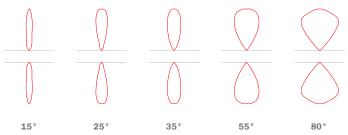


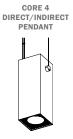
SPECIFICATIONS

PROFILE	Square
SIZES	4.5" x 4.5"
LED OUTPUT	500lm - 3,000lm
CCT/CRI	2700K/3000K/3500K/4000K • 90CRI or BIOS
DIMMING/ DRIVER	Canopy and Remote Driver: 0-10V, Phase, DALI, DMX, eldoLED, Lutron®, PoE (Molex, Igor, NuLEDS). Dimming to 0% for select models
POWER	6.8W to 50.4W per fixture
INPUT	100VAC to 277VAC Phase dimmable versions are 120VAC only
OPTICS	15° - 80° distribution spun aluminum reflectors. Field replaceable without tools.
FINISHES	Powder coat - TGIC polyester
MATERIAL	Extruded aluminum with galvanized steel hardware
ENVIRONMENT	Indoor dry or damp locations

DISTRIBUTIONS & PROFILES



Available in any combination of distributions for direct and indirect.



CORE 4

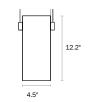
DIRECT/INDIRECT

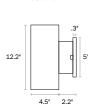
PENDANT





CORE 4 DIRECT/INDIRECT SCONCE





Not to scale. Dimensions are nominal. Consult factory for CAD drawing

CULISTED COOPER POE Ready NULEDS

*Safety and Performance information available on last page. Output and other specifications available on page 6.

PRODUCT SUBMITTAL QUICK WORKSHEET

1. MODEL (CHOOSE 1)	2. OUTPUT	- DIRECT* (CHOOSE 1)	3. CRI - D	IRECT* (CHOOSE 1)	4. CCT -	DIRECT* (CHOOSE 1)
CST4 Pendant CSU4 Sconce	10 15 20 25 30 *See BOIS Dy BIOS lampin	500Im 1000Im 1500Im 2000Im 2500Im 3000Im mamic supplement pages 7-8 for g options. V01 dimming only.	out with mo	90 BIOS Dynamic IOS SkyBlue® 490nm LED can be tuned st LED driver and dimmer combinations. -8 for details.	27* 30 35 40 *Not avail	2700K 3000K 3500K 4000K able in BIOS Dynamic.
5. REFLECTOR - DIRECT* (CHOOSE 1)	6. OPTICAI	L ACCESSORY - DIRECT (CHOOSE 1)	7. OUTPL	IT - INDIRECT* (CHOOSE 1)	8. CRI -	INDIRECT* (CHOOSE 1)
15 15° (0.3 S/MH)	HL	None Honeycomb Louver Diffusion Lens	05² 10 15	500lm 1000lm 1500lm	90 BD*	90 BIOS Dynamic BIOS SkyBlue® 490nm LED can be tune
25 25° (0.4 S/MH) 35 35° (0.6 S/MH) 55 55° (0.9 S/MH) 80 80° (1.4 S/MH) *Beam angles noted above are nominal.	LS WW	Linear Spread Lens (60° x 1°) Wall Wash Lens (shifts beam 20° from vertical)	20 25 30 *See BOIS BIOS lamp	2000lm 2500lm 3000lm Dynamic supplement pages 7-8 for bing options. for V01 dimming only.	out with m	Sos Skybluew 4901mi LED Can be Unite sost LED driver and dimmer combinations 7-8 for details.

9. CCT -	INDIRECT (CHOOSE 1)	10. REFL	ECTOR - INDIRECT* (CHOOSE 1)	11. OPTIC	AL ACCESSORY - INDIRECT (CHOOSE 1)	12. DRIV	TER LOCATION* (CHOOSE 1)
27	2700K	15	15° (0.3 S/MH)	NN	None	R	Remote
30	3000K	25	25° (0.4 S/MH)	HL	Honeycomb Louver	D	Deep Canopy
35	3500K	35	35° (0.6 S/MH)	DF	Diffusion Lens	*See 'Dimn	ning/driver location compatitibility' on page 9
40	4000K	55	55° (0.9 S/MH)	LS	Linear Spread Lens (60° x 1°)		correct dimming specification.
		80	80° (1.4 S/MH)	ww	Wall Wash Lens (shifts beam 20°		
		*Beam ang	les noted above are nominal.		from vertical)		

13. DIMMING * (CHOOSE 1)	14. NUM	BER OF CIRCUITS (CHOOSE 1)	15. SHELL	COLOR* (CHOOSE 1)	16. SUSPENS	SION* (CHOOSE 1)	
V00 (0-10V, dim to 0%)	10	1 Circuit	STANDA	RD FINISHES	BK	Black Cord	
V01 (0-10V, dim to 1%)	2C	2 Circuits	sw 🗌	Satin White	WH	White Cord	
P01 (ELV/TRIAC phase dim to 1%)			SB	Satin Black	СВ	Clear Braided Cord	
ELDVO (eldoLED, 0-10V, dim to 0%)			AS	Aluminum Silver Anodized Effect	*Dual aircraft ca	ible + cord suspension.	
LDE1 (Lutron ECOSYS1, 0-10V, dim to 1%)			ТВ	Textured Black	**Cable length field adjustable. Standard cord length (
DALI (DALI, dim to 0%)			BA Brushed Aluminum for longer cords, type desired length in code above (i.e. BK / 8 = Black Cord + 8		is, type desired length into product e BK/8 = Black Cord + 8ft cord length).		
DMX (DMX, dim to 0%)			PREMIU	IM FINISHES		,,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	
POEM ³ (POE Molex)			Se	ee chart on page 5 for			
POEI ³ (POE IGOR)			pr	emium finishes. Manually			
POEN ³ (POE Nuleds)				pe in the finish code (Ex: OB Oil-Rubbed Bronze)			
POE ^{3,4} (POE Ready)				,			
See 'Driver', 'Sensor', and 'dimming/driver compatibility				L ORDER FINISHES*			
charts for sensor and dimming compatibility.			RAL	Specify RAL Classic Color			
*Consult factory for BIOS Dynamic dimming options.				(Ex: RAL 3003)			
POE drivers only compatible with remote driver (R) location Driver size may change depending on lumen package.			CCM	Custom Color Match			
Choose if desired PoE solution not listed. Contact customer service to review and confirm the PoE system of your choice.	•		*See page 5 for **Manually type parametric co	e the finish code into the			

PRODUCT SUBMITTAL QUICK WORKSHEET -

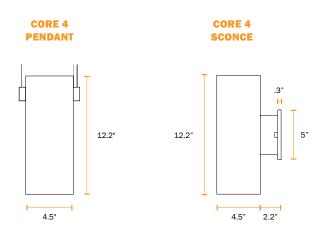
EXAMPLE: CST4 - 20902725HL - 20902725HL - RV00 - 2C - SG - BK - NLT - EMB 1 2 3 4 5 6 7 8 9 1011 12 13 14 15 16 17 18

17. SENSOR OPTIONS^{*} (OPTIONAL CHOOSE 1) 18. EMERGENCY OPTIONS^{*} (OPTIONAL)

WLNX (Cooper Wavelinx, remote)	EMB ⁵ Emergency Battery
ENLGHT (Enlighted, remote)	*Emergency options only available with 0-10V driver options.
FCJS (Lutron, remote)	Third party inverter system recommended for other driver
FCJS/S (Lutron, remote, occ/daylight sensor)	options. Refer to ALW EM Solution Catalog for all compatibility exceptions.
MLX (Molex POE, remote)	⁵ Available for deep canopy and remote driver location only.
NLT (nLight wired remote connection)	
NLTAIR (nLight AIR, remote connection,	
integral occ/daylight sensor)	
OS/PH/HV (Hubbel WASP remote	
occ/daylight sensor)	

Default quantity is 1 sensor per fixture, type alternate quantity (/##) into product code above if desired and contact ALW to request price adjustment. Sensor descriptions available on page 10. Not all sensors are compatible with all drivers. See 'Driver', 'Sensor' and lamping charts for driver details and sensor compatibility. Available for remote driver location only.

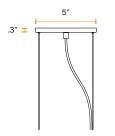
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REMOTE DRIVER

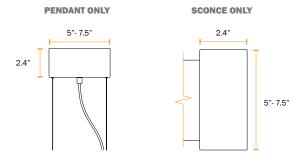
STANDARD SHALLOW CANOPY

PENDANT ONLY



DEEP CANOPY MOUNTED DRIVER⁶

DEEP CANOPY FOR CANOPY MOUNTED LED DRIVERS



Not to scale. Dimensions are nominal. Consult factory for CAD drawings All canopies fit standard 3.5" and 4" round and octagonal junction boxes. ⁶Deep canopy diameter depends on LED driver size



Standard finishes are available at no additional charge and no extended lead time for standard configurations.

STANDARD FINISHES



PREMIUM FINISHES

BASIC POWDER COAT



METALLIC POWDER COAT



SATIN ANODIZED EFFECT POWDER COAT



GLOSS POWDER COAT (80-95% GLOSS)



Contact ALW Quotes for sample paint finish swatches.

White

SPECIAL ORDER FINISHES*



RAL CLASSIC COLORS (80-95% GLOSS): RAL____

Most RAL Classic Colors are available for a minimum setup fee. On your specification submittal choose your RAL color by entering the 4-digit RAL code (Ex: RAL 3003). See www.alw-inc.com/resources/finishes

*An individual setup fee will apply to each unique Special Order Finish per purchase order. (ex: RAL 5023 and RAL 2008 are specified for multiple line items on a purchase order. 2x setup fees will apply)

White

*Printed or on-screen colors are only approximations - consult actual Color Chip Set before specifying

CORD OPTIONS

Black Order Code = **BK**

For all locations

Order Code = **WH** For all locations Clear Silver Braid Order Code = **CB**

For dry and damp locations only

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CUSTOM COLOR MATCH: CCM____

Custom powder coat color matching is available for a premium setup fee. Consult ALW for additional information.

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PERFORMANCE DETAILS -

REFLECTOR OPTION	CRI	DELIVERED LUMENS ⁸	EFFICACY (LM/W)	WATTS(W)	CCT OPTIONS
		500	146	3.4	
15 °		1000	136	7.3	0700//
25°		1500	130	11.5	2700K 3000K
55°	35° Ra = 90 ± 3 55° 80°	2000	125	15.9	3500K 4000K
80 °		2500	121	20.4	4000K
		3000	118	25.2	

*Based on 55deg reflector for all outputs, 4000K 90CRI.

*Refer to IES files for full performance data.

⁸Actual lumens measured in field may differ +/- 10%.

TM-30-18 DETAILS (90 CRI LAMPING)

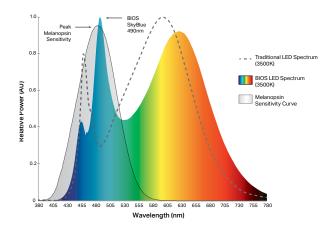
сст	CRI (Ra)	CRI (R9)	TM-30 Rf	TM-30 Rg
2700K	90.5	59.7	89.4	99.6
3000K	92.5	66.5	89.9	98.7
3500K	93.8	74.2	89.8	98.1
4000K	94.2	78.8	89.8	98.5





BIOS SkyBlue® technology is designed to provide the specific circadian stimulus required to improve overall sleep by featuring a distinct peak in the 'skyblue' spectral power at 490nm. Unlike traditional white LEDs, BIOS SkyBlue® makes it possible to achieve high EML (Equivalent Melanopic Lux) and Melanopic/Photopic ratios without harsh CCTs or high, glare-inducing light levels.

BIOS light engines are available for cylinder products with a Dynamic options for use with a variety of applications. Dynamic options include a dynamic board and Bio-Dimmer module to allow the user to dim-out the SkyBlue 490nm signal during night time hours.



	BIOS DYNAMIC + BIO-DIMMING (BIOSD)
DESCRIPTION	Dynamic light engine with Bio-Dimming add the ability to fine-tune and dim-out the 490nm SkyBlue signal during night time hours or as desired.
TYPICAL APPLICATIONS	Environments occupied for a 24-hour period such as hospitals, security facilities, behavioral health facilities, factories, etc.
CONTROLS & DIMMING	Works with any standard dimming controls (0-10V, Dali, EcoSystem, Triac, DMX, Wireless, etc.). BIOS SkyBlue® LED can be dimmed-out using a standard control/dimmer.

BIOS LED LAMPING DETAILS (DYNAMIC)

DELIVERED LUMENS°	WATTS (W)	EFFICACY (LM/W)
500	5.4	93
1000	11.1	90
1500	18.3	82
2000	23.8	77

BIOS LED PERFORMANCE DETAILS

ССТ	CRI (R9) Dynamic BIOS	DAYTIME M/P RATIO ¹⁰ Dynamic BIOS	NIGHTTIME M/P RATIO ¹⁰ Dynamic BIOS	COI ¹¹ Dynamic BIOS
3000K	83	0.73	0.45	3.3
3500K	83	0.84	0.50	3.1
4000K	83	0.95	0.55	3.1

⁹Delivered Lumens calculations are based on LM-79 test of BIOS 4000K, 2000Im output.

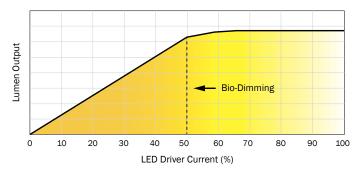
²⁰Melanopic to photopic (M/P) ratios are used to help calculate equivalent melanopic lux (EML) values which is the metric used for circadian lighting in the WELL™ Building Standard. ³¹BIOS SkyBlue® meets the Cyanosis Observation Index (COI) requirements for visual assessment of cyanosis, providing a COI up to 3.3.

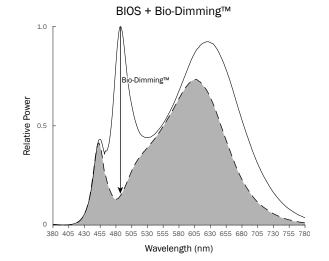


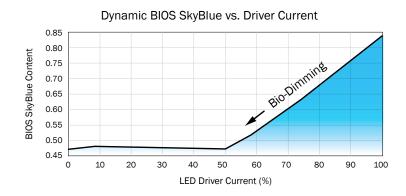
BIOS DYNAMIC + BIO-DIMMING DIMMING CONTROL CHARACTERISTICS



Dynamic BIOS Lumen Output vs. Driver Current









PRODUCT CODE	DESCRIPTION			
V00	0-10V dimming down to 0%			
V01	0-10V dimming down to 1%			
P01	Driver supports both TRIAC Forward Phase 2-Wire and ELV Reverse Phase 3-Wire dimming controls.			
ELDVO	eldoLED, 0-10V dimming down to 0%			
DALI	DALI flicker-free dimming down to 0%.			
DMX	DMX flicker-free dimming down to 0%.			
LDE1	ECOSYS1, (LDE1) Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology			
POEM	POE MOLEX. Molex CoreSync PoE LED Driver dimming down to 0.1%			
POEI	IGOR PoE LED Driver. Contact ALW to assist with your project.			
POEN	NuLEDS PoE LED Driver. Contact ALW to assist with your project.			
POE	PoE Ready LED Driver. Contact ALW to assist with your project.			

*Contact ALW for specific dimming level requests. ALW lighting fixtures are intended for use with a wide range of sensors, lighting controls, LED drivers, and building management systems. If there are specific components required for your application that aren't listed on this spec sheet, please contact ALW customer support today to specify a compatible solution of your choice.

DF	DRIVER/LED LAMPING COMPATIBILITY						
	STD*	STD/BIOS	CA TITLE 24 JA8/JA10 ¹²	IEEE P1789 & HD TV STUDIO ¹³			
V00	•	•	•				
V01	•	•	•				
P01	•	•	•				
ELDVO	•	•	•	•			
DALI	•	•	•	•			
DMX	•	•	•	•			
LDE1	•	•	•	•			
POEM	PER	REQUEST	•	•			
POEI	PER	REQUEST	•	•			
POEN	PER	REQUEST	•	•			
POE	PER	REQUEST	•	•			

Indicates compatibility

*Standard lamping (STD) - 500-6000lm

¹²Fixtures specified with 90CRI 2700K, 3000K, 3500K, and 4000K lamping with applicable LED drivers have the ability to conform to California Title 24 JA8 and JA10 Appendices.

¹³The following drivers conform to IEEE P1789 Flicker Standard: 'IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers'. These drivers may also be installed in HD TV Studio applications utilizing high frequency camera equipment.

DRIVER	DRIVER LOCATION/DRIVER COMPATIBILITY						
	INTERNAL	DEEP CANOPY	REMOTE				
V00		•	٠				
V01		•	•				
P01		•	•				
ELDV0		•	•				
DALI		•	•				
DMX		•	•				
LDE1		•	•				
POEM			•				
POEI			•				
POEN			٠				
POE			•				



SENSORS*-

	PRODUCT CODE	DESCRIPTION		SENSOR LOCATION
	N	None. Choose when sensors are not desired.	-	-
COOPER	WLNX	WLNX Fixture is built with 0/10V wiring to connect to Wavelinx Wireless sensors and power/relay packs (sensors and equipment not provided by ALW) Description Description		
ENLIGHTED™	ENLGHT	Enlighted® remote connected lighting smart sensor - occ/daylight/networking (Enlighted Part: SU-5S-H-CL)	Remote	
	FCJS	Lutron® Vive remote RF wireless fixture control (Lutron Part: FCJS-EC0 or FCJS-010)	Remote	
LUTRON VIVE	FCJS/S	Lutron® Vive remote RF wireless fixture control + daylight/occ sensor (Lutron Part: FCJS-ECO or FCJS-010, & FC-Sensor)	Remote	
MOLEX POE CORESYNC	MLX	MLX Molex PoE sensors for use with Molex/PoE drivers. Customer will need to determine who to purchase PoE equipment from.		Remote
NLIGHT WIRED®	NLT Fixture is built to connect to nLight Wired remote components specified by agency. Contact ALW to review project details.		Remote	
NLIGHT WIRELESS®	NLTAIR	Fixture is built to connect to nLight Air (Wireless) remote components specified by agency. Contact ALW to review project details.		
VALUE SENSORS	os/ph/hv	Hubbell WASP High Voltage 0-10V remote surface mount occ/daylight sensor. 120/277/347VAC input (Hubbell Part: WSPDSMUNV) Automated Dimming Functionality: Connect fixture 0/10V wires to sensor in the field. Adjust occ/photocell settings as desired. On/Off or Manual Dimming Functionality: Turn photocell functionality OFF. Cap off 0/10V wires on sensor. Connect fixture 0/10V wires to wall dimmer in the field.	Internal Deep Canopy Remote	

*All connected lighting sensors/systems must be programmed in the field by an electrical commissioner familiar with the system. Refer to the 'Sensor Compatibility' and 'Driver/ Sensor Compatibility' charts to specify compatible sensors, LED lamping, and LED driver systems.

SENSOR COMPATIBILITY							
PRODUCT CODE		SENSOR TYPE	MAX MT HT	CA TITLE 24	STD*		
COOPER WAVELINX	WLNX		15 ft	•	•		
ENLIGHTED™	ENLGHT	OCCUPANCY/PHOTOCELL	40 ft	•	•		
LUTRON VIVE	FCJS	WIRELESS CONTROL	12 ft	•	•		
	FCJS/S	OCCUPANCY/PHOTOCELL	12 ft	•	•		
MOLEX POE CORESYNC	MLX		16 ft	•	•		
NLIGHT WIRED	NLT		15 ft	•	•		
NLIGHT WIRELESS	NLTAIR		15 ft (average)	•	•		
VALUE SENSORS	OS/PH/ HV	OCCUPANCY/PHOTOCELL	45 ft	•	•		

DRIVER/SENSOR COMPATIBILITY									
	WLNX	ENLGHT	MLX	FCJS	FCJS/S	NLT	NLTAIR	OS/ PH/HV	NO SENSOR
V00	•	•		•	•				•
V01	•	•		•	•				•
P01									•
ELDVO						•	•		•
DALI								-	•
DMX								-	•
LDE1				•	•				•
POEM			•						•
POEI	POEI Sensor types will depend on the PoE system configuration. Contact ALW for details.								
POEN	POEN Sensor types will depend on the PoE system configuration. Contact ALW for details.								
POE	POE Sensor types will depend on the PoE system configuration. Contact ALW for details.								

• - Indicates compatibility = - On/off sensor functionality only *Standard lamping (STD) - 500 - 6000LM

- Indicates compatibility
- Fixture can have automated dimming via sensor OR on/off functionality and manual dimming
- On/off sensor functionality only



PHOTOMETRICS CORE 4

BEAM ANGLE (°)	POLAR PLOT (CD)	MTG HEIGHT (FT)	LIGHT LEVEL (FC)	BEAM DIAMETER (FT)	SPACING CRITERION (SC)¹⁴ (0°- 180°) (90°- 270°)	MAX INTENSITY (CD)
		6	35 <mark>8</mark> .9	1.8		12920
		8	20 <mark>1.</mark> 9	2.3		
15 °		10	1 <mark>29.2</mark>	2.9	.28	
10		12	89.7	3.5	.28	
		14	65.9	4.1		
		16	50.5	4.7		
		6	299.8	3.0		
		8	168.6	4.0		
25°		10	107.9	5.0	.47	10793
		12	75.0	6.0	.47	
		14	55.1	7.0		
		16	42.2	8.0		
		6	197.0	3.9	.58 .58	7094
35°		8	110.8	5.2		
		10	70.9	6.5		
		12	49.3	7.8		
		14	36.2	9.1		
		16	27.7	10.5		
		6	101.6	6.8	.94 .94 .94	3670
		8	57.2	9.1		
55°		10	36.6	11.3		
		12	25.4	13.6		
		14	18.7	15.9		
		16	14.3	18.1		
80°		6	61.0	10.0	1.26 1.26	2195
		8	34.3	13.4		
		10	21.9	16.7		
		12	15.2	20.1		
		14	11.2	23.4		
		16	8.6	26.7		

*Photometric calculations based on 3000lm 4000K 90CRI fixture combination. Actual results may vary in the field.

For footcandle and output multipliers refer to the ALW IES File Multipliers Chart.

¹⁴Spacing criterion refers to maximum distance luminaires can be spaced to provide uniform illumination on the working plane or surface.

Luminaire spacing = Spacing Criterion (SC) x Mounting Height (MH) (ex. 1.14 (SC) x 10' (MH) = 11.4' Luminaire Spacing).

SS121823



ADDITIONAL OPTIONS & SPECIFICATIONS

LED PERFORMANCE

> 55,000 hours at 80% lumen maintenance, LM80 / TM-21

COLOR CONSISTENCY

3 SDCM; 90 CRI typical

HOUSING

Extruded aluminum with galvanized steel hardware

SAFETY & REGULATORY

Can be used to comply with **Title 24 JA8 and JA10** requirements. Contact ALW customer support today and we can help you with your project requirements.

UL Listed (U.S. & Canada). Suitable for dry or damp locations. Conforms to UL 2108, 8750 Certified to CSA std. CSA C22.2# 9 & #250.0

OPERATING TEMPERATURE

Luminaire should be installed and operated ONLY in dry or damp environments where the ambient temperature ranges from -4°F to 104°F (-20°C to 40°C). Luminaire operation in environments outside the listed temperature range voids the warranty AND may damage the product or adversely impact lamp life, lumen output and color consistency.

CONTROLS, SENSORS, & LED DRIVER

ALW lighting fixtures are intended for use with a wide range of sensors, lighting controls, LED drivers, and building management systems. Our component portfolio is continually expanding to adopt to the latest technologies and specification needs. We currently support integration with Lutron, Enlighted, EldoLED, nLight, Osram, Philips, and more. If there's a component or system needed that you don't see on the spec sheet please contact ALW customer support today so we can review your requirements.

WARRANTY

LIMITED WARRANTY. Visit alw-inc.com for more information.

WEIGHT

CORE 4				
PENDANT	SCONCE			
7 lbs/ 3.2 kg	7 lbs/ 3.2 kg			