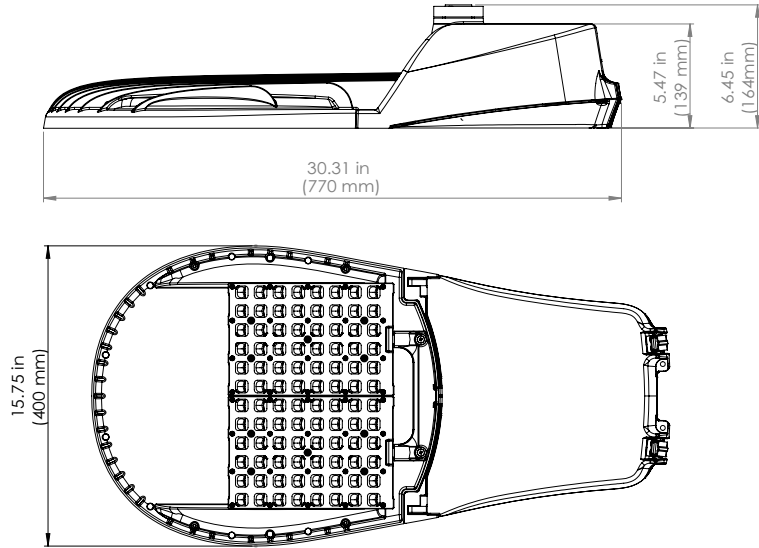


GreenCobra™ LED Street Light

GC2 N-Series Specification Data Sheet

Luminaire Data

Weight 25 lbs [11.3 kg]
EPA 0.77 ft²



Ordering Information

Sample Catalog No. GC2-96N-MV-NW-2R-GY-750-FDC

Product	LED Code	Voltage	Color Temperature	Distribution	Finish ¹	Drive Current Code ²	Options
GC2	96N	MV 120-277V	WW 3000K	2R Type 2 Medium	GY Gray	750 820 930 1050	FDC ³ Fixed Drive Current
		HV 347-480V	NW 4000K				DB Dark Bronze
			CW 5000K	BK Black	PCR7 ⁴ ANSI 7-wire Photocontrol Receptacle		
				3R Type 3 Medium			PCR7-CR ⁵ Control Ready 7-wire Photocontrol Receptacle
				4 Type 4			WL Utility Wattage Label
				4F Type 4F			DSC Door Safety Cable
				5 Type 5			CF ⁶ Coastal Paint Finish
							LSSP2 20/10 SPD, fail-to-off

- Notes:
- 1 Gray, Black and Dark Bronze standard, consult factory for other finishes.
 - 2 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.
 - 3 Non-field adjustable, fixed drive current. Specify required drive current. Not available with PCR7-CR option.
 - 4 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.
 - 5 Control-ready wired at factory for wireless none dimming (node by others). Current selector not included in the fixture. Not able to adjust above specified drive current.
 - 6 Specify the CF Option for coastal installation. See warranty for details.
 - 7 Flush mounted house side shield. Shield cuts light off at 1/2 mounting height behind luminaire. Specify color when ordering.
 - 8 Specify Color (GY, DB, BK)
 - 9 Specify MV (120-277V) or HV (347-480V).

Accessories*	
HSSGC2 ⁷	House Side Shield
SPB ⁸	Square Pole Horizontal Arm Bracket
RPB ⁸	Round Pole Horizontal Arm Bracket
PTB ⁸	Pole Top Tenon Horizontal Arm Bracket
PTB2 ⁸	Pole Top Tenon Horizontal Arm Bracket (2@180°)
WB ⁸	Wall Horizontal Arm Bracket
BSK	Bird Deterrent Spider Kit
LLPC ⁹	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap

*Accessories are ordered separately and not to be included in the catalog number. For factory-installed HSS, consult factory



Luminaire Specifications

Housing

Die cast aluminum housing with universal four-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. Aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. All hardware is stainless steel material. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass. Mounting has leveling adjustment from + 10° to -5° in 2.5° steps and integral bubble level standard. Electrical components are accessed without tools and are mounted on removable power door with stainless steel latches. Standard rubber wildlife guard conforms to mast arm with no gaps.

Light Emitting Diodes

Hi-flux/Hi-power white LEDs produce a minimum of 90% of initial intensity at 100,000 hours of life based on IES TM-21 (L90 = 100k hours). LEDs are tested in accordance with IES LM-80 testing procedures. LEDs have correlated color temperature of 3000K (WW), 4000K (NW), or 5000K (CW) and 70 CRI minimum. LEDs are 100% mercury and lead free.

Field Adjustability

LED drive current can be changed in the field to adjust light output for local conditions (not available with Fixed Drive Current (FDC) or PCR7-CR option). The specified drive current code will be the factory set drive current. Field adjustments can be made with the current 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. Tools required for field installation

Electrical

Rated life of electrical components is 100,000 hours minimum. 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 and is aligned for straight wire entry. Surge protection complies with IEEE/ANSI C62.41 Category C High, 20kV/10kA and ANSI C136.2-2015, 20kV/10kA.

Power Supply

IP66 rated power power supply with high power factor of > 90%. Auto sensing universal AC input from 120 to 277VAC (MV model) and 347 to 480VAC (HV mode) rated for both line to line and line to neutral applications. Maximum THD rating of 20%. Class 1 or Class 2. Built-in overheating protection mechanism will reduce drive current to LEDs and electrical components if the driver experiences unusual internal overheating situation. Built-in short circuit, voltage overload, and current overload protection with automatic recovery after correction.

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. Consult DLC QPL to confirm your specific fixture selection is DLC approved. 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. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C. Assembled in the U.S.A

Photometry

Luminaires photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures. IES files for all CCTs are available at leotek.com.

Warranty

10-year limited warranty is standard on luminaire and components.

Vandal Resistance

Housing and optics rated to IK10

Certification and Compliance

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	132
BK	Black	9004	130
DB	Dark Bronze	6022	128

TM21 Lumen Maintenance per IES-11 TM21-11 Calculation

Model Number	60,000 Hours*	80,000 Hours	100,000 Hours
All GC2 N	>96%	>96%	>95%

Performance Data: 3000K (WW)

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

Product	LED Code	Drive Output Code	System Wattage (W)	Delivered Lumens (Lm) ¹	Efficacy (Lm/W)	Field Adjustable Output Range
GC2	96N	750	220	31086	141	↕
		820	243	34079	140	
		930	278	37973	137	
		1050	307	40846	133	

Notes:

1 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 are available at leotek.com.

Product	LED Code	Drive Output Code	System Wattage (W)	Delivered Lumens (Lm) ¹	Efficacy (Lm/W)	Field Adjustable Output Range
GC2	96N	750	220	32594	148	↕
		820	243	35576	146	
		930	278	39742	143	
		1050	307	42843	140	

Notes:

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

BUG Ratings: 3000K (WW)

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

Product	LED Code	Drive Output Code	Type 2R BUG Rating	Type 3R BUG Rating	Type 4 BUG Rating	Type 4F BUG Rating	Type 5 BUG Rating
GC2	96N	750	B3-U0-G3	B3-U0-G4	B4-U0-G4	B3-U0-G4	B5-U0-G3
		820	B3-U0-G3	B4-U0-G4	B4-U0-G4	B3-U0-G4	B5-U0-G3
		930	B4-U0-G4	B4-U0-G4	B4-U0-G4	B3-U0-G5	B5-U0-G4
		1050	B4-U0-G4	B4-U0-G4	B5-U0-G4	B4-U0-G5	B5-U0-G4

BUG Ratings: 4000K (NW) and 5000K (CW)

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

Product	LED Code	Drive Output Code	Type 2R BUG Rating	Type 3R BUG Rating	Type 4 BUG Rating	Type 4F BUG Rating	Type 5 BUG Rating
GC2	96N	750	B3-U0-G3	B4-U0-G4	B4-U0-G4	B3-U0-G4	B5-U0-G3
		820	B4-U0-G4	B4-U0-G4	B4-U0-G4	B3-U0-G4	B5-U0-G4
		930	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5	B5-U0-G4
		1050	B4-U0-G4	B4-U0-G4	B5-U0-G4	B4-U0-G5	B5-U0-G4