



**TOWN OF CHAPEL HILL
Planning Department**

405 Martin Luther King Jr. Blvd.
Chapel Hill, NC 27514-5705

phone (919) 969-5066 fax (919) 969-2014
www.townofchapelhill.org

**Community Design Commission
Final Plan Application**

This application should be used to submit Final Plan applications to the Community Design Commission including building elevations, site lighting, and alternative buffers. For assistance with this application, please contact the Chapel Hill Planning Department at (919) 969-5066 or at planning@townofchapelhill.org.

Section A: Property Information

Property Address:	1810 Old Durham Chapel Hill Road. Chapel Hill, NC 27514
Zoning:	CC-C (Community Commercial- Conditional)

Type of Application

Building Elevation Alternative Buffers

Section B: Applicant Information (for contact purposes)

Name:	Pennoni- Justin Brown, PE			
Address:	401 Providence Road, Suite 200			
City:	Chapel Hill	State:	NC	Zip Code: 27514
Phone Number:	919-929-1173	Email:	jjbrown@pennoni.com	

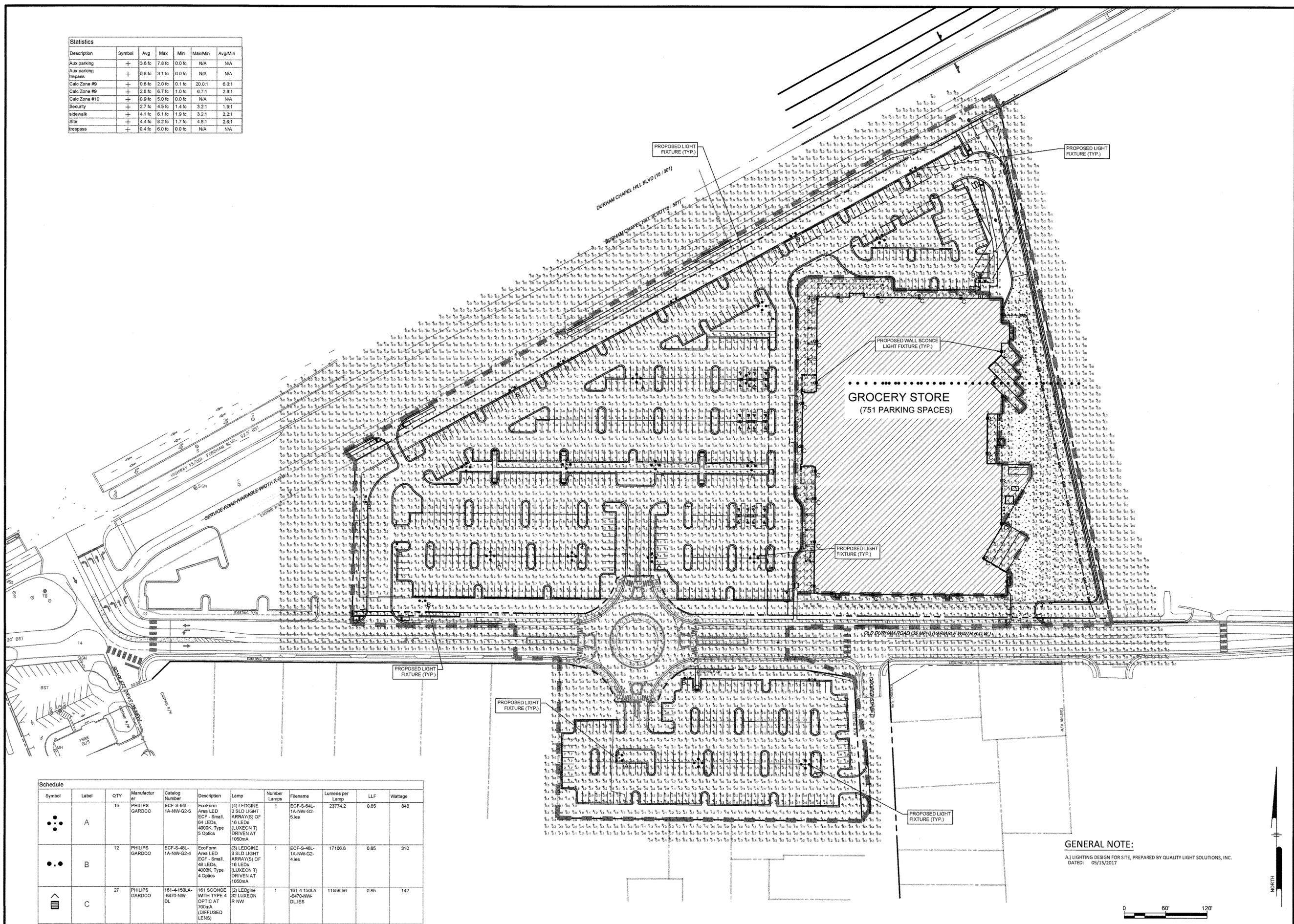
The undersigned applicant hereby certifies that: a) the property owner authorizes the filing of this application; b) authorizes on-site review by authorized staff; and c) to the best of their knowledge and belief, all information supplied with this application is true and accurate.

Signature:  Date: January 23, 2018

Parcel Identifier Number (PIN):	9799782879,9799782474,9799780494, 9799780414
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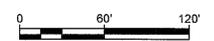
The Community Design Commission meets regularly on the fourth Tuesday of each month. For confirmation of a meeting date and the placement of your request on the agenda, please contact the Planning Department at (919) 969-5066.

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Aux parking	+	3.6 fc	7.8 fc	0.0 fc	N/A	N/A
Aux parking repass	+	0.8 fc	3.1 fc	0.0 fc	N/A	N/A
Calc Zone #9	+	0.6 fc	2.0 fc	0.1 fc	20.0:1	6.0:1
Calc Zone #9	+	2.8 fc	6.7 fc	1.0 fc	6.7:1	2.8:1
Calc Zone #10	+	0.9 fc	5.0 fc	0.0 fc	N/A	N/A
Security	+	2.7 fc	4.5 fc	1.4 fc	3.2:1	1.9:1
sidewalk	+	4.1 fc	6.1 fc	1.9 fc	3.2:1	2.2:1
Site	+	4.4 fc	8.2 fc	1.7 fc	4.8:1	2.6:1
trespass	+	0.4 fc	6.0 fc	0.0 fc	N/A	N/A



Schedule											
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	LLF	Wattage
•••	A	15	PHILIPS GARDCO	ECF-S-64L-1A-NW-G2-5	EcoForm Area LED ECF - Small, 64 LEDs, 4000K, Type 5 Optics	(4) LEDLINE 3 SLD LIGHT ARRAY(S) OF 16 LEDs (LUXEON T) DRIVEN AT 1050mA	1	ECF-S-64L-1A-NW-G2-5ies	23774.2	0.85	848
••	B	12	PHILIPS GARDCO	ECF-S-48L-1A-NW-G2-4	EcoForm Area LED ECF - Small, 48 LEDs, 4000K, Type 4 Optics	(3) LEDLINE 3 SLD LIGHT ARRAY(S) OF 16 LEDs (LUXEON T) DRIVEN AT 1050mA	1	ECF-S-48L-1A-NW-G2-4ies	17106.8	0.85	310
^	C	27	PHILIPS GARDCO	161-4-150LA-6470-NW-DL	161 SCONCE WITH TYPE 4 OPTIC AT 700mm (DIFFUSED LENS)	(2) LEDLINE 32 LUXEON R NW	1	161-4-150LA-6470-NW-DLies	11556.56	0.85	142

GENERAL NOTE:
 A) LIGHTING DESIGN FOR SITE, PREPARED BY QUALITY LIGHT SOLUTIONS, INC.
 DATED: 05/15/2017



**PRELIMINARY
 NOT FOR CONSTRUCTION**

Pennoni
 Firm License F-1287
PENNONI ASSOCIATES INC.
 401 Providence Road #200
 Chapel Hill, NC 27514
 T 919.929.1173 F 919.493.6546

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

PROPOSED GROCERY STORE
 1814 DURHAM-CHAPEL HILL BLVD
 CHAPEL HILL, NC 27514
LIGHTING PLAN
 LEON CAPITAL GROUP
 5970 FAIRVIEW ROAD, SUITE 450
 CHARLOTTE, NC 28210

NO.	DATE	REVISIONS	BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSION OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS RISK AND WITHOUT LIABILITY OR LEGAL REMEDY TO PENNONI ASSOCIATES. AND OWNERS SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT LCGR1601
DATE 2017-12-01
DRAWING SCALE 1"= 60'
DRAWN BY SAK
APPROVED BY JUB

CS2201
 SHEET 11 OF 25



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Qty: _____
 Notes: _____



Philips Gardco EcoForm LED luminaire combines economy with performance. Capable of delivering up to 20,000 lumens or more in a compact, low profile housing, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems, including motion response and wireless controls are available for further energy savings during off peak hours.

Ordering guide

example: ECF-APD-MRO-1-4-75LA-NW-120-NP-LF

Prefix	Controls	Mounting	Optical System	Wattage	Color Temp	Voltage	Finish	Options
ECF								
ECF EcoForm	— Standard luminaire (leave blank) DIM 0-10V Dimming APD ¹ Auto Profile Dimming APD-MRO ² Auto Profile Dimming and Motion Response Override pole mounted motion sensor APD-MRI ^{2,3} APD with Motion Response Override luminaire sensor MRI ^{2,3} Motion Response at 50% low luminaire sensor MR50 ² Motion Response at 50% low, pole mounted sensor Wireless Controls (Remote wireless controller available. See p.2 for details) LLC2 ^{1,4} #2 lens for 8' mounting heights LLC3 ^{1,4} #3 lens for 9-20' mounting heights LLC4 ^{1,4} #4 lens for 21-40' mounting heights	1 Standard 2 2@180 2@90 2@90 3 3@90 3@120 3@120 4 4@90 WS Wall mount including surface conduit rear entry permitted MA Mast Arm Fitter (requires 2-3/8" O.D. Mast Arm)	2 Type 2 3 Type 3 4 Type 4 5 Type 5	530 mA 55LA-3253 ¹ 75LA-4853 100LA-6453 700mA 70LA-3270 105LA-4870 135LA-6470 1050mA 105LA-321A ¹ 160LA-481A 215LA-641A	CW Cool White 5,700K 70 CRI (nominal) NW Neutral White 4,000K 70 CRI (nominal) WW ⁵ Warm White 3,000K 70 CRI (nominal)	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V 50hz/60hz HVU 347-480V 50hz/60hz	BRP Bronze Paint BLP Black Paint WP White Paint NP Natural Paint OC Optional Color Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) SC Special color Specify, must supply color chip. Requires factory quote.	TL Tool-Less entry and driver removal hardware TB ³ Terminal Block IS ⁶ Internal Shield LF ⁷ Line Fusing LFC ⁷ Line Fusing for Canada PC ^{5,7,8} Receptacle with Photocell (Includes PCR5) PCB ^{4,7,8} Photocell Button PCRS ^{4,9,10} Photocell Receptacle only with 2 dimming connections PCR7 ^{4,10,11} Photocell Receptacle only with 2 dimming and 2 auxiliary connections RAM Retrofit Arm Mount kit PTF2 ¹² Pole Top Fitter for 2 3/8"- 3" Tenon PTF3 ¹² Pole Top Fitter for 3"- 3 1/2" Tenon PTF4 ¹² Pole Top Fitter for 3 1/2"- 4" Tenon RPA ¹³ Round Pole Adapter for 3"- 3.9" O.D. BD Bird Deterrent (field installed only)

1. Available in 120V-277V Voltages only (UNV, 120, 208, 240 & 277).
 2. MR50 and APD-MRO luminaires require one motion sensor per pole, ordered separately. See page 2 for Accessories. Available in 120V or 277V only.
 3. ECF-MRI requires outboard sensor when used with Terminal Block (TB) Option.
 4. LLC2/LLC3/LLC4 Wireless Controls are not configurable with PC/PCB/PCR5/PCR7 Options. See page 6-7 for more info.
 5. Contact factory for lead times on warm white.
 6. Not configurable with Type 5 (5) Optics.
 7. Not configurable with 120-277V (UNV) Voltage. Voltage must be specified.
 8. Not configurable with 480V (480) Voltage.
 9. Works with 3-pin or 5-pin NEMA photocell/dimming device.
 10. If ordered with DIM, APD, MRI, MR50, APD-MRI, APD-MRO, dimming will not be connected to NEMA receptacle.
 11. Works with 3-pin or 5-pin NEMA photocell/dimming device and auxiliary connections are not connected (for future use only).
 12. Not configurable with 3@120 (3@120) Mounting.
 13. No adaptor required for 4" round poles. RPAs provided with Black Paint standard.

ECF EcoForm LED luminaire

EcoForm Accessories (order separately)

FS1R-100

MR hand held programmer

For use with 'MRI' motion response when field programming is required. If desired, only one is needed per job.

MS-A-120V

120V Input Area Motion Sensor

For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

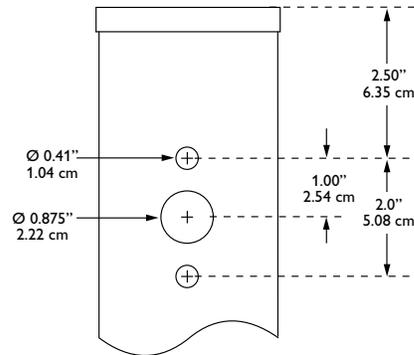
MS-A-277V

277V Input Area Motion Sensor

For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

Note: Motion Sensors are ordered separately, with one (1) motion sensor required per pole location for MR50 or APD-MRO luminaires. See Luminaire Configuration Information on page 5 for more details. Area motion sensor color is Arctic White. MRI and APD-MRI luminaires include an integral motion sensor.

EcoForm Drill Template (standard arm mount)



EcoForm Wireless Controls Accessories (for wall or pole mount)^{1,2,3,4}

LLCR2-(F)

Standalone wall or pole wireless controller with #2 Lens.

LLCR3-(F)

Standalone wall or pole wireless controller with #3 Lens.

LLCR4-(F)

Standalone wall or pole wireless controller with #4 Lens.

1. When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size)
2. 120-277V only.
3. Must specify finish (F=Specify matching finish)
4. Luminaire configuration must include 0-10V Dimming 'ECF-DIM' option when Wireless Controls Accessories are specified

LED Wattage and Lumen Values (standard EcoForm luminaire)

Ordering Code	No. of LED Modules (16 LEDs per Module)	Total LEDs	LED Current (mA)	Average System Watts ⁵	Color Temp.	Type 2			Type 3			Type 4			Type 5		
						Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating	Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating	Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating	Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating
55LA-3253	2	32	530	52	4000K	6,294	122	B1-U0-G1	6,190	120	B2-U0-G2	6,106	118	B1-U0-G2	5,867	114	B3-U0-G2
70LA-3270	2	32	700	69	4000K	7,754	112	B2-U0-G2	7,955	115	B2-U0-G2	7,659	111	B2-U0-G2	7,421	107	B3-U0-G2
75LA-4853	3	48	530	77	4000K	9,344	121	B2-U0-G2	9,191	119	B2-U0-G2	9,086	117	B2-U0-G2	8,712	113	B3-U0-G2
105LA-321A	2	32	1050	107	4000K	10,709	100	B2-U0-G2	10,981	103	B3-U0-G2	10,576	99	B2-U0-G2	10,255	96	B4-U0-G2
105LA-4870	3	48	700	104	4000K	11,513	111	B2-U0-G2	11,812	114	B3-U0-G2	11,373	110	B2-U0-G2	11,019	106	B4-U0-G2
100LA-6453	4	64	530	103	4000K	12,491	121	B2-U0-G2	12,285	119	B3-U0-G2	12,129	118	B2-U0-G2	11,645	113	B4-U0-G2
135LA-6470	4	64	700	139	4000K	15,390	111	B3-U0-G2	15,789	114	B3-U0-G2	15,192	110	B3-U0-G3	14,729	106	B4-U0-G2
160LA-481A	3	48	1050	158	4000K	15,901	101	B3-U0-G3	16,343	103	B3-U0-G2	15,696	99	B3-U0-G3	15,188	96	B4-U0-G2
215LA-641A	4	64	1050	211	4000K	21,255	101	B3-U0-G3	21,265	100	B4-U0-G3	20,984	99	B3-U0-G3	20,874	99	B5-U0-G3

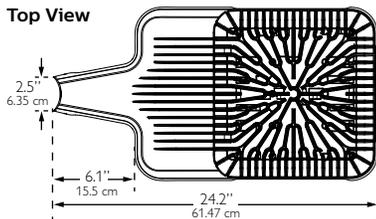
5. System input wattage may vary based on input voltage, by up to +/- 10% , and based on manufacturer forward voltage, by up to +/- 8%.

6. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

Note: Some data may be scaled based on tests of similar, but not identical, luminaires.

Dimensions – Standard EcoForm luminaire

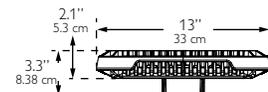
Top View



Side View



End View



EPA (ft²/m²)

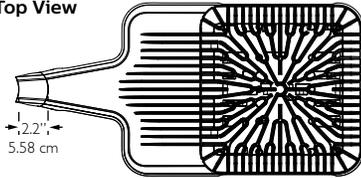
Single	Twin (2@180)	3/4@90
0.2 / 0.019	0.5 / 0.046	0.5 / 0.046

Approximate Luminaire Weight:
20 Lbs (9.07 Kg)

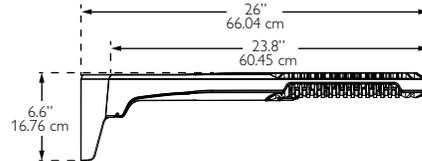
ECF EcoForm LED luminaire

Dimensions – EcoForm with Retrofit Arm Mount (RAM)

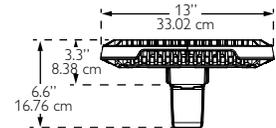
Top View



Side View



End View



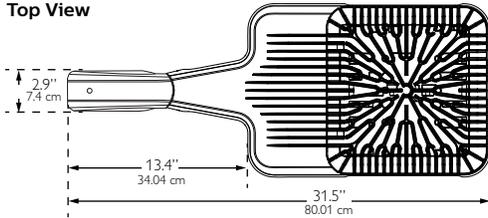
EPA (ft²/m²)

Single	Twin (2@180)	3/4@90
0.3 / 0.028	0.6 / 0.056	0.7 / 0.065

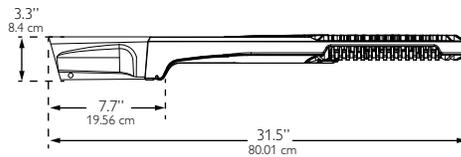
Approximate Luminaire Weight:
21 Lbs (9.53 Kg)

Dimensions – EcoForm with Mast Arm Fitter (MA)

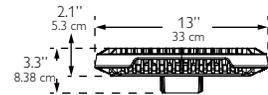
Top View



Side View



End View



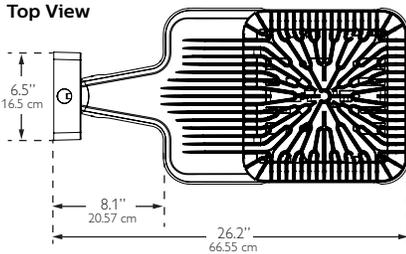
EPA (ft²/m²)

Single
0.51 / 0.047

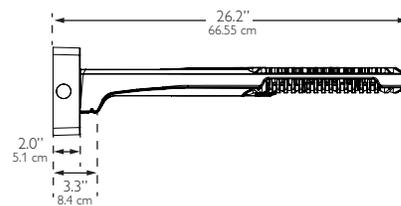
Approximate Luminaire Weight:
21.5 Lbs (9.77 Kg)

Dimensions – EcoForm with Wall Mount (WS)

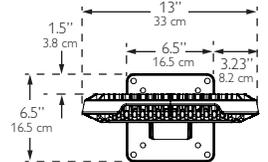
Top View



Side View



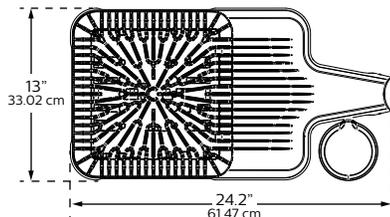
End View



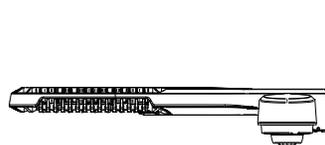
Approximate Luminaire Weight:
23.36 Lbs (10.6 Kg)

Dimensions – EcoForm with wireless controls (luminaire mounted controller)

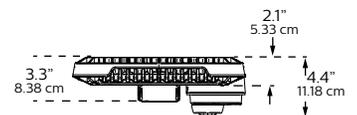
Top View



Side View



End View



ECF EcoForm LED luminaire

Luminaire Configuration Information

ECF

Philips Gardco EcoForm LED standard luminaire providing constant wattage and constant light output when power to the luminaire is energized.

ECF-DIM

Philips Gardco EcoForm LED luminaire provided with 0-10V dimming for connection to a control system provided by others.

ECF-APD

Philips Gardco EcoForm LED luminaire with Automatic Profile Dimming. Luminaire is provided with a Philips DynaDimmer module, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the Philips DynaDimmer module based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

ECF-APD is available in 120V–277V input only.

ECF-APD Dimming Profile:

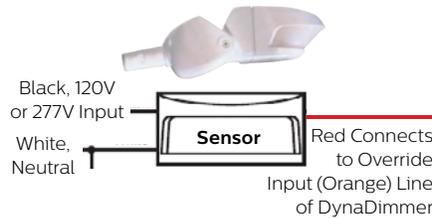
100%	2 hours 50%	6 hours 50%	100%
Power On	Mid Point	Power Off	

ECF-MR50

Philips Gardco EcoForm LED luminaire with motion response, providing a 50% power reduction on low and a commensurate reduction in light output. The power and light output reduction is accomplished utilizing the Philips DynaDimmer module, programmed for a constant 50% power. Power supplied by the motion sensor connected to the override line on the DynaDimmer takes the luminaire to high setting, 100% power and light output, when motion is detected. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

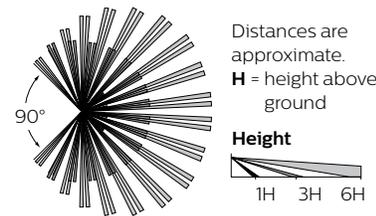
ECF-MR50 is available in 120V–277V input only to the luminaire. Motion sensors require single voltage 120V or 277V input.

The Area PIR motion sensor is the WattStopper EW-200-120-W (120V Input – MSA-120V) or the WattStopper EW-200-277-W (277V Input – MSA-277V.) One motion sensor per pole is required and is ordered separately. Area sensors require single voltage 120V or 277V input.



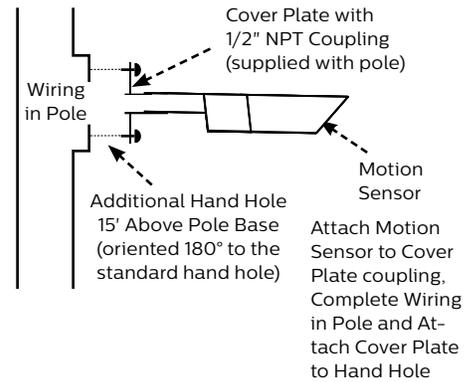
The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Area PIR Motion Sensor Coverage Pattern:



Motion response requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole.

Mounting to a Philips Gardco Pole:



ECF-APD-MRO

Philips Gardco EcoForm LED luminaire with Automatic Profile Dimming, with Motion Response Override. The ECF-APD-MRO combines the benefits of both automatic profile dimming and motion response, using the Philips DynaDimmer module. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the ECF-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

Notes:

ECF-APD-MRO is available in 120V through 277V input only to luminaire. The motion sensor requires either 120V or 277V input to the motion sensor.

The ECF-APD-MRO has the same pole requirements and utilizes the same motion sensors as the ECF-MR50. The motion sensor mounts and wires identically as well. The ECF-APD-MRO utilizes the identical dimming profile as shown for the ECF-APD.

By combining the benefits of automatic profile dimming and motion response, the ECF-APD-MRO assures maximum energy savings, and insures that adequate light is present if motion is detected.

All motion sensors utilized consume 0.0 watts in the off state.

ECF EcoForm LED luminaire

Luminaire Configuration Information (Continued)

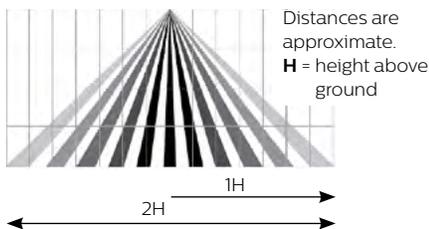
ECF-MRI

Luminaires with Motion Response include a LED driver and an integral programmable motion sensor. The motion sensor is set to a constant 50%. When motion is detected, the luminaire goes to 100%. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes. Available with 120V or 277V only.

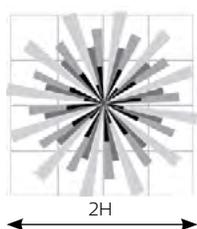
Luminaires include a passive infrared (PIR) motion sensor, WattStopper® FSP-211 equipped with an FSP-L3 lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, or mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

The approximate motion sensor coverage pattern is as shown below.

Side Coverage Pattern



Top Coverage Pattern



ECF-APD-MRI



Luminaires with Automatic Profile Dimming and Motion Response Override combine the benefits of both automatic profile dimming and motion response. APD-MRI luminaires utilize Philips DynaDimmer. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for APD luminaires (see page 4). If motion is detected during the time that the luminaire is operating at 50%, the luminaire goes to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes.

APD-MRI luminaires are available with 120V or 277V input voltages only.

APD-MRI luminaires use the identical motion sensor as MRI luminaires. See motion sensor details for ECF-MRI.

FS1R-100 Wireless Remote Programming Tool

The FS1R-100 Remote Programming Tool accessory permits adjustment of ECF-MRI and ECF-APD-MRI sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes.

The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

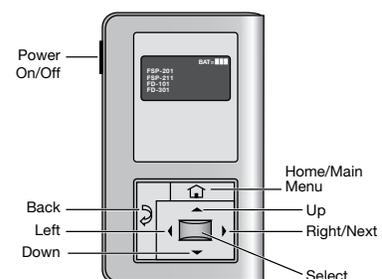
The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.

The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in "less-than/greater-than" symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost. More information on the FS1R-100 Remote Programming Tool is available at wattstopper.com.

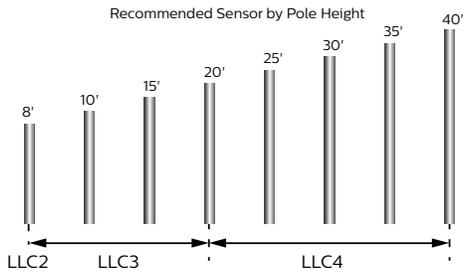
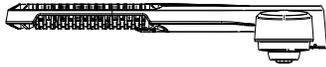


ECF EcoForm LED luminaire

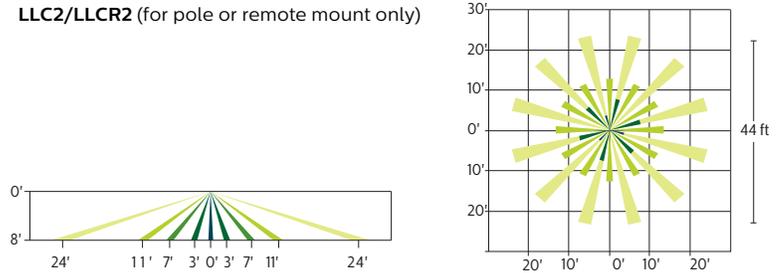
Luminaire Configuration Information – EcoForm with wireless controls

ECF-LLC2/3/4 Luminaire Mounted Controller

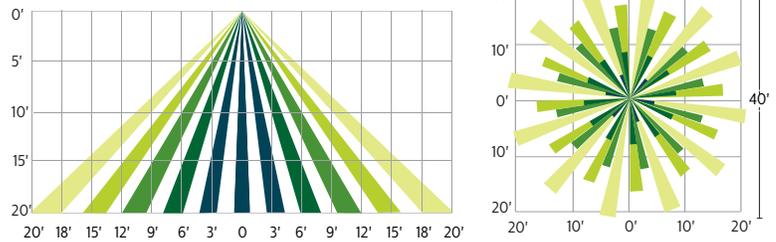
Wireless controller attached to luminaire and includes radio, photocell and motion sensor with #2, 3, or 4 lens for 8-40' mounting heights.



LLC2/LLCR2 (for pole or remote mount only)

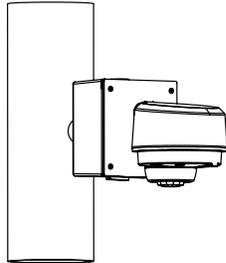


LLC3/LLCR3 (for luminaire, pole, or remote mount)



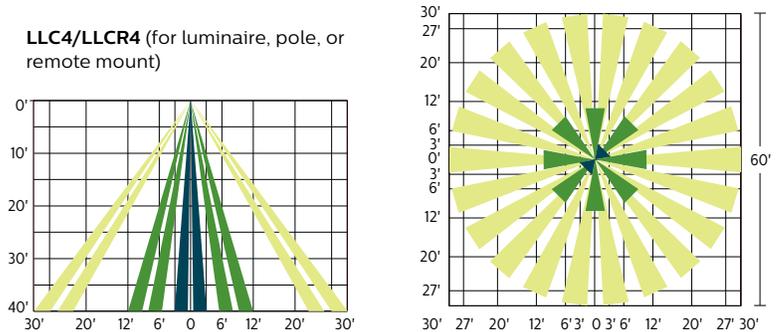
LLCR2/3/4 Pole Mounted Controller

In this configuration, the wireless controller will be mounted to the pole at a fifteen foot mounting height. The number of luminaires on each pole, as well as the specific wattage chosen, will determine how many controllers will be required.



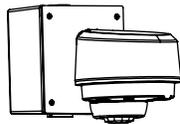
When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size). Confirm required orientation of luminaire and wireless controller. Indicate height above pole base and orientation to handheld. Recommended min pole height is 18ft, with option (CL) 15ft above pole base. Other heights are possible when choosing the appropriate sensor lens type. See pole specification sheets for more information.

LLC4/LLCR4 (for luminaire, pole, or remote mount)

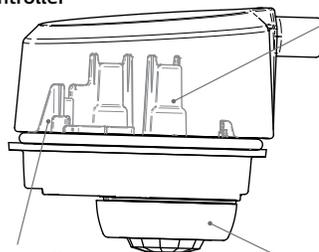


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Controller



Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant

Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height

ECF EcoForm LED luminaire

Luminaire Configuration Information (EcoForm with wireless controls)

Gateway

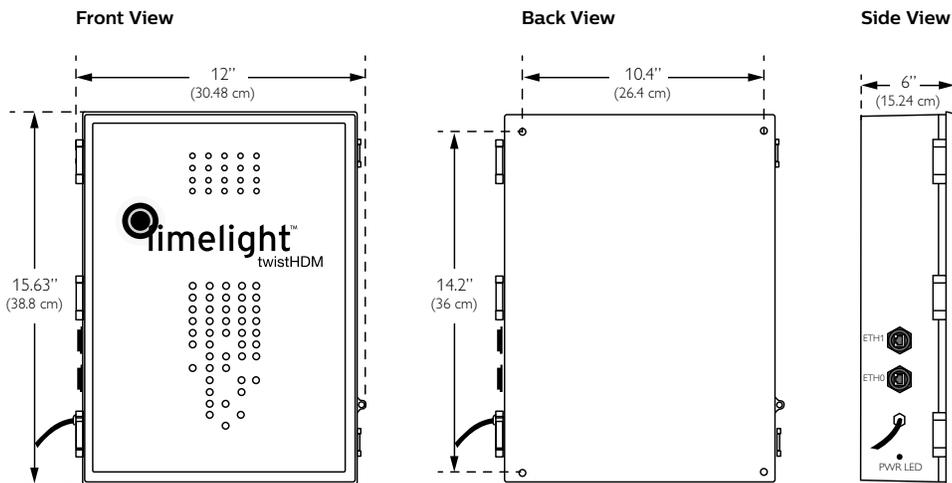
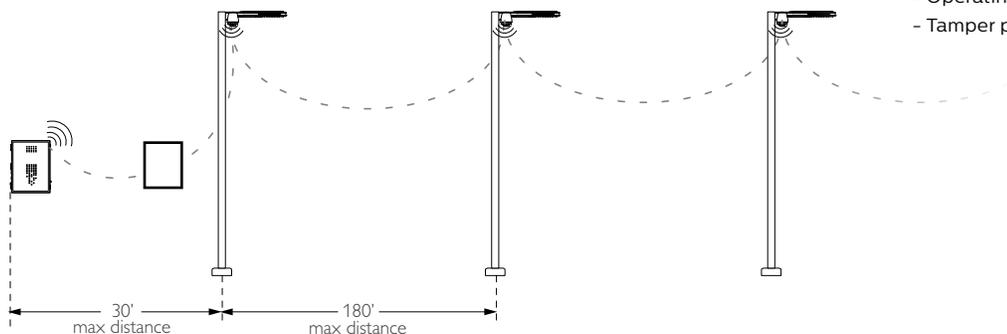
Overview: One gateway is included with the wireless controls system. The gateway opens up communication with the wireless radios installed with the EcoForm luminaires (or pole), allowing you to control your fixtures straight from the web. One gateway can communicate with up to 800 fixtures. Typically one unit is required per parking lot.

Installation: Gateway has 4 blind threaded holes on the back side that accept 10-32 screws. Mount spacing is 10.41" across and 14.19" vertical.

Requirements: The gateway must be mounted in a secure on-site location. The gateway requires 120V. Distance of gateway to the first radio varies upon application; contact factory. Strong internet connection required.

Specifications:

- High density RF Mesh coordinator
- Ethernet or wireless internet connection to server
- Proprietor of software "rules of operation"
- Watertight Ethernet connections
- Highly protected, long life ac/dc power supply
- Single board, ARM compliant 520Mhz Intel computer.
- Operating Temperature -20°C to 55°C
- Tamper proof housing



ECF EcoForm LED luminaire

Specifications

Housing

One piece die cast aluminum housing with integral arm and separate, self retained hinged, one piece die cast door frame.

IP Rating

LED light engine rated IP66.

Vibration Resistance

EcoForm with Standard Arm carries a 3G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

LED Board and Array

32, 48, or 64 LEDs. Color temperatures: 3000K, 4000K, 5700K +/- 250K. Minimum CRI of 70. Aluminum metal clad board. RoHS compliant.

LED Thermal Management

The housing design allows the one piece housing to provide excellent thermal management critical to long LED system life.

Energy Saving Benefits

System efficacy up to 95 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

LED Performance

Predicted Lumen Depreciation Data¹

Ambient Temperature °C	Driver (mA)	Calculated L ₇₀ Hours ^{1,2}	L ₇₀ Per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
Up to 40 °C	Up to 1050 mA	> 350,000 hours	> 60,000 hours	97%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours.

Wireless Controls

The wireless controls system includes: gateway, controller (with wireless radio, motion response, and photocell), and commissioning/training. This intelligent web-based system operates through a high density mesh (HDM) wireless technology. Wireless radios with motion response and photocell sensors are integrated with PureForm luminaires, and enable the fixtures to communicate via the ZigBee protocol. The gateway is a mini computer that connects to the internet, and is located in a secure location. The central database channels communication to and from the gateway, allowing data to be viewed or managed through the web-based graphical user interface (GUI). See wireless controls pages 6-7 for details and technical information.

Motion Sensors

ECF-MR50, ECF-APD-MRO, ECF-MRI, ECF-APD-MRI luminaires may be specified for additional energy savings during unoccupied periods. See pages 4-6 for complete details.

Optical Systems

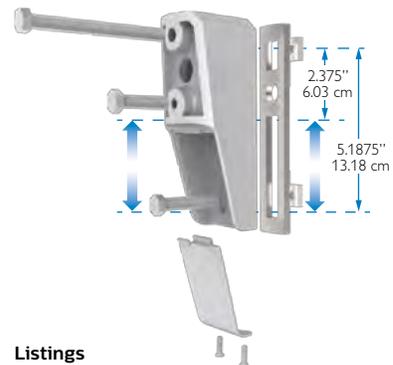
Type 2, 3, 4, and 5 distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, and 4 distributions to control backlight.

Mounting

Standard luminaire arm mounts to 4" round poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles.

Retrofit Arm Mount

EcoForm features an innovative retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately.



Listings

ETL/cETL listed to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). The quality systems of this facility have been registered by UL to the ISO 9001 series standards. All EcoForm luminaires equipped with NW and CW are DesignLights Consortium® qualified.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

Warranty

EcoForm luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer.



Job:
 Type:
 Notes:

120 LINE LED

121 LED Performance Sconce - Generation 2

The Philips Gardco 121 LED Performance Sconce provides an energy efficient, architecturally pleasing solution for wall mount applications. The sloped surface ribs of the die cast aluminum housing create a distinctly unique aesthetic element, and perform important functions in the Philips Gardco thermal management system. 121 Generation 2 luminaires feature high performance Class 1 LED systems. The high performance LED optical systems produce full cutoff performance, minimizing glare and light trespass. Philips Gardco's LED technology provides maximized light output and maximum energy savings.



PREFIX	OPTICAL SYSTEM	LED WATTAGE	LED SELECTION	VOLTAGE	FINISH	OPTIONS
<input type="text"/>						

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX

- 121** 121 LED Performance Sconce - Constant Wattage / Full Light Output
- 121-MR** 121 LED Performance Sconce - Motion Response
- 121-DIM** 121 LED Performance Sconce - 0 - 10V Dimming
- 121-APD** 121 LED Performance Sconce - Automatic Profile Dimming

OPTICAL SYSTEM

- 2** Type 2 All optical systems are supplied with a clear glass lens standard. A Diffuse Lens (DL) option is available. See **OPTIONS** on Page 2.
- 3** Type 3
- 4** Type 4
- MT** Medium Throw

121-DCC 121 LED Performance Sconce - Dual Circuit Control

LED WATTAGE AND LUMEN VALUES

Single LED Array Wattages, Available in 121, 121-MR, 121-DIM and 121-APD Only

Ordering Code	Average System Watts ¹	LED Current (mA)	LED Quantity - Single LED Array	LED Selection	Luminaire Initial Absolute Lumens ²			
					TYPE 2	TYPE 3	TYPE 4	MT
18LA	18	350	16	NW	1,673	1,707	1,609	2,022
26LA	26	530	16	NW	2,442	2,485	2,345	2,927
35LA-700	36	700	16	NW	3,102	3,139	2,972	3,650
35LA-350	35	350	32	NW	3,664	3,736	3,523	4,425
50LA	52	530	32	NW	5,587	5,685	5,365	6,697
75LA	72	700	32	NW	6,199	6,538	6,296	7,289

Dual LED Array Wattages, Available in 121-DCC Only

Ordering Code	Average System Watts ¹	LED Current (mA)	LED Quantity - Dual LED Arrays		LED Selection	Luminaire Initial Absolute Lumens ²			
			Per LED Array	Total LEDs		TYPE 2	TYPE 3	TYPE 4	MT
35LA-2	35	350	16	32	NW	3664	3,736	3,523	4,425
50LA-2	52	530	16	32	NW	5587	5,685	5,365	6,697
75LA-2	72	700	16	32	NW	6199	6,538	6,296	7,289

1. Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
 2. Values shown are for luminaires without the DL option. Tests are in process for configurations not shown. "(s)" following the value indicates that values are scaled from tests on similar, but not identical luminaire configurations. Contact gardco.applications@philips.com if any approximate estimates are required for design purposes. Lumen values based on tests performed in compliance with IESNA LM-79.



PHILIPS



120 LINE LED

121 LED Performance Sconce - Generation 2

LED SELECTION

CW	Cool White - 5700°K - 75 CRI Nominal
NW	Neutral White - 4000°K - 70 CRI Nominal
WW	Warm White - 3000°K - 80 CRI Nominal

VOLTAGE

120	
208	
240	
277	
UNIV	Accepts 120V through 277V input, 50hz to 60hz.
347	347V - Requires Extended Back Box, which is provided standard. Requires and includes auxilliary transformer mounted in Extended Back Box.

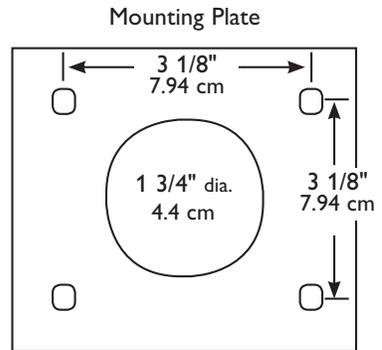
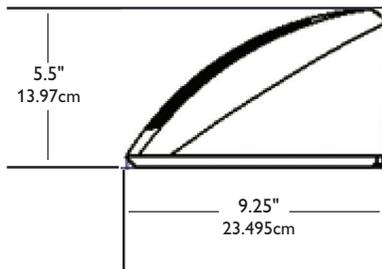
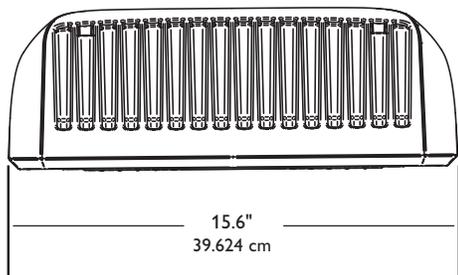
FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
BGP	Beige Paint
OC	Optional Color Paint Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.
SC	Special Paint Specify. Must supply color chip.

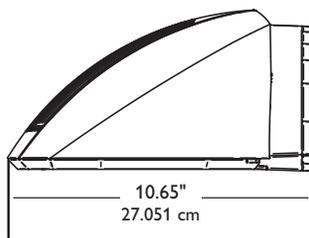
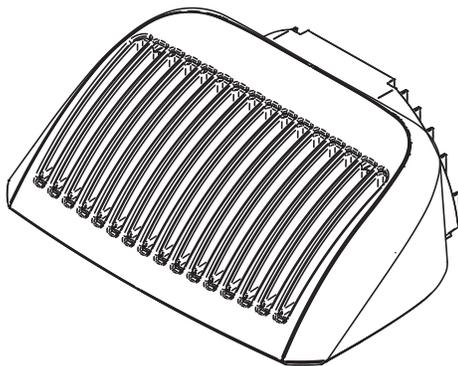
OPTIONS

F	Fusing (Provide specific input voltage)
DL	Solite Diffusing Glass Lens (Reduces performance significantly.)
PCB	Button Type Photocontrol (Provide specific input voltage)
WS	Wall Mounted Box for Surface Conduit (Rear entry permitted.)
EBB	Extended Back Box (Provided standard with 347V luminaires.)

DIMENSIONS

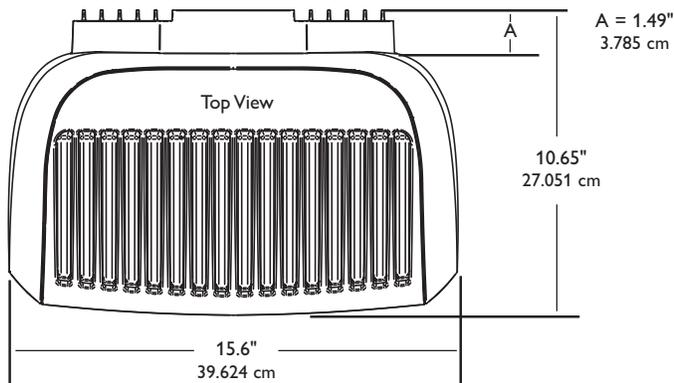


With Extended Back Box (EBB) Option



Mounting Bolt Pattern

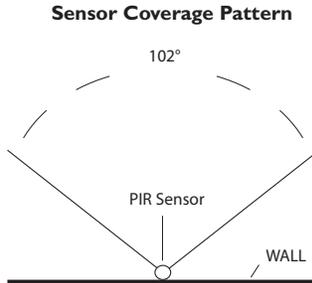
Note: Mounting plate center is located in the center of the luminaire width and 2.38" (6.03cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.



LUMINAIRE CONFIGURATION INFORMATION

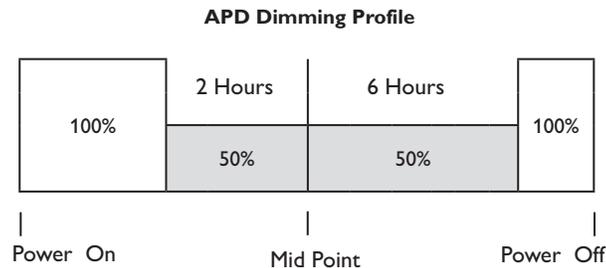
121-CWL: 121 LED sconce providing constant wattage and constant light output when power to the luminaire is energized.

121-MR: 121 LED sconce including a passive infrared (PIR) motion sensor capable of detecting motion within 30 feet of the 121 LED Sconce. The PIR sensor is mounted in the center of the luminaire, near the wall edge of the door frame, approximately 1.5" forward from the wall, and is less than .75" in diameter. When no motion is detected for 5 minutes, the Motion Response system reduces the wattage by 75%, to 25% of the normal constant wattage, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. The PIR sensor is capable of motion detection across a total angle of 102° from the center of the sensor (51° to either side of center.) The sensor may be adjusted directionally to maximize detection of motion to one side of the luminaire if desired based on site traffic patterns. PIR sensor provided is the Panasonic EKMB1203112. If the PIR sensor fails, the luminaire will operate in default-high mode. Motion sensors utilized consume 0.0 watts in the off state.



121-DIM: 121 LED sconce provided with 0 -10V dimming for connection to a control system provided by others.

121-APD: Philips Gardco performance LED sconces with Automatic Profile Dimming are provided with the Philips DynaDimmer included. The DynaDimmer is factory programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously calculated by the DynaDimmer based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.



121-DCC: 121 LED sconce provided with dual circuiting, and dual arrays, permitting separate switching of each led array. Available in LED wattages shown on Page 1 only.

SPECIFICATIONS

GENERAL: Each Philips Gardco 121 luminaire is a wall mounted full cutoff luminaire with integrated lensed LEDs mounted in a fixed array. Internal components are totally enclosed in a rain-tight, dust-tight and corrosion resistant housing. The housing, back plate and door frame are die cast aluminum. A choice of four (4) optical systems is available. Luminaires are suitable for wet locations, mounted in the normal downlight position.

HOUSING: The single-piece stylized housing is die cast aluminum. A memory retentive gasket seals the housing with the door frame to exclude moisture, dust, insects and pollutants from the luminaire. A black, die cast ribbed backplate is included.

IP RATING: Luminaires are rated IP66.

DOOR FRAME: A single-piece die cast aluminum door frame integrates to the housing form. The door frame is hinged closed and secured to the housing with two (2) captive stainless steel fasteners.

OPTICAL SYSTEMS: Philips Gardco 121 Generation 2 LED luminaires utilize lensed LED arrays set to achieve IES Type II, Type III, and Type IV distributions, as well as a Medium Throw distribution. Individual LED arrays are replaceable. Luminaires feature high performance Class 1 LED systems. Luminaires are supplied standard with a clear glass lens.

ELECTRICAL: Luminaires are equipped with an LED driver that accepts 120V through 277V, 50hz to 60hz, input. Driver output is either 350 mA, 530 mA or 700 mA, based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F/150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaires consume 0.0 watts in the off state. Surge protector standard. 10KA per AN SI/IEEE C62.41.2.

LED THERMAL MANAGEMENT: The 121 design provides deep integral thermal radiation fins cast into the upper housing to assist in the thermal management so critical to long LED system life. Metallic screens are placed over the fins and integrated to the housing to prevent the buildup of dust, dirt and contaminants, while permitting required air flow for cooling

LED PERFORMANCE:

PREDICTED LUMEN DEPRECIATION DATA ⁴		
Ambient Temperature °C	Driver mA	L ₇₀ Hours ⁵
25 °C	350 mA	180,000
	530 mA	150,000
	700 mA	120,000
40 °C	350 mA	170,000
	530 mA	130,000
	700 mA	100,000

4. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.

5. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

FINISH: Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WVP), natural aluminum (NP) and beige (BGP). Consult factory for specifications on custom colors.

LABELS: All luminaires bear either UL or CUL (where applicable) Wet Location labels.

WARRANTY: Philips Gardco luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays and LED drivers. See Warranty Information on www.sitelighting.com for complete details and exclusions.

FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.



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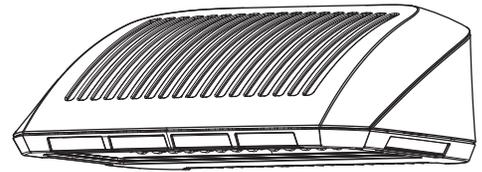
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Imported by: Philips Lighting,
A division of Philips Electronics Ltd.
281 Hillmount Rd,
Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

High performance and integrated style, all in one luminaire

LED Wall Sconce 161



Project: _____
 Location: _____
 Catalog No: _____
 Fixture Type: _____
 Mfg: _____ Qty: _____
 Notes: _____

PHILIPS GARDCO, LED WALL SCONCE 161

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

Ordering guide

example: 161-CWL-2-70LA-6435-CW-UNIV-BRP

Prefix		Distribution	Wattage	LED Type	Voltage	Finish	Options
<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
161-CWL	Sconce 161 LED	2 IES Type 2	350mA	CW 5700°K	120	BRP Bronze	F² Fusing
161-MR	161 with motion response (120V or 277V only)	3 IES Type 3	70LA-6435 2 LED arrays, 70W	NW 4000°K	208	BLP Black	PCB² Button
161-DCC¹	161 with dual circuit control	4 IES Type 4	110LA-9635 2 LED arrays, 110W	WW 3000°K	240	NP Natural	photocell (not available with 161-DCC)
161-DIM	161 with 0-10V dimming controlled by others		530mA	70 CRI	277	WP White	DL Diffusing lens
161-APD	161 with automatic profile dimming (120V thru 277V ONLY)		110LA-6453 2 LED arrays, 110W	70 CRI	347	OC Optional color (specify optional color or RAL ex: OC-LGP or RAL7024)	WS Surface mount conduit feed junction box
161-APD-MRI	161 with automatic profile dimming and motion response override – integrated motion sensor (120V or 277V ONLY)		170LA-9653 2 LED arrays, 170W		480	SC Special color (specify, must supply color chip)	
			700mA		UNIV 120-277V AC		
			150LA-6470 2 LED arrays, 150W		HVU 347-480V AC		
			220LA-9670 2 LED arrays, 220W				

Footnotes:

- ¹ For luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.
² Available 120-277V only. Provide specific input voltage.

Accessories (order separately)

- **FS1R-100** – MR hand held programmer (For use with 'MR' motion response when field programming is required). If desired, only one is needed per job.

Features

- Complements the 121 wall sconce
- Perfect companion to Philips Gardco PureForm site and area luminaires
- Type 2, 3, and 4 optical distributions available
- Full cutoff performance minimizes glare and light trespass
- 10kA surge protection provided standard, meeting ANSI C62.41.2

Benefits

- Exceptional performance can reduce pole requirements on a site
- Motion response and control options available for additional energy savings
- Performance equivalent to 400W HID while utilizing less energy

Description

- **Housing:** Die cast housing
- **Finish:** Painted finish only
- **Lens:** Light engines will be sealed IP66 (in downlight application only). Tempered flat glass and diffuse glass lens option
- **Mounting:** Wall mounted only
- **Supply connection:** 90°C supply wire minimum (supplied by others)
- **Driver:** 120-277VAC and 347-480VAC non-class 2, constant current driver 350mA and 530mA, 700mA 0-10VDC dimming
- **Light engine:** LEDgine 32, 48 LEDs. LEDgine optics - acrylic. IES distributions - 2, 3, and 4. 0% uplight (full cut-off).
- **Agency approvals:** UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NW or CW are DesignLights Consortium® qualified.



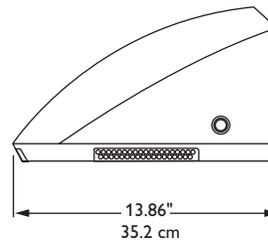
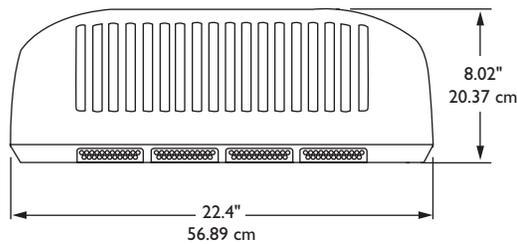
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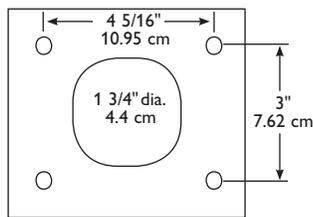
LED Wattage and Lumen Values

Ordering Code	Average System Watts ³	LED Current (mA)	LED Quantity - Dual LED Arrays		LED Selection	Luminaire Initial Absolute Lumens		
			Per LED Array	Total LEDs		TYPE 2	TYPE 3	TYPE 4
70LA-6435	74.4	350	32	64	NW	6,815	7,105	6,890
110LA-9635	110.0	350	48	96	NW	10,029	10,469	10,171
110LA-6453	106.8	530	32	64	NW	9,565	9,972	9,670
170LA-9653	158.0	530	48	96	NW	14,061	14,532	14,181
150LA-6470	142.0	700	32	64	NW	11,957	12,466	12,087
220LA-9670	210.0	700	48	96	NW	17,509	18,103	17,822

Dimensions



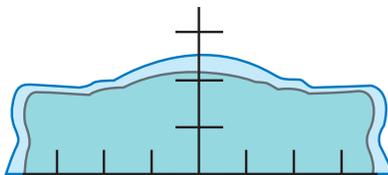
Approximate luminaire weight – 40lbs (18.15kg)



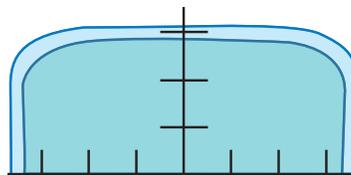
Mounting plate and bolt pattern

Note: Mounting plate center is located in the center of the luminaire width and 3.5" (8.89cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

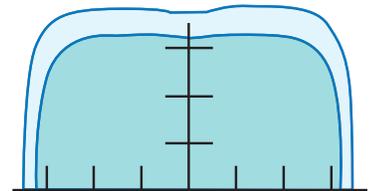
Distribution Options



Type 2



Type 3



Type 4

LED Performance

Predicted Lumen Depreciation Data ⁴		
Ambient Temperature °C	Driver mA	L ₇₀ Hours ⁵
25 °C	350 mA	180,000
	530 mA	150,000
	700 mA	120,000
40 °C	350 mA	170,000
	530 mA	130,000
	700 mA	100,000

Footnotes:

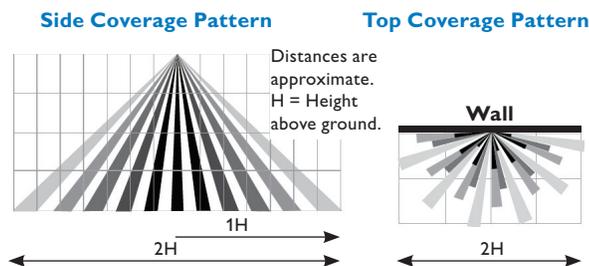
- Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- Predicted performance derived from LED manufacturer's data and engineering design estimates.
- L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

Luminaire Configuration Information

- **161-CWL:** 161 LED sconce providing constant wattage and constant light output when power to the luminaire is energized.
- **161-MR:** Luminaires include a passive infrared (PIR) motion sensor, WattStopper® FSP-211 equipped with an FS-L3W lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, and mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

In Motion Response (MR) luminaires, when no motion is detected for 10 minutes, the Motion Response system reduces the wattage by 90%, to 10% of the normal constant wattage, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. Dimming on low is factory set to 10% with duration set at 10 minutes.

The approximate motion sensor coverage pattern is as shown below.



FS1R-100 Wireless Remote Programming Tool:

The FS1R-100 Remote Programming Tool accessory permits adjustment of 161-MR sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

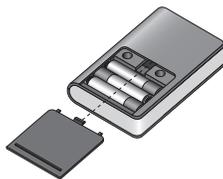
The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes.

The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

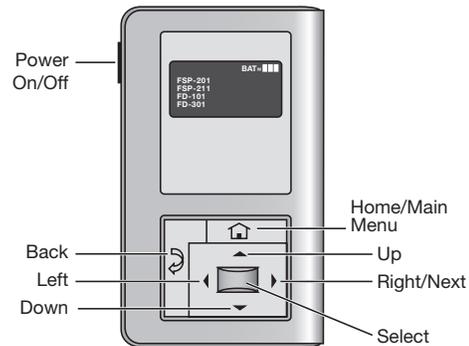
The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.

The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in "less-than" greater-than" symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost.



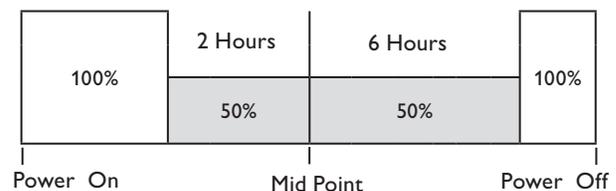
More information on the FS1R-100 Remote Programming Tool is available at wattstopper.com.

The FS1R-100 Wireless Remote Programming Tool can be used to adjust sensor settings on 161-MR luminaires ONLY. It cannot be used to adjust sensor settings on the 161-APD-MRI.

- **161-DCC:** 161 LED sconce provided with dual circuiting, permitting separate switching of each LED array. Note, for luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.
- **161-DIM:** 161 LED sconce provided with 0-10V dimming for connection to a control system provided by others.
- **161-APD:** 161 LED sconces with Automatic Profile Dimming, are provided with a programmable driver, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the programmable driver based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

161-APD is available in 120V through 277V input only.

APD Dimming Profile:



Luminaire Configuration Information

- **161 - APD- MRI:** 161 wall sconce with Automatic Profile Dimming and Motion Response Override (with integral motion sensor) combines the benefits of both automatic profile dimming and motion response. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the 161-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 10 minutes.
APD-MRI luminaires are available with 120V or 277V input voltages only.
APD-MRI luminaires use the identical motion sensor as MR luminaires.

Additional Specifications

General Description

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

Housing

Housing constructed of die-cast aluminum.

IP Rating

LED light engine rated IP66 (in downlight application only).

Optical Systems

IES Type 2, 3 and 4 distributions available. 0% uplight (full cut-off).

Listings

UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NW or CW are DesignLights Consortium® qualified.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors are as listed. Consult factory for specs on custom colors.

Warranty

161 Luminaires feature a 5 year limited warranty. LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer.

