CORE 3
ROUND, DIRECT/INDIRECT ILLUMINATION


SPECIFICATIONS

PROFILE	Round
SIZES	3.5" diameter
LED OUTPUT	500lm - 1,500lm
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

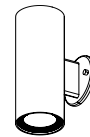| 15°	25°	35°	55°	80°
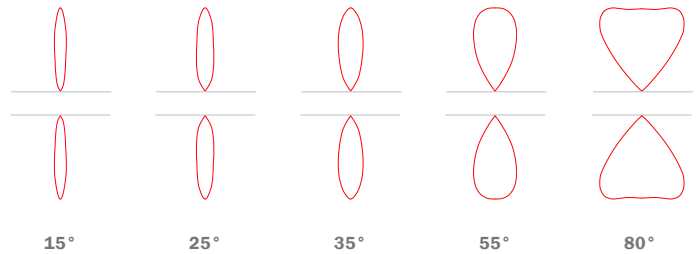
Available in any combination of distributions for direct and indirect.

CORE 3 DIRECT/INDIRECT PENDANT

CORE 3 DIRECT/INDIRECT SCONCE

CORE 3 DIRECT/INDIRECT PENDANT
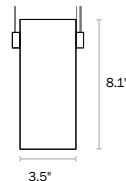
8.1"
3.5"

CORE 3 DIRECT/INDIRECT SCONCE

.3"
8.1"   5"
3.5"   2.2"

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

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*Safety and Performance information available on last page. Output and other specifications available on page 5.
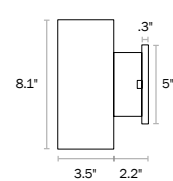
PRODUCT SUBMITTAL QUICK WORKSHEET

—	—	—	—	—	—	—
1	2 3 4 5 6	7 8 9 10 11	12 13	14	15	16	17	18	19

EXAMPLE: CRT3 — 20902725HL — 20902725HL — RV00 — 2C — SWBK — ADA — NLT — EMB
　　　　　　　　1　　2 3 4 5 6　　7 8 9 10 11　　12 13　14　15 16　17　18　19

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1. MODEL (CHOOSE 1)

CRT3	Pendant
CRU3	Sconce

2. OUTPUT - DIRECT * (CHOOSE 1)

05[1]	500lm
10	1000lm
15	1500lm

*See BOIS Dynamic supplement on pages 6-7 for BIOS lamping options.
[1]Available for V01 dimming only.

3. CRI - DIRECT* (CHOOSE 1)

90	90
BD*	BIOS Dynamic

*Dynamic BIOS SkyBlue® 490nm LED can be tuned out with most LED driver and dimmer combinations. See pages 6-7 for details.

4. CCT - DIRECT* (CHOOSE 1)

27*	2700K
30	3000K
35	3500K
40	4000K

*Not available in BIOS Dynamic.

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5. REFLECTOR - DIRECT (CHOOSE 1)

15	15° (0.3 S/MH)
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.

6. OPTICAL ACCESSORY - DIRECT (CHOOSE 1)

NN	None
HL	Honeycomb Louver
DF	Diffusion Lens
LS	Linear Spread Lens (60° x 1°)
WW	Wall Wash Lens (shifts beam 20° from vertical)

7. OUTPUT - INDIRECT* (CHOOSE 1)

05[1]	500lm
10	1000lm
15	1500lm

*See BOIS Dynamic supplement on pages 7-8 for BIOS lamping options.
[1]Phase dimming not available for 500lm

8. CRI - INDIRECT* CHOOSE 1)

90	90
BD*	BIOS Dynamic

*Dynamic BIOS SkyBlue® 490nm LED can be tuned out with most LED driver and dimmer combinations. See pages 7-8 for details.

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9. CCT - INDIRECT (CHOOSE 1)

27	2700K
30	3000K
35	3500K
40	4000K

10. REFLECTOR - INDIRECT (CHOOSE 1)

15	15° (0.3 S/MH)
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.

11. OPTICAL ACCESSORY - INDIRECT (CHOOSE 1)

NN	None
HL	Honeycomb Louver
DF	Diffusion Lens
LS	Linear Spread Lens (60° x 1°)
WW	Wall Wash Lens (shifts beam 20° from vertical)

12. DRIVER LOCATION* (CHOOSE 1)

R	Remote
D	Deep Canopy

*See 'Dimming/driver location compatibility on page 8 to ensure correct dimming specification.

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13. DIMMING * (CHOOSE 1)

V00	(0-10V, dim to 0%)
V01	(0-10V, dim to 1%)
P01	(ELV/TRIAC phase dim to 1%)
ELDV0	(eldoLED, 0-10V, dim to 0%)
LDE1	(Lutron ECOSYS1, 0-10V, dim to 1%)
DALI	(DALI, dim to 0%)
DMX	(DMX, dim to 0%)
POEM[2]	(POE Molex)
POEI[2]	(POE IGOR)
POEN[2]	(POE Nuleds)
POE[2,3]	(POE Ready)

*See 'Driver', 'Sensor' , and 'dimming/driver compatibility' charts for sensor and dimming compatibility.
**Consult factory for BIOS Dynamic dimming options.
[2]POE drivers only compatible with remote driver (R) location Driver size may change depending on lumen package.
[3]Choose if desired PoE solution not listed. Contact customer service to review and confirm the PoE system of your choice.
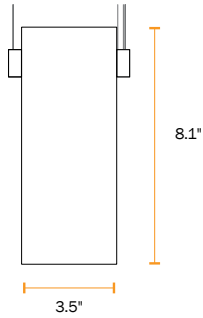
14. NUMBER OF CIRCUITS (CHOOSE 1)

1C	1 Circuit
2C	2 Circuits

15. SHELL COLOR* CHOOSE 1)

STANDARD FINISHES

SW	☐ Satin White
SB	◼ Satin Black
AS	☐ Aluminum Silver Anodized Effect
TB	◼ Textured Black
BA	◼ Brushed Aluminum

PREMIUM FINISHES

__ See chart on page 4 for premium finishes. Manually type in the finish code (Ex: OB = Oil-Rubbed Bronze)

SPECIAL ORDER FINISHES*

RAL____	Specify RAL Classic Color (Ex: RAL 3003)
CCM____	Custom Color Match

*See page 4 for finish chart.
**Manually type the finish code into the parametric code above.

16. SUSPENSION* (CHOOSE 1)

BK	Black Cord
WH	White Cord
CB	Clear Braided Cord

*Dual aircraft cable + cord suspension.
**Cable length field adjustable. Standard cord length 6ft, for longer cords, type desired length into product code above (i.e BK/8 = Black Cord + 8ft cord length).

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17. SUSPENSION OPTIONS* (CHOOSE 1)

SCONCE OPTIONS

ADA[4]	ADA Compliant

*See 'Dimensions & Mounting' on page 4 for ADA Sconce dimensions.
[4]ADA compliant sconces are only available for remote driver location and standard shallow canopy.

18. SENSOR OPTIONS* (OPTIONAL CHOOSE 1)

WLNX	(Cooper Wavelinx, remote)
ENLGHT	(Enlighted, remote)
FCJS	(Lutron, remote)
FCJS/S	(Lutron, remote, occ/daylight sensor)
MLX	(Molex POE, remote)
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 9.
**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.

19. EMERGENCY OPTIONS* (OPTIONAL)

EMB[5]	Emergency Battery

*Emergency options only available with 0-10V driver options. Third party inverter system recommended for other driver options. Refer to ALW EM Solution Catalog for all compatibility exceptions.
[5]Available for deep canopy and remote driver location only.

CORE 3 PENDANT

8.1"

3.5"

CORE 3 SCONCE

.3"

8.1"

5"

3.5" 2.2"

REMOTE DRIVER

STANDARD SHALLOW CANOPY

PENDANT ONLY

5"

.3"

DEEP CANOPY MOUNTED DRIVER[6]

DEEP CANOPY FOR CANOPY MOUNTED LED DRIVERS
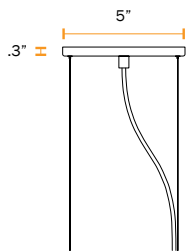
PENDANT ONLY

5"- 7.5"

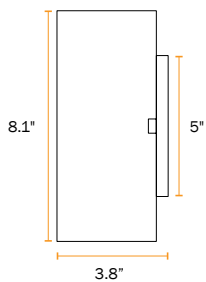2.4"

SCONCE ONLY

2.4"

5"- 7.5"
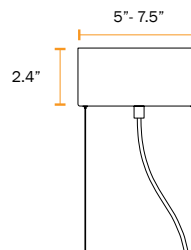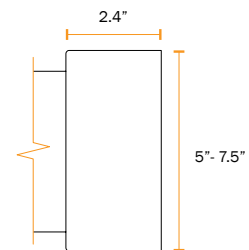
ADA COMPLIANT

CORE 3 SCONCE ADA COMPLIANT

8.1"

5"

3.8"

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

SS112923

![ALW logo]

FINISHES

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

STANDARD FINISHES

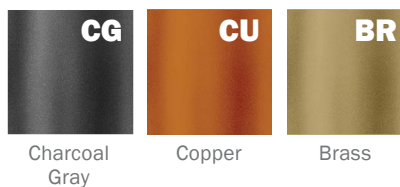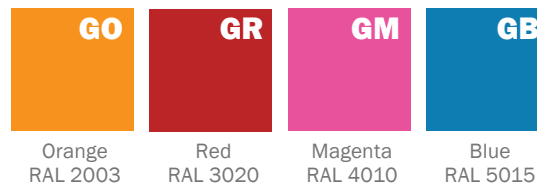| BA	AS	SW	SB	TB
Brushed Aluminum	Aluminum Silver Anodized Effect	Satin White	Satin Black	Textured Black

PREMIUM FINISHES

BASIC POWDER COAT

GW	AW	TW
Gloss White	Antimicrobial Gloss White	Textured Matte White

METALLIC POWDER COAT

CG	CU	BR
Charcoal Gray	Copper	Brass

SATIN ANODIZED EFFECT POWDER COAT

OB	DB
Oil-Rubbed Bronze	Dark Bronze

GLOSS POWDER COAT (80-95% GLOSS)

GO	GR	GM	GB
Orange RAL 2003	Red RAL 3020	Magenta RAL 4010	Blue RAL 5015

Contact ALW Quotes for sample paint finish swatches.

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

CUSTOM COLOR MATCH: CCM_ _ _ _
Custom powder coat color matching is available for a premium setup fee. Consult ALW for additional information.

*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)

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

CORD OPTIONS

	Black Order Code = **BK**		White Order Code = **WH**		Clear Silver Braid Order Code = **CB**
	For all locations		For all locations		For dry and damp locations only

PERFORMANCE DETAILS

REFLECTOR OPTION	CRI	DELIVERED LUMENS[7]	EFFICACY (LM/W)	WATTS(W)	CCT OPTIONS
15° 25° 35° 55° 80°	Ra = 90 ± 3	500	150	3.4	2700K 3000K 3500K 4000K
		1000	139	7.3	
		1500	132	11.5	
		2000	128	15.9	
		2500	124	20.4	
		3000	121	25.2	

Based on 55deg reflector for all outputs, 4000K 90CRI.
Refer to IES files for full performance data.
[7]*Actual lumens measured in field may differ +/- 10%.*

TM-30-18 DETAILS (90 CRI LAMPING)

| CCT	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.
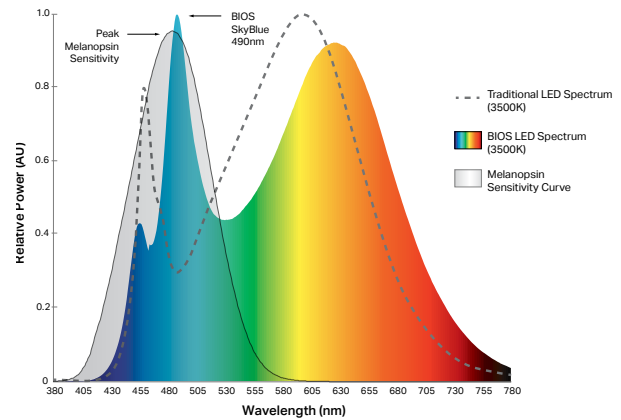
	BIOS DYNAMIC + BIO-DIMMING (BIOSD)		
DESCRIPTION	Dynamic light engine with Bio-Dimming add the ability to fine-tune and dim-out the 490nm SkyBlue signal during night time hours or as desired.		
TYPICAL APPLICATIONS	Environments occupied for a 24-hour period such as hospitals, security facilities, behavioral 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[8]	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

CCT	CRI (R9) Dynamic BIOS	DAYTIME M/P RATIO[9] Dynamic BIOS	NIGHTTIME M/P RATIO[9] Dynamic BIOS	COI[10] 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

[8]Delivered Lumens calculations are based on LM-79 test of BIOS 4000K, 2000lm output.
[9]Melanopic 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.
[10]BIOS SkyBlue® meets the Cyanosis Observation Index (COI) requirements for visual assessment of cyanosis, providing a COI up to 3.3.
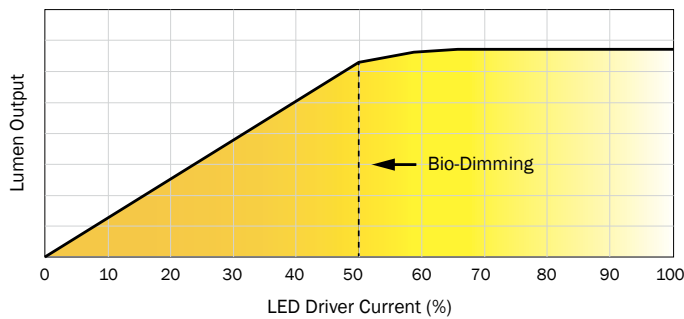
BIOS DYNAMIC + BIO-DIMMING DIMMING CONTROL CHARACTERISTICS

DIMMER SETTING	BIOS SKYBLUE® LED	WHITE LED	LIGHT OUTPUT		
100%* (Full On)	100%	100%	100%	Bio-Dimming	BIOS SkyBlue® maintained for maximum circadian impact.
99% - 51%	100% - 0%	100%	100% - 90%		Light output remains relatively constant.
50%	NO BIOS	100%	~90%	White LED Intensity Dimming	BIOS SkyBlue® removed to provide minimal circadian impact.
49% - 0%	NO BIOS	100% - 0%	Linear Dimming 90% - 0%		White LED output dims linearly.

Dynamic BIOS Lumen Output vs. Driver Current

Lumen Output

Bio-Dimming

LED Driver Current (%)

BIOS + Bio-Dimming™

Relative Power

Bio-Dimming™

Wavelength (nm)
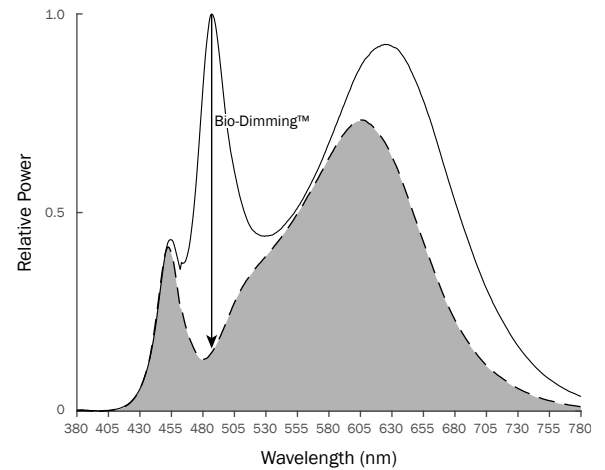
Dynamic BIOS SkyBlue vs. Driver Current

BIOS SkyBlue Content

Bio-Dimming

LED Driver Current (%)
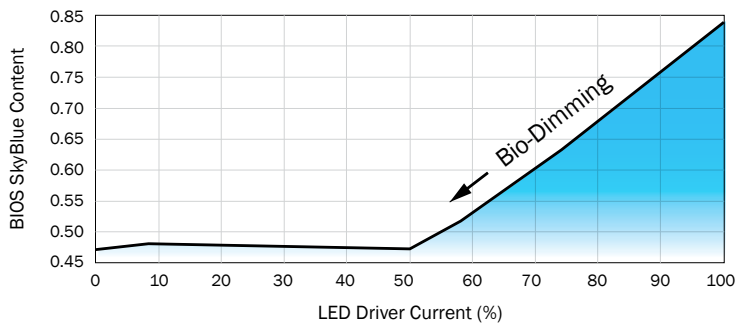
DRIVERS

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.
ELDV0	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.

DRIVER/LED LAMPING COMPATIBILITY				
	STD*	BIOS	CA TITLE 24 JA8/JA10[11]	IEEE P1789 & HD TV STUDIO[12]
V00	●	●	●	
V01	●	●	●	
P01	●	●	●	
ELDV0	●	●	●	●
DALI	●	●	●	●
DMX	●	●	●	●
LDE1	●	●	●	●
POEM	PER REQUEST		●	●
POEI	PER REQUEST		●	●
POEN	PER REQUEST		●	●
POE	PER REQUEST		●	●

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

● - Indicates compatibility

*Standard lamping (STD) - 500-6000LM

[11] Fixtures 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.

[12] The 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.

SENSORS*

	PRODUCT CODE	DESCRIPTION	DRIVER LOCATION	SENSOR LOCATION
	N	None. Choose when sensors are not desired.	-	-
COOPER	**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)	Internal Deep Canopy Remote	Remote
ENLIGHTED™	**ENLGHT**	Enlighted® remote connected lighting smart sensor - occ/daylight/networking (Enlighted Part: SU-5S-H-CL)	Remote	
LUTRON VIVE	**FCJS**	Lutron® Vive remote RF wireless fixture control (Lutron Part: FCJS-ECO or FCJS-010)	Remote	
	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**	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.	Remote	
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	●	●

● - Indicates compatibility   ■ - On/off sensor functionality only

*Standard lamping (STD) - 500 - 6000LM

DRIVER/SENSOR COMPATIBILITY

	WLNX	ENLGHT	MLX	FCJS	FCJS/S	NLT	NLTAIR	OS/PH/HV	NO SENSOR
V00	●	●		●	●			■	●
V01	●	●		●	●			■	●
P01								■	●
ELDV0						●	●	▲	●
DALI								■	●
DMX								■	●
LDE1				●	●				●
POEM		●							●
POEI	Sensor types will depend on the PoE system configuration. Contact ALW for details.								
POEN	Sensor types will depend on the PoE system configuration. Contact ALW for details.								
POE	Sensor types will depend on the PoE system configuration. Contact ALW for details.								

● - Indicates compatibility

▲ - Fixture can have automated dimming via sensor OR on/off functionality and manual dimming

■ - On/off sensor functionality only

BEAM ANGLE (°)	POLAR PLOT (CD)	MTG HEIGHT (FT)	LIGHT LEVEL (FC)	BEAM DIAMETER (FT)	SPACING CRITERION (SC)[13] (0°- 180°) (90°- 270°)	MAX INTENSITY (CD)
15°		6	446.8	1.8	.30 .30	16086
		8	251.3	2.5		
		10	160.9	3.1		
		12	117.7	3.7		
		14	82.1	4.3		
		16	62.8	4.9		
25°		6	262.3	2.6	.39 .39	9443
		8	147.6	3.4		
		10	94.4	4.3		
		12	65.6	5.1		
		14	48.2	6.0		
		16	36.9	6.8		
35°		6	205.1	3.7	.55 .55	7383
		8	115.4	4.9		
		10	73.8	6.2		
		12	51.3	7.4		
		14	37.7	8.7		
		16	28.8	9.9		
55°		6	117.4	6.2	.85 .85	4227
		8	66.1	8.2		
		10	42.3	10.3		
		12	29.4	12.3		
		14	21.6	14.4		
		16	16.5	16.4		
80°		6	54.3	10.1	1.36 1.36	2103
		8	30.5	13.4		
		10	19.5	16.8		
		12	13.6	20.1		
		14	10.0	23.5		
		16	7.6	26.8		

*Photometric calculations based on 3000lm 4000K 90 CRI fixture combination. Actual results may vary in the field.
For footcandle and output multipliers refer to the ALW IES File Multipliers Chart.
[13]Spacing 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).

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 3	
PENDANT	**SCONCE**
4.5 lbs/ 2.1 kg	2.5 lbs/ 1.1 kg