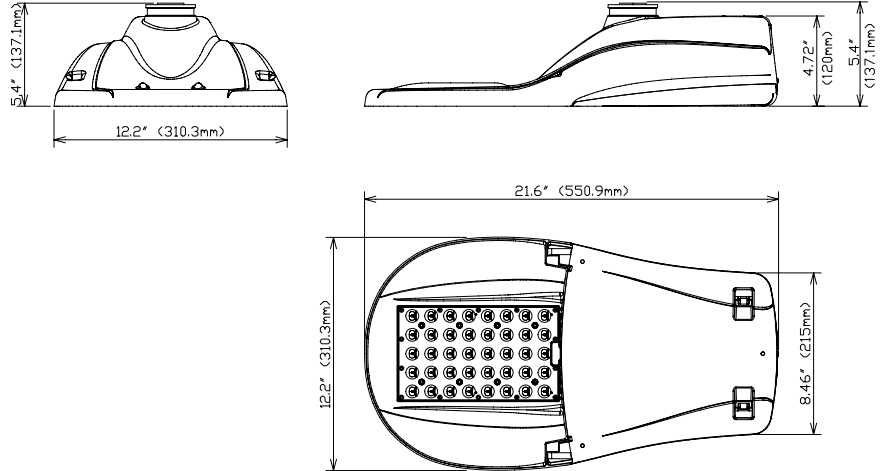


GreenCobra™ Midsize LED Street Light

GCM H-Series Specification Data Sheet

Luminaire Data

Weight 11 lbs [5.0 kg]
EPA 0.44 ft²



Ordering Information

Sample Catalog No. GCM2-30H-MV-NW-2R-GY-700-PCR7-WL

Product	LED Code	Voltage	Color Temperature	Distribution	Finish ¹	30H Drive Current Code ²	Options
GCM2	30H	MV 120-277V HV 347-480V	WW 3000K	2S Type 2 Short	GY Gray	530	FDC ³ Fixed Drive Current
			NW 4000K	2R Type 2 Medium	DB Dark Bronze	610	LPCR Less Photocontrol Receptacle
			CW 5000K	3R Type 3 Medium	BK Black	700	PCR7 ⁴ ANSI 7-wire Photo-control Receptacle
				4 Type 4		850	PCR7-CR ⁵ Control Ready 7-wire PC Receptacle
				5 Type 5		1A	MSL3 Motion Sensor, L3 Lens
GCM2	40H					40H Drive Current Code ²	MSL7 Motion Sensor, L7 Lens
							LSSP2 Extreme Surge Protection, Fail-to-off, 20kV/10kA Rating
							WL Utility Wattage Label
							4B 4-Bolt Mounting Bracket
							RWG Rubber Wildlife Guard
							SWTB Straight Wire Terminal Block
							BBL Bubble Level
			DSC Door Safety Cable				
			CF ⁶ Coastal Paint Finish				

Notes:

- Gray, Black, and Dark Bronze standard. Consult factory for other finishes.
- Specified drive current code is the factory set drive current. Field adjustable current selector enables fixture to be changed in the field to adjust light output for local conditions (not available with Fixed Drive Current (FDC) or PCR7-CR option). Consult factory if wattage limits require a special drive current.
- Non-field adjustable, fixed drive current. Specify required drive current. Not available with PCR7-CR option.
- Includes current selector that enables field adjustability of light levels. Includes connectors to allow easy upgrade of wireless dimming via PCR7. Wireless node by others.
- Control-ready wired at factory for wireless node dimming (node by others). Current selector not included in the fixture. Not able to adjust above specified drive current.
- Specify the CF Option for coastal installation. See warranty for details.
- Flush mounted house side shield. Shield cuts light off at 1/2 mounting height behind luminaire.
- Flush mounted cul-de-sac shield. Shield cuts light off at 1/2 mounting height behind luminaire and 1-1/2 mounting height on either side of luminaire.
- Flush mounted front side shield cuts light off at approximately one mounting height in front of luminaire (street side).
- Specify Color (GY, DB, BK)
- Specify MV (120-277V) or HV (347V-480V)

Accessories*

HSSGCM ⁷	House Side Shield, Snap-On*
CSSGCM ⁸	Cul-De-Sac Side Shield, Snap-On*
FSSGCM ⁹	Front Side Shield, Snap-On*
SPB ¹⁰	Square Pole Horizontal Arm Bracket
RPB ¹⁰	Round Pole Horizontal Arm Bracket
PTB ¹⁰	Pole Top Tenon Horizontal Arm Bracket
PTB2 ¹⁰	Pole Top Tenon Horizontal Arm Bracket (2@180°)
WB ¹⁰	Wall Horizontal Arm Bracket
BSK	Bird Deterrent Spider Kit
LLPC ¹¹	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap

*Unless specified for field installation, Shields and Shorting Caps are shipped installed. All other options are shipped separately.



Luminaire Specifications

Housing

Die cast aluminum housing with universal two-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. One-piece aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Four-bolt mounting bracket is available. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass. Mounting has leveling adjustment from ± 5° in 2.5° steps. All hardware is stainless steel. Electrical components are accessed without tools via die cast aluminum door with stainless steel quick-release latches. Provided standard with removable polycarbonate wild life guard. For additional protection, optional rubber wildlife guard (RWG) which conforms snugly to the mast arm is offered.

Light Emitting Diodes

LEDs produce minimum 90% of initial intensity at 60,000 hours of life per IES recommended lumen maintenance life projection based on 6 times the duration of the collected LM-80 data. For details on IESNA Position on LED Product Lifetime Prediction, PS-10-18. LEDs have correlated color temperature of 3000K (WW), 4000K (NW), or 5000K (CW) and 70 CRI minimum. LEDs are ROHS compliant, 100% mercury and lead free.

Field Adjustability

LED lumen output can be changed in the field to adjust drive current for local conditions (not available with PCR7-CR option). The specified driver current will be the factory set output. Field adjustments can be made with the output selector included in the fixture. Field adjustable range shown in performance data table.

Quality Control

Every luminaire is performance tested before and after a 2-hour burn-in period. Assembled in the USA.

Optical Systems

Micro-lens optical systems produce IESNA Type 2, Type 3, Type 4, or Type 5 distributions and are fully sealed to maintain an IP66 rating. Luminaire produces 0% total lumens above 90° (BUG Rating, U=0). Optional house side shield cuts light off at 1/2 mounting height behind luminaire. Front side shield cuts light off at approximately one mounting height in front of the luminaire (street side). Cul-de-sac shield provides back and side light control for end of cul-de-sac applications. All shields are field installable without tools.

Electrical

Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire. Surge protection complies with IEEE/ANSI C62.41 Category C High, 20kV/10kA and ANSI C136.2-2015, 20kV/10kA.

Controls

3-Wire photocontrol receptacle is standard. ANSI C136.41 7-wire (PCR7) photocontrol receptacle is available. All photocontrol receptacles have tool-less rotatable bases. Wireless control module is provided by others.

Finish

Housing receives a durable, fade-resistant polyester powder coat finish with 3.0 mil nominal thickness. Standard finish tested to withstand 5000 hours in salt spray exposure per ASTM B117 and Coastal Finish per ASTM G85. Finish meets scribe creepage rating 8 per ASTM D1654. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

Listings/Ratings/Labels

Luminaires are UL listed for use in wet locations in the United States and Canada. All electronic components inside of the luminaire are NRTL damp location rated per ANSI 136.37-2011 Ingress Protection standard. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C.

Photometry

Luminaire photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures.

Warranty

10-year limited warranty is standard on luminaire and components. See Leotek.com for warranty details.

Vandal Resistance

Housing and optics rated to IK10

Standards

Luminaire complies with:
ANSI: C136.2, C136.3, C136.10, C136.13, C136.15, C136.22, C136.31, C136.35, C136.37, C136.41, C62.41, C78.377, C82.77
Other: FCC 47 CFR, IEC 60598, ROHS II, UL 1449, UL 1598

Color Specifications

Order Code	Color	RAL #	Pantone Equivalent
GY	Gray	7040	429C
BK	Black	9004	426C
DB	Dark Bronze	6022	BLACK 2C

TM21 Lumen Maintenance per IES TM21-11 Calculation

Model Number	60,000 Hours*	80,000 Hours	100,000 Hours
All GCM H	>95%	>94%	>93%

*Calculation based on IES position statement on Lumen Maintenance Life Projections

Performance Data: 3000K (WW)

All data nominal. IES files for all CCTs available at leotek.com.

Product	LED Code	Drive Current Code	System Wattage (W)	Delivered Lumens (Lm) ¹	Efficacy (Lm/W)	Field Adjustable Output Range
GCM2	30H	530	48	5770	120	↑ ↓
		610	58	6700	116	
		700	68	7620	112	
		850	82	8800	107	
		1A	101	10480	104	
	40H	575	73	8780	120	
		700	88	10230	116	
		850	107	11960	112	
		950	121	13040	108	
		1A	135	14080	104	

Notes:

1 Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.

Performance Data: 4000K (NW) and 5000K (CW)

All data nominal. IES files for all CCTs available at leotek.com.

Product	LED Code	Drive Current Code	System Wattage (W)	Delivered Lumens (Lm) ¹	Efficacy (Lm/W)	Field Adjustable Output Range
GCM2	30H	530	48	6330	132	↑ ↓
		610	58	7440	128	
		700	68	8550	126	
		850	82	9830	120	
		1A	101	11720	116	
	40H	575	73	9590	131	
		700	88	11260	128	
		850	107	13270	124	
		950	121	14390	119	
		1A	135	15430	114	

Notes:

1 Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.

BUG Ratings

3000K (WW)

			Type 2S	Type 2R	Type 3R	Type 4	Type 5	
Product	LED Code	Drive Current Code	BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating	
GCM2	30H	530	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1	
		610	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G2	B3 U0 G1	
		700	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1	
		850	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	
		1A	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	
	40H	575	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		700	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		850	B2 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B3 U0 G2	
		950	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2	
		1A	B2 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2	

4000K (NW)

			Type 2S	Type 2R	Type 3R	Type 4	Type 5	
Product	LED Code	Drive Current Code	BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating	
GCM2	30H	530	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1	
		610	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1	
		700	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	
		850	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	
		1A	B3 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	B3 U0 G2	
	40H	575	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		700	B2 U0 G2	B2 U0 G2	B3 U0 G3	B2 U0 G2	B3 U0 G2	
		850	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2	
		950	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2	
		1A	B3 U0 G2	B3 U0 G3	B3 U0 G3	B3 U0 G3	B4 U0 G2	

5000K (CW)

			Type 2S	Type 2R	Type 3R	Type 4	Type 5	
Product	LED Code	Drive Current Code	BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating	
GCM2	30H	530	B2 U0 G1	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1	
		610	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1	
		700	B2 U0 G1	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	
		850	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2	
		1A	B2 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B3 U0 G2	
	40H	575	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
		700	B2 U0 G2	B2 U0 G2	B3 U0 G3	B2 U0 G2	B3 U0 G2	
		850	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2	
		950	B3 U0 G2	B2 U0 G2	B3 U0 G3	B3 U0 G2	B4 U0 G2	
		1A	B3 U0 G2	B3 U0 G3	B3 U0 G3	B3 U0 G3	B4 U0 G2	