

ORDINANCE No. \_\_\_\_\_

## **LIGHTING ORDINANCE**

AN ORDINANCE PROVIDING REGULATIONS FOR LIGHTING IN THE CITY LIMITS; PROVIDING FOR THE FOLLOWING: RULES; STANDARDS; PROCEDURES; CRIMINAL PENALTIES INCLUDING CRIMINAL FINES NOT TO EXCEED \$ 500.00 PER VIOLATION AND CIVIL FINES OF UP TO \$500.00 PER VIOLATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

**WHEREAS**, the City Council of Spring Branch (“City Council”) seeks to provide for the regulation of lighting within the city limits of Spring Branch (“City”); and

**WHEREAS**, the City Council seeks to maintain the value of Spring Branch and its scenic beauty and rural charm, which are the keystones of the City's quality of life; and

**WHEREAS**, the City Council finds that unnecessary and improperly designed light fixtures cause glare, light pollution and wasted resources; and

**WHEREAS**, glare and light pollution can result in hazardous circulation conditions for all modes of transportation; the diminishing ability to view the night sky; light trespass; and unattractive townscape; and

**WHEREAS**, the people who live in and near Spring Branch value the natural environment, including the beauty and high quality of the night sky; and

**WHEREAS**, Spring Branch desires to protect the health, safety and welfare of the general public, and to protect the night sky that adds to the quality of life and economic well-being of the City; and

**WHEREAS**, these lighting regulations will not sacrifice the safety of our citizens or visitors, or the security of property, but instead will result in safer, efficient and more cost-effective lighting; and

**WHEREAS**, pursuant to Texas Local Government Code Section 51.001, the City has general authority to adopt an ordinance or police regulation that is for the good government, peace or order of the City and is necessary or proper for carrying out a power granted by law to the City; and

**WHEREAS**, the City Council finds that it is necessary and proper for the good government, peace or order of Spring Branch to adopt an ordinance regulating lighting.

**NOW, THEREFORE, BE IT ORDAINED** by the Spring Branch City Council:

### **1. FINDINGS OF FACT**

The foregoing recitals are incorporated into this Ordinance by reference as findings of fact as if expressly set forth herein.

### **2. REPEALER**

To the extent reasonably possible, ordinances are to be read together in harmony. However, all ordinances, or parts thereof, that are in conflict or inconsistent with any provision of this Ordinance are hereby repealed to the extent of such conflict, and the provisions of this Ordinance shall be and remain controlling as to the matters regulated, herein.

### **3. SEVERABILITY**

Should any of the clauses, sentences, paragraphs, sections or parts of this Ordinance be deemed invalid, unconstitutional, or unenforceable by a court of law or administrative agency with jurisdiction over the matter, such action shall not be construed to affect any other valid portion of this Ordinance.

### **4. EFFECTIVE DATE**

This Ordinance shall be effective immediately upon passage and publication of caption.

### **5. PROPER NOTICE & MEETING**

It is hereby officially found and determined that the meeting at which this Ordinance was passed was open to the public, and that public notice of the time, place and purpose of said meeting was given as required by the Open Meetings Act, Texas Government Code, Chapter 551. Notice was also provided as required by Chapter 52 of the Texas Local Government Code.

**PASSED & APPROVED** this, the 10th day of December 2019,

**CITY OF SPRING BRANCH:**

by: \_\_\_\_\_  
Mayor, *mayors name*

**ATTEST:**

\_\_\_\_\_  
*Name, City Secretary*

*Attachment "A"*

This Article shall be known as the "Lighting Ordinance".

**002 Definitions**

*Applicant:* A person or entity who submits to the City an application for an approval required by the Code of Ordinances. To be qualified as an Applicant under this Article, the person or entity must have sufficiently documented legal authority or proprietary interests in the land to commence and maintain proceedings under the Code of Ordinances. To avoid confusion, the term will not include anyone other than the Property Owner(s), tenant(s), or a duly authorized agent and

representative of the Property Owner. As to enforcement between tenant(s) and Property Owner(s) of a particular piece of property, the Property Owner(s) shall have ultimate liability for violations of this Ordinance.

*B-U-G Ratings:* A luminaire classification system with ratings for backlight (B), uplight (U), and glare (G). The Backlight component of the rating system takes into account the amount of light in the BL, BM, BH and BVH zones depicted in Figure A below. The Uplight component takes into account the amount of light in the UH and UL zones. The Glare component takes into account the amount of light in the FH, FVH, BH and BVH zones.

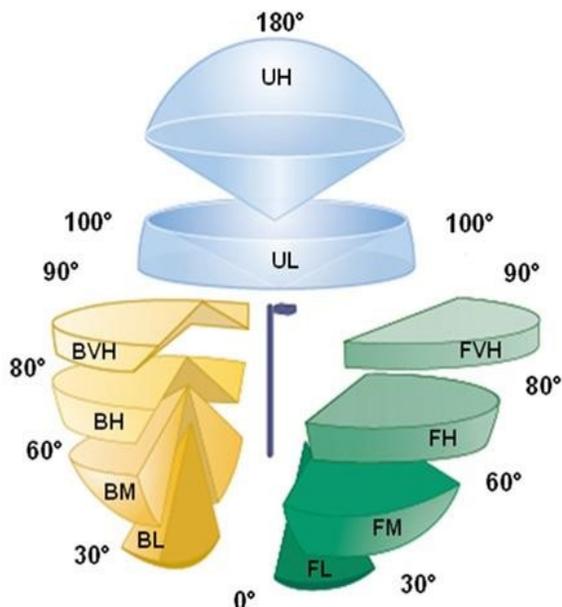


Figure A: Components of B-U-G Ratings

*City:* Spring Branch, an incorporated municipality located in Comal County, Texas.

*Full Cut-off Fixtures:* Fixtures, as installed, that are designed or shielded in such a manner that all light rays emitted by the fixture, either directly from the lamps or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted and less than ten percent of the rated lumens are projected between the 90-degrees and 80degrees angle made from said horizontal plane with Nadir.

*Fully Shielded Light Fixture:* A light fixture constructed and installed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane through the fixture's lowest light-emitting part. A fully shielded light may or may not be full-cutoff depending on the amount of light produced in the glare zone between 90-degrees and 80-degrees above nadir.

Glare: Lighting entering the eye directly from luminaires or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.

Holiday Lighting: Lighting used for a specific celebration which may be one of the following types:

- (1) Festoon type low-output lamps, limited to small individual bulbs on a string with a maximum output of 70 lumens within any square foot if the bulbs are coated in a color, or a maximum output of 20 lumens within any square foot if the bulbs are clear.
- (2) Low-output lamps with a maximum output of 210 lumens within any cubic foot used to internally illuminate yard art.
- (3) Flood or spotlights producing less than 2000 lumens each, whose light source is not visible from any other property, and which are used only as temporary lighting.

Light Trespass: Light that falls beyond the property it is intended to illuminate, in a motor vehicle driver's eyes, or upwards toward the sky.

Lighting: Any source of light that does not include natural light emitted from celestial objects or fire.

Logo: A representation or symbol adopted by a business, organization, or an individual used to promote instant public recognition.

Lumen: The unit of measurement used to quantify the amount of light produced by a bulb or emitted from a fixture (as distinct from "watt," a measure of power consumption). The lumen rating associated with a given lamp is generally indicated on its packaging or may be obtained from the manufacturer. (Abbreviated lm)

Lumens per Net Acre: The total number of luminaire lumens produced by all lamps utilized in outdoor lighting on a property divided by the number of acres, or part of an acre, of the property to be illuminated.

Luminaire: The complete lighting unit (fixture) consisting of a lamp, or lamps and ballasts, together with the parts designed to distribute the light (reflector, lens, diffuser), to position and protect the lamps, and to connect the lamps to the power supply.

Luminaire Lumens: Calculated as the sum of the initial number of lumens produced by the light emitting elements of an individual luminaire, multiplied by the luminaire efficiency. If the efficiency is not known for a residential luminaire, assume 70%.

Luminous Elements (of a Light Fixture): The lamp (light bulb), any diffusing elements, and surfaces intended to reflect or refract light emitted from the lamp individually or collectively comprise the luminous elements of a light fixture (luminaire).

Nadir (of a Light Fixture): Zero degrees vertical made by a line that points directly downward from the luminaire.

Outdoor Lighting: Temporary or permanent lighting that is installed, located or used in such a manner to cause light rays to shine outdoors. Non-residential fixtures that are installed indoors that cause light to shine outside are considered outdoor lighting for the intent of this Article. (See Figure A). Residential fixtures installed indoors generating more than 6200 lumens (approximately equal to a 300 watt incandescent bulb) that cause light to shine outside are also considered outdoor lighting for the intent of this Article.

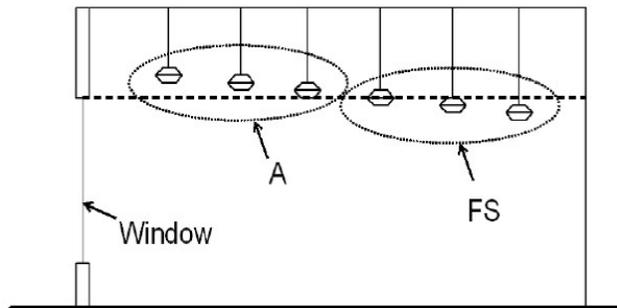


Figure A: Elevation view showing an example of a non-residential application of indoor lighting, labeled FS, which will be subject to this ordinance and indoor lighting, labeled A, which is installed so that it is not subject to this Ordinance. This example presumes the luminaires in the structure in question are not elevated such that any of the luminaires labeled A in the figure above may be seen from any other property.

Temporary Lighting: Lighting intended for uses which by their nature are of limited duration; for example, holiday decorations, civic events, or construction projects.

Total Outdoor Light Output: Total outdoor light output is the total amount of light, measured in lumens, from all outdoor light fixtures within the illuminated area of a property. The lumen value to be used in the calculation is the initial lamp lumens, as defined in this Article.

Uplighting: Lighting that is directed in such a manner as to project light rays above a horizontal plane running through the lowest point on the fixture where light is emitted.

### **003 New Lighting**

All outdoor lighting installed after enactment of this Article shall conform to the standards established herein.

### **004 Existing Lighting**

All existing outdoor lighting on property annexed into the City following the enactment of this Article, or that was legally installed within the City's municipal boundaries (i.e., City Limits) before the enactment of this Article, that conflicts with the standards specified herein shall be considered nonconforming. Nonconforming outdoor lighting shall be brought into conformance with this Article as follows:

- (1) The City will determine the appropriate applications, development permits, etc. that will require conformance with the Outdoor Lighting Ordinance. The city shall determine the applicable maximum of days from date of permit issuance to bring the lighting into conformance.

The replacement, enlargement, alteration, repair, or improvement of any existing outdoor lighting equipment which becomes damaged or inoperable with equipment that does not conform to this Ordinance, is prohibited.

All other existing outdoor lighting on property used for non-residential purposes that is not in conformance with this Article shall be brought into conformance with this Article within \_\_\_\_\_ years from the date of adoption of this Article.

All existing outdoor lighting on property used for residential uses, that does not comply with this Article is required to be brought into conformance with this Article no later than \_\_\_\_\_ years from the date of adoption of this Article.

### **005 Outdoor Lighting in the Extra Territorial Jurisdiction (ETJ) of the City**

The provisions of this Article are not binding in the ETJ of the City. However, compliance is strongly encouraged. All outdoor lighting in the ETJ brought into the City Limits as a result of annexation shall be brought into conformance with this Article within the following time periods:

- (1) Any non-residential outdoor lighting that is installed, repaired, renovated, or moved after the date of adoption of this Article shall have \_\_\_\_\_ months from the date of annexation to come into compliance.
- (2) Any non-residential outdoor lighting installed, repaired, renovated, or moved on or prior to the date of adoption of this Article shall have \_\_\_\_\_ years from the date of annexation to come into compliance.

- (3) All residential outdoor lighting installed, repaired, renovated, or moved on or prior to the date of annexation shall have \_\_\_\_\_ years from the date of annexation to come into compliance.

### **006 Shielding and Total Outdoor Light Output Standards**

- (1) Governmental owned streetlights, if rated by the B-U-G classifications,
  - A) Shall be rated and installed with the maximum Backlight component limited to the values in TABLE 1 based on location of the light fixture where the property line is considered to be 5 feet beyond the actual property line.
  - B) Shall be rated and installed with the Uplight component of zero (U0) and
  - C) Shall be rated and installed with the Glare component no more than G1 although G0 is preferred

| TABLE 1   | Governmental Owned |
|---|--------------------|
| Fixture is greater than 2 mounting heights from property line   | B4                 |
| Fixture is 1 to less than 2 mounting heights from property line | B3                 |
| Fixture is -.5 to 1 mounting heights from property line         | B2                 |
| Fixture is less than 0.5 mounting height to property line       | B0                 |

- (2) Governmental owned streetlights, if not rated by the B-U-G classifications, shall meet the qualifications to be full cutoff fixtures in order to limit light trespass. (See Figure B)

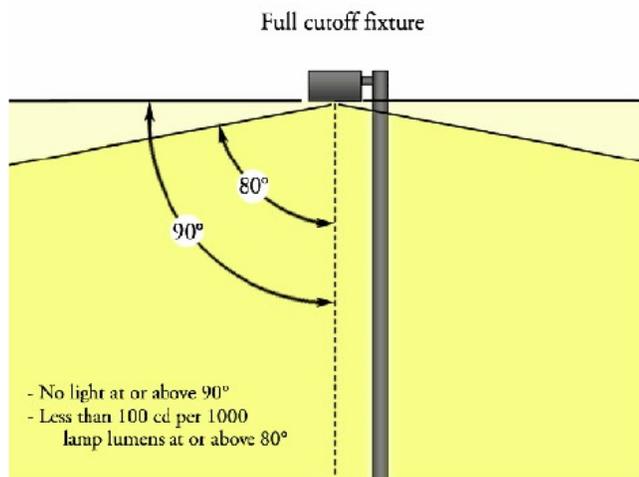


Figure B

- (3) All outdoor lighting, except governmental owned streetlights, shall be shielded so that the luminous elements of the fixture are not visible from any other property. Mounting height or proximity to property lines may cause the luminous elements of a light fixture to require additional shielding. (See Figures C).



Figure C: Examples of shielding

- (4) Non-governmental light fixtures, if rated by the B-U-G classifications,
  - A) Shall be rated and installed with the maximum Backlight component limited to the values in TABLE 2 based on location of the light fixture where the property line is considered to be 5 feet beyond the actual property line.
  - B) Shall be rated and installed with the Uplight component of zero (U0) and
  - C) Shall be rated and installed with the Glare component no more than G0.
  - D) Shall be shielded in accordance with this Article.

| TABLE 2   | Residential | Non-Residential |
|---|-------------|-----------------|
| Fixture is greater than 2 mounting heights from property line   | B3          | B4              |
| Fixture is 1 to less than 2 mounting heights from property line | B2          | B3              |
| Fixture is -.5 to 1 mounting heights from property line         | B1          | B2              |
| Fixture is less than 0.5 mounting height to property line       | B0          | B0              |

DO NOT USE

MAY BE USED IN MOST CASE

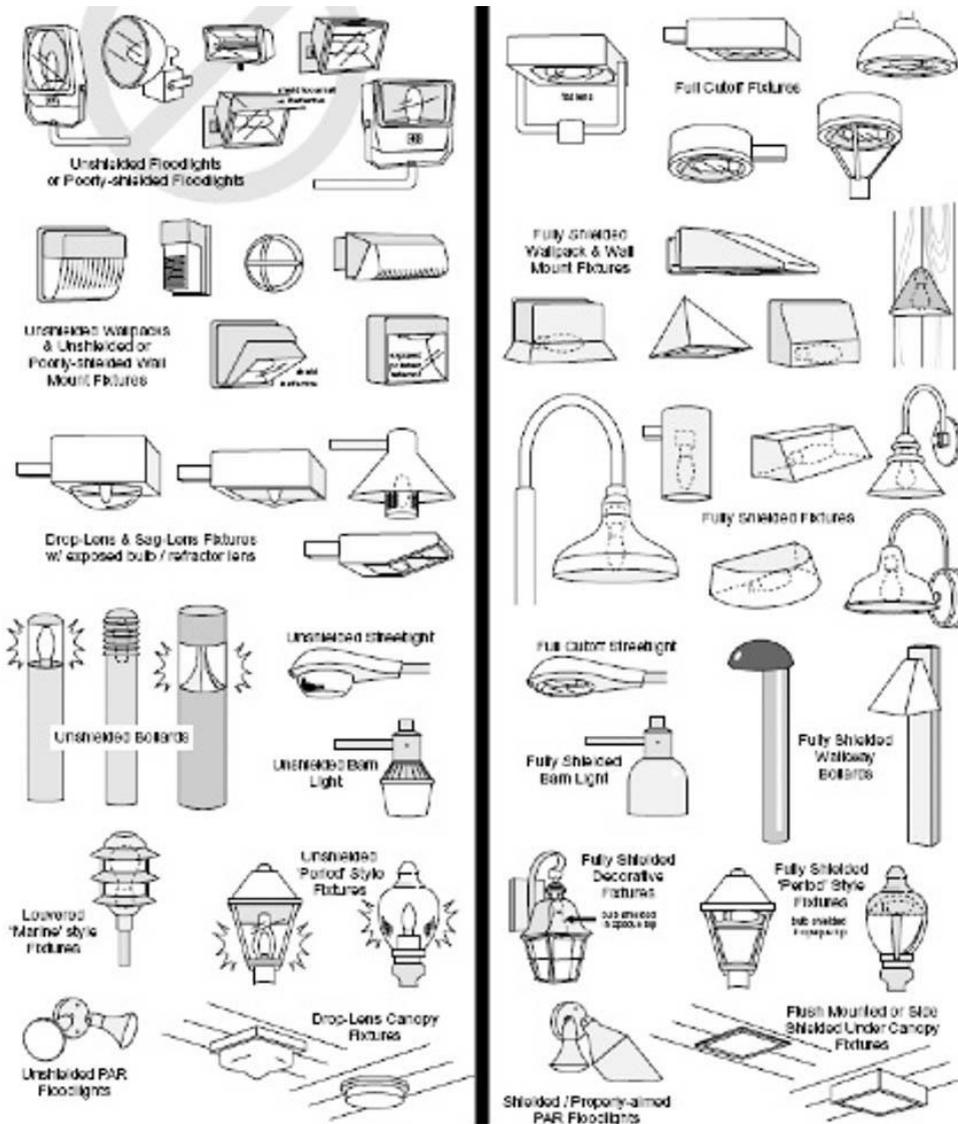


Figure D: The lights on the left are non-conforming. Those on the right may be used in most cases. However, the mounting height and proximity to the property line may require additional shielding to prevent the luminous elements from being visible from any other property.

- (3) Outdoor uplighting is prohibited, except as specifically permitted in this Article.

- (4) Outdoor lighting fixtures, except those with uplighting specifically permitted in this Article, are not allowed to have light escape a horizontal plane running through the lowest point of the luminous elements. (See Figures E and F).
- (5) Outdoor lighting with the “G” component of the B-U-G Rating equal to zero (“0”) is conforming if the mounting height and proximity to the property line is such that additional shielding is not needed to prevent the luminous elements from being visible from any other property.

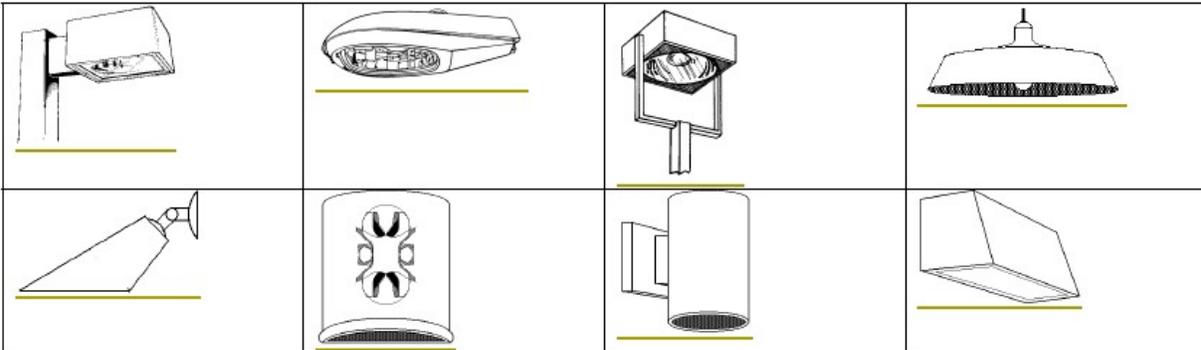


Figure E: This figure shows examples of fixtures that will conform to the provision to not allow light to escape above a horizontal plane running through the lowest point of the luminous elements if they are closed on top and mounted such that the bottom opening is horizontal. Note that the mounting height and proximity to the property line may require additional shielding to prevent the luminous elements from being visible from any other property.

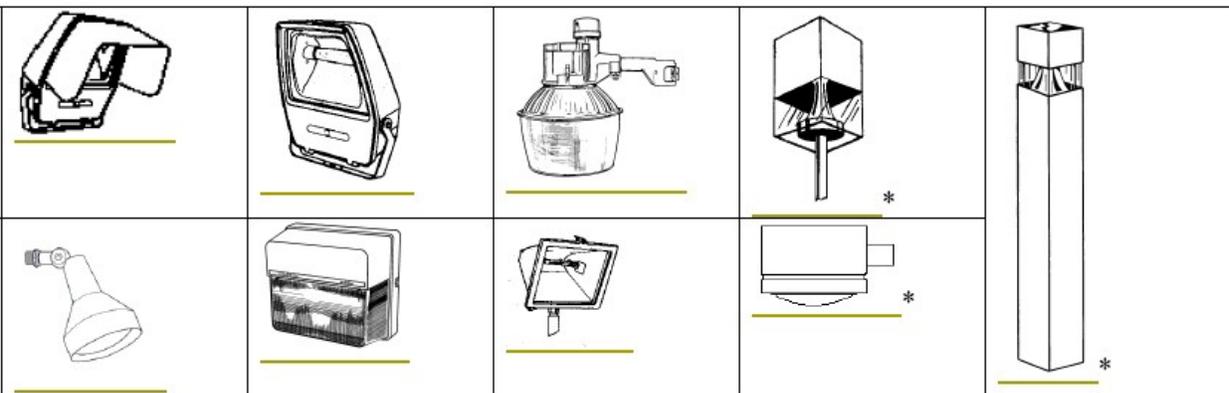


Figure F: This figure illustrates examples of fixtures that do NOT conform to the provision to not allow light to escape above a horizontal plane running through the lowest point of the luminous elements.

\*Note: Even though the lamps in these fixtures are shielded from direct view when viewed from the side or above, reflective surfaces within the fixtures and or lens covers *are* directly visible from the side.

- (5) Total outdoor light output (excluding governmental owned streetlights used for illumination of public rights-of-way and outdoor recreation facilities) of any nonresidential property shall not exceed 100,000 lumens per net acre in any contiguous illuminated area. This Lumen per net acre value is an upper limit and not a design goal; design goals should be the lowest levels that meet the requirement of the task.
- (6) Total outdoor light output (excluding governmental owned street lights used for illumination of public rights-of-way and outdoor recreation facilities) of any residential property shall not exceed the following cap: A base of 10,000 lumens plus 800 lumens per entry/exit plus the number of feet around the perimeter of each permanent structure times 10 lumens.
- (7) Outdoor recreational facilities are not subject to the lumens per net acre limit. However, outdoor recreational facilities are subject to the shielding requirement above. Where fully shielded fixtures are not available, lighting fixtures using external louvers or shields that, in the final installed configuration, extend to within 3 inches on the lowest portion of the light fixture opening are required. (See Figure G). The fixtures shall be installed and maintained with aiming angles that permit no greater than 1% of the light emitted by each fixture to project above the horizontal. It is recommended that the lumens per net acre for multi-directional aerial sports (e.g., baseball, basketball, football, soccer) not exceed 1,000,000 lumens per net acre. It is recommended that the lumens per net acre for uni-directional aerial sports (e.g., golf at a driving range, skeet shooting) and all ground level sports (e.g., field hockey, swimming, archery, target shooting) not exceed 800,000 lumens per net acre.

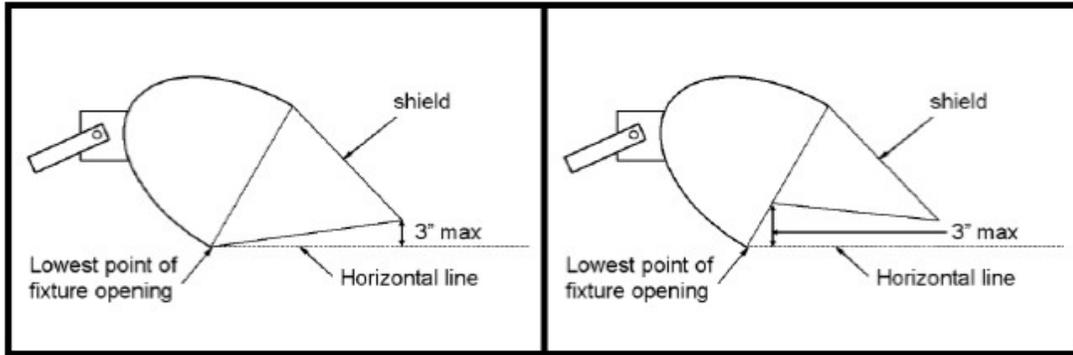


Figure G: Sports lighting where fully shielded fixtures are not available.

### 007 Lighting for Outdoor Signs and Panels

- (1) Outdoor internally illuminated signs (whether free standing or building mounted) shall be constructed with an opaque background and translucent letters and symbols or with a colored background and lighter letters and symbols. (See Figure H). The internally illuminated portion of the sign cannot be white, cream, off-white, yellow or any light color unless it is part of a registered logo. White, cream, off-white, yellow or any light color are permitted in the logo only, provided that such colors in the logo shall represent not more than 33% of the total sign area permitted. Lamps used for internal illumination shall not be included in the total outdoor light output calculation. The illumination is to be the lowest intensity needed to allow the sign to be visible for up to 1/2 mile from its installation.

| Light Background<br><input type="checkbox"/>  | Colored Background<br><input checked="" type="checkbox"/>                           | Opaque Background<br><input checked="" type="checkbox"/>                              |
|---|---|---|
|  |  |  |
|  |  |  |

Figure H: Internally illuminated Signs

- (2) Outdoor internally illuminated panels (such as illuminated canopy margins or building faces), shall be included in lumens per net acre calculation or lumens cap as applicable to the property.
- (3) Outdoor externally illuminated signs shall conform to all provisions of this Article.

**008 Lighting Under Canopies, Building Overhangs, or Roof Eaves**

- (1) All Outdoor light fixtures located under canopies, under building overhangs, or under roof eaves must conform to all provisions of this Article.
- (2) Outdoor light fixtures located under canopies, under building overhangs, or under roof eaves where the center of the lamp or luminaire is located at 5 feet, but less than 10 feet from the nearest edge of the canopy or overhang are to be included in the lumens per net acre calculation or lumens cap, as applicable, as though they produced only one-quarter (1/4) of the lamp's rated lumen output. (See Figures I and J).

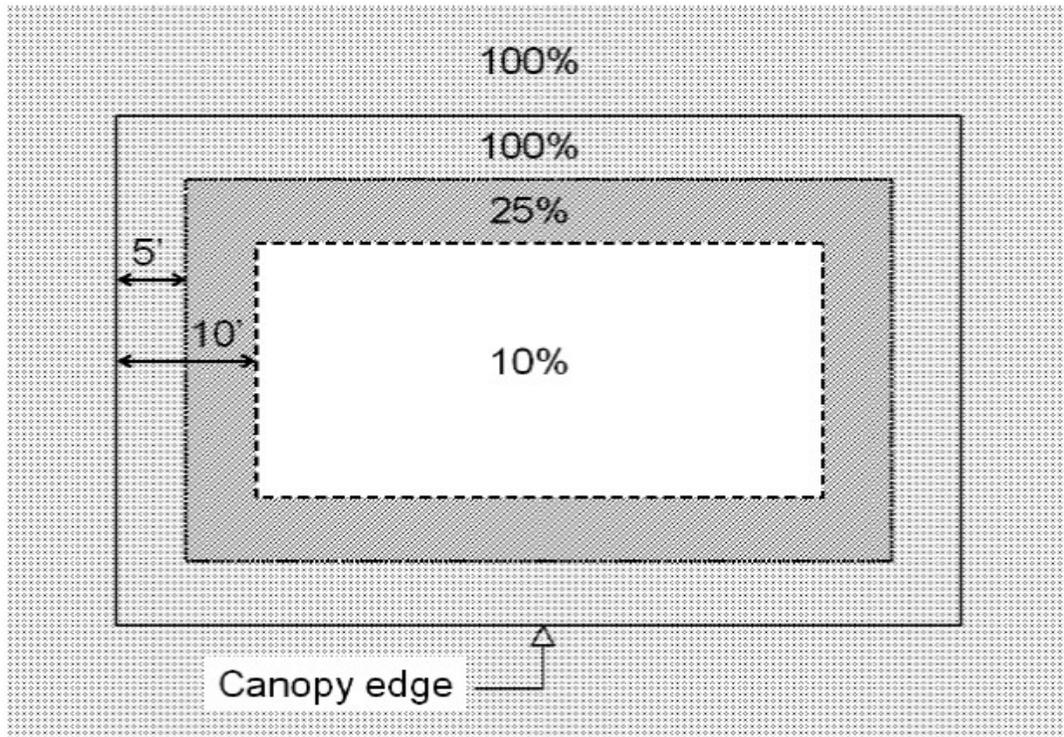


Figure I: Plan view of a canopy, showing fixture location and lumen lamp output percentage counted toward total lumens per net acre or lumens cap, as applicable.

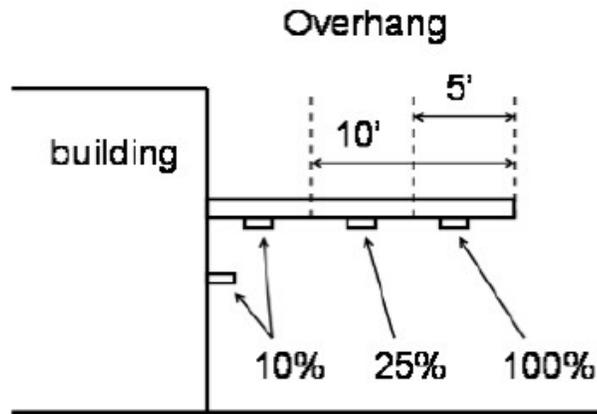


Figure J: Sample elevation view of a canopy or overhang attached to a building, showing location of shielded fixtures and initial lamp output percentage counted toward lumens per net acre or lumens cap, as applicable.

- (3) Outdoor light fixtures located under canopies, under building overhangs, or under roof eaves where the center of the lamp or luminaire is located 10 or more feet from the nearest edge of a canopy, building overhang, or eave are to be included in the lumens per net acre or lumens cap, as applicable, as though they produced only one-tenth (1/10) of the lamp's rated lumen output. (See Figures I and J)
- (4) The total light output used for illuminating under canopies or building overhangs, defined as the sum of all under canopy initial lamp lumen outputs, shall not exceed 20 lumens per square foot under the canopy area. All lighting mounted under the canopy, including but not limited to light fixtures mounted on the lower surface of the canopy and auxiliary lighting within signage or illuminated panels under the canopy, is to be included in the lumens per net acre or lumens cap, as applicable.

### 009 Neon Lighting

Neon lighting is permitted, so long as lumen calculations from such lighting are included in the total outdoor light output calculations for the site. Lumens are calculated on a per foot basis, rather than per "fixture". Such lighting shall also be subject to the shielding requirements of this section, unless exempted under Section titled Exemptions.

## 010 Flagpoles

It is preferred that flagpoles not be illuminated and that the traditional raising of the flag after dawn and lowering of the flag before sunset be utilized. Lighting of up to a total of 2 flags per property is permitted with the following restrictions:

- A) The flags must either be the flag of the United States of America or the flag of the State of Texas to be illuminated.
- B) Flag poles with a height greater than 20 feet above ground level shall be illuminated from above if illuminated at all. This may be achieved by utilizing a light fixture attached to the top of the flag pole or a fixture mounted above the top of the flag pole on a structure within 15 feet of the flag pole and must comply with all sections of this ordinance except for lights such as the ones in Figure K. The total number of lumens initially output from any light fixture mounted on top of a flagpole is limited to 800.
- C) Flag poles with a height equal to or less than 20 feet above ground level may be illuminated from below. They are to be illuminated with up to 2 spot type fixtures utilizing shields to reduce glare, whose maximum combined lumen output is 78 lumens per foot of pole height, measured from the light fixture to the top of the flagpole. The fixture is to be mounted so that the lens is perpendicular to the flagpole and the light output points straight up at the flag.



Figure K: Options for flagpole lighting

- (D) Lamps used for flagpole illumination shall be included in the lumens per net acre calculation or the lumens cap, as applicable.

## 011 Lighting Curfews

- (1) Non-residential outdoor lighting intended to be left on more than 30 minutes after closing, or the completion of activities, must be reduced to 25% or less of the normal lumen output. Motion sensor activation may be allowed to cause the light to resume normal lumen output only when activated and to be reduced back to 25% or less of normal lumen output within 5 minutes after activation has ceased, and the light shall not be triggered by activity off the property.

- (2) Illumination for all advertising signs, both externally and internally illuminated, shall be turned off by the later of closing time or 10:00 P.M., provided, however, that such signs may be turned back on prior to sunrise, but no more than one hour prior to opening.
- (3) Street Lighting, other than at the intersection of roadways, shall utilize half-night photocells or timers to turn off the lights halfway between dusk and dawn.
- (4) Lighting for outdoor recreational facilities is allowed between one hour prior to sunset and 10:30 p.m., unless it is needed to complete a specific organized activity or event already in progress at 10:30 p.m.
- (5) All outdoor lighting is encouraged to be turned off when no one is present to use the light.
- (6) Controls shall be provided that automatically extinguish all outdoor lighting when sufficient daylight is available using a control device or system such as a photoelectric switch, astronomic time switch or equivalent functions from a programmable lighting controller, building automation system or lighting energy management system, all with battery or similar backup power devices.

## **012 Prohibitions**

- (1) The installation of any mercury vapor fixture or lamp for use as outdoor lighting is prohibited.
- (2) The operation of searchlights for advertising purposes is prohibited.
- (3) Luminaries rated at more than 4400K are not permitted.

## **013 Submission of Plans and Evidence of Compliance**

- (1) All non-residential building permit applications must include an outdoor lighting plan which includes the following information:
  - (A) The location of all existing and proposed light fixtures (may be included on site plan) including those indoor fixtures defined as outdoor lighting for the intent of the Article.

- (B) A lumen calculation sheet to determine lumens per net acre. It must include the total area to be illuminated, the fixture catalog descriptions, lamp types (i.e., incandescent, low pressure sodium, compact fluorescent, LED, etc.), number of luminaires, initial lamp lumens per luminaire, and the light loss factor (LLF) or efficiency rating for all existing and proposed lamps. Lumens for existing fixtures may be estimated but the source of the numbers assigned must be documented in said outdoor lighting plan.
  - (C) Luminaries intended to illuminate fuel pumps or automated teller machines must be so noted.
  - (D) Specification sheets for all existing and proposed light fixtures. If specification sheets cannot be located for existing fixtures, then daylight and nighttime photographs with the light illuminated are to be submitted.
  - (E) Acknowledgement that the Applicant has received notification of the provisions of this Article.
- (2) Upon receipt of residential building permit applications, City Staff shall provide the home builder and/or Applicant with educational materials about this Article. The City's submission of educational materials shall be *prima facie* evidence that the Applicant has received notification of the provisions of this Article.
  - (3) The residential property homeowner must create a table with an entry for each luminaire designated as an outdoor light existing or planning to be installed on the property. They must provide the estimated number of lumens produced for each existing luminaire and specification sheets with manufacturer supplied lumens for each luminaire planned for the property; the number of entrances /exits to the structures on the property and the perimeter of each permanent structure on the property.
  - (3) Verification that a residential or commercial construction project requiring a building permit application has complied with the provisions of this Article shall occur during the final electrical inspection by the City Building Inspector.

#### **014 Exemptions**

The following lighting instances are exempt from this Article:

- (1) Outdoor light fixtures with a maximum output of 310 lumens per fixture, regardless of the number of bulbs, (equals approximately one 25-watt incandescent light), may be left unshielded provided the fixture has a diffuser installed, and the source of the

light is not visible from any other property. The output from these fixtures shall not exceed 10% of the allowable lumens per net acre.

- (2) Outdoor light fixtures with a maximum output of 620 lumens per fixture, regardless of the number of bulbs, (equals approximately one 45 watt incandescent light), which are shielded with a colored lens provided said lens reduces the lumen output approximately in half, and the source of the light is not visible from any other property. The output from these fixtures shall not exceed 10% of the allowable lumens per net acre.
- (3) Outdoor lighting for which light is produced directly by the combustion of fossil fuels.
- (4) Holiday lights as defined in this Article are exempt from the requirements of this Article from November 15 to January 15 during the hours from 6:00 A.M. to midnight each day, except that flashing holiday lights are prohibited on nonresidential properties. Flashing holiday lights on residential properties are discouraged. Holiday lights may be illuminated one additional seven (7) day period per calendar year.
- (5) Festoon type low-output lamps limited to small individual bulbs on a string with a maximum output of 20 lumens within any square foot.
- (6) Lighting required by law to be installed on motor vehicles.
- (7) Lighting needed during activities of law enforcement, fire and other emergency services. These lights are to be positioned so as to not shine directly in the eyes of passing drivers.
- (8) Lighting employed during emergency repairs of roads and utilities may be unshielded provided the lights are positioned so they do not shine in the eyes of passing drivers.
- (9) Lighting required for the safe operation of aircraft.
- (10) Temporary lighting for theatrical, television, performance areas, or construction areas provided the lights are positioned so they do not shine in the eyes of passing drivers and the source of the illumination is shielded from any other property. This temporary lighting must not allow any light to be projected or reflect above the structures or trees on the property.
- (11) Temporary lighting required to save life or property from imminent peril. Caution must be used to position the lights so they do not shine in the eyes of passing drivers.
- (12) Lighting required by federal, state, territorial, commonwealth or provincial laws or regulations.

## **015 Materials and Methods of Installation**

This Article is not intended to prohibit the use of any design, material or method of prescribed installation not specifically proscribed by this Article, provided such alternative meets the legislative intent of this Article.

## **016 Compliance with Building Code**

All lighting installations commenced in accordance with this Article must be in compliance with the International Building Code, as adopted by the City Council.

## **017 Civil & Criminal Penalties**

The City shall have the power to administer and enforce the provisions of this Article as may be required by governing law. Any person violating any provision of this Article is subject to suit for injunctive relief as well as prosecution for criminal violations.

## **018 Criminal Prosecution**

Any person violating any provision of this Article shall, upon conviction, be fined a sum not exceeding five hundred dollars (\$500.00). Each day that a provision of this Article is violated shall constitute a separate offense. An offense under this Article is a Class A misdemeanor.

## **019 Civil Remedies**

Nothing in this Article shall be construed as a waiver of the City's right to bring a civil action to enforce the provisions of this Article and to seek remedies as allowed by law, including, but not limited to the following:

- (1) Injunctive relief,
- (2) Monetary damages, and
- (3) Other relief as directed by a court with jurisdiction over the matter.

## **.020 Alternative Relief**

To prevent specific conduct that violates this Article or to require specific conduct that is necessary for compliance with this Article; and

- (1) In lieu of criminal prosecution, a civil penalty up to five hundred dollars (\$500.00) a day to be deposited in the General fund, when it is shown that the defendant was actually notified of the provisions of this Article and committed acts in violation of

this Article or failed to take action necessary for compliance with this Article; and other available relief.

- (2) In the event work is not being performed in accordance with this Article, the City shall issue a stop work order and all work shall immediately cease. No further work shall be undertaken on the project as long as a stop work order is in effect.

**021 Public Nuisance**

Any violation of this Article is hereby declared to be a public nuisance.

**022 Administrative Guidance**

The City is authorized to promulgate one or more interpretive documents to aid in the administration of, and compliance with, this Article. Such interpretive documents shall be educational only and shall not constitute regulations, amendments, or exceptions.

*Exhibit 1*

**Sample Lumen Calculation Sheet**

| Lumen Compliance Chart: Sample     |       |            |                |      |            |
|------------------------------------|-------|------------|----------------|------|------------|
| Luminaire Schedule Lumens          |       |            |                |      |            |
| Lamp Description                   | Label | # of Lamps | Initial Lumens | LLF  | Total      |
| KVF2 250M SR4WFL                   | S1    | 3          | 22,500         | 0.72 | 48,600.00  |
| LGH 100M 8RW FFL                   | G     | 8          | 7,900          | 0.72 | 45,504.00  |
| CSXW LED 1 30B700/40K<br>MVOLT SR3 | W1    | 2          | 5,403          | 1    | 10,806.00  |
| ALED 35/18 6AR LS                  | GF    | 6          | 1,868          | 0.72 | 8,069.76   |
|                                    |       |            |                |      | 0          |
|                                    |       |            |                |      | 0          |
| Total Initial Luminaire Lumens     |       |            |                |      | 112,979.76 |
| Site Allowed Total Initial Lumens  |       |            |                |      | 114,785.00 |
| Is Project Compliant?              |       |            |                |      | Yes!       |
|                                    |       |            |                |      |            |

| Illuminated Acres (Note 1 acre = 43,560 sq ft) |             |                   |            |  |  |
|--|-------------|-------------------|------------|--|--|
| Allowance Description                          | Square Feet | Allowed per Sq Ft | Allowed    |  |  |
| Site square footage                            | 50000       | 2.295700004       | 114,785.00 |  |  |
| Site Allowed Total Initial Lumens              |             |                   |            |  |  |