2019 DLC

April 1 - 3 • St. Louis, MO

STAKEHOLDER MEETING

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SSL App Processing

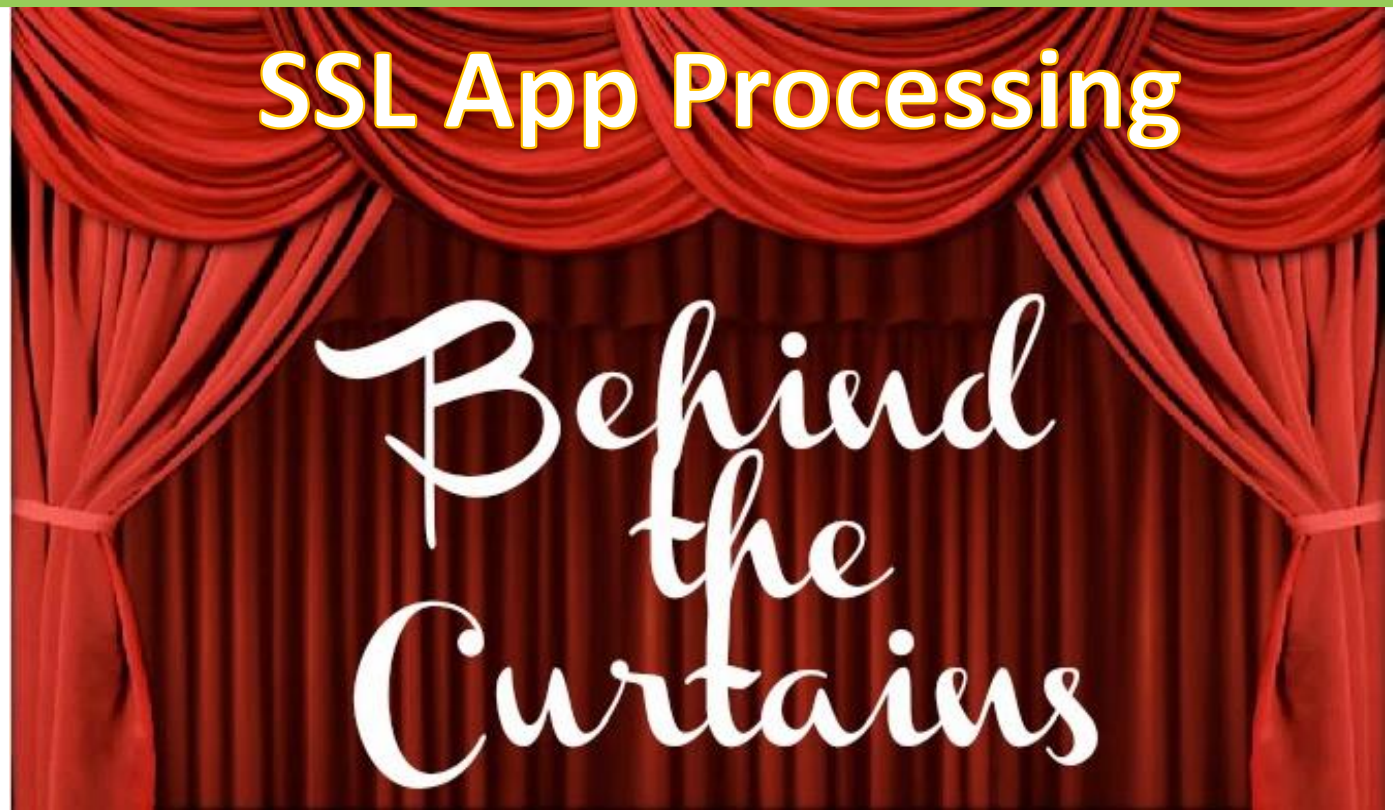


Image downloaded from:
http://www.taycor.com/news/category/articles/

Presenter

Bernadette Boudreaux

Technical Operations Manager

What Is DLC Doing With My Application?

TopImages.com

Perception

"They don't even look at the documents!"

Reality

Rigorous analysis done on each document submitted

https://updato.com

Perception

"Submitters don't look at my application until the last day !"

http://midtnhometeam.com

Reality

Reviewers typically manage 20-30 applications regularly

SSL Application Processing

Application Submitted

Applicant creates and submits application for review

+

Initial Review

Is application eligible?

Application Invoice

+

Comprehensive Review

Rigorous technical review of application materials

Does application meet Technical Requirements?

=

DLC QPL LISTED

Required Documentation For Submissions

https://msmt.org/peek-behind-curtain/

- Application Form
- Product Spec Sheet
- LED Spec Sheet
- Driver Spec Sheet
- LM-79
- IES files
- LM-80
- TM-21
- ISTMT
- Warranty Document
- Safety Certification

SSL Technical Requirements V4.4

Table 1: Technical Requirements: Luminaires

#	Category	General Application	Requirements: Minimum Light Output (lm)	DLC Standard: Minimum Efficacy (lm/W)	DLC Standard: Minimum Warranty (years)	DLC Standard: CCT / CRI / L_{70}	DLC Premium**: Minimum Efficacy (lm/W)	DLC Premium**: Minimum Warranty (years)	DLC Premium**: CCT / CRI / L_{80} / L_{70}	Primary Use***	Distribution
1	Outdoor	Outdoor – Low Output									
2		Outdoor – Mid Output									
3		Outdoor – High Output									
4		Outdoor – Very High Output*									
5	Indoor	Interior Directional									
6		Case Lighting									
7		Troffer									
8		Linear Ambient									
9		High Bay									

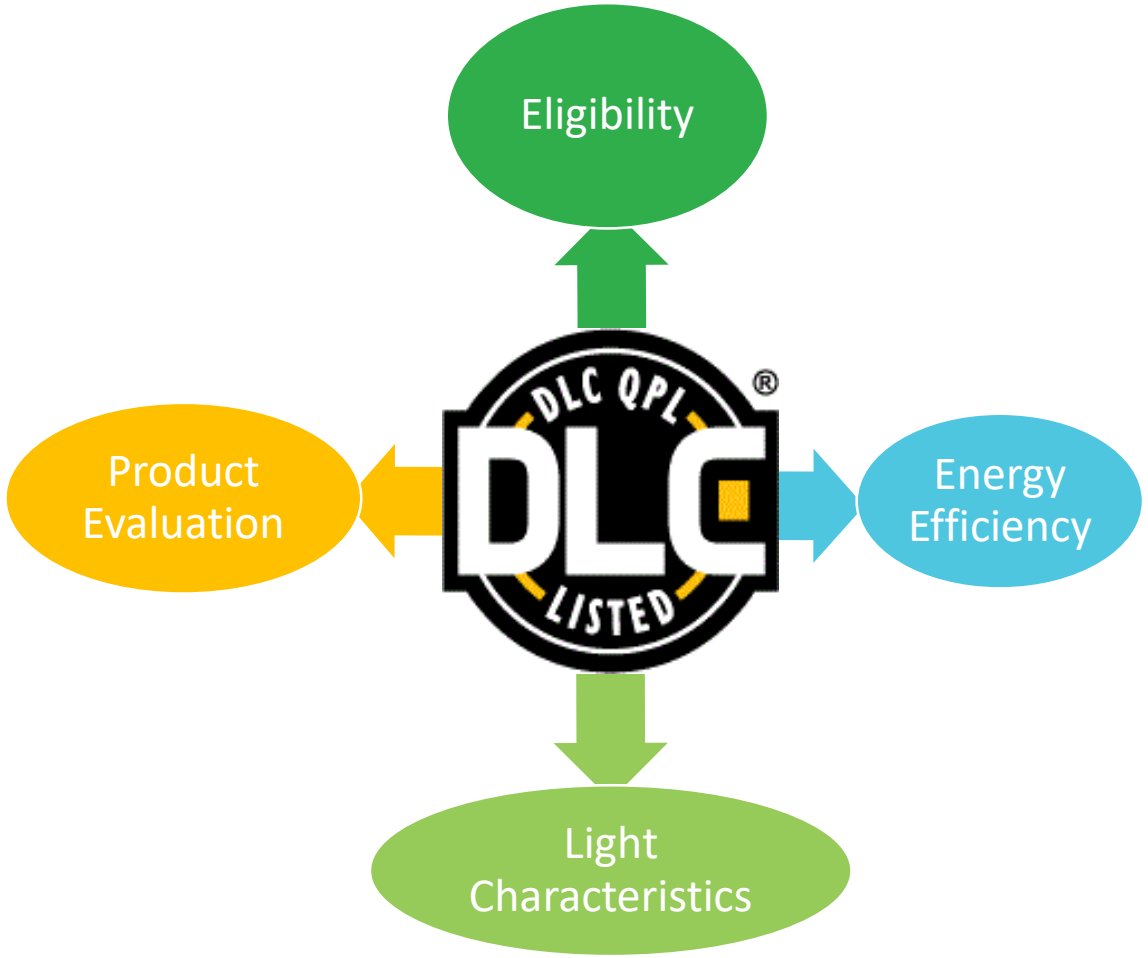
* Under the next revision to the
** Products seeking qualificatio
the DLC Standard classification.

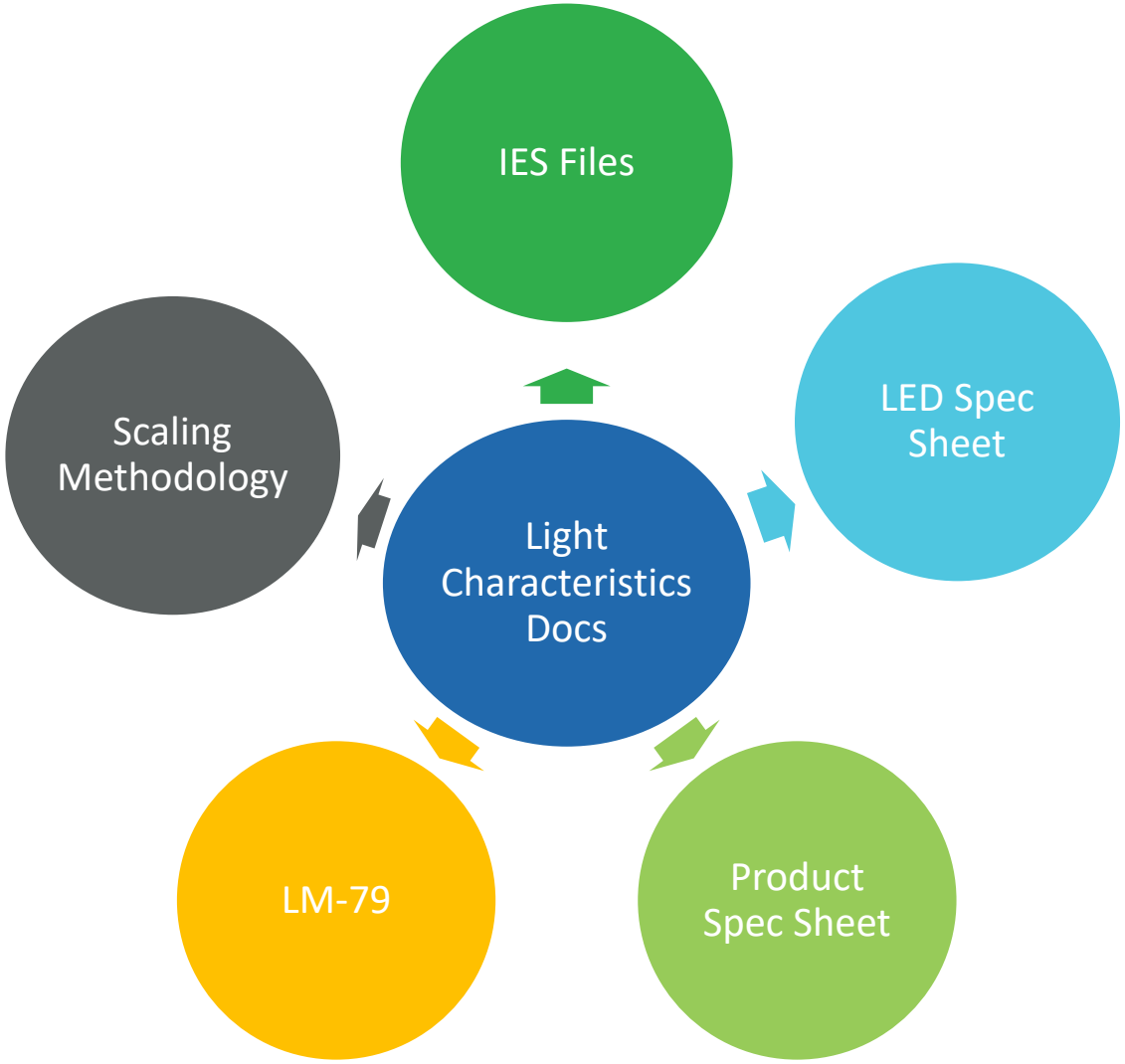
Table 4: Primary Use Technical Requirements: Light Output and Zonal Lumen Distribution

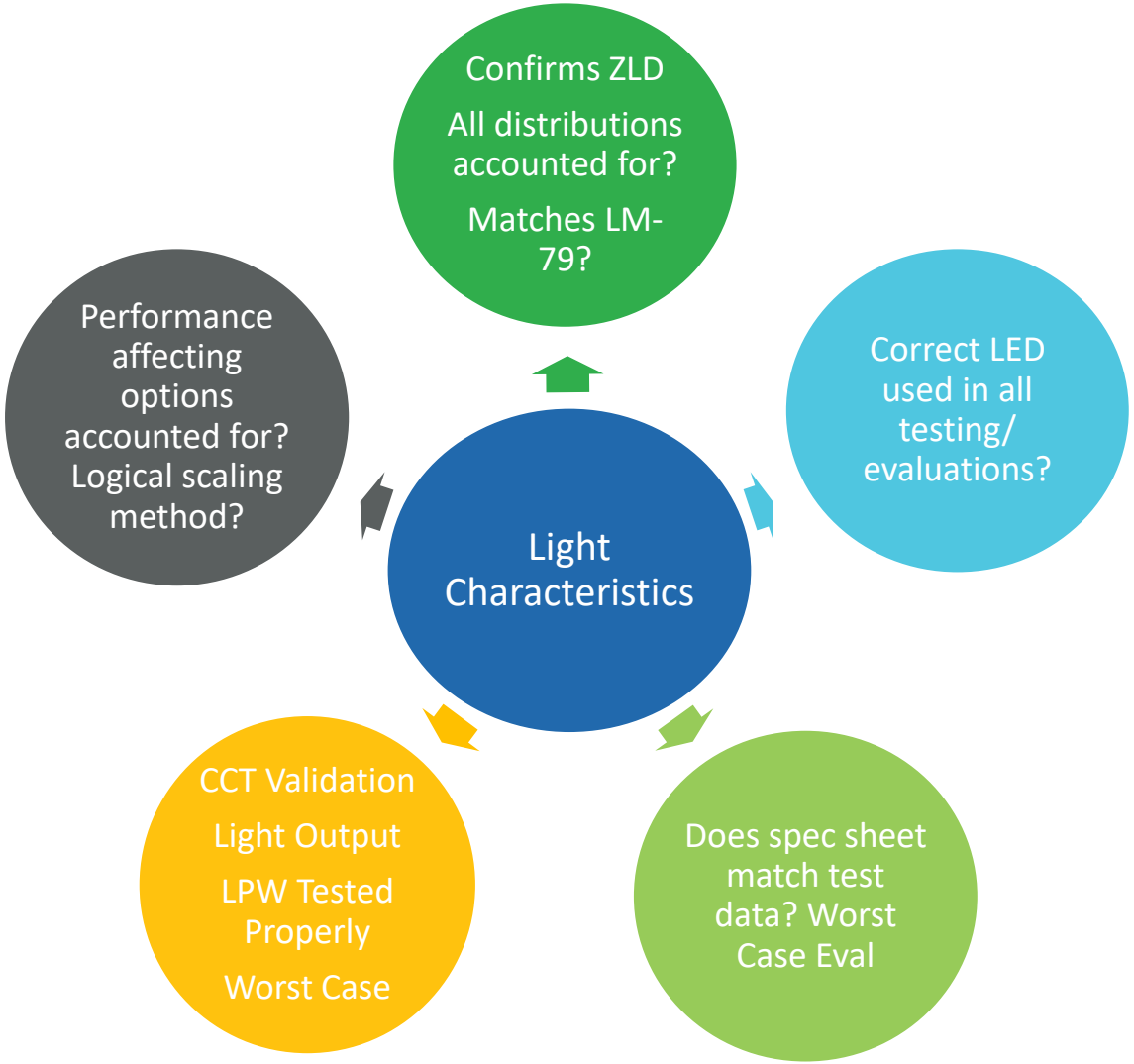
Primary Use Letter	Primary Use Designation	Minimum Light Output (lm)	Zone/Spacing Criteria	ZLD/SC Nominal Requirement	ZLD/SC Tolerance	ZLD/SC Requirement with Tolerance
A	Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	1,000	0-90°	100%	-1%	≥99%
			80-90°	≤10%	+3%	≤13%
B	Outdoor Pole/Arm-Mounted Decorative Luminaires	1,000	0-90°	≥65%	-3%	≥62%
C	Outdoor Full-Cutoff Wall-Mounted Area Luminaires	300	0-90°	100%	-3%	≥97%
			80-90°	≤10%	+3%	≤13%
D	Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires	300 (0-90° zone)***	80-90°***	≤10%***	+3%	≤13%
E	Bollards	500				
F	Parking Garage Luminaires	2,000				
G	Fuel Pump Canopy Luminaires	2,000				
H	Landscape/Accent Flood and Spot Luminaires	250 (<1,000				
I	Architectural Flood and Spot Luminaires	1,000				
J	Stairwell and Passageway Luminaires	750				
K	Wall-wash Luminaires	575				
L	Track or Mono-Point Directional Luminaires	250				
M	Vertical Refrigerated Case Luminaires-center	100 lm/				
N	Vertical Refrigerated Case Luminaires-end	50 lm/f				
O	Horizontal Refrigerated Case Luminaires	100 lm/				
P	Display Case Luminaires	50 lm/f				
Q	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces	2,000				
R	1x4 Luminaires for Ambient Lighting of Interior Commercial Spaces	1,500				

Testing & Reporting Requirements

- Retrofit Kits
- Linear Replacement Lamps
- Screw-Base Replacements for HID Lamps
- Four Pin-Base Replacement Lamps for CFLs
- Hazardous Location Lighting
- Color-Tunable Products
- Dimmable and Field-Adjustable Products
- Field-Adjustable Light Distribution Products
- DC and PoE Products
- Safety Certification







Ensures light characteristics meet eligibility requirements
Verifies light characteristic claims
Protects integrity of QPL - submitters held to same standards

Example

[Integrating Sphere System]

Total operating time for integrating sphere test: **1.0hours**

Test orientation: **Downward**

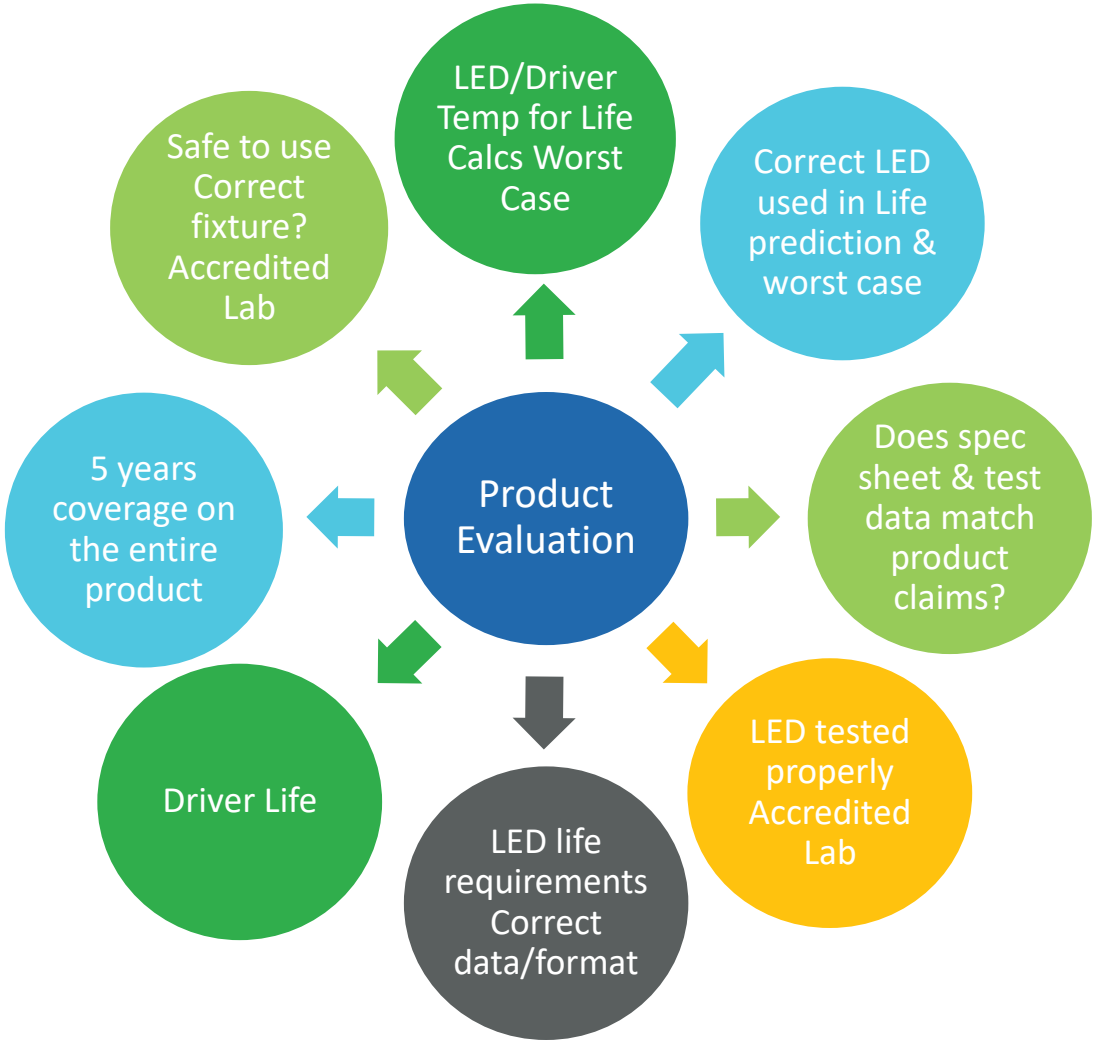
[Goniophotometer System]

Total operating time for luminous intensity distribution: **1.5hours**

Test orientation: **Downward**

Not consistent with the intended installation of a wall-pack

When tested in Proper Orientation ZLD requirements were NOT MET

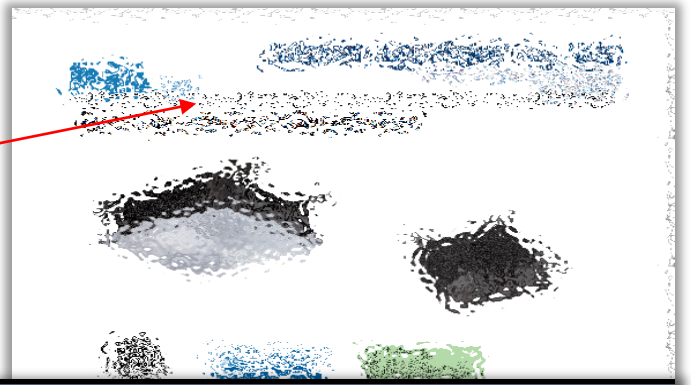


Accurate product representation

Ensures reviewers evaluate eligibility based on submitter intent and design

No manufacturing info
Model info unclear
Limited detail
Word document

Name or PUD on application does not match spec sheet



Entire application form must be filled out and submitted online using your manufacturer account. Applications will not be considered complete until payment h
Application Form and Scaled Performance Table are submitted.

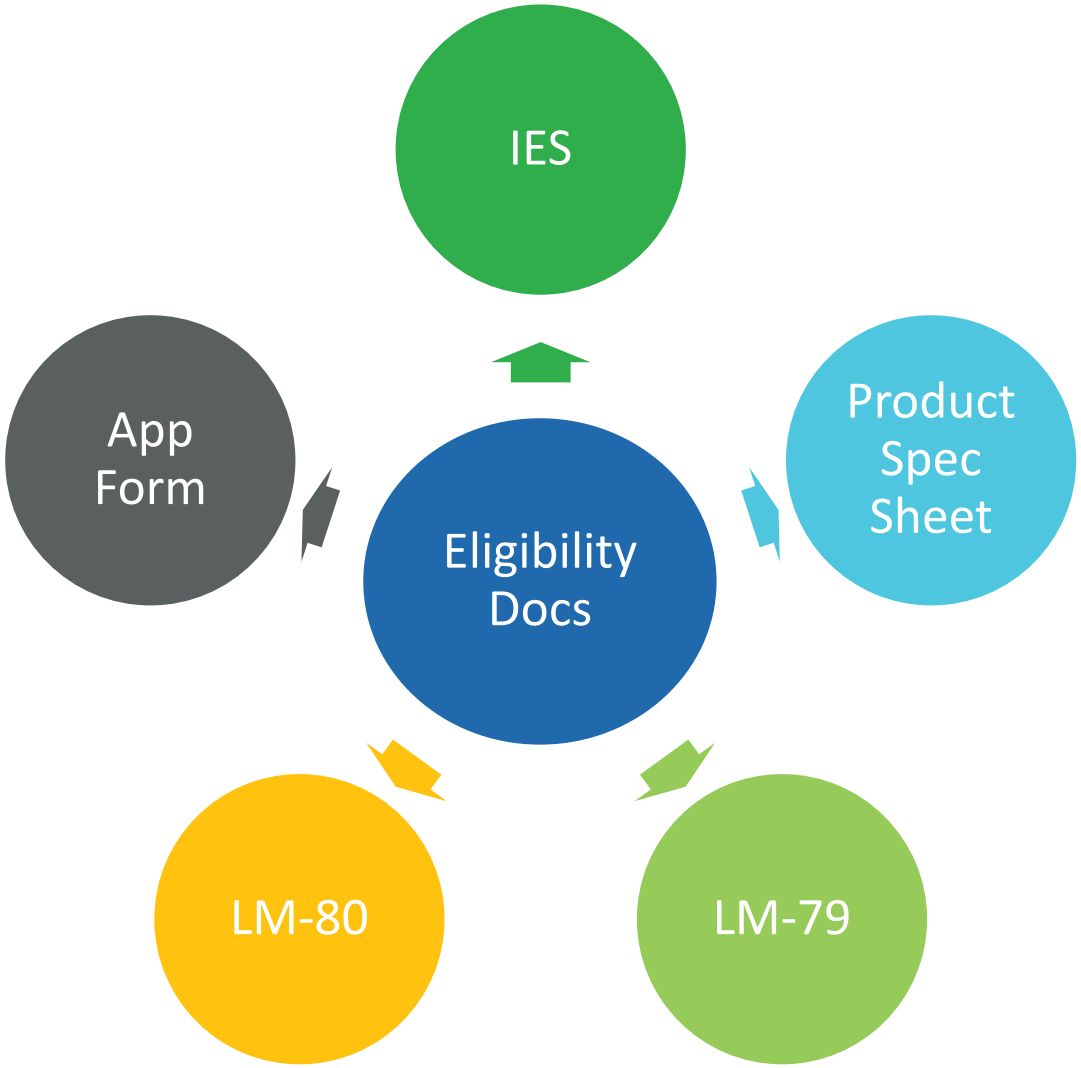
Company	
Brand Name	
Contact Name	

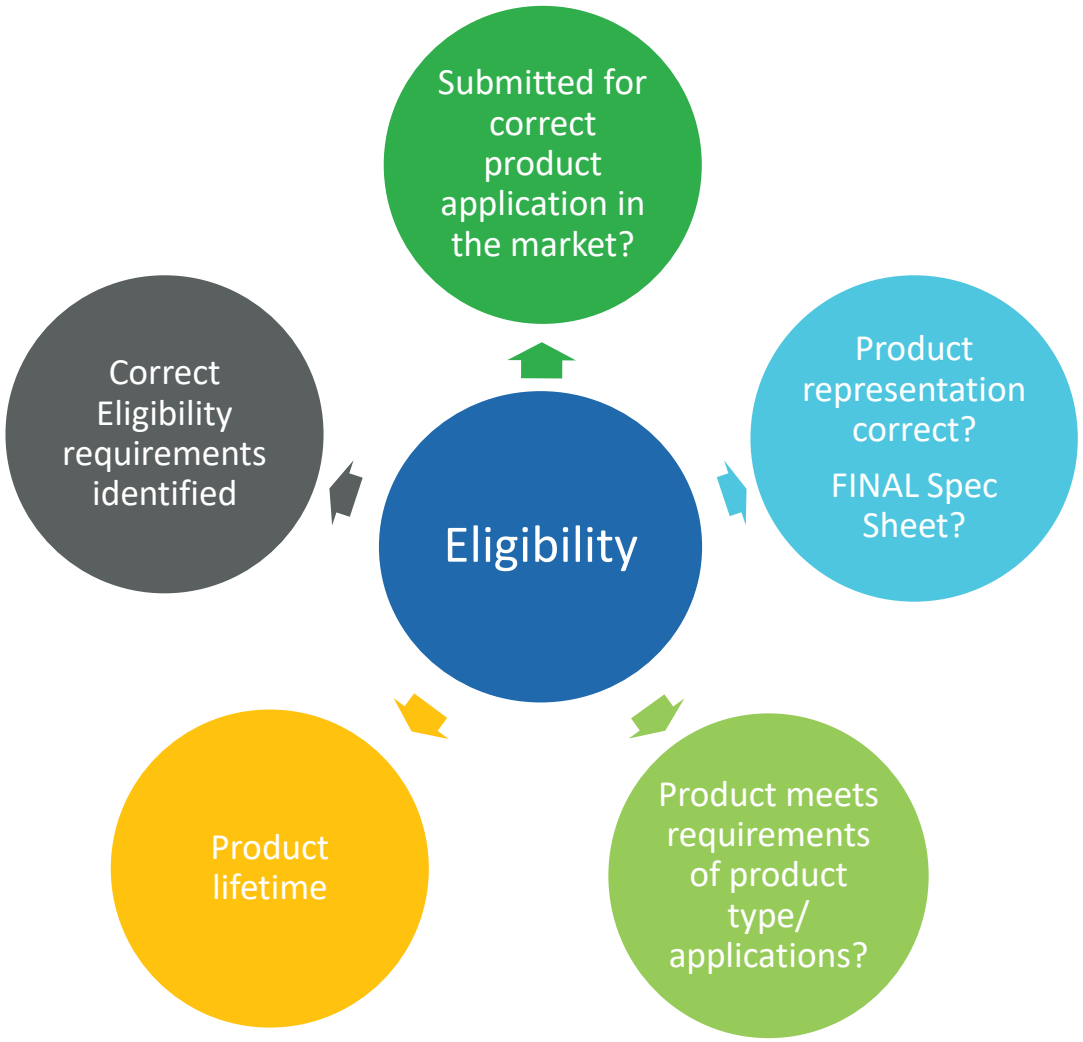
Power:	300W±5%
Input Voltage:	Ac100-277V
Power Factor:	>0.95
CCT:	4000/5000/5700K
CRI:	Ra80
Lumen:	40000lm±5%
Beam angle:	120°
Dimmable:	1-10V
IP grade:	IP65
Lifespan:	50,000H
Working Temperature:	-40 - 50℃
Installing method:	Hanging hook / Adjustable bracket / NPT
Material:	Aluminum + PC

TECHNICAL DATA

Wattage	300W	CRI	≥80
Lumens	39900	Housing Material	[illegible]
Efficacy	133 lm/W	Lens Material	Tempered Glass
Voltage	100-277V	IP Rating	[illegible]
CCT	4000K	Certifications	cUL
Dimming Type	1-10V	Rated Life	50,000 Hours

Performance Affecting Option not accounted for in scaling

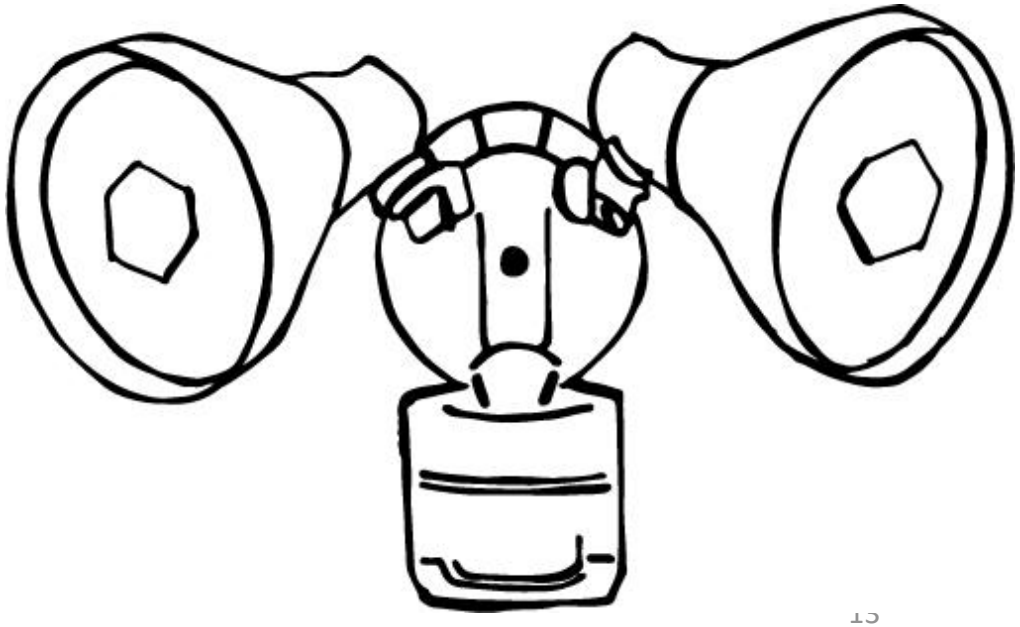




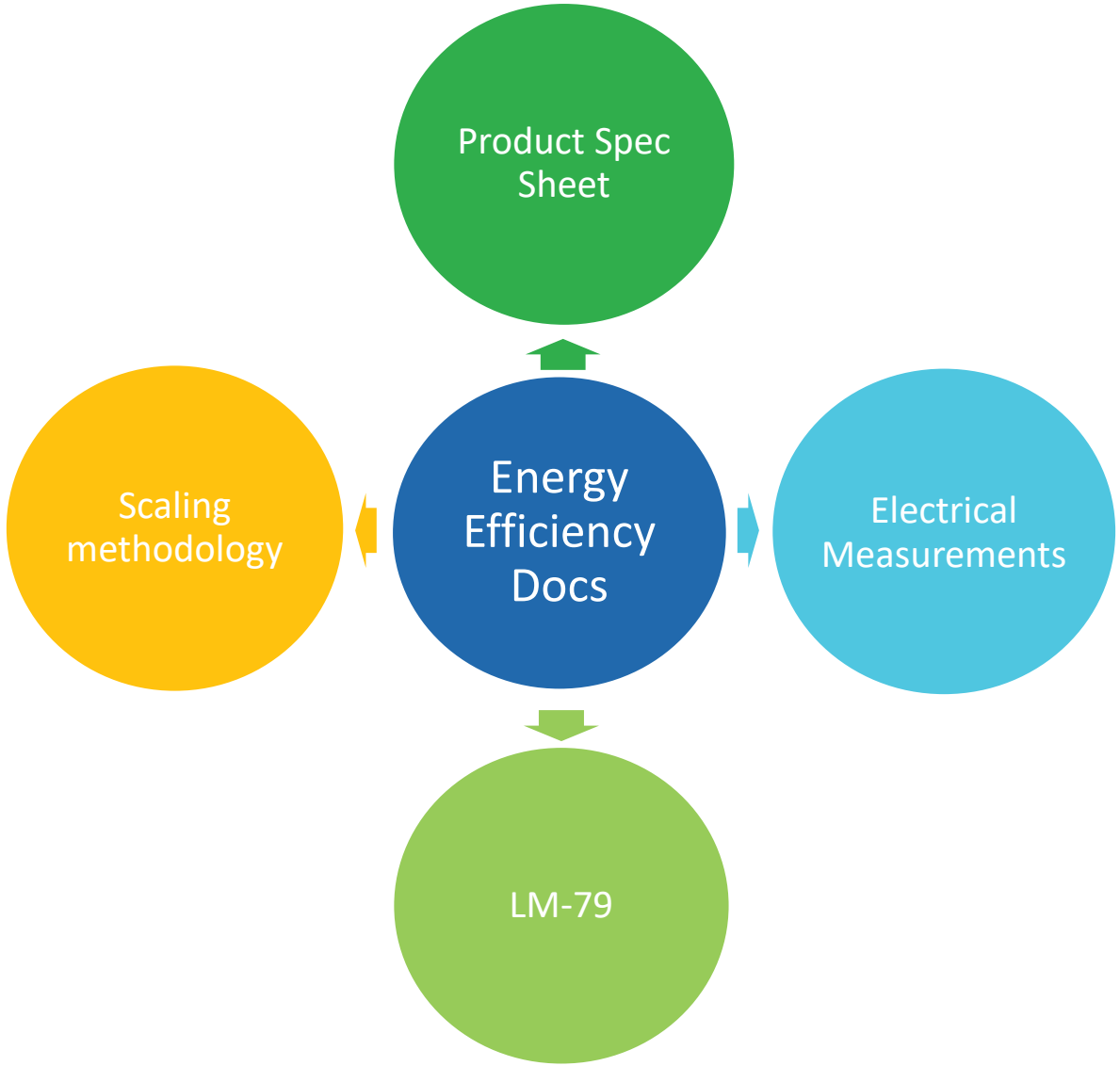
Assists with ensuring rebates are applied properly

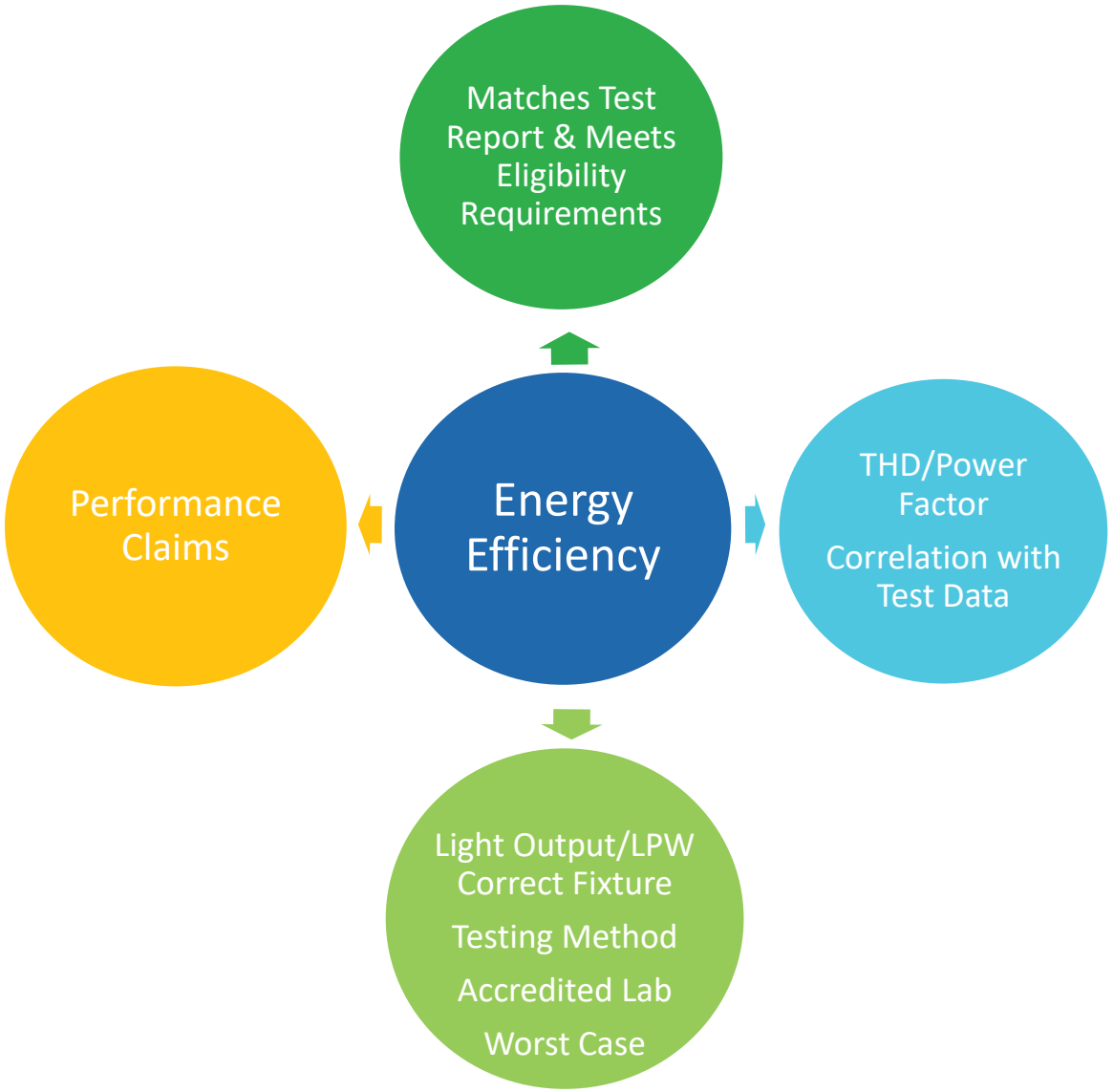
Maintains fairness in qualification

This is not a HIGH BAY



This is not an AREA LIGHT



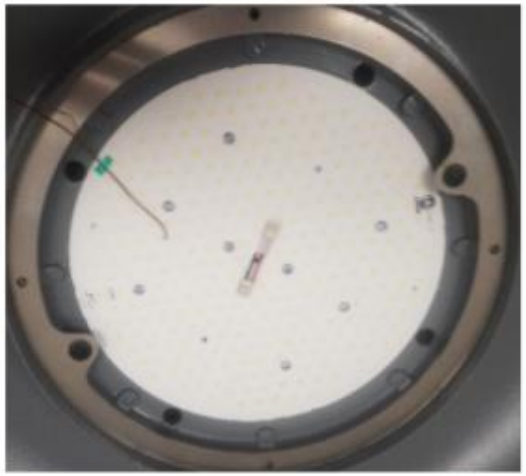


Ensures manufactures and submitters are eligible for the appropriate energy rebates

ISTMT Test Report

for

Thermocouple Reference



Was the LED tested properly?

3.1 Test Data:

Input Vol.	120.0V	Input Current	0.8346A	Input W
No.	Temperature (°C)		No.	Tempera
	Measured	Corrected at 25°C		Measured
1	74.9	74.8	3	72.0
2	72.5	72.4	4	73.5
The highest in-situ measured temperature LED is				74.8°C

Different LED temps used

***In-Situ* Inputs**

Drive current for each LED package/array/module (mA):	179
In-situ case temperature (T_c, °C):	67.3
Percentage of initial lumens to project to (e.g. for L_{70}, enter 70):	90

Results

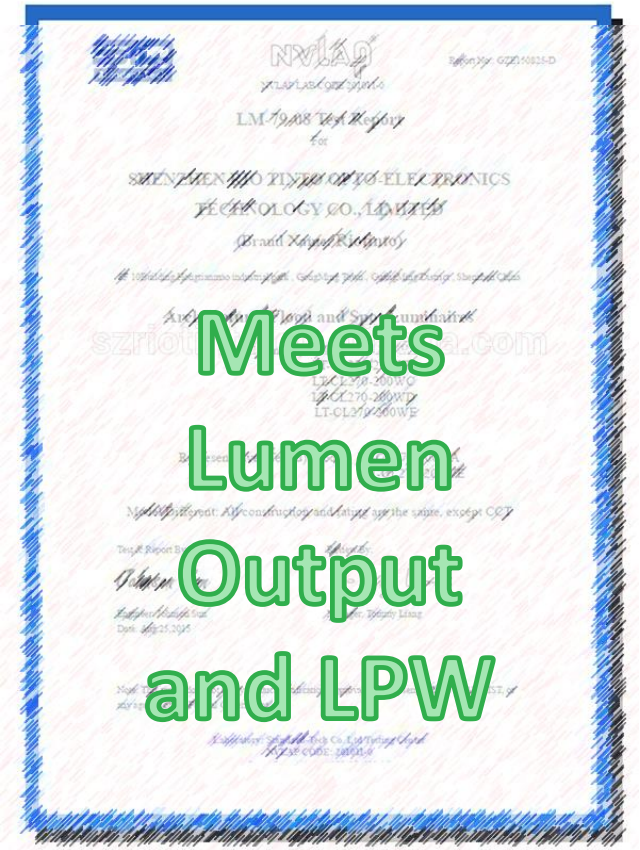
Time (t) at which to estimate lumen maintenance (hours):	36,000
Lumen maintenance at time (t) (%):	90.13%
Reported L90 (hours):	36,000

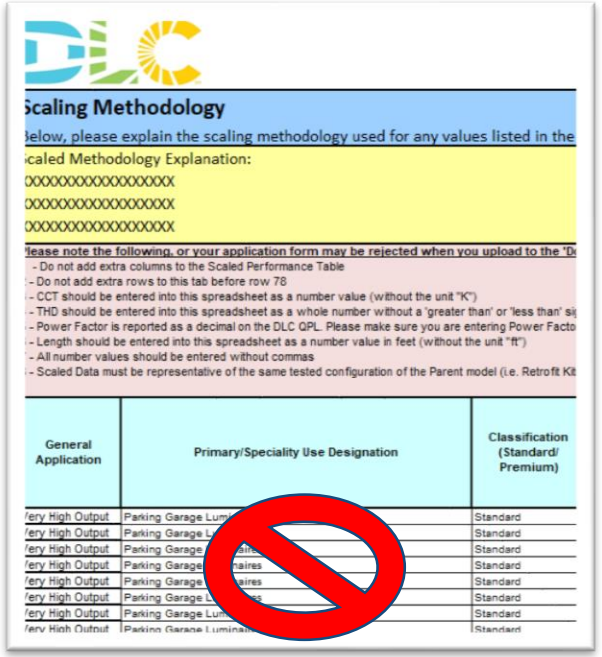
Worst Case

ProductNumber	InputVoltage	InputCurrent	InputWattage	PowerFactor	OutputWattage	OutputVoltage	OutputCurrent	THDCurrent
D15 xxxxxxxx	119.0	00.229	027.2	0.997	022.2	037.6	00.592	25.797

Does not meet THD requirement

LM-79





Does not align with scaling

ISTMT Test Report

LED Manufacturer	Lumileds
LED Model	L130-4080003000W21

LED tested does not match LED spec sheet

Contact Us

Search for

Please use the forms to the right to submit either a general question o about the QPL.

Phone Support:

781-538-6425
Mon-Fri, 9am-5pm EST
For Application Support - Dial 1
For Qualified Product List Inquiries - Dial 1

Email Support:

General Inquiries: info@designlights.org
Application Support: applications@designlights.org