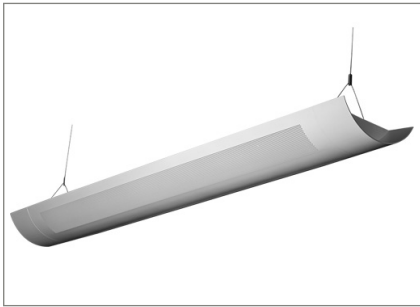


SIOP LED

Project Name:	
Type:	



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:

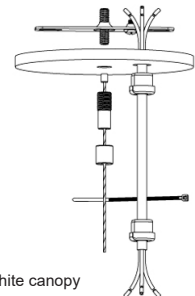
- UL/CUL listed.
- Listed to UL 1598 and UL 8750.
- DLC listed. ⁹
- TITLE 24 Compliant.
- Suitable for damp locations.
- CEC Compliant EM (please contact for more information)
- ARRA compliant. (optional)
- 5 years limited warranty.
- 7 or 10 years limited warranty. (optional) ⁵
- Bluetooth Mesh System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

CONFIGURATIONS

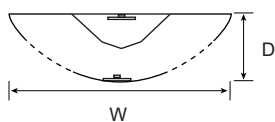
	Model #	Input Watts	Lumen Output (3000K)	Lumen Efficiency (3000K)
2FT	30L	31W	4144.5 lm	132.8 lm/W
	36L	33.8W	4333 lm	128 lm/W
	40L	38.8W	4884.5 lm	126 lm/W
3FT	45L	46.8W	6215 lm	132.8 lm/W
	54L	50.7W	6489.6 lm	128 lm/W
	60L	58.1W	7320.6 lm	126 lm/W
4FT	72L	67.67W	8666 lm	128 lm/W
	81L	77.53W	9769 lm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



5" white canopy



All dimensions are in inches (millimeters).

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

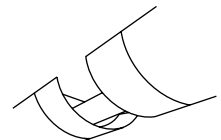
Length: 24, 36, 48, 96, 144
(609 / 914 / 1220 / 2439 / 3657)
Width: 9 (229)
Depth: 3 (76)
Weight:
SIOP-R4: 14.35 lbs (6.51 kg)
SIOP-R8: 25.57 lbs (11.6 kg)
SIOP-R12: 35.58 lbs (16.14 kg)



[Standard]

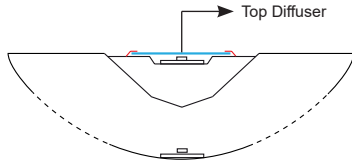


[SPE option]

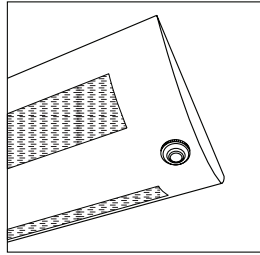


[BSC option]

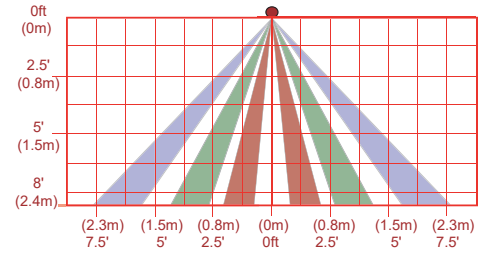
LED ARCHITECTURAL LINEAR SUSPENDED-PARTIALLY PERFORATED



[Top Diffuser Drawing]



MS - Integrated Occupancy Sensor with Hold-Off Daylighting



AMS coverage pattern (side view)

* The coverage shown in the diagram is maximum. AMS is designed to detect small motion when mounted within 6' occupants.

ORDERING INFORMATION

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

MODEL	ROW		SECTION ¹		LED		COLOR TEMP.		REFLECTOR		TOP DIFFUSER								
SIOP	xx	Increments Total Row Lengths	R2	2' Length	30L	30W LED (2072 lm/ft)	-30K	3000K	(Blank)	White Reflector	(Blank)	None							
					36L	36W LED (2166 lm/ft)		3500K					SR	Specular Reflector	PA	Prismatic Acrylic			
					40L	40W LED (2442 lm/ft)		4000K									CA	Clear Acrylic	
				R3	3' Length	45L		45W LED (2071 lm/ft)											5000K
						54L		54W LED (2163 lm/ft)											
		60L	60W LED (2440 lm/ft)																
R4	4' Length	23L	23W LED (763 lm/ft)																
		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)																

* Number of circuit(s) should be determined by the customer prior to ordering the continuous run considering the AC input voltage and total run wattage.


* Contact factory for custom wattage or lumen requirement.
* Contact factory for custom up/down light distribution.

VOLTAGE		EM SECTION ²		FIXTURE FINISH			CORD FINISH (for pendant)		CANOPY FINISH (for pendant)		
UNV	120-277V (Std.)	(Blank)	None EM	(Blank)	Matte White RAL #9003 (Std.)	(Blank)	White (Std.)	(Blank)	White (Std.)	(Blank)	White (Std.)
120	120V	1SE	1 Section	*SV	Silver RAL #9022	*BKC	Black	*BC	Black Canopy	*SC	Silver Canopy
277	277V	2SE	2 Section	*BK	Black RAL #9011			*SC	Silver Canopy	**CSS	Custom Canopy Color (White is Std.)
347	347V ¹³	xSE	x Section	**CC	Custom Color						
				*AMB	Anti-Microbial Coating (Matte Skye White)						

* Non-standard finish with extra charge.
** Additional charge & set up fee.

LED DRIVER		OPTIONS	
(Blank)	0-10V dim to 1% (Std.) (dim both uplight and downlight simultaneously)	EMG8	1296 LUMEN EM Battery Backup (CEC Compliant EM) ²
SD50	Bi-Level Step dim 50/100 ^{3,4}	EMG15	2430 LUMEN EM Battery Backup (CEC Compliant EM) ²
TDM	Triac Dim. (120V only)	EMG20	3240 LUMEN EM Battery Backup (CEC Compliant EM) ²
ES566	eldoLED SOLOdrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim	ELCU-200	Fail-to-on Emergency lighting, UL924 ⁸
EC	eldoLED ECOdrive 0-10V natural dim to 1% (Hybrid HydraDrive)	GTD	Bodine Generator Transfer Device
LDE1	Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim	GTD10DIM	Bodine Generator Transfer Device (0-10VDC Dimmer Override)
ELV	ELV compatible (reverse-phase or trailing-edge)	SPE	Spade End Cap
PHSR	Philips Xitanium Sensor-Ready, Dali 5%~100% dim.	BSC	Non-lit Continuous Coupler
PHDL	Philips Xitanium DALI driver, Dim to 5%	DC	Dust Cover
	* Contact factory for custom minimum dimming level set up. (Custom set up is not available with SD50)	ARRA	ARRA Compliant
TRIOT	Tridonic IoT ready, 1-100% dim via Smart Module Interface (SMI), automated dimming/lighting controls via Enlighted Sensor Interface	AMS	Occupancy Sensor/ Daylight Harvesting ⁶
DIMT	Tri-mode dimming (Triac, ELV, 0-10V)	DPMS	Daylight Dimming Photo Sensor (0-10 VDC Control), (LSR-301-S required) ¹⁵
LTEA2W	Hi-lume 1% 2-wire LED driver (120V forward phase only)	SO	Dimming Wires connected to Sensor Only ⁷
BLT	Bluetooth Mesh System (contact factory for more information)	LSR-301-S	Setup Remote Control for DPMS (Required for DPMS) Occupant Remote Control for DPMS
		LSR-301-P	Control for DPMS
		O7W	Optional 7 Years Limited Warranty ⁵
		O10W	Optional 10 Years Limited Warranty ⁵
		COC	Separated EM feed for City of Chicago code compliance

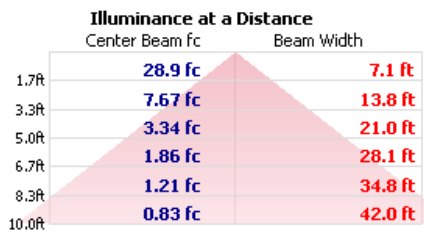
SIOP LED

CEILING TYPE (for pendant)		SUSPENSION LENGTH (for pendant)		LIGHTING CONTROL SYSTEM	
X1	15/16" grid T-bar ceiling	AC48	Adjustable Aircraft Cable Canopy 48"L	LUTRON VIVE	<Lutron Vive System Enabled>
X2	Hard ceiling	AC96	Adjustable Aircraft Cable Canopy 96"L		 Click Here!
X3	Sloped Hard ceiling	AC120	Adjustable Aircraft Cable Canopy 120"L		<Enlighted>
X4	9/16" T-bar ceiling	AC150	Adjustable Aircraft Cable Canopy 150"L		Enlighted IoT-Ready Indoor Micro sensor with occupancy/vacancy detection, daylight harvesting, thermal sensing, task tuning, and room and zone control, Bluetooth enabled ^{10, 14}
		* Contact factory for custom length. 1 pair (2 aircraft cables) standard for up to 8' length.		SU-5E-IoT	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)
				SU-5E-CL	Enlighted Room controller providing basic control functions of a standard wall switch with preset dimming capability
				RS-WS	<EasySense> Enlighted Room controller providing basic control functions of a standard wall switch with preset dimming capability
				SNS200C	EasySense Ceiling-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver) ^{11, 12}
				RS-IR	IR dongle for EasySense control

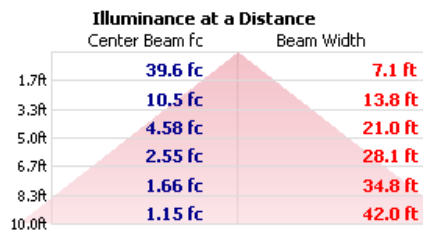
NOTES:

- 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 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).
- Automatic on/off is not available. For automatic on/off, additional occupancy sensor is required or a manual on/off switch can be done.

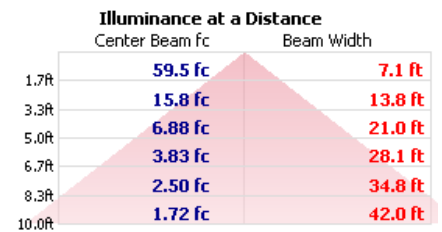
SIOP-4-60L-UNV



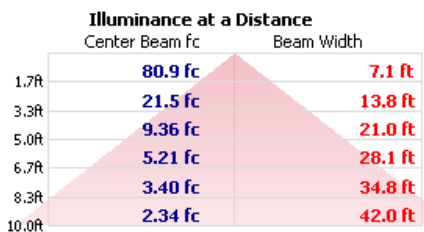
SIOP-4-81L-UNV



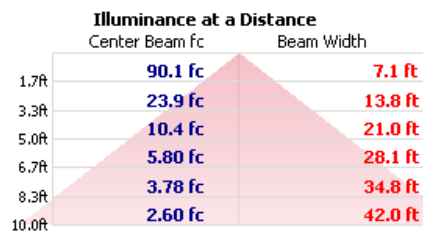
SIOP-8-120L-UNV



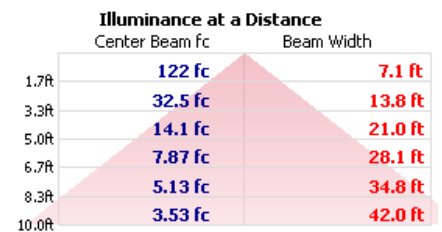
SIOP-8-162L-UNV



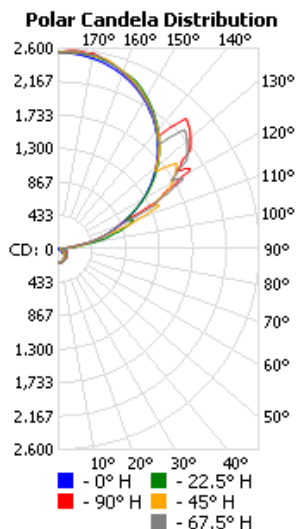
SIOP-12-180L-UNV



SIOP-12-243L-UNV



SIOP LED



Street Side (Down)	3.2%
House Side (Down)	3.2%
Total (Down)	6.4%
Street Side (Up)	46.8%
House Side (Up)	46.8%
Total (Up)	93.6%
Total	100%

COMPATIBLE DIMMER SWITCH (TABLE 1)

Model #	Brand	Compatible Dimmer Switch	
(Blank)	-	<Leviton>	IllumaTech IP7 series
		<Lutron>	Visit www.lutron.com/advance 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>	IllumaTech - 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, NFTV GRAFIK Eye: GRX-TVI w GRX3503 Energy Savr Node: QSN-4T16-S TVM2 Module	
	<Crestron>	GLX-DIMFLV8, GLXP-DIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIMFLVV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-AO8, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX	
LDE1	Lutron Hi-lume 1% EcoSystem	<Lutron>	PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO ^{1,2} Energ 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
PHSR ³	Philips Xitanium Sensor-Ready	<Illumra>	<u>Single Rocker Self-Powered Light Switch (on/off, dim-up/down)</u> Illumra# ZBT-S1AWH Digi-Key# 1082-1033-ND <u>Dual Rocker Self-Powered Light Switch (on/off, dim-up/down, scene1,2)</u> Illumra# ZBT-S2AWH Digi-Key# 1082-1034-ND
ELV/ TDM	ERP	<Lutron>	S-603PG, DVCL-153P, DV-600P, TGCL-153P, S-600P, DVCLV-303P, SELV-300P, TG-600P, LG-600P, CT-103P, MAELV-600, FAELV-500
		<Leviton>	IPI06-1LZ, 6631-2, VPE06,6683-IW, 6161, 6633-P, IPE04
		<Cooper>	DLC03P, SLC03P, DAL06P
		<Lightolier>	ZP260QEW
LTEA2W	Lutron Hi-lume 2-wire (120V forward voltage only)	<Lutron>	Visit http://www.lutron.com/TechnicalDocumentLibrary/369543_ENG.pdf for a list of compatible dimmer switches.

NOTES:

- 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.
- 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.
- Recommended for EasySense System.

SIOP LED

All dimensions are in inches (millimeters).

