

# VIRGIN TOWN

## ORDINANCE # 2020-35

AN ORDINANCE AMMENDING SECTIONS OF CHAPTER 8.40 (Outdoor Lighting) IN ORDER TO MAINTAIN CONTINUITY BETWEEN OTHER SECTIONS OF VULU.

### RECITALS

**WHEREAS**, Virgin Town (“Town”) is an incorporated municipality duly organized under the laws of the State of Utah;

**WHEREAS**, the Town is authorized pursuant to Utah Code Annotated, Title 10, Chapter 9A, to enact ordinances necessary or appropriate for the use of land within the Town’s municipal boundaries;

**WHEREAS**, pursuant to Utah Code Annotated, Title 10, Chapter 3b, Section 301, the Virgin Town Council (“Town Council”) is designated as the governing body of the Town.

**WHEREAS**, sections of VULU Chapter 8.40 are currently not compatible with other parts of VULU,

**WHEREAS**, amendments to VULU Chapter 8.40 would create better continuity and compatibility within VULU,

**WHEREAS**, the Town, by and through its Town Council, has determined that it is in the best interests of the Town and its residents to amend sections of VULU chapter 8.40 to maintain continuity and compatibility within VULU

### ORDINANCE

**NOW THEREFORE** be it ordained by Virgin Town, Washington County, State of Utah, acting by and through the Town Council, and for the reasons listed below, amend VULU Chapter 8.40 (Outdoor Lighting) from the current wording to the following proposed wording with proper formatting adjustments:

\*Changes or additions are indicated in red text for public hearing purposes only and will be formatted to proper VULU guidelines upon Town Council approval for publishing.

Date of document preparation: 9-20-20
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Reason for change: <ul style="list-style-type: none"><li>• Ordinance is being rewritten for simplicity and to meet the newly adopted purpose section</li><li>• Definitions are being clarified, added to, and regulations removed out of them</li><li>• Table of luminaire types is being removed to simplify and meet new proposed regulations</li></ul>

- General guidelines are being established in one section
- Exceptions to regulations are being clarified

Current wording:

~~8.40.B.1 REQUIREMENTS FOR SHIELDING AND FILTERING~~

<del>FIXTURE LAMP TYPE</del>	<del>SHIELDED</del>
<del>Low pressure sodium 4.20.1.A.i.</del>	<del>Partially</del>
<del>High pressure sodium</del>	<del>Fully</del>
<del>Metal halide 4.20.1.A.vi.</del>	<del>Fully</del>
<del>Fluorescent</del>	<del>Fully 4.20.1.A.ii.</del>
<del>Quartz</del>	<del>Fully</del>
<del>Incandescent, greater than 160W</del>	<del>Fully</del>
<del>Incandescent, 160W or less</del>	<del>None</del>
<del>Mercury vapor</del>	<del>Fully 4.20.1.A.vii.</del>
<del>Fossil fuel</del>	<del>None</del>
<del>Glass tubes, filled with Neon</del>	<del>None</del>
<del>Argon, Krypton, Other sources</del>	<del>As approved by the Planning</del>

~~1. \* FOOTNOTES:~~

- ~~1. This is the preferred light source to minimize undesirable light into the night sky affecting astronomical observations.~~
- ~~2. Warm White and Natural Lamps (3500K) are preferred to minimize detrimental effects.~~
- ~~3. For the purposes of this ordinance, Quartz lamps shall not be considered an incandescent light source.~~
- ~~4. Most glass, acrylic, or translucent enclosures satisfy these filter requirements. (Quartz glass does not meet this requirement.)~~
- ~~5. This section is from the Springdale Zoning Ordinance.~~

6. ~~Metal halide display lighting shall not be used for security lighting after 11:00 p.m. (or after closing hours if before 11:00 p.m.) unless fully shielded. Metal halide lamps shall be in enclosed luminaries.~~
7. ~~Recommended for existing mercury vapor fixtures. The installation of new mercury fixtures is prohibited sixty (60) days after the effective date of this ordinance.~~

2. ~~REGULATIONS. All public and private outdoor lighting installed in the Town of Virgin shall be in conformance with the requirements established by this ordinance. All previous language in the Virgin Town Bylaws and Ordinances regarding outdoor lighting is replaced with this ordinance. Except in the instance where the existing sign ordinance may be more restrictive it will take precedence.~~

1. ~~CONTROL OF GLARE LUMINARIES DESIGN FACTORS~~

1. ~~Any luminaries with a lamp or lamps rated at a total of more than 1800 lumens, and all flood or spot luminaries with a lamp or lamps rated at a total of more than 900 lumens, shall not emit any direct light above a horizontal plane through the lowest direct light-emitting part of the luminaries.~~
2. ~~Any luminaries with a lamp or lamps rate at a total of more than 1800 lumens, and all flood or spot luminaries with a lamp or lamps rated at a total of more than 900 lumens, shall be mounted at a height equal to or less than the value  $3 + (D/3)$ , where D is the distance in feet to the nearest property boundary. The maximum height of the luminaries may not exceed twenty five feet (25').~~
3. ~~Full Cutoff Luminaires: (see luminaires definition 2.12) required. Unless specifically exempted by the section, all outdoor lighting shall use full cutoff fixtures and shall be installed so light is directed downward with no light emitted above the horizontal plane, as defined by the bottom of the fixture. Lighting must not be placed at a location, angle, or height that directs illumination outside the property boundaries where the light fixtures are located.~~
  1. ~~Qualifications: To qualify as a "full cutoff" luminaire, a luminaire must conform to the performance specifications of classifications established by the Illuminating Engineering Society of North America (IESNA).~~
  2. ~~Characteristics: Full cutoff luminaires must have the top and sides made of completely opaque material such that light only escapes through the bottom of the fixture. Luminaires with translucent or transparent sides, or sides with perforations or slits, do not qualify as full cutoff. Any glass or diffuser on the bottom of the fixture must be flush with the fixture (no drop lenses). Merely placing a luminaire under an eave, canopy, patio cover, or other similar covers does not qualify as full cutoff.~~

3. ~~EXCEPTIONS TO CONTROL OF GLARE~~

1. ~~Any luminaries with a lamp or lamps rated at a total of 1800 lumens or less, and all flood or spot luminaries with a lamp or lamps rated at 900 lumens or less, may be used without restriction to light distribution or mounting height, except that if any spot or flood luminaries rated 900 lumens or less is aimed, directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways, the luminaries shall be redirected or its light output controlled as necessary to eliminate such conditions.~~
2. ~~Luminaries used for public roadway illumination may be installed at a maximum height of twenty five feet (25') and may be positioned at that height up to the edge of any bordering property.~~
3. ~~All temporary emergency lighting need by the Police or Fire Departments or other emergency services, as well as all vehicular luminaries, shall be exempt from the requirements of this section.~~

- ~~4. All hazard warning luminaries required by Federal regulatory agencies are exempt from the requirements of this section.~~
- ~~5. Luminaries used primarily for sign illumination may be mounted at any height to a maximum of twenty five feet (25'), regardless of lumen rating,~~
- ~~6. Law Governing Conflicts. Where any provision of Federal, State, County or Town statutes, codes, or laws conflicts with any provision of this code, the most restrictive shall govern unless otherwise regulated by law.~~

Proposed changes and additions:

Chapter 8.40 Lighting Ordinance revisions

(Changes include removal of all current wording above, plus new changes in red contained below.)

**B.** (Definitions specific to lighting. These will be included in chapter 2.12 only.)

Luminaire- A lighting unit consisting of one or more electric lamps with all of the necessary parts and wiring.

Spot luminaire- A lamp projecting a narrow, intense beam of light directly on to a place or person.

Shielding- A barrier around a light bulb that directs the light output and minimizes glare.

Filtering- The use of translucent materials that allow light brightness while adding a degree of glare reduction.

Color temperature- Color temperature for lighting is measured in Kelvins following the light spectrum. The lower Kelvin temperatures are more yellow (ex. 3000K) and the higher temperatures are a more blue or daylight color (ex. 6500K).

Glare- An intense and blinding light that reduces visibility.

**C.** General Lighting Regulations-

1. Shielding- It is generally preferred to have lighting directed downward and/or shielded to protect the night sky and still provide for safety.
2. Light color temperature- Warm White and natural color lamps at a color temperature of 3500K (Kelvin) or less are preferred.
3. Glare- Any light with a color temperature above 3500K must be shielded and/or filtered from direct glare.
  - a. Filtering- Filtering will be encouraged where appropriate to minimize glare.
  - b. Exceptions to glare-
    - i. Any luminaires with a lamp output or rating of 1600 lumens or less (ex. A 100 watt lightbulb on your porch) or spot luminaire rated at 900 lumens or less, unless the spot luminaire is aimed or directed toward residential buildings on adjacent land, or to create glare perceptible to persons operating motor vehicles on public ways. (See table below for lumens to watts conversions.)

Watts / Energy Used			
Incandescent Bulbs	LEDs	CFL Bulbs	= Lumens
5	N/A	N/A	25
15	1-2	N/A	100
25	2-3	N/A	200
35	4-5	N/A	350
40	6-8	9-13	450
60	9-13	13-15	800
75	12-15	18-25	1100
100	16-20	25-30	1600
150	25-28	30-35	2600

- ii. Emergency lighting- All temporary emergency lighting needed by the police or fire department or other emergency services, as well as all vehicular luminaires, shall be exempt from the requirements of this section.
  - iii. Hazard-warning luminaires required by State and Federal regulatory agencies.
  - iv. Temporary outdoor lighting (see 8.4?)
  - v. Event Lighting (see 8.4?)
  - vi. Holiday lighting (see 8.4?)
4. Positioning- When possible lighting should be placed at a location, angle, or height that directs illumination inside the property boundaries where the light fixtures are located and away from adjoining premises used for residential or sleeping purposes.
- a. Exceptions-
    - i. Lighting for public roadways may be placed up to the edge of any bordering property.

Clean formatted copy:

(A clean formatted copy will include all the proposed changes above with the table properly formatted that can be included in the online VULU version.)