Seattle City Light MATERIAL STANDARD

Streetlight Photocontrols



1. Scope

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

Stock No.	Description
569333	Streetlight photocontrol
569334	Shorting cap
015052	Non-shorting cap

2. Application

Photocontrols are used as light-sensing switches to control luminaries. Photocontrols are designed to switch lamps off during the day and switch lamps on at night.

A shorting cap is installed in place of a photocontrol when a lamp is needed to stay on 24 hours a day.

A non-shorting cap is installed in place of a photocontrol in scenarios where lights need to be off 24 hours a day.

3. Industry Standards

Streetlight photocontrols and shorting caps shall meet the applicable requirements of:

ANSI C136.10-2006 - American National Standard for Roadway and Area Lighting Equipment—Locking-type Photocontrol Devices and Mating Receptacles—Physical and Electrical Interchangeability and Testing

4. Construction

4.1 Common

Photocontrols and shorting caps shall be provided with a means of sealing according to the requirements of ANSI C136.10, Section 4.3.

Standard Coordinator Laura Vanderpool



Standards Engineering Supervisor Brett Hanson

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4.2 Photocontrols

Color code	Blue
Plug type	Locking type, three-pole, three-wire
Photosensor type	Silicon
Operating voltage range, volts, AC	105 to 305
Load rating, incandescent lamp, minimum, W	1,000
Load rating, high-intensity discharge (HID), minimum, VA	1,800
Operating temperature range, ambient, degrees C	-40 to +65
Turn on response time range, seconds	0.5 to 5.0
Turn off response time range, seconds	0.5 to 5.0
Turn on light level, fc	2.8 +/- 0.6
Turn off light level, maximum, fc	5.1
Turn-off/turn-on ratio, nominal	1.5
Failure mode, nominal	Fail-on

Each photocontrol shall be provided with a means to conveniently and permanently record date of installation and date of removal.

Each photocontrol shall be provided with an internal, 160-joule minimum, metal-oxide varistor (MOV) type surge arrester.

4. Construction, continued

4.3 Shorting Caps

Сар Туре	Plug Type	Color Code
Plug type	Locking type, three-pole, three-wire	Black
Non-shorting	Locking type, three-pin	Red

5. Design Changes

Manufacturer shall inform Seattle City Light in writing of all design changes that could affect the product's understood or published capabilities.

6. Testing

Photocontrols and caps shall be tested according to the requirements of ANSI C136.10.

Test results shall be provided upon request.

7. Marking

Each individual photocontrol and cap shall be marked with the following information:

- Manufacturer name
- Model number
- Voltage rating
- Load rating
- North orientation
- Rotation of installation and removal

8. Packaging

Photocontrols and caps shall be individually packaged to prevent damage from storage and handling.

From the outside of each individual package, the manufacturer's name and model number shall be clearly visible.

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

- Manufacturer identification
- Product description
- Seattle City Light purchase order number
- Seattle City Light stock number

The shipping container weight shall not exceed 50 pounds.

9. Issuance

Stock Unit: EA

10. Approved Manufacturers

10.1. Photocontrols

Manufacturer	Catalog No.
Area Lighting Research (ALR)/ Tyco	6190-VPS
Dark to Light (DTL)/Acuity	DP124-2.6-TJ J50
Fisher Pierce Outdoor Lighting Controls (OLC)/ Electroswitch	7673C-70578
SELC/Xylem	8483
Sun-Tech/Electroswitch	P124-2.5-SCL
Ripley Lighting Controls/ Electroswitch	-

10.2. Caps

Manufacturer	Shorting Cap (Stock No. 569334) Catalog No.	Non-shorting Cap (Stock No. 015052) Catalog No.
Area Lighting Research (ALR)/Tyco	MC-10	-
Dark to Light (DTL)/ Acuity	RA1013	-
Fisher Pierce Outdoor Lighting Controls (OLC)/ Electroswitch	FPS1038-1	-
SELC/Xylem	8483-SC	-
Sun-Tech/ Electroswitch	-	-
Ripley Lighting Controls/Electroswitch	6005	6007

11. References

Shipek, John; SCL Standards Supervisor, subject matter expert, and originator of 5731.12

12. Sources

SCL Material Standard 5693.00; "Streetlight Photocontrols" (canceled/renumbered)

www.acuitybrands.com

www.fpolc.com

www.ripleylightingcontrols.com

www.selc.ie

www.te.com