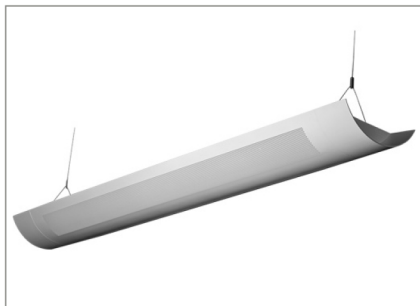


# SIOP LED



## APPLICATION

Architectural indoor, direct/indirect suspended light for LED system and fluorescent lamps. Reflected from the ceiling it creates soft and diffused lighting that ensures maximum visual comfort and balanced shadows. It can be installed individually or in a continuous line. Use for general office, banking, retail and educational environments.

## FEATURES:

- Die formed 20 gauge cold-rolled steel housing. Flat steel end plate standard. Powder coated for a long life finish. White finish is standard. Die cast aluminum spade end cap optional.
- 2', 3', 4', 8' and 12' individual fixture sections for nominal suspension spacing of 2', 3', 4', 8' and 12'. Using 2', 3', 4', 8' and 12' sections can be joined to form longer length fixtures.
- Die-formed high-reflective white reflector is standard. Optional anodized specular aluminum reflector.
- Uplight and down light distribution.
- Textured matte white polyester powder paint.
- Overlay diffuser option as standard (99% diffusion factor & 73% total transmission).

## MOUNTING:

- Provided with a standard 48" length aircraft cable mount kit for suspended mounting.

## LED:

- High quality array LEDs.
- LM80
- Color Temperature: 2700/3000/3500/4000/5000 (K)
- Color Rendering Index: > 82.8
- Calculated L70: 122,000 hours
- Reported L70: >54,000 hours

## ELECTRICAL:

- High power factor electronic driver, operate from a 120 ~ 277 Vac input range, 50 / 60 Hz.
- Features included over voltage protection, surge, short circuit protection and over load protection.
- Power Factor: typical > 0.95, THD <20, meets Class1 or Class 2 circuit.
- 0-10V dimmable driver as standard, 1%~100%.
- Operating temperature: -4°F (-20°C) ~ 122°F (50°C).
- <ELCU-200>
- Guarantees emergency lighting remains ON or is turned on when power to the control device is lost.
- Interfaces with fire alarm panel or security system.
- "Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads.
- UL listed for use in emergency circuits.

## LISTING:

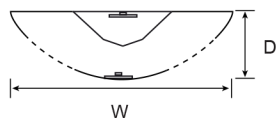
- UL/CUL listed.
- Listed to UL 1598 and UL 8750.
- DLC listed. <sup>9</sup>
- TITLE 24 Compliant.
- Suitable for damp locations.
- CEC Compliant EM (please contact for more information)
- ARRA compliant. (optional)
- 5 years limited warranty.
- 7 or 10 years limited warranty. (optional) <sup>5</sup>

## CONFIGURATIONS

	Model #	Input Watts	Lumen Output (3000K)	Lumen Efficiency (3000K)
2FT	30L	31W	4144.5 lm	132.8 lm/W
	36L	33.8W	4333 lm	128 lm/W
	40L	38.8W	4884.5 lm	126 lm/W
3FT	45L	46.8W	6215 lm	132.8 lm/W
	54L	50.7W	6489.6 lm	128 lm/W
	60L	58.1W	7320.6 lm	126 lm/W
4FT	60L	62.39W	8289 lm	132.8 lm/W
	72L	67.67W	8666 lm	128 lm/W
	81L	77.53W	9769 lm	126 lm/W
8FT	120L	124.8W	16573.4 lm	132.8 lm/W
	144L	135.3W	17318.4 lm	128 lm/W
	162L	155W	19530 lm	126 lm/W
12FT	180L	187W	24833.6 lm	132.8 lm/W
	216L	203W	25984 lm	128 lm/W
	243L	232.6W	29307.6 lm	126 lm/W

Multiplier		
3000K	3500K	5000K
1.027627	1.055254	1.110508

Zone	Lumens	% of Luminaire
0-40	147	2.5%
0-60	263	4.4%
0-90	380	6.4%
90-180	5589	93.6%



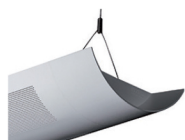
All dimensions are in inches (millimeters).

### Specifications: SIOP 2', 3', 4', 8', 12'

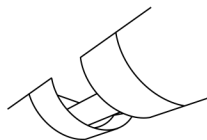
Length: 24, 36, 48, 96, 144  
(609 / 914 / 1220 / 2439 / 3657)  
Width: 9 (229)  
Depth: 3 (76)  
Weight:  
SIOP-R4: 14.35 lbs (6.51 kg)  
SIOP-R8: 25.57 lbs (11.6 kg)  
SIOP-R12: 35.58 lbs (16.14 kg)



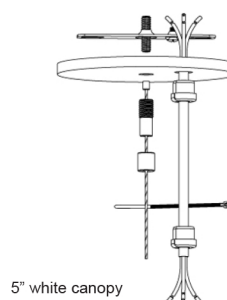
[ Standard ]



[ SPE option ]



[ BSC option ]



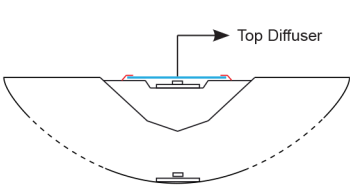
5" white canopy



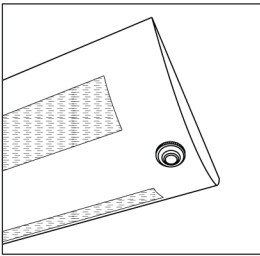
CTO

Invisible Silicone "O" ring Cable and cord holder. Slips onto Cord - cable slides in, provides tool-less adjustability.

SIOP LED



[ Top Diffuser Drawing ]



MS - Integrated Occupancy Sensor  
with Hold-Off Daylighting

ORDERING INFORMATION

EXAMPLE: SIOP-4-60L-40K-UNV-X1-AC48

MODEL		ROW		SECTION ¹		LED		COLOR TEMP.		REFLECTOR		TOP DIFFUSER		VOLTAGE	
SIOP	xx	Increments Total Row Lengths	R2	2' Length	30L	30W LED (2072 lm/ft)	-30K -35K -40K -50K	3000K 3500K 4000K 5000K	(Blank) SR	White Reflector Specular Reflector	(Blank) PA CA	None Prismatic Acrylic Clear Acrylic	UNV	120-277V	
					36L	36W LED (2166 lm/ft)								(Std.)	
					40L	40W LED (2442 lm/ft)								120V	
			R3	3' Length	45L	45W LED (2071 lm/ft)								277V	
					54L	54W LED (2163 lm/ft)								347V ¹³	
					60L	60W LED (2440 lm/ft)									
			R4	4' Length	60L	60W LED (2072 lm/ft)									
					72L	72W LED (2166 lm/ft)									
					81L	81W LED (2442 lm/ft)									
			R8	8' Length	120L	120W LED (2071 lm/ft)									
					144L	144W LED (2164 lm/ft)									
					162L	162W LED (2441 lm/ft)									
			R12	12' Length	180L	180W LED (2069 lm/ft)									
					216L	216W LED (2165 lm/ft)									
					243L	243W LED (2442 lm/ft)									
														* Contact factory for custom wattage or lumen requirement.	
														* Contact factory for custom up/down light distribution.	

<sup>1</sup> \* Contact factory for custom wattage or lumen requirement.  
<sup>2</sup> \* Contact factory for custom up/down light distribution.

EM SECTION <sup>2</sup>		FINISH		CORD FINISH		LED DRIVER	
(Blank) 1SE 2SE xSE	None EM 1 Section 2 Section x Section	(Blank) AL CSS  AMB	Matte White (Std.) Light Gray Custom Canopy Color (White is Std.) Anti-Microbial Coating (Matte Skye White)	(Blank) BKC	White (Std.) Black  <sup>3</sup> * Non-standard finish with extra charge.	(Blank) SD50 TDM ES566 EC LDE5 LDE1 ELV PHSR PHDL  TRIOT  DIMIT LTEA2W	0-10V dim to 1% (Std.) (dim both uplight and downlight simultaneously) Bi-Level Step dim 50/100 <sup>3,4</sup> Triac Dim. (120V only) eldoLED SOLOdrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim eldoLED ECOdrive 0-10V natural dim to 1% (Hybrid HydraDrive) 5-Series EcoSystem LED driver, 100% ~ 5% dim Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim ELV compatible (reverse-phase or trailing-edge) Philips Xitanium Sensor-Ready, Dali 5%~100% dim. Philips Xitanium DALI driver, Dim to 5%  <sup>5</sup> * Contact factory for custom minimum dimming level set up. (Custom set up is not available with SD50) Tridonic IoT ready, 1-100% dim via Smart Module Interface (SMI), automated dimming/lighting controls via Enlighted Sensor Interface Tri-mode dimming (Triac, ELV, 0-10V) Hi-lume 1% 2-wire LED driver (120V forward phase only)

<sup>2</sup> \* Available custom color (RAL)  
Please provide us with the RAL number.  
<sup>3</sup> \* Non-standard finish with extra charge.


OPTIONS				CEILING TYPE		SUSPENSION LENGTH	
EMG5	5W EM Battery Backup (CEC Compliant EM) <sup>2</sup>	ARRA	ARRA Compliant	X1	T-bar ceiling	AC48	Adjustable Aircraft
EMG8	8W EM Battery Backup (CEC Compliant EM) <sup>2</sup>	AMS	Occupancy Sensorw/ Daylight Harvesting <sup>6</sup>	X2	Hard ceiling		Cable Canopy 48"L
EMG16	16W EM Battery Backup (CEC Compliant EM) <sup>2</sup>	DPMS	Daylight Dimming Photo Sensor (0-10 VDC Control) <sup>6</sup>	X3	Sloped Hard ceiling	AC96	Adjustable Aircraft
EMG25	25W EM Battery Backup (CEC Compliant EM) <sup>2, 15</sup>	SO	Dimming Wires connected to Sensor Only <sup>7</sup>				Cable Canopy 96"L
ELCU-200	Fail-to-on Emergency lighting, UL924 <sup>8</sup>	LSR-301-S	Setup Remote Control for DPMS			AC120	Adjustable Aircraft
GTD	Bodine Generator Transfer Device	LSR-301-P	Occupant Remote for DPMS				Cable Canopy 120"L
GTD10DIM	Bodine Generator Transfer Device (0-10VDC Dimmer Override)	O7W	Optional 7 Years Limited Warranty <sup>5</sup>			AC150	Adjustable Aircraft
		O10W	Optional 10 Years Limited Warranty <sup>5</sup>				Cable Canopy 150"L
SPE	Spade End Cap	COC	Separated EM feed for City of Chicago code compliance				
BSC	Non-lit Continuous Coupler	CTO	Invisible Silicone "O" ring cable and cord holder				
DC	Dust Cover						

\* Contact factory for custom length.  
1 pair (2 aircraft cables) standard for up to 8' length.

<sup>8</sup> \* Contact factory for custom length.  
1 pair (2 aircraft cables) standard for up to 8' length.

## SIOP LED

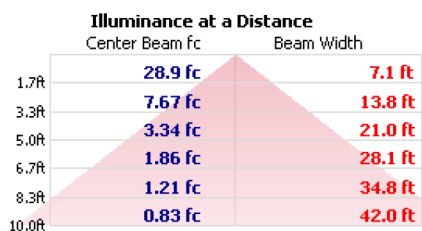
## LIGHTING CONTROL SYSTEM

LUTRON VIVE	<Lutron Vive System Enabled>
	 Click Here!
	<Enlighted>
	SU-5E-IoT Enlighted IoT-Ready Indoor Micro sensor with occupancy/vacancy detection, daylight harvesting, thermal sensing, task tuning, and room and zone control, Bluetooth enabled <sup>10, 14</sup>
	SU-5E-CL Enlighted Indoor Micro sensor with occupancy/vacancy detection, daylight harvesting, thermal sensing, task tuning, and room and zone control, Bluetooth enabled (Connected lighting sensor only)
RS-WS	Enlighted Room controller providing basic control functions of a standard wall switch with preset dimming capability
	<EasySense>
SNS200C	EasySense Ceiling-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver) <sup>11, 12</sup>
RS-IR	IR dongle for EasySense control

## NOTES:

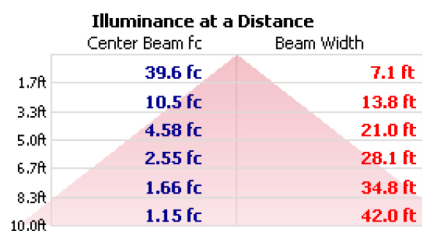
- No need to select, if same as row length and section length.
- EM is installed in last 4' of luminaire sections. Separate section required 2SE or specified. Must specify voltage, not available with 347V. Contact factory for other emergency ballast options.
- Contact factory for custom wattage or lumen requirement.
- Lumens and watts per foot may differ for STEP drivers, consult factory.
- This limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation.
- The standard will be ON/OFF sensor with dimming wires provided for dimmer switch. For sensor dimming control, please select additional "SO" option.
- Dimming wires provided and connected to sensor only, not for dimmer switch. (available with AMS and DPMS option)
- Shipped separately.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.
- "RS-WS" option can be added if wish to have a wall switch, please see Enlighted Room Controller in the separate attachment.
- See NFC and IR manual in the separate attachment. If your phone is not compatible, please order "RS-IR" and follow the manual.
- Refer to Advanced Grouping Datasheet for its default setting and compatible wireless switches.
- 347V cannot work with Emergency Battery Backup.
- Must be ordered either with 0-10V LED driver or TRIOT (IoT-Ready LED driver).
- Not available with 2ft housing due to space limitations.

SIOP-4-60L-UNV



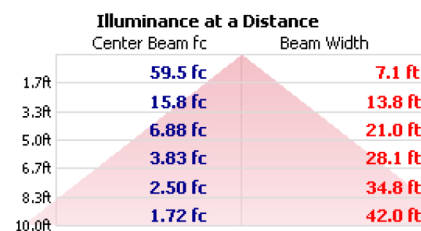
■ Horiz. Spread: 129.0°

SIOP-4-81L-UNV



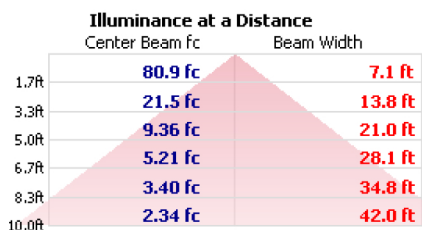
■ Horiz. Spread: 129.0°

SIOP-8-120L-UNV



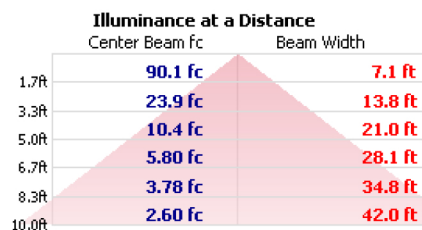
■ Horiz. Spread: 129.0°

SIOP-8-162L-UNV



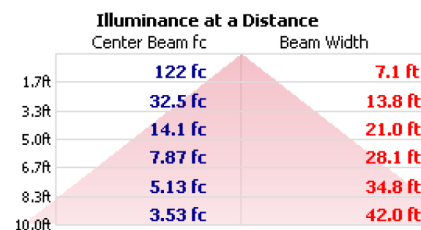
■ Horiz. Spread: 129.0°

SIOP-12-180L-UNV



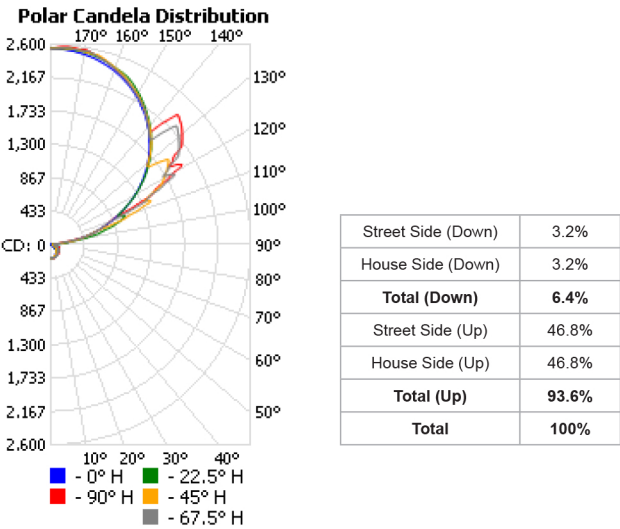
■ Horiz. Spread: 129.0°

SIOP-12-243L-UNV



■ Horiz. Spread: 129.0°

SIOP LED



COMPATIBLE DIMMER SWITCH (TABLE 1)

Model #	Brand	Compatible Dimmer Switch	
(Blank)	-	<Leviton>	IlumaTech IP7 series
		<Lutron>	Visit <a href="http://www.lutron.com/advance">www.lutron.com/advance</a> for a list of dimmers (Mark VII) that will work with this driver.
		<Philips>	Sunrise : SR1200ZTUNV
ES566	eldoLED SOLOdrive	<Busch-Jaeger>	2112U-101
		<Jung>	240-10
		<Leviton>	IlumaTech - IP710-DLX
		<Lightoller Controls>	ZP600FAM120
		<Merten>	5729
		<Pass & Seymour>	CD4FB-W
		<Wattstopper>	DCLV1
		<Sensor Switch>	nIO EZ
		<Synergy>	ISD BC
		<ABB>	SD/S 2.16.1
		<Lutron>	Nova T: NTFTV Diva - DDTV-xx, NDTV GRAFIK Eye: GRX-TVI w GRX3503 Energy Savr Node: QSN-4T16-S TVM2 Module
		<Crestron>	GLX-DIMFLV8, GLXP-DIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIMFLV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-AO8, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX
LDE5	Lutron 5-Series EcoSystem	<Lutron>	PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO <sup>1,2</sup> Energi Savr Node (120V only): QSN-1ECO-S, QSN-2ECO-S GRAFIK Eye QS/Homeworks QS control unit (120V only): QSGRJ-_E(wireless) QSGR-_E Quantum Hub (120V only): QP2-_ _2C/4C/6C/8C Homeworks QS/myRoom Plus power module (120V only): LQSE-2ECO-D
LDE1	Lutron Hi-lume 1% EcoSystem		
PHSR <sup>3</sup>	Philips Xitanium Sensor-Ready	<Ilumra>	<u>Single Rocker Self-Powered Light Switch (on/off, dim-up/down)</u> Ilumra# ZBT-S1AWH Digi-Key# 1082-1033-ND <u>Dual Rocker Self-Powered Light Switch (on/off, dim-up/down, scene1,2)</u> Ilumra# ZBT-S2AWH Digi-Key# 1082-1034-ND
TDM	KEYSTONE	<Lutron>	Diva DV-600P, SkyLark S-600P, Maestro MA-600 (Digital)
ELV	ERP	<Lutron>	Nova-NFTV, Diva-DDTV
LTEA2W	Lutron Hi-lume 2-wire (120V forward voltage only)	<Lutron>	Visit <a href="http://www.lutron.com/TechnicalDocumentLibrary/369543_ENG.pdf">http://www.lutron.com/TechnicalDocumentLibrary/369543_ENG.pdf</a> for a list of compatible dimmer switches.

NOTES:  
1. All devices connected to one FCJ/FCJS-ECO will be controlled together. Devices will dim to the same level as the result of a control command.  
For more detail on adjusting low-end light level refer to Application Note#556 at [www.lutron.com](http://www.lutron.com).  
2. For the Line/Hot (L/H) terminal on the driver, it is preferred not to use the switched hot (red) wire from the control but rather the hot wire directly from the power source.  
3. Recommended for EasySense System.