LEOTEK®

ComfortView™
Neighborhood LED Streetlight (CV)

Luminaire Data

Weight 8lbs [3.6kg]
EPA 0.39 ft^2

4.78 in [121 mm]
9.55 in [243 mm]
4.48 in [114 mm]
4.78 in [121 mm]
9.55 in [243 mm]
18.35 in [466 mm]
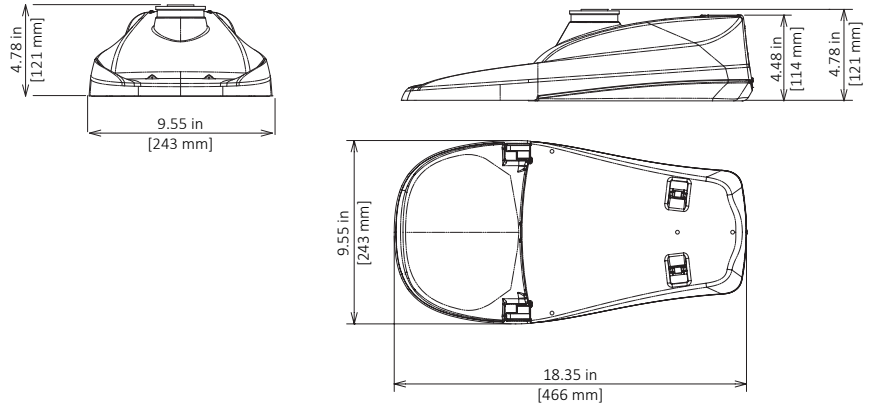
Ordering Information

Sample Catalog No. CV1-H-MV-40K-2R-GY-045-FOC

Product	LED Code	Voltage		Color Temperature		Distribution		Finish[1]		Output Code[2]	Options	
CV1	H	MV	120-277V	22K	2200K	2R	Type 2	GY	Gray	025	FOC[3]	Fixed Output Code
		HV	347-480V	27K	2700K	3R	Type 3	DB	Dark Bronze	030	LPCR	Less Photocontrol Receptacle
				30K	3000K					035	PCR7[4]	ANSI 7-wire Photo-control Receptacle
				40K	4000K			BK	Black	040		
										045	PCR7-CR[5]	Control Ready 7-wire PC Receptacle
										050		
										055	WL	Utility Wattage Label
										060	4B	4-Bolt Mounting Bracket
										070	RWG	Rubber Wildlife Guard
										075	SWTB	Straight Wire Terminal Block
										080	BBL	Bubble Level
											CF[6]	Coastal Paint Finish

Notes:

1. Gray, Black, and Dark Bronze standard. Consult factory for other finishes.
2. Specified output code is the factory set lumen performance. Field adjustable is standard via an eight-position output selector. Refer to output data table on this spec sheet. An illustration of the output selector and its label is shown on page 2. Consult factory if special output setting is required.
3. Non-field adjustable, fixed lumen output. Specify required output code. Not available with PCR7-CR option.
4. Includes output 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 node dimming (node by others). Output 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 Cul-de-Sac Shield cuts light off at 1 times the mounting height behind the luminaire, 1¾ in front, and 2¼ times the mounting height laterally.
8. Flush mounted Front Side Shield cuts light off at approximately 1½ times the mounting height in front of the luminaire (street side) and 2¼ times the mounting height laterally.
9. Flush mounted House Side Shield cuts light off at 1 times the mounting height behind the luminaire and 2¾ times the mounting height laterally.
10. 80 Degree Cutoff Shield mitigates high angle glare above 80 degrees from nadir and cuts light off at 1½ times the mounting height behind and 2⅓ times the mounting height laterally.
11. Specify Color (GY, DB, BK)
12. Specify MV (120-277V) or HV (347-480V).

Accessories*	
CSSCV[7]	Cul-De-Sac Side Shield, Snap-On*
FSSCV[8]	Front Side Shield, Snap-On*
HSSCV[9]	House Side Shield, Snap-On*
VHCS[10]	80 Degree Cutoff Shield, Grey*
PTB[11]	Pole Top Tenon Horizontal Arm Bracket
PTB2[11]	Pole Top Tenon Horizontal Arm Bracket (2@180°)
RPB[11]	Round Pole Horizontal Arm Bracket
SPB[11]	Square Pole Horizontal Arm Bracket
WB[11]	Wall Horizontal Arm Bracket
LLPC[12]	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap
BSK	Bird Deterrent Spider Kit

*Accessories are ordered separately and not to be included in the catalog number. For factory installed HSSCV, CSSCV, FSSCV and VHCS specify as option in luminaire catalog number. HSSCV, CSSCV, FSSCV can be installed without a tool, but a tool is required for removal. 80 Degree Cutoff Shield (VHCS) requires a Phillips head screwdriver for installation.

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SOLA COMMUNITY FRIENDLY LIGHTING PROGRAM

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*2700 and 3000K ComfortView fixtures are certified as Community Friendly Lighting Equipment by the Smart Outdoor Lighting Alliance (SOLA).

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 (4B option) is available. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass by independent lab. 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
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 2200K (22K), 2700 (27K), 3000 (30K), 4000 (40K), and 70 CRI minimum. LEDs are 100% mercury and lead free.

Field Adjustability
LED lumen output can be changed in the field to adjust light output for local conditions (not available with PCR7-CR option). The specified output code 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
Two-stage reflective optics produce IESNA Type 2 or Type 3 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. Cul-de-sac shield provides back and side light control for end of cul-de-sac applications. Front side shield cuts light off at approximately one mounting height in front of luminaire (street side). 80 degreee cutoff shield eliminates very high angle glare above 80 degrees from nadir. 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 receptacles is available. All photocontrol receptacles have a tool-less rotatable base. 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. International Dark Sky Association listed. 2700 and 3000K ComfortView fixtures are certified as Community Friendly Lighting Equipment by the Smart Outdoor Lighting Alliance (SOLA). Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C.

Photometry
Luminaires 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.

Vandal Resistance
Housing and optics rated to IK10
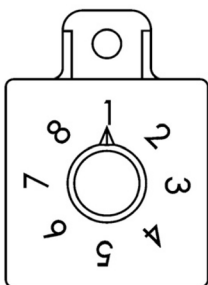
Standards
Luminaire complies with:
ANSI: C136.2, C136.3, C136.10, C136.13, C136.15, C136.22, C136.31, C136.35, C136.37, C136.41, C62.41, C78.377, C82.77
Other: FCC 47 CFR, IEC 60598, ROHS II, UL 1449, UL 1598

Example of ComfortView™ Output Selector and Label:

Refer to the Performance Data Tables (below) for the lumen output corresponding to the output selector value.

Performance Data[1]

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

Product	Color Temperature (CCT)	Output Code	Dial Selection	System Wattage (W)	Delivered Lumens (Lm)[2]	Efficacy (Lm/W)	Field Adjustable Output Range
CV1-H	2200 (22K)	020	1	19	2087	110	
		025	2	24	2693	112	
		030	3	29	3224	111	
		040	4	34	3876	114	
		043	5	38	4222	111	
		045	6	43	4653	108	
		050	7	48	5101	106	
		065	8	66	6722	102	
	2700K (27K)	025	1	19	2242	118	
		030	2	24	2892	120	
		035	3	29	3463	119	
		040	4	34	4163	122	
		045	5	38	4535	119	
		050	6	43	4998	116	
		055	7	48	5479	114	
		070	8	66	7220	110	
	3000K (30K)	025	1	19	2412	127	
		030	2	24	3073	128	
		035	3	29	3676	127	
		045	4	35	4423	128	
		050	5	38	4777	126	
		055	6	45	5561	124	
		060	7	49	5800	118	
		075	8	67	7722	115	
	4000K (40K)	025	1	19	2675	139	
		035	2	24	3294	137	
		040	3	29	3930	136	
		045	4	34	4561	134	
		050	5	38	5059	133	
		055	6	43	5594	130	
		060	7	48	6147	128	
		080	8	67	8227	123	

Notes:
1 Data shown above is for type 2 optic. For type 3 optic, consult IES files for specific data at Leotek.com
2 Nominal lumens. Normal tolerance ± 10% due to factors including LED bin variance, and ambient temperatures.

BUG Ratings

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

Product	Color Temperature (CCT)	Output Code	Dial Selection	Type 2R BUG Rating	Type 3R BUG Rating
CV1-H	2200K (22K)	020	1	B1-U0-G1	B1-U0-G1
		025	2	B1-U0-G1	B1-U0-G1
		030	3	B1-U0-G1	B1-U0-G1
		040	4	B1-U0-G1	B1-U0-G1
		043	5	B1-U0-G1	B1-U0-G1
		045	6	B1-U0-G1	B2-U0-G1
		050	7	B1-U0-G1	B2-U0-G1
		065	8	B2-U0-G1	B2-U0-G2
	2700K (27K)	025	1	B1-U0-G1	B1-U0-G1
		030	2	B1-U0-G1	B1-U0-G1
		035	3	B1-U0-G1	B1-U0-G1
		040	4	B1-U0-G1	B1-U0-G1
		045	5	B1-U0-G1	B2-U0-G1
		050	6	B1-U0-G1	B2-U0-G1
		055	7	B1-U0-G1	B2-U0-G1
		070	8	B2-U0-G1	B2-U0-G2
	3000K (30K)	025	1	B1-U0-G1	B1-U0-G1
		030	2	B1-U0-G1	B1-U0-G1
		035	3	B1-U0-G1	B1-U0-G1
		045	4	B1-U0-G1	B1-U0-G1
		050	5	B1-U0-G1	B2-U0-G1
		055	6	B1-U0-G1	B1-U0-G1
		060	7	B1-U0-G1	B2-U0-G1
		075	8	B2-U0-G1	B2-U0-G2
	4000K (40K)	025	1	B1-U0-G1	B1-U0-G1
		035	2	B1-U0-G1	B1-U0-G1
		040	3	B1-U0-G1	B1-U0-G1
		045	4	B1-U0-G1	B2-U0-G1
		050	5	B1-U0-G1	B2-U0-G1
		055	6	B1-U0-G1	B2-U0-G1
		060	7	B2-U0-G1	B2-U0-G1
		080	8	B2-U0-G1	B3-U0-G2