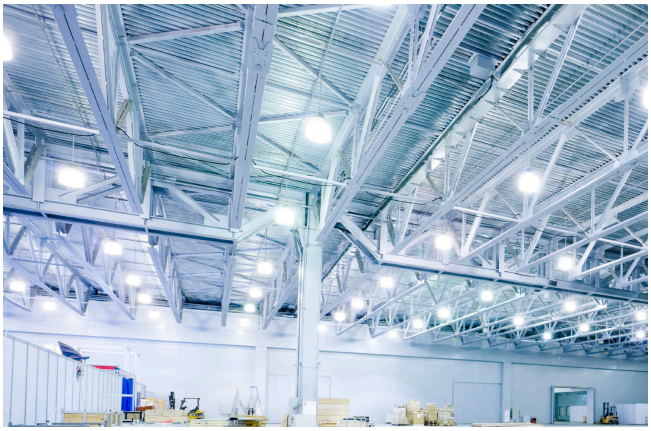
BONNEVILLE POWER ADMINISTRATION

Commercial & Industrial Lighting Program Offerings

2016 Edition



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NOTICE: The program incentives listed in document reflect the Bonneville Power Administration's (BPA) wholesale incentive amount. Individual utilities may change incentive levels, project caps, and unique program requirements in addition to those of BPA. Trade Allies are strongly encouraged to check with their local utility before starting projects or offering incentives to customers.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

BPA Lighting Caluclator 3.3

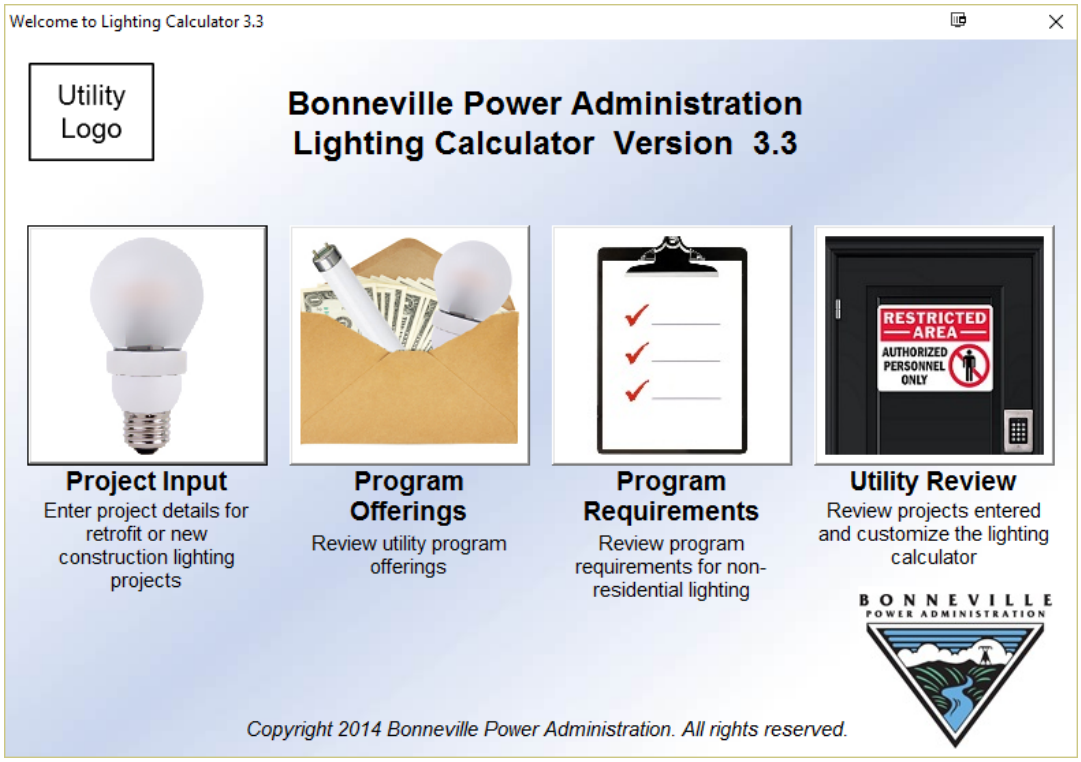
Over 2,000 projects and still going strong!

This guide has been organized into three main sections for easy navigation.

Section I gives a high level overview of the deemed measures series and incentives available for easy reference.

Section II outlines Lighting Calculator Series 3.3's features and explains the prescriptive hybrid model that offers greater incentives for greater savings achieved.

Section III provides guidelines for select measure series and additional user resources.



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Section I
Deemed Measure Tables

Measure Series A
T8 Linear Fluorescent

Measure Series A covers interior and exterior linear fluorescent lighting including 4', 8' T8 and irregular size products.

Note: Incentives and reportable savings to BPA for all 4' & 8' T12 fixtures will use the Market Average Baseline. (See the BPA Lighting Formulas and Adjustments form.)

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
A1-30%	T8 Linear Fluorescent (4' & 8')	≤100	≥30%	**$20**
A1-40%	T8 Linear Fluorescent (4' & 8')	≤100	≥40%	**$30**
A2-30%	T8 Linear Fluorescent (4' & 8')	101 - 200	≥30%	**$40**
A2-40%	T8 Linear Fluorescent (4' & 8')	101 - 200	≥40%	**$50**
A3-30%	T8 Linear Fluorescent (4' & 8')	201 - 300	≥30%	**$60**
A3-40%	T8 Linear Fluorescent (4' & 8')	201 - 300	≥40%	**$80**
A4-40%	T8 Linear Fluorescent (4' & 8')	≥301	≥40%	**$100**
A4-60%	T8 Linear Fluorescent (4' & 8')	≥301	≥60%	**$160**
A5-40%	Irregular size T8 Linear Fluorescent (2', 3', 5', 6' 7') and U-Tubes	NA	NA	**$20**

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series B Compact Fluorescent

Measure Series B covers interior and exterior compact fluorescent lighting including: screw-in CFLs, hardwired CFLs and cold cathodes.

Note: Measures B1 through B5 are calculated per bulb. Total bulb count should be entered in the quantity field. Measures B6 through B9 are incentivized per fixture.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
B1-50%	Compact Fluorescent *Dimmable or Flashable CC*	NA	≥50%	**$10**
B2-60%	Compact Fluorescent *Screw in CFL or Cold Cathodes*	≤100	≥60%	**$3**
B3-60%	Compact Fluorescent (screw in CFL)	101-150	≥60%	**$6**
B4-60%	Compact Fluorescent (screw in CFL)	151-300	≥60%	**$60**
B5-60%	Compact Fluorescent (screw in CFL)	≥301	≥60%	**$80**
B6-50%	Compact Fluorescent / Hardwired / GU-24 base	≤100	≥50%	**$20**
B6-65%	Compact Fluorescent / Hardwired / GU-24 base	≤100	≥65%	**$25**
B7-50%	Compact Fluorescent / Hardwired / GU-24 base	101-150	≥50%	**$30**
B7-65%	Compact Fluorescent / Hardwired / GU-24 base	101-150	≥65%	**$40**
B8-50%	Compact Fluorescent / Hardwired / GU-24 base	151-300	≥50%	**$50**
B8-65%	Compact Fluorescent / Hardwired / GU-24 base	151-300	≥65%	**$65**
B9-50%	Compact Fluorescent / Hardwired / GU-24 base	≥301	≥50%	**$90**
B9-65%	Compact Fluorescent / Hardwired / GU-24 base	≥301	≥65%	**$120**

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series C Induction

Measure Series C covers interior and exterior induction lighting including screw-in and hardwired fixtures.

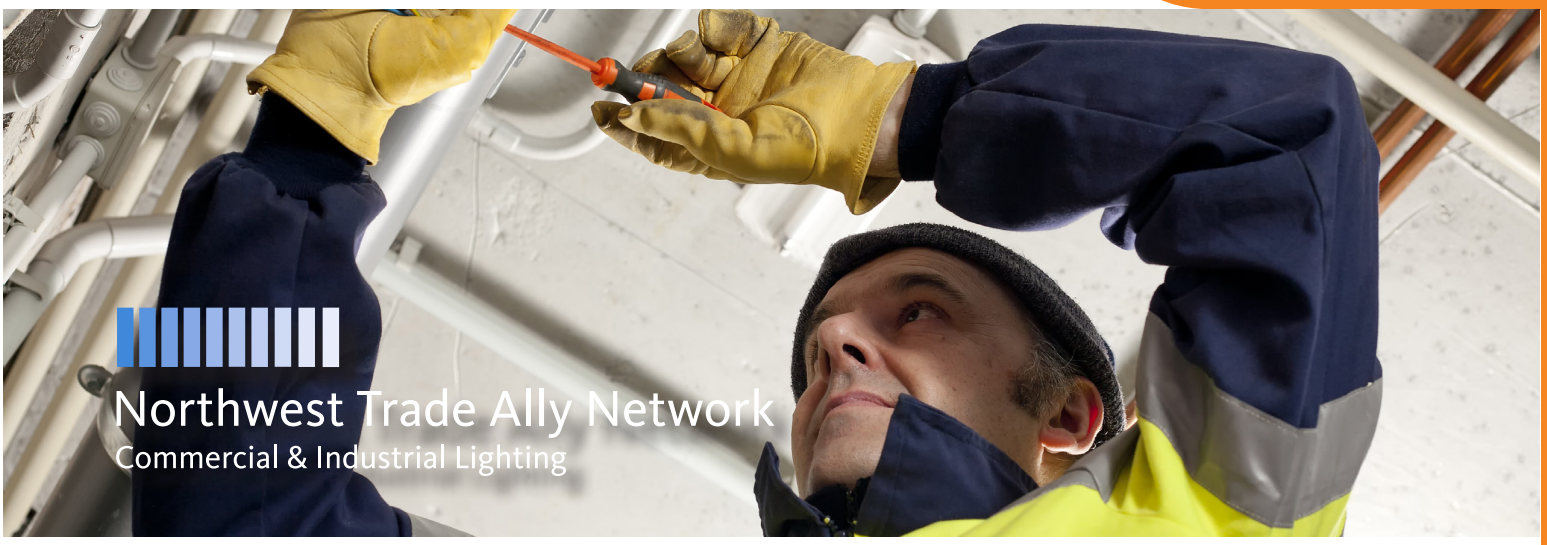
Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
C1-50%	Induction	50-99	≥50%	**$40**
C2-50%	Induction	100-199	≥50%	**$80**
C3-50%	Induction	200-299	≥50%	**$120**
C4-50%	Induction	300-399	≥50%	**$160**
C5-50%	Induction	400-499	≥50%	**$200**
C6-50%	Induction	≥500	≥50%	**$400**

Measure Series D Electronic & Ceramic Metal Halide

Measure Series D covers ceramic and electronic metal halides including screw-in and single or double ended products intended for interior and exterior use.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
D1-50%	Electronic and Ceramic Metal Halide	50-99	≥50%	**$40**
D2-50%	Electronic and Ceramic Metal Halide	100-199	≥50%	**$80**
D3-50%	Electronic and Ceramic Metal Halide	200-299	≥50%	**$120**
D4-50%	Electronic and Ceramic Metal Halide	300-399	≥50%	**$160**
D5-50%	Electronic and Ceramic Metal Halide	400-499	≥50%	**$200**
D6-50%	Electronic and Ceramic Metal Halide	≥500	≥50%	**$400**

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.



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- ✔ Information on lighting tools, resources and best practices
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- ✔ Increased revenue through more projects

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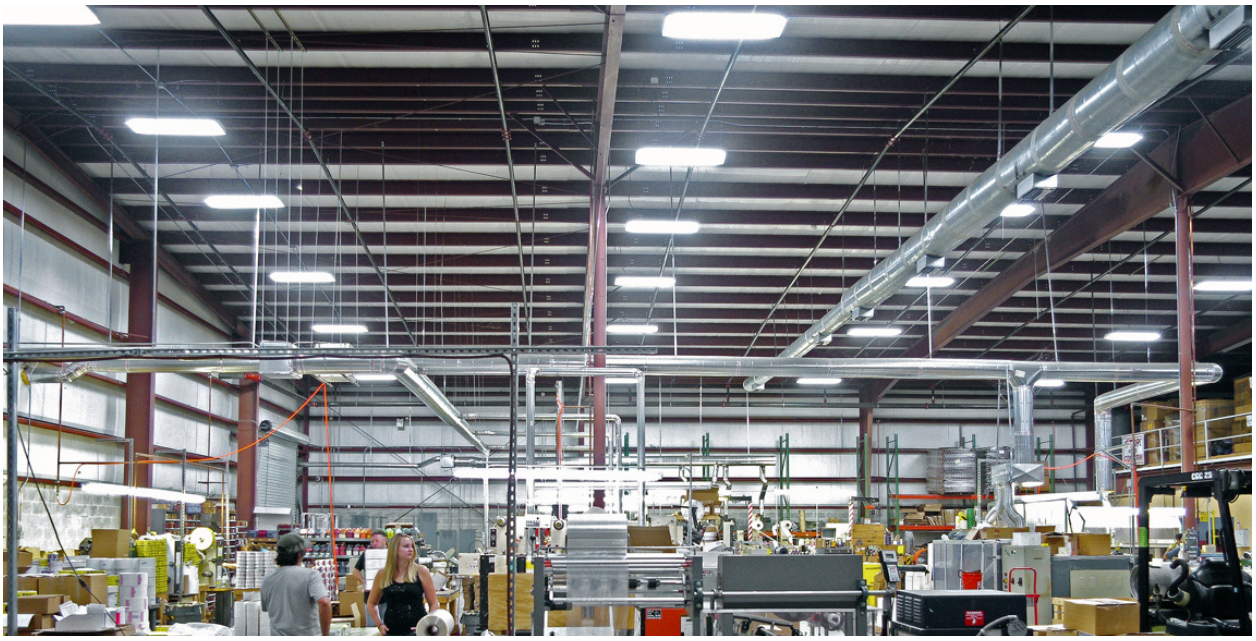
Measure Series E
Linear Fluorescent High-Bay

Measure Series E covers interior and exterior high output (HO) High-Bay Linear Fluorescent lighting systems. This measure series is designated by replacing an HID baseline of ≥ 200 watts with high output linear fluorescent lighting systems.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
E1-40%	HO Linear Fluorescent High-Bay	200-299	≥40%	**$80**
E1-50%	HO Linear Fluorescent High-Bay	200-299	≥50%	**$120**
E2-40%	HO Linear Fluorescent High-Bay	300-399	≥40%	**$120**
E2-50%	HO Linear Fluorescent High-Bay	300-399	≥50%	**$160**
E3-40%	HO Linear Fluorescent High-Bay	400-499	≥40%	**$140**
E3-50%	HO Linear Fluorescent High-Bay	400-499	≥50%	**$200**
E4-40%	HO Linear Fluorescent High-Bay	≥500	≥40%	**$260**
E4-50%	HO Linear Fluorescent High-Bay	≥500	≥50%	**$400**



Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series F
LED Screw-ins & Small Fixtures

Measure Series F is intended for interior and exterior screw-in and small LED fixtures. This measure series includes: reflectors, PAR, BR, A-lamps, MR-16s, recessed cans (retrofit included), and track fixtures.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Lamp
F1-20%	LED Screw-ins / Small Fixtures	≤25	≥20%	**$5**
F2-50%	LED Screw-ins / Small Fixtures	26-60	≥50%	**$10**
F2-75%	LED Screw-ins / Small Fixtures	26-60	≥75%	**$15**
F3-50%	LED Screw-ins / Small Fixtures	61-100	≥50%	**$20**
F3-75%	LED Screw-ins / Small Fixtures	61-100	≥75%	**$30**
F4-50%	LED Screw-ins / Small Fixtures	101-150	≥50%	**$40**
F4-75%	LED Screw-ins / Small Fixtures	101-150	≥75%	**$60**
F5-50%	LED Screw-ins / Small Fixtures	151-199	≥50%	**$60**
F5-75%	LED Screw-ins / Small Fixtures	151-199	≥75%	**$80**

Notes:
- Measure F1 is intended for a CFL baseline.
- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series G LED Tubes & Troffers

Measure Series G covers all sizes and configurations of LED tubes and troffers for interior and exterior use.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
G1-40%	LED Tubes & Troffers	≤100	≥40%	**$20**
G1-50%	LED Tubes & Troffers	≤100	≥50%	**$30**
G1-60%	LED Tubes & Troffers	≤100	≥60%	**$40**
G1-70%	LED Tubes & Troffers	≤100	≥70%	**$50**
G2-40%	LED Tubes & Troffers	101-200	≥40%	**$40**
G2-50%	LED Tubes & Troffers	101-200	≥50%	**$60**
G2-60%	LED Tubes & Troffers	101-200	≥60%	**$80**
G2-70%	LED Tubes & Troffers	101-200	≥70%	**$100**
G3-40%	LED Tubes & Troffers	≥201	≥40%	**$70**
G3-50%	LED Tubes & Troffers	≥201	≥50%	**$100**
G3-60%	LED Tubes & Troffers	≥201	≥60%	**$120**
G3-70%	LED Tubes & Troffers	≥201	≥70%	**$140**

Notes:

- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series H
LED Exterior General Area

Measure Series H is intended for all forms of exterior LED lighting. This measure series includes: parking lot, street, wall packs, bollards, floods, barn/yard, pole lamps, and canopy.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
H1-40%	LED Exterior General Area	50-99	≥40%	**$30**
H1-60%	LED Exterior General Area	50-99	≥60%	**$40**
H1-70%	LED Exterior General Area	50-99	≥70%	**$50**
H2-40%	LED Exterior General Area	100-199	≥40%	**$60**
H2-60%	LED Exterior General Area	100-199	≥60%	**$80**
H2-70%	LED Exterior General Area	100-199	≥70%	**$100**
H3-40%	LED Exterior General Area	200-299	≥40%	**$80**
H3-60%	LED Exterior General Area	200-299	≥60%	**$120**
H3-70%	LED Exterior General Area	200-299	≥70%	**$140**
H4-40%	LED Exterior General Area	300-399	≥40%	**$100**
H4-60%	LED Exterior General Area	300-399	≥60%	**$180**
H4-70%	LED Exterior General Area	300-399	≥70%	**$250**
H5-40%	LED Exterior General Area	400-499	≥40%	**$120**
H5-60%	LED Exterior General Area	400-499	≥60%	**$220**
H5-70%	LED Exterior General Area	400-499	≥70%	**$300**
H6-40%	LED Exterior General Area	≥500	≥40%	**$250**
H6-60%	LED Exterior General Area	≥500	≥60%	**$400**
H6-70%	LED Exterior General Area	≥500	≥70%	**$500**

Notes:
- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series I: LED High-Bay

Measure Series I is intended for interior LED high-bay applications.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
I1-40%	LED High-Bay	200-299	≥40%	**$80**
I1-60%	LED High-Bay	200-299	≥60%	**$140**
I1-70%	LED High-Bay	200-299	≥70%	**$200**
I2-40%	LED High-Bay	300-399	≥40%	**$100**
I2-60%	LED High-Bay	300-399	≥60%	**$180**
I2-70%	LED High-Bay	300-399	≥70%	**$300**
I3-40%	LED High-Bay	400-499	≥40%	**$140**
I3-60%	LED High-Bay	400-499	≥60%	**$240**
I3-70%	LED High-Bay	400-499	≥70%	**$360**
I4-40%	LED High-Bay	≥500	≥40%	**$250**
I4-60%	LED High-Bay	≥500	≥60%	**$400**
I4-70%	LED High-Bay	≥500	≥70%	**$500**

Notes:

- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series J: LED Parking Garage

Measure Series J is intended for parking garage applications with at least an 18/7 operating schedule. Parking garage applications under 18 hours per day should use Measure Series H: LED Exterior General Area.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
J1-40%	LED Parking Garage	50-99	≥40%	**$40**
J1-60%	LED Parking Garage	50-99	≥60%	**$50**
J1-70%	LED Parking Garage	50-99	≥70%	**$60**
J2-40%	LED Parking Garage	100-199	≥40%	**$60**
J2-60%	LED Parking Garage	100-199	≥60%	**$100**
J2-70%	LED Parking Garage	100-199	≥70%	**$160**
J3-40%	LED Parking Garage	200-299	≥40%	**$100**
J3-60%	LED Parking Garage	200-299	≥60%	**$160**
J3-70%	LED Parking Garage	200-299	≥70%	**$250**
J4-40%	LED Parking Garage	300-399	≥40%	**$140**
J4-60%	LED Parking Garage	300-399	≥60%	**$220**
J4-70%	LED Parking Garage	300-399	≥70%	**$350**
J5-40%	LED Parking Garage	400-499	≥40%	**$200**
J5-60%	LED Parking Garage	400-499	≥60%	**$280**
J5-70%	LED Parking Garage	400-499	≥70%	**$400**

Notes:
- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series K: LED Loading Dock

Measure Series K is intended for interior and exterior loading dock applications.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
K-70%	LED Loading Dock	100-2000	≥70%	**$100**

Notes:

- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Measure Series L: LED Exit Signs

Measure Series L is intended for all LED exit signs.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Installed Fixture
L-90%	LED Exit Signs	10-60	≥90%	**$40**

Notes:

- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series M: Linear LED Application

Measure Series M is intended for interior and exterior linear LED applications and includes refrigerator case lights and accent / cove lighting.

Measure	Description	Watt Baseline	Required Wattage Reduction	Incentive per Linear Foot Installed
M-60%	Linear LED Application	≥60	≥60%	**$15**

Notes:

- Users will enter total linear feet as the quantity for Measure Series M.
- Please refer to the LED Quick Reference Guide for performance guidelines.
- Trade Allies should check with utilities for any applicable LED requirements.

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series N: Controls

Measure Series N covers occupancy sensors and bi-level controls.

Measure	Description	Controlled Wattage	Estimated Wattage Reduction	Incentive per Installed Fixture
N1	Controls	45-200	25%	**$35**
N2	Controls	≥201	25%	**$60**

Advanced Controls

LC Series 3 offers calculated incentives for advanced controls. Controls are considered advanced when they deploy multiple strategies and are self-reporting. The BPA lighting team will accept data logging if self-reporting features are not available. Advanced controls require a minimum of two weeks data post system commissioning. The lighting calculator treats Advanced Controls as non-standard measures and requires BPA approval.

Measure	Description	Estimated Wattage Reduction	Incentive per Installed Fixture
NA	Advanced Controls	25%-50%	$0.18 / kWh saved

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

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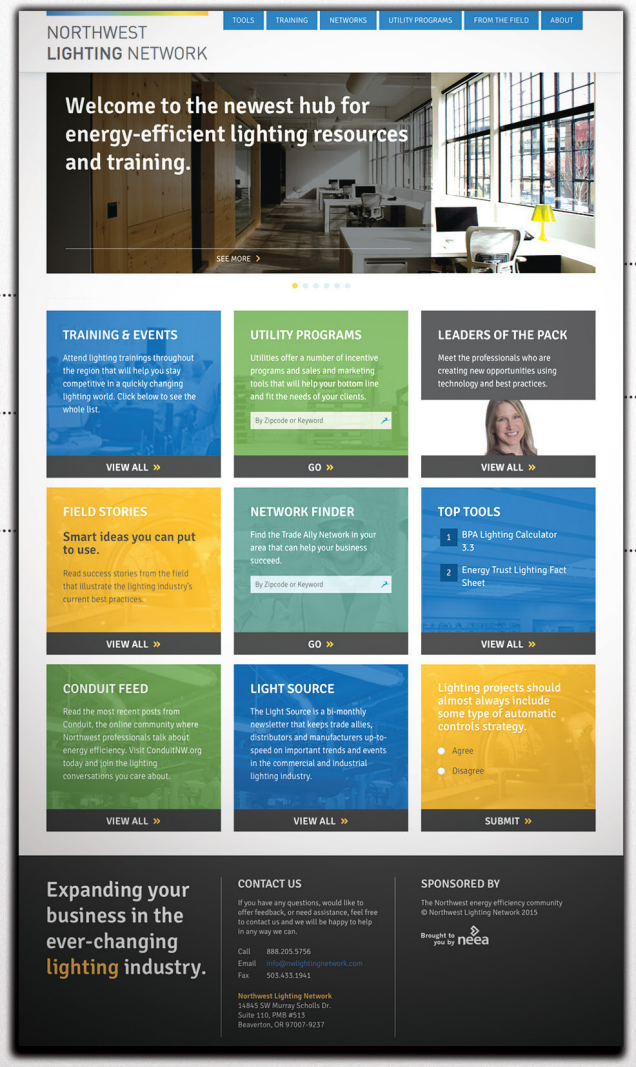

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Measure Series O: Decommissioning

The lighting calculator will automatically recognize decommissioning when there is a reduction in fixtures and apply a calculated incentive (including any deemed equipment incentives that are part of that measure row). Incentives are calculated based on the total adjusted savings.

Decommissioning measures must provide a net energy savings of at least 10% and merit an incentive of at least $5.00 to be eligible for an incentive. To qualify for decommissioning, a fixture must be completely removed, not just disconnected. BPA will not require conduit leading up to the fixture to be removed.

Measure	Description	Required Wattage Reduction	Requires BPA Approval	Incentive
O	Decommissioning	NA	NA	$0.18 / kWh saved

Note: See section II for additional information

Fixture Increase

Fixture Increases must provide a net energy savings of at least 10% and merit an incentive of at least $5.00 to be eligible for an incentive.

Measure	Description	Required Wattage Reduction	Requires BPA Approval	Incentive
NA	Fixture Increase	NA	NA	$0.18 / kWh saved

Note: See section II for additional information

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Measure Series P: Non-Standard Measures

When trade allies or utilities are not able to select the existing or proposed equipment from the drop down boxes within the Measures Tab, the information may be entered as a non-standard measure. A non-standard measure allows the user to manually key in the desired proposed equipment.
Non-standard measures must provide a net energy savings of at least 10% and merit an incentive of at least $5.00 to be eligible for an incentive.

Measure	Description	Required Wattage Reduction	Requires BPA Approval	Incentive
P	Non-Standard	NA	Yes	$0.18 / kWh saved

Confused about Non-Standard Measures?

Turn to **Page 20** for additional information

Measure Series NC: New Construction

Requirement: New construction projects must save at least 20% to be eligible for an incentive.

Measure	Description	Controlled Wattage	Required Wattage Reduction	Incentive per Installed Fixture
NC	New Construction	NA	NA	$0.18 / kWh saved

Note: See section II for additional information

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Section II
Calculator Features

New Construction vs Retrofit

Which baseline do I use?

New projects require the **Baseline Eligibility Form** be completed by answering four questions that will determine a project's status as New Construction or Retrofit. **Answering yes to any one of the four questions will designate the project as new construction.**

1. Is this a newly constructed facility or newly constructed exterior area with new lighting fixtures?
2. Is this a newly constructed addition to an existing facility that adds usable floor area?
3. Is the project a major renovation? A project is considered a major renovation whenever a whole building permit is required.
4. Is there a change in occupancy type (e.g., office to food service, warehouse to office, retail to office - see occupancy and space use type definition)?

Utility program managers are strongly encouraged to review this form.

Specific Deemed Measures

What kind of incentives do I qualify for?

Specific deemed measures are determined by three factors:

1. Technology type being proposed (measure series)
2. Wattage baseline currently in place (found in measure series table)
3. Wattage reduction being achieved (found in measure series table)

Each measure series listed represents an energy efficient technology type and the associated tables list the applicable baseline wattage ranges, as well as required wattage percentage reductions necessary to trigger an incentive. Trade Allies can find a list of utility specific incentives in the Program Offerings (located on the front page of the lighting calculator.

Tiered Incentives

More Savings = Greater Incentives

Several measure series offer tiered incentives. The greater the wattage reduction, the greater the incentive. The percentage figure shown next to the measure number represents the wattage reduction necessary for a deemed incentive.

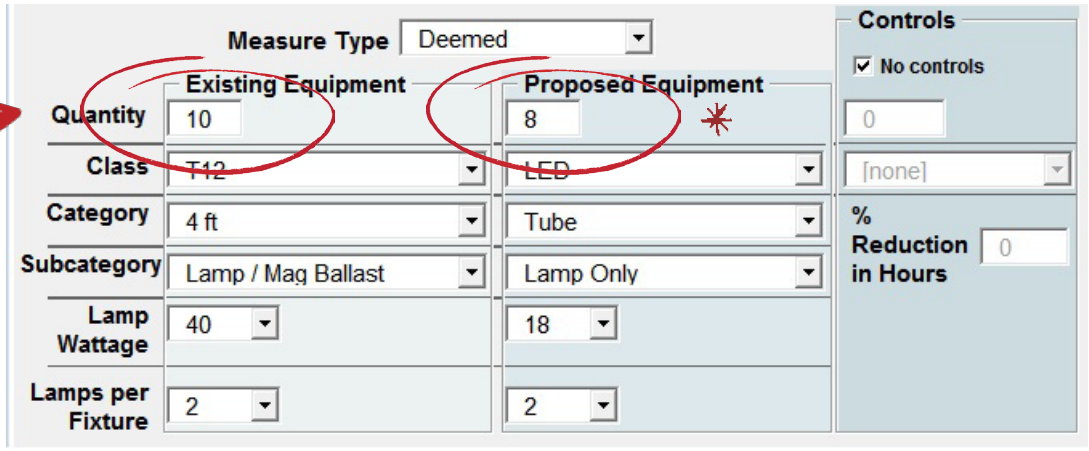
Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Decommissioning

Redesigning a space is encouraged ...and it pays!

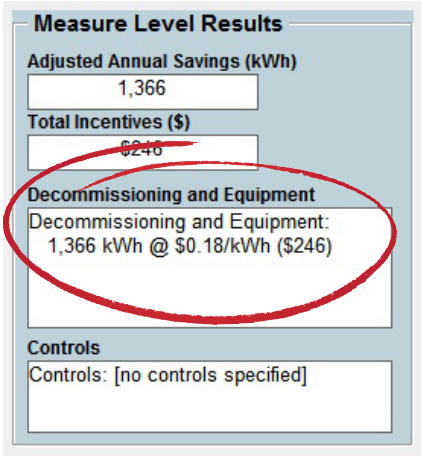
The lighting calculator will automatically recognize decommissioning when there is a reduction in fixtures. Measure lines that include decommissioning will automatically be calculated at $0.18 per kWh saved (including any deemed equipment incentives that are part of that measure row).

Incentives are calculated based on the total adjusted savings (factoring in Federal Standards, HVAC, and BUSBAR adjustments). Decommissioning measures must provide a net energy savings of at least 10% and merit an incentive of at least $5.00 to be eligible for an incentive.



*Less Fixtures

Calculated incentives based on savings!



Fixture Increase

Sometimes redesigning a space to use less energy adds fixtures.

Lighting Calculator Series 3 will incentivize fixture increase scenarios as calculated measures requiring no pre-approval. Anytime the proposed quantity of fixtures is greater than the existing, the calculator will automatically apply a calculated incentive. Calculated measures must provide a net energy savings of 10% and merit an incentive of at least $5.00

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Non-Standard Measures

When trade allies or utilities are not able to select the existing or proposed equipment from the drop down boxes within the Measures Tab, the information may be entered as a non-standard measure. A non-standard measure allows the user to manually key in the desired proposed equipment.

Applications that need to be sent in for non-standard approval include:

- Advanced Lighting Controls
- Any measure not fitting BPA's deemed model

Submitting a non-standard measure for approval:

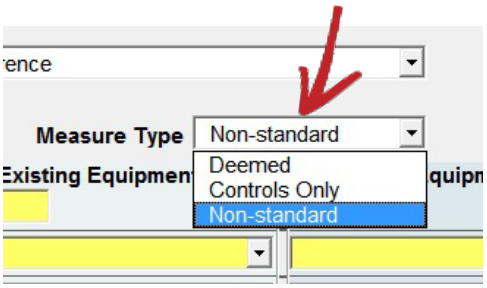
- Non-standard measures will always require review by the BPA Lighting Team. Non-standard measures should be sent to Lighting@BPA.gov with an attached, completed lighting calculator and technical product cut sheets as requested by the lighting team.
- Non-standard measure requests can only come from utilities or utility agents. Non-standard measures connot be submitted by trade allies.

Non-standard Measures Procedures

To enter a non-standard measure, follow the guidelines below:

- Users will select non-standard from the lighting calculator dropdown menu. (See image to the right.)
- The red non-standard status column will read "**NS-N**" (Non-Standard-Not Approved). (See image below.)

Select "Non-Standard"



Measure # Space Status	Existing	Proposed
1 Conference NS-N	5 T12(s) 4 ft, Lamp / Mag Ballast 40 W/lamp, 2 lamp(s)/fixture	5 T8 HP(s) 4 ft, NLO Ballast 28 W/lamp, 2 lamp(s)/fixture

- Users will select the existing and proposed equipment that matches what is being replaced and added. Users may also manually key in the proposed equipment information.

- After the BPA Lighting Team reviews and approves a non-standard measure, the column will read "**NS-Y**" (Non-Standard-Yes) and will no longer be highlighted red.

Measure # Space Status	Existing	Proposed
1 Conference NS-Y	5 T12(s) 4 ft, Lamp / Mag Ballast 40 W/lamp, 2 lamp(s)/fixture	5 T8 HP(s) 4 ft, NLO Ballast 28 W/lamp, 2 lamp(s)/fixture

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

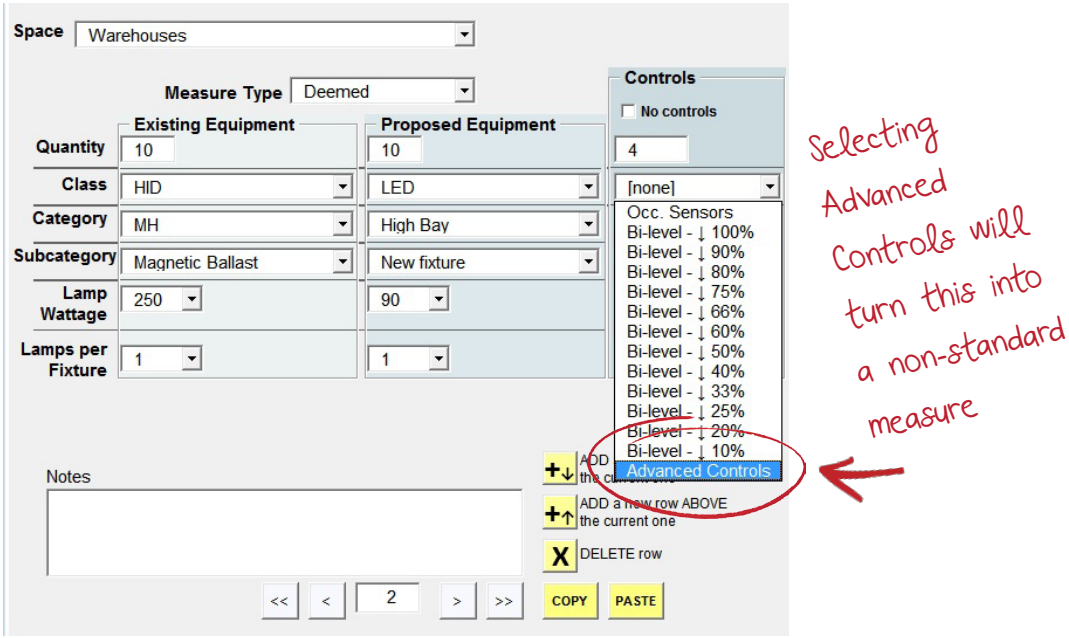
Advanced Controls

Lighting Calculator Series 3 offers new programmatic incentives for advanced controls. Advanced controls are defined as controls deploying at least two strategies such as photocell and occupancy sensor or daylight harvesting and occupancy sensor. By utilizing the advanced controls feature, calculator users are able to generate larger incentives where greater control savings can be documented.

Advanced Controls require at least two weeks of data logging post installation and system commissioning to qualify for an incentive. This data must be submitted to lighting@bpa.gov.

Lighting Calculator Series 3 treats advanced controls as a non-standard measure. Calculator users wishing to claim higher incentives through this mechanism should work with their utility.

BPA approval is required on advanced controls.



Controls in the BPA Lighting Calculator will have the following default values:

Control Type	Default Reduction in Hours of Operation
Occupancy Sensors (includes wall timers)	**25%**
Bi-Level Controls (The user can then manually select the appropriate bi-level reduction, between 0% – 100%)	**25%**

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

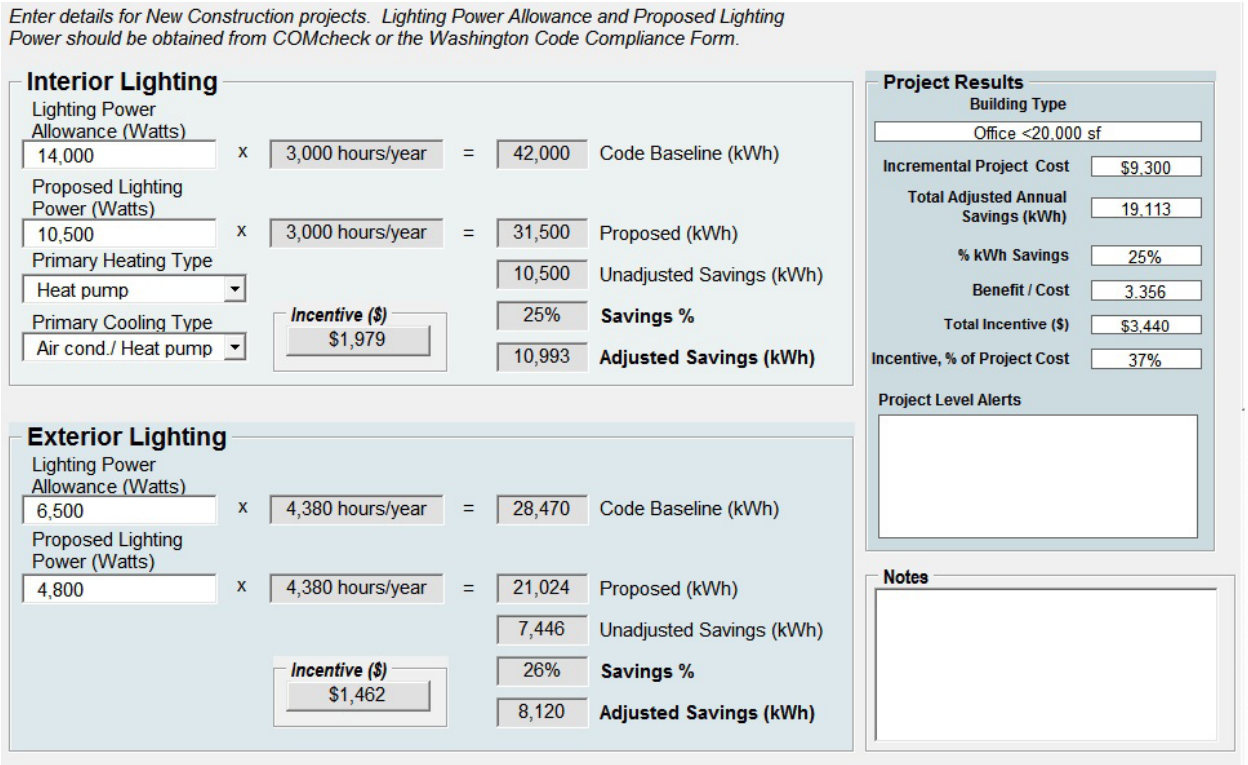
New Construction

Project Input Tab

The new construction portion of Series 3 offers users a simplified interface. Users will no longer be required to enter projects on a measure by measure basis.

Within the project input tab, users will only need to enter the building's Lighting Power Allowance* (total watts allowed by code) and the project's Proposed Lighting Power (total watts of project). Series 3 will automatically determine the hours of operation based on the building type.

Incentives will automatically be calculated at $0.18 per kWh saved using the total adjusted savings (factoring in HVAC and BUSBAR adjustments). (See image below.) **Projects must save at least 20% to be eligible for an incentive.**



*Lighting Power Allowance figures can be found on the code compliance forms used for building permits.

Questions!?
Contact us at
Lighting@bpa.gov

Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

Section III
Technical References

Measure Series F-M LEDs/Solid State Lighting

Any proposed LED products which do not meet the BPA guidelines for wattage reduction, or are not listed on a QPL, may still be eligible as a non-standard measure.

Utility LED Quick Reference Guide			
LEDs by Application	**Minimum Required Wattage Reduction for Deemed Measures**	**Qualified Product List Recommended**	**New Measure**
Screw in/Small LED Fixtures Includes: Reflectors, PAR, BR, A-lamps, MR-16s and Small LED Fixtures including: recessed cans (retrofit included) and track fixtures	≥50% minimum Measure F1 requires a 20% wattage reduction	Yes	F1-F5
LED Tubes & Troffers Includes all sizes of LED tubes and troffers	≥40% minimum		G1- G3
Outdoor General Area Includes: Parking Lot, Street, Wall Packs, Bollards, Floods, Barn/Yard, Pole Lamps, and Canopy.	≥40% minimum		H1- H6
High Bay	≥40% minimum		I1 – I4
Parking Garage	≥40% minimum		J1 – J5
Loading Dock	≥70% minimum		K
Linear LED Applications Includes: refridgerator case lights, accent / cove lighting, and most LED sign applications.	N/A		M
Exit Signs	N/A	No	L

A Qualified Product List (QPL) is a third-party-compiled list that validates a product's lab test results (e.g. LM-79).

Medium base screw in lighting fixtures and lamps	**Energy Star**
Lighting fixtures / luminares	**DLC (Design Lights Consortium)**
Miscellaneous lighting fixtures and lamps	**LDL (Lighting Design Lab)**

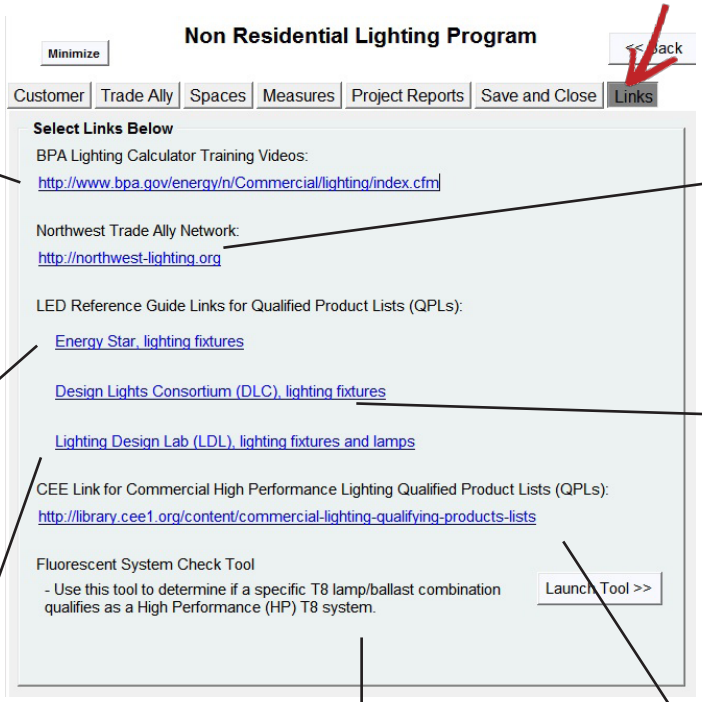
Refer to the Lighting Calculator for a complete description of measures, incentives, specifications and requirements. Measures will vary by utility. Program offerings and requirements may vary by utility.

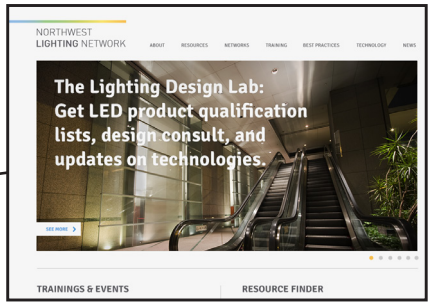
Additional Resources

Additional Resources including the Lighting Calculator, tutorials, and webinar information are available on **BPA's Commercial Lighting webpage** and the **BPA C&I Lighting Tool tab** in the lighting calculator.

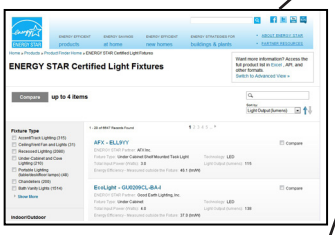
Download BPA Program Offerings!

Check out the Links tab!

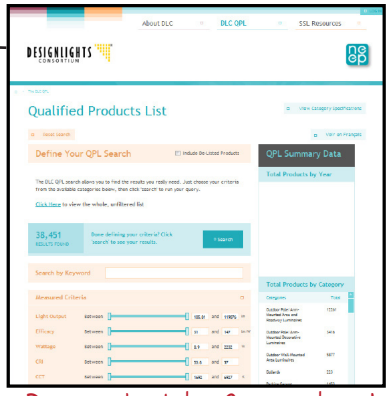




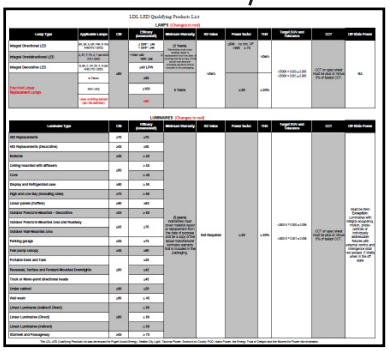
Northwest Lighting Network



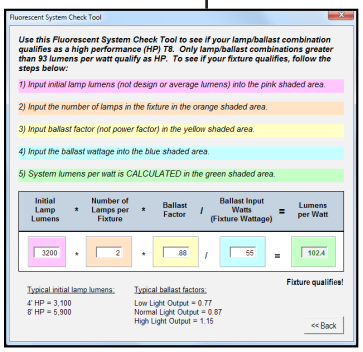
Energy Star Link!



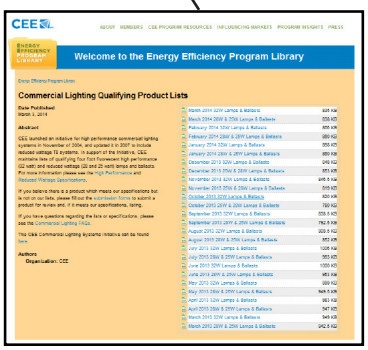
Design Lights Consortium!



Lighting Design Lab!



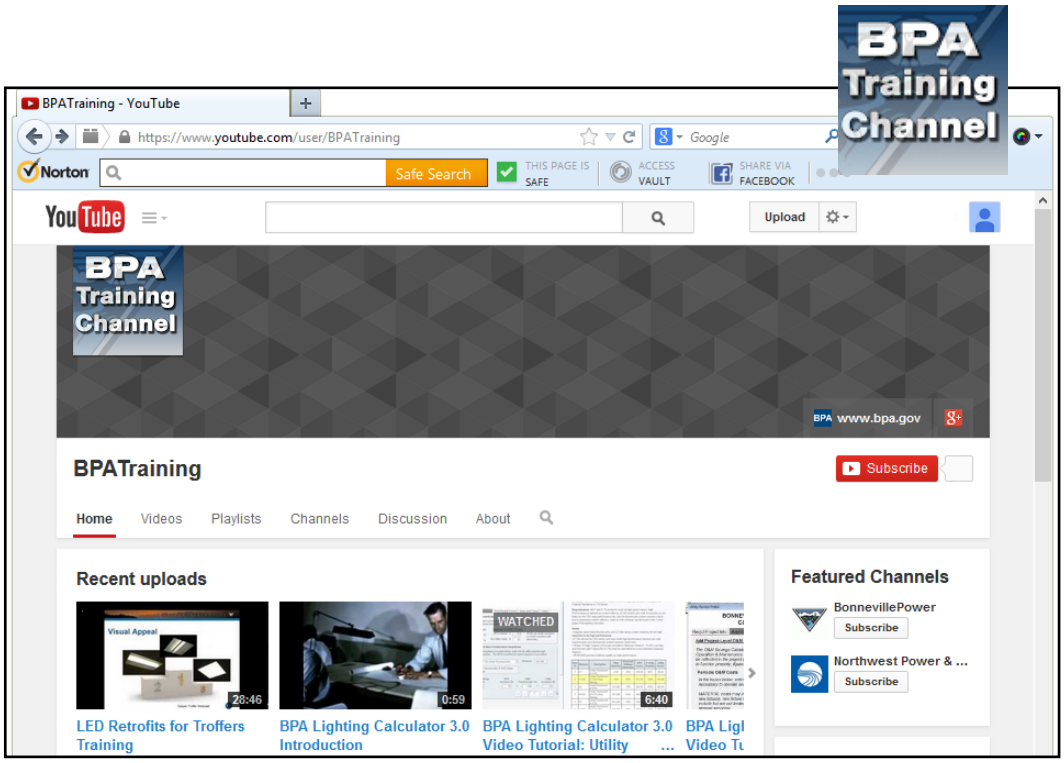
Linear Lamp Fixture Efficacy Tool!



CEE High Performance List (Not Required)

Additional Resources

BPA provides training resources on the **BPATraining Youtube Channel** at **www.youtube.com/user/BPATraining**



What's Available

For utilities:

- How to customize your calculator.
- How to review your project before submitting to BPA.

For Trade Allies:

- How to start a new project.
- How to enter measures.

Need Calculator Training? Check out our online tutorial videos and learn at your own pace!

www.bpa.gov