

Description:

The purpose of the section is to highlight the current applicable UMD Design Standards for the design, selection and installation lighting fixtures located on the exterior of buildings, the project site and, the surrounding campus arena.

Related Sections:

- 26 51 00 Lighting-Interior

Effective Date:

January 1, 2020

Applicable Standards:

- ASHRAE 90.1-2007
- Illuminating Engineering Society of North America (IESNA) Standards

General Requirements:

The application of this section applies to all interior and exterior lighting in “new building” designs. This section also applies to “renovation work” within existing buildings--if the installation of new light fixtures, or the relocation of existing light fixtures is a part of the renovation, and the lighting work involves at least 50% of the lighting within the renovated space. Any deviation or exception to the requirements of this section requires the prior written approval of the Director of the Operations and Maintenance (O&M) Department in Facilities Management Electrical Systems Section, as well as notification to the Electrical Systems Section within O&M.

Light Fixture Recommendations/Guidelines

- Outdoor
 - UMD current light fixture and pole standards are under review & final selection. Designers are directed to contact the associated PM assigned to the project for current criteria related to outdoor street, walkway and parking lot lighting fixtures, in addition to criteria related pole support systems. ~~shall be the “Gardco” shoebox fixture utilizing metal halide lamps in 175 watt, 400 watt, and 1000 watt sizes.~~
- Lamp Color
 - Color temperature shall be 5000K or higher
 - Color Rendition Index (CRI) of 80 or higher

Lighting Installation/Performance Guidelines

- **Lighting Levels**
 - Light levels shall be as specified by the Illuminating Engineering Society of North America (IESNA) handbook (latest edition), unless modified below.
 - Light levels shall be measured by “full spectrum” light meters, or at a level of 90% of IESNA Standards using “photopic” light meters.
- **Controls**
 - The outdoor lighting for sidewalks, parking lots and street shall be controlled via central photocell to turn the lights on, and a 7 day/24 hour time clock to turn the lights off, and a “Hand-Off-Auto” (HOA) switch to operate the lights manually. The HOA switch shall be mounted in an area not accessible to the general public.
- **Wiring Configuration**
 - Support wire systems as required by the NEC.

- **Fixture Mounting**
 - Lighting fixtures shall be supported in accordance with code.
- **Labels**
 - Junction boxes utilized for power distribution, shall be labeled on the cover plate with the following information.
 - Circuit Number (feeding the light fixture)
 - Power Panel Number
 - Room Number for Panel location