Streetlight Power Tap Adapters



1. Scope

This standard covers the requirements for streetlight power tap adapters.

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

Stock No.	Description
014057	Streetlight power tap adapter, 8-ft cable
015001	Streetlight power tap adapter, 20-ft cable

2. Application

Power tap adapters provide temporary overhead power to normally underground-fed streetlights. In these situations, the underground system has failed and the streetlight must be restored immediately. Temporary overhead power is provided until the underground system can be repaired.

Power tap adapters are installed between the photocontrol or shorting cap and the receptacle on the luminaire, which allows for the provision of constant 120 Vac power without tampering with the existing pole, arm, and/or luminaire.

Applications other than providing temporary overhead power to streetlights require approval from Streetlight Engineering.

Standard Coordinator Laura Vanderpool



Standards Engineering Supervisor Brett Hanson

Kyset Humon

Division Director Bob Risch

3. Industry Standards

Streetlight power tap adapters shall meet the applicable requirements of the following industry standard:

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

4. Requirements

Power tap adapters shall meet the following requirements:

Plug type	Solid brass, locking type, three-pole, three-wire
Pin configuration	7-pin
Operation	Continuous on
Operating voltage range, Vac	120 to 480
Load rating, continuous, Vac	10
Operating temperature range, ambient (degrees C)	-40 to +70
Cable	2 conductor, SOOW 16 AWG
Cable end	Pigtail
Housing	UV stabilized
Base Gasket	Crosslinked polyethylene

Circuit board components shall be protected from the environment with a thin, transparent coating that does not promote heat build-up.

Power tap adapters shall not interfere with normal photocontrol operation.

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. Marking

Each power tap adapter shall be marked with the following information:

- Manufacturer's name
- Model number
- Voltage rating
- Load rating
- Operating mode (continuous on)

7. Packaging

Power tap adapters shall be individually packaged to prevent damage from storage and handling.

The manufacturer's name and model number shall be clearly visible from the outside of each package.

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

Shipping container weight shall not exceed 50 pounds.

8. Issuance

Stock Unit: EA

9. Approved Manufacturers

9.1 Stock No. 014057

Manufacturer:	Sun-Tech (Sunrise Technologies, Inc.)
Catalog Number:	FP283A-7-096-N-N-N
where:	
FP283A =	model, power tap adapter
7 =	type, 7-pin
096 =	cable length, 96 inches (8 ft)
N =	factory code, none
N =	DC power outputs/cable connector type, none
N =	AC power output, none

9.2 Stock No. 015001

Manufacturer:	Sun-Tech (Sunrise Technologies, Inc.)
Catalog Number:	FP283A-7-240-N-N-N
where:	
FP283A =	model, power tap adapter
7 =	type, 7-pin
240 =	cable length, inches (20 ft)
N =	factory code, none
N =	DC power outputs/cable connector type, none
N =	AC power output, none

10. Sources

Chao, Yaochiem; SCL Standards Engineer, subject matter expert, and originator of 5731.45

SCL Material Standard 5693.45; Streetlight Power Tap Adapters (canceled/renumbered)