Standard Number: **7659.33** 

Superseding: New

Effective Date: March 20, 2019

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# Voltage Tester, 120 to 600 V, "Wiggy"



### 1. Scope

This standard covers the requirements for a spring-loaded, solenoid-style voltage tester, also known as a "Wiggy".

This standard applies to Seattle City Light (SCL) stock number 765850.

# 2. Application

The "Wiggy" is used to detect the simple presence or absence of voltage prior to working on a circuit.

This device is used by Streetlight crews who consider them more reliable in wet conditions.

Operation of this device for 10 seconds at 600 V requires five minutes off for cooling before reuse.

The "Wiggy" was invented in 1918 by George P. Wigginton.

See SCL 7659.35 for a modern digital voltage tester.

Standards Coordinator Ponet Neuansourinh Standards Supervisor John Shipek Unit Director Andrew Strong

ACH

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#### 3. Requirements

Voltage testers shall include the following:

- Three forms of ac/dc voltage indication: light, sound, and vibration
- Battery-free operation
- Polarity indicator, DC
- Easy-to-read dual voltage indicator (neon lamp and arm)
- Extra heavy-duty, replaceable test leads
- Fully insulated
- AC and DC voltage testing capability:
  - o AC: 120, 240, 480, 600
  - o DC: 120, 240, 600
- In-line prod mount case for testing in tight places
- Low input impedance (4,000 ohms, nominal) to help identify circuits with loose or marginal connections
- Safety rating for overvoltage: CAT III, AC/DC per UL 61010-1

#### 4. Packaging

Product shall be individually packaged with their accessories and marked with the following information:

- Manufacturer name
- Product description
- Seattle City Light stock number

Shipping containers shall be legibly marked with:

- Manufacturer name
- Seattle City Light purchase order number

#### 5. Issuance

Stock Unit: EA

#### 6. Approved Manufacturer

Manufacturer	Catalog No.
Knopp, Inc	14460

#### 7. References

**UL 61010-1**; Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements, 2012-05-11

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# 8. References

SCL Material Standard 7659.35; Continuity and Voltage Testers

# 9. Sources

**Neuansourinh, Ponet**; SCL Standards Engineer and originator of 7659.33 (ponet.neuansourinh@seattle.gov)

SCL Stock Catalog page 76-19; October 6, 2017 www.knoppinc.com