PHILIPS

GARDCO

Site & Area

Gullwing LED

Small, GL13



LED

Project:

Location:

Cat.No:

Type:

Quantity:

Notes:

Philips Gardco Gullwing LED GL13 area luminaires combine LED performance excellence and advanced Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing.

Ordering guide

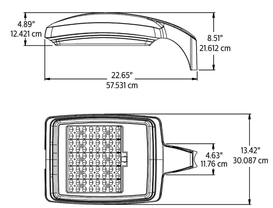
Example: GL13-APD-1-4-70LA-6435-NW-120-BRP-LF

Prefix	Controls	Mounting	Optical System[4]	Wattage	LED Color	Voltage	Finish	Options
GL13	-	1	2	70LA-6435	NW	120	BLP	F[1]
13" Gullwing LED Luminaire Constant Wattage	Gullwing Standard Luminaire	Single	Type 2	64 LEDs, 350mA	Neutral White 4000K, 70 min. CRI	208	Black Paint	Fusing
GL13-RK	GL13-DIM	2	3	85LA-8035	CW	240	WP	LF[1]
13" Gullwing LED Retrofit Kit	13" Gullwing LED with 0-10V Dimming	2@180˚	Type 3	80 LEDs, 350mA	Cool White 5700K, 70 min. CRI	277	White Paint	In-Line/In-Pole Fusing
	GL13-APD[2]	2@90	4	105LA-6453	WW	347	BRP	PC[2,3,6]
	13" Gullwing LED with Automatic Profile Dimming	2 @ 90˚	Type 4	64 LEDs, 530mA	Warm White 3000K, 70 min. CRI	480	Bronze Paint	Photocell Receptacle only
	GL13-MRI[2,3]	3	5			UNV	NP	PCR5[2,5,9]
	13" Gullwing LED with Motion Response at 50% Low (luminaire mounted sensor)	3@90˚	Type 5			(120-277V)	Natural Aluminum Paint	Photocell Receptacle only with 2 dimming and 2 auxiliary connections
	GL13-APD-MRI[2,3]	3@120				HVU	OC	PCR7[2,5,9]
	13" Gullwing LED with APD with Motion Response Override (luminaire mounted sensor)	3@120˚				(347-480V)	Optional Color Specify optional color or RAL ex: OC-LGP or OC-RAL7024.	HS
		4					SC	External Houseside Shield
		4@90˚					Special Color Specify Musi-supply color chip. Requires factory quote.	IS
		W						Internal Houseside Shield (types 2, 3, 4 only)
		Wall Mount, Recessed J-Box						MA
		WS						Mast Arm Fitter - Mounts to a 2-3/8" O.D. mast arm.
		Wall Mount, Surface Conduit						TR1[8]
								Single Transition
								TR2[8]
								Twin Transition
								PTF2[10]
								Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
								PTF3[10]
								Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
								PTF4[10]
								Pole Top Fitter - 3 1/2" - 4" Dia. Tenon
								SPA[11]
								Square Pole Adapter
								DL[4]
								Diffuse Lens

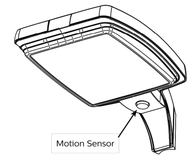
1. Available 120-277V.
2. Not available with Retrofit Kits (GL13-RK).
3. Available 120 or 277V only.
4. Luminaire door frame and optic assembly provided standard with clear tempered glass lens.
5. Voltage must be specified.
6. Not available with 480V.
7. Works with 3-pin or 5-pin NEMA photocell/dimming device.
8. If ordered with DIM, APD, MRI, APD-MRI, dimming will not be connected to NEMA receptacle.
9. Mounts to a 2-3/8" Top Tenon. Specify a round pole with a 3.0" top O.D. for a smooth transition.
10. Not available in 120° mounting configurations.
11. Required for mounting to straight square poles.

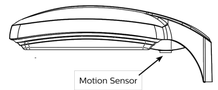
GL13 Gullwing LED area luminaire, small

Dimensions and EPA



GL13-MRI or GL13-APD-MRI Units





EPA Data

1	2	3...4
.8 ft²	1.6 ft²	2.2 ft²
.07 m²	.15 m²	.20 m²

Approximate Weight
Single Luminaire

33 lbs / 14.969 kg

Technical Data

Ordering Code	Total LEDs	LED Current (mA)	Average System Watts[12]	Color Temp.	Type 2 Lumen Output[13,14]	Type 2 Efficacy (LPW)	Type 2 BUG Rating	Type 3 Lumen Output[13,14]	Type 3 Efficacy (LPW)	Type 3 BUG Rating
70LA-6435	64	350	70	4000K	6652	95	B2-U0-G1	6750	96	B1-U0-G2
85LA-8035	80	350	86	4000K	8064	95	B2-U0-G1	8173	95	B1-U0-G2
105LA-6453	64	530	101	4000K	9870	97	B2-U0-G2	9385	93	B2-U0-G2

Ordering Code	Total LEDs	LED Current (mA)	Average System Watts[12]	Color Temp.	Type 4 Lumen Output[13,14]	Type 4 Efficacy (LPW)	Type 4 BUG Rating	Type 5 Lumen Output[13,14]	Type 5 Efficacy (LPW)	Type 5 BUG Rating
70LA-6435	64	350	70	4000K	6731	96	B1-U0-G2	6657	95	B3-U0-G1
85LA-8035	80	350	86	4000K	8027	94	B1-U0-G2	8025	93	B3-U0-G2
105LA-6453	64	530	101	4000K	9388	93	B2-U0-G2	9139	90	B3-U0-G2

12. 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.
13. Contact Outdoorlighting.applications@philips.com for values not listed or if approximate estimates are required for design purposes.
14. LED arrays feature LEDs that provide from 90 to 100 lumens per watt when operated at 350 mA. Lumen values based on tests performed in compliance with IESNA LM-79.

GL13 Gullwing LED area luminaire, small

Luminaire Configuration Information

GL13

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

GL13-DIM

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

GL13-APD

Philips Gardco Gullwing LED luminaire with Automatic Profile Dimming. Luminaire is provided with Dynadimmer, 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 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.

GL13-APD Dimming Profile:

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

The GL13-APD offers many of the advantages of a sophisticated control system, including an average energy savings of at least 33% versus constant wattage, constant light output systems, without the need for a control system.

GL13-MRI (Luminaire mounted sensor)



Luminaires with Integral Motion Sensor include the DynaDimmer module and an integral motion sensor. The location of the integral motion sensor is shown on page 2. The DynaDimmer is programmed to provide 50% power and light output, unless motion is detected. 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. Duration period is field adjustable. Available in 120V or 277V input only.

MRI luminaires are provided with the WattStopper FS-355-L3W motion sensor, with a maximum recommended 20 ft. mounting height. The area coverage and range of the integral sensors make them most suitable for applications not requiring longe range detection.

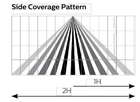
GL13-APD- MRI (Luminaire mounted sensor)

Luminaires with Automatic Profile Dimming and Motion Response Override with integral morion sensor, (APD-MRI) combine the benefits of automatic profile dimming and motion response. The luminaire will dim to 50% power, 50% light output, per the APD dimming profile. If motion is detected during the time 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. Duration period is field adjustable. APD-MRI luminaires use the identical motion sensor as MRI lumaires. See motion sensor details above. Available in 120V or 277V input only.

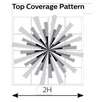
APD-MRI luminaires are available with 120V or 277V (UNIV) input voltages only.

APD-MRI luminaires use the identical motion sensor as MRI luminaires. See motion sensor details for GL13-MRI.

Side Coverage Pattern

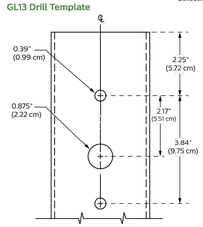


Top Coverage Pattern



Distances are approximate.
H = height above ground

GL13 Drill Template



GL13 Gullwing LED area luminaire, small

Specifications

General Description

The Philips Gardco Gullwing LED GL13 area luminaire is defined by its high performance, sleek profile and rugged construction. Gullwing LED luminaires combine LED performance excellence and advanced Philips Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing.

Housing

A one-piece die cast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only 0.8 ft² /.07 m².

IP Rating

Gullwing LED 13" optics are IP65 rated.

Thermal Management

The Philips Gardco Gullwing LED provides extruded aluminum integral thermal radiation fins to provide the excellent thermal management so critical to long LED system life.

LED Optical System

LED arrays are set to achieve IES Type II, Type III, Type IV, and Type V, available with internal shields for back light control. Individual LED arrays are replaceable. Luminaires feature high performance Class 1 LED systems.

Electrical

Luminaires are equipped with an LED driver that accepts 120V through 277V, or 347V through 480V, 50hz to 60hz, input. Driver output is 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. Power factor is not less than 90%. Luminaire consumes 0.0 watts in the off state. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

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.

Labels

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

Limited Warranty

5 year limited warranty. See philips.com/luminaires for complete details and exclusions.

LED Performance:

PREDICTED LUMEN DEPRECIATION DATA[15]				
Ambient Temperature °C	Driver mA	Calculated L_{70} Hours[15,16]	L_{70} Per TM-21[16,17]	Lumen Maintenance % @ 60,000 hours
25°C	up to 530 mA	>100,000	>60,000	82%

15. 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.
16. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output.
17. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours.

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philips.com/luminaires

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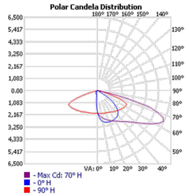
OUTDOOR PHOTOMETRIC REPORT
CATALOG: GL13-2-105LA-6453-NW-IS

AcuityBrands.

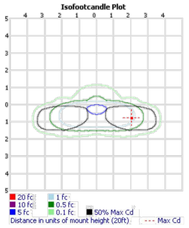
MANUFACTURER:	PHILIPS GARDCO
TEST #:	LRPS1156M
TEST LAB:	PHILIPS LIGHTING - SAN MARCOS
CATALOG:	GL13-2-105LA-6453-NW-IS
DESCRIPTION:	PHILIPS GULLWING LED GL13 WITH INTERNAL SHIELDING
LAMP:	(4) LEDGINE 3.1 LIGHT ARRAYS OF 16 LEDS (LUXEON T) DRIVEN AT 530MA
LAMP OUTPUT:	TOTAL LUMINAIRE LUMENS: 7683.3, ABSOLUTE PHOTOMETRY *
INPUT WATTAGE:	101.2
LUMINOUS OPENING:	POINT
MAX CD:	6,462.4 AT HORIZONTAL: 70°, VERTICAL: 65°
ROADWAY CLASS:	SHORT, TYPE II

No Photo Available

Polar Candela Distribution



Isofootcandle Plot



*TEST BASED ON ABSOLUTE PHOTOMETRY WHERE LAMP LUMENS=LUMENS TOTAL.
*CUTOFF CLASSIFICATION AND EFFICIENCY CANNOT BE PROPERLY CALCULATED FOR ABSOLUTE PHOTOMETRY.

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LRPS1156M
VISUAL PHOTOMETRIC TOOL

OUTDOOR PHOTOMETRIC REPORT
CATALOG: GL13-2-105LA-6453-NW-IS

AcuityBrands.

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% TOTAL	LUMINAIRE
0-30	1,507.0	19.6%	
0-40	2,629.9	34.2%	
0-60	5,712.5	74.3%	
60-90	1,970.8	25.7%	
70-100	511.8	6.7%	
90-120	0.000	0%	
0-90	7,683.3	100%	
90-180	0.000	0%	
0-180	7,683.3	100%	

ROADWAY SUMMARY

DISTRIBUTION:	TYPE II, SHORT	
MAX CD, 90 DEG VERT:	0.000	
MAX CD, 80 TO <90 DEG:	281.6	
	LUMENS	% LAMP
DOWNWARD STREET SIDE:	6,724.9	87.5%
DOWNWARD HOUSE SIDE:	958.8	12.5%
DOWNWARD TOTAL:	7,683.7	100%
UPWARD STREET SIDE:	0.000	0%
UPWARD HOUSE SIDE:	0.000	0%
UPWARD TOTAL:	0.000	0%
TOTAL LUMENS:	7,683.7	100%

LUMENS PER ZONE

ZONE	LUMENS	% TOTAL	ZONE	LUMENS	% TOTAL
0-10	183.8	2.4%	90-100	0.000	0%
10-20	507.8	6.6%	100-110	0.000	0%
20-30	815.5	10.6%	110-120	0.000	0%
30-40	1,122.9	14.6%	120-130	0.000	0%
40-50	1,434.9	18.7%	130-140	0.000	0%
50-60	1,647.6	21.4%	140-150	0.000	0%
60-70	1,459.0	19.0%	150-160	0.000	0%
70-80	496.7	6.5%	160-170	0.000	0%
80-90	15.0	0.2%	170-180	0.000	0%

LCS TABLE

BUG RATING	B1 - U0 - G1	
FORWARD LIGHT	LUMENS	LUMENS %
LOW(0-30):	1,187.5	15.5%
MEDIUM(30-60):	3,733.6	48.6%
HIGH(60-80):	1,793.9	23.3%
VERY HIGH(80-90):	10.0	0.1%
BACK LIGHT		
LOW(0-30):	319.7	4.2%
MEDIUM(30-60):	471.9	6.1%
HIGH(60-80):	162.3	2.1%
VERY HIGH(80-90):	4.9	0.1%
UPLIGHT		
LOW(90-100):	0.000	0%
HIGH(100-180):	0.000	0%
TRAPPED LIGHT:	0.000	0%

LRPS1156M
VISUAL PHOTOMETRIC TOOL

NORTH

brr

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BEST DEVELOPMENT GROUP

APN: 656-020-034
DESERT HOT SPRINGS, CA 92240

NO.	DATE	DESCRIPTION

REGISTERED PROFESSIONAL ENGINEER
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No. E015418
Exp. 06/30/19
ELECTRICAL
STATE OF CALIFORNIA

DATE:

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CHECKED BY: NGE

JOB #

SHEET TITLE

ELECTRICAL PHOTOMETRIC PLAN

SHEET NO.

EP1.1

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