasing the wastage of light and glare resulting from overlighting and poorly shielded or inappropriately directed lighting fixtures.

# 18.18.020 Compliance.

All outdoor luminaires devices shall be installed in conformance with the provisions of this Code, the Building Code, the Electrical Code, and the Sign Code of the City of El Paso as applicable and under appropriate permit and inspection.

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18.18.030 New Buildings and Additions to Existing Facilities.

For all proposed new construction or additions to existing facilities, all new outdoor lighting fixtures shall meet the requirements of this Code.

#### 18.18.040 Additions.

Additions, as defined in 18.18.030 above, shall require the submission of a complete inventory and site plan detailing any proposed new outdoor lighting. New lighting on the site shall meet the requirements of this Code with regard to shielding and lamp type;

18.18.050 Roadways.

Lighting for public and private roadways shall utilize only full cutoff light fixtures or cutoff light fixtures.

#### **ARTICLE II - DEFINITIONS**

## **18.18.060** Definitions

Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown below:

Average maintained horizontal illuminance means the density of light flux in an outdoor area or areas calculated:

- (a) on a horizontal plane at ground level;
- (b) as an average flux density over the surface of the outdoor area or areas; and
- (c) applying a light loss factor calculated by methods prescribed by the lighting handbook of the Illuminating Engineering Society or any successor publication; with calculations made by, or on the basis of lighting plans other information provided by, manufacturers or suppliers of outdoor light fixtures and made in a manner consistent with the lighting handbook of the Illuminating Engineering Society or any successor publication.

Class 1 Lighting. All outdoor lighting used for, but not limited to, outdoor sales or eating areas, assembly or repair areas, advertising and other signs, recreational facilities and other similar applications where COLOR RENDITION IS IMPORTANT to preserve the effectiveness of the activity. Recognized Class 1 uses are: outdoor eating and retail food or beverage service areas; outdoor maintenance areas; display lots; assembly areas such as concert or theater amphitheaters.

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 the 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 trees, bushes, etc.

Cutoff Light Fixture. A luminaire light distribution where no more than 25 candela per 1000 lamp lumens is emitted above the horizontal.

Development Project. Any residential, commercial, industrial or mixed use subdivision plan or development plan.

Directly Visible. Allowing a direct line-of-sight to the light source or lamp.

Director. The Building Permits and Inspections Director or designee.

**Display Lot.** Outdoor areas where active nighttime sales activity occurs AND where accurate color perception of merchandise by customers is required. A display lot, shall entail one of the following specific uses: automobile sales, boat sales, tractor sales, building supply sales, gardening or nursery sales, assembly lots, swap meets. Additional uses may be designated as display lot as determined by the Director.

Flood Lamp. A specific form of lamp designed to direct its output in a specific direction (a beam) with a reflector formed from the glass envelope of the lamp itself, and with a diffusing glass envelope.

Footcandle. One lumen per square foot. Unit of illuminance. It is the luminous flux per unit area in the Imperial system. One footcandle equals approximately 10 (10.76) lux.

Full Cutoff Light Fixture. A luminaire with light distribution such that no light is emitted above the horizontal.

Glare. The sensation produced by a bright source within the visual field that is sufficiently brighter than the level to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance and visibility; blinding light. The magnitude of glare depends on such factors as the size, position, brightness of the source, and on the brightness level to which the eyes are adapted.

Illuminance. The amount of light falling onto a unit area of surface (luminous flux per unit area) - measured in lumens per square meter (lux) or lumens per square foot (footcandles).

Installed. The attachment, or assembly fixed in place, connected to a power source, of any outdoor light fixture.

Light Trespass. Light falling where it is not wanted or needed, typically across property boundaries.

Lighting Zones. The four lighting zones are based on the zoning districts or overlays established by the Zoning Ordinance. Guidelines used to guide the delineation of the lighting zones are:

Lighting Zone E1. This zone shall include all zoning districts with a "Planned Mountain Development" overlay.

Lighting Zone E2. This zone shall include the zoning districts of R-F, R-1, R-2, R-2A, R-3, R-3A, R-4, R-5, RMH, RMD, P-R I, SRR, P-R II.

Lighting Zone E3. This zone shall include the zoning districts of A-1, A-2, A-3, A-4, A-O, A-3/O, A-M, C-OP and S-D.

Lighting Zone E4. This zone shall include the current zoning districts of C-1, C-2, C-3, C-4, C-5, M-1, M-2, M-3, P-C, Q, and P-I.

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

Luminaire. The complete lighting assembly (including the lamp, housing, reflectors, lenses and shields), less the support assembly (pole or mounting bracket); a light fixture. For purposes of determining total light output from a luminaire or light fixture (see 18.18.060, Outdoor Light Output, Total), lighting assemblies which include multiple unshielded or partially shielded lamps on a single pole or standard shall be considered as a single unit.

Luminous tube. A glass tube filled with a gas or gas mixture (including neon, argon, mercury or other gasses), usually of small diameter (10-15 millimeter), caused to emit light by the passage of an electric current, and commonly bent into various forms for use as decoration or signs. A "neon" tube, does not include common fluorescent tubes.

Lux. A unit of illuminance equal to one lumen per square meter. One lux equals approximately 0.1 (0.093) footcandles.

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 total area of the development project. For parcels including those special uses listed in 18.18.150, 18.18.160, 18.18.170 and 18.18.180 that are exempted from the lumens per acre caps of 18.18.080

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(recreational facilities and outdoor display lots), the area devoted to the special use shall also be excluded from the net acreage.

**Opaque.** Opaque means that a material does not transmit light from an internal illumination source. Applied to sign backgrounds, means that the area surrounding any letters or symbols on the sign either is not lighted from within, or allows no light from an internal source to shine though it.

Outdoor light fixture. An outdoor illuminating device, outdoor lighting or reflective surface, luminous tube, lamp or similar device, permanently installed or portable, used for illumination, decoration, or advertisement. Such devices shall include, but are not limited to lights used for:

- A. Parking lot lighting;
- B. Roadway lighting;
- C. Buildings and structures;
- D. Recreational areas;
- E. Landscape lighting;
- F. Billboards and other signs (advertising or other);
- G. Product display area lighting;
- H. Building or structure decoration;
- I. Building overhangs and open canopies.

Outdoor Light Output, Total. The initial total amount of light, measured in lumens, from all lamps used in outdoor light fixtures. Includes all lights and luminous tubing used for Class 1, Class 2, Class 3 and multi-Class lighting, and lights used for external illumination of signs, but does not include lights used to illuminate internally illuminated signs or luminous tubing used in neon signs. For lamp types that vary in their output as they age (such as high pressure sodium, fluorescent and metal halide), the initial lamp output, as defined by the manufacturer, is the value to be considered. For determining compliance with 18.18.080 - Total Outdoor Light Output Standards of this Code, the light emitted from lamps in outdoor light fixtures is to be included in the total output as follows:

- A. Outdoor light fixtures installed on poles (such as parking lot luminaires) and light fixtures installed on the sides of buildings or other structures, when not shielded from above by the structure itself as defined in parts B, C and D below, are to be included in the total outdoor light output by simply adding the initial lumen outputs of the lamps;
- B. Outdoor light fixtures installed under canopies, buildings (including parking garage decks), overhangs or roof eaves where all parts of the lamp or luminaire are located at least five (5) feet but less than ten (10) feet from the nearest edge of the canopy or overhang are to be included in the total outdoor light output as though they produced only one-quarter (0.25) of the lamp's rated initial lumen output;
- C. Outdoor light fixtures installed under canopies, buildings (including parking garage decks), overhangs or roof eaves where all parts of the lamp or luminaire are located at least ten (10) feet but less than thirty (30) feet from the nearest edge of the canopy or overhang are to be included in the total outdoor light output as though they produced only one-tenth (0.10) of the lamp's rated initial lumen output.
- D. Outdoor light fixtures installed under canopies, buildings (including parking garage decks), overhangs or roof eaves where all parts of the lamp or luminaire are located thirty (30) or more feet from the nearest edge of the canopy or overhang are not to be included in the total outdoor light output. Such lamps must however conform to the lamp source and shielding requirements of 18.18.070.

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.

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

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Searchlight. A lighting assembly designed to direct the output of a contained lamp in a specific tightly focused direction (a beam) with a reflector located external to the lamp, and with a swiveled or gimbaled mount to allow the assembly to be easily redirected. Searchlights include such lights that are used commonly to sweep the sky for advertisement purposes.

Sign, Externally Illuminated. A sign illuminated by light sources from the outside.

Sign, Internally Illuminated. A sign illuminated by light sources enclosed entirely within the sign cabinet and not directly visible from outside the sign.

**Sign, Neon.** A sign including luminous gas-filled tubes formed into text, symbols or decorative elements and directly visible from outside the sign cabinet.

**Spot Lamp.** A specific form of lamp designed to direct its output in a specific direction (a beam) with a reflector formed from the glass envelope of the lamp itself, and with a clear or nearly clear glass envelope. Spot lamps are those lamps so designated by the manufacturers.

**Spot Light.** A lighting assembly designed to direct the output of a contained lamp in a specific tightly focused direction (a beam) with a reflector located external to the lamp.

**Temporary Lighting.** Lighting which does not conform to the provisions of this Code 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 that by their nature are of limited duration, for example holiday decorations, civic events, or construction projects.

## ARTICLE III – SHIELDING AND TOTAL OUTDOOR LIGHT OUTPUT STANDARDS

## 18.18.070 Shielding Standards.

All nonexempt outdoor lighting fixtures shall have shielding as shown in Table 18.18.070.

Table 18.18.070 LAMP TYPE AND SHIELDING STANDARDS<sup>1,2,3,4</sup>

|   | LIGHTING ZONE |              |      | ONE       |
|---|---------------|--------------|------|-----------|
| USE CLASS AND LAMP TYPE                             | <b>E4</b>     | <b>E3</b>    | E2   | <b>E1</b> |
| Class 1 lighting (Color Rendition):                 |               |              |      |           |
| Initial output greater than or equal to 1800 lumens | F             | F            | F    | F         |
| Initial output below 1800 lumens (2)                | <b>A</b> (1)  | <b>A</b> (1) | A(1) | F         |
| Class 2 lighting (General Illumination):            |               |              |      |           |
| Initial output greater than or equal to 1800 lumens | F             | F            | F    | F         |
| Initial output below 1800 lumens (2)                | A(1)          | A(1)         | A(1) | F         |
| Class 3 lighting (Decorative)(3):                   |               |              |      |           |
| Initial output greater than or equal to 1800 lumens | F             | F            | F    | X         |
| Initial output below 1800 lumens (2)                | A(1)          | A(1)         | A(1) | F         |
| Residential lighting (all Classes)(4):              |               |              |      |           |
| Initial output greater than or equal to 1800 lumens | F             | F            | F    | F         |
| Initial output below 1800 lumens (2)                | A(1)          | A(1)         | A(1) | A(1)      |

## **Notes to Table 18.18.070**

A = all types of fixtures allowed; shielding not required but highly recommended, except that any spot or flood-light shall be aimed not higher than 25 degrees from the vertical line between the fixture and the ground when the source is visible from any off-site residential property or public roadway.

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- F = only fully shielded fixtures allowed
- X = not allowed
- 1. Flood or spot lamps shall be aimed no higher than 25 degrees from the vertical line between the fixture and the ground when the source is visible from any off-site residential property or public roadway.

  Exception: seasonal decorations using typical unshielded low-wattage incandescent lamps shall be permitted in all lighting zones from 15<sup>th</sup> of November thru the 15<sup>th</sup> of January.
- 2. See exception in 18.18.080 for seasonal decorations from November 15<sup>th</sup> till January 15<sup>th</sup>.
- 3. All Class 3 lighting shall be extinguished between 11:00pm (or when the business closes, whichever is later) and sunrise.
- 4. Residential refers to single family attached or detached uses located in any of the zone districts such as single-family detached and duplexes. Multiple-family residential uses, or apartments, must use standards for Class 1, 2 and 3 lighting.

## 18.18.080 Total Outdoor Light Output Standards.

Total outdoor light output shall not exceed the limits in Table 18.18.080. Seasonal decorations, permitted between November 15<sup>th</sup> and January 15<sup>th</sup>, are not counted toward these limits; lighting used for external illumination of signs is counted, while lighting used for internal illumination of signs is not counted. (The values in this table are the maximum permitted levels and not intended as design standards; design standards shall be the lowest levels that meet the requirements of the task.)

Table 18.18.080 MAXIMUM TOTAL OUTDOOR LIGHT OUTPUT STANDARDS

| LUMEN CAPS – INITIAL LAMP<br>LUMENS PER NET ACRE | LIGHTING ZONE |                 |                 |        |
|--|---------------|-----------------|-----------------|--------|
|  | E4            | E3 <sup>4</sup> | E2 <sup>4</sup> | E1     |
| Commercial and Industrial uses (1)               |               |                 |                 |        |
| Total (full cutoff + unshielded)                 | 1,000,000     | 200,000         | 50,000          | 25,000 |
| Unshielded only                                  | 40,000        | 20,000          | 4,000           | 2,000  |
| Residential uses (2,3)                           |               |                 |                 |        |
| Total (full cutoff + unshielded)                 | 20,000        | 10,000          | 10,000          | 10,000 |
| Unshielded only                                  | 5,000         | 5,000           | 1,000           | 1,000  |

#### Notes to Table 18.18.080.

- 1. This refers to all commercial and industrial uses and includes multiple family or apartment uses.
- 2. This refers to all single family attached or detached uses.
- 3. In Lighting Zones E4-E1, each residential single-family attached or detached home, duplex, triplex, quadruplex or townhome is allowed up to 5,500 total lumens, or the amount indicated in this Table based on the parcel's acreage, whichever is larger. Each is also allowed a maximum of 5,500 lumens of unshielded ("A") lighting, provided Table18.18.070 allows the lamp's type with "A" shielding. All residential spot or flood lamps permitted are to be aimed no higher than 25 degrees from the vertical line between the fixture and the ground when the source is visible from any off-site residential property or public roadway.
- 4. Public and private schools located in Zones E2 and E3 may petition the Director for an increase in the lumens per acre cap to the level permitted in Zone E4. The Director may allow an increase when the school submits an engineered design supporting the need of such increase.

## 18.18.090 Effective Shielding Standard.

All light fixtures that are required to be shielded shall be installed and maintained in such a manner that the shielding is effective as described in the definition in 18.18.060 for full cutoff fixtures.

## 18.18.100 Light Trespass Standard.

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- A. Beyond the shielding requirements of Section 18.18.070, all light fixtures shall be located, aimed or shielded so as to minimize stray light trespassing across residential property boundaries.
- **B.** Any lamp installed on a residential property in Zone E1 and visible from any other residential property shall be shielded such that it is not directly visible from that property.
- C. Luminaires, spot lamps or spot lights which are aimed, directed or focused such as to cause direct light to be directed toward residential buildings or adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on streets or roadways, shall be redirected or their light output controlled as necessary to eliminate such conditions.

18.18.110 Multi-Class Lighting Standard.

Multi-Class lighting shall conform to the shielding and timing restrictions, if any, which apply to the most restrictive Class.

# ARTICLE IV - ON-PREMISE AND OFF-PREMISE SIGNS

18.18.120 Externally Illuminated Sign Standards.

External illumination for 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 Section 18.18.080. Upward-directed sign lighting is prohibited.

18.18.130 Internally Illuminated Sign and Neon Sign Standards.

- A. Outdoor internally-illuminated advertising signs constructed with faces of translucent materials and wholly illuminated from within do not require shielding. Colored or dark backgrounds with light lettering or symbols are preferred to minimize the detrimental effects of light pollution. Lamps used for internal illumination of such signs shall not be counted toward the lumen caps in Section 18.18.080.
- B. Neon signs shall be treated as internally illuminated signs for the purposes of this Code, and shall not have their luminous outputs counted toward the lumen caps in Section 18.18.080. Neon lighting extending beyond the area considered to be the sign area (as defined in the Sign Code) shall conform to all provisions of this Code and shall be treated as Class 3 (decorative) lighting.
- C. Other internally-illuminated panels or decorations not considered to be signage according to the sign code (such as illuminated canopy margins or building faces), shall be considered decorative (Class 3) lighting, and shall be subject to the standards applicable for such lighting, including but not limited to the lamp source, shielding standards and lumens per acre caps of Section 18.18.080.

## 18.18.140 Curfews.

Illumination for all signs, both externally and internally illuminated, shall be turned off at the curfew times listed in Table 18.18.140 or when the business or portion thereof closes, whichever is later. Signs subject to curfews are required to have functioning and properly adjusted automatic shut-off timers. Internally illuminated signs, may continue to be used and illuminated but must conform to the curfews as indicated.

## Table 18.18.140 ILLUMINATED SIGN CURFEWS

|                                  | LIGHTING ZONE |           |           |            |
|----------------------------------|---------------|-----------|-----------|------------|
|                                  | <b>E4</b>     | <b>E3</b> | <b>E2</b> | <b>E</b> 1 |
| ON-PREMISE AND OFF-PREMISE SIGNS | 12 PM         | 12 PM     | 9 PM      | 9 PM       |

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## ARTICLE V - SPECIAL USES

#### 18.18.150 Recreational Facilities.

A. Lighting for outdoor athletic fields, courts, tracks or similar recreational facilities in Lighting Zones E1, E2, E3, and E4, shall be considered Class 1 (Color Rendition), and shall be exempt from the lumens per acre limits of Section 18.18.080.

## B. Shielding:

In Lighting Zones E1, E2, E3 and E4, full cutoff lighting is required for tennis courts, basketball courts, swimming pools, racquetball courts, golf driving ranges and similar facilities. Football fields, soccer fields, golf courses and baseball diamonds designed for Class III or IV levels of play (typically amateur or municipal league, elementary to high school, training, recreational or social levels; cf. IESNA Lighting Handbook and IESNA RP-6 Sports and Recreational Area Lighting) or designed for Class I and II levels of play (typically college, semi-professional, professional or national levels) shall utilize luminaires with minimal uplight consistent with the illumination constraints of the design. Where full cutoff 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 minimize uplight and offsite light trespass, and;
- 2. Are installed and maintained with aiming angles that permit no greater than five percent (5%) of the light emitted by each fixture to project above the horizontal.

## C. Illuminance:

All lighting installations shall be designed to achieve no greater than the minimal illuminance levels for the activity as recommended by the Illuminating Engineering Society of North America (IESNA).

## D. Off-site spill:

The installation shall also limit off-site spill (outside the parcel containing the recreational facility) to the maximum extent possible consistent with the illumination constraints of the design. For Class III and IV levels of play, a design standard of 1 lux (0.1 fc) at the property line of any residential property at a vertical point five (5) feet above grade, as measurable from any orientation of the measuring device, shall be required. For Class I and II levels of play, a design goal of 1.5 lux (0.15 fc) at the property line of any residential property at a vertical point five (5) feet above grade, as measurable from any orientation of the measuring device, shall be required.

#### E. Engineering Design:

Every such lighting system shall be designed by a registered professional engineer.

## F. Curfew:

All events shall be scheduled so as to complete all activity before the curfew listed in Table 18.18.150. 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.

Table 18.18.150 SPORTS FACILITY AND DISPLAY LOT LIGHTING CURFEWS

|   | LIGHTING ZONE |           |           |            |
|---|---------------|-----------|-----------|------------|
| ĺ | <b>E</b> 4    | <b>E3</b> | <b>E2</b> | <b>E</b> 1 |
|   | 11 PM         | 10 PM     | 9 PM      | 8 PM       |

#### 18.18.160 Outdoor Display Lots.

A. Lighting for display lots shall be considered Class 1 (Color Rendition), and shall be allowed a lumens per acre cap of 2,000,000.

#### B. Shielding:

All display lot lighting shall utilize full cutoff luminaires that are installed in a fashion that maintains the full cutoff characteristics.

#### C. Illuminance:

Lighting for display lots shall be considered Class 1 (Color Rendition).

## D. Off-site spill:

The display lot shall limit off-site spill (outside the parcel containing the display lot) to a maximum of 0.5 lux (0.05 fc) at the property line of any residential property at a vertical point five (5) feet above grade, as measurable from any orientation of the measuring device, shall be required.

## E. Engineering Design:

Every display lot lighting system shall be designed by a registered professional engineer.

#### F. Curfew:

Display lot lighting exceeding the lumens per acre cap of Section 18.18.080 shall be turned off at the curfew listed in Section 18.18.150 or within thirty 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 applicable for Class 2 lighting, including the lumens per acre caps in Section 18.18.080.

## 18.18.170 Service Station Canopies.

## A. Lighting Class:

Lighting for service station canopies shall be considered Class 2 lighting (General Illumination).

## B. Shielding:

All luminaires mounted on or recessed into the lower surface of service station canopies shall be full cutoff and utilize flat lenses.

# C. Total Under-Canopy Output:

The total light output used for illuminating service station canopies, defined as the sum of all under-canopy initial bare-lamp outputs in lumens, shall not exceed forty lumens (40) per square foot of canopy in Lighting Zones E4, and shall not exceed twenty (20) lumens per square foot in Lighting Zones E3. All lighting mounted under the canopy, including but not limited to luminaires mounted on the lower surface or recessed into the lower surface of the canopy and any lighting within signage or illuminated panels over the pumps, is to be included toward the total at full initial lumen output.

## D. Lumen Output:

The lumen output of lamps mounted on or within the lower surface of a canopy is included toward the lumen caps in Section 18.18.080 according to the method defined in 18.18.060. Other lighting located under a canopy but not mounted on or within the lower surface is included toward the lumen caps in 18.18.080 at full initial output.

## E. Off-site spill:

The service station canopy lot shall limit off-site spill (outside the parcel containing the service station lot) to a maximum of 0.5 lux (0.05 fc) at the property line of any residential property at a vertical point five (5) feet above grade, as measurable from any orientation of the measuring device, shall be required.

## 18.18.180 Other Lighting on Parcels with Special Uses.

On a property with special uses as listed above, all lighting not directly associated with the special use areas above shall conform to the lighting standards described in this Code, including but not limited to the lamp type and shielding requirements of 18.18.070 and the lumens per acre limits of 18.18.080. The net acreage for the determination of compliance with 18.18.080 shall not include the area of the athletic field or outdoor display lot, as defined in 18.18.060; the area of any service station canopy shall be included in the net acreage.

## ARTICLE VI - PLANS AND EVIDENCE OF COMPLIANCE

18.18.190 Submission Contents.

The applicant for any permit required by any provision of the Municipal Code 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. Even if no other such permit is required, the installation or modification (except for routine servicing and same-type lamp replacement) of any exterior lighting shall require submission of the information described below. 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 Municipal Code upon application for the required permit:

- A. Plans indicating the location on the premises of all lighting fixtures, both proposed and existing on the site;
- B. Description of all lighting fixtures, both proposed and existing. The description may include, but is not limited to, catalog cuts and illustrations by manufacturers (including sections where required); lamp types, wattages and initial lumen outputs;
- C. Photometric data, such as that furnished by manufacturers, or similar showing the angle of cut off of light emissions.

#### 18.18.200 Additional Submission.

The above required plans, descriptions and data shall be sufficiently complete to enable the Director to readily determine whether compliance with the requirements of this Code will be achieved. If such plans, descriptions and data cannot enable this ready determination, the applicant shall additionally submit as evidence of compliance to enable such determination such certified reports of tests as will do so provided that these tests shall have been performed and certified by a recognized testing laboratory.

#### 18.18.210 Subdivision Plats.

If any subdivision proposes or is required to have installed street or other common or public area outdoor lighting, submission of the information as described in 18.18.190 shall be submitted with the illumination plans required by Title 19.

## 18.18.220 Lamp or Fixture Substitution.

Changes of outdoor light fixture or the type of light source therein shall be subject to the approval of the Director.

# **ARTICLE VIII - PROHIBITIONS**

# 18.18.230 Installation of Non-Conforming Fixtures and Lamps.

The installation of any outdoor lighting fixture or lamp for new construction, additions, or replacement fixtures to existing facilities not in compliance with this Chapter is prohibited.

## 18.18.240 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, unless installed for temporary use with prior approval of the Director under Article IX. Authorization for such temporary use shall be for no more than three days per 365 day period for any one applicant or property and shall additionally be subject to any necessary state and federal approvals.

## 18.18.250 Searchlights.

The operation of searchlights for non-governmental purposes is prohibited, unless installed for temporary use with prior approval of the Director under Article IX. Authorization for such temporary use shall be for no more than three days per 365 day period for any one applicant or property and shall additionally be subject to any necessary state and federal approvals.

# 18.18.260 Off-Premise Signs.

Illumination of outdoor advertising off-premise signs is prohibited in Lighting Zone E1.

18.18.270 Existing Lighting Causing Light Trespass Onto Residential Property

- A. If after complaint and investigation, the Director finds that an existing light fixture directs light toward residential buildings, the Director shall give written notice of such violation to the owner and/or to the occupant of such premises demanding that the violation be abated within 90 days of the date of written notice.
- **B.** Light trespass onto residential property from existing lighting shall be remedied by redirecting the light fixture or by controlling the light output as necessary.
- C. Light levels shall not exceed a maximum of 0.25 footcandles (2.5 lux) at the property line of any residential property at a vertical point five (5) feet above grade.
- D. Light trespass measurements shall be made at the property line of the residential site, with the meter held normal to a line between any offending light source(s) and the light meter. If measurement on private property is not possible or practical, light level measurements may be made at the boundary of the public right of way or at any other location on an adjacent property.
- E. Measurement shall be made using a commercial cosine and color corrected meter having an accuracy tolerance of plus –or-minus five percent or better at 1 lux (0.1 footcandle). The meter shall have been calibrated within two years of the date of measurement by the manufacturer or by a certified illumination laboratory.
- F. Measurements shall be taken using a 4.5" long, 1.75" +/- 0.25" diameter thin wall black tube baffle atop the meter's photolelectric cell aperture to prevent any stray light from other sources from affecting the measurement.

# ARTICLE IX - TEMPORARY EXEMPTIONS

18.18.280 Temporary Exemption Requests.

A temporary exemption request shall be subject to the approval of the Director. Such request shall contain the following information:

- A. Specific Code exemption(s) requested;
- C. Duration of requested exemption(s);
- E. Proposed location on premises of the proposed light fixture(s);
- B. Purpose of proposed lighting;
- D. Information for each luminaire and lamp combination as required in 18.18.190;
- F. Previous temporary exemptions, if any, and addresses of premises thereunder;
- G. Such other data and information as may be required by the Director.

18.18.290 Approval; Limitation.

The Director shall have five (5) 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 (30) days from the date of issuance of the approval. The approval shall be renewable upon further written request for a maximum of one (1) additional thirty (30) day period. The Director is not authorized to grant more than one (1) temporary permit and one (1) renewal for a thirty (30) day period for the same property within one (1) calendar year.

18.18.300 Disapproval; Appeal.

If the request for temporary exemption or its extension is disapproved, the applicant shall have the appeal rights provided in 18.18.380.

# ARTICLE X – OTHER EXEMPTIONS 18.18.310 Nonconformance

A. Bottom-mounted or unshielded on-premise or off-premise sign lighting shall be brought into compliance with the shielding standards of 18.18.070 no later than May 7, 2015.

- Post Top antique or acorn style luminaires that cannot achieve full cutoff may be used if they achieve B. cutoff.
- There shall be no change in use or lamp type, change or replacement of ballast or any replacement (except C. for same-type and same-output lamp replacement) or structural alteration made, without conforming to all applicable requirements of this Code.
- All existing outdoor lighting fixtures shall be brought into compliance with the shielding standards of 18.18.070 not later than May 7, 2015. Compliance with lumens cap is not mandatory but encouraged.

# 18.18.320 Flag Illumination.

Illumination of City, County, State or US flags with spot lights or flood lamps is exempt from all the requirements of this code.

#### 18.18.330 State and Federal Facilities.

Compliance with the intent of this Code by facilities that are owned, operated and maintained by the State or Federal government is encouraged but not required.

### 18.18.340 Emergency Lighting.

Emergency lighting, used by police, firefighting, or medical personnel, or at their direction, is exempt from all requirements of this code for as long as the emergency exists.

## 18.18.350 Swimming Pool and Fountain Lighting.

Underwater lighting used for the illumination of swimming pools and fountains is exempt from the lamp type and shielding standards of 18.18.070, though such lighting shall conform to all other provisions of this Chapter.

# 18.18.360 Fossil Fuel Lights:

All outdoor light fixtures producing light directly by the combustion of natural gas or other fossil fuels are exempt from all requirements of this code.

## 18.18.370 El Paso Star on the Franklin Mountain:

The El Paso Star on the Franklin Mountain, owned and operated by El Paso Electric Company as of the date of this ordinance, is exempt from all requirements of this code.

## ARTICLE XI - APPEALS

## 18.18.380 Appeals.

Any person aggrieved by any decision of the Director made in administration or enforcement of this Code has the right of appeal to the Building Board of Appeals.

## ARTICLE XI – CONFLICTS, VIOLATIONS, PENALTIES AND SEVERABILITY

#### 18.18.390 Conflicts.

Where any provision of federal, state, or local law conflicts with any provision of this Code, the most restrictive shall govern unless otherwise regulated by law.

#### 18.18.400 Violations.

Any person, firm, corporation or agent who shall violate a provision of this code, or fails to comply therewith, or with any of the requirements thereof, or who has erected, constructed, altered, installed, demolished or moved any outdoor lighting, in violation of this Chapter, shall be charged with a Class C Misdemeanor which is punishable by a fine which shall not exceed two thousand dollars. Each such person may be charged with a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this code is committed or continued.

## 18.18.410 Severability.

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Document Author: MWAT

If any section, subsection, sentence, clause or phrase of this code is for any reason held to be illegal, such decision shall not affect the validity of the remaining portions of this code.

## **ARTICLE XII – EFFECTIVE DATE**

# 18.18.420 Effective Date.

- A. The effective date of this ordinance shall be May 7, 2005.
- B. This ordinance shall be applicable to all permit applications received on or after that date.

PASSED AND APPROVED this & the day of February, 2005.

THE CITY OF EL PASO

Joe Ward Mayor

ATTEST:

Richarda Momsen,

City Clerk

APPROVED AS TO FORM:

Matt Watson

**Assistant City Attorney** 

APPROVED AS TO CONTENT:

R. Alan Shubert, P.E.

Director of Building Permits & Inspections