Lumark

DESCRIPTION

The Lumark Axcent LED wall mount luminaire provides a flush-mounted, architectural design with high performing, energy-efficient illumination resulting in up to 95% energy and maintenance savings over traditional sources. The die-cast aluminum construction along with stainless steel hardware, gasketed housing, and sealed optical compartment make the Axcent impervious to contaminants. The Axcent replaces 70W to 450W metal halide equivalents making it ideal for pathway illumination, building entrances, vehicle ramps, schools, tunnels, stairways, loading docks and floodlighting applications.

		Type
Catalog #		L2
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Low-profile LED design with rugged die-cast aluminum housing. Matching housing styles incorporate both a full cutoff and refractive lens design. External fin design on the back of the fixture extracts heat from the surface resulting in a thermally optimize design for longer luminaire life. One-piece silicone gasket seals the fixture, keeping out moisture and dusts in compliance with IP66 rating. The fixture is 3G vibration rated (ANSI C136.31) and UL/cUL listed ensuring reliability and durability in wall mount applications.

Optical
Silicone-sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Refractive lens models incorporate a molded lens assembly designed for maximum forward throw. Optional glare free lens is available for visual comfort at reduced lumen values. Available in Type IV distribution with lumen packages ranging from 1,800 to 17,300 nominal lumens. Light engine configurations consist of high-efficiency, discrete LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life. Offered in standard 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 5000K CCT / 70CRI min and 3000K / 80CRI min are available.

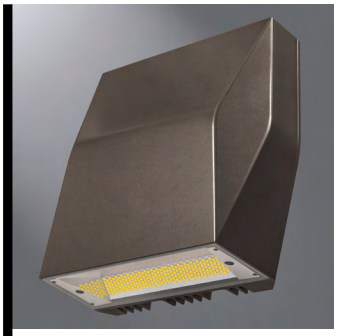
Electrical
LED driver is mounted to the die-cast aluminum housing for optimal heat sinking. Integral LED electronic driver incorporates 6kV surge protection. Class 1 electronic drivers have a power factor >90% and THD<20%. 120-277V 50/60Hz standard operation with optional 347V 60Hz or 480V 60Hz options available. 480V is compatible for use with 480V Wye systems only. 0-10V dimming driver is standard with leads external to the fixture to accommodate controls capability such a dimming and occupancy. 10kV/10kA surge protection option is available.

Mounting
Steel wedge mounting plate fits directly to 4" standard j-box or directly to wall with the "Hook-N-Lock" mechanism for quick installation. Secure with two captive, corrosion resistant, stainless steel set screws, which are concealed but accessible from bottom of fixture. Optional floodlight kits available in slipfitter, knuckle and trunnion mount configurations. Optional pole mount configuration provides a quick-mount solution to round and square poles. The easy installation arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8".

Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch, an AC-ON indicator light and a premium, maintenance-free battery pack. The separate emergency lighting LEDs are wired to provided redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

Finish
The Axcent is protected with five state super TGIC polyester powder coat paint in carbon bronze and five other color finishes. Super TGIC power coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty
Five-year warranty.



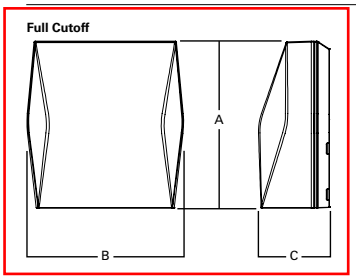
AXCS / AXCL
AXCENT

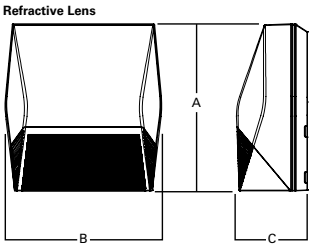
14-123W

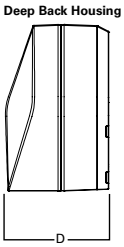
LED

APPLICATIONS:
WALL / SURFACE / INVERTED FLOODLIGHTING / PATHWAY / SITE LIGHTING

DIMENSIONS







Dimensional Data

	AXCS Small	AXCL Large
A	8" [202mm]	11-1/2" [292mm]
B	7-1/2" [190mm]	10-3/4" [273mm]
C	3-5/8" [94mm]	4-7/8" [124mm]
D	6-1/8" [155mm]	7-1/8" [181mm]

CERTIFICATION DATA
3G Vibration Rated
Dark Sky Approved (Fixed mount, Full cutoff, and 3000K CCT only)
DesignLights Consortium® Qualified*
FCC Class A
IP66 Rated
ISO9001, UL/cUL Wet Location Listed
ROHS Compliant
Title 24 Compliant
UL924 Listed (CBP Models)

TECHNICAL DATA
-40°C Minimum Ambient Temperature
+40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum

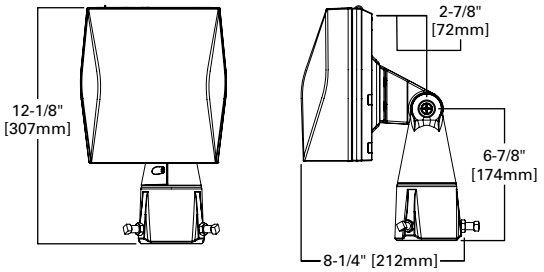
SHIPPING DATA:
Approximate Net Weight:
Small fixture=5 lbs. [2.36 kgs.]
Small with sensor or CBP=10 lbs. [4.40 kgs.]
Large fixture=12 lbs. [5.45 kgs.]
Large with sensor or CBP=17 lbs. [7.73 kgs.]
Large with sensor & CBP=21 lbs. [9.54 kgs.]

COOPER Lighting Solutions

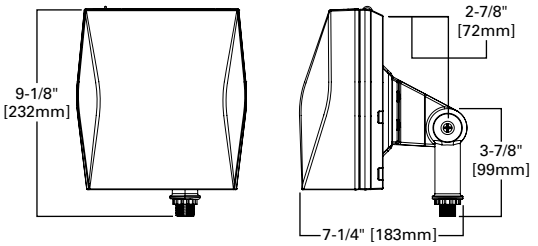
*www.designlights.org

MOUNTING OPTIONS

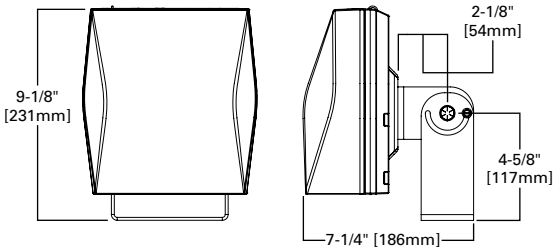
Slipfitter Mount (Small)
Tenon OD: 2-3/8" | EPA: 0.60



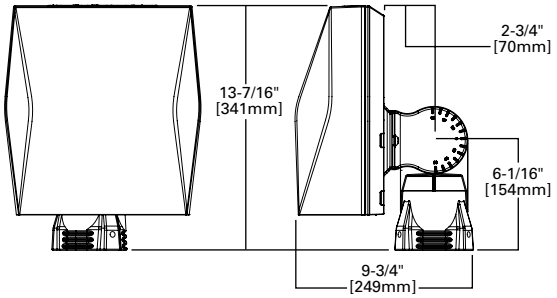
Knuckle Mount (Small)



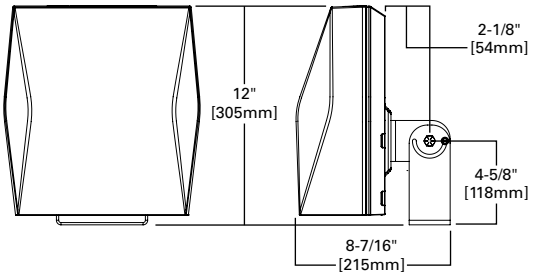
Trunnion Mount (Small)



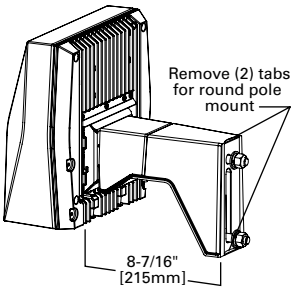
Slipfitter Mount (Large)
Tenon OD: 2-3/8" to 2-7/8" | EPA: 1.10



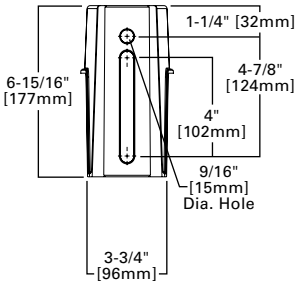
Trunnion Mount (Large)



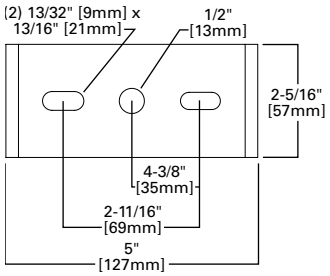
Pole Mount Arm (Shown with Large fixture)
EPA: 1.1



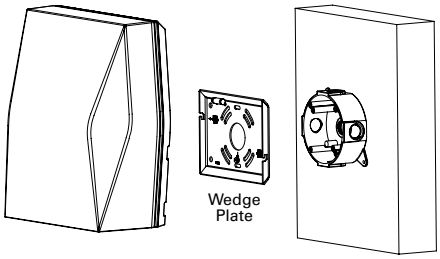
Drill Pattern



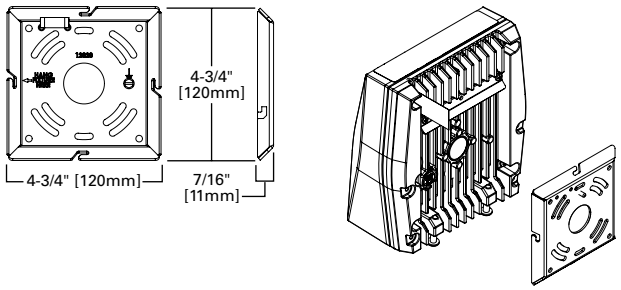
Trunnion Mount Detail



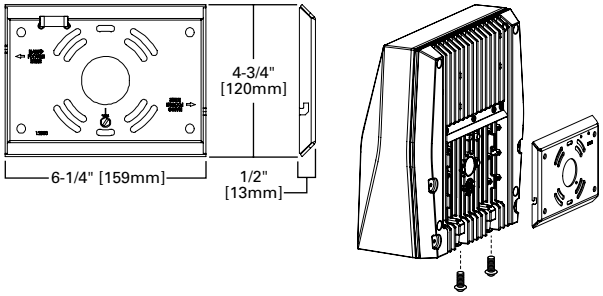
Through-branch Wiring (Available through rated junction box - supplied by others)



Wall Mount Plate Detail (Small)

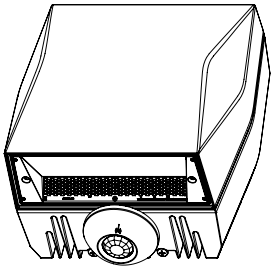


Wall Mount Plate Detail (Large)

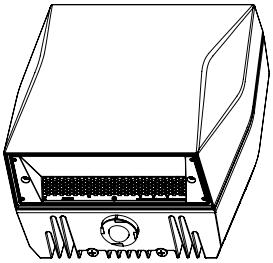


CONTROL OPTIONS

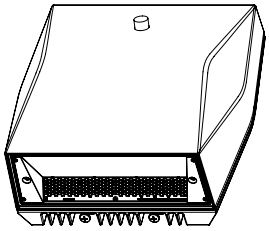
LumaWatt Pro Sensor



Occupancy Sensor

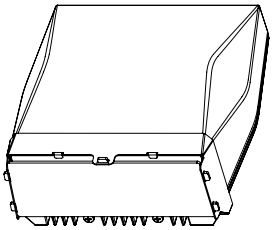


Button Photocontrol

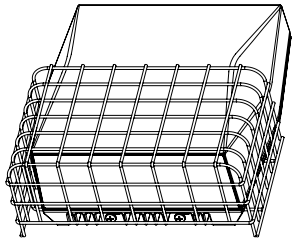


VANDAL SHIELD AND WIRE GUARD OPTIONS

Vandal Shield



Wire Guard



CONTROL OPTIONS

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

Photocontrol (PC1, PC2, and PC)
Optional button-type photocontrol provides a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels.

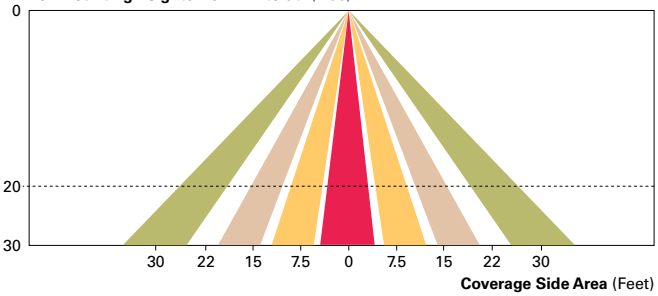
After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a “dusk-to-dawn” period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (MSP/DIM-LXX and MSP-LXX)
These sensors are factory installed in the luminaire housing. When the MSP/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MSP/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of ten minutes. The MSP-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity.

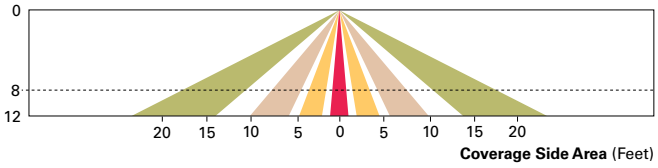
These occupancy sensors includes an integrated photocell that can be activated with the ISHH-01 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is ON. The ISHH-01 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-30’.

For mounting heights from 12' to 30' (-L30)



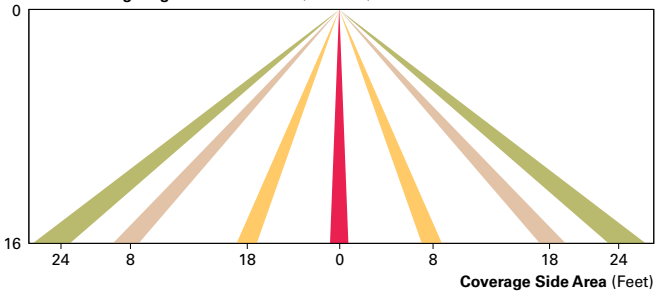
For mounting heights from 8' to 12' (-L12)



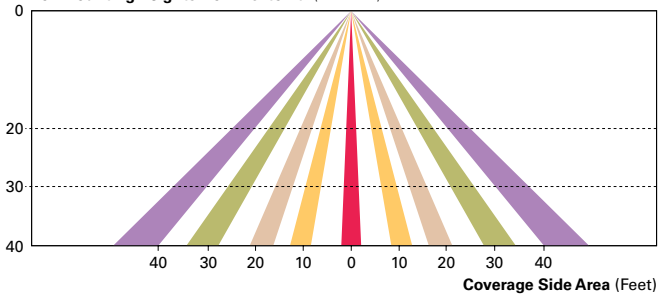
LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



POWER AND LUMENS (AXCENT SMALL)

Light Engine		AXCS1A	AXCS2A	AXCS3A	AXCS4A	AXCS5A
Power (Watts)		14	21	27	44	52
Input Current @ 120V (A)		0.12	0.18	0.23	0.37	0.43
Input Current @ 240V (A)		0.06	0.09	0.11	0.18	0.22
Input Current @ 277V (A)		0.05	0.08	0.10	0.16	0.19
Input Current @ 347V (A)		0.04	0.06	0.08	0.13	0.15
Input Current @ 480V (A)		0.03	0.04	0.06	0.09	0.11
Configuration						
Full Cutoff	4000K/5000K Lumens	1,806	2,561	3,537	5,520	6,300
	3000K Lumens	1,526	2,164	2,989	4,665	5,324
	BUG Rating	B1-U0-G0	B1-U0-G0	B1-U0-G0	B2-U0-G1	B2-U0-G1
Refractive Lens	4000K/5000K Lumens	1,915	2,716	3,704	5,858	6,699
	3000K Lumens	1,618	2,295	3,130	4,950	5,661
	BUG Rating	B1-U3-G2	B1-U3-G2	B1-U3-G2	B1-U4-G3	B1-U4-G3

POWER AND LUMENS (AXCENT LARGE)

Light Engine		AXCL6A	AXCL8A	AXCL10A	AXCL12A
Power (Watts)		56	72	102	123
Input Current @ 120V (A)		0.44	0.60	0.83	1.01
Input Current @ 240V (A)		0.22	0.31	0.41	0.51
Input Current @ 277V (A)		0.20	0.27	0.36	0.45
Input Current @ 347V (A)		0.17	0.22	0.30	0.37
Input Current @ 480V (A)		0.13	0.16	0.22	0.27
Configuration					
Full Cutoff	4000K Lumens	7,594	9,696	13,283	16,823
	5000K Rating	7,465	9,531	13,058	16,538
	3000K Lumens	6,619	8,450	11,577	14,662
	BUG Rating	B1-U0-G1	B1-U0-G1	B3-U0-G2	B3-U0-G2
Refractive Lens	4000K Lumens	7,809	9,970	13,641	17,346
	5000K Rating	7,689	9,817	13,450	17,034
	3000K Lumens	6,817	8,704	11,924	15,102
	BUG Rating	B1-U4-G4	B2-U5-G5	B2-U5-G5	B2-U5-G5

LUMEN MAINTENANCE (AXCENT SMALL)

Ambient Temperature	TM-21 Lumen Maintenance (72,000 Hours)	Theoretical L70 (72,000 Hours)
Up to 3A		
25°C	90%	246,000
40°C	90%	225,000
50°C	89%	195,000
Up to 5A		
25°C	89%	240,000
40°C	88%	223,000
50°C	87%	186,000

LUMEN MAINTENANCE (AXCENT LARGE)

Ambient Temperature	TM-21 Lumen Maintenance (72,000 Hours)	Theoretical L70 (72,000 Hours)
Up to 8A		
25°C	94%	556,000
40°C	94%	556,000
50°C	92%	340,000
Up to 10A		
25°C	94%	556,000
40°C	94%	478,000
50°C	87%	207,000
Up to 12A		
25°C	94%	151,000
40°C	81%	125,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.97

POWER AND LUMENS (SMALL + CBP)

Light Engine		AXCS1A	AXCS2A	AXCS3A	AXCS4A
Power (Watts)		18	25	31	48
Input Current @ 120V (A)		0.15	0.21	0.26	0.40
Input Current @ 240V (A)		0.08	0.11	0.13	0.20
Input Current @ 277V (A)		0.07	0.09	0.11	0.18
Configuration					
Full Cutoff	4000K/5000K Lumens	629	587	647	570
	3000K Lumens	531	496	547	482
Refractive Lens	4000K/5000K Lumens	667	623	686	605
	3000K Lumens	563	526	580	511

Note: Power and current based on full power consumption while CBP is charging. Lumen outputs are while operating in emergency mode only.

POWER AND LUMENS (LARGE + CBP)

Light Engine		AXCL6A	AXCL8A	AXCL10A
Power (Watts)		81	97	127
Input Current @ 120V (A)		0.65	0.81	1.04
Input Current @ 240V (A)		0.33	0.41	0.52
Input Current @ 277V (A)		0.29	0.36	0.45
Configuration				
Full Cutoff	4000K/5000K Lumens	1,340		
	3000K Lumens	1,168		
Refractive Lens	4000K/5000K Lumens	1,380		
	3000K Lumens	1,203		

Note: Power and current based on full power consumption while CBP is charging. Lumen outputs are while operating in emergency mode only.

ORDERING INFORMATION

Sample Number: AXCS1A-AP-347V

Model Series [1]	LED Color Temperature	Color	Options (Add as Suffix)
Full Cutoff **AXCS1A**=14W **AXCS2A**=21W **AXCS3A**=27W **AXCS4A**=44W **AXCS5A**=52W **AXCL6A**=56W **AXCL8A**=72W **AXCL10A**=102W **AXCL12A**=123W **Refractive Lens** **AXCS1ARL**=14W **AXCS2ARL**=21W **AXCS3ARL**=27W **AXCS4ARL**=44W **AXCS5ARL**=52W **AXCL6ARL**=56W **AXCL8ARL**=72W **AXCL10ARL**=102W **AXCL12ARL**=123W	**[Blank]**=4000K, Neutral **C**=5000K, Cool **W**=3000K, Warm	**[Blank]**=Carbon Bronze (Standard) **WT**=Summit White **BK**=Black **AP**=Grey **GM**=Graphite Metallic **DP**=Dark Platinum	**347V**=347V [2] **480V**=480V [2] **PC1**=Photocontrol 120V [3, 4, 5] **PC2**=Photocontrol 208-277V, 347V, 480V [4, 5, 6] **PC**=Photocontrol 120-277V, 347V, 480V [4, 7, 8] **KKIT**=Knuckle Floodlight Mount [7] **TRNKIT**=Trunnion Floodlight Mount **SFKIT**=Slipfitter Floodlight Mount **PMAKIT**=Pole Mount Arm **LWR-LW**=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [4, 9] **LWR-LN**=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [4, 9] **MSP/DIM-L12**=Integrated Sensor for Dimming Operation, 8' - 12' Mounting Height [4, 9, 10] **MSP/DIM-L30**=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height [4, 9, 10] **MSP-L12**=Integrated Sensor for ON/OFF Operation, 8' - 12' Mounting Height [4, 9, 10] **MSP-L30**=Integrated Sensor for ON/OFF Operation, 12' - 30' Mounting Height [4, 9, 10] **CBP**=Cold Weather Battery Pack [3, 11, 12, 13, 14, 15] **10K**=10kV/10kA Surge Protection **HA**=50°C High Ambient [12, 16] **GRF**=Glare Reducing Lens [17] **AHD145**=After Hours Dim, 5 Hours [5, 18] **AHD245**=After Hours Dim, 6 Hours [5, 18] **AHD255**=After Hours Dim, 7 Hours [5, 18] **AHD355**=After Hours Dim, 8 Hours [5, 18]

Accessories (Order Separately) [19]

VS/AXCS=Vandal Shield Axcent Small [7, 20]
VS/AXCS-MS=Vandal Shield Axcent Small (With Motion Sensor) [7, 20]
WG/AXCS=Wire Guard Axcent Small [7]
WG/AXCS-MS=Wire Guard Axcent Small (With Motion Sensor) [7]
VS/AXCL=Vandal Shield Axcent Large [5, 20]
VS/AXCL-MS=Vandal Shield Axcent (With Motion Sensor) [5, 20]
WG/AXCL=Wire Guard Axcent Large [5]
WG/AXCL-MS=Wire Guard Axcent (With Motion Sensor) [5]
KKIT/AXCS-XX=Knuckle and Visor Floodlight Kit (For Axcent Small) [7]
SFKIT/AXCS-XX=Slipfitter Floodlight Kit (For Axcent Small) [7]
TRNKIT/AXCS-XX=Trunnion and Visor Floodlight Kit (For Axcent Small) [7]
TRNKIT-XX=Trunnion Floodlight Kit (For Axcent Large) [5]
SFKIT-XX=Slipfitter Floodlight Kit (For Axcent Large) [5]
PMAKIT-XX=Pole Mount Kit
ISHH-01=Integrated Sensor Programming Remote [21]
MA1010-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1011-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1018-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon

NOTES:
1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Transformer used only when ordered with motion sensor or AXCS1 through AXCS5 or AXCL6 fixture wattages.
3. Not available in 347 or 480 VAC.
4. Button photocontrol and any motion sensor not offered together.
5. Only available on AXCL6-AXCL12 models.
6. Used with 277, 347, and 480 VAC options.
7. Only available on AXCS1-AXCS5 models.
8. This configuration may contain materials that are not RoHS compliant. Contact your lighting representative for more information.
9. Uses deep back housing.
10. The ISHH-01 accessory is required to adjust parameters.
11. Ambient operating temperature -20°C to 25°C for AXCL6 through AXCL10. Ambient operating temperature -20°C to 30°C on AXCS4 models. Ambient operating temperature -20°C to 40°C on AXCS1 through AXCS3 models.
12. Not available with AXCS5 or AXCL12 models.
13. Uses deep back housing for AXCS1, AXCLS2, AXCS3, and AXCS4 models.
14. Not to be mounted in upwards / inverted orientation. Downlight wall mount only for AXCS1 through AXCS4.
15. In AXCS1, AXCS2, AXCS3, and AXCS4 models, CBP cannot be used with any sensor option (PC, MSP, LWR).
16. Can not be ordered with CBP or PC options.
17. Use dedicated IES files on product website for lumen values and distributions.
18. Requires the use of PC1 or PC2 button photocontrol. See After Hours Dim supplemental guide for additional information.
19. Replace XX with color designation.
20. For use with full cutoff lens configurations only.
21. This tool enables adjustment to parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult you lighting representative for more information.

STOCK ORDERING INFORMATION

Model Series [1]			
Full Cutoff		**Refractive Lens**	
AXCS1A=14W	**AXCL10A**=102W	**AXCS1ARL**=14W	**AXCL10ARL**=102W
AXCS2A=21W	**AXCL12A**=123W	**AXCS2ARL**=21W	**AXCL12ARL**=123W
AXCS3A=27W	**AXCL6A-347V**=56W	**AXCS3ARL**=27W	**AXCL6ARL-347V**=56W
AXCS4A=44W	**AXCL8A-347V**=72W	**AXCS4ARL**=44W	**AXCL8ARL-347V**=72W
AXCS5A=52W	**AXCL10A-347V**=102W	**AXCS5ARL**=52W	**AXCL10ARL-347V**=102W
AXCL6A=56W	**AXCL12A-347V**=123W	**AXCL6ARL**=56W	**AXCL12ARL-347V**=123W
AXCL8A=72W		**AXCL8ARL**=72W	

NOTES:
1. All stock configuations are 4000K color temperatures, standard Carbon Bronze finish, and wall mount configuration.