## 50-31 EXTERIOR LIGHTING.

#### 50-31.1 Applicability.

## A. General.

Unless excepted in subsection B below, all exterior lighting on lots and parcels in any zone district that contain a primary structure with a multi-family, mixed use,\_commercial, institutional, industrial or parking principal use, when any of the following conditions occur shall comply with the standards of this Section 50-31:

- 1. A new primary structure is constructed;
- The floor area in an existing primary structure(s), taken collectively, is increased by more than 25 percent;
- 3. An existing primary structure is relocated on the lot or parcel;
- 4. The primary structure is renovated or redeveloped (including but not limited to reconstruction after fire, flood or other damage), and the value of that renovation or redevelopment, as indicated by building permits, is more than 25 percent of the market value of the land and buildings, as indicated by tax assessor's records;

## B. Exceptions.

The following types of lighting are not subject to the requirements of this Section 50-31:

- 1. Public street and right-of-way lighting;
- 2. Temporary decorative seasonal lighting;
- 3. Temporary lighting for emergency or nighttime work and construction;
- 4. Temporary lighting for theatrical, television and performance areas, or for special public events;
- 5. Lighting for a special district, street or building that, according to an adopted city plan or ordinance, is determined to require special lighting aesthetics as part of its physical character;
- 6. Lighting required and regulated by the FAA;
- 7. Lighting for outdoor recreational uses such as ball diamonds, playing fields, tennis courts and similar uses, provided that (a) light poles are not more than 80 feet tall, (b) maximum illumination at the property line is not brighter than two footcandles, and exterior lighting is extinguished no later than 11:00 p.m. (Ord. No. 10044, 8-16-2010, § 6; Ord. No. 10096, 7-18-2011, § 43.)

#### 50-31.2 General review standard.

If installed, all exterior lighting shall meet the functional security needs of the proposed land use without adversely affecting adjacent properties or the community. For purposes of this Section 50-31, properties that comply with the design standards of Section 50-31.3 below shall be deemed to not adversely affect adjacent properties or the community. (Ord. No. 10044, 8-16-2010, § 6.)

# 50-31.3 Design and illumination standards.

All exterior lighting regulated by this Section shall not be altered or replaced except where the alteration or replacement would comply with the provisions of this Section. All exterior lighting shall meet the following design standards:

A. Any light source or lamp that emits more than 900 lumens (13 watt compact fluorescent or 60 watt incandescent) shall be concealed or shielded with an Illuminations Engineering Society of North America (IESNA) full cut-off style fixture with an angle not exceeding 90 degrees, with 90 percent of the light below 80 degrees. Exterior lighting shall be designed, constructed, and maintained in a manner that minimizes off-site glare, light trespass on adjacent property, and traffic hazards for pedestrian and motorists;

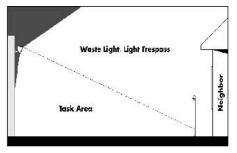


Figure 50-39.1-A: Does not comply --Light trespass

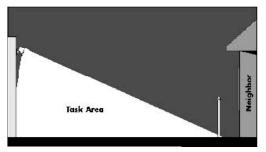


Figure 50-39.1-B: Complies -- No light trespass

B. All lighting shall have the intensities and uniformity ratio consistent with the IESNA lighting handbook, and shall be designed and located so that the illumination measured in footcandles at the finished grade shall comply with the standards in Table 50-31-1, *Minimum and Maximum Illumination Values*. All exterior lighting shall meet the requirements of the Minnesota State Energy Code, except for temporary decorative seasonal lighting;

Table 50-31-1: Minimum and Maximum Illumination Values (in Footcandles)				
Use	Maximum Illumination on Property	Maximum Illumination at Property Line (Excluding Rights-of- Way)	Maximum Illumination at Right-of-Way	Maximum/ Minimum Ratio in an Illuminated Area
Residential Uses and Agricultural and Animal Related Uses	5	.5	1.0	10:1
All Other Uses	10	1.0	2.0	15:1

- C. The maximum height of any lighting pole serving a residential use is 20 feet. The maximum height serving any other type of use is 25 feet, except that (1) in parking lots larger than five acres, the maximum height of any pole located at least 100 feet from any residential use is 35 feet, and (2) in the I-G and I-W zone districts, the maximum pole height is 50 feet; The calculation for the height of lighting poles excludes the pole's base (up to 30 inches;
- D. Sign illumination shall conform to the provisions of Section 50-27.
- E. Lighting of free standing canopies for automobile service stations, convenience stores, and other similar uses shall have a maximum light level of 15 footcandles. Lighting shall be fully recessed into the canopy and shall not protrude downward beyond the ceiling of the canopy. Maximum lighting level uniformity (maximum to minimum) on the site shall be 15:1;

- F. The use or operation of searchlights for advertising purposes is prohibited. The use of laser source light or any similar high intensity light for outdoor advertising or entertainment, when projected above the horizon, is prohibited;
- G. All outdoor light not necessary for security purposes shall be reduced to 30 percent of design levels or less, activated by motion sensor detectors, or turned off during non-operating hours;
- H. Light fixtures used to illuminate statues, monuments, or any other objects mounted on a pole, pedestal or platform shall use a narrow cone beam of light that will only illuminate the object;
- I. For upward-directed architectural, landscape and decorative lighting, and flood lights, direct light emissions shall be contained by the buildings and not be visible above the building roof line, and shall not be utilized to light any portion of a building façade between 10:00 p.m. and 6:00 a.m.;
- J. No flickering or flashing lights shall be permitted, except for temporary decorative seasonal lighting.
- K. LED lighting may not exceed a correlated color temperature (CCT) of 3000 Kelvin (K) nor have a minimum color rendering index (CRI) of less than 80. This provision does not apply to lighting serving a public or quasi-public institution for public safety or security purposes as determined by the Land Use Supervisor, or street lighting provided by the city, county, or the state of Minnesota.

(Ord. No. 10044, 8-16-2010, § 6; Ord. No. 10153, 5-14-2012, § 13, Ord. No. 10813, 9-12-22, §3)