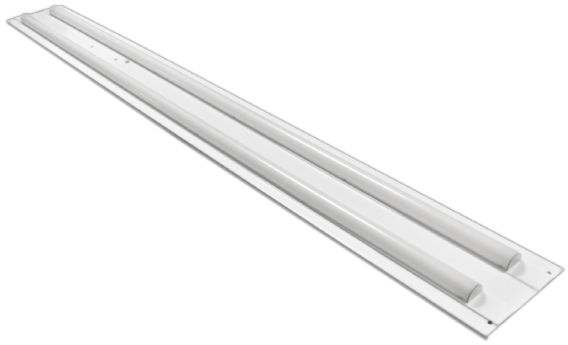
# FBSK - Fidelux Batten Strip Kit Series

## Product Description

The FBSK series combines high performance frosted LED strips and UL class II LED drivers. The FBSK is a range of surface mounted LED luminaries designed to replace conventional T8/T5 lamps. With savings of up to 60% and up to 5 times the lamp life of T8 lamps makes it an easy choice.



## Features & Benefits

- Designed to replace two lamp fluorescent strip fixtures
- Easy installation with the ability to avoid the removal of existing fixture from ceiling
- Ability to use in dry and damp locations
- Diffused lens

## Applications

- Schools \ classrooms
- Retail stores
- Warehouses
- Office buildings
- Hallways
- Corridors
- Shops

## Mounting Options

- Strip Light Retrofit Kit

## Regulatory & Voluntary Qualifications

- UL, Damp location only
- Most of our products are DLC listed, qualifying them for the highest rebates. Please check individual product specs for DLC status. Refer to DLC website by clicking this link: https://www.designlights.org

## Performance Summary

| |
|---|
| Efficacy: up to 131 l/pw |
| CRI: 80-82 cri |
| CCT: 4000K / 5000K |
| Dimming: 0-10v |
| Operating Temp: -20° - +45°C Ambient |
| Input Voltage: 120-277vac |
| Operating Frequency: 50 / 60Hz |
| Power Factor up to: >0.99 |
| Dimension: 5" x 48" |
| 5/8"L70 Lifetime Hrs : 93,000+ (TM21 Calculated) |

UL LISTED E363188

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Project Name:
Type:
Date:

## FBSK Series Specification Summary

| DATA SOURCE | LM79 | LM79 | DLC |
|---|---|---|---|
| Product Number | FBSK4-18W | FBSK-30W | FBSK4-40W |
| Efficacy l/pw (Nominal) | 100 | 101 | 131 |
| Input Power: Watts | 19.3 | 28.4 | 40 |
| Lumens @ 4000K | 1919 | 2860 | 5000 |
| Lumens @ 5000K | 2098 | 3110 | 5220 |
| CRI | 82 | | 80 |
| THD @ 120vac | 13.5% | 9.2% | 10% |
| CCT/Kelvin Temp Options | 40/50 Kelvin | | |
| Power Factor | >0.98 ~ >0.99 | | |
| Input Voltage Options | 120-277vac / 50-60Hz | | |
| Qualifications | UL, (No DLC) | UL, (No DLC) | UL, DLC 4.2 |
| Dimming | Non Dim | Non Dim | 0-10v |
| L70 Lifespan | 93,000 + Hrs. (TM21 Calculated) | | |
| Ambient Working Temp | -20°C to +45°C Ambient | | |
| Max Dimensions (in) | 48" | 48" | 48" |
| Total Weight | 2.6 lbs | 3.86 lbs | 3.86 lbs |
| Limited Warranty | 5 Yrs. | | |

Notes
Values are nominal unless noted +/- 5%
Specifications change without notice


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Project Name:
Type:
Date:

# FBSK Series Product Ordering Guide

Example: FBSK4-30W-40K-UNV-D

| Product | CCT/Color Temp | Voltage | Controls & Dimming |
|---|---|---|---|
| FBSK4-18W<br>FBSK4-30W<br>FBSK4-40W | **40K** (4000 Kelvin)<br>**50K** (5000 Kelvin) | **UNV** (120-277vac) | **D** (0-10v Dim) |

## Factory Installed Accessories

| | |
|---|---|
| EM15 | 15 Watt adjustable EM driver, 90 Min ( Sold as separate line item ) |

## Field Installed Accessories / Sold Separately

| | |
|---|---|
| B4 | 4ft blank cover plate |


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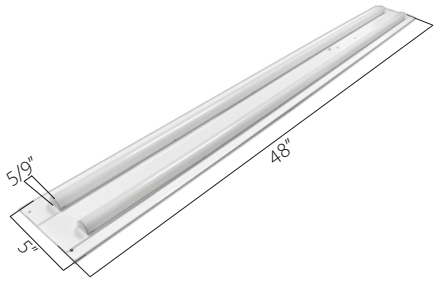
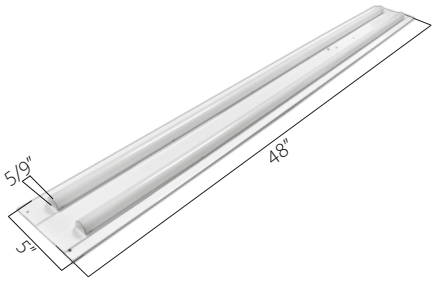
# FBSK Series Design Details & Photometry

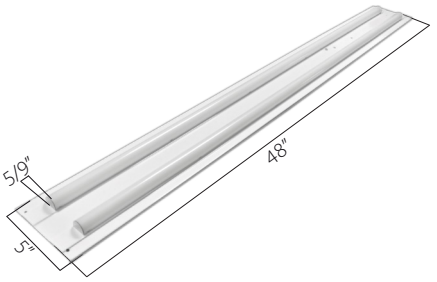
## FBSK4-18W




## FBSK4-30W




## FBSK4-40W




Photometry
FBSK4-18W–40K
Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA

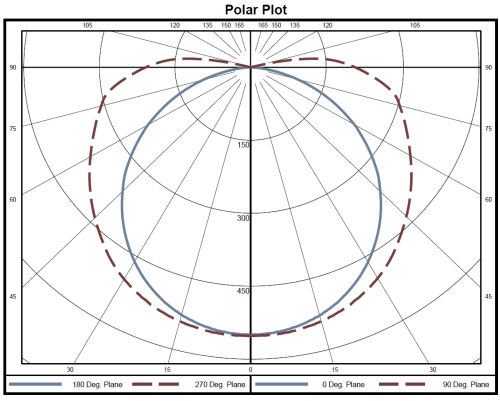
**Cone of Light Tabulation**

| Mounting Height (Feet) | Footcandles at Nadir | Diameter (Feet) |
|---|---|---|
| 4.00 | 34.5 | 5.21 |
| 6.00 | 15.3 | 7.82 |
| 8.00 | 8.63 | 10.4 |
| 10.0 | 5.52 | 13.0 |
| 12.0 | 3.84 | 15.6 |
| 14.0 | 2.82 | 18.2 |
| 16.0 | 2.16 | 20.8 |

| Beam and Field Information | |
|---|---|
| CIE Type | Direct |
| Center Beam Intensity | 552.3 Candela |
| Central Cone Intensity | 552 Candela |
| Beam Flux | 1591.6 Lumens |
| Beam Angle (0-180) | 111.0 Degrees |
| Field Angle (90-270) | 162.3 Degrees |
| Field Angle (0-180) | 159.2 Degrees |
| Field Angle (90-270) | 204.1 Degrees |

| Zone | Lumens | % of Luminaire |
|---|---|---|
| 0-40 | 724 | 34.2% |
| 0-60 | 1339 | 63.3% |
| 0-90 | 2018 | 95.4% |
| 90-180 | 97 | 4.6% |

**Polar Plot**




| Zonal Lumen Summary | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Zone | Lumens | % of Luminaire | Zone | Lumens | % of Luminaire | Zone | Lumens | % of Luminaire |
| 0-5 | 13.2 | 0.6% | 60-65 | 141.6 | 6.7% | 120-125 | 0 | 0.0% |
| 5-10 | 39.2 | 1.9% | 65-70 | 132.0 | 6.2% | 125-130 | 0 | 0.0% |
| 10-15 | 64.1 | 3.0% | 70-75 | 121.2 | 5.7% | 130-135 | 0 | 0.0% |
| 15-20 | 87.2 | 4.1% | 75-80 | 110.0 | 5.2% | 135-140 | 0 | 0.0% |
| 20-25 | 107.7 | 5.1% | 80-85 | 96.4 | 4.6% | 140-145 | 0 | 0.0% |
| 25-30 | 125.1 | 5.9% | 85-90 | 77.6 | 3.7% | 145-150 | 0 | 0.0% |
| 30-35 | 139.0 | 6.6% | 90-95 | 57.6 | 2.7% | 150-155 | 0 | 0.0% |
| 35-40 | 178.7 | 7.0% | 95-100 | 32.2 | 1.5% | 155-160 | 0 | 0.0% |
| 40-45 | 154.4 | 7.3% | 100-105 | 7.1 | 0.3% | 160-165 | 0 | 0.0% |
| 45-50 | 156.3 | 7.4% | 105-110 | 0.0 | 0.0% | 165-170 | 0 | 0.0% |
| 50-55 | 154.6 | 7.3% | 110-115 | 0 | 0.0% | 170-175 | 0 | 0.0% |
| 55-60 | 149.5 | 7.1% | 115-120 | 0 | 0.0% | 175-180 | 0 | 0.0% |



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# FBSK Series Installation Instructions

For all FBSK Series Batten Strip Kit Product

## WARNING:

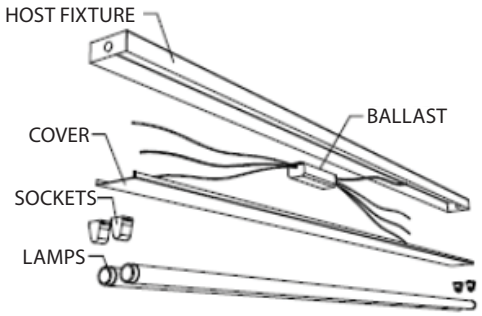
To avoid the risk of fire, or electric shock this product should be installed, inspected, and maintained by a qualified electrician only. Installation should be completed by an individual familiar with the construction and operation of the luminaire. Installation of luminaire must be in accordance with nation and local building and electrical codes.

Safety Warning: **To avoid electric shock:** Be certain electrical power is OFF before and during installation and maintenance. Luminaire must be supplied by a wiring system with an equipment grounding conductor. **To avoid burning hands:** Make sure lens and housing are cool when performing maintenance. **To avoid product degradation:** Make sure the wire supply voltage is the same as the luminaire supply. Use proper supply wiring as specified on the luminaire nameplate. Avoid use in environments containing sulfur, chlorine, or other halides, methyl acetate or ethyl acetate, cyanoacrylates, glycol ether, formaldehyde, or butadiene.

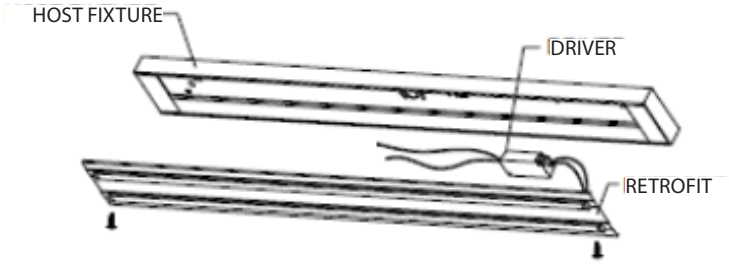
Notes: Instructions do not over all details and all possible product configurations. Do not restrict luminaire ventilation. Ensure LED luminaire is not covered with material that will prevent convention or conduction cooling. Ensure LED luminaire has the correct polarity before installation. Avoid exposing wiring to metal edges and sharp objects.

Maintenance: Perform visual, electrical, and mechanical inspections on a regular basis. The environment and frequence of use should determine ths. However it is recommended that checks be made at least once a year. Electrically check to make sure that all connections are clean and tight. Mechanically check that all parts are properly assembled.

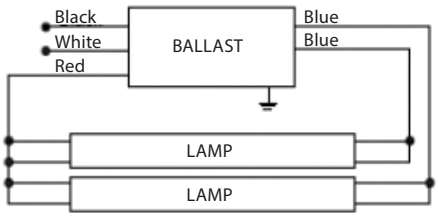
Disassembly: The disassembly involves removing and discarding the ballast cover, ballast, sockets, and wiring of the host fixture. Dispose of according to state and local code requirements. Please recycle all reusable parts.
1.) Shut off power to existing fixture. Disconnect the black and the white power supply wires to existing ballast. 2.) Remove and discard the host fixture lamp(s). 3.) Remove and discard the host fixture parts.



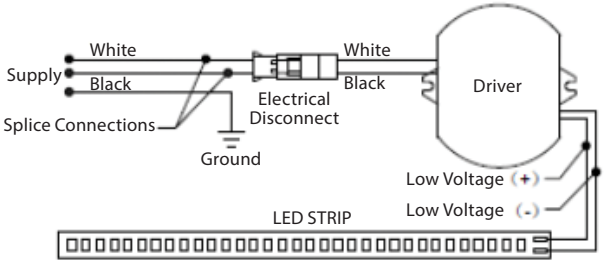

Assembly: 1.) Make Electrical Connections: Remove the male connector from the Electrical Disconnect by pulling the two halves of the disconnect apart. Using the factory supplied wire nuts, connect the black lead from the Electrical Disconnect to the black branch wire and connect the white lead from the Electrical Disconnect to the white branch lead. 2.) Install LED Retrofit Assembly: Connect the two halves of the Electrical Disconnect and seat the LED Retrofit Assembly against the host fixture brackets while making sure that no wires are pinched in the provess. 3.) Attach the retrofit kits to brackets by using self-tapping screws. 4.) Electrically activate the fixture.




## Wiring Diagrams




Wiring Diagram BEFORE Retrofit Installation




Wiring Diagram AFTER Retrofit Installation



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