naire Schedule			Calculation Summary		1		
Qty Label LLF Description → 5 ECF4H 0.903 GARDCO - ECF-S-48L-1A-NW-G2-4-HIS → 20 D 0.875 LIGHTOLIER - L6R20AZ10UVA-L6R2083VA-L6RDW 1 WB 0.903 DUAL-LITE - PG Series → 3 ZA 0.903 HI-LITE - #HCDEE-B69-9 W SATCO 8542 21W 2100lm A21	Lum. Lumens 16372 1859 481 2275	REFLECTANCES ARE .50 CALCULATION POINTS AT 5' O.C. IN PARKING AREAS CALCULATION POINTS AT 2.5' O.C. IN PEDESTRIAN AREAS CALCULATION POINTS AT GROUND	Label PEDESTRIAN SITE PLAN	CalcType Illuminance Illuminance	Units Fc Fc	Avg Max Min 5.96 17 1 3.05 20.6 0.1	Avg/Min Max/Min 5.96 17.00 30.50 206.00
$0.1 \ 0.$	1 0.1 0.2 0.3	0.4 0.5 0.6 0.5 0.4 0.4 0.5 0.7 0.9 1.1 1.3	1.6 1.9 2.2 2.7 3.2	3.2 1.6 0.5 0.5 0.	5 0.4 0.3	0.2	
// 0.5 °0.6 °0.	7 0.8 0.7 0.6 0	0.6 0.8 0.9 0.7 0.7 0.8 1.0 1.2 1.3 1.4 1.5 1.6	1.8 2.0 2.4 3.0 3.7	4.4 5.1 3.3 0.9 0.	7 0.5 0.3	0.2	
	9 2.6 3.5 4.3 5	5.0 5.5 MH5 20 6 5.2 4.6 3.9 3.2 2.6 2.2 2.0 2.0 1.9	2.0 2.2 2.6 3.1 3.9	4.8 5.7 6.3 6. MH: 20 2.	0 0.6 0.4	0.2	
	5 3.2 4.0 4.9	5.8 6.4 6.5 6.2 5.3 4.5 3.8 3.3 2.9 2.6 2.4 2.3	2.3 2.4 2.7 3.2 3.9	4.8 5.7 6 3 6.5 5.	$\frac{9}{1} = \frac{4.1}{1.6} = \frac{1.6}{1.6}$	0.5	
// 1.3 1.7 2/0 2.	5 3.1 3.8 4.7	5.5 5.8 5.8 5.7 5.1 4.3 3.7 3.2 3.0 2.8 2.6 2.5	2.5 2.5 2.7 3.1 3.7	4.4 5.1 5.5 5.9 5.	6 4.8 4.0	2.2	
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// 1.0 1.3 1.6 1.9 2.	2 2.6 3.0 3.5 3	3.9 4.1 4.2 4.1 3.8 3.4 3.1 2.9 2.7 2.6 2.5 2.4	2.3 2.3 2.4 2.7 3.0	3.4 3.8 4.1 4.2 4.	0 3.6 3.1	2.7	
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		1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9					
			2 2				
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	0 2 0 2.0 2.0 1	1.9 1.9 2.1 2.3 2.4 2.5 2.4 2.4 2.4 2.4 2.5 2.4	2.3 2.1 2 2.0 2.1	2.3 2.5 2.6 2.7 2.	8 2.8 2.3	1.5	
	1 2.2 2.4 2.5 2	2.4 2.6 3.4 4.1 4.6 4.6 4 6 5 5 5 5 5 5 5 5 5 5 5	4 4 3 3 2 2.1 2.1 7 6 5 3 3	2.3 2.6 2. <u>8</u> 2.9 3.	1 3.2 2.7	1.5	
/ 0.3 0.6 / 2.5 3.2 3.0 2.7 2.5 / 2.3 2 2 2	2 3 3 3 4 4 3 3 2 3 3 3 3 3 4 3 3	3 3 5 7 9 11 12 12 12 12 12 12 12 12 12 12 12 12	10 8 6 4 3 2.2 2.2 12 10 7 5 3	2.4 2.7 3.0 3.2 3.	5 3.6 3.3	1.5	
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0.6 1.2 1.8 2.1 2.2 2/2 2/2 2/2 2.0 2.0 2.1 2.3 2.	6 2.9 3.2 3.5	5.2 7.6 9.8 8.2 11.3 9.8 8.4 7.6 7.0 7.7 8.4 7.5	7.2 6.4 4.3 2.9 2.3	2.1 2.0 2.1 2.1 2.	2 2.2 1.8	0.8	
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0.3 0.5 0.7 0.9 1.0 1.0 1.0 1.0 1.0 0.9 0.8 0.	8 0.8 0.7 0.7	0.6 0.6 0.7 0.9 1.1 1.2 1.2 1.0 0.9 0.7 0.7	0.8 0.8 0.8				

Downlighting

LIGHTOLIER

LyteCaster LED 6"

by (Signify





YORBA LINDA, CA 92887

Lightolier LyteCaster LED Downlights are ideal general purpose downlighting solution, providing comfortable, quality light. Available in new construction and remodeler frame with interchangeable light engine that is offered in two lumen packages. The downlight is wet location listed and comes in 3 standard option.



Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
Notes:	

Complete product = Frame-in kit + Light engine + Trim (order each separately)

Frame-In kit Example: L6RAE1VA

Series L6R	Lumens ¹	Frame type	Dimming	Input voltage	Version VA	
L6R LyteCaster	blank 1500	A AirSeal IC, New Construction, Screw	E ELV dimming	1 120V	VA Version A ²	
6" Round	20 2000	AN AirSeal IC, New Construction, Nail	Z10 O-10V	U Universal		
	15 1500 R AirSeal IC, Remodeler 2000					

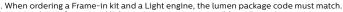
Light engine

Example: L6R15827VA

Series L6R	Lumens ¹	CRI	сст	Version VA
LGR LyteCaster 6" Round	15 1500 20 2000	8 80	27 2700K 30 3000K 35 3500K 40 4000K	VA Version A ²
		9 90	27 2700K	

Trim Example: L6RDW

Series L6R	Luminaire type	Finish				
L6R LyteCaster 6" Round	D Open Downlight	D Clear diffuse (with white flange) W White (with white flange)				
	B Baffle Downlight	W White (with white flange)				



1. When ordering a Frame-in kit and a Light engine, the lumen package code must match. 2. Version A (VA) frames and light engines are not compatible with previous versions.

Open Downlight (white)





Baffle Downlight (white)

Open Downlight (clear diffuse)

Note: Lumen output is calculated based on 80 CRI and 3500K CCT. Please consult adjustment factors table on page 5 for other lumen outputs.



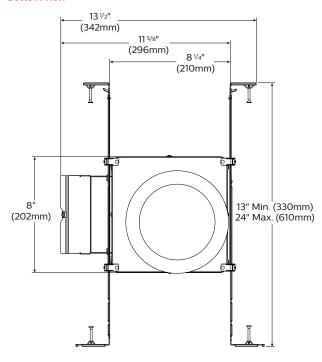




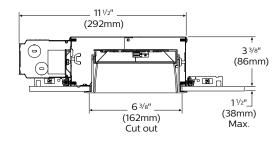
Round Downlight

New construction frame-in kit

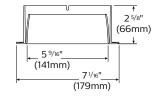
Bottom view



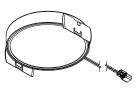
Side view



Downlight trim



Light engine



Features

- 1. Housing: .026" galvanized steel. UL listed for direct contact with thermal insulation. Airseal® housing minimizes air leakage to less than 2 CFM at 1.57PSF (or 75PA), which complies with the International Energy Conservation Code, and Washington State Energy Code (Section 502.4). This reduces heat loss and condensation in ceiling. Access door for inspection of junction box.
- 2. Lower frame and top cover: .026" galvanized steel. Accommodates ceilings up to 1½" (38mm) thick. 3/8" (9.5mm) deep integral lip with four notches at 90° apart to simplify alignment. Locks into position along length of mounting bars with locking screws.
- 3. Junction Box: 2.5" X 5 3/8" X 2" (27 cu. in) .032" galvanized steel. UL listed 90 * supply conductors. Rated for branch circuit wiring supplying connected luminaires (daisy chaining).

- Retaining clips: Permit easy and fast installation of light engine/trim.
- 5. Mounting bars: .059" galvanized steel. Bars pivot for easy attachment and wire-in below ceiling line. Bars extend to accommodate 16" (406mm) to 24" (610mm) O.C. joist spacing. Bars can accommodate 12" (305mm) O.C. joist spacing after a slight field modification (see Instruction sheet). Features integral self tapping phillips/ square drive screws for secure attachment to wood or metal construction. Also available with integral nails. Attaches to T-bar ceilings without the need of accessories. Bars installed on shortest dimension of frame, but can be easily repositioned 90 degrees from original position.
- Driver: ELV: 120V, 50/60Hz.
 ROHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class B) for EMI/RFI (conducted & radiated). Class A sound rating.
 0-10V: 120/277V, 50/60Hz.
 - O-IOV: 120/2/7V, 50/60HZ.

 ROHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class A) for EMI/RFI (conducted & radiated). Class A sound rating.
- 7. Ceiling cutout: 6 3/8" (162mm).

Electrical

Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty. (see Philips.com/ warranties for details)

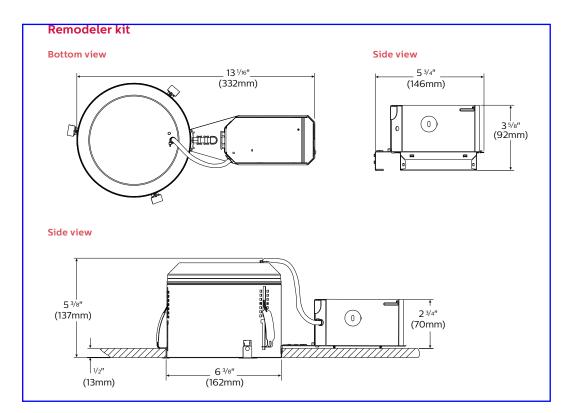
Recommended dimmers

See LED-DIM Specification Sheet.

Labels

cULus Listed Type I.C. frames are suitable for damp location. Trims are cULus suitable for wet location (no shower lens unit required). Complies with Air Leakage. Energy Star certified.

Round Downlight



Features

- 1. Housing: .032 Aluminum. UL listed for direct contact with thermal insulation. Integral retaining spring secures housing to ceilings up to 2" thick. Removable for access to junction box and ceiling plenum. 5 ½" maximum for use in 2" x 6" joist construction and shallow plenum applications. Airseal® housing minimizes air leakage to less than 2 CFM at 1.57PSF (or 75PA), which complies with the International Energy Conservation Code, and Washington State Energy Code (Section 502.4). This reduces heat loss and condensation in ceiling.
- 2. **Junction Box**: 2 ½" x 2 ½" x 4 ½" (29 cu in.) .031" galvanized steel. UL listed for 90°C supply conductors. Rated for branch circuit wiring supplying connected fixtures.

- 3. **Retaining clips:** Permit easy and fast installation of light engine/trim.
- Driver: ELV /Triac: 120V, 50/60Hz. RoHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class B) for EMI/RFI (conducted & radiated). Class A sound rating.
 - **0-10V:** 120/277V, 50/60Hz. RoHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class A) for EMI/RFI (conducted & radiated). Class A sound rating.
- 5. **Ceiling cutout:** 6 %" (162mm).

Electrical

Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty. (see Philips.com/warranties for details)

Recommended dimmers

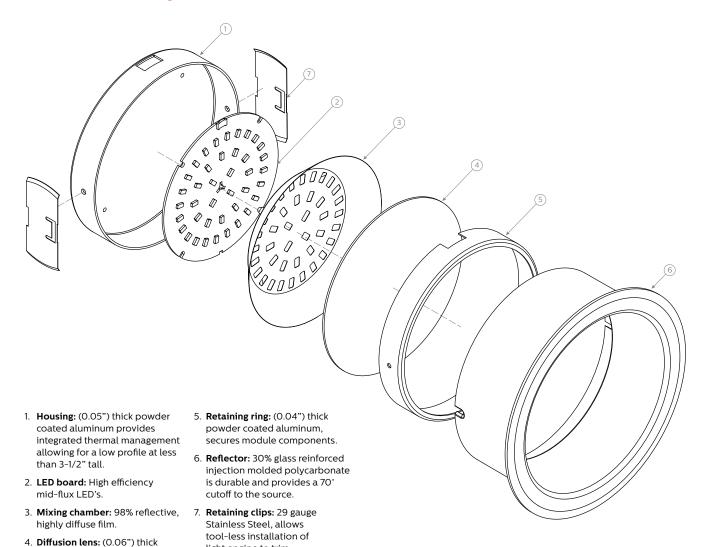
See LED-DIM Specification Sheet.

Labels

cULus Listed Type I.C., frames are suitable for damp location. Trims are cULus suitable for wet location (no shower lens unit required). Complies with Air Leakage. Energy Star certified.

Round Downlight

Reflector: Round downlight



Electrical specifications

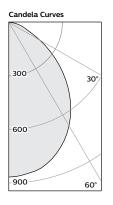
acrylic opal lens provides an even source of illumination.

Electrical specifications									
Frame-in kit / Remodeler	_	Input	Input	Input	LED drive	Input	LED	THD	Power
	Lumens	volts	freq.	current	current	power	power	factor	factor
L6RAE1VA / L6R15RE1VA	1500	120V	50/60Hz	0.14A	350mA	16W	13W	<20%	>0.9
LCDA710UVA / LCD15D710UVA	1500	120V	50/60Hz	0.14A	350mA	17W	13W	<10%	>0.9
L6RAZ10UVA / L6R15RZ10UVA	1500	277V	50/60Hz	0.07A	350mA	17W	15W	<15%	>0.9
L6R2OAE1VA / L6R2ORE1VA	2000	120V	50/60Hz	0.175A	470mA	19W	16W	<20%	>0.9
L6R2OAZ10UVA / L6R2OR10UVA	2000	120V	50/60Hz	0.26A	470mA	20W	16W	<10%	>0.95
LORZUAZIOUVA / LORZURIOUVA	2000	277V	50/60Hz	O.11A	470mA	20W	16W	<15%	>0.95

light engine to trim.

Round Downlight

80 CRI, 1500 lumens



Angle	Mean CP	Lumen
0	730	
5	724	69
10	412	
15	698	197
20	671	
25	634	292
30	596	
35	538	336
40	473	
45	397	304
50	314	210
55	235	210
60 65	161 107	111
70	80	111
75	59	62
80	37	02
85	16	18
90	0	
	1	I

Frame: L6RAE1VA / L6RAZ10UVA / L6R15RE1VA / L6R15RZ10UVA Light engine: L6R15835VA									
Trim: L6RDW		Report no ³ : 686GFR							
Output lumens:	1599 lm	Efficacy: 99.9lm/W							

Output lumens:	1599 lm	Efficacy:
Input Watts1:	16 W	CCT ² :
Spacing Criterion:	1.2	CRI:

Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	29	6.0′
6'	20	7.2'
7'	15	8.4'
8'	11	9.6'
9′	9	10.8′

^{*} Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial Center Beam Foot-Candles	Watts per Sq. Ft.
5' 6' 7' 8' 9'	66.8 43.8 31.3 26.1 20.9	0.71 0.47 0.33 0.28 0.22

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceili	ng		80)%		70)%	50)%	30)%	0%
Wall		70	50	30	10	50	10	50	10	50	10	0
RCR Zonal cavity method - Effective flo					e flo	or ref	lecta	nce =	20%			
	0	119	119	119	119	116	116	111	111	106	106	100
_	1	110	106	102	99	104	97	100	94	96	92	87
Cavity Ratio	2	102	94	88	83	92	82	89	80	86	79	75
Ra	3	94	84	77	71	83	71	80	69	77	68	65
-	4	86	76	68	62	74	61	72	60	70	60	57
ž	5	80	68	60	54	67	54	65	53	63	53	50
Ü	6	74	62	54	48	61	48	59	47	58	47	45
Ē	7	69	57	48	43	56	43	54	42	53	42	40
Room	8	65	52	44	38	51	38	50	38	49	38	36
œ	9	60	48	40	35	47	35	46	35	45	34	33
	10	57	44	37	32	44	32	43	32	42	31	30

Zonal lumens & percentages	CRI and CCT adjustment factors
Zone Lumens %Luminaire	90CRI 2700K: = 0.71
0-30 5558 34.6%	80CRI 2700K: = 0.89
0-40 893 55.9%	80CRI 3000K: = 0.97
0-60 1408 88.1%	80CRI 3500K: = 1.00
0-90 1599 100.0%	00 CI (1 3 3 0 0 I (1 . 0 0

80 CRI, 2000 lumens

Candela Curves	
300)°
600	
900 60	,

Angle	Mean CP	Lumens
0	863	
5	856	81
10	843	
15	818	230
20	778	
25	730	336
30	671	
35	604	377
40	529	245
45 50	448 365	345
55	284	254
60	205	254
65	137	141
70	98	
75	70	74
80	43	
85	19	22
90	0	

3500 K ≥80

Frame: L6R20AZ20UVA/L6R20AE1VA/ L6R20RZ10UVA/L6R20RE1VA Light engine: L6R20835VA Trim: L6RDW

im: L6RDW Report no³: 891GFR

	1859 lm	Efficacy:	93.9lm/W
Input Watts1:	19.8W	CCT ² :	3500 K
Spacing Criterion:	1.1	CRI:	≥80

Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	35	5.5'
6'	24	6.6'
7'	18	7.7'
8'	13	8.8'
9'	11	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial Center Beam Foot-Candles	Watts per Sq. Ft.
5'	77.5	0.88
6'	50.8	0.58
7'	36.3	0.41
8'	30.3	0.34
9'	24.2	0.27

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceiling		80%			70)%	50)%	30)%	0%	
Wall	l	70	50	30	10	50	10	50	10	50	10	0
RCR		Zona	Zonal cavity method - Effective floor refl						lecta	nce =	20%	
	0	119	119	119	119	116	116	111	111	106	106	100
_	1	110	106	102	99	104	97	100	94	96	91	87
ξi	2	101	94	88	83	92	82	89	80	86	78	75
Вa	3	93	84	77	71	82	70	79	69	77	68	65
Cavity Ratio	4	86	75	67	61	74	61	72	60	69	59	56
<u> </u>	5	80	68	60	54	67	53	65	53	63	52	50
	6	74	62	53	47	61	47	59	47	57	46	44
Room	7	69	56	48	42	55	42	54	42	53	42	39
8	8	64	52	44	38	51	38	50	38	48	38	36
œ	9	60	48	40	35	47	35	46	34	45	34	32
	10	57	44	37	32	44	32	43	31	42	31	29

Zonal	lumens &	percentages	CRI and CCT adjustment factors
Zone	Lumens	%Luminaire	90CRI 2700K: = 0.71
0-30	647	34.8%	80CRI 2700K: = 0.89
0-40	1023	55.1%	80CRI 3000K: = 0.97
0-60 0-90	1622 1859	87.3% 100.0%	80CRI 3500K: = 1.00

- 1. Wattage: controlled to within ± 5%
- 2. Correlated Color Temperature: within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
- 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

 $The information\ presented\ in\ this\ document\ is\ not\ intended\ as\ any\ commercial\ offer\ and\ does\ not\ form\ part\ of\ any\ quotation\ or\ contract.$



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Signify North America Corporation 200 Franklin Square Drive, Somerset, NJ 08873 Telephone 855–486–2216 ignify Canada Ltd. .81 Hillmount Road, 1arkham, ON, Canada L6C 2S3 elephone 800-668-9008



by (s) ignify

Site & Area

EcoForm

ECF-S small area light





Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, 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 available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

-roject.	
_ocation:	
Cat.No:	
Гуре:	
_amps:	Qty:
Notes:	



Type: ECF4H

Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

	N	D :	15001				Options					
Prefix ECF-S	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Dimming controls	Motion sensing lens	Photo-sensing	Electrical	Luminaire	Finish
ECF-S EcoForm Site and area, small	32L 32 LEDS (2 modules) 48L 48 LEDS (3 modules) 64L 64 LEDS (4 modules)	1.2A 1200 mA 900 900 mA 1A 1050 mA 1.2A 1200 mA 900 900 mA	Generation 2 NW-G2	AR Arm Mount (standard) ² The following mounting kits must be ordered separately (See accessories) SF Slip Fitter Mount ³ (fits to 2 ³ / ₈ " O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM Retrofit arm mount kit ²	Type 2 2 Type 2 2-90 Rotated left 90' 2-270 Rotated right 270' Type 3 3-90 Rotated left 90' 3-270 Rotated right 270' Type 4 4 Type 4 4-90 Rotated left 90' 4-270 Rotated right 270' Type 5 5 Type 5 5 Type 5 5 W Type 5W AFR Auto Front Row, Rotated left 90' AFR-270 Auto Front Row, Rotated right 270' AFR-270 Auto Front Row, Rotated right 270'	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)	module ^{4,6,8,17}	IMRI7 Integral with #7 lens 16	PCB Photocontrol Button®9 TLRD5 Twist Lock Receptacle 5 Pin 10 TLRD7 Twist Lock Receptacle 7 Pin 10 TLRDC TWIST Lock Receptacle 9 Pin 10 TLRDC TWIST Lock Receptacle 9 Pin 10 TLRDC TWIST Lock Receptacle w/ Photocell®11	Fusing F1 Single (120, 277, 347VAC)° F2 Double (208, 240, 480VAC)° Pole Mount Fusing FP1 Single (120, 277, 347VAC)° FP2 Double (208, 240, 480VAC)° FP3 Canadian Double Pull (208, 240, 480VAC)° Surge Protection (10kA standard) SP2 Increased 20kA	(fits to 3"- 3.9" O.D. pole) 13 HIS Internal	Textured BK Black WH White BZ Bronze DGY Dark Gray MGYMedium Gray Customer specified RAL Specify optional color or RAL (ex: RAL7024) CC Custom color (Must supply color chip for required factory quote)

- BL-IMRI3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
- 2. Mounts to a 4" round pole with adapter included for square poles.
- 3. Limited to a maximum of 45 degrees aiming above horizontal.
- Not available with other dimming control options.
- Not available with motion sensor.
- Not available with photocontrol.
- 7. Available only in 120 or 277V.

- 8. Not available in 347 or 480V
- 9. Must specify input voltage.
- Dimming will not be connected to NEMA receptacle if ordering with other control options.
- 11. Not available in 480V. Order photocell separately with TLRD5/7.
- 12. Not available with DCC.
- Not available with SF and WS. RPAs provided with black finish standard.
- 14. HIS not available with Type 5 and 5W optics.
- 15. Not available with DD, DCC, and FAWS dimming control options.
- Not available with DD, DCC, FAWS and LLC dimming control options.
- 17. Must specify a motion sensor lens









Area luminaire

EcoForm Accessories (ordered separately, field installed)

Shielding Accessories

House Side shield

Standard optic orientation:

HIS-32-H 18 Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-H 18 Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-H 18 Internal House Side Shield for 64 LEDs (4 modules)

Optic at 90 or 270 orientation:

HIS-32-V ¹⁸ Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-V ¹⁸ Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-V ¹⁸ Internal House Side Shield for 64 LEDs (4 modules)

18. Not available with Type 5 or 5W optics

Luminaire Accessories

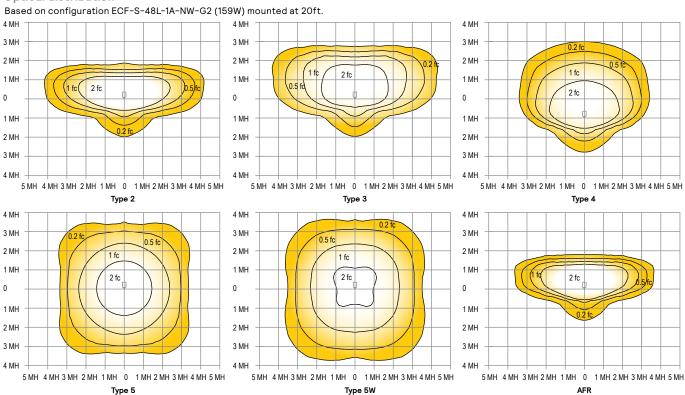
ECF-BD-G2 ECF-RAM-G2-(F)	Bird deterrent Retrofit Arm mount kit							
ECF-SF-G2-(F) ECF-WS-G2-(F)	Slip Fitter Mount (fits to 2 3/8" O.D. tenon) Wall mount with surface conduit rear entry permitted							
EcoForm PTF2 (pole top fitter fits 23/8-21/	2" OD x 4" depth tenon)	EcoForm PTF3 (pole top fitter fits 3-31/2" (DD x 6" depth tenon)	EcoForm PTF4 (pole top fitter fits 31/2-4" (DD x 6" depth tenon)			
PTF2-ECF-S/L-1-90-(F)	1 luminaire at 90°	PTF3-ECF-S/L-1-90-(F)	1 luminaire at 90°	PTF4-ECF-S/L-1-90-(F)	1 luminaire at 90°			
PTF2-ECF-S/L-2-90-(F)	2 luminaires at 90°	PTF3-ECF-S/L-2-90-(F)	2 luminaires at 90°	PTF4-ECF-S/L-2-90-(F)	2 luminaires at 90°			
PTF2-ECF-S/L-2-180-(F)	2 luminaires at 180°	PTF3-ECF-S/L-2-180-(F)	2 luminaires at 180°	PTF4-ECF-S/L-2-180-(F)	2 luminaires at 180°			
PTF2-ECF-S/L-3-90-(F)	3 luminaires at 90°	PTF3-ECF-S/L-3-90-(F)	3 luminaires at 90°	PTF4-ECF-S/L-3-90-(F)	3 luminaires at 90°			
PTF2-ECF-S/L-4-90-(F)	4 luminaires at 90°	PTF3-ECF-S/L-4-90-(F)	4 luminaires at 90°	PTF4-ECF-S/L-4-90-(F)	4 luminaires at 90°			
PTF2-ECF-S/L-3-120-(F)	3 luminaires at 120°	PTF3-ECF-S/L-3-120-(F)	3 luminaires at 120°	PTF4-ECF-S/L-3-120-(F)	3 luminaires at 120°			
(F) = Specify finish								

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

Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>60,000 hours	>88%

Optical distribution



Area luminaire

3000K LED Wattage and Lumen Values

		LED		Average		Type 2			Type 3			Type 4	
Ordering Code	Total LEDs	Current (mA)	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,508	B1-U0-G1	138	5,428	B1-U0-G2	136	5,637	B1-U0-G2	141
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,159	B2-U0-G2	129	7,055	B1-U0-G2	127	7,327	B1-U0-G2	132
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,234	B2-U0-G2	127	9,034	B2-U0-G2	124	9,452	B2-U0-G2	130
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,001	B3-U0-G2	123	12,719	B2-U0-G2	120	13,306	B2-U0-G3	126
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,421	B3-U0-G3	119	14,108	B2-U0-G3	116	14,760	B2-U0-G3	121
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,115	B3-U0-G3	127	16,744	B3-U0-G3	124	17,518	B2-U0-G3	130
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	19,381	B3-U0-G3	122	18,960	B3-U0-G3	119	19,836	B3-U0-G4	125
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	21,515	B3-U0-G3	118	21,048	B3-U0-G4	115	22,020	B3-U0-G4	121
ECF-S-64L-900-WW-G2-x	64	900	3000	178	22,652	B3-U0-G3	127	22,161	B3-U0-G4	125	23,185	B3-U0-G4	130
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	25,520	B3-U0-G3	124	24,966	B3-U0-G4	121	26,120	B3-U0-G4	127

		LED		Average		Type AFR			Type 5			Type 5W	
Ordering Code	Total LEDs	Current (mA)	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,706	B2-U0-G1	143	5,790	B3-U0-G1	145	5,604	B3-U0-G1	140
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,417	B2-U0-G1	133	7,526	B3-U0-G2	135	7,284	B3-U0-G2	131
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,567	B2-U0-G2	131	9,707	B4-U0-G2	133	9,395	B4-U0-G2	129
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,467	B3-U0-G2	128	13,665	B4-U0-G2	129	13,227	B4-U0-G2	125
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,939	B3-U0-G2	123	15,158	B4-U0-G2	125	14,671	B4-U0-G2	121
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,731	B3-U0-G2	131	17,990	B4-U0-G2	133	17,413	B5-U0-G3	129
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	20,076	B3-U0-G2	127	20,372	B5-U0-G3	128	19,717	B5-U0-G3	124
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	22,288	B3-U0-G2	122	22,616	B5-U0-G3	124	21,888	B5-U0-G3	120
ECF-S-64L-900-WW-G2-x	64	900	3000	178	23,465	B3-U0-G2	132	23,810	B5-U0-G3	134	23,045	B5-U0-G3	130
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	26,437	B4-U0-G3	128	26,150	B5-U0-G3	127	25,964	B5-U0-G4	126

4000K LED Wattage and Lumen Values

		LED		Average		Type 2			Type 3			Type 4	
Ordering Code	Total LEDs	Current (mA)	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134

		LED		Average		Type AFR			Type 5			Type 5W	
Ordering Code	Total LEDs	Current (mA)	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	6,006	B2-U0-G1	150	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,807	B2-U0-G1	140	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-NW-G2-x	32	700	4000	73	10,070	B2-U0-G2	138	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	14,176	B3-U0-G2	134	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,725	B3-U0-G2	129	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18664,	B3-U0-G2	138	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	21,133	B3-U0-G2	133	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	23,461	B3-U0-G2	128	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-NW-G2-x	64	900	4000	178	24,700	B3-U0-G2	139	25,063	B5-U0-G3	141	24,258	B5-U0-G4	136
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	27,828	B4-U0-G3	135	27,526	B5-U0-G3	134	27,330	B5-U0-G4	133

Area luminaire

5000K LED Wattage and Lumen Values

		LED		Average		Type 2			Type 3			Type 4	
Ordering Code	Total LEDs	Current (mA)	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148
ECF-S-32L-530-CW-G2-x	32	530	5000	56	75,36	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138
ECF-S-32L-700-CW-G2-x	32	700	5000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127
ECF-S-64L-900-CW-G2-x	64	900	5000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134

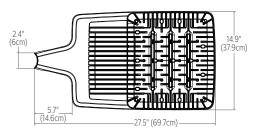
		LED		Average		Type AFR			Type 5			Type 5W	
Ordering Code	Total LEDs	Current (mA)	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	6,006	B2-U0-G1	150	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,807	B2-U0-G1	140	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-CW-G2-x	32	700	5000	73	10,070	B2-U0-G2	138	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	14,176	B3-U0-G2	134	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,725	B3-U0-G2	129	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,664	B3-U0-G2	138	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	21,133	B3-U0-G2	133	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	23,461	B3-U0-G2	128	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-CW-G2-x	64	900	5000	178	24700	B3-U0-G2	139	25063	B5-U0-G3	141	24258	B5-U0-G4	136
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	27828	B4-U0-G3	135	27526	B5-U0-G3	134	27330	B5-U0-G4	133

Area luminaire

Dimensions

Standard Arm (AR)

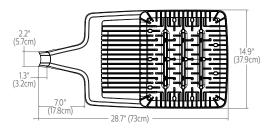
Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)





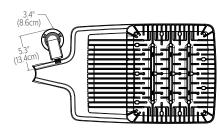
Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft2 (.022m2)





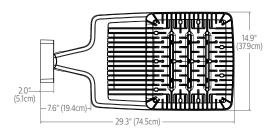
Outboard IMR-HVU sensor





Wall (WS)

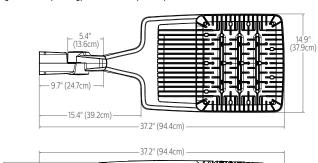
Weight: 27 Lbs. (12. 2Kg)EPA: 0.27ft² (.025m²)





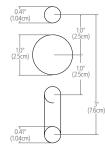
Slip fitter (SF)

Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft2 (.031m2)

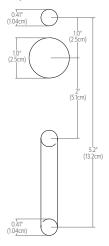




Standard Arm (AR) drill pattern



Retrofit Arm (RAM) drill pattern

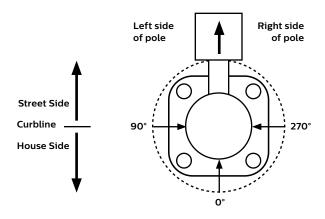


Area luminaire

Optical Orientation Information

Standard Optic Position

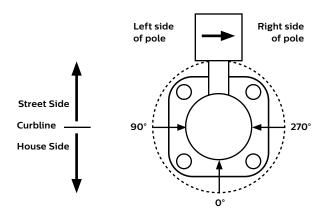
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

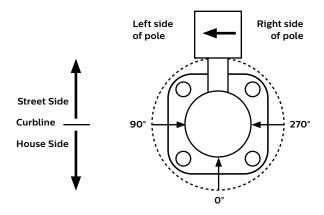
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

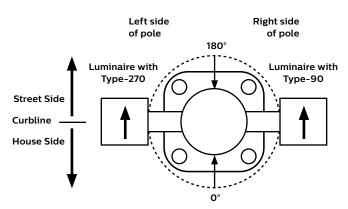
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

Area luminaire

Specifications

Housing

One-piece die cast aluminum housing with integral arm and separate, self-retained hinged, one-piece die cast door frame. Luminaire housing rated to IP66, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31–2010. Testing includes vibration in three axes, all performed on the same luminaire.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 2, 3, and 4 modules or 32, 48, and 64 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 133 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions. Types 2, 3, 4, and AFR when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. EcoForm features a 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. Also optional are slipfitter and wall mounting accessories. Note that only fixed mounts (AR, RAM, WS) are required to meet IDA compliance. SF mounting will not meet IDA.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

SiteWise (SW): 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. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. 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.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic diming profile schedule. Automatic dimming profile scheduled with the following settings:

- CS50/CS30: Security for 7 hours night duration (Ex., 11 PM 6 AM)
- CM50/CM30: Median for 8 hours night duration (Ex., 10 PM 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1 or 2 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

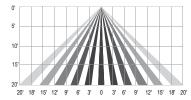
Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

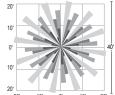
FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight 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. Equipped with motion response with #3 lens for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC wireless controller with #3 lens





Motion response options

Bi-Level Infrared Motion Response (BL-IMRI): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

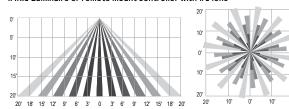
Area luminaire

Specifications

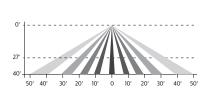
Infrared Motion Response with Other Controls: When used in combination with other controls (Automatic Dimming Profile and SiteWise), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

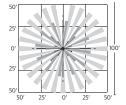
Infrared Motion Response Lenses (IMRI3/IMRI7): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

IMRI3 Luminaire or remote mount controller with #3 lens



IMRI7 Luminaire or remote mount controller with #7 lens





Electrical

Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering Twist-lock receptacle (TLRD5 or TLRD7), photocell or shorting cap is not included. TLRPC is shipped standard with 5 pin.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): 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, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA. 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Listinas

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most EcoForm configurations are qualified under Premium and Standard DesignLights Consortium® categories. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

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 (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, 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: signify.com

Warranty

EcoForm luminaires feature a 5-year limited warranty
See signify.com/warranties for complete details and exclusions.



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FEATURES

Application

The PG is an indoor/outdoor, die-cast architectural emergency unit. It is a wet location listed, emergency luminaire with high-output LED technology that provides path of egress illumination for mounting over entrance/exit ways and perimeter walkways. Spectron® self-testing/self-diagnostic electronics are included standard. A battery heater for cold temperature operation is available as an option.

Construction

Housing and mounting plate are constructed of 0.125" die-cast aluminum and 0.125" closed-cell, medium density, neoprene gasket. The acrylic lens allows 92% light transmission. The reflector is electropolished aluminum with 95% reflectance. Housing finish is powder coated electro-deposition paint available in four colors: dark bronze, white, platinum silver and black.

Installation

Universal housing knockouts for mounting to standard 31/2" and 4" octagon and 4" square electrical boxes. A 1/2" – 1/4 NPT threaded conduit opening is provided at the top of the housing and sealed with a closure plug. The back plate mounts to the wall surface using installer supplied hardware. The housing "snaps" to the back plate by a "pin and socket" arrangement, and is secured with two Fillister head screws. AC Lockout feature prevents battery discharge prior to initial unit power-up saving installation time.

Lamps

Four high-output, long life LED lamps arranged in redundant pairs.

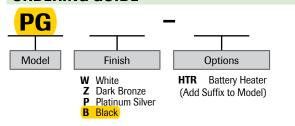
Compliances

UL 924 Listed (emergency models only) UL Wet Location Listed NFPA 101 Life Safety Code NFPA 70 National Electrical Code OSHA U.S. Patent No. D627,916

Warranty

Fixture: 5 Years Full Battery: 2 Years Full, 8 Years Pro Rata Lifetime LED Warranty

ORDERING GUIDE







White



Dark Bronze



Platinum Silver



Black

Reference "Remote Heads and Fixtures" specification sheet for information on matching PG remote



PGR Remote LED







SPECIFICATIONS

Electronics

Upon failure of the normal utility power, a solid-state transfer switch automatically activates the emergency lamp. Upon resumption of the normal utility power, the battery is disconnected from the load and recharged through a solid-state charging unit. A low voltage battery disconnect feature protects the battery from severe damage during prolonged power failures. Spectron® self-testing/self-

diagnostic circuitry provides automatic system testing on a monthly and semi-annual basis. Manual testing is available at any time using the push-to-test button: push once for a 60-second system test; push twice for a 90-minute system test.

Number of Lamps: Four high output LEDs

Lamp Configuration: Two sets of 2 LEDs provide illumination. In the unlikely event that any single LED should fail the remaining LEDs willcontinue to function.

Lamp Type: Solid state high output LEDs

Lamp Color: Cool White, 6350K Total Lamp Output: 405 Lumens Input: 120/277VAC, 60 Hz

Battery Charger: Temperature compensating, constant current

Transfer: Solid state

Functional Circuitry: AC lockout, transformer isolation, transient surge protection, low voltage battery disconnect, brownout

detection, time delay retransfer

Battery Recharge Cycle: per UL time standards

Test Means: Integral test switch

Battery: Sealed, maintenance-free Nickel-Cadmium Operating Temperature Range for Models without Heater:

0°C to 50°C (32°F to 122°F)

Operating Temperature Range for Models with Heater:

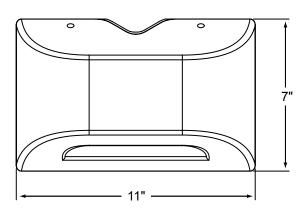
-30°C to 50°C (-22°F to 122°F)

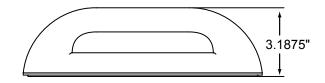
Power Consumption

Models Wit	hout Heater	Models W	ith Heater		
120VAC	2.78 watts	120VAC	15.2 watts		
277VAC	2.88 watts	277VAC	15.7 watts		

Power factor, average: 0.8 (lagging)

DIMENSIONS





ILLUMINATION PATTERN

SINGLE UNIT COVERAGE

Mounting Height: 9'
Outdoor Reflectance: 0/30/10
Indoor Reflectance: 80/50/20



	Indoor	Outdoor
1 FC Average (W x D)	33' X 10'	27' X 10'
1 FC Minimum (W x D)	10' X 10'	9' X 10'

MULTIPLE UNIT SPACING

Mounting Height: 9'
Illuminated Path Depth: 6'
Outdoor Reflectance: 30/10
Indoor Reflectance: 80/50/20

Path of Egress

1 FC Average

	Indoor	Outdoor
1 FC Average	44'	33'
1 FC Minimum	16'	15'

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HI-LITE MFG. CO., INC.

13450 Monte Vista Avenue Chino, California 91710 Telephone: (909) 465-1999 Toll Free: (800) 465-0211 SCALE:

N.T.S.

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S.M.-W

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Fax: (909) 465-0907

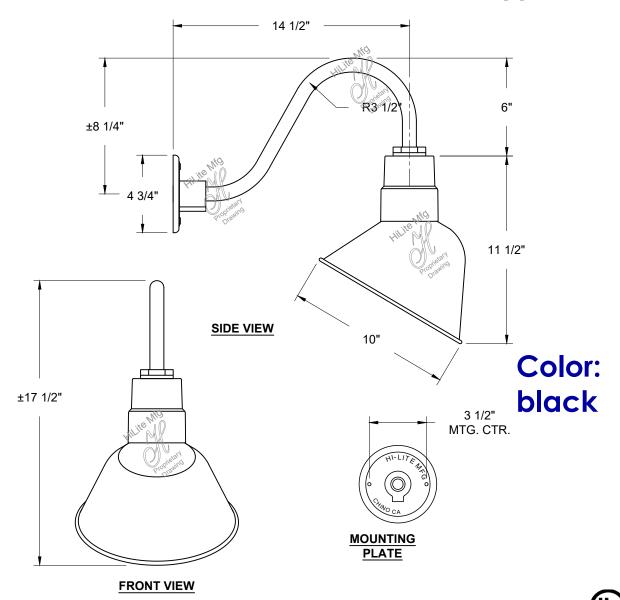
*EDESIGNSOLUTIONS

ROBIN GOETZ, LC

YORBA LINDA, CA 92887

562-926-7202

Type: ZA



	LISTED	
1	Voltage	

Item Number	Wattage	Voltage
H-CDEEE-B69-G	200W	120V

Finish
95-Dark Green (Exterior of Fixture & Arm)
93-White (Interior of Fixture)

Mounting Wall Mount Lamp/Socket
1-Medium Base INC