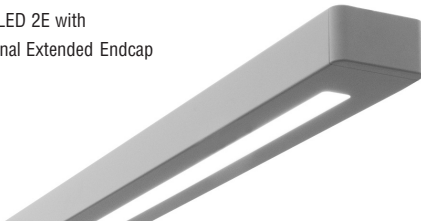




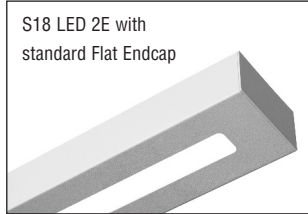
**Declare.**



S18 LED 2E with  
optional Extended Endcap



S18 LED 2E with  
standard Flat Endcap



Date

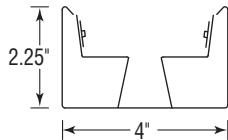
Project

Type

Comments

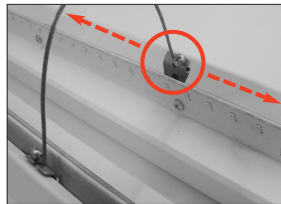
## DESCRIPTION

Series 18 LED-2E is a slim-profile rectilinear form scaled to complement any interior architecture. The luminaire uses mid-powered LEDs for long life and enhanced performance. This Product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving Red List Approved and Declared status.



## DIMENSIONS AND LIGHT ENGINE

Two replaceable light engines with mid-power LEDs provide excellent distribution for the uplight and downlight.



## OPTIONAL FLEXIBLE MOUNTING BRACKET

The Flexible Mounting Bracket (FM) adjusts along the length of the luminaire to accommodate existing mounting points.

## 8' Standard Continuous Shielding (CS)\*

## 8' Optional Segmented Shielding (SG)

## 4' Shielding

## SHIELDING

Continuous shielding is standard with a maximum 8' length. The visible diffuse area is 7'9" centered on a 8' housing. Optional segmented shielding available.

**ORDERING GUIDE:** Sample Number: S18 LED ID - CS - 32' - 2E - S - 835 - FTO - 120V - SC - FA - EE - C1 - OBD - RLA

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| S18 LED ID |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Finelite **Series 18 LED** (ID - Indirect/Direct)

Shielding (**CS** - Continuous<sup>1</sup>, **SG** - Segmented)

Length (**4'**, **8'**, Multiples Standard)<sup>2</sup>

Light Engine System (**2E** - 2 Light Engine)

Light Output (**S** - Standard, **B** - Boosted Standard, **H** - High, **V** - Very High)

LED CRI/CCT (**830** - 80 CRI min, 3000K; **835** - 80 CRI min, 3500K;

**840** - 80 CRI min, 4000K; **930** - 90 CRI min, 3000K;

**935** - 90 CRI min, 3500K; **940** - 90 CRI min, 4000K)

Uplight Optic (**Open** - Standard, **FTO** - Frosted Top Optic, **CTO** - Clear Top Optic)

Voltage (**120V**, **277V**)

Circuiting (**SC** - Single Circuit)<sup>3</sup>

Mounting (**FA** - Standard, **AC** - Optional, **FM** - Optional)

Endcap (**FE** - Flat, **EE** - Extended)

Ceiling type (**C1** - 15/16" T-bar, **C2** - 9/16" T-bar, **C3** - Slot Grid, **C4** - Hard Ceiling)

Integrated Sensors (**OBO** - Occupancy, **OBD** - Daylight, **W601** - Wattstopper Wireless Sensor<sup>4</sup>, **OBE** - Enlighted<sup>5</sup>,

**CLM** - Encelium Sensor, **RE7** - nLight Air Sensor, **AOCC-W** - Lutron Athena Sensor (Device Color White)<sup>6</sup>,

**AOCC-B** - Lutron Athena Sensor (Device Color Black)<sup>6</sup>, **ARF-W** - Lutron Athena RF (Device Color White)<sup>6</sup>,

**ARF-B** - Lutron Athena RF (Device Color Black)<sup>6</sup>)

Special Options (**RLA** - Red List Approved, **RDL** - Declared Label)

<sup>1</sup>Continuous shielding is standard with a maximum 8' length. Visible diffuse area is 7'9" centered on a 8' housing. Available with LED only.

<sup>2</sup>Contact factory for 6' lengths.

<sup>3</sup>Contact factory for switching options.

<sup>4</sup>LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected / LMFS-601 w/ DALI driver, only 1 driver can be connected.

<sup>5</sup>Enlighted components installed by Finelite, provided by others

<sup>6</sup>0-10V Drivers - AOCC up to 10 drivers may be connected; ARF up to 40 drivers may be connected / DALI Drivers - AOCC & ARF up to 4 drivers can be connected.

## PHOTOMETRY - 4' Luminaire

S18-LED-1D-DCO-Open

Very High Output (Open)

Efficacy (lumens per watt): 119

Total luminaire output: 4416 lumens (1104 lumens/foot)

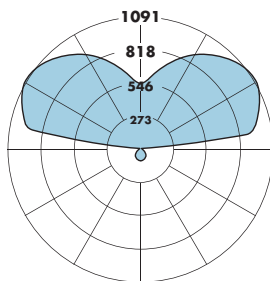
38.1 watts (9.3 watts/foot)

Peak Candela Value: 1091 @ 125°

CRI: 80

CCT: 3500K

ITL LM79 Report: 85168



| CANDLEPOWER SUMMARY |     |      |      |      |      |
|---------------------|-----|------|------|------|------|
|                     | 0   | 22.5 | 45.0 | 67.5 | 90.0 |
| 0                   | 97  | 97   | 97   | 97   | 97   |
| 5                   | 96  | 96   | 96   | 96   | 96   |
| 15                  | 93  | 93   | 94   | 94   | 94   |
| 25                  | 86  | 86   | 87   | 88   | 88   |
| 35                  | 76  | 76   | 78   | 78   | 78   |
| 45                  | 64  | 64   | 65   | 66   | 65   |
| 55                  | 50  | 50   | 51   | 51   | 50   |
| 65                  | 34  | 34   | 35   | 34   | 34   |
| 75                  | 18  | 19   | 19   | 18   | 20   |
| 85                  | 4   | 5    | 5    | 4    | 5    |
| 90                  | 0   | 0    | 0    | 0    | 0    |
| 95                  | 46  | 331  | 637  | 679  | 576  |
| 105                 | 139 | 461  | 743  | 926  | 992  |
| 115                 | 235 | 515  | 836  | 1007 | 1059 |
| 125                 | 323 | 544  | 850  | 1038 | 1091 |
| 135                 | 398 | 557  | 815  | 981  | 1041 |
| 145                 | 459 | 555  | 759  | 892  | 935  |
| 155                 | 502 | 547  | 676  | 773  | 809  |
| 165                 | 530 | 539  | 592  | 637  | 656  |
| 175                 | 543 | 543  | 544  | 548  | 549  |
| 180                 | 544 | 544  | 544  | 544  | 544  |

| Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire |      |      |      |
|---|------|------|------|
| S*  | B*   | H*   | V**  |
| 1808  | 2273 | 3435 | 4416 |

| Light Output, 3500K, 80 CRI (Lumens Per Foot) |     |     |      |
|---|-----|-----|------|
| S*  | B*  | H*  | V**  |
| 452   | 568 | 859 | 1104 |

| Power, 3500K, 80 CRI (Watts Per Foot) |     |     |     |
|---------------------------------------|-----|-----|-----|
| S*                                    | B*  | H*  | V** |
| 3.6                                   | 4.6 | 7.1 | 9.3 |

| Efficacy, 3500K, 80 CRI (Lumens Per Watt) |     |     |     |
|---|-----|-----|-----|
| S*  | B*  | H*  | V** |
| 124                                       | 123 | 120 | 119 |

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

\*\* Based on ITL report: 85168

| Lumen Adjustment Factors - 80 CRI |       |
|-----------------------------------|-------|
| 3000K                             | 0.985 |
| 3500K                             | 1.000 |
| 4000K                             | 1.032 |

| Lumen Adjustment Factors - 90 CRI |       |
|-----------------------------------|-------|
| 3000K                             | 0.746 |
| 3500K                             | 0.760 |
| 4000K                             | 0.789 |

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

### SAMPLE LUMEN ADJUSTMENT CALCULATION

Standard Output (S), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

Total Light Output =  
1808 lm x 0.789 = 1427 lm

Total Light Output per Foot =  
452 lm/ft x 0.789 = 357 lm/ft

watts/foot = 3.6 W/ft

$$\text{Efficacy} = \frac{357 \frac{\text{lm}}{\text{ft}}}{3.6 \frac{\text{W}}{\text{ft}}} = 99 \text{ lm/W}$$

## PHOTOMETRY - 4' Luminaire

S18-LED-ID-DCO-FTO

Very High Output - 120V

Efficacy (lumens per watt): 103

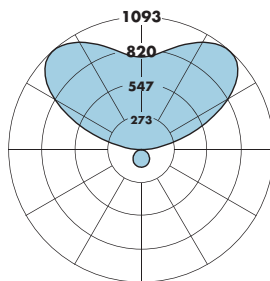
Total luminaire output: 3831 lumens (958 lumens/foot)

38.1 watts (9.3 watts/foot)

Peak Candela Value: 1087 @ 135°

CCT: 3500K

ITL LM79 Report: 85169



| CANDLEPOWER SUMMARY |     |      |      |      |      |
|---------------------|-----|------|------|------|------|
|                     | 0   | 22.5 | 45.0 | 67.5 | 90.0 |
| 0                   | 145 | 145  | 145  | 145  | 145  |
| 5                   | 144 | 144  | 144  | 144  | 144  |
| 15                  | 139 | 139  | 140  | 140  | 140  |
| 25                  | 129 | 128  | 130  | 130  | 130  |
| 35                  | 114 | 113  | 115  | 115  | 115  |
| 45                  | 96  | 95   | 96   | 96   | 96   |
| 55                  | 74  | 74   | 74   | 74   | 74   |
| 65                  | 51  | 51   | 50   | 50   | 50   |
| 75                  | 27  | 27   | 27   | 26   | 26   |
| 85                  | 6   | 7    | 6    | 6    | 7    |
| 90                  | 0   | 0    | 0    | 0    | 0    |
| 95                  | 39  | 50   | 64   | 78   | 85   |
| 105                 | 157 | 204  | 270  | 317  | 335  |
| 115                 | 305 | 399  | 542  | 638  | 665  |
| 125                 | 449 | 571  | 776  | 911  | 953  |
| 135                 | 568 | 681  | 892  | 1037 | 1087 |
| 145                 | 656 | 731  | 900  | 1025 | 1066 |
| 155                 | 714 | 753  | 857  | 940  | 969  |
| 165                 | 748 | 761  | 803  | 838  | 853  |
| 175                 | 763 | 765  | 770  | 774  | 775  |
| 180                 | 765 | 765  | 765  | 765  | 765  |

| Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire |      |      |      |
|---|------|------|------|
| S*  | B*   | H*   | V**  |
| 1568  | 1972 | 2980 | 3831 |

| Light Output, 3500K, 80 CRI (Lumens Per Foot) |     |     |     |
|---|-----|-----|-----|
| S*  | B*  | H*  | V** |
| 392   | 493 | 745 | 958 |

| Power, 3500K, 80 CRI (Watts Per Foot) |     |     |     |
|---------------------------------------|-----|-----|-----|
| S*                                    | B*  | H*  | V** |
| 3.6                                   | 4.6 | 7.1 | 9.3 |

| Efficacy, 3500K, 80 CRI (Lumens Per Watt) |     |     |     |
|---|-----|-----|-----|
| S*  | B*  | H*  | V** |
| 108                                       | 107 | 104 | 103 |

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

\*\* Based on ITL report: 85169

## Lumen Adjustment Factors - 80 CRI

|       |       |
|-------|-------|
| 3000K | 0.985 |
| 3500K | 1.000 |
| 4000K | 1.032 |

## Lumen Adjustment Factors - 90 CRI

|       |       |
|-------|-------|
| 3000K | 0.746 |
| 3500K | 0.760 |
| 4000K | 0.789 |

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

## SAMPLE LUMEN ADJUSTMENT CALCULATION

Standard Output (S), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

Total Light Output =  
1568 lm x 0.789 = 1237 lm

Total Light Output per Foot =  
392 lm/ft x 0.789 = 309 lm/ft

watts/foot = 3.6 W/ft

$$\text{Efficacy} = \frac{309 \frac{\text{lm}}{\text{ft}}}{3.6 \frac{\text{W}}{\text{ft}}} = 86 \text{ lm/W}$$

## SPECIFICATIONS

**CONSTRUCTION:** Body is 20-gauge die-formed steel with an 18-gauge die-formed internal joiner system. Plug-together wiring standard. All components are hard-tooled to tolerances of +/- 0.010".

**ENDCAPS:** The Flat Endcap (**FE**) is standard and made of 20-gauge die-formed steel adding 1/8" at each end. The optional Extended Endcap (**EE**) is an aluminum die-cast endcap and adds 9/16" at each end.

**REFLECTORS:** Die-formed 24-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white powder coat paint.

**UPLIGHT OPTICS:** The 2E optical system is open, standard. Optional Frosted Top Optic (**FTO**) and Clear Top Optic (**CTO**), available.

**SHIELDING:** Diffusers are 73% transmissive with 99% diffusion. Luminaires are available with two distinct shielding options:

CS Continuous Shielding (**CS**) is standard with a maximum 8' length. The visible diffuse area is 7'9" centered on an 8' housing.

SG Segmented Shielding (**SG**) option available.

**LIGHT OUTPUT:** Four lumen packages available, Standard (**S**), Boosted Standard (**B**), High (**H**), and Very High (**V**). A separate chart summarizes lumen distribution and wattage. Light engines are replaceable

**LUMEN MAINTENANCE:** 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

**DRIVER:** Replaceable 120V/277V Constant Current Reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 10%-100%. Dimming to 1% available; consult factory. Driver is fully accessible from below the ceiling. Power Factor:  $\geq 0.90$ . Total Harmonic Distortion (THD)  $< 20\%$ . Expected driver lifetime: 100,000 hours.

**LUTRON DRIVER OPTIONS: LUTES1:** Hi-lume 1% EcoSystem with Soft-On, Fade to Black dimming (LDE1 series); Contact factory for availability of discontinued Lutron drivers, L3DA-3-wire and L3DA EcoSystem.

**ELECTRICAL:** Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery. Optional Chicago Plenum available. A factory-choice low-profile backup battery is available (8' minimum fixture length). Backup batteries deliver 2208 lumens. A 4' section will be illuminated in emergency mode.



**INTEGRATED SENSORS:** Daylight sensors and Integrated PIR (Passive Infrared) occupancy sensors available. Refer to Occupancy Sensor and Daylight Sensor tech sheets for more info.

**MOUNTING:** 50" Fully Adjustable (**FA**) plated steel aircraft cable with safety stop hardware standard. Contact factory for additional lengths up to 150". Optional semi-adjustable Aircraft Cable (**AC**) ( $\pm 0.5"$ ) in lengths of 12", 15", 18", 21", 24", 27", 30", 36".

**FLEXIBLE MOUNTING BRACKET:** The optional Flexible Mounting Bracket (**FM**) with curved balancer, can be adjusted along the length of the luminaire to accommodate existing mounting points.

**FINISHES:** Finelite Signal White (**SW**) powder coat, Finelite Black (**RAL 9005**) with semi gloss fine texture (**FB**), and Satin Aluminum (**SA**) are standard. Optional Adders: 179 RAL colors.<sup>1</sup>

**FEED:** Standard with one 18-gauge/5-conductor single circuit feed. 14-gauge feed used when fixture current exceeds 5 amps.

**LENGTHS:** Standard 4' and 8' section lengths can be combined to make longer runs.

**LABELS:** Fixture and electrical components are ETL listed conforming to UL 1598 in the U.S.A. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.130 (G), this luminaire contains an internal driver disconnect. UL 924 and UL 2108 - PoE options available on request. Damp Location. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2015/863. Finelite makes the specification process easy when putting healthier products on your projects. Simply add – **RLA** (Red List Approved) or – **RLD** (Red List Declared Label) to your part number.

**WARRANTY:** 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

<sup>1</sup> 20 Business day lead time for color