



## PROGRAM REQUIREMENTS

### GENERAL

Lighting projects must achieve a minimum energy savings of 25% from existing baseline conditions to qualify for CLIP incentives payments.

Must be a LADWP commercial customer, in good standing, whose current Facilities Charge is greater than 200kW to apply.

Total incentive payments cannot exceed 100% of the invoiced project costs.

The project invoice must include an itemized description of the lighting materials installed and their associated costs as directly related to the lighting installation. Invoices may include other costs related to the lighting installation, such as labor charges, permit fees, project design costs, and/or specialized equipment rental charges. LADWP will not include any additional charges for excess materials, spare parts, or other costs not directly related to the lighting project in the incentive calculation.

All installed products must be new and unused to qualify for incentive.

Only permanently installed, hardwired fixtures are eligible for incentives. Table lamps, task lighting, construction lighting, and other temporary and/or portable luminaires are not eligible.

CLIP will not pay incentives for the installation of incandescent, halogen, compact fluorescent, mercury vapor, probe-start metal halide, T-12 linear fluorescent, ballasts, and/or other outdated technologies when more energy efficient options are available.

All installed products must comply with California's appliance efficiency standards, as demonstrated by listing in the Appliance Efficiency Database of the California Energy Commission.

All installed products must have a Power Factor (PF) greater than or equal to 0.9 and total harmonic distortion (THD) less than or equal to 20% to qualify.

All installed products must be listed by Underwriters Laboratory (UL), or an equivalent organization.

All products installed in exterior locations must be approved for outdoor use by the manufacturer.

Existing fixtures must be operational to qualify for incentives.

All installed luminaires, retrofit kits, and lamps must be dimming-capable. Customers are responsible for verifying their proposed projects meet all requirements with their local code compliance officials.

### INCENTIVE RATES

All incentives are calculated per kilowatt-hour of annualized, first-year energy savings and shall be paid at the levels shown in table below:

Incentive Measures		Incentive rate per kWh Saved
Lamp Only	• Includes screw in lamps	\$0.08
	• LED tube to LED tube replacement <sup>1</sup>	
Fixture Retrofit or Replacement	Design Lights Consortium (DLC) Standard Classification	\$0.20
	Design Lights Consortium (DLC) Premium Classification	\$0.30
	LADWP Preferred <sup>2</sup>	\$0.40
Lighting Controls	Wall/Ceiling Mounted	\$0.10
	Fixture Integrated	\$0.20
	Networked Lighting Controls	\$0.30
	Interactive Effects	\$0.08

*Note: <sup>1</sup>All existing LED tube to new LED tube replacements retrofits will be incentivized at \$0.08 regardless of any changes to infrastructure/wiring, etc.*

*<sup>2</sup>In addition to being DLC Premium Listed, product must exceed DLC Premium minimum requirements for efficacy by +30 to qualify.*

## LIGHTING REQUIREMENTS

Light-emitting diode (LED) lighting, including both lamps and fixtures, must meet or exceed the applicable values for each factor shown in the tables below. Efficacy is calculated using initial lumens at full light output divided by the total system watts.

### LAMP ONLY MINIMUM REQUIREMENTS

LED Type or Application	Rating /Listing	Efficacy (Initial Lumens/ Watts)	Color Rendering Index (CRI)	Power Factor	THD	Dimming	Warranty
Decorative Lamp	Energy Star	65	80	≥ .9	N/A	Yes	3 Years
Directional Lamp	Energy Star	70	80	≥ .9	N/A	Yes	3 Years
Omni-directional Lamp	Energy Star	80	80	≥ .9	N/A	Yes	3 Years
LED tube to LED tube replacement <sup>1</sup>	DLC Standard	120	80	≥ .9	≤ 20%	Yes	5 Years

<sup>1</sup>LED products designed to operate using existing and/or new fluorescent ballasts are ineligible for incentives.

LED lamps must be Energy Star certified in order to be eligible for incentive. Please visit <https://www.energystar.gov/productfinder/product/certified-light-bulbs/> for a complete listing of Energy Star rated lamps.

LED tubes, fixture retrofit or replacement products must be listed on the DesignLights Consortium's (DLC) Qualified Products List (QPL) - <https://qpl.designlights.org> to qualify. Equipment must meet or exceed all applicable DLC Solid-State Lighting Technical Requirements in effect at the time of application. In

addition to being DLC listed, all proposed products must have a Power Factor (PF) greater than or equal to 0.9 and total harmonic distortion (THD) less than or equal to 20% to qualify. Please note, DLC Standard and Premium products may be tested at numbers below the threshold required by the LADWP for PF and THD. Products not meeting the minimum requirements for PF and THD will not be eligible for LADWP incentives despite DLC Standard or Premium classification. Please make certain the products you have selected meet LADWP's PF and THD requirements prior to applying.

### FIXTURE RETROFIT OR REPLACEMENT

Rating	Listing	Efficacy	Power Factor	THD
Standard	DLC Standard	Per DLC Standard Classification Requirements <sup>1</sup>	≥ .9	≤ 20%
Premium	DLC Premium	Per DLC Premium Classification Requirements <sup>1</sup>	≥ .9	≤ 20%
LADWP Preferred	DLC Premium	+30 lumens per watt over DLC Premium efficacy requirements	≥ .9	≤ 20%

<sup>1</sup>Equipment must meet or exceed all applicable DLC Solid-State Lighting Technical Requirements in effect at the time of application.

Customers must submit documentation to validate their proposed products meet the program requirements listed above.

For LED lamp replacement measures, customers must submit documents from the following sources:

- Manufacturer's Specification Sheet for dimming and warranty
- Energy Star listing for the LED lamp
- Print out of the LED tube listing from the Design Lights Consortium (DLC) Qualified Product List, which can be found here - <https://qpl.designlights.org>

For LED Retrofit Measures, customers must submit documents from the following sources:

- Manufacturer's Specification Sheet for dimming and warranty
- Print out of the LED product's listing from the Design Lights Consortium (DLC) Qualified Product List, which can be found here - <https://qpl.designlights.org> Product listing must include the product's "Standard DLC" or "Premium DLC" designation

## EXIT SIGNS

### LED products designed to operate using existing and/or new fluorescent ballasts are ineligible for incentives.

CLIP reserves the right to request a sample of proposed fixtures prior to approval of installation for self-testing to ensure minimum requirements are met. Any products tested by CLIP will be disqualified if found to not meet the minimum criteria.

New LED exit signs are eligible for incentives when they meet these requirements:

- Replace existing incandescent or fluorescent exit signs
- Input wattage <5 watts
- Are UL-approved, ETL-listed, or have equivalent certification
- Have a 5-year warranty
- Meets local fire code and permit requirements

## ANNUAL HOURS OF OPERATION ALLOWANCES

Customers must provide detailed information regarding the building operating hours with their CLIP application. LADWP will verify all figures during site verification and has final determination of annual hours. For areas, within a scope of work, where annual hours cannot be reasonably ascertained by LADWP, CLIP will derive the annual hours from the industry average from the Database for Energy Efficiency Resources (DEER) from the California Public Utilities Commission. The following table lists the maximum hours of operation allowed for the spaces indicated below.

### HOURS OF OPERATION MAXIMUM ALLOWANCE

Space	Fixed Hours of Operation
Exterior Lighting	4380
Mechanical/Electrical Room	1095
Storage Closet	1095
Conference Room	1060
Hotel Room	1095
Vacant Space	1460

## FIXTURE/LAMP REMOVAL

CLIP will not pay incentives for the removal of fixtures unless the customer also completes other qualified measures in the same space as part of a lighting redesign project. LADWP will pay DLC Standard level incentives when customers remove some fixtures and complete qualified retrofit or replacement measures on other fixtures within the same space.

CLIP will not pay incentives for the removal of lamps (de-lamping) from multi-lamp fixtures unless the customer also completes other qualified measures within the same space. The fixtures must have its excess lamp holders and/or sockets permanently removed and may not contain a ballast or driver capable of operating additional lamps.

## CONTROLS

Incentive rates for energy savings attributable to controls will be paid at the respective rates shown in the Incentive Table above.

The LADWP will use the standardized values shown in the table below to calculate energy savings attributable to control strategies. CLIP does not allow for user-defined savings projections for these strategies.

### CONTROLS ALLOWANCE

Strategy	Savings Allowance
Wall/Ceiling Mounted	24%
Fixture Integrated	28%
Networked Lighting Controls	38%

## NETWORKED LIGHTING CONTROLS

Listing	Added Capabilities
DLC Listed	Demand Response & Energy Monitoring Required

Networked Lighting Controls must also be listed on the DLC's Qualified Products List to be eligible for incentives. Equipment must meet or exceed all applicable DLC Networked Lighting Control System Technical Requirements in effect at the time of application. In addition to being DLC listed, the proposed Networked Lighting Control must also have Demand Response (DR) and Energy Monitoring capabilities. Please note, not all DLC listed Networked Lighting Controls are DR and energy monitoring capable. Please confirm the products you have selected meet LADWP's requirements prior to applying.

Customers must submit documentation to validate their proposed products meet the program requirements listed above.

For Networked Lighting Controls, customers must submit documents from the following sources:

- Manufacturer's Specification Sheet
- Print out of the Networked Lighting Control's listing from the Design Lights Consortium (DLC) Qualified Product List, which can be found here - <https://qpl.designlights.org>

Photocells controlling the on and off cycles of exterior fixtures are not eligible. Time clocks and twist timers are also not eligible for incentives.

CLIP will pay incentives for:

- Installation of new sensors
- Replacement of existing, non-operational sensors
- Replacement of existing operational Wall/Ceiling mounted controls to Fixture Integrated or Networked Lighting Controls, based on the incremental energy savings
- Replacement of existing operational Fixture Integrated to Networked Lighting Controls, based on the incremental energy savings

Lighting System wattages are calculated at full light output.

Passive infrared, ultrasonic, dual technology, or microwave sensors controlling interior or exterior fixtures are eligible. Sensors may be either hardwired or battery-operated (wireless). Wireless sensor batteries must have a minimum rated design life of 5 years or greater.

## INTERACTIVE EFFECTS

Energy efficient lighting measures reduce the internal heat load of a building or enclosed space, and may reduce the building's cooling energy consumption. Customers submitting CLIP applications may identify areas in their facilities with mechanical, refrigeration cycle, comfort cooling. Only these identified areas may be eligible for the additional interactive effect incentives. CLIP will calculate energy savings for interactive effects

in Conditioned spaces using a standardized value of eight percent (8%) of the net energy reduction achieved by the lighting measures implemented in the space. CLIP will pay incentives for interactive effects at the rate listed in the Incentive Table above. All exterior locations, non-conditioned spaces, and areas cooled by evaporative "swamp" coolers or fans are ineligible for interactive effect incentives.

## DEFINITIONS

Lamp-only retrofit is defined as the replacement of an existing lamp with a new lamp that results in energy savings, without modification or electrical rewiring of the existing fixture. Replacement of lamp holders or sockets with a similar product does not constitute a modification.

Fixture replacement means the total removal of an existing fixture and the installation of a new fixture.

Retrofit means the replacement of components and electrical rewiring, in addition to lamps, within an existing fixture.

High bay is defined as a fixture mounted at a height greater than 12 feet above the floor.

Strip Lighting is a LED array designed to replace existing lamps in a fixture.

Occupancy sensors adjust light levels according to the presence of occupants.

Daylight sensors adjust light levels automatically in response to the presence of natural light.

Networked Lighting Controls are systems where individual lighting elements are interconnected through a digital network, enabling centralized management and automation for enhanced energy efficiency.

Omnidirectional lamps emit lighting in all directions. Includes ANSI standard lamp shapes: A, BT, P, PS, S and T.

Decorative lamps, sometimes considered ornamental lighting, include ANSI standard lamp shapes: B, BA, C, CA, DC, F and G.

Directional lamps radiate light in a specific direction. Includes ANSI standard lamp shapes: R, BR, ER, MR, MRX and PAR.