

2021 BUSINESS OFFERINGS



LIGHTING

WISCONSIN

 **focus on energy**[®]
Partnering with Wisconsin utilities



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ABOUT FOCUS ON ENERGY®

Focus on Energy works with eligible Wisconsin residents and businesses to install cost-effective energy efficiency and renewable energy projects. Focus on Energy information, resources and financial incentives help to implement projects that otherwise would not get completed, or to complete projects sooner than scheduled. Its efforts help Wisconsin residents and businesses manage rising energy costs, promote in-state economic development, protect our environment and control the state's growing demand for electricity and natural gas.

**For more information,
call 800.762.7077
or visit focusonenergy.com**

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HOW TO APPLY

NEED HELP? Call 800.762.7077

FOCUS ON ENERGY® makes saving energy and money easy for Wisconsin businesses. Use the information below to help guide your way to savings. For electronic copies of the forms, visit focusonenergy.com/catalogs.

STEP 1

BEFORE YOU APPLY:

Verify customer and product eligibility:

- Confirm your gas and/or electric utilities participate in Focus on Energy at focusonenergy.com/utilities.
- Read product requirements, both general and technology-specific, in your equipment's corresponding incentive catalog.
- Review the Participation Requirements page.
- Review the Terms and Conditions at focusonenergy.com/terms.
- View the qualified product lists at focusonenergy.com/business/qpls.
- Applications exceeding \$10,000 can request preapproval. Requests received on or before December 8, 2021 will be pre-approved at 2021 incentive rates. Applications not pre-approved may not receive incentive payment if program funds have been exhausted.

Qualifying products must be installed by December 31, 2021.

STEP 2

WHAT YOU'LL NEED:

- Incentive Application & Equipment Incentive Catalog(s)
 - Gas & Electric Utility Account Numbers
 - Tax ID Number
 - Invoice **MUST include:**
 - Trade Ally name, address and phone number
 - Itemized list of each product along with manufacturer name, model number, and quantity
 - Itemized purchase price of product/installation
 - Job Site Address
- Reminder: Incentives are capped at 100% of equipment cost unless otherwise noted. Equipment cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax. Like-for-like equipment replacement due to recall, warranty replacement, etc. is not eligible for an incentive.**
- Manufacturer specifications (when required) – **MUST include:**
 - Full model number
 - Energy performance information
 - Additional documentation (when required)

STEP 3

COMPLETE THIS APPLICATION:

- All fields on application are required. Incomplete application(s) cannot be processed.
- Complete SECTION 7 with all product information. Use the Incentive Product Information Sheet found at focusonenergy.com/catalogs if you need additional lines.
- Include project completion date (date of the last product installed). If project is new construction, use the occupancy date. Project is considered complete when products are installed and operational.
- Complete the catalog-specific Supplemental Data Sheet for applicable measures. An asterisk (*) next to the code indicates when this is needed. Read the measure requirements in your catalog for directions.
- Include the reservation code(s) in SECTION 7 when applicable.
- The utility ratepayer** must sign and date SECTION 8.
- Ensure supporting documents are attached, including itemized invoice(s).
- Make a copy of the application and supporting documents for your records.

STEP 4

SUBMIT YOUR APPLICATION:

Mail or email your application and all supporting documentation. **Applications must be submitted within 60 calendar days of completed project installation**, no later than January 31, 2022.

MAIL: Focus on Energy
725 W. Park Avenue
Chippewa Falls, WI 54729

E-MAIL: business@focusonenergy.com

PARTICIPATION REQUIREMENTS

NEED HELP? Call 800.762.7077



Use the eligibility requirements below to see if your business qualifies for program incentives. You can also visit focusonenergy.com to find savings opportunities specific to your business.

CUSTOMER ELIGIBILITY

All non-residential customers (agriculture, commercial, government, industrial, multifamily, and schools) located in a participating utility territory are eligible to receive Focus on Energy incentives. To see if your utility participates, go to focusonenergy.com/participating-utilities. Typical facility types include:

- School facilities (e.g., public and private k-12, technical colleges, colleges, universities)
- Commercial facilities (e.g., banks, hotels, offices, convenience stores/gas stations, manufacturing, breweries, restaurants)
- Healthcare facilities (e.g., nursing homes/skilled nursing, Community-Based Residential Facilities (CBRF), hospitals)
- Multifamily residential properties with four or more dwelling units under one roof (e.g., apartment/condominium buildings, student housing). Common areas of multifamily buildings such as hallways, exercise rooms, or laundry rooms, along with central HVAC systems are eligible for business incentives included in this catalog. For in-unit efficiency incentives and offerings, refer to focusonenergy.com/residential.

CUSTOM INCENTIVES

Does your project not fit in one of our prescriptive offers? Custom project incentives are calculated on a case-by-case basis for non-standard technologies and are based on estimated first-year energy savings. Whether you operate a large industrial facility, a chain store or franchise, an office, school or municipal building, a farm, or anything in between, we can show you how to be more energy efficient – and how to save on the cost of making improvements.

Before purchasing equipment or proceeding with upgrades, you must contact an Energy Advisor from Focus on Energy. Your Energy Advisor will help you determine if your project qualifies for a Focus on Energy custom incentive and will help you obtain necessary pre-approval. Refer to the green 'Custom Project Idea' boxes throughout the catalog for ideas.

To get started with your custom project, download and complete the Custom Incentive Guide at focusonenergy.com/custom.

NEW CONSTRUCTION & MAJOR RENOVATIONS

Qualifying projects are new, stand-alone commercial, industrial and multifamily residential facilities, additions to existing facilities, and major renovations due to a change in the use of space (e.g., a warehouse to office).

Available incentives include Whole Building Design incentives and prescriptive incentives included in this catalog. Reach out to an Energy Advisor from Focus on Energy to help identify what is best for your project.

New Construction & Major Renovations measures and incentives will appear in a **grey table**, while Equipment Upgrades & Retrofits measures and incentives will appear in a **blue table**. If a measure does not have a grey table, New Construction & Major Renovations incentives are not offered for that measure.

New Construction multifamily common areas or central system installations should refer to focusonenergy.com/catalogs for incentives.

INFORMATION AND REQUIREMENTS

Before you start your project, make sure you are familiar with participation requirements, program information and Terms and Conditions.

General Terms and Conditions

Review the Focus on Energy Terms and Conditions at focusonenergy.com/terms or call 800.762.7077 to request a copy.

Incentive Limits

Incentives are limited to \$300,000 per project and \$400,000 per customer per calendar year for all Focus on Energy incentives (prescriptive and custom).

Depending on the business tax classification of the payee, the entity receiving the incentive payment may receive IRS form 1099 for incentives totaling over \$600 in a calendar year.

Trade Ally Information

A Trade Ally represents the company who provided/installed the equipment for a project or performed the service for which a Customer is seeking an incentive. Trade Allies who have signed an agreement with Focus on Energy are allowed to enjoy certain program benefits, one of which is to receive direct payment of incentives at the Trade Ally's request. Incentives can only be paid directly to a registered Trade Ally who has a W-9 on file with Focus on Energy. For more information on becoming a registered Trade Ally, visit focusonenergy.com/tradeally.

The Federal Employer Identification Number (FEIN) and Business Classification of the Trade Ally is required IF the incentive is paid directly to the Trade Ally. In this scenario, the credit must be clearly labeled as the Focus on Energy incentive and deducted from the amount due on the Customer's invoice.

If your project was completed by more than one Trade Ally (example, equipment was purchased from one Trade Ally but installed by another Trade Ally) and the incentive is being paid to you the Customer, enter the information of the Trade Ally who installed your equipment in Section 4: Trade Ally Information. If the equipment was self-installed, enter the information of the Trade Ally from whom you purchased the equipment.

Assignment of Incentives to Other Payee

The Customer for the project site listed on the application may assign their right to participate and receive incentives to Other Payee. The Customer must sign Section 8 and identify the Other Payee in Section 5.

FOCUS ON ENERGY LIGHTING POLICIES

NEED HELP? Call 800.762.7077

The following lighting policies apply to all lighting projects.

PRIVATE LABELING GUIDANCE

Focus on Energy requires lighting products to have the brand, model/catalog number(s), specification sheet(s), and invoicing match their respective DesignLights Consortium® (DLC) product listing. For privately labeled products, this means the manufacturer, brand and model under which the product is being sold must have its own DLC listing separate from any other DLC listing(s) for the original equipment manufacturer (OEM). Should a separate listing for the privately labeled equipment not exist on DLC, the product is subject to disqualification. Focus on Energy is a DLC member utility and therefore adheres to DLC's private label policy.

Why? With LED technology advancements and product choices, it has become increasingly common for LED equipment to be rebranded and sold under another manufacturer, model and/or brand. This presents challenges for Utility Programs to verify equipment performance and eligibility as the relationship between the OEM and private labeling entity is not always known.

The Program relies solely on DLC to validate equipment performance. DLC listed performance data (tested and reported) is exclusive to the product listed, including the specific manufacturer, and model of the product listed on DLC. The challenges in managing the large number of rebranded products available and the OEM they correspond with has resulted in the Program needing to rely solely on DLC to verify equipment performance. Any product being rebranded will be required to be DLC listed under the rebranded manufacturer and model to prove equipment performance and to be considered for any incentives.

It is strongly advised Trade Allies and customers independently verify equipment is DLC listed under the manufacturer and model for which it is being bought/sold under. Focus on Energy will not be liable for products which are misrepresented as being DLC listed and/or qualifying for an incentive from Focus on Energy. Please contact your Energy Advisor or Focus on Energy if you need assistance in verifying equipment eligibility.

FIELD ADJUSTABLE LIGHTING OUTPUT GUIDANCE

Field adjustable products allow for the wattage, light level output, or color temperature of the fixture to be modified by means of a switch or fixture setting. Field adjustable products are most common in downlights and troffers.

DLC lists the highest wattage in their technical specifications for field adjustable products. For measures requiring a DLC listing and adherence to a specific wattage limit, Focus on Energy will base equipment eligibility on the wattage stated on the DLC listing.

Field adjustable fixtures where the wattage has been adjusted to be within a qualifying wattage limit for a Focus on Energy incentive, may be accepted should a separate written statement from the customer or Trade Ally be provided with the incentive application. The written statement must clearly identify the quantity of fixtures being applied for where the settings have been adjusted accordingly. This statement must specify which setting is used (by referencing room types or fixture code on the drawings) and include a photo of the fixture or control system demonstrating these settings have been applied. Failing to provide this documentation will result in Focus on Energy referencing the DLC listing for the purpose of determining equipment eligibility.

INSTANT DISCOUNT RETAILERS

Focus on Energy works with select retailers to offer instant discounts on LED bulbs at the time of purchase. Bulbs from these retailers have already received an incentive and therefore are not eligible for incentives noted in the Lighting Catalog. This is stated in the Requirements section for applicable technologies. To identify participating instant discount retailers, visit focusonenergy-findaretailer.com.

INCENTIVE APPLICATION

FOR PROJECTS COMPLETED BY 12/31/2021

COMPLETE ALL SECTIONS. INCOMPLETE APPLICATIONS CANNOT BE PROCESSED AND WILL DELAY PAYMENT OF INCENTIVES. APPLICATIONS MUST BE SUBMITTED WITHIN 60 DAYS OF COMPLETED PROJECT INSTALLATION, NO LATER THAN JANUARY 31, 2022. FOR ADDITIONAL COPIES OF THIS FORM, VISIT FOCUSONENERGY.COM/CATALOGS.

SECTION 1

ACCOUNT AND CUSTOMER INFORMATION

TAX IDENTIFICATION NUMBER (Check one. If you use a Social Security number as your tax identification number, leave blank. You will be contacted by a program representative via email to provide a copy of your W-9. You must list an email address in Section 3.)

FEIN **or** SSN _____
FEIN

BUSINESS CLASSIFICATION OF CUSTOMER

(Check one. Required for all businesses, including non-profits.)

- Sole Proprietorship Individual Single-Member LLC
 C Corporation S Corporation Partnership
 Limited Liability Company - C Corp Limited Liability Company - S Corp
 Limited Liability Company - Partnership
 Other _____

OWNER NAME (REQUIRED IF SSN IS USED AS TAX IDENTIFICATION NUMBER)

COMPANY NAME

LEGAL ADDRESS (AS SHOWN ON COMPANY W-9)

CITY STATE ZIP

WHO DID YOU WORK WITH FROM FOCUS ON ENERGY ON THIS PROJECT? (CONTACT NAME)

How did you hear about us? (Check one.)

- Community Association/Agency Distributor/Supplier
 Focus Direct Mail/Postcard Focus Email Focus Event
 Focus Staff/Energy Advisor Focus Website Internet Search
 Manufacturer National Rebate Administrator Newspaper
 Past Participation Radio Social Media Trade Ally/Contractor
 Trade Show/Fair TV Utility Bill Insert/Direct Mail
 Utility Contact Utility Email Utility Website
 Word of Mouth - Referral Other: _____

SECTION 2

JOB SITE INFORMATION

(Refer to your utility bills for account numbers below.)

JOB SITE BUSINESS NAME

ELECTRIC UTILITY AT JOB SITE ELECTRIC ACCOUNT #

GAS UTILITY AT JOB SITE GAS ACCOUNT #

- Job Site Address is same as Legal Address
 Job Site Address is different (complete below)

JOB SITE ADDRESS

CITY STATE ZIP

SECTION 3

CUSTOMER CONTACT INFORMATION

JOB SITE CUSTOMER CONTACT NAME

PRIMARY PHONE # E-MAIL ADDRESS

I opt in to receive program updates via text message.

Preferred method of contact: Call E-mail Text

If Focus on Energy has a question about this application, we should contact:

Customer Trade Ally Other _____

SECTION 4

TRADE ALLY INFORMATION



TRADE ALLY CONTACT NAME

PRIMARY PHONE # E-MAIL ADDRESS

TRADE ALLY COMPANY NAME

ADDRESS

CITY STATE ZIP

SECTION 5

BUSINESS PAYMENT INFORMATION

Make incentive check payable to:

Customer Trade Ally (complete item A) Other Payee (complete item B)

Payee is responsible for any associated tax consequences.

Mail check to: Customer Address Job Site Address

Trade Ally Address Alternate Address or Other Payee (complete below)

COMPANY NAME

ADDRESS

CITY STATE ZIP

ATTENTION TO (OPTIONAL)

A. For Trade Ally Payee

To receive payment, a Trade Ally must be registered with a current W-9 on file. Provide the Trade Ally's Tax Identification Number. If you use a Social Security number as the company tax ID, do not provide it here.

FEIN

B. For Other Payee

1. Individual Contact Information:

NAME EMAIL ADDRESS

2. Specify relationship to utility account holder (this is required if check is payable to someone other than the Customer or Trade Ally):
 Tenant Building Owner Other (specify) _____

3. Select your business classification. (Check one. Required for all businesses, including non-profits.)

- Sole Proprietorship Individual Single-Member LLC C Corporation
 S Corporation Partnership LLC - C Corp LLC - S Corp
 LLC - Partnership Other _____

4. A representative of Focus on Energy will reach out to you via email with a method to securely provide a copy of your W-9. This is required to receive payment. Provide the email address (if different than the one provided above):

2021 LIGHTING INCENTIVE CATALOG SUPPLEMENTAL DATA SHEET (SDS)

THIS FORM MUST BE ATTACHED TO COMPLETED INCENTIVE APPLICATION AND SUBMITTED TOGETHER. FOR PROJECTS INSTALLED BY 12/31/2021. NEED HELP? CALL 800.762.7077.

HOW TO FILL OUT THIS FORM

Refer to the Lighting Incentive Catalog for measure requirements and information.

- Complete the table corresponding to the measure in the catalog.
- For electronic version of SDS, visit focusonenergy.com/catalogs.
- If the new equipment is DesignLights Consortium® (DLC) Solid State Lighting (SSL) Qualified Product List (QPL) listed (TRT V5.0 or higher), use the DLC tested data (with the green background) for wattage of new equipment. If the DLC tested data is not available and only family data (with the yellow background) is available, use the wattage listed on the specification sheet of the new equipment if the data is more current than the DLC listed family data.
- If the new equipment is listed under ENERGY STAR®, use the wattage on the ENERGY STAR certification instead of the specification sheet.
- Round both Existing Equipment and New Equipment Wattage to the nearest whole number.

CUSTOMER INFORMATION

JOB SITE BUSINESS NAME _____

JOB SITE ADDRESS _____

TRADE ALLY NAME _____

REMINDER

Exact model numbers and manufacturer of equipment installed must be identified on invoicing and any qualified product list when required. For Focus on Energy's Private Label policy, see page 6 of the Lighting Incentive Catalog.

Attach this form to a completed **Incentive Application** and submit together.

A WATTAGE REDUCTION WORKSHEET FOR WATTS REDUCED MEASURES									PAGES 15-16, 18
INCENTIVE CODE: L3903, L3904, L3962, L3963, L4354, L4356, L4779, L4813									
EQUIP #	TYPE OF EXISTING EQUIPMENT	(A) ROUNDED WATTAGE OF EXISTING EQUIPMENT PER FIXTURE	(B) QUANTITY OF EXISTING EQUIPMENT	TYPE OF NEW EQUIPMENT	(C) ROUNDED WATTAGE OF NEW EQUIPMENT PER FIXTURE	(D)* QUANTITY OF NEW EQUIPMENT	(E) WATTS REDUCED PER FIXTURE (A - C)	(F) INCENTIVE PER WATT REDUCED (\$/Watt Reduced)	REQUESTED INCENTIVE** (D x E x F)
<i>Example</i>	2L 32w CFL	70 <i>2.5x proposed (new construction)</i>	5	10w LED downlight	11	5	59	\$0.11/W reduced	\$32.45

If applying for an interior or exterior LED sign light measure, please include the existing ballast make and model number in addition to the specific lamp type or provide metering data (amperage and voltage readings) of the existing equipment.

B WATTAGE REDUCTION WORKSHEET FOR WATTS CONTROLLED MEASURES							PAGES 32-33
INCENTIVE CODE: L3406, L5061, L5062, L4812, L5063, L5064							
EQUIP #	MEASURE CODE	FIXTURE DESCRIPTION	(A) ROUNDED WATTAGE PER FIXTURE	(B) QUANTITY OF FIXTURES	(C) INCENTIVE PER WATT CONTROLLED (\$/Watt Reduced)	TOTAL INCENTIVE** (A x B x C)	
<i>Example</i>	L3406	45W LED 2x4 Troffer	45	75	\$0.05	\$168.75	

*Existing and proposed fixture quantity must be the same except for signage measures.

**Focus on Energy may adjust total incentive based on projects caps or variances in wattages provided for existing or proposed conditions.

See measure requirements and Terms and Conditions for more information.



INTERIOR FIXTURES AND LAMPS

INTERIOR FIXTURES AND LAMPS

For more information,
call 800.762.7077
or visit focusonenergy.com

LINEAR LIGHTING

General Requirements: Incentives are available for replacing T8 or T12 fixtures with light emitting diode (LED) as described in the sections below. **Manufacturer and model number(s) are required. Product categories listed below do not imply equivalency – all installations are expected to meet current Illuminating Engineering Society of North America (IESNA) recommendations for delivered light level and uniformity. Compliance is the responsibility of the installer.**



LED HIGH PERFORMANCE TROFFER (1X4 AND 2X4)



Requirements for 1X4 LED products:

- For 1-for-1 replacement of T12 or standard T8 fluorescent fixtures as noted in measure descriptions.
 - Must be DLC SSL QPL listed (TRT V5.0 or higher) in either the “1X4 Luminaires for Ambient Lighting of Interior Commercial Spaces,” “Linear Retrofit Kits for 1X4 Luminaires” or “Integrated Retrofit Kits for 1X4 Luminaires” primary use categories.**
 - Other LED configurations may qualify for a custom incentive.

Requirements for 2X4 LED products:

- For 1-for-1 replacement of T12 or standard T8 fluorescent fixtures as noted in measure descriptions.
 - Must be DSL SSL QPL listed (TRT V5.0 or higher) in either the “2X4 Luminaires for Ambient Lighting of Interior Commercial Spaces,” “Linear Retrofit Kits for 2X4 Luminaires” or “Integrated Retrofit Kits for 2X4 Luminaires” primary use categories.**
 - Other LED configurations may qualify for a custom incentive.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
1X4 LED, <44W replacing 1- or 2-lamp T8 or T12 troffer	L3760	\$4	Fixture
2X4 LED, <44W replacing 1- or 2-lamp T8 or T12 troffer	L4793	\$4	Fixture
2X4 LED, ≤55W replacing 3- or 4-lamp T8 or T12 troffer	L3111	\$15	Fixture

REMINDER

Looking for incentives for your new construction project? Check out the Lighting Power Density (LPD) measure on page 22 for details.

PRO TIP

Have you considered Networked Lighting Controls? Take full advantage of your LED investment and harness benefits like remote diagnostics, energy monitoring, and bi-level control.



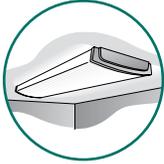
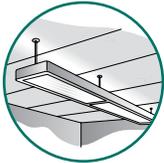
LED HIGH PERFORMANCE TROFFER (2X2)



Requirements:

- Must be DLC SSL QPL listed (TRT V5.0 or higher) in either the “2X2 Luminaires for Ambient Lighting of Interior Commercial Spaces,” “Linear Retrofit Kits for 2X2 Luminaires” or “Integrated Retrofit Kits for 2X2 Luminaires” primary use categories.**
- 2G11 base lamps replaced must have a nominal lamp wattage between 40-55 watts.
- Other LED configurations may qualify for a custom incentive.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
2X2 LED, ≤36W, replacing Fixture with 2 or more T8 or T12 Lamps	L3400	\$7	Fixture
2X2 LED, ≤85W, replacing Fixture with 2 or more 2G11 base Lamps	L3401	\$15	Fixture



LED LINEAR AMBIENT FIXTURES



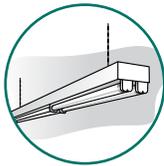
Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in either “Direct Linear Ambient Luminaires,” “Linear Ambient Luminaires w/Indirect component,” “Retrofit Kits for Direct Linear Ambient Luminaires” or “Specialty: Hazardous Direct Linear Ambient Luminaires” primary use categories. Fixtures ENERGY STAR listed as under cabinet or cove are also eligible, provided they are a linear product and meet the wattage limits in the table below.**
- **Fixtures which are DLC SSL QPL listed (TRT V5.0 or higher) in the Low-Bay General Application Category which have a linear profile are also eligible.**
- For replacements, overall LED fixture length must match existing fluorescent fixture length, other LED configurations may qualify for a custom incentive.
- This incentive is for the 1-for-1 replacement of surface mount or suspended linear T5, T8 or T12 fluorescent fixtures.
- Recessed troffers (2X2, 1X4 and 2X4) and LED replacement lamps are not eligible under these incentives.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Fixture ≤11W/FT Replacing 1- or 2-lamp T8 or T12 Lamp(s) in Cross Section	L3740	\$1	Linear Foot
LED Fixture ≤24W/FT Replacing 3- or 4-lamp T8 or T12 Lamps in Cross Section	L3741	\$2.50	Linear Foot
LED Fixture ≤9W/FT Replacing 1- or 2-lamp T5 Lamp(s) in Cross Section	L3738	\$1	Linear Foot
LED Fixture ≤24W/FT Replacing 3- or 4-lamp T5 Lamps in Cross Section	L3739	\$2.50	Linear Foot

REMINDER

Exact model numbers and manufacturer of equipment installed must be identified on invoicing and any qualified product list, when required. For Focus on Energy's Private Label policy, see page 6 of the Lighting Incentive Catalog.



LED RETROFIT OF 8 FOOT FIXTURES



Requirements:

- **Retrofit kit must be replacing an 8' fixture housing 8' lamps. The new 4' lamps must be DLC SSL QPL listed (TRT V5.0 or higher) and <24W per lamp.**
- **4' Tubular LED (TLED) lamps must be DLC SSL QPL listed (TRT V5.0 or higher) in one of the following primary use categories:**
 - **Replacement Lamps (“Plug and Play”) (UL Type A)**
 - **Internal Driver/Line Voltage (UL Type B) Lamps**
 - **2-lamp External Driver (UL Type C) Lamps**
 - **3-lamp External Driver (UL Type C) Lamps**
 - **4-lamp External Driver (UL Type C) Lamps**
 - **Dual Mode Internal Driver (UL Type A or B)**
- Installed equipment must be a complete retrofit kit including, but not limited to, sockets, socket brackets and/or channel covers. Detail must be provided on invoicing and spec sheets.
- 4' TLED lamp only upgrades can be found on page 19.
- **UL TYPE B PRODUCTS – By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

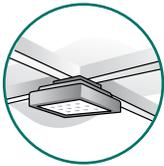
EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
4' 2-lamp TLED <24W replacing 8' 1-lamp T8 or T12	L4314	\$7.50	Fixture
4' 2-lamp TLED <24W replacing 8' 1-lamp T8HO or T12HO	L4317	\$7.50	Fixture
4' 4-lamp TLED <24W replacing 8' 2-lamp T8 or T12	L4320	\$13	Fixture
4' 4-lamp TLED <24W replacing 8' 2-lamp T8HO or T12HO	L4323	\$15	Fixture
4' 2-lamp TLED <24W replacing 8' 2-lamp T8 or T12	L4326	\$18	Fixture
4' 2-lamp TLED <24W replacing 8' 2-lamp T8HO or T12HO	L4329	\$20	Fixture

CUSTOM PROJECT IDEA

When replacing 8' T8/T12 with high bay or low bay fixtures, consider applying for a custom incentive.

HIGH-BAY AND LOW-BAY

General Requirements: Incentives are available for replacing or retrofitting existing high intensity discharge (HID) or linear fluorescent fixtures with permanently wired or applicable cord and plug high/low bay light emitting diode (LED) as described in each of the sections below. All products must be intended for use in high-bay or low-bay applications. New luminaires or hardwired retrofits only. Integral ballast screw-based retrofit products of any technology are not eligible for these incentives. For projects where two fixtures are installed replacing a single HID fixture, the combined wattage must be equal or less than the wattage requirements shown. **Manufacturer and model number(s) are required. Product categories listed below do not imply equivalency – all installations are expected to meet current IESNA recommendations for delivered light level and uniformity. Compliance is the responsibility of the installer.**



LED HIGH AND LOW BAY LIGHTING



Requirements:

- **Retrofit products must be DLC SSL QPL listed (TRT V5.0 or higher) under the High-Bay or Low-Bay General Application category and be permanently wired or applicable cord and plug.**
- **New fixtures must be DLC SSL QPL listed (TRT V5.0 or higher) under the High-Bay or Low-Bay General Application category.**
- Must be a 1-for-1 replacement. Incentive is per fixture replaced.
- Integral ballast screw-based lamp retrofit products are not eligible for this incentive. Refer to page 18 for High/Low-Bay Mogul Screw-base (E39) LED lamps.
- ≤500W and ≤800W refers to LED total system watts and may consist of up to two fixtures replacing a single HID fixture.
- Long-Day Lighting fixtures for dairy applications are eligible for this incentive.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
≤155W LED, replacing 250W HID	L3091	\$30	Fixture
≤250W LED, replacing 320-399W HID	L3092	\$35	Fixture
≤250W LED, replacing 400W HID	L3093	\$50	Fixture
≤365W LED, replacing 400W HID	L3094	\$30	Fixture
≤500W LED, replacing 1000W HID	L3095	\$80	Fixture
≤800W LED, replacing 1000W HID	L3096	\$50	Fixture
≤180W LED, replacing 6L T8 or 4L T5HO	L3393	\$25	Fixture
≤250W LED, replacing 8L T8 or 6L T5HO	L4347	\$35	Fixture
≤300W LED, replacing 10L T8 or 8L T5HO	L4795	\$50	Fixture
≤350W LED, replacing 12L T8 or 10L T5HO	L4796	\$65	Fixture

CUSTOM PROJECT IDEA

Talk to your Energy Advisor about custom incentives that may be available for **installing DLC-listed fixtures in a different category** than what they are listed (i.e., exterior fixture used in high-bay application).

OTHER INTERIOR FIXTURES

General Requirements: Incentives are available for replacing or retrofitting existing incandescent, compact fluorescent lamp (CFL), or high intensity discharge (HID) with light emitting diode (LED) including new fixtures or fixture upgrades which meet the requirements as described in each of the sections below. All fixture replacements must result in a wattage reduction from the existing condition. Incentives are also available for replacing existing stairwell and passageway fixtures with LED as described in the stairwell and passageway section. **Manufacturer and model number(s) are required.**



LED DOWNLIGHTS



Requirements:

- Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for these measures.
- Fixtures must be listed on ENERGY STAR as a "Downlight Recessed," "Downlight Solid State Retrofit," "Downlight Surface Mount," "Ceiling Mount" or "LED Surface Mount Ceiling Retrofit" fixture type and be intended for commercial use. Fixtures that are intended for residential use may be used in multifamily buildings.
- For replacement of incandescent, CFL or HID fixtures in interior applications.

EQUIPMENT UPGRADES AND RETROFITS				
Measure Description	Code	Incentive	Unit	
LED Downlight Fixtures replacing Incandescent, CFL or HID fixture (See system wattage table on pg. 39 for baseline inputs)	L4354*	\$0.11	Watt Reduced	
* Supplemental Data Sheet needed				

HOW TO APPLY EXAMPLE

EQUIP #	TYPE OF EXISTING EQUIPMENT	(A) ROUNDED WATTAGE OF EXISTING EQUIPMENT PER FIXTURE	(B) QUANTITY OF FIXTURES	TYPE OF NEW EQUIPMENT	(C) ROUNDED WATTAGE OF NEW EQUIPMENT PER FIXTURE	(D) QUANTITY OF NEW EQUIPMENT	(E) WATTS REDUCED PER FIXTURE (A - C)	(F) INCENTIVE PER WATT REDUCED (\$/Watt Reduced)	REQUESTED INCENTIVE (D x E x F)
Downlights	2L 32w CFL	70	5	10w LED downlight	11	5	59	\$0.11/W reduced	\$32.45

CUSTOM PROJECT IDEA

Talk to your Energy Advisor about custom incentives that may be available for installing **low voltage or decorative LED fixtures** that do not meet prescriptive measure requirements.



LED TRACK/ACCENT FIXTURES



Requirements:

- Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for these measures.
- Fixtures must be listed on ENERGY STAR and in a category not defined by linear ambient (pg. 13) or downlight (pg. 15) measures. Eligible fixtures may also be DLC SSL QPL listed (TRT V5.0 or higher) in the "Track or Mono-point Luminaires" or "Wall-wash Luminaires" primary use categories. Fixtures must be intended for commercial use.
- Must be permanently wired fixtures and include housing, lens, heat sink, driver and light source.

EQUIPMENT UPGRADES AND RETROFITS				
Measure Description	Code	Incentive	Unit	
LED track/mono/accent fixtures replacing incandescent, CFL, or HID fixture (See system wattage table on pg. 39 for baseline inputs)	L4813*	\$0.10	Watt Reduced	
* Supplemental Data Sheet needed				



LED STAIRWELL/PASSAGEWAY FIXTURE



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the "Stairwell and Passageway Luminaires" primary use category and operate at ≤55W in high/occupied state.**
- Replacement of 2-lamp 4' fluorescent fixture with complete, new LED fixture including integrated, remote or on-board occupancy sensor system.
- Must utilize a passive infrared and/or ultrasonic occupancy sensor with a fail-safe feature (fails in ON position).
- Must operate in low standby light level during vacancy and switch to high light output upon occupancy. Fixture cannot exceed 50% of full wattage during unoccupied periods.
- Items not eligible include fixtures whose settings can be overridden and screw-in lamps.
- Incentive cannot be combined with other incentives for controls or fixtures.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Stairwell/Passageway Fixture	L3097	\$12	Fixture



LED INTERIOR SIGNAGE

Requirements:

- **Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for these measures.**
- **Must result in at least a 30% wattage reduction to be eligible.**
- LED upgrades from incandescent, HID, fluorescent or neon commercial signage are eligible for this measure.
- Applications include, but are not limited to, channel lettering, backlit displays and menu boards.
- Signs illuminated by screw-in or pin-based lamps should refer to replacement lamp incentives on pages 17-18.
- Clear documentation (i.e. spec sheets, sign schematics, existing ballast or transformer) of existing equipment or metering data (i.e. voltage and amperage readings) **MUST** be provided or measure eligibility will be subject to disqualification. For neon signs, a 60% power factor will be assumed for the neon sign transformer unless supporting documentation for a different value is provided.
- Replacement lamp products that intend to use existing sockets or lamp holders **MUST** be reviewed by Focus on Energy prior to installation.
- Incentive may be adjusted if existing ballast information is not provided.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Interior Signage	L3903*	\$0.20	Watt Reduced

* Supplemental Data Sheet needed

HOW TO APPLY EXAMPLE

EQUIP #	TYPE OF EXISTING EQUIPMENT	(A) ROUNDED WATTAGE OF EXISTING EQUIPMENT PER FIXTURE	(B) QUANTITY OF EXISTING EQUIPMENT	TYPE OF NEW EQUIPMENT	(C) ROUNDED WATTAGE OF NEW EQUIPMENT PER FIXTURE	(D) QUANTITY OF NEW EQUIPMENT	(E) WATTS REDUCED PER FIXTURE (A - C)	(F) INCENTIVE PER WATT REDUCED (\$/Watt Reduced)	REQUESTED INCENTIVE (D x E x F)
Interior signage	1L F96T12	121	1	25' LED strip, 2 watts/ft	50	1	71	\$0.20/W reduced	\$14.20

REMINDER

Exact model numbers and manufacturer of equipment installed must be identified on invoicing and any qualified product list, when required. For Focus on Energy's Private Label policy, see page 6 of the Lighting Incentive Catalog.

SCREW-BASED/PIN-BASED REPLACEMENT LAMPS



General Requirements: Incentives are available for replacing existing incandescent, CFL or standard wattage metal halide (MH) lamps with integral ballast/driver, screw-based or pin-based light emitting diode (LED) as described in each of the sections below. Lamps that are pre-discounted by Focus on Energy at retail locations are not eligible for the incentives below. **Manufacturer and model number(s) are required.**



LED OMNIDIRECTIONAL OR DECORATIVE LAMP



Requirements:

- **Must appear on ENERGY STAR certified light bulbs qualified product list under Omnidirectional or Decorative Lamp Category.**
- **Only interior lamp replacements are eligible for this measure.**
- 1-for-1 replacement of incandescent or CFL only.
- LED lamp must contain integral driver.
- Lamps may not be used for resale or giveaway-type promotions.
- Lamps sold at participating instant discount retailers are not eligible.



EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED with rated lumen output of 1,600-1,999 replacing incandescent or CFL	L3952	\$3	Lamp
LED with rated lumen output of 1,100-1,599 replacing incandescent or CFL	L3953	\$2	Lamp
LED with rated lumen output of 800-1,099 replacing incandescent or CFL	L3954	\$1.50	Lamp
LED with rated lumen output of 450-799 replacing incandescent or CFL	L3955	\$1	Lamp
LED with rated lumen output of 250-449 replacing incandescent or CFL	L3956	\$1	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



LED DIRECTIONAL LAMP



Requirements:

- **Must appear on ENERGY STAR certified light bulbs qualified product list under Directional Lamp Category.**
- **Only interior lamp replacements are eligible for this measure.**
- 1-for-1 replacement of incandescent or compact fluorescent (CFL) only.
- LED lamp must contain integral driver.
- Lamps may not be used for resale or giveaway-type promotions.
- **Incentive is limited to 50% of the retail product cost.** Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax. Focus on Energy reserves the right to confirm actual payment.
- Lamps sold at participating instant discount retailers are not eligible.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED replacing incandescent 120W - 250W	L3941	\$5	Lamp
LED replacing incandescent 100W - 119W	L3942	\$4	Lamp
LED replacing incandescent 75W - 99W	L3943	\$3	Lamp
LED replacing incandescent 55W - 74W	L3944	\$2	Lamp
LED replacing incandescent 36W - 54W	L3945	\$1.50	Lamp
LED replacing incandescent ≤35W	L3946	\$1	Lamp
LED replacing CFL ≥23W	L3932	\$1.75	Lamp
LED replacing CFL 14W - 22W	L3933	\$1.50	Lamp
LED replacing CFL ≤13W	L3934	\$1	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



LED HIGH/LOW-BAY MOGUL SCREW-BASE (E39) LAMP



Requirements:

- Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for this measure.
- Must be DLC SSL QPL listed (TRT V5.0 or higher) in one of the following primary use categories
 - Replacement Lamps for High-Bay Luminaires (UL Type B)
 - Replacement Lamps for Low-Bay Luminaires (UL Type B)
 - Replacement Lamps for High-Bay Luminaires (UL Type C)
 - Replacement Lamps for Low-Bay Luminaires (UL Type C)
- Replacement lamps must be installed in high or low bay luminaires only.
- Interior medium screw-base (E26) lamps may be eligible if E39 option is DLC listed. Contact Focus on Energy for assistance.
- Reference default system wattage table for common HID systems on page 39 for baseline input. Contact Focus on Energy for any system not listed.
- Existing incandescent or high-wattage CFL upgrades are also eligible for this incentive.
- **UL TYPE B PRODUCTS** – By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
Mogul Screw-Base (E39) replacing existing E39 base lamp	L3962*	\$0.10	Watt Reduced
* Supplemental Data Sheet needed			

REMINDER

Exact model numbers and manufacturer of equipment installed must be identified on invoicing and any qualified product list, when required. For Focus on Energy's Private Label policy, see page 6 of the Lighting Incentive Catalog.



LED FOUR PIN-BASE LAMP



Requirements:

- Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for this measure.
- Must be DLC SSL QPL listed (TRT V5.0 or higher) in one of the following primary use categories:
 - Vertically/Horizontally-Mounted Lamps:
 - Replacement Lamps ("Plug and Play") (UL Type A)
 - 2G11 Base Replacement Lamps:
 - Internal Driver/Line Voltage (UL Type B) Lamps
 - 2-lamp External Driver (UL Type C) Lamps
 - 3-lamp External Driver (UL Type C) Lamps
 - Dual Mode Internal Drive (UL Type A or B)
- Reference default system wattage table for common CFL systems on page 39 for baseline input. Contact Focus on Energy for any system not listed.
- **UL TYPE B PRODUCTS** – By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
Four Pin-Base Lamp Replacing CFL	L4779*	\$0.10	Watt Reduced
* Supplemental Data Sheet needed			

HOW TO APPLY EXAMPLE

EQUIP #	TYPE OF EXISTING EQUIPMENT	(A) ROUNDED WATTAGE OF EXISTING EQUIPMENT PER FIXTURE	(B) QUANTITY OF EXISTING EQUIPMENT	TYPE OF NEW EQUIPMENT	(C) ROUNDED WATTAGE OF NEW EQUIPMENT PER FIXTURE	(D) QUANTITY OF NEW EQUIPMENT	(E) WATTS REDUCED PER FIXTURE (A - C)	(F) INCENTIVE PER WATT REDUCED (\$/Watt Reduced)	REQUESTED INCENTIVE (D x E x F)
Mogul screw-base	400W HID	455	1	200W LED	200	1	255	\$0.10/W reduced	\$25.50

LINEAR REPLACEMENT LAMPS



General Requirements: Incentives are available for replacing existing standard wattage linear fluorescent lamps with reduced wattage light emitting diode (LED) as described in each of the sections below. **Incentive is limited to 50% of the retail product cost.** Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax. Focus on Energy reserves the right to confirm actual payment. **Manufacturer and model number(s) are required.**



LED 4 FOOT T8 LAMP



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the Four-Foot Linear Replacement Lamps General Application Category.**
- Measures MAY NOT be combined with fixture incentives.
- 4' LED replacement lamps DLC listed as "Dual Mode Internal Driver (UL Type A or B)" may apply for the measure by which they are installed.
- Measures are not intended for refrigerated display case applications.
- **UL TYPE B PRODUCTS – By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
4' TLED, ≤24W, replacing 4' T8 or T12 Lamp w/External Driver (UL Type C)	L3511	\$1.50	Lamp
4' TLED, ≤24W, replacing 4' T8 or T12 Lamp, Direct Wire (UL Type B)	L3759	\$1.50	Lamp
4' TLED, ≤24W, replacing 4' T8 or T12 Lamp Utilizing Existing Ballast (UL Type A)	L3512	\$1.25	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



LED 4 FOOT T5/T5HO LAMP



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the T5/T5HO Four-Foot Linear Replacement Lamps General Application Category.**
- Measures MAY NOT be combined with fixture incentives.
- 4' LED replacement lamps DLC listed as "Dual Mode Internal Driver (UL Type A or B)" may apply for the measure by which they are installed.
- Measures are not intended for refrigerated display case applications.
- **UL TYPE B PRODUCTS – By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Replacement of 4' T5 Lamp w/External Driver (UL Type C)	L4803	\$2	Lamp
LED Replacement of 4' T5HO Lamp w/External Driver (UL Type C)	L4804	\$3	Lamp
LED Replacement of 4' T5 Lamp, Direct Wire (UL Type B)	L4805	\$2	Lamp
LED Replacement of 4' T5HO Lamp, Direct Wire (UL Type B)	L4806	\$3	Lamp
LED Replacement of 4' T5 Lamp Utilizing Existing Ballast (UL Type A)	L4807	\$1.50	Lamp
LED Replacement of 4' T5HO Lamp Utilizing Existing Ballast (UL Type A)	L4808	\$2.50	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.

REMINDER

Looking for incentives for your new construction project? Check out the Lighting Power Density (LPD) measure on page 22 for details.



LED 2 FOOT T8 LAMP



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the Two-Foot Linear Replacement Lamps General Application Category.**
- Measures MAY NOT be combined with fixture incentives.
- 2' LED replacement lamps DLC listed as "Dual Mode Internal Driver (UL Type A or B)" may apply for the measure by which they are installed.
- Measures are not intended for refrigerated display case applications.
- **UL TYPE B PRODUCTS - By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Replacement of 2' T8 or T12 Lamp w/External Driver (UL Type C)	L4797	\$1.25	Lamp
LED Replacement of 2' T8 or T12 Lamp, Direct Wire (UL Type B)	L4798	\$1.50	Lamp
LED Replacement of 2' T8 or T12 Lamp Utilizing Existing Ballast (UL Type A)	L4799	\$1	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



LED U-BEND T8 LAMP



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the U-Bend Replacement Lamps General Application Category.**
- Measures MAY NOT be combined with fixture incentives.
- U-Bend LED replacement lamps DLC listed as "Dual Mode Internal Driver (UL Type A or B)" may apply for the measure by which they are installed.
- Measures are not intended for refrigerated display case applications.
- **UL TYPE B PRODUCTS - By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Replacement of U-Bend T8 or T12 Lamp w/External Driver (UL Type C)	L4800	\$1.50	Lamp
LED Replacement of U-Bend T8 or T12 Lamp, Direct Wire (UL Type B)	L4801	\$2	Lamp
LED Replacement of U-Bend T8 or T12 Lamp Utilizing Existing Ballast (UL Type A)	L4802	\$1.50	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



LED 8 FOOT T8 LAMP



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the Eight-Foot Linear Replacement Lamps General Application Category.**
- Measures MAY NOT be combined with fixture incentives.
- 8' LED replacement lamps DLC listed as "Dual Mode Internal Driver (UL Type A or B)" may apply for the measure by which they are installed.
- Measures are not intended for refrigerated display case applications.
- **UL TYPE B PRODUCTS - By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Replacement of 8' T8 or T12 Lamp w/External Driver (UL Type C)	L4809	\$3.50	Lamp
LED Replacement of 8' T8 or T12 Lamp, Direct Wire (UL Type B)	L4810	\$4	Lamp
LED Replacement of 8' T8 or T12 Lamp Utilizing Existing Ballast (UL Type A)	L4811	\$3	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.

COMPREHENSIVE LIGHTING SOLUTIONS



FIXTURE OR RETROFIT KIT UPGRADE



Requirements:

- All Comprehensive Lighting Solutions (CLS) projects must be preapproved. Call 800.762.7077 or contact your Energy Advisor before you start your project.
- Documentation required for pre-approval:
 - Proposal detailing existing and proposed fixture type(s), quantities and model numbers with options.
 - Existing and proposed footcandles at working surface for space type representing the most square footage.
 - Completed CLS workbook. Download a copy at focusenergy.com/catalogs.
- New fixtures/retrofit kits must be ENERGY STAR® certified or DLC SSL QPL listed (TRT V5.0 or higher).
- For DLC listed equipment, use the tested data for wattage of new equipment (green background). If the tested data is not available and only family data is available (yellow background), use the wattage listed on the specification sheet of the new equipment.
- All installations are expected to meet current IESNA recommendations for delivered light level and uniformity. Compliance is the responsibility of the installer/designer.
- Customers can apply for either a fixture or retrofit kit upgrade or upgrade with connected controls (see L5030 and L5031 on page 31).
- 1-for-1 fixture/retrofit kit replacements are NOT eligible.
- No changes to existing control strategies (i.e., if existing lighting design had occupancy sensors, then new lighting system must include occupancy sensors).
- Lighting system must operate a minimum of 2,000 hours annually to be eligible.
- Only interior lighting is eligible (including underground parking structures).

EQUIPMENT UPGRADES AND RETROFITS

Measure Description	Code	Incentive	Unit
CLS - Fixture or Retrofit Kit Only	L5029	\$0.25	Watt Reduced

Incentive amount is limited to 50% of the project cost, including equipment and external labor (internal labor eligible for schools and government customers).

NEW CONSTRUCTION

General Requirements: Incentives are available for new construction and major renovations where Lighting Power Density (LPD) thresholds would apply. Projects participating in this offering are **NOT** eligible for individual interior lighting measures. Contact Focus on Energy for guidance for multifamily buildings undergoing new construction or a major renovation.

Required documentation (COMCheck™, floorplan and/or lighting layout) must be signed by a lighting professional with one or more of the following credentials:

- Lighting Certification (LC) designation from National Council on Qualifications for the Lighting Professions (NCQLP)
- Certified Lighting Efficiency Professional (CLEP) from the Association of Energy Engineers (AEE)
- Certified Lighting Management Consultant (CLMC)
- State of Wisconsin Professional Engineer (PE) License
- Member of International Association of Lighting Designers (IALD)
- Lighting Specialist II certification from National Association of Innovative Lighting Distributors (NAILD)
- Commercial and Industrial Lighting Certificate from the Illuminating Engineering Society of America (IES)
- Registered designer of electrical engineering systems in the state of Wisconsin
- Member of the Institute of Electrical and Electronics Engineers (IEEE)
- Other credential approved by Focus on Energy

If the documentation was NOT provided by an individual with the above credentials, then all lighting fixtures must be ENERGY STAR or DLC SSL QPL



INTERIOR NEW CONSTRUCTION LIGHTING POWER DENSITY (LPD) REDUCTION

Requirements:

- **Complete the LPD workbook. Download a copy at focusonenergy.com/catalogs.**
- Incentives are based on current Wisconsin Energy Code (International Energy Conservation Code (IECC) 2015 with Wisconsin Amendments found in SPS Chapter 363) LPD requirements.
- All installations are expected to meet current IESNA recommendations for delivered light level and uniformity. Compliance is the responsibility of the installer/designer.
- Installed lamps purchased at participating instant discount retailers disqualify the LPD measure.
- Upon project completion, the following must be included in addition to standard application requirements:
 - Documentation to verify square footage as-built (COMcheck or professional floorplan with dimensions)
 - Documentation to verify total connected wattage as-built (COMcheck or professional lighting layout indicating where fixtures are installed PLUS fixture cut sheets for all installed fixtures)

NEW CONSTRUCTION AND MAJOR RENOVATIONS			
Measure Description	Code	Incentive	Unit
Lighting Power Density (LPD) better than code requirements	N-L4948	\$0.04	kWh Reduced

REMINDER
As-built documentation must be provided to verify square footage and total connected wattage.

NEED HELP?
Call 800.762.7077 for assistance.



EXTERIOR FIXTURES AND LAMPS

For more information,
call 800.762.7077
or visit focusonenergy.com

EXTERIOR FIXTURES AND LAMPS

EXTERIOR FIXTURES

General Requirements: Incentives are available for replacing or retrofitting existing high intensity discharge (HID) fixtures with light emitting diode (LED) fixtures as described in each of the sections below. Existing fixture operation must be dusk-to-dawn (4,380 annual hours) unless otherwise noted. **Manufacturer and model number(s) are required. Product categories listed below do not imply equivalence – all installations are expected to meet current IESNA recommendations for delivered light level and uniformity. Compliance is the responsibility of the installer.**



EXTERIOR LED AREA FIXTURES & RETROFIT KITS



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in an “Outdoor” General Application Category.**
- Must be permanently wired. Integral ballast screw-based lamp retrofit products of any technology are not eligible for these incentives. Refer to page 27 for Exterior Mogul Screw-base (E39) LED lamps.
- Stadium lighting is not eligible for prescriptive incentives. Contact your Energy Advisor to determine eligibility for a custom incentive.
- **Customers applying for municipal roadway lighting MUST submit a copy of utility bill verifying customer is on a utility rate for customer owned street lights. Utility owned street lights are not eligible for incentives.**
- For stairwell/passageway fixtures, see page 16 for specific offering.
- **General Application (Low/Mid/High/Very High output) for incentive eligibility will be based the General Application text in the DLC listing for the specific product that was installed. Note that occasionally products may be listed in a General Application that doesn't quite match it's lumen output in order to keep related fixtures (e.g., same general model but different color temperatures) all within the same General Application.**
- **Fixtures equipped with light shields to prevent light from leaving the property can be considered eligible, even if not DLC listed, if the equivalent fixture without the shield is DLC listed.**
- **For new construction fixtures with networked lighting controls, controls must be DLC NLC QPL listed (TRT V4.0 or higher).**

EQUIPMENT UPGRADES AND RETROFITS				
Measure Description	General Application Category	Code	Incentive	Unit
Area Fixtures & Retrofit Kits: • Exterior Outdoor Pole-Mounted • Exterior Outdoor Decorative Area & Post-Top • Exterior Parking Garage & Canopy/Soffit • Exterior Outdoor Wall-Mounted • Exterior Outdoor Flood & Spot • Exterior Bollards	Outdoor - Low Output	L4280	\$15	Fixture
	Outdoor - Mid Output	L4281	\$25	Fixture
	Outdoor - High Output	L4282	\$50	Fixture
	Outdoor - Very High Output	L4283	\$120	Fixture

NEW CONSTRUCTION AND MAJOR RENOVATIONS				
Measure Description	General Application Category	Code	Incentive	Unit
Area Fixtures & Retrofit Kits: • Exterior Outdoor Pole-Mounted • Exterior Outdoor Decorative Area & Post-Top • Exterior Parking Garage & Canopy/Soffit • Exterior Outdoor Wall-Mounted • Exterior Outdoor Flood & Spot • Exterior Bollards	Outdoor - Low Output	N-L4280	\$10	Fixture
	Outdoor - Mid Output	N-L4281	\$20	Fixture
	Outdoor - High Output	N-L4282	\$50	Fixture
	Outdoor - Very High Output	N-L4283	\$100	Fixture
	Outdoor - Low Output, Networked Lighting Controls	N-L5065	\$20	Fixture
	Outdoor - Mid Output, Networked Lighting Controls	N-L5066	\$40	Fixture
	Outdoor - High Output, Networked Lighting Controls	N-L5067	\$100	Fixture
	Outdoor - Very High Output, Networked Lighting Controls	N-L5068	\$200	Fixture

CUSTOM PROJECT IDEA

If **redesigning the lighting layout** and adding or reducing the number of fixtures (not a 1-for-1 changeout), or changing the size (output) of the fixture, consider applying for a custom incentive.

REMINDER

Exact model numbers and manufacturer of equipment installed must be identified on invoicing and any qualified product list, when required. For Focus on Energy's Private Label policy, see page 6 of the Lighting Incentive Catalog.

OTHER EXTERIOR FIXTURES



General Requirements: Incentives are available for replacing existing incandescent or high intensity discharge (HID) fixtures with light emitting diode (LED) fixtures that meet the requirements described below. All fixture replacements must result in a wattage reduction from the existing condition.

Manufacturer and model number(s) are required.



EXTERIOR LED DOWNLIGHTS

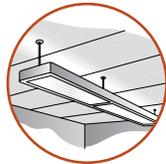


Requirements:

- Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for these measures.
- Fixtures must be listed on ENERGY STAR as a "Downlight Recessed," "Downlight Solid State Retrofit" or "Downlight Surface Mount" fixture type and be intended for commercial use. Fixtures that are intended for residential use may be used in multifamily buildings.
- For replacement of incandescent, CFL or HID fixtures in exterior applications.
- For new construction applications, use the proposed LED fixture wattage times 2.5 for the baseline.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Downlight Fixtures replacing Incandescent, CFL or HID fixture (See system wattage table on pg. 39 for baseline inputs)	L4356*	\$0.11	Watt Reduced
* Supplemental Data Sheet needed			

NEW CONSTRUCTION AND MAJOR RENOVATIONS			
Measure Description	Code	Incentive	Unit
LED Downlight Fixtures instead of Incandescent, CFL or HID fixture	N-L4356*	\$0.10	Watt Reduced
* Supplemental Data Sheet needed			



EXTERIOR LED LINEAR AMBIENT FIXTURES



Requirements:

- Must be DLC SSL QPL listed (TRT V5.0 or higher) in either "Direct Linear Ambient Luminaires," "Linear Ambient Luminaires w/ Indirect component," "Retrofit Kits for Direct Linear Ambient Luminaires" or "Specialty: Hazardous Direct Linear Ambient Luminaires" primary use categories. Fixtures ENERGY STAR listed as "Outdoor Ceiling Mount" may also be eligible. Contact Focus on Energy for details.
- This incentive is for the 1-for-1 replacement of surface mount or suspended linear T5, T8 or T12 fluorescent fixtures.
- Overall LED fixture length must match existing fluorescent fixture length; other LED configurations may qualify for a custom incentive.
- For stairwell/ passageway fixtures, see page 16 for specific offering.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED Fixture ≤11W/FT replacing 1- or 2-lamp T8 or T12 Lamp(s) in Cross Section	24 Hour: L4781 12 Hour: L4782	\$2	Linear Foot
LED Fixture ≤24W/FT replacing 3- or 4-lamp T8 or T12 Lamps in Cross Section	24 Hour: L4783 12 Hour: L4784	\$5	Linear Foot
LED Fixture ≤9W/FT replacing 1- or 2-lamp T5 Lamp(s) in Cross Section	24 Hour: L4785 12 Hour: L4786	\$2	Linear Foot
LED Fixture ≤24/FT replacing 3- or 4-lamp T5 Lamps in Cross Section	24 Hour: L4787 12 Hour: L4788	\$5	Linear Foot

NEW CONSTRUCTION AND MAJOR RENOVATIONS			
Measure Description	Code	Incentive	Unit
LED Fixture ≤11W/FT replacing 1- or 2-lamp T8 or T12 Lamp(s) in Cross Section	24 Hour: N-L4781 12 Hour: N-L4782	\$1	Linear Foot
LED Fixture ≤24W/FT replacing 3- or 4-lamp T8 or T12 Lamps in Cross Section	24 Hour: N-L4783 12 Hour: N-L4784	\$3	Linear Foot
LED Fixture ≤9W/FT replacing 1- or 2-lamp T5 Lamp(s) in Cross Section	24 Hour: N-L4785 12 Hour: N-L4786	\$1	Linear Foot
LED Fixture ≤24/FT replacing 3- or 4-lamp T5 Lamps in Cross Section	24 Hour: N-L4787 12 Hour: N-L4788	\$3	Linear Foot



LED RETROFIT OF EXTERIOR 8 FOOT FIXTURES



Requirements:

- Retrofit kit must be replacing an 8' fixture housing 8' lamps. The new 4' lamps must be DLC listed and <24W per lamp.
- 4' Tubular LED (TLED) lamps must be DLC TRT V5.0 or higher listed in one of the following primary use categories:
 - Replacement Lamps ("Plug and Play") (UL Type A)
 - Internal Driver/Line Voltage (UL Type B) Lamps
 - 2-lamp External Driver (UL Type C) Lamps
 - 3-lamp External Driver (UL Type C) Lamps
 - 4-lamp External Driver (UL Type C) Lamps
 - Dual Mode Internal Driver (UL Type A or B)
- Installed equipment must be a complete retrofit kit including, but not limited to sockets, socket brackets and/or channel covers. Detail must be provided on invoicing and spec sheets.
- 4' TLED lamp exterior upgrades can be found on page 29.
- **UL TYPE B PRODUCTS** – By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.

EQUIPMENT UPGRADES AND RETROFITS					
Measure Description		Code	Incentive	Unit	
4' 2-lamp TLED <24W replacing 8' 1-lamp T8 or T12	24 Hour 12 Hour	L4316 L4315	\$10	Fixture	
4' 2-lamp TLED <24W replacing 8' 1-lamp T8HO or T12HO	24 Hour 12 Hour	L4319 L4318	\$10	Fixture	
4' 4-lamp TLED <24W replacing 8' 2-lamp T8 or T12	24 Hour 12 Hour	L4322 L4321	\$12.50	Fixture	
4' 4-lamp TLED <24W replacing 8' 2-lamp T8HO or T12HO	24 Hour 12 Hour	L4325 L4324	\$12.50	Fixture	
4' 2-lamp TLED <24W replacing 8' 2-lamp T8 or T12	24 Hour 12 Hour	L4328 L4327	\$22.50	Fixture	
4' 2-lamp TLED <24W replacing 8' 2-lamp T8HO or T12HO	24 Hour 12 Hour	L4331 L4330	\$22.50	Fixture	



EXTERIOR LED SIGNAGE

Requirements:

- Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for this measure.
- Must result in at least a 30% wattage reduction to be eligible.
- LED upgrades from incandescent, HID, fluorescent or neon exterior commercial signage are eligible for this measure.
- Applications include, but are not limited to channel lettering, backlit displays and menu boards.
- Signs illuminated by flood fixtures should refer to flood fixture incentive offerings on page 24.
- Clear documentation (i.e. spec sheets, sign schematics, existing ballast or transformer) of existing equipment or metering data (i.e. voltage and amperage readings) MUST be provided or measure eligibility will be subject to disqualification. For neon signs, a 60% power factor will be assumed for the neon sign transformer unless supporting documentation for a different value is provided.
- Replacement lamp products that intend to use existing sockets or lamp holders MUST be reviewed by Focus on Energy prior to installation.
- Incentive may be adjusted if existing ballast information is not provided.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
Exterior LED Signage	L3904*	\$0.20	Watt Reduced

* Supplemental Data Table needed

HOW TO APPLY EXAMPLE

EQUIP #	TYPE OF EXISTING EQUIPMENT	(A) ROUNDED WATTAGE OF EXISTING EQUIPMENT PER FIXTURE	(B) QUANTITY OF EXISTING EQUIPMENT	TYPE OF NEW EQUIPMENT	(C) ROUNDED WATTAGE OF NEW EQUIPMENT PER FIXTURE	(D) QUANTITY OF NEW EQUIPMENT	(E) WATTS REDUCED PER FIXTURE (A - C)	(F) INCENTIVE PER WATT REDUCED (\$/Watt Reduced)	REQUESTED INCENTIVE (D x E x F)
Exterior Signage	1L F96T12	121	1	25' LED strip, 2 watts/ft	50	1	71	\$0.20/W reduced	\$14.20

REPLACEMENT LAMPS

General Requirements: Incentives are available for replacing existing metal halide (MH) or mogul screw-base (E39), with light emitting diode (LED) replacement lamps as well as replacing incandescent or CFL medium screw-base (E26) with light emitting diode (LED) lamps. **Manufacturer and model number(s) are required.**



EXTERIOR LED MOGUL SCREW-BASE (E39) LAMP



Requirements:

- Complete Table A of the "Lighting Incentive Catalog Supplemental Data Sheet" for these measures.
- Must be DLC SSL QPL listed (TRT V5.0 or higher) in one the following primary use categories:

Replacement Lamps		UL Type
Outdoor Pole/Arm-Mounted Area and Roadway Luminaires		UL Type B
		UL Type C
Outdoor Pole/Arm-Mounted Decorative Luminaires		UL Type B
		UL Type C
Outdoor Full-Cutoff Wall-Mounted Area Luminaires		UL Type B
		UL Type C
Parking Garage Luminaires		UL Type B
		UL Type C
Fuel Pump Canopy Luminaires		UL Type B

- Replacement lamps must be installed in luminaire they are DLC listed under.
- Exterior medium screw-base (E26) lamps may be eligible if E39 option is DLC listed. Contact Focus on Energy for assistance.
- Existing incandescent or high-wattage CFL upgrades are also eligible for this incentive.
- Reference default system wattage table for common HID systems on page 39 for baseline input. Contact Focus on Energy for any system not listed.
- **UL TYPE B PRODUCTS – By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**
- **Customers applying for municipal roadway lighting MUST submit a copy of utility bill verifying customer is on a utility rate for customer owned street lights. Utility owned street lights are not eligible for incentives.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
Mogul Screw-in Base (E39) replacing existing E39 base lamp	L3963*	\$0.15	Watt Reduced
* Supplemental Data Table needed			

HOW TO APPLY EXAMPLE

EQUIP #	TYPE OF EXISTING EQUIPMENT	(A) ROUNDED WATTAGE OF EXISTING EQUIPMENT PER FIXTURE	(B) QUANTITY OF EXISTING EQUIPMENT	TYPE OF NEW EQUIPMENT	(C) ROUNDED WATTAGE OF NEW EQUIPMENT PER FIXTURE	(D) QUANTITY OF NEW EQUIPMENT	(E) WATTS REDUCED PER FIXTURE (A - C)	(F) INCENTIVE PER WATT REDUCED (\$/Watt Reduced)	REQUESTED INCENTIVE (D x E x F)
Mogul screw base	400W HID	455	1	200W LED	200	1	255	\$0.15/W reduced	\$38.25



EXTERIOR LED OMNIDIRECTIONAL OR DECORATIVE LAMP



Requirements:

- **Product must appear on ENERGY STAR certified light bulbs qualified product list under Omnidirectional or Decorative Lamp Category.**
- **Only eligible for exterior lamp replacements.**
- 1-for-1 replacement of incandescent or CFL only.
- LED lamp must contain integral driver.
- Lamps may not be used for resale or giveaway-type promotions.
- Lamps sold at participating instant discount retailers are not eligible.



EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED with rated lumen output of 1,600-1,999 replacing incandescent or CFL	L3947	\$3	Lamp
LED with rated lumen output of 1,100-1,599 replacing incandescent or CFL	L3948	\$2	Lamp
LED with rated lumen output of 800-1,099 replacing incandescent or CFL	L3949	\$1.50	Lamp
LED with rated lumen output of 450-799 replacing incandescent or CFL	L3950	\$1	Lamp
LED with rated lumen output of 250-449 replacing incandescent or CFL	L3951	\$1	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.

NEW CONSTRUCTION AND MAJOR RENOVATIONS			
Measure Description	Code	Incentive	Unit
LED with rated lumen output of 1,600-1,999 instead of incandescent or CFL	N-L3947	\$3	Lamp
LED with rated lumen output of 1,100-1,599 instead of incandescent or CFL	N-L3948	\$2	Lamp
LED with rated lumen output of 800-1,099 instead of incandescent or CFL	N-L3949	\$1.50	Lamp
LED with rated lumen output of 450-799 instead of incandescent or CFL	N-L3950	\$1	Lamp
LED with rated lumen output of 250-449 instead of incandescent or CFL	N-L3951	\$1	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



EXTERIOR LED DIRECTIONAL LAMP



Requirements:

- **Product must appear on ENERGY STAR certified light bulbs qualified product list under Directional Lamp Category.**
- **Only eligible for exterior lamp replacements.**
- 1-for-1 replacement of incandescent or compact fluorescent only.
- LED lamp must contain integral driver.
- Lamps may not be used for resale or giveaway-type promotions.
- Lamps sold at participating instant discount retailers are not eligible.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
LED replacing incandescent 120W - 250W	L3935	\$5	Lamp
LED replacing incandescent 100W - 119W	L3936	\$4	Lamp
LED replacing incandescent 75W - 99W	L3937	\$3	Lamp
LED replacing incandescent 55W - 74W	L3938	\$2	Lamp
LED replacing incandescent 36W - 54W	L3939	\$1.50	Lamp
LED replacing incandescent ≤ 35W	L3940	\$1	Lamp
LED replacing CFL ≥ 23W	L3929	\$1.75	Lamp
LED replacing CFL 14W - 22W	L3930	\$1.50	Lamp
LED replacing CFL ≤ 13W	L3931	\$1	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.

NEW CONSTRUCTION AND MAJOR RENOVATIONS			
Measure Description	Code	Incentive	Unit
LED instead of CFL ≥ 23W	N-L3929	\$0.90	Lamp
LED instead of CFL 14W - 22W	N-L3930	\$0.60	Lamp
LED instead of CFL ≤ 13W	N-L3931	\$0.40	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



EXTERIOR LED 4 FOOT T8 LAMP



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the Four-Foot Linear Replacement Lamps General Application Category.**
- **DLC rated wattage listing must be ≤24W per lamp.**
- Measures MAY NOT be combined with fixture incentives.
- 4' LED replacement lamps DLC listed as "Dual Mode Internal Driver (UL Type A or B)" may apply for the measure by which they are installed.
- **UL TYPE B PRODUCTS - By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
24 Hour, LED Replacement of 4' T8 or T12 Lamp w/External Driver (UL Type C)	L4353	\$2	Lamp
24 Hour, LED Replacement of 4' T8 or T12 Lamp, Direct Wire (UL Type B)	L4351	\$2	Lamp
24 Hour, LED Replacement of 4' T8 Lamp Utilizing Existing Ballast (UL Type A)	L4349	\$1.50	Lamp
Dusk to Dawn, LED Replacement of 4' T8 or T12 Lamp w/External Driver (UL Type C)	L4352	\$2	Lamp
Dusk to Dawn, LED Replacement of 4' T8 or T12 Lamp, Direct Wire (UL Type B)	L4350	\$2	Lamp
Dusk to Dawn, LED Replacement of 4' T8 Lamp Utilizing Existing Ballast (UL Type A)	L4348	\$1.50	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



EXTERIOR LED 8 FOOT T8 LAMP



Requirements:

- **Must be DLC SSL QPL listed (TRT V5.0 or higher) in the Eight-Foot Linear Replacement Lamps General Application Category.**
- Measures MAY NOT be combined with fixture incentives.
- 8' LED replacement lamps DLC listed as "Dual Mode Internal Driver (UL Type A or B)" may apply for the measure by which they are installed.
- **UL TYPE B PRODUCTS - By signing the application, customers agree that necessary steps have been taken to ensure product, luminaire and maintenance safety.**

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
24 Hour, LED Replacement of 8' T8 or T12 Lamp w/External Driver (UL Type C)	L4834	\$4.50	Lamp
24 Hour, LED Replacement of 8' T8 or T12 Lamp, Direct Wire (UL Type B)	L4835	\$4.50	Lamp
24 Hour, LED Replacement of 8' T8 Lamp Utilizing Existing Ballast (UL Type A)	L4833	\$4.00	Lamp
Dusk to Dawn, LED Replacement of 8' T8 or T12 Lamp w/External Driver (UL Type C)	L4831	\$4.50	Lamp
Dusk to Dawn, LED Replacement of 8' T8 or T12 Lamp, Direct Wire (UL Type B)	L4832	\$4.50	Lamp
Dusk to Dawn, LED Replacement of 8' T8 Lamp Utilizing Existing Ballast (UL Type A)	L4830	\$4.00	Lamp

Incentive is limited to 50% of the retail product cost.
Product cost is the amount paid by the customer for qualifying equipment, excluding any Focus on Energy incentive credit, shipping and sales tax.



LIGHTING CONTROLS

For more information,
call 800.762.7077
or visit focusonenergy.com

COMPREHENSIVE LIGHTING SOLUTIONS



FIXTURE OR RETROFIT KIT/LAMP UPGRADE WITH CONNECTED CONTROLS



Requirements:

- **All projects must be preapproved. Call 800.762.7077 or contact your Energy Advisor before you start your project.**
- Documentation required for pre-approval:
 - Proposal detailing existing and proposed fixture type(s), quantities and model numbers with options.
 - Proposed control system specifications.
 - Existing and proposed footcandles at working surface for space type representing the most square footage.
 - Completed CLS workbook. Download a copy at focusonenergy.com/catalogs.
- **New fixtures/retrofit kits must be ENERGY STAR certified or DLC SSL QPL listed (TRT V5.0 or higher).**
- For DLC listed equipment, use the tested data for wattage of new equipment (green background). If the tested data is not available and only family data is available (yellow background), use the wattage listed on the specification sheet of the new equipment if the data is more current than the DLC listed family data.
- Control systems must be DLC NLC QPL listed (TRT V5.0 or higher), and have the following Networked Lighting Controls capabilities set up and operational:
 - Occupancy sensing
 - Zoning
 - Individual Addressability
- All installations are expected to meet current IESNA recommendations for delivered light level and uniformity. Compliance is the responsibility of the installer/designer.
- Customers can apply for either a fixture or retrofit kit upgrade (see L5029 on page 21) or upgrade with connected controls. Eligibility limited to one option.
- Fixtures, retrofit kits, or lamps with connected controls are eligible. Equipment is not eligible for additional fixture/retrofit kit/lamp incentives.
- Systems are NOT eligible for additional control incentives (i.e. daylighting, high bay, or non-high bay controls).
- Interior lighting system must operate a minimum of 2,000 hours annually to be eligible.
- Exterior fixtures with connected controls in new construction applications may be eligible for incentives (see L5065 - L5068 on page 24).

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
CLS - Fixture or Retrofit Kit/Lamp with Connected Controls, Interior	L5031	\$0.45	Watt Reduced
CLS - Fixture or Retrofit Kit/Lamp with Connected Controls, Exterior	L5030	\$0.50	Watt Reduced

Incentive amount is limited to 50% of project cost, including equipment and external labor (internal labor eligible for schools and government customers).

OTHER LIGHTING CONTROLS

General Requirements: Incentives are available for installing lighting controls which meet the requirements as described in each of the sections below. Controls may be installed on existing lighting equipment or in conjunction with new equipment listed throughout the catalog. Sensors may control more than one fixture. Rapid or programmed start ballasts are recommended for fluorescent fixtures to extend lamp life. Control costs must be itemized separately on invoice.



DAYLIGHTING CONTROLS

Requirements:

- **Complete Table B of the "Lighting Incentive Catalog Supplemental Data Sheet" for this measure.**
- Must be step dimmed with at least one level in addition to full power and off or continuous dimming controls.
- Specification sheets for controls and fixtures controlled, along with a floor plan showing window/skylight locations and fixtures which are considered to be in the daylight zone, must be submitted with the application.
- Inventory of fixtures controlled (including quantity, fixture type and number of lamps per fixture) by space type or lighting diagram must be submitted with the application.
- For retrofit situations where specification sheets are not available for existing fixtures, program default wattages will be used for calculating incentives. Reference page 39 for default wattage table or contact Focus on Energy to obtain a system wattage not listed.
- Daylighting controls may be combined with additional incentives for occupancy sensors.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
Daylighting Controls	L3406	\$0.05	Watt Controlled



HIGH-BAY CONTROLS

Requirements:

- **Complete Table B of the "Lighting Incentive Catalog Supplemental Data Sheet" for these measures.**
- Sensors must be ultrasonic, passive infrared, microwave or dual technology and rated for controlling high bay fixtures.
- May be high/low or on/off controls as listed below.
- Eligible sensors include high wall, ceiling, or fixture mounted sensors designed for controlling fixtures in high- or low-bay applications.
- Socket-based occupancy sensors do not qualify.
- Timers do not qualify for prescriptive incentives, but may be eligible for custom incentives.
- Upgrading existing high-bay controls are not eligible.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
On/Off Occupancy Control	L5061	\$0.05	Watt Controlled
Bi-Level Occupancy Control	L5062	\$0.05	Watt Controlled

HOW TO APPLY EXAMPLE

EQUIP #	MEASURE CODE	FIXTURE DESCRIPTION	(A) ROUNDED WATTAGE PER FIXTURE	(B) QUANTITY OF FIXTURES	(C) INCENTIVE PER WATT CONTROLLED (\$/Watt Reduced)	TOTAL INCENTIVE (A x B x C)
Example 1 (office area)	L3406	New 2x4 LED troffers, 45W each	45	74	\$0.05	\$166.50
Example 2 (warehouse)	L5062	Existing 175W LED high bays	175	30	\$0.05	\$262.50



NON-HIGH-BAY CONTROLS

Requirements:

- **Complete Table B of the "Lighting Incentive Catalog Supplemental Data Sheet" for this measure.**
- Must be ultrasonic, passive infrared, microphonic, microwave or dual technology occupancy/vacancy sensors controlling non-high bay fixture types.
- Socket based occupancy sensors do not qualify.
- Timers do not qualify for prescriptive incentives, but may be eligible for custom incentives.
- Upgrades to existing non-high-bay controls are not eligible.



EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
Non-High Bay Occupancy/Vacancy Sensor	L4812	\$0.05	Watt Controlled



PARKING GARAGE CONTROLS

Requirements:

- **Complete Table B of the "Lighting Incentive Catalog Supplemental Data Sheet" for this measure.**
- Must be installed in a parking garage. A custom incentive may be available for similar controls installed on exterior lighting.
- Controls must be occupancy or occupancy schedule based and may include dimming, stepped dimming or high/low ballast controls.
- If passive infrared and/or ultrasonic occupancy sensors are used, system must have a fail-safe feature (fails in "on" position).
- Fixtures must operate in a low-standby light level during periods of low occupancy, and cannot exceed 50% of full wattage during unoccupied periods.

EQUIPMENT UPGRADES AND RETROFITS			
Measure Description	Code	Incentive	Unit
Bi-Level Controls, Parking Garage Lighting, Dusk to Dawn	L5063	\$0.05	Watt Controlled
Bi-Level Controls, Parking Garage Lighting, 24 Hour	L5064	\$0.05	Watt Controlled

PRO TIP

Position wall sensors in an office on the same wall as the door so that the sensor can only "see" the area intended to be controlled and not the hallway outside of the door. The most common cause of "false-on" triggering of sensors is incorrect positioning of the sensor.

SAMPLE INVOICE

NEED HELP? Call 800.762.7077

Focus on Energy requires a copy of your itemized invoice to process incentives. Use this example to help guide you through our invoice requirements. Only registered Trade Allies can receive incentive payments on behalf of their customers. If submitting a purchase order, submit an invoice as well.

Purchase orders alone are not sufficient documentation.

INVOICE DATE AND NUMBER

Date: 1/1/2021
Invoice # 00001

TRADE ALLY NAME AND ADDRESS

XYZ HVAC CONTRACTOR
111 HVAC Expert Rd
Anytown, WI 53523
(555) 555-1212

CUSTOMER NAME AND ADDRESS

To John Sample Corporation
123 Save Energy Way
Anytown, WI 53590

Ship To

John Sample Corporation
123 Save Energy Way
Anytown, WI 53590

INCLUDE JOB SITE INFORMATION (NAME & ADDRESS) IF DIFFERENT FROM ABOVE

QUANTITY SHIPPED	MANUFACTURER OR BRAND	MODEL #	DESCRIPTION	EXTENDED PRICE
1	ABC Brand	XYZ123000-17	3 Ton Rooftop Unit	\$ 2,733.00
1	ABC Brand	X71DPP-60D135-0	Natural Gas Boiler - 150,000 BTU, 95% efficient	\$4,685.00
SPECIFY THE QUANTITY FOR EACH				INCLUDE ITEM COST
	IDENTIFY MANUFACTURER AND MODEL NUMBERS		INCLUDE A DETAILED DESCRIPTION	

If you are a Focus on Energy registered Trade Ally receiving the incentive, you must show the credit to the customer on your invoice

Focus on Energy Incentive - \$ 500.00

Subtotal \$ 6,918.00

Sales Tax \$ 380.49

TOTAL AMOUNT DUE \$ 7,298.49

Thank you for your business!

GLOSSARY

NEED HELP? Call 800.762.7077

Acronyms, abbreviations and technical terms used throughout this catalog are defined below.

ACRONYMS AND ABBREVIATIONS

1x4	One foot by four feet in dimension (nominal)	IESNA	Illuminating Engineering Society of North America
2x2	Two feet by two feet in dimension (nominal)	kW	Kilowatts
2x4	Two feet by four feet in dimension (nominal)	kWh	Kilowatt-hours
A-Lamp	Standard incandescent lamp shape	LED	Light emitting diode
ANSI	American National Standards Institute	lm	Lumen(s)
BF	Ballast factor	lm/W	Lumens per Watt
BR Lamp	Bulged reflector lamp	NEC	National Electric Code
CCT	Correlated color temperature	MH	Metal halide
CEE	Consortium for Energy Efficiency	MV	Mercury vapor
CFL	Compact fluorescent lamp	PAR Lamp	Parabolic aluminized reflector lamp
CMH	Ceramic metal halide	PSMH	Pulse-start metal halide
CRI	Color Rendering Index	QPL	Qualified products list
DLC	DesignLights Consortium®	R Lamp	Reflector lamp
DOE	U.S. Department of Energy	RWT8	Reduced wattage 1" diameter fluorescent lamp
ES	ENERGY STAR®	SDS	Supplemental data sheet
G Lamp	Globe-shaped light bulb, generally for exposed use	SSL	Solid-state lighting
HID	High-intensity discharge. Includes: HPS, MH, CMH, PSMH and mercury vapor	T5	5/8" diameter tubular lamp
HO	High output	T8	1" diameter tubular lamp
HPS	High-pressure sodium	T12	1½" diameter tubular lamp
HPT8	High performance 1" diameter fluorescent lamp	VHO	Very high output
		W	Watt(s) demand for electricity and natural gas

GLOSSARY TERMS

A Lamp

Standard incandescent lamp shape, typically with an omnidirectional distribution of light.

Average Rated Life

An average rating, in hours, indicating end of useful life. For most lamps, this indicates when 50% of a large group of lamps will have failed, when operated at nominal lamp voltage and current. For LED, this would be the point at which the light system has depreciated to an unacceptable level and needs to be replaced, often when it has dropped to 70% of initial light output.

Ballast

An electrical control device that initiates the light arc in fluorescent and HID lights with high starting voltage and regulates the operation of the lamp.

Ballast Factor (BF)

The ratio of the light output of a fluorescent lamp or lamps operated on a ballast to the light output of the lamp(s) operated on a standard (reference) ballast. BF depends on both the ballast and the lamp type; a single ballast can have several ballast factors depending on lamp type. Rated Lamp Lumens x BF = Net Lumen output for the system. Also referred to as relative light output. Typically grouped into Low (≤ 0.85), Normal (>0.85 to ≤ 1.0) and High (≥ 1.01) light output categories.

Bi-Level Control

Device that controls light source intensity at two discrete levels in addition to off.

Bollards

Lights mounted on short, heavy piers or posts. They are used mostly for larger residences and campus settings.

Bulged Reflector Lamp (BR Lamp)

Flood style lamp with wide, diffuse beam. Often used in downlights for general lighting.

Canopy Lighting

Recessed or surface-mounted lighting on the underside of a covered drive through, covered walkway or covered gasoline pumping station.

Color Rendering Index (CRI)

A rating index commonly used to represent how well a light source renders the colors of objects that it illuminates. The maximum value of 100 indicates that the colors of objects can be expected to be seen as they would appear under an incandescent or natural daylight. Sources with CRI values less than 50 are generally regarded as rendering colors poorly.

Consortium for Energy Efficiency (CEE)

CEE is the U.S. and Canadian consortium of gas and electric efficiency program administrators. CEE works together to accelerate the development and availability of energy-efficient products and services for lasting public benefit.

Continuous Dimming

Control of a light source's intensity to practically any value within a given operating range.

Correlated Color Temperature (CCT)

A measure of the color appearance of a light source relative to a black body at a particular temperature expressed in degrees Kelvin ($^{\circ}\text{K}$). Incandescent lights have a low color temperature (approximately 2700°K) and have a red-yellowish tone; daylight has a high color temperature (approximately 5000°K) and appears bluish (fluorescent Cool White is rated at 4100°K).

Cove Lighting

Light built into a cove, a shelf or ledge at the upper part of a wall, to illuminate the ceiling and upper wall area.

Daylight Sensor

A device which senses the amount of daylight in a room and adjusts the electric lighting accordingly.

Decorative Lamps

General service lamps available in a variety of wattages and shapes. Decorative bulbs include flame, teardrop, globe and candelabra shapes. Typically available in incandescent, CFL and LED.

DesignLights Consortium[®] (DLC)

The DLC is a project of Northeast Energy Efficiency Partnerships (NEEP), a regional non-profit, whose mission is to serve the Northeast and mid-Atlantic regions to accelerate energy efficiency in the building sector through public policy, program strategies and education. Visit designlights.org

Diffuser

Light control device that spreads light by scattering it.

Dimmer

Control that varies the output of the light source by reducing the voltage or current to the lamp.

Directional Lamps

Lamp type which typically integrates a reflector to distribute light forward away from the lamp. Typically used to direct light toward an object or display. Includes flood and spot lamps with a variety of beam patterns (includes PAR, R, BR, MR, and AR types).

Downlights

Light fixtures that direct all of the light in a downward direction. Most often are completely recessed into the ceiling, circular or square shaped, and less than 12" in diameter.

Efficacy

The amount of light produced per watt of electricity (lumens/watt). It is the rate at which a light source is able to convert electrical power (watts) into light (lumens), expressed in terms of lumens per watt (LPW). For example, a 10 watt lamp producing 800 lumens has an efficacy of 80 lumens per watt.

ENERGY STAR[®]

A U.S. Environmental Protection Agency (EPA) voluntary program that helps businesses and individuals save money and protect our climate through superior energy efficiency.

Flood

Floodlights create a widespread distribution of light for illuminating a wall, sign or large object or building. A floodlight should be well shielded with an accessory louver or shield to avoid stray light and glare.

Fluorescent Lamps

Lamps which operate by creating an electric arc inside a gas-filled tube. The color of the light is determined by the type of phosphor coating used in the lamp.

Fluorescent Troffers

Recessed fluorescent fixtures for 2-foot and 4-foot lamps, generally in modular sizes (2'x4', 1'x4', 2'x2'); commonly used in commercial spaces.

Flushmount

A type of light fixture that mounts directly to a junction box, typically in the ceiling.

Footcandle

The unit of measure for the density of light as it reaches a surface. One footcandle is equal to one lumen per square foot.

G Lamp

Globe-shaped light bulb, generally for exposed use.

GLOSSARY TERMS

General Lighting

Also known as ambient lighting, general lighting provides an area with overall, non-specific illumination.

Glare

Lighting that causes discomfort and impairs good visibility.

Halogen Lamp

An incandescent lamp that uses a halogen fill gas. Halogen lamps have higher-rated efficacies and longer lives than standard incandescent A-lamps.

High-Bay

Interior Lighting where the roof trusses or ceiling height is greater than approximately 25 feet above the floor. Common in big box retail, warehouse and industrial settings.

High-Intensity Discharge (HID)

An electric lamp that produces light directly from an arc discharge under high pressure. Metal halide, high-pressure sodium, and mercury vapor are types of HID lamps.

High-Pressure Sodium (HPS)

Lamp type that uses sodium under high pressure as the primary light-producing element. HPS lamps produce a yellow light with a CCT of approximately 2000 Kelvin. HPS lamps are among the most efficacious light sources, with efficacies as high as 150 lumens per watt, although those with higher CRI values have efficacies as low as 25 lumens per watt.

High Voltage

Voltage that exceeds 50 volts.

Illuminance

The density of luminous flux on a surface, is measured in footcandles (one lumen per square foot) or lux (one lumen per square meter).

Incandescent Lamp

Produces light with a wire filament, which creates light as it is heated by electric current.

Induction Lamp

An electrodeless fluorescent lamp which is powered by an electromagnetic induction generator to excite gases within the lamp to light rather than using electrodes internal to the lamp which can wear out.

Initial Lumens

The lumens produced by a lamp after an initial burn in period (usually 100 hours).

Input Watts

The total wattage required by both the ballast or driver and the lamp or light source in a luminaire.

Instant Start

Ballast starting type. Applies high voltage across the lamp with no preheating of the cathode. The higher voltage is necessary because the electrodes are not heated prior to starting. It is more energy efficient than rapid or preheat starting, but results in greater wear on the electrodes during starting. The life of instant-start lamps that are switched on and off frequently may be reduced by as much as 25% relative to rapid-start operation. However, for longer burning cycles (such as 12 hours per start), there may be no difference in lamp life for different starting methods.

Kelvin

Color temperature is measured in degrees Kelvin, which indicate the hue of a specific type of light source. Higher temperatures indicate whiter, "cooler" colors, while lower temperatures indicate yellower, "warmer" colors (see CCT).

Kilowatt (kW)

1000 watts

Kilowatt Hour (kWh)

A unit of measurement for electrical energy usage. One kilowatt hour equals 1000 watts of energy used for one hour.

Job Site

The physical location and address where the measures were installed.

Lamp

The light source within a fixture. Some types are referred to as a bulb or tube.

Lamp Disposal

Refers to the proper recycling of lamps containing mercury or other hazardous materials.

Lamp Holder

Socket inside a housing, which holds the lamp in place and connects it to the electrical source.

Lens

A glass or plastic diffuser used in luminaires to seal a fixture or control the exiting light.

Light Emitting Diode (LED)

A semiconductor diode (electronic components that let electricity pass in only one direction) that emit visible light when electricity is applied and is used in lamps and digital displays. LED is available in a wide variety of colors and lighting fixture types and typically has a much longer-rated life than traditional lighting technologies.

Lighting Controls

Devices that adjust lighting systems to vary light level or turn on or off.

Light Distribution

Pattern of light produced by a fixture or created in a room or in an area.

Line Voltage

The voltage supplied by a power line, measured at the point of use.

Low-Bay

Interior lighting where the roof trusses or ceiling height is approximately 25 feet or less above the floor. Common in warehouses, athletic facilities and industrial settings.

Low Voltage Lighting

Lighting system that operates on a system that supplies ≤ 50 volts to the lamps or light sources.

Lumens Per Watt (LPW)

The number of lumens produced by a light source for each watt of electrical power supplied to the light source. Also known as efficacy.

Lumen

Unit of total light output of a light source in all directions, expressed in lumens.

Lumen Depreciation

The decrease in lumen output of a light source over time. The decrease in lumen output that occurs as a lamp is operated, until failure. Also referred to as lamp lumen depreciation (LLD).

GLOSSARY TERMS

Lumen Maintenance

The ability of a lamp to retain its light output over time. Greater lumen maintenance means a lamp will remain brighter longer. The opposite of lumen maintenance is lumen depreciation, which represents the reduction of lumen output over time.

Luminaire

A complete lighting fixture consisting of lamp or lamps together with the socket and parts designed to distribute the light, to position and protect lights and to connect the lights to their power supply.

Luminaire Efficiency

The ratio, expressed as a percentage, of the light output of a luminaire to the light output of the luminaire's lamp(s) (percentage of the light generated by the light source that actually makes it out of the luminaire). Luminaire efficiency accounts for the optical and thermal effects that occur within the luminaire under standard test conditions.

Mean Lumens

The average lumen output of a lamp over its rated life. Mean lumen values for fluorescent and HID lamps are typically measured at 40% of their rated lives.

Mercury Vapor (MV) Lamp

A high-intensity discharge lamp type that uses mercury as the primary light-producing element. Mercury vapor lamps produce light with a CCT from 3000 to 7000 K. Mercury vapor lamps are less efficacious than other HID lamp types, typically producing only 30 to 65 LPW.

Metal Halide (MH) Lamp

A high-intensity discharge lamp type that uses mercury and several halide additives as light-producing elements. MH lamps have better color properties than other HID lamp types because the different additives produce more visible wavelengths, resulting in a more complete spectrum. MH lamps are available with CCTs from 2300 to 5400 K and with CRI values from 60 to 93. Efficacies of MH lamps typically range from 75 to 125 LPW.

Multi-Facet Reflector Lamp (MR Lamp)

Multi-facet reflector lamp, of which the most popular is MR16.

Occupancy Sensor

A device which activates a fixture upon sensing the presence of a person in a space.

Parabolic Aluminized Reflector Lamp (PAR Lamp)

Incandescent PAR lamps are constructed of hard glass with a separate back reflector. Also available in CMH and LED. LED PAR lamps typically have a similar overall shape and beam angle of light, but do not actually use the parabolic reflector.

Photocell

Light-sensitive device used to operate fixtures according to available daylight. They are used to integrate an electric lighting system with a daylighting system so lights operate only when daylighting is insufficient and turn outdoor or security lights on and off at dusk and dawn.

Programmed Start

A method of starting fluorescent lamps, associated with electronic ballasts, where low voltage is applied to the cathode to pre-heat prior to lamp ignition. Recommended for use with occupancy sensors.

Rated Lamp Life

See: Average Rated Life

Recessed Fixture

A fixture mounted in the ceiling. With downlights, only the aperture and trim are visible from below. With fluorescent troffers and luminous ceilings, only the light shield is visible.

R Lamp

Reflector lamp whose interior is coated with a reflecting material so as to direct the light forward.

Relamping

A project where the existing lighting fixtures are cleaned and new lamps installed.

Re-Strike

Refers to the restarting of a previously operating HID lamp shortly after turn off. Typically requires a minimum of 4-15 minutes to restart after turn off.

Retrofit

Upgrading a fixture by installing new lighting fixtures, parts or equipment.

Semi-Specular

A reflective but somewhat diffuse surface.

Soffit

In architecture, the underside of an overhead component. Often used to describe an exterior element under the roofline.

Solid State

Electronics that use semi-conductor chips and circuitry.

Specular

A highly polished or mirrored surface.

Spot Lamp

Reflectorized lamp with a narrow light distribution.

Task Lighting

Lighting directed to a specific area or surface that provides illumination for visual tasks, such as reading, writing, wiring or grinding.

Thermal Characteristics

The manner in which a luminaire manages heat, either dissipating heat or retaining it.

Timer

Device that turns lights on and off at pre-programmed times.

Track Lighting

Lighting system that utilizes multiple fixtures which operate off a track or strip mounted to the wall or ceiling. May be low voltage or line voltage.

Trim

The edge or visible part of a recessed downlight. The finishing section of the exterior of a recessed fixture.

Troffer

Recessed fluorescent fixture for use in a suspended ceiling; derived from the words "trough" and "coffer."

TRT vX.X

Acronym for DLC's Technical Requirements Table followed by version number.

U Lamp

Linear, double-ended fluorescent lamp, usually T8 or T12, bent into a "U" shape.

UL

Underwriters Laboratory. An independent organization whose responsibilities include rigorous testing of electrical products.

Watt

A unit of electrical power.

SOURCES Terms defined in the Glossary were referenced from the following sources:

products.gecurrent.com/sites/products.currentbyge.com/files/documents/document_file/35311-GE-Retail-Lighting-101-eBook.pdf

focusonenergy.com

Lightsearch.com/resources

DEFAULT SYSTEM WATTAGE TABLES

FOR COMMON CFL DOWNLIGHTS

Existing Lamp Configuration	Total System Wattage
(1) 13W CFL	16
(1) 18W CFL	23
(1) 26W CFL	31
(1) 32W CFL	35
(1) 42W CFL	46
(1) 36/39W 2G11 CFL	51
(1) 40W 2G11 CFL	48
(1) 55W 2G11 CFL	58
(2) 13W CFL	32
(2) 18 W CFL	46
(2) 26W CFL	62
(2) 32W CFL	70
(2) 42W CFL	92

FOR COMMON HID SYSTEMS

Existing Lamp Configuration	Total System Wattage
50W HID	65
70W HID	94
100W HID	126
150W HID	179
175W HID	210
250W HID	293
320W HID	356
400W HID	455
1,000W HID	1,079

FOR COMMON LINEAR FLUORESCENT SYSTEMS

	Existing Lamp Configuration	Total System Wattage
4-Foot Fixtures	1L F32 T8 Normal BF	33
	1L F34 T12	39
	1L F40 T12	39
	2L F32 T8 Normal BF	61
	2L FU32T8/6	55
	2L F34 T12	66
	2L F40 T12	79
	2L FU40T12	72
	3L F32 T8 Normal BF	91
	3L F34 T12	103
	3L F40 T12	124
	4L F54 T5HO	234
	4L F32 T8 Normal BF	120
	4L F32 T8 High BF	151
	4L F34 T12	136
	4L F40 T12	153
6L F54 T5HO	355	
6L F32 T8 High BF	224	
8L F32 T8 High BF	291	
8-Foot Fixtures	1L F96T8	61
	2L F96T8	107
	1L F96T12	69
	1L F96T12/HO	115
	2L F96T12	109
	2L F96T12/HO	190

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