

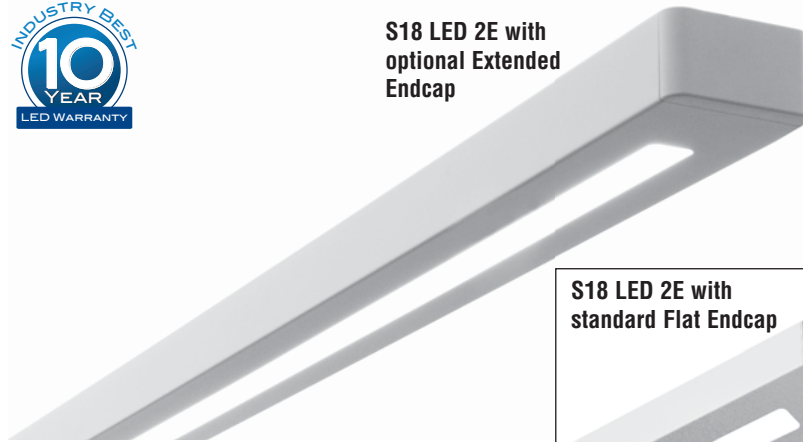


FINELITE

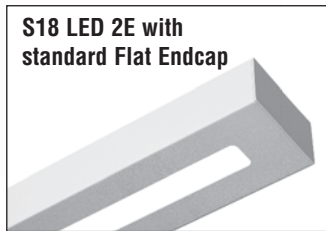
Series 18 LED - 2E Technical Sheet



S18 LED 2E with optional Extended Endcap



S18 LED 2E with standard Flat Endcap



Date

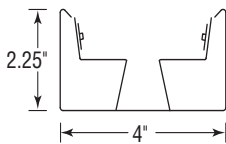
Project

Type

Comments

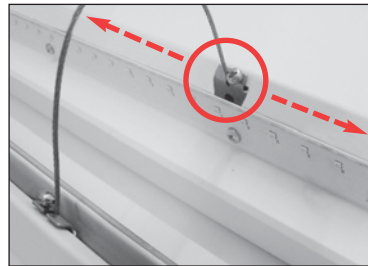
DESCRIPTION

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.



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.

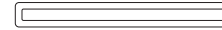
8' Standard Continuous Shielding (CS)*



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 - 8 - 35 - FTO - 120 - SC - FA - EE - C1 - OBD



- Finelite **Series 18 LED** (ID - Indirect/Direct)
- Shielding (CS - Continuous*, SG - Segmented)
- Length (4', 8', Multiples Standard)**
- Light Engine System (2E - 2 Light Engine)
- Light Output (S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output)
- LED CRI (8 - 80 CRI Min (standard), 9 - 90 CRI Min (optional))
- LED Color Temperature (30 - 3000K, 35 - 3500K, 40 - 4000K)
- Uplight Optic (Open - Standard, FTO - Frosted Top Optic, CTO - Clear Top Optic)
- Voltage (120V, 277V)
- Circuiting (SC - Single Circuit)[†]
- Mounting (FA - Standard, AC - Optional, FM - Optional)
- Endcap (FE - Flat, EE - Extended)
- Ceiling type (C1 - 1" T-bar, C2 - 9/16" T-bar, C3 - Slot Grid, C4 - Hard Ceiling)
- Integrated Sensors (OBD - Daylight, OBO - Occupancy)

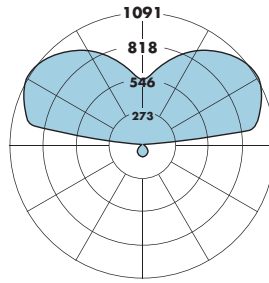
*Continuous shielding is standard with a maximum 8' length. Visible diffuse area is 7'9" centered on a 8' housing. Available with LED only.
**Contact factory for 6' lengths.
[†]Contact factory for switching options.

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Series 18 LED - 2E Technical Sheet

PHOTOMETRY

Very High Output - 4' Luminaire (Open)
 Efficacy (lumens per watt): 118.7
 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	Flux
0	97	97	97	97	97	
5	96	96	96	96	96	9
15	93	93	94	94	94	26
25	86	86	87	88	88	40
35	76	76	78	78	78	48
45	64	64	65	66	65	50
55	50	50	51	51	50	45
65	34	34	35	34	34	34
75	18	19	19	18	18	20
85	4	5	5	4	4	5
90	0	0	0	0	0	
95	46	331	637	679	576	404
105	139	461	743	926	992	710
115	235	515	836	1007	1059	743
125	323	544	850	1038	1091	702
135	398	557	815	981	1041	595
145	459	555	759	892	935	456
155	502	547	676	773	809	308
165	530	539	592	637	656	169
175	543	543	544	548	549	23
180	544	544	544	544	544	

OPEN - 4' Luminaire

Total Light Output, 3500K, 80 CRI (Lumens)			
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 (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**
124.1	122.8	120.3	118.7

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.

** Correlation 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

$$\text{Efficacy} = \frac{357 \frac{\text{lm}}{\text{ft}}}{3.6 \frac{\text{W}}{\text{ft}}} = 99.2 \text{ lm/W}$$



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Series 18 LED - 2E Technical Sheet

PHOTOMETRY

S18-LED-ID-DCO - 4' Luminaire (FTO)

Very High Output - 120V

Efficacy (lumens per watt): 103

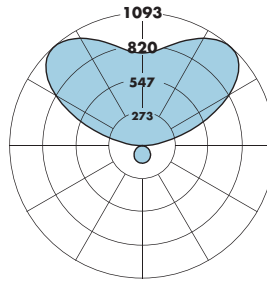
Total luminaire output: 3831 lumens (958 lumens/foot)

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	Flux
0	145	145	145	145	145	145
5	144	144	144	144	144	14
15	139	139	140	140	140	39
25	129	128	130	130	130	60
35	114	113	115	115	115	72
45	96	95	96	96	96	74
55	74	74	74	74	74	66
65	51	51	50	50	50	50
75	27	27	27	26	26	28
85	6	7	6	6	6	7
90	0	0	0	0	0	
95	39	50	64	78	85	72
105	157	204	270	317	335	276
115	305	399	542	638	665	509
125	449	571	776	911	953	658
135	568	681	892	1037	1087	661
145	656	731	900	1025	1066	551
155	714	753	857	940	969	393
165	748	761	803	838	853	228
175	763	765	770	774	775	74
180	765	765	765	765	765	

FROSTED TOP OPTIC (FTO) - 4' Luminaire

Total Light Output, 3500K, 80 CRI (Lumens)			
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 (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**
107.7	106.6	104.4	103.0

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.

** Correlation 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

$$\text{Efficacy} = \frac{309 \frac{\text{lm}}{\text{ft}}}{3.6 \frac{\text{W}}{\text{ft}}} = 85.8 \text{ lm/W}$$



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Series 18 LED - 2E Technical Sheet

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 0.10" at each end. The optional Extended Endcap (EE) is an aluminum die-cast endcap and adds 0.55" at each end.

REFLECTORS: Die-formed 24-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white power 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 Output (S), Boosted Standard Output (B), High Output (H), and Very High Output (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: ≥ 0.9 . Total Harmonic Distortion (THD) <20%. Expected driver lifetime: 100,000 hours.

LUTRON DRIVER OPTIONS: Lut3W-3-wire, LutES-EcoSystem, Lut2W-2-wire.

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 1600 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) (± 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 powder coat standard. Optional Adders: 185 Tiger Drylac's non-metallic RAL colors.

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. Contact factory for additional lengths.

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 410.73 (G), this luminaire contains an internal driver disconnect. 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 2002/95/EC.

WEIGHT: 2.5 lb/ft.

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