

# **Technical Sheet**

# Lighting Fixtures and Controls- Energy Efficient Communities

Effective Date: January 15, 2024

The Pepco Energy Savings for Business Program offers incentives to install energy efficient lighting and lighting controls.

To take advantage of these incentives, you must meet the following eligibility requirements:

- 1. Be a county, state, city, or town government agency
- 2. Be a Pepco customer in the Maryland territory
- 3. Have an existing facility, as new construction is not eligible for this program.
- 4. Not be a temporary account or a vacant facility. These may be eligible for new construction/major renovation incentives.

Multifamily properties are eligible to apply for these incentives as follows. If tenant units are individually metered, incneitves apply only to common areas. Master-metered buildings are offered incentives for tenant units as well as common areas.

### All projects require pre-approval.

You can also contact an approved Service Provider to discuss energy efficient equipment options. If you do not have a contractor or vendor in mind, please visit our website for a list of approved Service Providers.

All projects MUST receive pre-approval before purchasing equipment or beginning work. No amount of existing equipment being replaced may be removed or altered, and no amount of proposed equipment applied for may be purchased and/or installed prior to the issuance of a program pre-approval letter. Please review the program process and eligibility requirements on the program website as well as the Terms and Conditions. Please contact the program office with any questions.

The Lighting Fixtures and Controls Application is intended to be used for approximately one-for-one fixture replacements or efficiency upgrade retrofits in the Prescriptive Program.

# How to Apply:

- 1. The Lighting Fixtures and Controls Workbook, which can be downloaded from the program website, must be completed and submitted to the program via the online <u>Application Center</u>. Pre-approval is required before proceeding. The following supporting information must also be included with the application:
  - ✓ Completed and customer-signed <u>Terms and Conditions (T&Cs)</u>
  - ✓ Manufacturer specification sheets for lamps, ballasts, drivers, and lighting controls
  - ✓ Current Design Lights Consortium (DLC), ENERGY STAR<sup>®</sup> or CEE website product qualification screenshots for products, in PDF format (screenshots not applicable to lighting controls)
- 2. The Program reviews submitted documentation, revises and/or requests additional documentation as necessary. A site inspection may be required as part of the pre-approval process.
- 3. The Program emails the project pre-approval to the customer and Service Provider.
- 4. If the scope of work has changed, then the as-built workbook must be submitted. If your project increases the incentive amount by more than \$2,500 or 10% of the reserved amount whichever is greater a separate application must be submitted for the variance prior to installation and will need to go through the application pre-approval process.
- 5. Once the installation of all proposed equipment is complete and the Pepco customer is satisfied with the equipment and installation, the Pepco customer must sign the program pre-approval letter. The customer-signed pre-approval letter must be uploaded to the online Application Center along with the final detailed invoice(s). The invoice should indicate total project cost, incentive amount, and balance of cost to be paid by customer. The invoice should match the Lighting Fixtures and Controls Workbook.
- 6. The Program may require a post-installation inspection to verify compliance with program rules, accuracy of project documentation, and equipment operation.



#### Lighting Technical Requirements

- ✓ Installations that are not for permanent use are not eligible for incentives (e.g. equipment that plugs into a receptacle).
- ✓ All ENERGY STAR luminaires must be hard-wired. Screw/plug-in lamps and recessed trim kits that screw in are ineligible for these measure codes. Incentives for lamps and recessed trim kits are available through Pepco's Business Instant Discounts program.
- Equipment for each measure code must be selected within the specified "Category," "General Application," and "Primary Use" designations, as classified by the Design Lights Consortium (does not include ENERGY STAR measures).
- Wattage, Efficacy, and Lumens values for the proposed equipment are based on "Reported Data" and must be entered exactly as indicated on the Design Lights Consortium (DLC) Qualified Products List (QPL) and ENERGY STAR Qualified Products List.
- If LED linear lamps (TLEDs) are being installed and fewer lamps than what is currently installed are proposed for installation (i.e. installing a single lamp in a 2-lamp fixture), the luminaires must be permanently de-lamped and the TLEDs re-centered in luminaires through the use of UL/CSA-listed retrofit kits specifically made for this purpose.
- Private labeled equipment must be listed on the electronic lighting worksheet in the designated manufacturer and model columns as "Original (as listed on DLC)/Private Labeled" make and model numbers. Spec sheet submissions must include both the spec sheet for the original equipment and the spec sheet for the private labeled equipment with a signed letter attached by the original equipment manufacturer that validates the equipment is the same.
- To qualify for a new fixture incentive, the existing luminaire must be removed and the new luminaire must be independently mounted in a manner that aligns with DLC Primary Use Designation for the luminaire type. Any application that does not align with DLC Primary Use Designation does not qualify for a new fixture incentive.
- ✓ A retrofit of existing equipment is any application that makes use of the existing housing luminaire as aligned by DLC Primary Use Designation. Retrofit equipment must be listed under DLC Primary Use Designation to qualify for a corresponding measure code.
- The program is intended for one-for-one replacement. If a lighting project exceeds the one-for-one cap, written authorization by the program is required prior to application submission.
- A retrofit of existing equipment now includes existing LED luminaires and lamps, including troffers, linear ambient luminaires, high bays, low bays, exterior luminaires and fixtures retrofitted with TLED lamps. All proposed equipment must meet all stated technical criteria to qualify for an incentive.

## Specific LED Requirements

- Equipment must be listed on the ENERGY STAR Qualified Products List to apply for ENERGY STAR measure codes (RL 171-173). All other lighting equipment must be listed on the DLC's Qualified Product List.
- Type A and Type B LED linear replacement lamps (TLEDs) and LED mogul screw-based replacement for an HID lamp are not eligible for incentives. Only Type C equipment, as defined by the DLC, is eligible for incentives, as outlined in measure codes RL 181 and RL 182.
- Incentive for measure codes RL111 and RL 167 applies to contiguous linear feet of fixture installed, not for nominal linear feet. The measure code should only count the linear feet of a luminaire as measured from end to end, whether as a long contiguous unit or modular units connected to form a chain. Non-contiguous configurations of modular units can claim a per-foot incentive for the length of the assembly at its longest point from end to end of any given module.
- To qualify for high/low bay fixture incentives (RL 141 RL 145), luminaires must be installed greater than or equal to 15 ft. above finished floor (AFF).
- If project includes replacement of existing LED luminaires, photos of existing LED luminaire nameplate information, or specification sheets for the existing fixtures, are required to verify baseline equipment specifications, such as wattage.

### Lighting Control Technical Requirements

- ✓ To be eligible for lighting incentives, lighting controls are required to be installed as follows:
- ✓ Occupancy/Vacancy controls are required to be installed in the following areas:
  - ✓ Classrooms/lecture/training rooms
- ✓ Janitorial closets
- ✓ Restrooms

- ✓ Conference/meeting rooms✓ Copy/print rooms
- ✓ Employee lunch and break rooms
- ✓ Locker rooms
   ✓ Lounges
- ✓ Private offices
- ✓ Storage rooms
- ✓ Warehouses
  - ✓ Other spaces 300 sq. ft. or less that are enclosed by floor-toceiling height partitions
- Lighting controls are not required in the following areas: 1) areas designated as security or emergency areas that are required to be continuously lit 2) interior exit stairways, interior exit ramps, and exit passageways 3) electrical rooms and 4) emergency egress lighting that is normally off.
- Spaces with existing control types are not eligible for control incentives. Please indicate when entering your equipment if there are existing controls within a space.
- Exterior luminaires require a functioning time clock or photocell to qualify for lighting incentives, but are not eligible for daylight control incentives. They are eligible for networked lighting control and/or occupancy/vacancy control incentives.

Networked Lighting Control Requirements

- ✓ To be eligible for NLC, the following control strategies are required:
- $\checkmark$  Occupancy/vacancy control must be enabled for all fixtures controlled by a NLC system
- All fixtures located in a sidelight or toplight daylight zone must enable daylight harvesting control strategies
- Spaces with existing control types are not eligible for control incentives. Please indicate when entering your equipment if there are existing controls within a space.
- ✓ Where daylight is not required, at least one additional strategy is required to be implemented.
- To be eligible, the NLC detail tab must be completed, specifying the strategies implemented and in which locations. NLC systems that fail to implement the minimum number of strategies, or fail to complete the NLC detail tab, will qualify for standard fixture-mounted occupancy/vacancy sensor incentives.

	Lighting Measures and Incentives										
	Measure Code	Proposed Measure	Min. Watts Reduced	Reported Efficacy (LM/W)	Incentive	Technical Requirements					
Troffer Luminaires	RL 101	New LED linear recessed or surface troffer for 2x2 and 1x4 luminaires	15	110	\$84/fixture	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use – <ul> <li>2x2 Luminaries for Ambient Lighting of Interior</li> <li>Commercial Spaces</li> <li>1x4 Luminaires for Ambient Lighting of Interior</li> <li>Commercial Spaces</li> </ul> </li> <li>Fixture housing must be a minimum of 1.5 inches in height</li> <li>Troffers less than 1.5 inches must apply for RL 103</li> <li>Product spec sheets must show dimensions</li> </ul>					
LED Troffe	RL 102 New LED Inear recessed or RL 102 Surface 20 110 \$112/fixture troffer for 2x4 Iuminaires	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use – <ul> <li>2x4 Luminaires for Ambient Lighting of Interior</li> <li>Commercial Spaces</li> </ul> </li> <li>Fixture housing must be a minimum of 1.5 inches in height</li> <li>Troffers less than 1.5 inches must apply for RL 104</li> <li>Product spec sheets must show dimensions</li> </ul>									

	Lighting Measures and Incentives (Continued)									
	Measure Code	Proposed Measure	Min. Watts Reduced	Reported Efficacy (LM/W)	Incentive	Technical Requirements				
LED Flat Planel Luminaires	RL 103	New LED flat panel for 2x2 and 1x4 luminaries	15	110	\$56/panel	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use –         <ul> <li>2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces</li> <li>1x4 Luminaires for Ambient Lighting of Interior Commercial Spaces</li> </ul> </li> <li>Product spec sheets must show dimensions</li> </ul>				
LED Flat Pl	RL 104	New LED flat panel for 2x4 luminaries	20	110	\$56/panel	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use –         <ul> <li>2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces</li> </ul> </li> <li>Product spec sheets must show dimensions</li> </ul>				
ell Luminaires	RL 111A	New LED linear ambient luminaire with direct and indirect components or VaporTight, min. IP65	5	110	\$20/foot	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Linear Ambient</li> <li>DLC Primary Use –         <ul> <li>Direct Linear Ambient Luminaires</li> <li>Linear Ambient Luminaires w/ Indirect component</li> </ul> </li> </ul>				
LED Linear Ambient/Stairwell Luminaires	RL 111B	New LED linear ambient luminaire – strip or wrap fixture	5	110	\$16/foot	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Linear Ambient</li> <li>DLC Primary Use –         <ul> <li>O Direct Linear Ambient Luminaires</li> <li>Linear Ambient Luminaires w/ Indirect component</li> </ul> </li> </ul>				
LED Linear	RL 112	New LED stairwell luminaire	10	100	\$112/fixture	<ul> <li>Fixture must be installed in stairwell.</li> <li>DLC Category – Outdoor</li> <li>DLC General Application – Outdoor – Low, Mid, High, or Very High Output</li> <li>DLC Primary Use –         <ul> <li>Stairwell and Passageway Luminaires</li> </ul> </li> </ul>				
ED Interior Directional Luminaires	RL 121	New LED wall wash luminaire	10	75	\$34/foot	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Interior Directional</li> <li>DLC Primary Use –         <ul> <li>Wall-wash Luminaires</li> </ul> </li> </ul>				
LED Interior Directional Luminaires	RL 122	New LED track/mono-point luminaire	25	75	\$45/head	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Interior Directional</li> <li>DLC Primary Use –         <ul> <li>Track or Mono-point Luminaires</li> </ul> </li> </ul>				
uminaires	RL 131	New LED display case luminaire	20	70	\$45/fixture	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Display Case</li> <li>DLC Primary Use –         <ul> <li>O Display Case Luminaires</li> </ul> </li> </ul>				
LED Display Case Luminaires	RL 132	New LED display case luminaire in reach-in coolers/freezers	15	85	\$56/fixture	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – Display Case</li> <li>DLC Primary Use –         <ul> <li>Horizontal Refrigeration Case Luminaires</li> <li>Vertical Refrigerated Case Luminaires</li> </ul> </li> </ul>				

	Lighting Measures and Incentives (Continued)									
	Measure Code	Proposed Measure	Min. Watts Reduced	Reported Efficacy (LM/W)	Incentive	Technical Requirements				
LED High/Low Bay Luminaires	RL 141	New LED high/low-bay luminaire – DLC reported lumens between 5,000 lm – 9,999 lm	50	110	\$224/fixture	<ul> <li>DLC Category – Indoor</li> <li>DLC General Application – High-Bay</li> <li>DLC Primary Use –         <ul> <li>High-Bay Luminaires for Commercial and Industrial Buildings</li> <li>Low-Bay Luminaires for Commercial and Industrial Building</li> <li>High-Bay Aisle Luminaires</li> </ul> </li> </ul>				
	RL 142	New LED high/low-bay luminaire – DLC reported lumens between 10,000 lm – 19,999 lm	75	110	\$336/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced cannot be achieved, please apply for RL 141.</li> <li>DLC Category – Indoor</li> <li>DLC General Application – High-Bay</li> <li>DLC Primary Use –         <ul> <li>High-Bay Luminaires for Commercial and Industrial Buildings</li> <li>Low-Bay Luminaires for Commercial and Industrial Buildings</li> <li>High-Bay Aisle Luminaires</li> </ul> </li> </ul>				
	RL 143	New LED high/low-bay luminaire – DLC reported lumens between 20,000 lm – 29,999 lm	100	110	\$448/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced cannot be achieved, please apply for RL 142.</li> <li>DLC Category – Indoor</li> <li>DLC General Application – High-Bay</li> <li>DLC Primary Use –         <ul> <li>High-Bay Luminaires for Commercial and Industrial Buildings</li> <li>Low-Bay Luminaires for Commercial and Industrial Buildings</li> <li>High-Bay Aisle Luminaires</li> </ul> </li> </ul>				
	RL 144	New LED high/low-bay luminaire – DLC reported lumens between 30,000 lm – 39,999 lm	150	110	\$560/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced cannot be achieved, please apply for RL 143.</li> <li>DLC Category – Indoor</li> <li>DLC General Application – High-Bay</li> <li>DLC Primary Use –         <ul> <li>High-Bay Luminaires for Commercial and Industrial Buildings</li> <li>Low-Bay Luminaires for Commercial and Industrial Buildings</li> <li>High-Bay Aisle Luminaires</li> </ul> </li> </ul>				
	RL 145	New LED high/low-bay luminaire – DLC reported lumens between 40,000 lm or more	400	110	\$672/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced cannot be achieved, please apply for RL 144.</li> <li>DLC Category – Indoor</li> <li>DLC General Application – High-Bay</li> <li>DLC Primary Use –         <ul> <li>High-Bay Luminaires for Commercial and Industrial Buildings</li> <li>Low-Bay Luminaires for Commercial and Industrial Buildings</li> <li>High-Bay Aisle Luminaires</li> </ul> </li> </ul>				

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	Measure Code	Proposed Measure	Min. Watts Reduced	Reported Efficacy (LM/W)	Incentive	Technical Requirements
	RL 151	New LED exterior luminaire – DLC reported lumens between 4,999 or less	40	90	\$168/fixture	<ul> <li>DLC Category – Outdoor</li> <li>DLC General Application – Outdoor – Low Output</li> <li>DLC Primary Use –         <ul> <li>Outdoor Pole/Arm-mounted Area and Roadway Luminaires</li> <li>Outdoor Pole/Arm-mounted Decorative Luminaires</li> <li>Outdoor Pole/Arm-mounted Decorative Luminaires</li> <li>Outdoor Full-Cutoff Wall-mounted Area Luminaires</li> <li>Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires</li> <li>Bollards</li> <li>Parking Garage Luminaires</li> <li>Fuel Pump Canopy Luminaires</li> <li>Architectural Flood and Spot Luminaires</li> <li>Landscape/Accent Flood and Spot Luminaires</li> </ul> </li> </ul>
LED Exterior Luminaires	RL 152	New LED exterior luminaire – DLC reported lumens between 5,000 lm – 9,999 lm	125	95	\$280/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced and/or efficacy cannot be obtained, please apply for RL 151.</li> <li>DLC Category – Outdoor</li> <li>DLC General Application – Outdoor – Mid Output</li> <li>DLC Primary Use –         <ul> <li>Outdoor Pole/Arm-mounted Area and Roadway Luminaires</li> <li>Outdoor Pole/Arm-mounted Decorative Luminaires</li> <li>Outdoor Full-Cutoff Wall-mounted Area Luminaires</li> <li>Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires</li> <li>Bollards</li> <li>Parking Garage Luminaires</li> <li>Architectural Flood and Spot Luminaires</li> <li>Landscape/Accent Flood and Spot Luminaires</li> </ul> </li> </ul>
	RL 153	New LED exterior luminaire – DLC reported lumens between 10,000 lm – 19,999 lm	250	100	\$336/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced and/or efficacy cannot be obtained, please apply for RL 152.</li> <li>DLC Category – Outdoor</li> <li>DLC General Application – Outdoor – High Output</li> <li>DLC Primary Use –</li> <li>Outdoor Pole/Arm-mounted Area and Roadway Luminaires</li> <li>Outdoor Pole/Arm-mounted Decorative Luminaires</li> <li>Outdoor Full-Cutoff Wall-mounted Area Luminaires</li> <li>Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires</li> <li>Bollards <ul> <li>Parking Garage Luminaires</li> <li>Architectural Flood and Spot Luminaires</li> </ul> </li> </ul>

			l	ighting Measur	res and Incentives	(Continued)
	Measure Code	Proposed Measure	Min. Watts Reduced	Reported Efficacy (LM/W)	Incentive	Technical Requirements
LED Exterior Luninaires (Continued)	RL 154	New LED exterior luminaire – DLC reported lumens between 20,000 lm – 29,999 lm	400	100	\$448/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced cannot be obtained, please apply for RL 153.</li> <li>DLC Category – Outdoor</li> <li>DLC General Application – Outdoor – High Output</li> <li>DLC Primary Use – <ul> <li>Outdoor Pole/Arm-mounted Area and Roadway Luminaires</li> <li>Outdoor Pole/Arm-mounted Decorative Luminaires</li> <li>Outdoor Full-Cutoff Wall-mounted Area Luminaires</li> <li>Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires</li> <li>Bollards</li> <li>Parking Garage Luminaires</li> <li>Architectural Flood and Spot Luminaires</li> <li>Landscape/Accent Flood and Spot Luminaires</li> </ul> </li> </ul>
	RL 155	New LED exterior luminaire – DLC reported lumens between 30,000 lm – 39,999 lm	550	100	\$560/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced cannot be obtained, please apply for RL 154.</li> <li>DLC Category – Outdoor</li> <li>DLC General Application – Outdoor – Very High Output</li> <li>DLC Primary Use – <ul> <li>Outdoor Pole/Arm-mounted Area and Roadway Luminaires</li> <li>Outdoor Pole/Arm-mounted Decorative Luminaires</li> <li>Outdoor Full-Cutoff Wall-mounted Area Luminaires</li> <li>Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires</li> <li>Bollards</li> <li>Parking Garage Luminaires</li> <li>Architectural Flood and Spot Luminaires</li> <li>Landscape/Accent Flood and Spot Luminaires</li> </ul> </li> </ul>
	RL 156	New LED exterior luminaire – DLC reported lumens between 40,000 lm or more	700	100	\$672/fixture	<ul> <li>If the indicated lumen output is needed and the min. watts reduced cannot be obtained, please apply for RL 155.</li> <li>DLC Category – Outdoor</li> <li>DLC General Application – Outdoor – Very High Output</li> <li>DLC Primary Use –         <ul> <li>Outdoor Pole/Arm-mounted Area and Roadway Luminaires</li> <li>Outdoor Pole/Arm-mounted Decorative Luminaires</li> <li>Outdoor Full-Cutoff Wall-mounted Area Luminaires</li> <li>Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires</li> <li>Bollards</li> <li>Parking Garage Luminaires</li> <li>Laminaires</li> <li>Landscape/Accent Flood and Spot Luminaires</li> </ul> </li> </ul>



	Lighting Measures and Incentives (Continued)										
	Measure	Proposed	Min.	Reported							
	Code	Measure	Watts Reduced	Efficacy (LM/W)	Incentive	Technical Requirements					
	RL 161	LED linear retrofit kit for 2x2 and 1x4 fixtures	15	110	\$28/kit	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use –         <ul> <li>Linear Retrofit Kits for 2x2 Luminaires</li> <li>Linear Retrofit Kits for 1x4 Luminaires</li> </ul> </li> </ul>					
	RL 162	LED linear retrofit kit for 2x4 fixtures	20	110	\$50/kit	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use –         <ul> <li>Linear Retrofit Kits for 2x4 Luminaires</li> </ul> </li> </ul>					
	RL 163	LED integrated retrofit kit for 2x2 and 1x4 fixtures	15	110	\$78/kit	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use – <ul> <li>Integrated Retrofit Kits for 2x2 Luminaires</li> <li>Integrated Retrofit Kits for 1x4 Luminaires</li> <li>Must be a minimum of 1.5 inches in height</li> <li>Integrated Kits less than 1.5 inches must use RL 165</li> </ul> </li> </ul>					
	RL 164	LED integrated retrofit kit for 2x4 fixtures	20	110	\$123/kit	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use –         <ul> <li>Integrated Retrofit Kits for 2x4 Luminaires</li> <li>Must be a minimum of 1.5 inches in height</li> <li>Integrated Kits less than 1.5 inches must use RL 166</li> </ul> </li> </ul>					
it Kits	RL 165	LED integrated flat panel retrofit kit for 2x2 and 1x4 fixtures	15	110	\$22/panel kit	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use –         <ul> <li>o Integrated Retrofit Kits for 2x2 and 1x4 Luminaires</li> </ul> </li> </ul>					
LED Retrofit Kits	RL 166	LED integrated flat panel retrofit kit for 2x4 fixtures	20	110	\$45/panel kit	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – Troffer</li> <li>DLC Primary Use –         <ul> <li>Integrated Retrofit Kits for 2x4 Luminaires</li> </ul> </li> </ul>					
	RL 167	LED retrofit kit for ambient luminaire	5	110	\$17/foot	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – Linear Ambient</li> <li>DLC Primary Use –         <ul> <li>Retrofit Kits for Direct Linear Ambient Luminaires</li> </ul> </li> </ul>					
	RL 168	LED retrofit kit for high/low- bay luminaire	40	110	\$112/kit	<ul> <li>DLC Category – Indoor Retrofit Kit</li> <li>DLC General Application – High-Bay</li> <li>DLC Primary Use –         <ul> <li>Retrofit Kits for High-Bay Luminaires for Commercial and Industrial Buildings</li> <li>Retrofit Kits for Low-Bay Luminaires for Commercial and Industrial Buildings</li> </ul> </li> </ul>					
	RL 169	LED retrofit kit for exterior luminaire	40	110	\$112/kit	<ul> <li>DLC Category – Outdoor Retrofit Kit</li> <li>DLC General Application – Outdoor – Low, Mid, High, or Very High Output</li> <li>DLC Primary Use –         <ul> <li>Retrofit Kits for Outdoor Pole/Arm-mounted Areas and Roadway Luminaires</li> <li>Retrofit Kits for Pole/Arm-mounted Decorative Luminaires</li> <li>Retrofit Kits for Large Outdoor Pole/Arm-mounted Area and Roadway Luminaires</li> <li>Retrofit Kits for Outdoor Full-Cutoff Wall-mounted Area Luminaires</li> <li>Retrofit Kits for Parking Garage Luminaires</li> <li>Retrofit Kits for Fuel Pump Canopy Luminaires</li> </ul> </li> </ul>					

	Lighting Measures and Incentives (Continued)									
	Measure Code	Proposed Measure	Min. Watts Reduced	Reported Efficacy (LM/W)	Incentive	Technical Requirements				
S	RL 171	New LED ENERGY STAR fixture – 1,499 Im or less	10	70	\$34/fixture	<ul> <li>ENERGY STAR fixtures must either be inseparable or be packaged with an ENERGY STAR qualifying lamp from the manufacturer.</li> <li>Screw or plug-in based recessed trim kits are not eligible for this measure.</li> </ul>				
LED ENERGY SAR Fixstures	RL 172	New LED ENERGY STAR fixture – 1,500 Im – 2,999 Im	25	70	\$56/fixture	<ul> <li>ENERGY STAR fixtures must either be inseparable or be packaged with an ENERGY STAR qualifying lamp from the manufacturer.</li> <li>Screw or plug-in based recessed trim kits are not eligible for this measure.</li> <li>If the indicated lumen output is needed and the min. watts reduced cannot be obtained, please apply for RL 171.</li> </ul>				
	RL 173	New LED ENERGY STAR fixture – 3,000 lm or greater	50	70	\$112/fixture	<ul> <li>ENERGY STAR fixtures must either be inseparable or be packaged with an ENERGY STAR qualifying lamp from the manufacturer.</li> <li>Screw or plug-in based recessed trim kits are not eligible for this measure.</li> <li>If the indicated lumen output is needed and the min. watts reduced cannot be obtained, please apply for RL 172.</li> </ul>				
	RL 181	Type C LED linear lamp and new LED driver	10	110	\$4/lamp	<ul> <li>DLC Category – Linear Replacement Lamps</li> <li>DLC General Application –</li> <li>Four-Foot Linear Replacement Lamps</li> <li>Two-Foot Linear Replacement Lamps</li> <li>U-Bend Replacement Lamps</li> <li>DLC Primary Use – <ul> <li>2-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>3-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>4-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> </ul> </li> </ul>				
LED Replacement Lamps	RL 182	Type C LED mogul screw- base replacement for an HID lamp and new external driver	60	110	\$34/lamp	<ul> <li>DLC Category – Mogul Screw-Base Replacements for HID Lamps</li> <li>DLC General Application – <ul> <li>Outdoor – Low, Mid, or High Output</li> <li>High-Bay</li> </ul> </li> <li>DLC Primary Use – <ul> <li>Replacement Lamps for Outdoor Pole/Arm-mounted Area and Roadway Luminaires (Type C)</li> <li>Replacement Lamps for Outdoor Pole/Arm-mounted Decorative Luminaires (Type C)</li> <li>Replacement Lamps for Outdoor Full-Cutoff Wall-mounted Area Luminaires (Type C)</li> <li>Replacement Lamps for Parking Garage Luminaires (Type C)</li> <li>Replacement Lamps for Fuel Pump Canopy Luminaires (Type C)</li> <li>Replacement Lamps for High-Bay Luminaires (Type C)</li> </ul> </li> </ul>				

Controls Measures and Incentives										
	Measure	Aeasure Proposed Min. Watts Incentive Caps		ve Caps						
	Code	Measure	Controlled	Ceiling or Wall Mounted	Wall Switch	Incentive	Technical Requirements			
	LC 101	Networked lighting control w/ local or cloud server required	20	N/A	N/A	\$67/fixture	<ul> <li>Equipment must be listed on DLC NLC Qualified Products List.</li> <li>The DLC NLC Qualified Products List indicates the system requires a Local or Cloud Server to operate.</li> </ul>			
Networked Lighting Controls	LC 102	Networked lighting control w/ local or cloud server required – lower wattage fixtures	N/A	N/A	N/A	\$34/fixture	<ul> <li>Equipment must be listed on DLC NLC Qualified Products List.</li> <li>The DLC NLC Qualified Products List indicates the system requires a Local or Cloud Server to operate.</li> </ul>			
Networked Li	LC 103	Networked lighting control (no server required)	20	N/A	N/A	\$45/fixture	<ul> <li>Equipment must be listed on DLC NLC Qualified Products List.</li> <li>The DLC NLC Qualified Products List indicates the system does not require a Local or Cloud Server to operate.</li> </ul>			
	LC 104	Networked lighting control (no server required) – lower wattage fixtures	N/A	N/A	N/A	\$22/fixture	<ul> <li>Equipment must be listed on DLC NLC Qualified Products List.</li> <li>The DLC NLC Qualified Products List indicates the system does not require a Local or Cloud Server to operate.</li> </ul>			
Dual Daylight/ Occupancy Controls	LC 111	Dual daylight and occupancy sensor (DOS)	20	\$120/control	\$80/control	\$45/fixture	<ul> <li>Control must have the capability to control fixtures based on both occupancy and daylight.</li> <li>Control must automatically turn fixtures on</li> </ul>			
Dual Daylight Cont	LC 112	Dual daylight and occupancy sensor (DOS) – lower wattage fixtures	N/A	\$120/control	\$80/control	\$22/fixture	<ul> <li>and off based on occupancy.</li> <li>Control must continuously dim fixtures located in a Daylight Zone (see General Control Requirements).</li> </ul>			
Daylight Controls	LC 121	Daylight continuous dimming control	20	\$120/control	\$80/control	\$45/fixture	<ul> <li>Control must continuously dim fixtures located in a Daylight Zone (see General</li> </ul>			
	LC 122	Daylight continuous dimming control – lower wattage fixtures	N/A	\$120/control	\$80/control	\$22/fixture	Control Requirements) in response to ambient daylight			

	Controls Measures and Incentives (Continued)										
			Incenti	ve Caps							
	Measure Code	Proposed Measure	Min. Watts Controlled	Ceiling or Wall Mounted	Wall Switch	Incentive	Technical Requirements				
	LC 131	Vacancy control	20	\$75/control	\$50/control	\$45/fixture	<ul> <li>Control must be set to "Manual ON" so fixtures controlled require a person to manually turn them ON.</li> </ul>				
Occupancy/Vacancy Controls	LC 132	Vacancy control – lower wattage fixtures	N/A	\$75/control	\$50/control	\$22/fixture	<ul> <li>The control must automatically turn off light fixtures after preset time has elapsed where no occupancy is detected.</li> </ul>				
Occupancy/Va	LC 133	Occupancy control	20	\$60/control	\$40/control	\$45/fixture	Control must automatically turn fixtures on				
	LC 134	Occupancy control – lower wattage fixtures	N/A	\$60/control	\$40/control	\$22/fixture	and off based on occupancy.				

Pepco Energy Savings for Business Program

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