

Chapter 11. LIGHTING ON PRIVATE PROPERTY

11.1 Purpose and Intent

The purpose of this Chapter is to control light spillage and glare so as not to adversely affect motorists, pedestrians, and uses of adjacent properties. Lighting intensities should be controlled to assure that excessive light spillage and glare are not directed at adjacent properties, neighboring areas, and motorists. Levels of illumination to achieve a certain function or desired effect should also reduce or eliminate the hazardous aspects and nuisance of glare and light spillage.

11.1 Purpose and Intent
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11.2 Administration

- A. Applicability:** The provisions of this chapter shall apply to lighting on private property for commercial and multi-family development. All lighting that is used within and around buildings, recreation areas, parking lots, and signs shall be designed to protect against the spillage of light to adjacent properties.
- B. Lighting Plan:** Any person submitting a site plan or applying for a zoning or sign permit to install outdoor lighting fixtures shall submit a lighting plan showing evidence that the proposed work will comply with this chapter. The Lighting Plan shall comply with the requirements of Section 16.11, Lighting Plan Requirements.
- C. Measurement:** Light level measurements shall be made at the property line of the property upon which the light to be measured is being generated. If measurement on private property is not possible or practical, light level measurements may be made at the boundary of the public street right-of-way that adjoins the property. Measurements shall be made at finished grade (ground level), with the light-registering portion of the meter held parallel to the ground and pointing upward. Lighting levels are to be measured in foot-candles with a direct reading, portable light meter.
- D. Exemptions:**
1. Single-family and duplex development.
 2. Lighting of the United States of America or State of North Carolina flags and other non-commercial flags expressing constitutionally protected speech. Current official flags of the United States of America, State of North Carolina, County of Rowan, and City of Salisbury are permitted by right. Whenever these flags are used, they should follow the Federal Flag Code whenever possible. The Federal Flag Code was established by Congress on July 7, 1976 – Public Law 94-344, 94th Congress, S. J. Res 49.
 3. Circus, fair, carnival, or other City Council recognized civic or community event.
 4. Construction and emergency lighting are exempt from the provisions of this chapter provided the lighting is temporary and is discontinued immediately upon completion of the construction work or abatement of the emergency.

5. Underwater lighting used for illumination of swimming pools and fountains is exempt from shielding standards.
6. Holiday decorations lighting (i.e. Christmas trees and lighting).
7. Steeples, public monument, and building accent lighting.

11.3 Lighting Provisions

- A. Lighting shall not shine directly into the yard or into the windows of an adjacent residence.
- B. Outdoor lighting shall be designed, located, and mounted at heights no greater than eighteen (18) feet above grade for pedestrian lights, or thirty-five (35) feet above grade for street or parking area lights.
- C. All lighting shall be designed and located such that the maximum illumination measured in foot-candles at the property line shall not exceed one (1.0) foot candle. This provision is not applicable in the DMX district except where DMX is adjacent to RMX, HR, UR-12, UR-8, GR-6, and GR-3 districts.
- D. To avoid light spillage, only downward-directed semi-cutoff, cutoff, or full cutoff fixtures shall be used.
- E. Floodlights shall be hooded or shielded so that the light source is not visible from any public right-of-way or adjacent property.
- F. Flickering, rotating, or flashing lights, or search lights are prohibited.
- G. Wall Packs on the exterior of the building shall be fully shielded (true cut-off type-bulb or light source not visible from off-site) to direct the light downward and be of low wattage (preferably 100 watts or lower). Other accent lighting projected onto buildings may be allowed provided that it is approved through the development plan process.
- H. Internally-illuminated translucent (i.e. glowing) canopies used for building accents over doors, windows, etc. are prohibited.
- I. **Outdoor Recreational Lighting:** Because of their unique requirements for nighttime visibility and limited hours of operation, the lighting of active recreation areas, such as for ball fields and tennis courts are not considered in this chapter. However, lighting fixtures for such uses shall be mounted and aimed so that the illumination falls within the primary playing area and immediate surroundings so that no direct light illumination is directed off site.

J. Gas Station/Convenience Store Aprons and Canopies:

1. The lighting fixtures and bulbs shall be recessed into a canopy ceiling so that the bottom of the fixture is flush with the ceiling so that light is restrained to no more than 85 degrees from vertical.
2. As an alternative to recessed ceiling lights, indirect lighting may be used where the light is directed upward and then reflected down from the underside of the canopy. In this case, light fixtures shall be shielded so that direct illumination is focused exclusively on the underside of the canopy.
3. Lights shall not be mounted on the top or sides (fascia) of the canopy and the sides of the canopy shall not be externally illuminated.
4. The under canopy lighting for new facilities shall not exceed the average horizontal illumination of 50 foot-candles at grade level.

11.4 Non-Residential Lighting Design Provisions

The following design provisions shall apply to the RMX and NMX districts. When developing in the CMX, DMX, HB, HS, CI, LI, or HI districts these design provisions shall apply only along those property lines that adjoin the following districts: OPS, RR, GR, UR, RMX, and NMX. The following chart is based on standards for various activities as prescribed by the Illuminating Engineering Society (IESNA).

USE	Illumination (in Foot-Candles)	
	Maximum (Glare)	Minimum (Safety)
UTILITY LIGHTING		
Minimum Visibility	-	0.5
Driving	1	0.5
Pedestrian Ways	1	0.5
General landscaped areas	2	0.5
AREA LIGHTING		
Gas Station & Convenience Store Canopies	10	0.5
Parking Lots	4	0.5
BUILDING EXTERIORS		
Entrances (frequent use)	6	2
Entrances (infrequent use)	1	0.5
Vital Locations or Structures	6	2
Building Surroundings	2	0.5

1. The quantity of fixtures to be provided shall be based upon the desired level of uniform illumination as established by the current standards of the IESNA.
2. Fixture locations should be chosen to minimize the hazards of glare.
3. The level of illumination shall be based upon the primary activity in each area to be lighted.
4. Foot-candle designations represent measurements for the average intensity at grade.