

VIRGIN TOWN

ORDINANCE # 2024-XXX

AN ORDINANCE OF THE TOWN OF VIRGIN, UTAH, PROVIDING THAT THE VIRGIN UNIFORMED LAND USE (VULU) CODE BE AMENDED BY REVISING SECTION 2.12 DEFINITIONS; REPEALING SECTION 8.40 OUTDOOR LIGHTING; AND ADDING A NEW CHAPTER TO BE NUMBERED CHAPTER 50 OUTDOOR LIGHTING.

RECITALS

WHEREAS, Virgin’s neighbors in Zion Canyon, Springdale and Zion National Park, have been certified as Dark Sky Places;

WHEREAS, Dark skies are integral to the well-being of many animal and plant species, and they have positive health impacts on humans;

WHEREAS, Star-gazing, dark sky photography, and many other activities allow Virgin residents and visitors to enjoy the physical and emotional benefits of the night sky;

WHEREAS, dark skies promote tourism, educational, and recreational opportunities in and around Virgin;

WHEREAS, the implementation of dark sky practices in land use, construction, utilities, and other aspects of community life actively promotes local governance, reduces energy-costs, and preserves Virgin’s Western lifestyle;

WHEREAS, Virgin’s General Pan recognizes the importance to preserving the night sky and restricting lighting to low, downward, and efficient types to preserve night sky;

WHEREAS, pursuant to Utah Code Ann. § 10-1-201 Virgin Town (“the Town”) is a Utah municipal corporation and political subdivision of the State of Utah;

WHEREAS, pursuant to Utah Code Ann. § 10-3b-401 the Virgin Town Council (“Town Council”) is the legislative and governing body of the Town;

WHEREAS, pursuant to Utah Code Ann. § 10-9a-103(30) the Town Council, in addition to being the legislative and governing body of the Town, is also the Land Use Authority vested with the power to enact all Land Use Regulations and make all Land Use Decisions within the Town unless the latter administrative power is delegated to another body or person;

WHEREAS, the Town Planning & Zoning Commission has reviewed this proposed ordinance and made a recommendation to the Town Council;

WHEREAS, after reviewing the recommendation from the Town Planning & Zoning

Commission, the Town Council finds it to be in the best interest of the health, safety and general welfare of the Town to amend Virgin's Uniformed Land Use ("VULU") Code to protect the dark sky by regulating outdoor lighting.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF VIRGIN, UTAH:

Section 1. That Section 2.12 of the Virgin Uniform Land Use (VULU) Code of the Town of Virgin, Utah be amended by adding to or amending the following definitions to Section 2.12:

"Accent or architectural lighting. Lighting of building surfaces, landscape features, statues, and similar items for the purpose of decoration or ornamentation; or lighting that does not contribute to the safety or security of residents, guests, employees, or customers on a property.

Communication Tower, Private (Private Communication Tower). A freestanding or building mounted structure, including appurtenances and antennas, intended for airway communication purposes; such as a television antenna, amateur radio tower, or satellite dish, utilized for non-commercial purposes.

Direct illumination. Illumination resulting from light emitted directly from a lamp, luminary, or reflector. This does not include light reflected from other surfaces such as the ground or building faces.

Floodlight. An artificial light so directed or diffused as to give a comparatively uniform illumination over a rather large given area. Such fixture or lamp are designed by the manufacturer to "flood" an area with light.

Fully shielded fixture. An outdoor light fixture designed so that the installed fixture emits no light above the horizontal plane. Full cutoff fixtures must be appropriately mounted so that the shielding prevents light from escaping above the horizontal and all light is directed downward.

Glare. An intense and blinding light that reduces visibility. Lighting entering the eye directly from luminaires or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.

Internally illuminated. As it relates to signs, any sign which has a light source entirely enclosed within the sign and not directly visible to the eye.

Lamp. The component of a luminaire that produces the actual light. A generic term for a source of optical radiation (i.e. "light"), often called a "bulb" or "tube".

Light, Direct (Direct Light). Illumination resulting from light emitted directly from a lamp, luminary or reflector.

Light, Indirect (Indirect Light). The light spread that lands outside of the direct scope and lights objects other than those in the direct illumination spread.

Lights, Fully Shielded (Fully Shielded Lights). Outdoor light fixtures shielded or constructed so that no light rays are emitted by the installed fixture at angles above the horizontal plane as certified by a photometric test report.

Light pollution. Any adverse effect of manmade or artificial light including but not limited to glare, light trespass, sky glow, visual clutter and other adverse effects of lighting on the nocturnal environment.

Light Source/Lamp. The component of a luminaire that produces the actual light (ex. the bulb).

Light Trespass. The shining of light produced by a luminaire beyond the boundaries of the property on which it is located. Light that falls beyond where it is intended or needed to illuminate. Spill light falling over property lines that illuminates adjacent grounds or buildings in an objectionable manner.

Lighting, Outdoor (Outdoor Lighting). The nighttime illumination of an outside area or object by any man-made device located outdoors that produces light by any means.

Lighting, Outdoor, Temporary (Temporary Outdoor Lighting). The specific illumination of an outside area or object by any man-made device located outdoors that produces light by any means for a period of less than seven (7) days, with at least 180 days passing before being used again.

Lumen. A unit of luminous flux. One foot (1') candle is one (1) lumen per square foot. The unit used to measure the actual amount of light which is produced by a lamp or emitted by a luminaire (as distinct from "watt," a measure of power consumption). For determining compliance with the regulations of this chapter, the lumen output of a fixture shall mean the manufacturer's published documentation of initial lumens for the fixture.

Luminaire. A complete lighting unit consisting of a lamp or lamps together with 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, Fully shielded/Full cutoff. (Fully shielded/Full Cutoff Luminaire). Outdoor light fixtures shielded or constructed so that no light rays are emitted by the installed fixture at angles above the horizontal plane.

Luminaire, Height of (Height of Luminaire). The height of a luminaire shall be the vertical distance from the ground directly below the centerline of the luminaire to the lowest direct light-emitting part of the luminaire.

Luminaires, Grandfathered (Grandfathered Luminaires). Luminaires not conforming to this code that were in place at the time this code was voted into effect. When an ordinance "grandfathers" a luminaire, it means that such already existing outdoor lighting does not need to be changed unless a specified period is specified for adherence to the code.

Manufacturer's catalog cuts. A publication or other printed material of a lamp or lighting manufacturer offering visual and technical information about a lighting fixture or lamp.

Outdoor light fixture. An outdoor electrically powered illuminating lamp or similar device used for lighting structures, parking lots, pathways, service canopies, recreational areas, signs or other similar outdoor lighting uses.

Sky glow. The brightening of the nighttime sky that results from scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Skyglow is caused by light directed or reflected upwards or sideways and reduces one's ability to view the night sky.

Spotlight. A fixture or lamp ~~that incorporates a reflector or refractor~~ designed to light or to concentrate the light output into a direct beam in a particular direction. See definition of Floodlight.

Tower. A self-supporting structure (such as a lattice tower or monopole tower), a guyed tower or a structure affixed to or mounted on an existing or newly constructed building or other permanent structure, together with associated equipment, on which is located one or more antennas.”

Section 2. That Section 8.40 Outdoor Lighting of the Virgin Uniform Land Use (VULU) Code of the Town of Virgin, Utah is hereby repealed and declared null and void and of no effect.

Section 3. That the Virgin Uniform Land Use (VULU) Code of the Town of Virgin, Utah be amended by adding a new chapter to VULU to be numbered Chapter 50 to read as follows:

“CHAPTER 50 OUTDOOR LIGHTING

50.02 PURPOSE

A. The purpose of this ordinance is to regulate outdoor lighting that will:

1. encourage outdoor lighting practices that will minimize light pollution, glare, light trespass and sky glow to preserve the natural dark of the night sky and to prevent lighting nuisances on properties;
2. preserve night skies and curtail light pollution;
3. maintain the rural atmosphere and village character of the Town;
4. maintain an uncluttered nighttime appearance in the Town;
5. protect the natural environment and nocturnal wildlife from the adverse effects of night lighting;
6. maintain nighttime safety, utility and security with minimum impact to the dark sky as possible;
7. promote energy conservation; and

8. prevent unnecessary or inappropriate outdoor lighting by encouraging or requiring low-level outdoor lighting through the use of low wattage bulbs, fully shielded light fixtures, and limits on the location and uses of outdoor lighting.

50.04 SCOPE AND APPLICABILITY

- A. All exterior outdoor lighting installed after October 1, 2024 shall conform to the requirements established by this chapter. This chapter does not apply to indoor lighting. However, light trespass from interior lighting that negatively impacts adjacent properties is also prohibited.
- B. All existing outdoor lighting that does not meet the requirements of this chapter and is not exempted by this chapter shall be considered a nonconforming use and as such shall be scheduled for amortization as provided in Section 50.24 of this chapter.
- C. If any section of this chapter conflicts with another section of this Code, the more restrictive applies.

50.06 GENERAL CONDITIONS AND STANDARDS:

- A. *Minimum necessary:* Outdoor lighting shall be the minimum necessary to provide for safety and functionality. The lowest lumens light source necessary for a lighting application should be used. Outdoor lighting that does not serve a functional purpose, including landscape lighting, is prohibited. Such lighting can be a significant source of sky glow.
- B. *Allowable applications:* Outdoor lighting is allowed only in the following applications:
1. To illuminate the entrances to buildings (including garage entrances).
 2. To illuminate pathways and walkways.
 3. To illuminate parking areas and parking area access lanes.
 4. To illuminate outdoor gathering areas such as patios, pool and hot tub areas, outdoor dining areas, and recreation areas.
 5. For security purposes, provided all the following conditions are met:
 - a. The lighting is activated by motion sensors and does not stay on for more than five minutes at a time.
 - b. The lighting is placed and directed such that no direct illumination falls outside the property boundaries where the security lighting is placed.
 6. To illuminate signage.
 7. For architectural lighting, provided all of the following conditions are met:
 - a. All architectural lighting is mounted on and directed onto the front of a commercial building facing the street.
 - b. The architectural lighting is sufficiently shielded such that the light source is not visible beyond the property boundaries.
 - c. The architectural lighting is directed such that all light falls on the front of the building, and not on the adjacent ground or into the night sky.

- d. The architectural lighting uses low lumen light sources.
 - e. The architectural lighting is not used to illuminate landscape, statues, or other similar features.
8. To illuminate outdoor water features, provided all of the following conditions are met:
- a. The lighting is angled at or below the horizontal plane.
 - b. The lighting is placed underneath or behind the water such that the water diffuses the light from all points where the light is visible.
 - c. Each light source has a total light output of 1,000 lumens or less.
- C. Light color temperature: All lighting must be of a warm color temperature. All light sources in all outdoor lighting must have color temperature equal to or less than 3,000 degrees Kelvin (3,000°K).

50.08 FULLY SHIELDED FIXTURE REQUIREMENTS:

- A. Required: Unless specifically exempted by this chapter, all outdoor lighting shall include fully shielded fixtures and shall be installed so light is directed downward with no light emitted above a horizontal plane extending out from the bottom of any light 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.
- B. Characteristics: In order to qualify as a "fully shielded" fixture, a light fixture must meet all of the criteria below:
- 1. The top and sides must be made of completely opaque material, such that light only escapes through the bottom of the fixture. Fixtures with translucent or transparent sides, or sides with perforations or slits, do not qualify as fully shielded. The light source must be entirely contained inside the opaque sides of the fixture housing.
 - 2. If mounted on or attached to a building or structure other than a parking lot light pole or a sign, the bottom of the light source (including all lenses, diffusers, reflectors, or similar elements) must be at least two inches higher than the bottom of the fixture housing.
 - 3. Surrounding structures such as eave overhangs, canopies, or patio covers are not to be considered in determining if a fixture is a fully shielded fixture. The fixture must be a fully shielded fixture in and of itself.
 - 4. If mounted on or attached to a building or structure other than a parking lot light pole, the light source of a fixture must not be visible from any point not on the property where the fixture is located.
- C. Exemptions to fully shielded fixture requirements:
- 1. A fixture that has a total light output less than 1,000 lumens is exempt from the fully shielded requirement provided:
 - a. The fixture has a top that is completely opaque such that no light is directed upwards.

3. The overall height of any light post used to illuminate parking lots in residential zones shall not exceed six feet.
4. All parking lot lighting shall use fully shielded fixtures.

D. Recreational lighting:

1. The Planning & Zoning Commission shall review all requests for new recreational lighting fixtures for fields or courts. The Planning & Zoning Commission shall approve such requests only if it finds each of the following:
 - a. The recreational lighting has provisions for minimizing glare, spill light, and uplight by the use of louvers, hoods, or shielding.
 - b. The recreational lighting does not exceed illumination levels for class IV sports lighting set by the Illuminating Engineering Society of North America.
 - c. The recreational lighting will only illuminate the field or court area with no direct illumination falling outside of those areas.
 - d. The light source for the recreational light will not be visible from adjacent properties.
2. Pole mounted recreational lighting shall be limited to 18 feet in height. Pole mounted recreational lighting must be set back a minimum of 60 feet from adjacent properties.
3. The lighting for nonfield and noncourt areas shall conform to all provisions of this chapter.
4. Illumination levels for recreational area lighting must be adjustable based on the task (e.g. active play vs. field or court maintenance).
5. Recreational lighting must be turned off no later than 10:00 p.m., or one hour after the end of play, whichever is later. Recreational lighting installations must include timers or auto-shut off controls that prevent lights from being left on when the recreational area is not in use.

E. Amphitheater lighting: Outdoor amphitheatres may use illumination to light the performance area of the amphitheater and for the safety of the public. The following standards apply to all amphitheater lighting:

1. Lighting used to illuminate the performance area must be either directed spotlighting or fully shielded lighting. If directed spotlighting, the light source must be located and designed such that it is not visible beyond the property boundaries.
2. Lighting used to illuminate the performance area may only be turned on during performances or rehearsals.
3. Lighting used to illuminate the seating areas, pathways, and other areas of the amphitheater must meet all standards of this chapter.

F. Signs: Signs may be unlighted, lighted externally, lighted internally, or backlit. All sign lighting must be designed, directed, and shielded in such a manner that the light source is not visible beyond the property boundaries where the sign is located. Lighting for signs

must be directed such that only the sign face is illuminated. All lighted signs must have stationary and constant lighting.

1. Standards for externally illuminated signs:

- a. Lighting for externally illuminated signs must be aimed and shielded so that light is directed only onto the sign face and does not trespass onto adjacent streets, roads or properties or into the night sky.
- b. Lighting for externally illuminated signs must be mounted at the top of the sign (or within two feet of the top of a building mounted sign).

2. Standards for internally illuminated signs:

- a. Only sign copy areas may be illuminated on an internally illuminated sign.
- b. Internally illuminated signs shall use semiopaque materials for sign copy such that the light emanating from the sign is diffused. Transparent, clear, or pure white materials are not allowed for sign copy. Noncopy portions of the sign (e.g., background and graphics) shall be made of completely opaque material that is consistent with subsection 10-24-3A. of this title.

3. Standards for backlit signs:

- a. Backlit signs shall be designed such that the light source is not visible.
- b. Backlit signs shall be designed such that harsh, direct illumination does not emanate out of the sign. Rather, the backlighting shall only allow indirect illumination to emanate from the sign. For example, signs that create a "halo" effect around sign text are allowed.
- c. Backlit signs shall use low lumen light sources.

4. Light color temperature standard: All light sources used to illuminate signage must have color temperature equal to or less than 3,000 degrees Kelvin (3,000°K).

5. Luminance level standard: No sign shall have an illuminance level greater than 100 nits (100 candelas per square meter).

6. Sign illumination curfew: Sign illumination shall be turned off one hour after sunset, or the close of the business, whichever is later. Sign illumination shall remain off until one hour prior to sunrise.

G. Vending machines, gas station pumps, ATM machines, etc.: Machines and kiosks that provide self-service dispensing of goods or money, such as vending machines, gas station pumps, and ATM machines, may be illuminated subject to the standards below:

1. The machine is placed entirely underneath a solid covering (such as a patio cover) such that light coming from the machine does not escape into the night sky.

2. The machine is either:

- a. Completely screened from view from adjacent properties and streets by a solid and opaque screen such that no illumination from the machine is visible from adjacent properties or the street, or

<u>Lighting Zone</u>	<u>Definition</u>	<u>Applicable Uses</u>	<u>Associated Land Use Zoning</u>	<u>Lumen Allowance</u>
<u>LZ-1: Very low ambient lighting zone.</u>	<u>Areas where the surrounding environment will be adversely impacted by lighting. Heavy emphasis on minimizing lighting to the greatest extent possible. Artificial lighting is limited sufficiently enough to create conditions where a person's nighttime vision can adapt to darkness.</u>	<u>Single family and duplex residential, open space.</u>	<u>RR; AG; OS</u>	<u>7,500 lumens per acre. Parcels smaller than one acre are allowed a maximum of 7,500 lumens.</u>
<u>LZ-2: Low ambient lighting.</u>	<u>Low level artificial outdoor lighting is used for safety and convenience but is limited in scope and application. Artificial lighting may be more intense in limited pockets, but the area is not continuously illuminated. There are areas of natural darkness preserved where the impacts of artificial lighting are minimal.</u>	<u>Multi-family residential, public uses, parks, agriculture, low-density and low-intensity commercial.</u>	<u>R; C (abutting R or RR); HRZ</u>	<u>40,000 lumens per acre.</u>
<u>LZ-3: Moderate ambient lighting.</u>	<u>Moderate amounts of artificial light are used to enhance safety, convenience, and comfort. There is sufficient continuous artificial light to allow a person to navigate the area. A person's nighttime vision does not adapt to darkness. Lighting is design and controlled to prevent light trespass and limit sky glow.</u>	<u>Moderate density and moderate intensity commercial.</u>	<u>C; RZ</u>	<u>55,000 lumens per acre.</u>

- B. All outdoor lighting (building mounted, pathway lighting, parking lot lighting, sign illumination, etc.) is included in the lumen allowance. The lighting plan described in section 50.22 will be used to demonstrate compliance with the lumen allowance standard. Each light shown on the lighting plan must be included in the calculation of total lumens on the property.
- C. The lumen allowance described in this section applies to all new construction, as well as to all reconstruction, remodels, or additions to existing construction that impact 50 percent or more of an existing structure, or add 50 percent or more building size to an existing structure.
- D. The lumen allowance described in this section is calculated based only on the developed portion of a property. For example, a five acre property in the HRZ zone which only has two acres of developed area would have a lumen allowance of 110,000 lumens (55,000 lumens per acre times two acres of developed area). In determining what portion of a property is developed, the following criteria shall be employed:
 - 1. All areas where there are physical improvements (e.g. buildings, parking areas, walkways, driveways, patios, pools, courtyards, walls, accessory structures, etc.) are included as developed areas.
 - 2. All areas of landscaping required by VULU (either vegetative landscape or natural open space) are included as developed areas.

50.16 TOWERS:

- A. All monopole, antenna, tower or support facility lighting not required by the Federal Aviation Administration (FAA) or the Federal Communication Commission (FCC) is prohibited.
- B. When lighting is required by the FAA or the FCC, such lighting shall not exceed the minimum requirements of those agencies. Collision markers should have a dual mode for day and night to minimize impact to the night sky and migrating birds.
- C. All other lighting used on the property not regulated by the FAA or FCC shall conform to this chapter.

50.18 EXEMPTIONS:

The following are exempt from the requirements of this chapter:

- A. Holiday lighting from October 15 to January 15 as long as it does not create a hazard or nuisance from glare.
- B. Traffic control signals and devices.
- C. Temporary emergency lighting in use by law enforcement or government agencies or at their direction.

50.20 PROHIBITED LIGHTING:

The following are prohibited:

- A. Uplighting to illuminate buildings and other structures, or vegetation, except as allowed by subsection 50.06.B.7. of this chapter.

- B. Flashing, blinking, intermittent or other lights that move or give the impression of movement, not including holiday lighting between October 15 and January 15.
- C. Floodlights or spotlights affixed to buildings for the purpose of lighting parking lots or sales display lot areas.
- D. Searchlights, laser source lights, or any similar high intensity light.
- E. Neon or luminous tube and string lighting mounted outdoors.

50.22 APPLICATION AND REVIEW PROCEDURES:

- A. Lighting plans required: All the following applications: sign permit, Conditional Use Permits (CUP), subdivision, building permit, and commercial site plan, shall include a lighting plan that shows evidence that the proposed lighting fixtures and light sources will comply with this Code and must include the following:
 - 1. Plans or drawings indicating the proposed location of lighting fixtures, height of lighting fixtures on the premises, and type of illumination devices, lamps, supports, shielding and reflectors used and installation and electrical details.
 - 2. Illustrations, such as contained in a manufacturer's catalog cuts, of all proposed lighting fixtures. The applicant must provide sufficient information regarding the light fixture, bulb wattage, and shielding mechanisms for the Planning Commission (or DRC, when applicable) to be able to determine compliance with the provisions of this chapter.
 - 3. A table showing the total amount of proposed exterior lights, by fixture type, lumens, color temperature, and lamp type.
 - 4. A calculation of the total lumen output from all outdoor fixtures on the property.
- B. Approval procedure:
 - 1. The lighting plan for all new development shall be submitted for approval concurrent with the associated application process.
 - 2. No certificate of occupancy will be issued unless is determined that the lighting is consistent with the requirements of this chapter by the proper reviewing authority for the associate application process.

50.24 AMORTIZATION OF NONCONFORMING OUTDOOR LIGHTING:

- A. Amortization: The Town will conduct an audit of nonconforming outdoor lighting to be completed by October 1, 2025, and the amortization period will begin on October 1, 2025. The Town shall require the termination of use of any outdoor lighting that is not in compliance with the standards of this chapter, pursuant to the amortization schedule contained in this section.
- B. Schedule of amortization: All outdoor lighting legally existing and installed prior to October 1, 2024, and which is not exempted shall be considered nonconforming and shall be brought into compliance by the property owner as follows:

1. Immediate abatement as a condition for approval upon application for a building permit, sign permit, conditional use permit (to include amendment or extension), new (nonrenewal) business license, development review committee or similar chapter permit or review when said site improvements, construction, reconstruction, expansion, alteration or modification of existing sites, structures, or uses individually or cumulatively equal or exceed 1,500 square feet. Projects less than 1,500 square feet will not be subject to immediate abatement. However, they will count towards a cumulative total of projects on the same property. When the cumulative total equals or exceeds 1,500 square feet abatement shall be immediate.
2. All damaged or inoperative nonconforming lighting shall be replaced or repaired only with lighting equipment and fixtures compliant with this chapter.
3. All outdoor lighting not previously scheduled for amortization or otherwise exempted shall be brought into conformance with this chapter within seven years from October 1, 2025.

C. Audits: The Town should perform two audits of all outdoor lighting in the chapter, one four years and the other six years after October 1, 2025. These audits should identify all lighting that does not conform to the standards of this chapter. The results of these audits will be made available to the public.

50.26 VIOLATIONS:

- A. The following constitute violations of this chapter:
 1. The installation, maintenance, operation, of any lighting fixture not in compliance with the provisions of this chapter.
 2. The alteration of outdoor lighting fixtures after a certificate of occupancy has been issued when such alteration does not conform to the provisions of this chapter.
 3. Failure to shield, correct, or remove lighting that is installed, operated, maintained or altered in violation of this chapter.
 4. Any other failure to comply with any requirement of this chapter.
 5. Violations of this chapter are subject to enforcement as outlined in Chapter 2 of VULU.”

Section 4. Severability. If any section, clause or portion of this Ordinance is declared invalid by a court of competent jurisdiction, the remainder shall not be affected thereby and shall remain in full force and effect.

Section 5. Conflicts/Repealer. This Ordinance repeals and supersedes the provisions of any prior ordinance in conflict herewith.

Section 6. Effective Date. This Ordinance shall become effective immediately upon adoption by the Virgin Town Council and execution by the Virgin Town Mayor.

ADOPTED AND APPROVED BY THE TOWN COUNCIL this day of 2024 based upon the following vote:

Council Member:

April McKeon

AYE ___ NAE ___

Marci Holm

AYE ___ NAE ___

Mistie Baird

AYE ___ NAE ___

Paul Luwe

AYE ___ NAE ___

Jean Krause, Mayor

AYE ___ NAE ___

VIRGIN TOWN

a Utah municipal corporation

Jean Krause, Mayor