

Pedestrian Luminaires, High Pressure Sodium, Post-Top**LCC30****S18****1. Scope**

This standard covers the requirements for post-top, high pressure sodium (HPS) pedestrian luminaires.

This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No	Description
572404	Post-Top LCC30, Octagonal, HPS Luminaire
010092	Post-Top S18, Round Globe, HPS Luminaire

2. Application

HPS pedestrian luminaires are installed in City-designated areas and SCL-designated streetlight districts.

Stock No. 010092 is installed in the Belltown district, along 2nd Avenue, and in the Central District, along 23rd Avenue from John Street to King Street.

The manufacturer, Acuity, has discontinued the Antique Street Lamps luminaire portfolio, including the post-top, S18 round globe HPS luminaire.

Stock No. 572404, also known as a Gothic fixture, is installed in the following neighborhoods: Mount Baker, Windermere, and Magnolia.

Historically, HPS pedestrian luminaires were installed on poles with 3-inch pole top diameters, as formerly specified in MS 5752.05. As of 2017, these were deemed obsolete. Stock Nos. 013409, 013410, 013411, and 013412 were removed from the standard and replaced with poles with a 4-inch pole top diameter.

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3. Industry Standards

HPS pedestrian luminaires shall meet the applicable requirements of the latest revision of the following industry standards:

ANSI C136.16; Standards for Roadway and Area Lighting Equipment - Enclosed, Post Top-Mounted Luminaires

ANSI C136.22, Standards for Roadway and Area Lighting Equipment - Internal Labeling of Luminaires

ANSI C136.24; Standards for Roadway and Area Lighting Equipment - Non-Locking (Button)-Type Photocontrols

ANSI C136.31; Standards for Roadway and Area Lighting Equipment - Luminaire Vibration

ASTM B117; Standard Practice for Operating Salt Spray (Fog) Apparatus

ASTM D523; Standard Test Method for Specular Gloss

ASTM D1654; Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments

ASTM D2247; Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity

ASTM G154; Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials

IEEE C62.41.2; IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits

IESNA TM-15-11 (revised); Luminaire Classification System for Outdoor Luminaires

4. Requirements

4.1 Luminaire Type

HPS pedestrian luminaires shall be of the post top outdoor type, utilizing lamps in the vertical position.

4.2 Housing

The housing shall be aluminum or polymer suitable for wet locations and resistant to ultraviolet light deterioration. The base shall be a cast aluminum tenon adapter designed to mount on a pole with a 3-in diameter top.

4.3 Lens

The lens shall be acrylic or polycarbonate and resistant to ultraviolet light deterioration.

4.4 Hardware Fastening Material

All visible hardware shall be stainless steel.

4.5 Sockets

HPS sockets shall be porcelain, medium base, pulse-rated 4 kV and have a spring-loaded center contact. Sockets shall be factory prewired with a disconnect plug for the ballast module.

4.6 Electrical Module

All electrical components shall be UL Recognized, for wet locations, and shall be mounted on a single plate and factory prewired with disconnect plugs.

Ballasts shall be 120-volt CWA type with a minimum starting temperature of 30 degrees F. Ballasts shall be completely wired to the terminal board and lamp socket.

4.7 Photocell Control

Luminaires shall be supplied with an internal photocell in the base of the fixture.

4.8 Terminal Block

A terminal block shall be mounted to the housing inside the electrical compartment. The block shall accept #14 to #4 AWG wire and shall be factory prewired to electrical module disconnect plug.

4.9 Luminaire Light Distribution Patterns

Luminaire light distribution shall be free from striations and hot spots. Photometric performance will be subject to testing by the Washington State Material Testing Laboratory to ensure conformance with these specifications and the photometric data submitted. A sample luminaire shall be submitted for testing when requested by the SCL department.

4.10 Luminaire Marking

Luminaires shall have an ANSI approved decal (three inches square) attached to the housing that is readily visible from the ground, indicating lamp type by color code (e.g., gold for "high pressure sodium"), and lamp wattage by numerical code.

4.11 Finish

The finish on the housing shall be a powder coating with a minimum thickness of 100 microns and shall meet salt spray requirements of ASTM B 117 and the humidity resistance requirements of ASTM D 2247.

5. Marking

Luminaires shall have a nameplate identifying wattage, voltage, manufacturer, and date of manufacture.

6. Packaging

Luminaires shall be packaged to prevent damage during shipping, handling, and inside storage.

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- SCL stock number
- Quantity

Each shipping container shall be legibly marked with the following information:

- SCL purchase order number

7. Issuance

Stock unit: EA

8. Approved Manufacturers

8.1 Luminaire Stock No. 572404

Manufacturer:	U.S. Architectural Lighting - Sun Valley
Catalog Number:	LCC30-WP-100-HPS-PC-120V-PT-RAL-8019-T
<i>where:</i>	
LCC30 =	luminaire style, LCC30
WP =	opal smooth polycarbonate lens
100 =	wattage, 100 watts
HPS =	lamp, HPS
PC =	photocell
120V =	voltage, 120 volts
PT =	post top
RAL-8019-T	dark bronze, texture finish

8.2 Luminaire Stock No. 010092

FOR INFORMATION ONLY

Manufacturer:	Acuity - Antique Street Lamps (Antique Street Lamps portfolio has been discontinued in August 2020)
Catalog Number:	S18-ESNF-150S-MOG-PCS/SB-TB1-PEB1-ANCM076
<i>where:</i>	
S18 =	luminaire style, S18, 18-inch globe
ESNF =	luminaire base, 8-inch height, aluminum, 3-inch inside diameter
150S =	150 watts, HPS lamp
MOG =	mogul base
PCS/SB =	lens, polycarbonate clear smooth – sand blasted
TB1 =	voltage, 120 volts, multi-tap ballast (120, 208, 240,277 volts)
PEB1 =	photocell, button type, 120, 208, 240 volt
ANCM076 =	color, natural aluminum

9. Sources

Stock Catalog page 57-13; Streetlight Luminaires, Residential, May 9, 2014

Stock Catalog page 57-12; Streetlight Luminaires, Residential, High Pressure Sodium, May 14, 2014

Wang, Quan; SCL Standards Engineer, originator, and subject matter expert for 5723.07

www.acuitybrands.com

www.usaltg.com