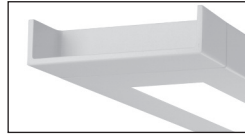
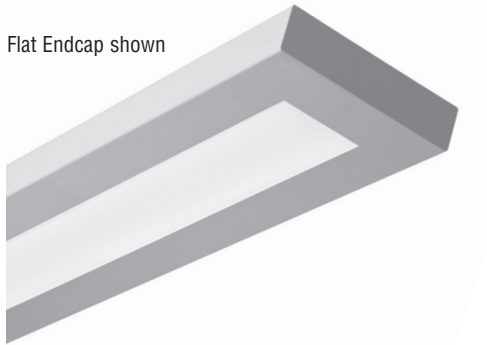




Declare.

Third Party Verified

Flat Endcap shown



Extended Endcap

Signal White is standard finish

DESCRIPTION

Series 16 LED is a low profile rectilinear form scaled to blend into any interior architecture. The luminaire uses mid-power 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.

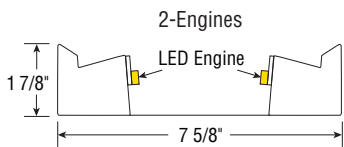
Date

Project

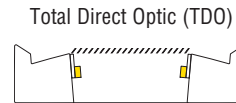
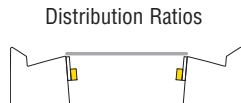
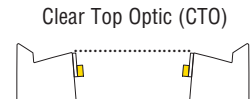
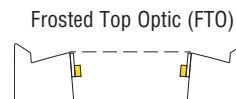
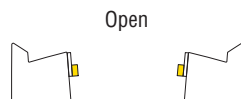
Type

Comments

LIGHT ENGINES



OPTIC & DISTRIBUTION RATIO OPTIONS

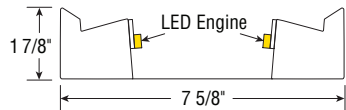


10% ↑ / 90% ↓ 30% ↑ / 70% ↓
20% ↑ / 80% ↓ 40% ↑ / 60% ↓

2E FEATURES

Date

DIMENSIONS & LIGHT ENGINES

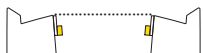


OPTIC OPTIONS

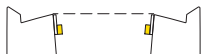
Open



Clear Top Optic (CTO)

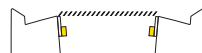


Frosted Top Optic (FTO)



DISTRIBUTION RATIO OPTIONS

Total Direct Optic (TDO)



10U90D - 10% ↑ / 90% ↓
(includes CTO standard)

20U80D - 20% ↑ / 80% ↓
(includes FTO standard)

30U70D - 30% ↑ / 70% ↓
(includes FTO standard)

40U60D - 40% ↑ / 60% ↓
(includes FTO standard)

Project

Type

Comments

ORDERING GUIDE:

Sample Number: S16 LED ID - DCO - 8' - 2E - S - 835 - 20U80D - 120V - FC-10% - SC - FA - FE - SW - C1 - OBO - CP - RLA

| | |
|--|----------------------|
| Series 16 LED ID ¹ | <input type="text"/> |
| Shielding (DCO , WCB) | <input type="text"/> |
| Length (4' , 8' , multiples standard) | <input type="text"/> |
| Light Engine System (2E - 2 Light Engines) | <input type="text"/> |
| Light Output (S - Standard, B - Boosted Standard, H - High, V - Very High) | <input type="text"/> |
| 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) | <input type="text"/> |
| Optic or Distribution Ratio (OPEN - standard, FTO - Frosted Top Optic, CTO - Clear Top Optic, TDO - Total Direct Optic, 10U90D - 10% up / 90% down, 20U80D - 20% up / 80% down, 30U70D - 30% up / 70% down, 40U60D - 40% up / 60% down) | <input type="text"/> |
| Voltage (120V , 277V) | <input type="text"/> |
| Driver (FC-10% - 0-10V 10% (standard), FC-1% - 0-10V 1%) | <input type="text"/> |
| Circuiting (SC - Single Circuit) ² | <input type="text"/> |
| Mounting (FA - Fully Adjustable (standard), AC - semi-adjustable) | <input type="text"/> |
| Endcap (FE - Flat Endcap (standard), EE - Extended Endcap) | <input type="text"/> |
| Finish (SW - Signal White (standard), FB - Finelite Blakc, SA - Satin Aluminum, #### - RAL Color Code ³) | <input type="text"/> |
| Ceiling Type (C1 - 15/16" T-Bar, C2 - 9/16" T-Bar, C3 -Slot Grid, C1T - 15/16" Tegular, C2T - 9/16" Tegular, C4 - Hard Ceiling) | <input type="text"/> |
| Integrated Sensors (OBO - Occupancy, OBD - Daylight, W601 - Wattstopper Wireless Sensor ⁴ , OBE - Enlighted ⁵ , CLM - Encelium Sensor, RE7 - nLight Air Sensor, AOCC-W - Lutron Athena Sensor (Device Color White) ⁶ , AOCC-B - Lutron Athena Sensor (Device Color Black) ⁶ , ARF-W - Lutron Athena RF (Device Color White) ⁶ , ARF-B - Lutron Athena RF (Device Color Black) ⁶) | <input type="text"/> |
| Special Options (CP - Chicago Plenum, RLA - Red List Approved, RLD - Declared Label) | <input type="text"/> |

¹ Indirect luminaires available on 2E.
² Contact factory for switching options.
³ 20 business days lead time for color
⁴ 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.
⁵ Enlighted components installed by Finelite, provided by others
⁶ 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.

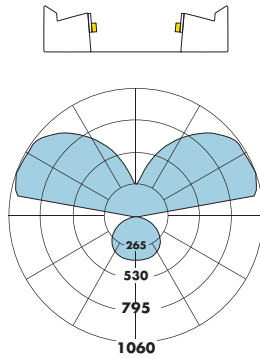
A brand of **legrand**

2E CTO AND FTO PHOTOMETRY - 4 ft. Luminaire

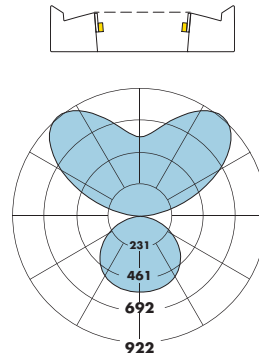
Series 16-LED-ID-DCO-2E-V-835-CTO
Distribution: 70% up / 30% down
Efficacy: 130 lumens per watt
Total Luminaire Output: 4722 lumens (1181 lumens/foot)
36.4 watts (9.1 watts/foot)

Series 16-LED-ID-DCO-2E-V-835-FTO*
Distribution: 60% up / 40% down
Efficacy: 122 lumens per watt
Total Luminaire Output: 4442 lumens (1111 lumens/foot)
36.4 watts (9.1 watts/foot)

2E CTO - REPORT 85120



2E FTO* - REPORT 85121



*For applications where a soft beam edge on wall or vertical surface is desired.

Refer to LM-79 reports for candlepower summaries

2E CTO AND FTO

| Total Light Output, 3500K, 80 CRI (Lumens) - 4 ft. Luminaire | | | | |
|--|------|------|------|------|
| | S* | B* | H* | V** |
| CTO | 1933 | 2430 | 3673 | 4722 |
| FTO | 1818 | 2286 | 3455 | 4442 |

| Light Output, 3500K, 80 CRI (Lumens Per Foot) | | | | |
|---|-----|-----|-----|------|
| | S* | B* | H* | V** |
| CTO | 483 | 608 | 918 | 1181 |
| FTO | 455 | 571 | 864 | 1111 |

| Power (Watts Per Foot) | | | | |
|------------------------|-----|-----|-----|-----|
| | S* | B* | H* | V** |
| CTO | 3.5 | 4.6 | 6.9 | 9.1 |
| FTO | 3.5 | 4.6 | 6.9 | 9.1 |

| Efficacy, 3500K, 80 CRI (Lumens Per Watt) | | | | |
|---|-----|-----|-----|-----|
| | S* | B* | H* | V** |
| CTO | 138 | 132 | 133 | 130 |
| FTO | 130 | 124 | 125 | 122 |

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

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

| 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
High Output (H), CTO, 4000K, 90 CRI

$$\text{Lumen Adjustment Factor} = 0.789$$

$$\text{Total Light Output} = 3673 \text{ lm} \times 0.789 = 2898 \text{ lm}$$

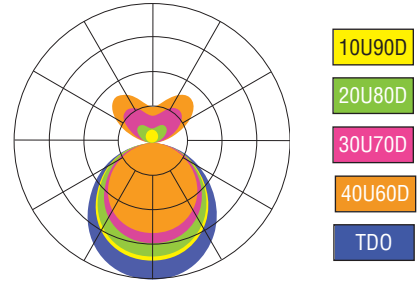
$$\text{Total Light Output per Foot} = 918 \text{ lm/ft} \times 0.789 = 724 \text{ lm/ft}$$

$$\text{watts/foot} = 6.9 \text{ W/ft}$$

$$\text{Efficacy} = \frac{724 \frac{\text{lm}}{\text{ft}}}{6.9 \frac{\text{W}}{\text{ft}}} = 105 \text{ lm/W}$$

2E DISTRIBUTION RATIO PHOTOMETRY - 4 ft. Luminaire

| | | |
|--|--|---|
| <p>Series 16-LED-ID-DCO-2E-V-835-10U90D Efficacy: 84 lumens per watt Total Luminaire Output: 3138 lumens (785 lm/ft) 37.2 watts (9.3 W/ft) ITL LM79 Report 87819</p> | <p>Series 16-LED-ID-DCO-2E-V-835-30U70D Efficacy: 94 lumens per watt Total Luminaire Output: 3506 lumens (877 lm/ft) 37.2 watts (9.3 W/ft) ITL LM79 Report 87821</p> | <p>Series 16-LED-ID-DCO-2E-V-835-TDO Efficacy: 88 lumens per watt Total Luminaire Output: 3261 lumens (815 lm/ft) 37.2 watts (9.3 W/ft) ITL LM79 Report 87823</p> |
| <p>Series 16-LED-ID-DCO-2E-V-835-20U80D Efficacy: 85 lumens per watt Total Luminaire Output: 3291 lumens (823 lm/ft) 37.2 watts (9.3 W/ft) ITL LM79 Report 87820</p> | <p>Series 16-LED-ID-DCO-2E-V-835-40U60D Efficacy: 99 lumens per watt Total Luminaire Output: 3675 lumens (919 lm/ft) 37.2 watts (9.3 W/ft) ITL LM79 Report 87822</p> | |



Refer to LM-79 reports for candlepower summaries



2E DISTRIBUTION RATIOS

↑ Indirect ↓ Direct

| Total Light Output, 3500K, 80 CRI (Lumens) - 4 ft. Luminaire | | | | |
|--|--------------------|--------------------|--------------------|--------------------|
| | S* | B* | H* | V** |
| 10U90D | 1285 [±10% 90%↓] | 1615 [±10% 90%↓] | 2441 [±10% 90%↓] | 3138 [±10% 90%↓] |
| 20U80D | 1347 [±17% 83%↓] | 1694 [±17% 83%↓] | 2560 [±17% 83%↓] | 3291 [±17% 83%↓] |
| 30U70D | 1435 [±30% 70%↓] | 1804 [±30% 70%↓] | 2727 [±30% 70%↓] | 3506 [±30% 70%↓] |
| 40U60D | 1504 [±40% 60%↓] | 1891 [±40% 60%↓] | 2858 [±40% 60%↓] | 3675 [±40% 60%↓] |
| TDO | 1335 [±0% 100%↓] | 1678 [±0% 100%↓] | 2536 [±0% 100%↓] | 3261 [±0% 100%↓] |

| Light Output, 3500K, 80 CRI (Lumens Per Foot) | | | | |
|---|-----|-----|-----|-----|
| | S* | B* | H* | V** |
| 10U90D | 321 | 404 | 610 | 785 |
| 20U80D | 337 | 423 | 640 | 823 |
| 30U70D | 359 | 451 | 682 | 877 |
| 40U60D | 376 | 473 | 715 | 919 |
| TDO | 334 | 420 | 634 | 815 |

| Power (Watts Per Foot) | | | | |
|------------------------|-----|-----|-----|-----|
| | S* | B* | H* | V** |
| 10U90D | 3.5 | 4.6 | 6.9 | 9.1 |
| 20U80D | 3.5 | 4.6 | 6.9 | 9.1 |
| 30U70D | 3.5 | 4.6 | 6.9 | 9.1 |
| 40U60D | 3.5 | 4.6 | 6.9 | 9.1 |
| TDO | 3.5 | 4.6 | 6.9 | 9.1 |

| Efficacy, 3500K, 80 CRI (Lumens Per Watt) | | | | |
|---|-----|-----|-----|-----|
| | S* | B* | H* | V** |
| 10U90D | 92 | 88 | 88 | 86 |
| 20U80D | 96 | 92 | 93 | 90 |
| 30U70D | 103 | 98 | 99 | 96 |
| 40U60D | 107 | 103 | 104 | 101 |
| TDO | 95 | 91 | 92 | 90 |

| 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

High Output (H), 20U80D, 4000K, 90 CRI

$$\text{Lumen Adjustment Factor} = 0.789$$

$$\text{Total Light Output} =$$

$$2560 \text{ lm} \times 0.789 = 2020 \text{ lm}$$

$$\text{Total Light Output per Foot} =$$

$$640 \text{ lm/ft} \times 0.789 = 505 \text{ lm/ft}$$

$$\text{watts/foot} = 6.9 \text{ W/ft}$$

$$\text{Efficacy} = \frac{505 \frac{\text{lm}}{\text{ft}}}{6.9 \frac{\text{W}}{\text{ft}}} = 73 \text{ lm/W}$$

* Family Correlation based on 3E 4 ft. Luminaire 3500K Very High Output (V) test - 120V.

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

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 with a 1/8" reveal adding 2-1/2" at each end.

OPTICS & DISTRIBUTION RATIOS:

| | |
|--------|----------------------------------|
| Open | Standard (2E) |
| FTO | Frosted Top Optic (2E) |
| CTO | Clear Top Optic (2E) |
| TDO | Total Direct Optic (2E) |
| 10U90D | 10% up / 90% down (2E) |
| 20U80D | 20% up / 80% down (2E) |
| 30U70D | 30% up / 70% down (2E) |
| 40U60D | 40% up / 60% down (2E) |

SHIELDING: Diffuse Center Optic (**DCO**), 73% transmissive, 99% diffusion. Visible diffuser: UV-stabilized and impact-resistant frosted virgin acrylic, 1/8" thick. Inner diffuser: 1/8" thick with 40% round perforations white/white. White Cross Baffle (**WCB**), 87 cell baffles spaced 1/2" apart and finished with 96% reflective white paint.

LIGHT OUTPUT:

2E: 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.

REFLECTORS: (**91W**) Die-formed pre-painted aluminum, 91% reflective white.

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: 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.

2E: A factory-choice low-profile backup battery is available (8 ft. minimum fixture length). Backup batteries deliver 2361 lumens. A 4 ft. section will be illuminated in emergency mode.



INTEGRATED SENSORS: Integrated PIR (Passive Infrared) Occupancy (OBO) or Daylight Sensors (OBD) available with

Flush and Bottom Glow downlight diffusers. PIR sensors not recommended for stairwell applications. Refer to Occupancy Sensor & Daylight Sensor tech sheet and the Embedded Intelligence landing page for more information and additional sensor options.

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**) (± 1/2") in lengths of 12", 15", 18", 21", 24", 27", 30", and 36".

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.¹

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

LENGTHS: Standard 4 ft. and 8 ft. section lengths can be combined to make longer runs. Contact factory 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 410.130 (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.

WEIGHT: 3.0 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.

¹ 20 business days lead time for color