

SEATTLE CITY LIGHT (SCL)



LED Fixture Evaluation and Approval Process 12-2010 v1.2

The evaluation and approval process will be conducted in a four (4) steps. The submitted fixture may be delayed at a step if all requirements are not met or needs to be repeated.

1. Document Submittals:

Submitted		
Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	<p>Compliance to SCL LED Material Specification 5732.51 – LED Streetlight Luminaire - 70 Watt (nominal) with the exception of the following requested improvements. Any variance consideration to the specification must be made in writing.</p> <p>Section 4.1 Luminaire Performance - Lumen depreciation of LED – change 70% (L_{70}) of initial lumens to 80% (L_{80}) or better of initial lumens when installed for a minimum of 50,000 hours. - Backlight Requirements have been added – BVH (0.2% of luminaire lumens) and BH (5% of luminaire lumens)</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Photometric Report and .ies file per IES LM-63 - Approved Standard File Format for Electronic Transfer of Photometric Data and Related Information -Photometric file must match the luminaire part # on the physical fixture (see #3)</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>IESNA Roadway Test Report per LM-79 from an Independent Testing Lab</p>

- Computer Modeling – The photometric information provided will be used to model a roadway to see the intended performance of the fixture. -Photometric file must match the luminaire part # on the physical fixture (see #3).
- Physical fixture is requested for set-up, review, and testing. Luminaire part # on the physical fixture must match the photometric file and the specification sheet ordering code.

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Indoor Mock-up ready
<input type="checkbox"/>	<input type="checkbox"/>	Indoor fixture performance review - passed
<input type="checkbox"/>	<input type="checkbox"/>	Current stability and harmonic levels tested - passed
<input type="checkbox"/>	<input type="checkbox"/>	Ease of maintenance assessed
<input type="checkbox"/>	<input type="checkbox"/>	Installation effort assessed

- SCL Outdoor Environment Field Test and Public Commenting Period – (May require 2 to 6 months.)

5. References:

IES LM-79 – Electrical and Photometric Measurements of Solid-State Lighting Products
 IES LM-80 – Measuring Lumen Maintenance of LED Light Sources
 Luminaire Classification and BUG Rating per IESNA TM-15 and IESNA TM-15-07 Addendum A – Luminaire Classification System for Outdoor Luminaires

For approved list of laboratories see: http://www1.eere.energy.gov/buildings/ssl/test_labs.html

Partial list of Independent Testing Labs:

AITL – Aurora International Testing Laboratory
ITL – Independent Testing Laboratories, Inc.
LTL – Luminaire Testing Laboratory, Inc.

Lighting Sciences Inc
Orb Optronix
Intertek