



# *Town of Camillus*

## *Lighting Guidelines*

*March 2005*

## **Overview**

The following are industry standard guidelines for commercial and residential lighting. The intent of these guidelines is to prevent light pollution and promote adequate lighting distribution. The guidelines summarized here are based on the recommendation of the Illumination Engineering Society (IES) and the International Dark-Sky Association requirements.

The main purpose of exterior lighting is to provide safety to pedestrian and vehicle traffic. However, exterior lighting shall minimize the impact of light “trespass” to surrounding neighbors. These guidelines provide recommendations to be use for lighting design. The guidelines are divided into two groups, commercial and residential.

Any deviation from the following guidelines shall be submitted to the Town of Camillus Planning Board for approval.

<p>Prepared by Barton &amp; Loguidice P.C. Adopted by the Town of Camillus Planning Board March 28, 2005</p>
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## **Commercial**

### General Requirements

A detailed lighting Plan describing fixture type, bulb type, height and location is required.

Photometric plots are required for site plan approval.

High traffic parking lot: The average level should be 0.9 foot-candles.

Medium traffic parking lot: The average level should be 0.6 foot-candles.

All parking lots: The maximum to minimum uniformity ratio should be 20:1.

All measurements are to be taken at ground surface unless otherwise noted.

The luminaires design shall prevent the lamp from being exposed to direct view. The luminaires shall have a reflector to provide illumination cutoff to avoid lighting spill. The lamp shall be horizontally mounted inside housing and the housing's light emitting surface shall be parallel to the parking surface.

- Pole Mounted Luminaires

Pole: The pole height should be 30'-0" or less from the parking surface. Poles located near other properties should be of a height no greater than  $3+(D/3)$ , D equals the distance to the nearest property.

Lamp: The lamp shall be pulse start metal halide with a maximum rating of 400 watts. The pulse start technology provides superior lighting uniformity and high efficiency to reduce the amount of luminaires required to achieve the footcandle levels. High pressure sodium may also be used; however, this type of light has a poor color rendition.

Reflector: The optical system shall comply with IES cutoff requirements. The lighting pattern type should be IV or V for parking lots and type III for access roads.

Housing: The luminaire orientation shall be in parallel with the surface of ground.

- Building Mounted Luminaires

Mounting: Luminaires mounted on the side of a building shall not exceed 12' mounting height. Luminaires mounted in the underside of overhangs or covered walkways shall be recessed mounted direct down lights. If overhangs or covered walkways are proposed or exist, recessed lighting is recommended.

Lamp: The lamp should be pulse start metal halide with a maximum rating of 175 watts. For security lighting near the building color rendition is very important. Metal halide should therefore be used whenever possible.

Reflector: The building mounted luminaires should provide full cutoff type III or II IES pattern. Flood light shall not be permitted.

Housing: The luminaire orientation shall be in parallel with the ground surface.

## Residential Development

### General Requirements

The average footcandle level shall be 0.2 footcandles and the maximum to minimum uniformity ratio shall be 20:1 for parking lots. Property owner shall prevent light spill over neighboring properties. All lighting shall be directed to area of illumination. All luminaires shall be located or their orientation shall be directed away from the road to avoid annoyance to driver.

No luminaires shall be located in the town right-of-way.

### Parking Lot Lights (Multiple Family Dwellings)

- Pole mounted luminaires

Pole: The pole height shall be less or equal to 25'-0" for access roads and parking lots. Poles located near other properties should be  $3+(D/3)$ , D equals the distance to the nearest property.

Lamp: The lamp should be pulse start metal halide with a maximum rating of 250 watts for access roads and parking lots.

Reflector: The optical system shall comply with IES cutoff requirements. The lighting pattern type should be IV or V for parking lots and type III for access roads.

## Single Family Dwellings

- Yard

Pole lighting shall be located at a distance equal or greater than  $\frac{1}{2}$  the set back distance of the structure from the road right-of-way.

Pole Lamps should be up to 10'-0" height maximum.

Lamp: The lamps shall be incandescent. Recommended rating is 60 watts maximum.

Driveway entrance structures: Luminaires shall not be of flood/spot types or present a hazard to vehicular traffic. It is recommended that luminaires be of the type in which the illumination source is not visible horizontally, and luminaires shall provide downward illumination.

All spot or flood type lighting shall be of shielded type. All lighting shall be directed on the property and shall not spill over adjacent properties.

- Porch Lights

Porch lighting should be up to 10'-0" height.

Lamp: It is recommended the lamps be incandescent, and rated at 60 watts maximum.

Exposed lamp flood or spot lights shall not be used.

## Recommended Luminaires and Pricing (2004)

### Commercial

Pole Mounted Luminaires:

<u>Make</u>	<u>Model</u>	<u>Price</u>
Exceline	SMR	\$300
HADCO	Profiler Area luminaire (attached)*	\$450
Widelite	EAL (attached) * Full cutoff EALM-400-BT/ED-28-1-SF	\$490

The above cost is material cost for each type of luminaires. The average cost of a steel pole 30' high is \$700.

Building Mounted:

<u>Make</u>	<u>Model</u>	<u>Price</u>
Exceline	600 (attached)* 61317MAL-8	\$220
HADCO	Profiler (attached) * PW3D_4175	\$440
Visionaire	MHC	\$440

### Residential

Pole Mounted Luminaires:

<u>Make</u>	<u>Model</u>	<u>Price</u>
HADCO	V21 (attached)* V21_B3_G70WMH	\$480
HADCO	V15	\$520
HADCO	R51 (attached)* R51AANN_G_G_70WMH	\$480

The above cost is material cost for each type of luminaires. The average cost of a steel pole 15' high is \$500.

\* Indicates designer preference. Designer preference is based on luminaires performance, quality of the fabrication and maintenance.

Note: All recommended luminaires have high quality materials and exceed the industry standard recommendation for efficiency and quality. For more information about the luminaries, please contact the manufacturer representative. Lumen Power, Mr. Richard Cunningham, located at 3264 Milton Avenue, Syracuse, New York at 487-1105.