



Gardco DuraForm medium floodlight provides seamless replacement of existing HID luminaires. This luminaire is available in three sizes (also see FLDS and FLDL), offers multiple lumen packages, and a complete array of optical distributions, making it an outstanding solution for all types of floodlighting applications. Includes Service Tag, Signify's innovative way to provide assistance throughout the life of the product.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lumens: _____ Qty: _____

Notes: _____

Ordering guide

example: FLDM-A13-740-A33-SFC-UNV-FAWS-SP2-TOL-API-MG

Prefix FLDM	Configuration (nominal lumens)	Color Temperature	Distribution	Mounting	Voltage
FLDM DuraForm medium	A07 11,700 A08 14,500 A09 18,100 A10 15,400 A11 17,200 A12 20,900 A13 21,600 A14 ¹³ 26,100	730 70CRI 3000K 740 70CRI 4000K 750 ¹¹ 70CRI 5000K 827 ¹¹ 80CRI 2700K	A33 Asymmetric 33° Flood (NEMA 6x5) RSP Rectangular Spot (NEMA 3x3) RNF Rectangular Narrow Flood (NEMA 7x5) RMF Rectangular Medium Flood (NEMA 7x4)	SFC Slip Fitter Mount with Cord (fits on 2-3/8" O.D. tenon, 6' or 1.83m cord exits luminaire) SLF Slip Fitter Mount (fits on 2-3/8" O.D. tenon, wires through slipfitter) YOK Yoke Mount (6' or 1.83m cord exits luminaire)	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V HVU 347-480V
Options					
Dimming controls ¹	Fusing	Surge Protection	Hardware Options	Other Options	Finish
none leave blank (0-10V dimming driver standard) DALI ^{2,3} Digitally Addressable Lighting Interface driver DIMD ^{4,5} 0-10V Dimming Driver external wires (controls by others) FAWS ⁴ Field Adjustable Wattage Selector SIWI ^{4,10} SiteWide integral module WLDC ^{2,4,5,6} Wireless Dimming Controls	FS1 ⁷ Single Fuse (120V, 277V, or 347V) FS2 ⁷ Double Fuse (208V, 240V, or 480V) FS3 ^{7,12} Canadian Double Pull Fuse (208V, 240V, or 480V)	blank Surge Protector 10kV / 10kA (standard) SP2 Surge Protector 20kV / 10kA (option)	blank Captive screws TOL Tool-less entry latches VPA Vandal Proof Access (bit included with luminaire)	blank Terminal Block, Service Tag, and Wiring Cover (standard) API Factory-installed ANSI C136.15-2015 compliant label C## ¹¹ Cord length specified by customer for SFC or YOK (put length in feet in place of "##" - example: C10 for 10' cord, must be ordered same time as luminaire - factory installed) (6' cord standard) PCB ^{2,7} Photocontrol Button TT7 ⁹ Tool-less NEMA Twist-lock 7-pin receptacle	BK Black BZ Bronze MG Medium Gray OC ¹¹ Optional Color (specify optional color or RAL) SC ¹¹ Special Color (must supply color chip, requires factory quote)

- Choose only 1 Dimming Controls option: either DALI or DIMD or FAWS or SIWI or WLDC.
- Not available with 347V, 480V, or HVU.
- Your specific required DALI profiles will be programmed at the factory. Contact factory for details.
- 0-10V dimming driver standard.
- Luminaire has 0-10V dimming wires exiting the luminaire for dimming controls by others.
- Must also select one of the Wireless System Accessories (LLCR2-(F), etc.) whenever WLDC is selected.
- Must specify applicable specific input voltage, not available with UNV or HVU.
- Not available with 480V.
- Use of photoelectric cell or shorting cap is required to ensure proper illumination.
- Available with 120V or 277V only.
- Must contact factory prior to ordering - these items are ETO Specials.
- Extended lead times apply. Contact factory for details.
- Not available with SIWI, WLDC, TT7, or PCB due to fit restrictions (two drivers so less room). If these options are required select FLDL-A15.

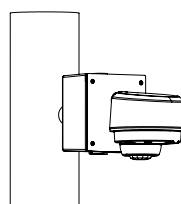
Wireless System Accessories

(ordered separately, field installed - for wall or pole mount)

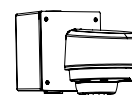
LLCR2-(F)¹² with #2 lens (specify finish at placeholder F)
LLCR3-(F)¹² with #3 lens (specify finish at placeholder F)
LLCR7-(F)¹² with #7 lens (specify finish at placeholder F)

Wireless pole mounted & remote controller accessory comes with standard 0-10V dimming driver. The wireless system offers a remote controller module that allows connectivity to the wireless system gateway. The remote wireless controller can be mounted to wall or pole j-box supplied. May be specified by choosing one of three different lenses to accommodate a variety of mounting heights/sensor detection ranges. Controller radio/sensor module includes radio, photocell, and motion sensor.

Pole mount



Remote pod (contact factory)



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Accessories

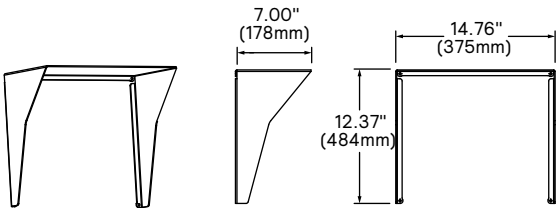
(ordered separately, field installed - mounting hardware included, uses dedicated mounting holes - do NOT remove lens)

FLDM-VSR-(F) Visor, top or bottom, painted same finish to match luminaire (specify finish at placeholder F, can not be used with GSH)

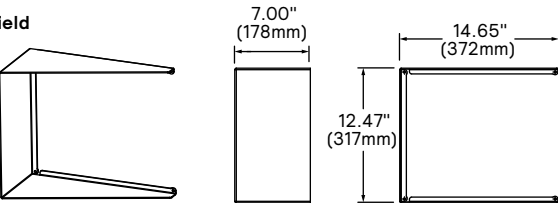
FLDM-GSH-(F) Glare Shield, left or right, painted same finish to match luminaire (specify finish at placeholder F, can not be used with VSR)

FLDM-WRG Wire Guard (nestable and can be used with either VSR or GSH)

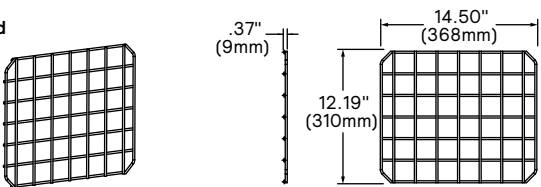
**FLDM-VSR Visor
Top or Bottom**



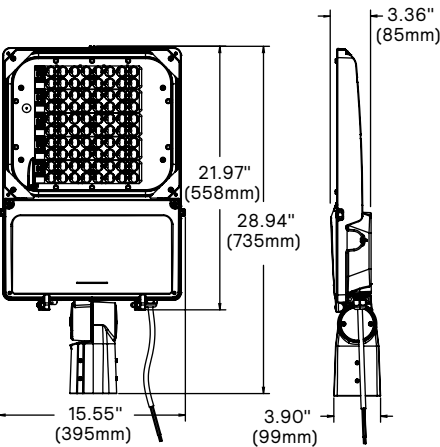
**FLDM-GSH Glare Shield
Left or Right**



**FLDM-WRG Wire Guard
Nestable**

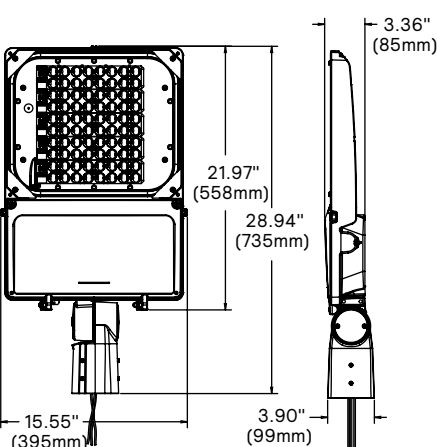


Dimensions



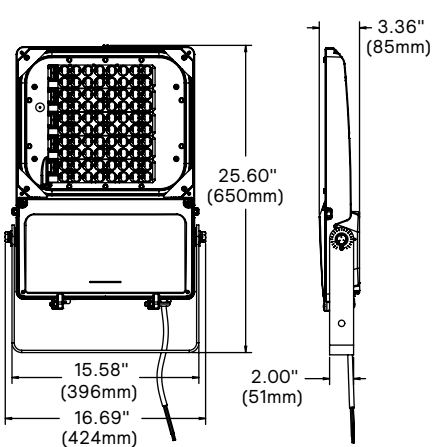
SFC

Luminaire weight: 23 lbs (10.4 kg)



SLF

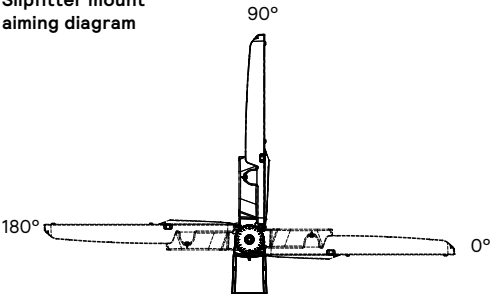
Luminaire weight: 23 lbs (10.4 kg)



YOK

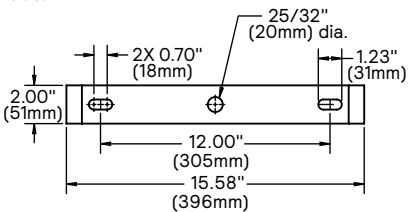
Luminaire weight: 24 lbs (10.9 kg)

**Slipfitter mount
aiming diagram**

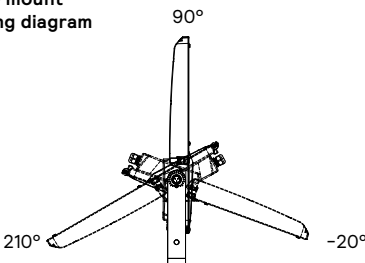


7-pin NEMA Twist Lock Receptacle option
Aiming limited to 0-90° per ANSI C136.10

**Yoke mount
detail**



**Yoke mount
aiming diagram**



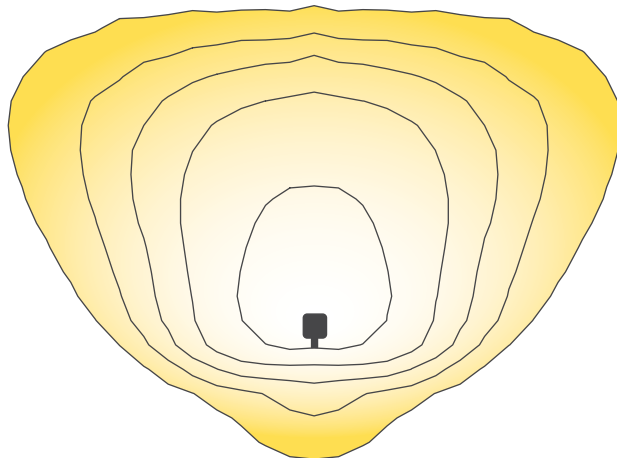
7-pin NEMA Twist Lock Receptacle option
Aiming limited to 0-90° per ANSI C136.10

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Optical Distribution Diagrams

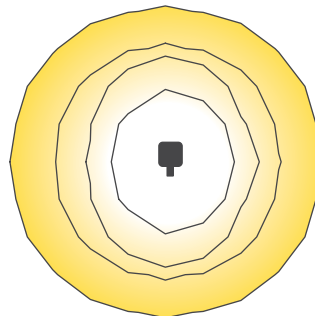
A33 Asymmetric 33° Flood (NEMA 6x5)



30' or 9.14m mounting height, 30° tilt

Applications include: area lighting, storage yards, transportation terminals, utility sub-stations, large facades, wall washing, large structures / monuments / statues, trees with large canopies.

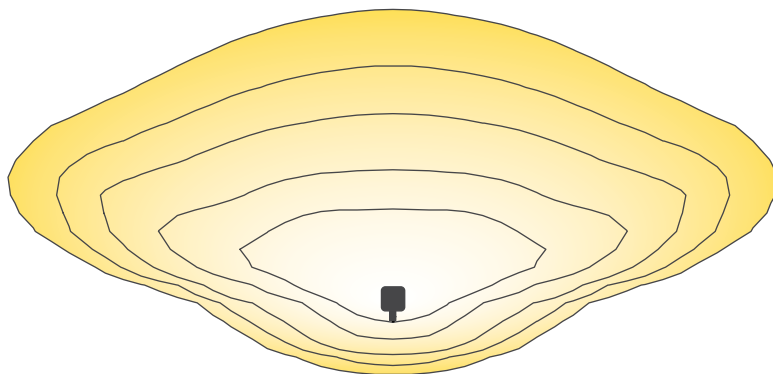
RSP Rectangular Spot (NEMA 3x3)



15' or 4.57m setback, 0° tilt

Applications include: flags, spotlighting, accenting, columns, scalloping, structures / monuments / statues, taller trees.

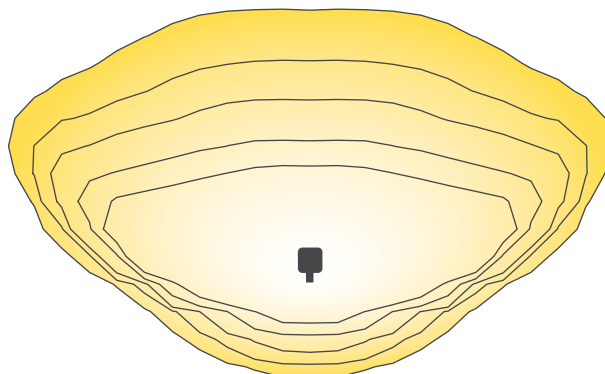
RNF Rectangular Narrow Flood (NEMA 7x5)



15' or 4.57m setback, 45° tilt

Applications include: facades, wall grazing, signs (especially larger and more rectangular)

RMF Rectangular Medium Flood (NEMA 7x4)



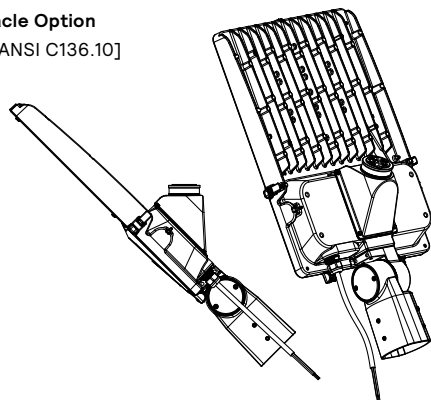
10' or 3.05m setback, 30° tilt

Applications include: building entrances and exits, security lighting, checkpoints and inspection stations, signs, ornamental trees and shrubs

Additional drawings

7-pin Twist Lock Receptacle Option

Aiming limited to 0-90° per ANSI C136.10]



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LED Wattage and Lumen Values – 2700K

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Wattage Label*	RSP		RMF		RNF		A33	
						Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)
FLDM-A07-827	48	600	2700	92	90	8,787	95	8,762	95	8,903	97	9,015	98
FLDM-A08-827	48	800	2700	120	120	10,863	90	10,833	90	11,007	92	11,145	93
FLDM-A09-827	48	1050	2700	161	160	13,504	84	13,466	83	13,683	85	13,855	86
FLDM-A10-827	64	600	2700	122	120	11,539	95	11,508	95	11,693	96	11,839	97
FLDM-A11-827	64	700	2700	140	140	12,916	92	12,881	92	13,088	93	13,252	95
FLDM-A12-827	64	900	2700	182	180	15,608	86	15,565	85	15,816	87	16,014	88
FLDM-A13-827	80	700	2700	178	180	16,138	91	16,094	90	16,353	92	16,558	93
FLDM-A14-827	80	900	2700	227	230	19,566	86	19,512	86	19,826	87	20,074	88

LED Wattage and Lumen Values – 3000K

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Wattage Label*	RSP		RMF		RNF		A33	
						Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)
FLDM-A07-730	48	600	3000	92	90	10,651	116	10,621	115	10,792	117	10,927	119
FLDM-A08-730	48	800	3000	120	120	13,167	110	13,131	109	13,342	111	13,509	112
FLDM-A09-730	48	1050	3000	161	160	16,368	101	16,323	101	16,586	103	16,794	104
FLDM-A10-730	64	600	3000	122	120	13,987	115	13,949	115	14,173	117	14,350	118
FLDM-A11-730	64	700	3000	140	140	15,656	112	15,613	111	15,864	113	16,063	115
FLDM-A12-730	64	900	3000	182	180	18,919	104	18,867	104	19,171	105	19,411	107
FLDM-A13-730	80	700	3000	178	180	19,561	110	19,508	110	19,822	111	20,070	113
FLDM-A14-730	80	900	3000	227	230	23,716	104	23,651	104	24,031	106	24,332	107

LED Wattage and Lumen Values – 4000K

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Wattage Label*	RSP		RMF		RNF		A33	
						Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)
FLDM-A07-740	48	600	4000	92	90	11,642	126	11,609	126	11,796	128	11,943	130
FLDM-A08-740	48	800	4000	120	120	14,392	120	14,352	119	14,583	121	14,765	123
FLDM-A09-740	48	1050	4000	161	160	17,890	111	17,841	111	18,128	112	18,356	114
FLDM-A10-740	64	600	4000	122	120	15,288	126	15,246	125	15,491	127	15,685	129
FLDM-A11-740	64	700	4000	140	140	17,112	122	17,065	122	17,339	124	17,557	125
FLDM-A12-740	64	900	4000	182	180	20,678	113	20,622	113	20,954	115	21,216	116
FLDM-A13-740	80	700	4000	178	180	21,380	120	21,322	120	21,665	122	21,937	123
FLDM-A14-740	80	900	4000	227	230	25,922	114	25,851	114	26,266	116	26,595	117

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

*Wattage Label per ANSI C136.15-2015. Consult factory for other labelling needs.

Field Adjustable Wattage Selector (FAWS) Multiplier Chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System Wattage Multiplier
1	0.31	0.28
2	0.53	0.50
3	0.62	0.58
4	0.70	0.67
5	0.78	0.75
6	0.83	0.81
7	0.89	0.87
8	0.92	0.91
9	0.96	0.95
10	1.00	1.00

Note: Typical value accuracy +/- 5%

Predicted Lumen Depreciation Data

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. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours

Ambient Temperature °C	Drive current	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1050 mA	>100,000 hours	>36,000 hours	>99%

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Specifications

Housing and Door

Made of low copper die cast Aluminum alloy (A360) for high resistance to corrosion. A hinged removable door opens to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. Captive flanged hex head screws with slotted drive provide access to electrical components and are compatible with 1/4" flat blade screwdriver.

Mounting

Up tilt aiming and down tilt aiming possible with all of the mounting options. Top edge of casting includes aiming sight for daytime aiming (see instructions).

cULus Listed as suitable for mounting within 4' or 1.2m of the ground.

SFC – Adjustable Slip Fitter with 6' (1.83m) of AWG 16-3 SEOOW cord (or AWG 16-5 if DIMD or WLDC external control options are selected) exiting the luminaire through IP66 rated cord seal. Customer-specified length or different cord type available – contact factory. Slip Fitter made of low copper Aluminum alloy (A356) for high resistance to corrosion, adjustable knuckle has 5 degree aiming increments with integral interlocking teeth and bolt to secure aiming in place, integral cast-in aiming marks. Fits on a 2-3/8" O.D. tenon.

SLF – Same Adjustable Slip Fitter as SFC but with AWG 16-3 wires (or AWG 16-5 if DIMD or WLDC external control options are selected) exiting through the Slip Fitter. Integral splice compartment for field wiring with cULus Wet Location rated access cover with seal around entire perimeter.

YOK – Adjustable Yoke with 6' (1.83m) of AWG 16-3 SEOOW cord (or AWG 16-5 if DIMD or WLDC external control options are selected) exiting the luminaire through IP66 rated cord seal. Customer-specified length or different cord type available – contact factory. Yoke made of high strength steel, galvanized and painted for high resistance to corrosion, fully adjustable (no minimum aiming increments) with bolts to secure aiming in place, integral aiming marks.

IP Rating

IP66 rated luminaire in all aiming positions including up tilt aiming per ANSI C136.37 with seal around entire perimeter of the lens and seal around entire perimeter of the electrical / driver compartment.

Light Engine

Composed of 5 main components: Heat Sink, Lens, LED Module, Optical System, Driver. Electrical components are RoHS compliant. LEDs tested by ISO 17025 2005 accredited lab in accordance with IESNA LM-80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

Heat Sink: Housing acts as heat sink, designed to ensure high efficacy and superior cooling by natural convection air flow always close to LEDs and driver(s) optimizing their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling).

Lens: Made of soda-lime clear tempered glass flat lens, mechanically assembled and sealed onto the housing heat sink forming IP66 seal. NOTE: Lens is not designed to be removable (if removed impacts IP66 seal).

IK Rating: IK09 high impact resistance rating for luminaire lens.

LED Module: Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin 3000K nominal (3045K +/-175K) or 4000K nominal (3985K +/- 275K), both CRI 70 min. 75 Typical. 2700K nominal (2725K +/- 145K) CRI 80 min. available – extended lead times apply, contact factory for details.

Optical System: Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance.

Driver: High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Integrated Features

Please note that these integrated features always come with this luminaire standard at no additional cost.

0-10V dimming driver included as standard, dimming leads pre-wired to Dimming Controls option except when DIMD or WLDC external controls options are selected.

SP1: Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground. Enhanced surge protection device SP2 20kV/10kA available as an option.

Service Tag: Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the app and register your product right away.

For more details visit: philips.com/servicetag

Terminal Block: 3-position. Accepts wires from #2AWG to #14AWG, rated 600V, 85A.

Wiring Cover: Cosmetic cover over LED board wiring. Painted same finish to match luminaire.

Controls Options

DALI: Pre-set driver compatible with the DALI Digitally Addressable Lighting Interface control system.

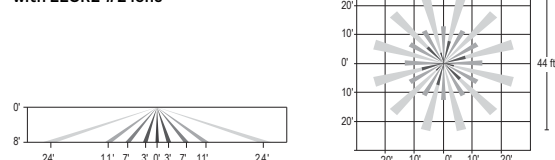
DIMD: 0-10V dimming driver with dimming wires externally accessible for connecting dimming controls by others.

FAWS: Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level – see the FAWS multiplier chart for more details.

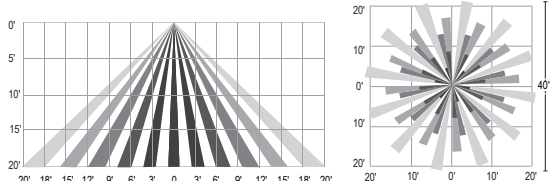
Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.

WLDC: Optional wireless remote controller ready to be connected to a Lighthouse by Lutron system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Available with various lenses depending upon mounting height. Also available with remote pod accessory to extend motion response or add other luminaires (contact factory for more information).

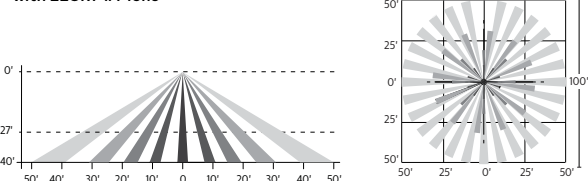
with LLCR2 #2 lens



with LLCR3 #3 lens



with LLCR7 #7 lens



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Specifications (continued)

SIWI: SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology and your site's existing mains wiring (no additional control wiring needed). A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Luminaire Options

SP2: 20kV / 10kA surge protection device that provides extra protection beyond the standard SP1 10kV/10kA level.

TT7*: Tool Less orientable twist-lock receptacle with 7 pins enabling dimming, can be used with a twist-lock photoelectric cell or a shorting cap.

** Use of photoelectric cell or shorting cap is required to ensure proper illumination.*

API: Factory Installed NEMA label, ANSI C136.15-2015 compliant, identifies LED source and wattage, affixed to luminaire at factory. Consult factory for other labeling needs.

FS1: Fusing, single (120, 277 or 347VAC) installed in electrical compartment

FS2: Fusing, double (208, 240 or 480VAC) installed in electrical compartment

FS3: Fusing, Canadian Double Pull (208, 240 or 480VAC) installed in electrical compartment.

TOL: Tool Free access 316 stainless steel latches provide a high resistance to corrosion. Latches operable while wearing protective electrical gloves.

VPA: Vandal Proof hardware to prevent access to internal components, 316 stainless steel, complete with Ceramic primer seal to reduce seizing of the parts, also offers a high resistance to corrosion. Bit included with luminaire.

PCB: Photocell Button (a.k.a. button photoeye).

Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, Signify System Reliability Tool, Advance data and LED manufacturer LM-80/TM-21 data, expected to reach 100,000 + hours with L_{70} lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

Wiring

#2-#14 AWG wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a time-delay or slow blow fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

Hardware and Seals

All exposed screws shall be steel and/or corrosion resistant and captive. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 3000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

LED Products Manufacturing Standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance

Luminaire meets the ANSI C136.31-2018 specifications, tested by independent lab over 100,000 cycles in all three axes: Normal for both Slip Fitters, Bridge/Overpass for Yoke.

Certifications and Compliance

cULus Listed for Canada and USA, including suitable for mounting within 4' or 1.2m of the ground. Configurations are DesignLights Consortium qualified, consult DLC QPL Qualified Products List for more details. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .15, .21, .22, .24, .25, .31, .32, .37, .41. Entire luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F). +50°C (+122°F) also available, consult factory.

Limited Warranty

5-year limited warranty.

See signify.com/warranties for details and restrictions.

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