

SIOL LED



APPLICATION

Architectural indoor, direct/indirect suspended light for LED system and fluorescent lamps. Reflection from the ceiling 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, bank, 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', 4', 8' and 12' individual fixture sections for nominal suspension spacing of 2', 4', 8' and 12'. Using 2', 4', 8' and 12' sections can be joined to form longer length fixtures.
- Parabolic semi-specular aluminum louvers, white painted steel baffle (WBL) (standard) or white painted perforated steel baffle (WPL). Optional Opal White Diffuser (OP) overlay on louver.
- Die formed high-reflective white reflector is standard. Optional anodized specular aluminum reflector.
- Up light and down light distribution.
- Textured matte white polyester powder paint.

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: +60,000 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.

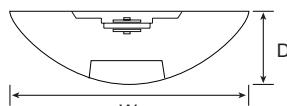
LISTING:

- UL/CUL listed.
- Listed to UL 1598 and UL 8750.
- Suitable for damp locations.
- CEC Compliant EM (please contact for more information)
- ARRA compliant (optional).
- BAA compliant (optional).
- Trade Agreements Act 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 |
|------|---------|-------------|--------------|
| 2FT | 30L | 32.4W | 2891 lm |
| | 36L | 38.4W | 3426 lm |
| | 40L | 42.9W | 3827 lm |
| 4FT | 32L | 32W | 3000 lm |
| | 60L | 64.8W | 5783 lm |
| | 72L | 76.8W | 6853 lm |
| | 81L | 85.8W | 7655 lm |
| 8FT | 120L | 124.8W | 11131 lm |
| | 144L | 148.8W | 13271 lm |
| | 162L | 166.8W | 14875 lm |
| 12FT | 180L | 184.8W | 16480 lm |
| | 216L | 220.8W | 19689 lm |
| | 243L | 247.8W | 22096 lm |

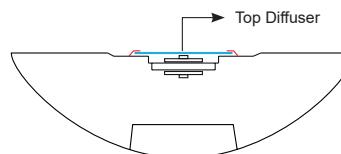
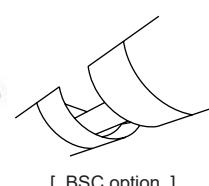
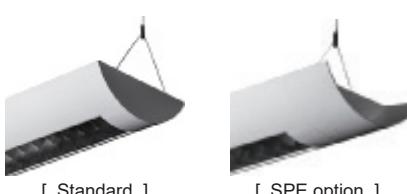
| Zone | Lumens | % of Luminaire |
|--------|--------|----------------|
| 0-40 | 1794 | 23.7% |
| 0-60 | 2623 | 34.7% |
| 0-90 | 2982 | 39.4% |
| 90-180 | 4586 | 60.6% |



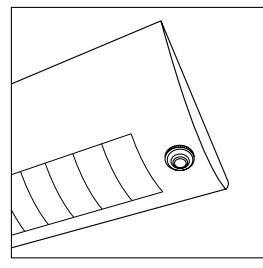
All dimensions are in inches (millimeters).

Specifications: SIOL 2', 4', 8', 12'

Length: 24, 48, 96, 144
(609 / 1220 / 2439 / 3657)
Width: 9 (229)
Depth: 3 (76)
Weight:
SIOL-R4: 13.61 lbs (6.18 kg)
SIOL-R8: 23.24 lbs (10.54 kg)
SIOL-R12: 34.49 lbs (15.65 kg)



[Top Diffuser Drawing]



MS - Integrated Occupancy Sensor
with Hold-Off Daylighting

SIOL LED

ORDERING INFORMATION

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

| MODEL | ROW | | SECTION ¹ | | LED | | COLOR TEMP. | | CRI | | REFLECTOR | |
|-------|-----|------------------------------|----------------------|------------|--------------------------|---|--------------------------------------|----------------------------------|---------------|----------------------------------|-----------|-----------------|
| SIOL | XX | Increments Total Row Lengths | R2 | 2' Length | 30L 36L 40L | 30W LED (1445 lm/ft) 36W LED (1713 lm/ft) 40W LED (1913 lm/ft) | -27K -30K -35K -40K -50K | 2700K ¹⁰ | (Blank) C9 | 80+ CRI 90+ CRI ¹¹ | (Blank) | White Reflector |
| | | | R4 | 4' Length | 32L 60L 72L 81L | 32W LED (750 lm/ft) 60W LED (1445 lm/ft) 72W LED (1713 lm/ft) 81W LED (1913 lm/ft) | | 3000K 3500K 4000K 5000K | | | | |
| | | | R8 | 8' Length | 120L 144L 162L | 120W LED (1445 lm/ft) 144W LED (1713 lm/ft) 162W LED (1913 lm/ft) | | | | | | |
| | | | R12 | 12' Length | 180L 216L 243L | 180W LED (1445 lm/ft) 216W LED (1713 lm/ft) 243W LED (1913 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.

| SHIELDING | | TOP DIFFUSER | | VOLTAGE | | EM SECTION ² | | Fixture Finish | | | CORD FINISH (for pendant) | |
|-----------------------------|---|---------------------|--|--------------------------|---|------------------------------|--|---------------------------------------|--|-----------------|---------------------------|--|
| (Blank) WBL WPL OP | Semi Specular White Blade White Perforated Blade Semi Specular Louver with White Acrylic Overlay Frosted Lens | (Blank) PA CA | None Prismatic Acrylic Clear Acrylic | UNV 120 277 347 | 120-277V (Std.) 120V 277V 347V ¹⁵ | (Blank) 1SE 2SE xSE | None EM 1 Section 2 Section x Section | (Blank) *SV *BK **CC *AMB | Matte White RAL #9003 (Std.) Silver RAL #9022 Black RAL #9011 Custom Color Anti-Microbial Coating (Matte Skye White) | (Blank) *BKC | White (Std.) Black | |

* Non-standard finish with extra charge.

** Additional charge & set up fee.

| CANOPY FINISH (for pendant) | | LED DRIVER | | | | | OPTIONS | | | | | |
|--------------------------------|---|---|--|--|--|---|---------|--|--|--|--|--|
| (Blank) *BC *SC **CSS | White (Std.) Black Canopy Silver Canopy Custom Canopy Color (White is Std.) | (Blank) UDSD SD50 TDM ES566 EC LDE1 ELV PHSR PHDL TRIOT LTEA2W | 0-10V dim to 1% (Std.) (dim both uplight and downlight simultaneously) Separate Dimming Control of Uplight and Downlight (0-10V dim to 10%) ^{7,14} Bi-Level Step dim 50/100 ^{3,4} 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) Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim ELV compatible (reverse-phase or trailing-edge), (120V only) Philips Xitanium Sensor-Ready, Dali 5%~100% dim. Philips Xitanium DALI driver, Dim to 5% Tridonic IoT ready, 1-100% dim via Smart Module Interface (SMI), automated dimming/lighting controls via Enlighted Sensor Interface Hi-lume 1% 2-wire LED driver (120V forward phase only) | (Blank) GTD GTD10DIM SPE BSC DC 74D/26U AMS DPMs SO LSR-301-S LSR-301-P O7W O10W ARRA BAA TAA COC | EMG8 EMG15 EMG20 EMG25 ELCU-200 GTD GTD10DIM 74D/26U AMS DPMs SO LSR-301-S LSR-301-P O7W O10W ARRA BAA TAA COC | 1296 LUMEN EM Battery Backup (CEC Compliant EM) ² 2430 LUMEN EM Battery Backup (CEC Compliant EM) ² 3240 LUMEN EM Battery Backup (CEC Compliant EM) ² 4050 LUMEN EM Battery Backup (CEC Compliant EM) ² Fail-to-on Emergency lighting, UL924 ⁸ Bodine Generator Transfer Device Bodine Generator Transfer Device (0-10VDC Dimmer Override) Spade End Cap Non-lit Continuous Coupler Dust Cover 74% Down 26% Up Light Bluetooth Mesh Wireless Sensor. Occupancy/Daylight/0-10V Dimming ¹⁶ Daylight Dimming Photo Sensor (0-10 VDC Control), (LSR-301-S required if FD-301 is installed) ¹⁷ Dimming Wires connected to Sensor Only (available option on FS-205 non-Bluetooth AMS sensor only) ⁶ Setup Remote Control for DPMs (Required for DPMs) Occupant Remote Control for DPMs Optional 7 Years Limited Warranty ⁵ Optional 10 Years Limited Warranty ⁵ ARRA Compliant Buy American Act compliant Trade Agreements Act compliant Separated EM feed for City of Chicago code compliance | | | | | | |

SIOL 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>  Click Here! |
| X2 Hard ceiling | AC96 Adjustable Aircraft Cable Canopy 96" L | SU-5E-IoT | <Enlighted> Enlighted IoT-Ready Indoor Micro sensor with occupancy/vacancy detection, daylight harvesting, thermal sensing, task tuning, and room and zone control, Bluetooth enabled ^{9, 16} |
| X3 Sloped Hard ceiling | AC120 Adjustable Aircraft Cable Canopy 120" L | 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) |
| X4 9/16" T-bar ceiling | AC150 Adjustable Aircraft Cable Canopy 150" L | RS-WS | Enlighted Room controller providing basic control functions of a standard wall switch with preset dimming capability |
| X5 9/16" Screw Slot ceiling | * Contact factory for custom length. 1 pair (2 aircraft cables) standard for up to 8' length. | SNS200C | <EasySense> EasySense Ceiling-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver) ^{12, 13} |
| | | RS-IR | IR dongle for EasySense control |
| | | IFS105SE | <Bluetooth> Bluetooth Mesh Wireless Sensor. Occupancy/Daylight/0-10V Dimming |
| | | PPA102S | Bluetooth Powerpack (Consult factory for installation location) |
| | | CASAMBI | Contact factory for CASAMBI READY options |

NOTES:

1. No need to select, if same as row length and section length.
2. 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.
3. Contact factory for custom wattage or lumen requirement.
4. Lumens and watts per foot may differ for STEP drivers, consult factory.
5. This limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation.
6. Dimming wires provided and connected to sensor only, not for dimmer switch.
(available with AMS and DPMS option)
7. For separate dimming control, please be advised it may not be available when EM battery backup is added due to limited space. Please contact us for more information.
8. Shipped separately.
9. "RS-WS" option can be added if wish to have a wall switch,
please see Enlighted Room Controller in the separate attachment.
10. Available with C9 only.
11. Lumen per watt is around 15% less than standard CRI (80+).
12. See NFC and IR manual in the separate attachment.
If your phone is not compatible, please order "RS-IR" and follow the manual.
13. Refer to Advanced Grouping Datasheet for its default setting and compatible wireless switches.
14. Can have up to 2 power feeds depending on the configuration.
15. 347V cannot work with Emergency Battery Backup.
16. Must be ordered either with 0-10V LED driver or TRIOT (IoT-Ready LED driver).
17. Automatic on/off is not available. For automatic on/off, additional occupancy sensor is required or a manual on/off switch can be done.
18. With TDM/ELV/SDxx/TDxx: Only available with line-voltage on/off occupancy sensor.

SIOL LED

COMPATIBLE DIMMER SWITCH (TABLE 1)

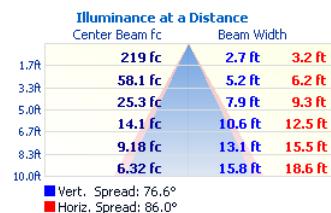
| Model # | Brand | Compatible Dimmer Switch | |
|-------------------|---|--------------------------|---|
| (Blank) | - | <Leviton> | IllumaTech IP7 series |
| | | <Lutron> | Visit www.lutron.com/advance for a list of dimmers (Mark VII) that will work with this driver. |
| | | <Philips> | Sunrise : SR1200ZTUVN |
| 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: NFTV Diva - DVTV-xx, NFTV 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 |
| LDE1 | Lutron Hi-lume 1% Eco-System | <Lutron> | PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO ^{1,2} 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 |
| PHSR ³ | Philips Xitanium Sensor-Ready | <Illumra> | Single Rocker Self-Powered Light Switch (on/off, dim-up/down) Illumra# ZBT-S1AWH Digi-Key# 1082-1033-ND Dual Rocker Self-Powered Light Switch (on/off, dim-up/down, scene1,2) Illumra# ZBT-S2AWH Digi-Key# 1082-1034-ND |
| TDM | KEYSTONE | <Lutron> | Diva DV-600P, SkyLark S-600P, Ariadni AY-600P, Ariadni TG-603P, Maestro MA-600 (Digital), Diva CFL/LED DVCL-153P, Satin Colors DVSC-600P-SW |
| | | <Leviton> | 6641, IllumaTech IP106-1LX, ToggleTouch TG106-1LW (Digital) |
| ELV | KEYSTONE | <Lutron> | MAELV-600BL (Digital), DVELV-300P, SkyLark SELV-300P |
| 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:

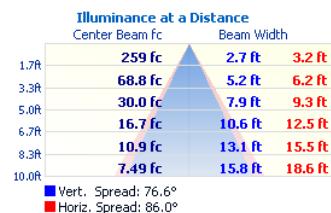
- All devices connected to one FCJ/FCJS-ECO will be controlled together. Devices will dim to the same level as the result of a control command.
For more detail on adjusting low-end light level refer to Application Note#556 at www.lutron.com.
- For the Line/Hot (L/H) terminal on the driver, it is preferred 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.

SIOL LED

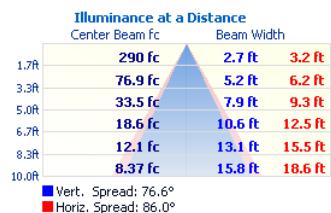
SIOL-2-30L-UVN



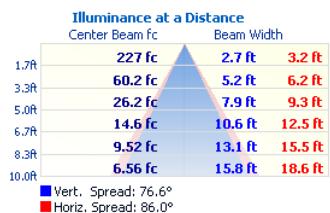
SIOL-2-36L-UVN



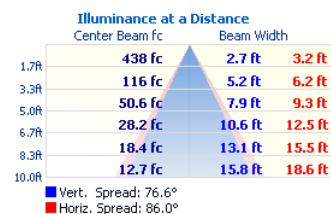
SIOL-2-40L-UVN



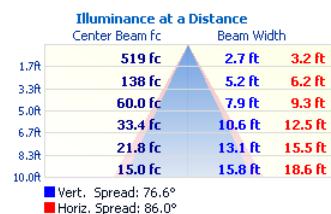
SIOL-4-32L-UVN



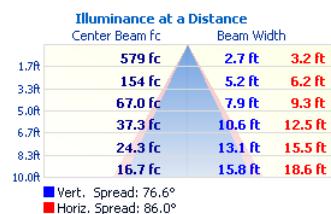
SIOL-4-60L-UVN



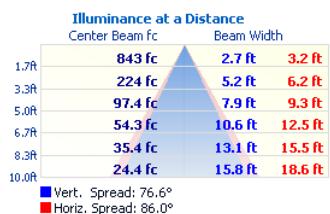
SIOL-4-72L-UVN



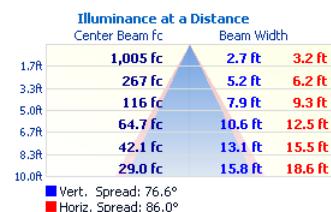
SIOL-4-81L-UVN



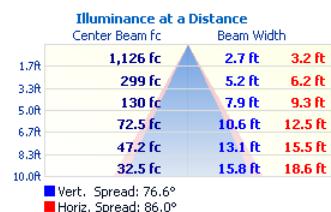
SIOL-8-120L-UVN



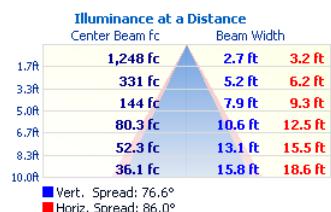
SIOL-8-144L-UVN



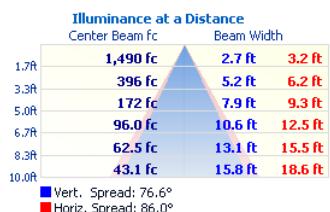
SIOL-8-162L-UVN



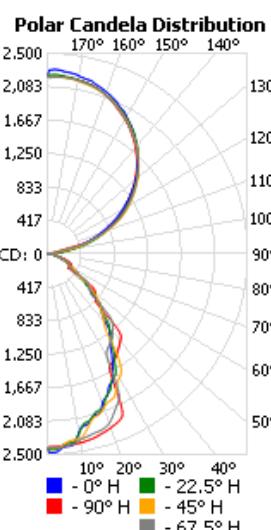
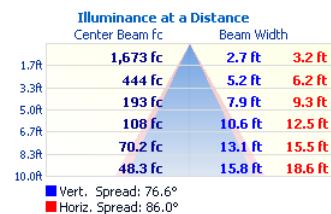
SIOL-12-180L-UVN



SIOL-12-216L-UVN



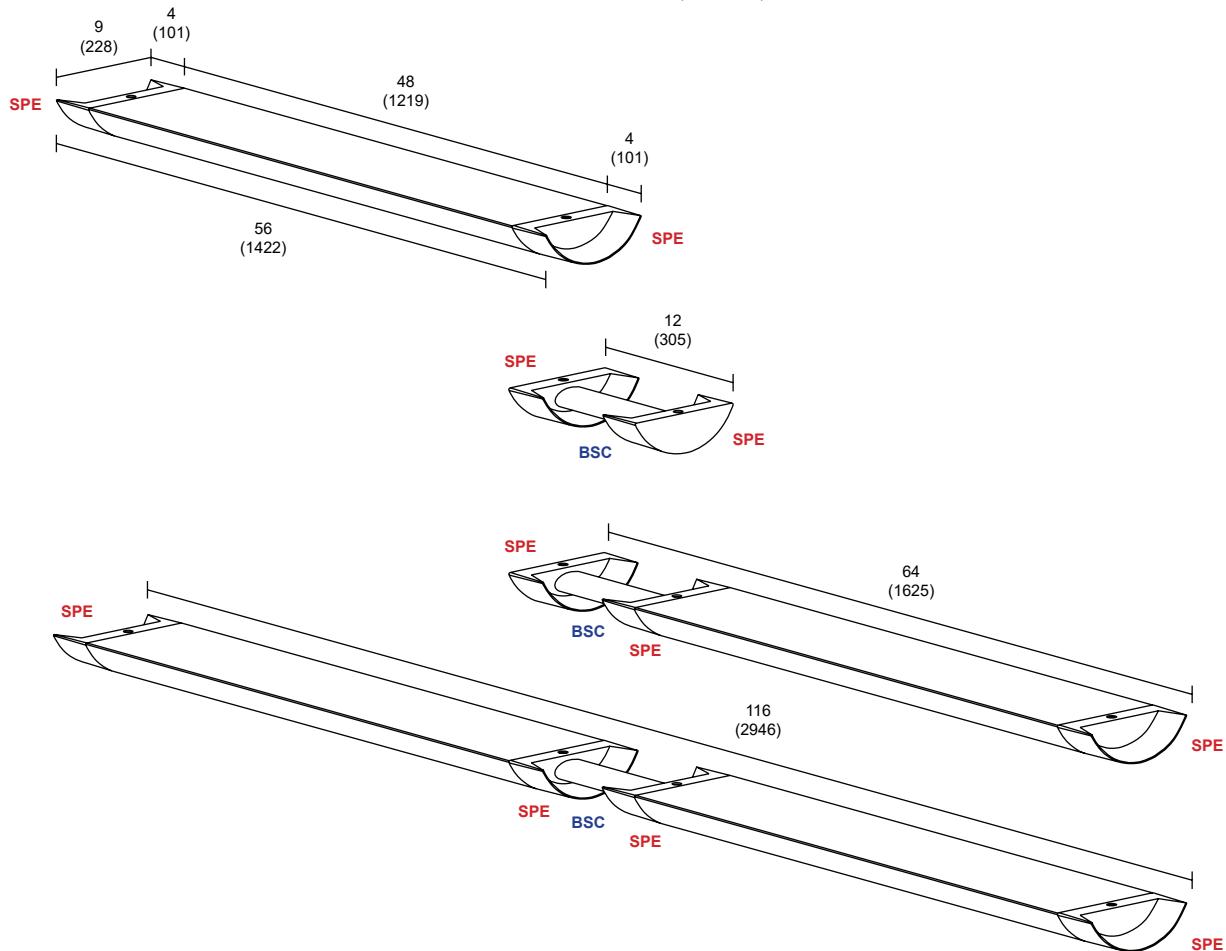
SIOL-12-243L-UVN



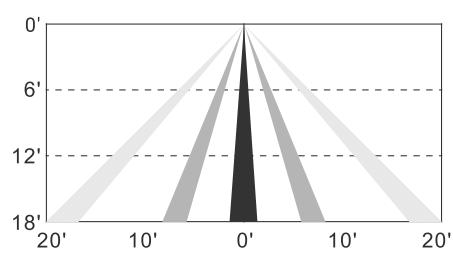
| | |
|---------------------|--------------|
| Street Side (Down) | 19.7% |
| House Side (Down) | 19.7% |
| Total (Down) | 39.4% |
| Street Side (Up) | 30.3% |
| House Side (Up) | 30.3% |
| Total (Up) | 60.6% |
| Total | 100% |

SIOL LED

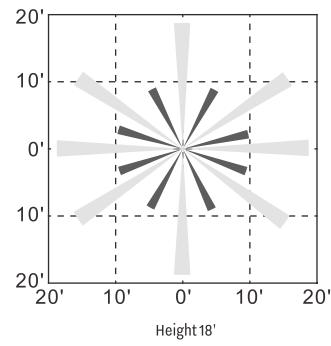
All dimensions are in inches (millimeters).



SIDE VIEW



TOP VIEW



AMS, IFS105SE coverage pattern