Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	

Streetworks

CRTK2 Caretaker LED

Dusk-to-Dawn Area/Roadway Luminaire

Product Features

Light ARchitect™

Product Certifications

Interactive Menu

Quick Facts

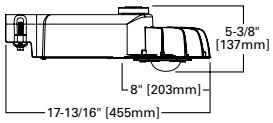
- Up to 154 lumens per watt
- Three optical distributions (T2, T3, and T5R)
- Seven lumen packages, 3,209 - 12,194 delivered lumens
- Offered in 2700K, 3000K, 4000K and 5000K CCTs
- Optional shields and lenses available

Connected Systems

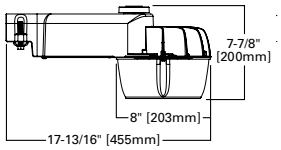
- WaveLinx
- Telensa

Dimensional Details

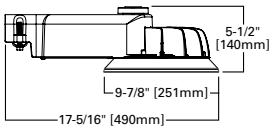
Standard (by it self)



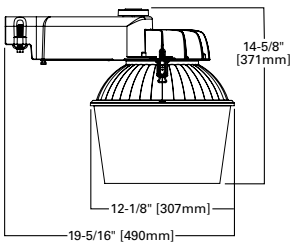
Small arcylic refractor (order separately)



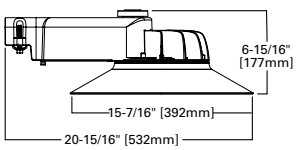
Zero uplight shield (order separately)



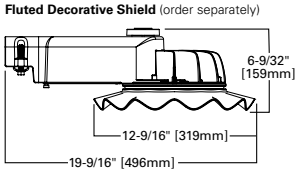
ANSI / NEMA refractor (order separately)



Hillbrook Decorative Shield (order separately)



Fluted Decorative Shield (order separately)



Ordering Information

SAMPLE ORDER NUMBER:

Product Family	Light Engine	Driver	Voltage	Distribution
CRTK2=Caretaker **BAA-CRTK2**=Caretaker, Buy American Act Compliant [9] **TAA-CRTK2**=Caretaker, Trade Agreements Act Compliant [9]	**C013**=1 LED, Approximately 30% Output **C015**=1 LED, Approximately 50% Output **C016**=1 LED, Approximately 60% Output **C018**=1 LED, Approximately 80% Output **C01**=1 LED, Full Output **C01H**=1 LED, High Lumen Output **C01HO**=1 LED, Very High Lumen Output [12]	**D**=Dimming (0-10V) **5LTD**=DALI [12]	**U**=Universal (120-277V)	**T2**=Type II **T3**=Type III **T5R**=Type V Round

Options (Add as Suffix)	Controls	Color	Accessories (Order Separately)
7030=70 CRI / 3000K **7050**=70 CRI / 5000K **8027**=80 CRI / 2700K **SR**=Small Acrylic Refractor (Factory Installed) **TSR**=Tool-less Small Acrylic Refractor (Factory Installed) **U0**=Zero Uplight Shield [1, 13] **TH**=Tool-less Door Hardware **4N7**= NEMA 7-PIN Photocontrol Receptacle **S**=Shorting Cap **10K**=10kV UL 1449 Surge Protection Device **10MSP**=10kV MOV Surge Protection Device **20K**=20kV UL 1449 Surge Protection Device **20MSP**=20kV MOV Surge Protection Device **CC**=Coastal Construction [2] **V**=(3) 5' #14 External Leads [14] **B18**=18" Wood Pole Pipe Arm [16] **B24**=24" Wood Pole Pipe Arm [16] **B30**=30" Wood Pole Pipe Arm [16] **WPBKT**=Wall or Pole Mounting Bracket **5**=120V NEMA Photocontrol Included [5] **LLPC**=Long-life Photocontrol **PW**=PackWise Packaging [15, 16] **DXXXXX**=Department of Transportation - Customer Specific Details [10] **UXXXXX**=Utility - Customer Specific Details [10]	**WLS2XX**=WaveLinx Occupancy Sensor with Bluetooth, 7-15ft [7, 8, 18] **WLS4XX**=WaveLinx Occupancy Sensor with Bluetooth, 15-40ft [7, 8, 18] **FADC**=Field Adjustable Dimming Controller [11, 17]	**A**=Raw Aluminum **AP**=Grey	**RMARROA5**=ANSI/NEMA Standard Refractor Assembly **SR-CARETAKER**=Small Acrylic Refractor **U0-XX**=Zero Uplight Shield [3] **LLPC**=Long-life Photocontrol **LLPC-FO**=Long-life Photocontrol (Fail Off) **HSS-CRTK2**=Field Install House Side Shield [4] **DS-HSS-CRTK2**=Drop Shield House Side Shield **OA1226**=10kV Surge Module Replacement **OA/RA1013**=Shorting Cap **VGS-F/B**=Vertical Glare Shield, Front/Back **VGS-SIDE**=Vertical Glare Shield, Side **FS-XX**=Fluted Decorative Shield [3] **HB-XX**=Hillbrook Bell Decorative Shield [3] **TSR-CARETAKER**=Tool-less Small Acrylic Refractor **B18PK**=18" Wood Pole Pipe Arm **B24PK**=24" Wood Pole Pipe Arm **B30PK**=30" Wood Pole Pipe Arm

NOTES:

1. U0 not offered with SR or TSR option.
2. Anti-corrosion treatment on external components, external screws/mounting bolts, and standard pipe clamp.
3. Replace XX with color.
4. Not for use on T5R optical distribution.
5. 120V input voltage only required.
6. Not available with 10MSP or 20MSP surge options.
7. Not available standard with 4N7 7-pin receptacle option. ETO required.
8. Replace XX with sensor color desired. (WH, BZ, or BK).
9. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
10. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc.
11. Cannot be used with 4N7 or other motion response control options including 5LTD DALI driver. Control leads are used with FADC only when selected.
12. C01HO not available with DALI driver.
13. Required to be IDA Certified when used with 3000K and warmer CCTs.
14. When leads are specified, the terminal block is replaced with serviceable connectors.
15. 9% package dunnage reduction by weight. Only available in order increments of 20, quantity per carton.
16. B18, B24, and B30 are not available with PackWise packaging.
17. Cannot be used with PR7 or other motion response control options.
18. Controls system is not available with photocontrol receptacles (PR , PR7) or other controls systems (FADC, SPBx).

Product Features

Construction

The product features a robust die-cast aluminum housing that ensures durability and longevity. The stamped aluminum door can be easily accessed through a single captive screw, which offers tool-less access for hassle-free maintenance and installation. Additionally, the hardware used is corrosion-resistant, making it suitable for use in harsh environments.

Optical

Precision molded optics are specifically designed to optimize the distribution of light, increase efficiency, and provide maximum coverage in T2, T3, and T5R distributions. These optics are available in seven different lumen packages at 4000K CCT, with a standard minimum of 70CRI. Additionally, there are optional packages available at 3000K / 70CRI, 5000K / 70CRI, and 2700K / 80CRI. The optics are fully compatible with both SR Acrylic refractor and ANSI/NEMA Standard refractor assembly. To control spill light, users can install an optional house side shield over the T2 or T3 optic, or use a drop shield house side shield in conjunction with the T5R or SR options.

For luminaires that require zero uplight compliance, the U0 option provides a full cutoff with a spun aluminum shield.

Electrical

The luminaire comes with a standard universal voltage LED driver with 0-10V control having an integrated 6kV surge protection. A DALI compatible driver option is also available. For even greater protection against electrical surges, parallel or series protection levels of 10kV or 20kV options are offered. The luminaire also includes a three-position tunnel-type compression terminal block when the leads option is not selected. A NEMA 3-pin receptacle comes standard. The fixture's design ensures efficient heat dissipation, which helps to maximize its efficiency, light output, and lifespan. The calculated lumen maintenance is over 85% at 60,000 hours. Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected.

Mounting

This luminaire has been specifically designed to fit pipe-arms with an outer diameter ranging from 1-5/8' to 2-3/8'. However, if you need to mount the luminaire to a wood pole, square pole, or wall without a pipe-arm, a bracket is also available.

Finish

The luminaire comes in unfinished raw aluminum as standard. However, an optional five-stage super TGIC polyester powder coat paint is available, which provides superior protection against fade and wear with a 2.5-mil nominal thickness. For those who require even greater protection in coastal construction environments, a Coastal Construction option is also available.

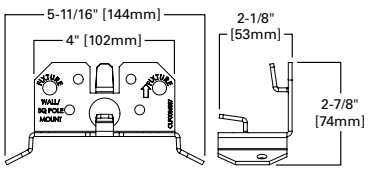
Warranty

Standard five-year warranty.

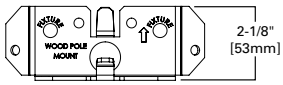
Mounting Details

Optional Wall/Pole Mounting Bracket

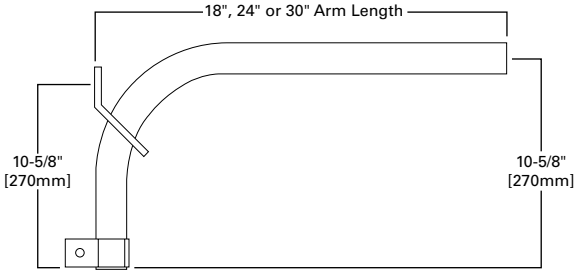
Wall Mount / Square Pole Mount



Pole Mount



Optional Wood Pole Pipe Arm



Energy and Performance Data

Lumen Maintenance

Light Engine	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours*	L70*
C013	25°C	96.01%	92.36%	90.94%	85.47%	> 110,000
	40°C	95.78%	91.89%	90.38%	84.58%	> 110,000
C015	25°C	96.01%	92.36%	90.94%	85.47%	> 110,000
	40°C	95.78%	91.89%	90.38%	84.58%	> 110,000
C016	25°C	96.01%	92.36%	90.94%	85.47%	> 110,000
	40°C	95.78%	91.89%	90.38%	84.58%	> 110,000
C018	25°C	96.01%	92.36%	90.94%	85.47%	> 110,000
	40°C	95.78%	91.89%	90.38%	84.58%	> 110,000
C01	25°C	96.01%	92.36%	90.94%	85.47%	> 110,000
	40°C	95.78%	91.89%	90.38%	84.58%	> 110,000
C01H	25°C	96.01%	92.36%	90.94%	85.47%	> 110,000
	40°C	95.78%	91.89%	90.38%	84.58%	> 110,000
C01HO	25°C	93.12%	87.65%	85.55%	77.66%	> 66,000
	40°C	92.34%	86.19%	83.84%	75.09%	> 66,000

Note: *Calculations provided in accordance with IES TM-21-11 using the configuration resulting in highest LED temperature.
Previous versions of IES TM-21 where theoretical calculations were used are no longer recommended as a proxy of lumen depreciation.

LED Color Multipliers

	LED					
	CCT					
	2200	2700	3000	3500	4000	5000
CRI	Lumen Multiplier					
70	--	--	0.971	--	1.00	1.012
80	--	0.878	--	--	--	--

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99

View CRTK2 Caretaker LED IES files

FADC Settings

FADC Postion	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

Energy and Performance Data

Power and Lumens (UNV) (70CRI - 4000K)

Light Engine		C013	C015	C016	C018	C01	C01H	C01HO
Power(Watts)		20	30	42	50	61.0	70	79
Wattage Label		20	30	40	50	60	70	80
Input Current @ 120V (A)		0.17	0.25	0.35	0.42	0.51	0.60	0.66
Input Current @ 277V (A)		0.07	0.11	0.15	0.18	0.25	0.28	0.29
Optics								
T2	Lumens	3,011	4,413	5,895	6,877	8,680	9,726	11,442
	BUG Rating	B1-U2-G1	B1-U3-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2	B2-U3-G2	B2-U3-G3
	Lumens per Watt	148	148	142	136	142	139	145
T2-U0	Lumens	2,907	4,261	5,691	6,679	8,380	9,390	11,047
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U3-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	Lumens per Watt	143	143	137	133	137	134	140
T3	Lumens	3,052	4,473	5,975	6,971	8,798	9,858	11,598
	BUG Rating	B1-U2-G1	B1-U3-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2	B2-U3-G2	B2-U3-G2
	Lumens per Watt	150	150	144	138	144	140	147
T3-U0	Lumens	2,941	4,310	5,758	6,717	8,478	9,500	11,176
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	Lumens per Watt	144	144	138	133	139	135	141
T5R	Lumens	3,209	4,703	6,283	7,329	9,251	10,366	12,194
	BUG Rating	B2-U2-G1	B3-U2-G1	B3-U3-G1	B3-U3-G2	B3-U3-G2	B4-U3-G2	B4-U3-G2
	Lumens per Watt	157	157	151	145	152	148	154
T5R-U0	Lumens	3,167	4,642	6,200	7,233	9,130	10,230	12,035
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	155	155	149	144	150	146	152
T5R-SR	Lumens	3,162	4,634	6,191	7,222	9,115	10,214	12,016
	BUG Rating	B2-U3-G1	B3-U3-G2	B3-U3-G2	B3-U3-G2	B3-U3-G3	B4-U3-G3	B4-U3-G3
	Lumens per Watt	155	155	149	143	149	145	152

Energy and Performance Data

Power and Lumens (DALI) (70CRI - 4000K)

Light Engine		C013	C015	C016	C018	C01	C01H	C01HO
Power(Watts)		23	33	43	54	60	75	N/A
Wattage Label		20	30	40	50	60	80	
Input Current @ 120V (A)		0.19	0.27	0.36	0.45	0.50	0.62	
Input Current @ 277V (A)		0.08	0.12	0.15	0.19	0.22	0.27	
Optics								
T2	Lumens	3,558	4,905	6,193	7,942	8,674	10,068	N/A
	BUG Rating	B1-U2-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2	B2-U3-G2	B2-U3-G2	
	Lumens per Watt	153	150	145	148	145	134	
T2-U0	Lumens	3,435	4,736	5,979	7,668	8,374	9,720	
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	
	Lumens per Watt	148	145	140	143	140	130	
T3	Lumens	3,606	4,972	6,277	8,050	8,792	10,205	
	BUG Rating	B1-U2-G1	B1-U3-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2	B2-U3-G2	
	Lumens per Watt	155	152	147	150	147	136	
T3-U0	Lumens	3,475	4,791	6,049	7,757	8,472	9,834	
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	
	Lumens per Watt	150	147	141	144	141	131	
T5R	Lumens	3,792	5,228	6,600	8,464	9,244	10,730	
	BUG Rating	B2-U2-G1	B3-U2-G1	B3-U3-G1	B3-U3-G2	B3-U3-G2	B4-U3-G2	
	Lumens per Watt	163	160	154	158	154	143	
T5R-U0	Lumens	3,742	5,159	6,514	8,353	9,123	10,590	
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	
	Lumens per Watt	161	158	152	156	152	141	
T5R-SR	Lumens	3,736	5,151	6,504	8,340	9,109	10,573	
	BUG Rating	B2-U3-G2	B3-U3-G2	B3-U3-G2	B3-U3-G2	B3-U3-G3	B4-U3-G3	
	Lumens per Watt	161	158	152	155	152	141	

View the complete Performance Tables

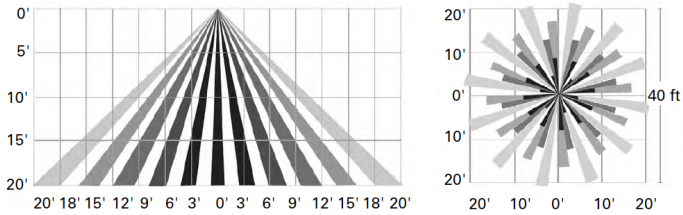
Control Options

0-10V (D)
This fixture is offered standard with 0-10V dimming driver(s). The dimming option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (4N7)
Photocontrol receptacles provide a flexible solution to enable dusk-to-dawn lighting by sensing light levels. Advanced control systems compatible with NEMA 7-PIN standards can be utilized with the 4N7 receptacle.

WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and are factory installed. Sensvors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required.

For mounting heights up to 15' (WLS2)



For mounting heights up to 40' (WLS4)