

## LSF1

### LED Low Profile Linear Wrap



#### Key Features

- Energy-efficient LED replacement for existing 2 lamp T8 fluorescent or equivalent.
- Available in 4 ft. or 8 ft. models with lumen packages up to 8,520L.
- Suspended or surface mounted.
- Designed to facilitate easier installations.
- Optional integrated motion sensor with daylight harvesting (Smart Blu™).
- Industry leading 10-Year warranty.

#### Electrical

- 120-277VAC input.
- 0-10V dimming with standard luminaire.
- Operating temperature: -30°C to +40°C (-22°F to +104°F)

#### Mounting

- Luminaire is ready to be suspended or surface mounted.
- Proprietary mounting back plate facilitates easier installation in the field.

#### Construction

- Housing is constructed of 22 gauge steel pre-painted a white finish.
- Back of housing knockouts provided for electrical access and mounting.
- Lens is frosted ribbed acrylic for uniform light distribution that's glare-free.
- End caps are high-impact injection molded ABS material.

#### Optics

- Industry leading LEDs with 3000K, 3500K, 4000K, and 5000K CCT (minimum 80 CRI).
- Lumen Maintenance >161,000 hours (L70) <sup>1</sup>

#### Warranty

- Backed by National LED's industry leading 10-year warranty.

Project	Date
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Catalog Number	Type
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#### Product Performance Summary

<b>Lumen Output</b>	Up to 8,520 lumens
<b>Efficacy</b>	Up to 142 LPW
<b>CRI</b>	≥ 80 CRI
<b>Available CCT</b>	3000K, 3500K, 4000K or 5000K
<b>Warranty</b>	10-Year Warranty

#### Product Overview

The LSF1 is the complete balance of contemporary style and photometric performance. With a streamlined form factor that's new but feels familiar, the LSF1 delivers superior illumination by utilizing advanced LED technology. The LSF1 offers an exclusive mounting plate that facilitates quicker installations in the field, thus reducing labor costs. Designed for complete versatility, it's ideal for lighting up educational facilities, offices, industrial areas, warehouses, and other commercial spaces.

#### Product Applications

- Classrooms
- Conference Rooms
- Office Spaces
- Hallways/Corridors
- Industrial Areas
- Retail Areas
- Commercial Spaces

#### Product Certifications/Approvals

- CSA Listed
- Complies with UL1598 and CSA 22.2
- DLC Premium Listed
- Suitable for indoor damp locations
- IP61 Rated Enclosure
- RoHS compliant



Example: LSF1-1-4-UNVL-30-2-50

#### Ordering Information

Series	Variant	Size	Input Voltage	Power	Driver	CCT
LSF1	1 Standard 8 in. Base (No Controls)	4	4 ft.	UNVL 120-277V	2 iNFINi Driver 0-10V	30 3000K
		8	8 ft.			35 3500K
						40 4000K
	2 Standard 14 in. Base (No Controls)	4	4 ft.	UNVL 120-277V	3 Blu-Drive Driver	50 5000K
		8	8 ft.			35 3500K
						40 4000K
						50 5000K

#### Variant 1 & 2 Combinations

Size	Available Power
4 ft.	25W, 30W
8 ft.	50W

#### Variant 3 Combinations

Size	Available Power
4 ft.	30W
8 ft.	50W

<sup>1</sup>. Product 'Lifetimes' refer only to the LED light engine, not the power source, and are based on the Illuminating Engineering Society's TM21 Projected Lumen Maintenance methodology at a 25° C / 77° F ambient temperature. The lifetimes are solely meant to be a guide for expected LED degradation and not a warranty or predictive of their actual life, which can be affected by ambient temperatures and other factors.

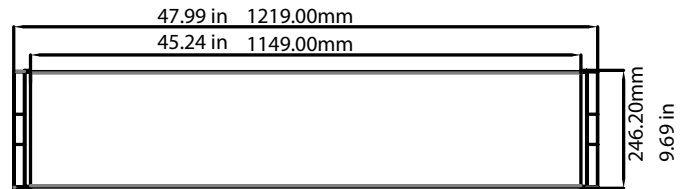
### In-Stock Configurations

Catalog #	Description
LSF1-1-4-UNVL-25-2-40	4 ft. Size   120-227V   25W   iNFiNiDriver 0-10V   4000K
LSF1-1-4-UNVL-25-2-50	4 ft. Size   120-227V   25W   iNFiNiDriver 0-10V   5000K
LSF1-1-4-UNVL-30-2-40	4 ft. Size   120-227V   30W   iNFiNiDriver 0-10V   4000K
LSF1-1-4-UNVL-30-2-50	4 ft. Size   120-227V   30W   iNFiNiDriver 0-10V   5000K

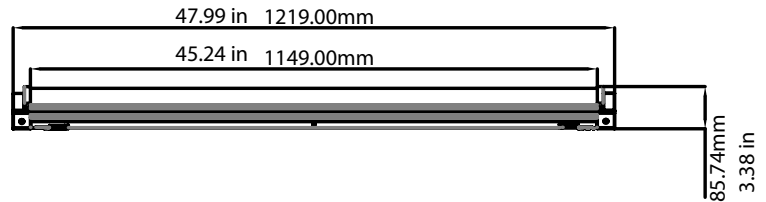
### Dimensions

Model	Net Weight
4 ft.	10.8 lbs. (4.9kg)
8 ft.	21.5 lbs. (9.8kg)

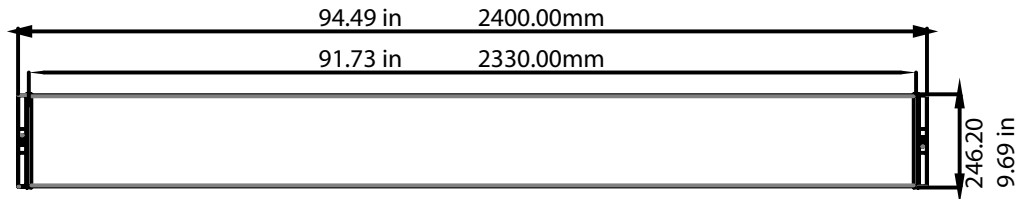
**4 ft. Model Variant 1 & 3 (Top View)**



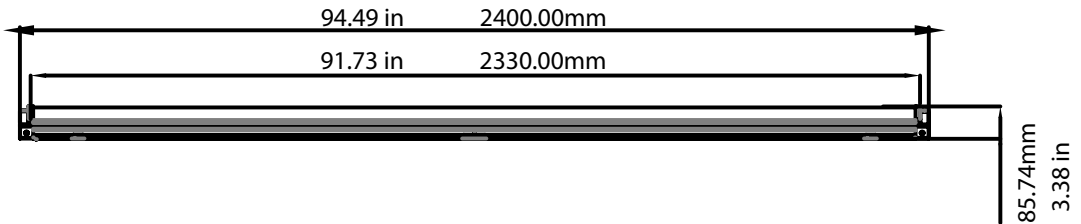
**4 ft. Model Variant 1 & 3 (Side View)**



**8 ft. Model Variant 1 & 3 (Top View)**



**8 ft. Model Variant 1 & 3 (Side View)**



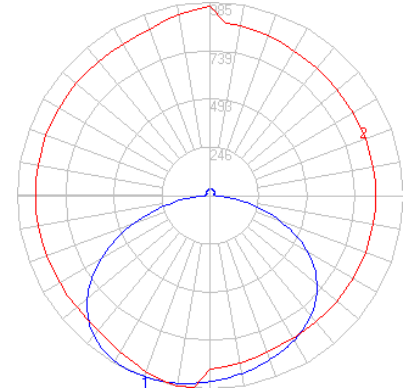
### Performance Data

#### Luminaire Photometric Data

Model Number	LSF1-1-4-UNVL-25-2-50
Issue Date	04/29/2019
IESNA	LM-63-2002
Lamp	LED
Total Input Watts	25.0
Total Lumens	3,430
Efficacy	137 LPW
Spacing Criterion	0°-180° = 1.24   90°-270° = 1.52

#### Zonal Lumen Summary

Zone	Lumens	% Fixt
0-30	750.53	21.90
0-40	1245.63	36.30
0-60	2280.92	66.50
0-90	3138.38	91.50
0-180	3430.08	100.00

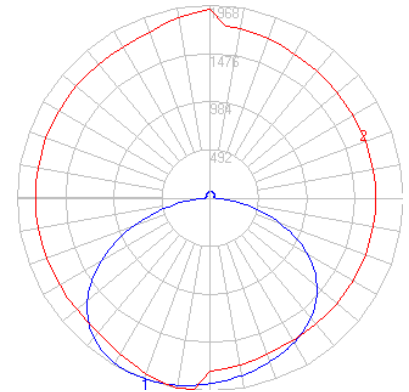


#### Luminaire Photometric Data

Model Number	LSF1-1-8-UNVL-50-2-50
Issue Date	04/29/2019
IESNA	LM-63-2002
Lamp	LED
Total Input Watts	51.1
Total Lumens	6,850
Efficacy	134 LPW
Spacing Criterion	0°-180° = 1.24   90°-270° = 1.52

#### Zonal Lumen Summary

Zone	Lumens	% Fixt
0-30	1498.87	21.90
0-40	2487.62	36.30
0-60	4555.20	66.50
0-90	6267.60	91.50
0-180	6850.15	100.00



Model	System Level Power	Delivered Lumens	Efficacy	CCT	L70 Calculate Life	L85 Calculate Life
LSF1-1-4-UNVL-25-2-30	25.0W	3,280L	131 LPW	3000K	161,000 Hours	74,000 Hours
LSF1-1-4-UNVL-25-2-35	25.0W	3,310L	132 LPW	3500K	161,000 Hours	74,000 Hours
LSF1-1-4-UNVL-25-2-40	25.0W	3,350L	134 LPW	4000K	161,000 Hours	74,000 Hours
LSF1-1-4-UNVL-25-2-50	25.0W	3,430L	137 LPW	5000K	161,000 Hours	74,000 Hours
LSF1-1-4-UNVL-30-2-30	28.8W	3,900L	135 LPW	3000K	161,000 Hours	74,000 Hours
LSF1-1-4-UNVL-30-2-35	28.8W	3,940L	137 LPW	3500K	161,000 Hours	74,000 Hours
LSF1-1-4-UNVL-30-2-40	28.8W	3,980L	138 LPW	4000K	161,000 Hours	74,000 Hours
LSF1-1-4-UNVL-30-2-50	28.8W	4,075L	142 LPW	5000K	161,000 Hours	74,000 Hours
LSF1-1-8-UNVL-50-2-30	51.1W	6,550L	128 LPW	3000K	161,000 Hours	74,000 Hours
LSF1-1-8-UNVL-50-2-35	51.1W	6,600L	129 LPW	3500K	161,000 Hours	74,000 Hours
LSF1-1-8-UNVL-50-2-40	51.1W	6,700L	131 LPW	4000K	161,000 Hours	74,000 Hours
LSF1-1-8-UNVL-50-2-50	51.1W	6,850L	134 LPW	5000K	161,000 Hours	74,000 Hours

### Smart Blu™ Performance Data

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Model	System Level Power	Delivered Lumens	Efficacy	CCT	L70 Calculate Life	L85 Calculate Life
LSF1-2-4-UNVL-30-3-30	30W	4,050L	135 LPW	3000K	161,000 Hours	74,000 Hours
LSF1-2-4-UNVL-30-3-35	30W	4,110L	137 LPW	3500K	161,000 Hours	74,000 Hours
LSF1-2-4-UNVL-30-3-40	30W	4,140L	138 LPW	4000K	161,000 Hours	74,000 Hours
LSF1-2-4-UNVL-30-3-50	30W	4,260L	142 LPW	5000K	161,000 Hours	74,000 Hours
LSF1-2-8-UNVL-60-3-30	60W	8,100L	135 LPW	3000K	161,000 Hours	74,000 Hours
LSF1-2-8-UNVL-60-3-35	60W	8,220L	137 LPW	3500K	161,000 Hours	74,000 Hours
LSF1-2-8-UNVL-60-3-40	60W	8,280L	138 LPW	4000K	161,000 Hours	74,000 Hours
LSF1-2-8-UNVL-60-3-50	60W	8,520L	142 LPW	5000K	161,000 Hours	74,000 Hours

### Mounting

— Smart Engineering Design —

## SURFACE MOUNT

— Quick & Easy Installation —

With the proprietary mounting back plate, surface mounting to the ceiling or wall can be completed within a few minutes.

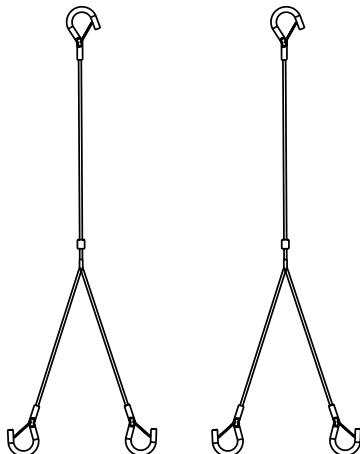
1. Unlatch the backplate and remove from the luminaire.
2. Mount the backplate to the ceiling or wall.
3. Hang the luminaire on the integrated hooks and finish wiring.
4. Close the luminaire, secure with a single tek screw, and power on.

For more detailed installation instructions, please visit [www.usled.com](http://www.usled.com) and download the PDF file from the LSF1 product page.



**30184 - 5 ft. Hangar Cable with Y-Snap Hooks**

(Sold Separately)



**30200 - 20 ft. Aircraft Cable Mounting Kit**

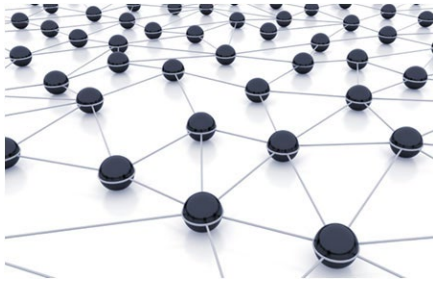
**30202 - 10 ft. Aircraft Cable Mounting Kit**

(Sold Separately)





*Simple, Affordable, and Effective  
Bluetooth Lighting Control*  
iOS and Android Compatible APP



**SMART BLU™** is a wireless lighting control system that utilizes Bluetooth 4.0 Mesh Network technology to transmit lighting control data from a smartphone to Lights & Switches (**Nodes**). Nodes cooperate in the transmission of data to ensure integrity.

**SMART BLU™** enables significant power and maintenance savings for LED lighting through simple automation processes while allowing for individual freedom to adjust as necessary.

Mesh Networks (**Zones**) can range from 1 to 100 Nodes maximum. Buildings may be divided into many different Zones with each having its own distinct encryption and QR Code. For example, a School may have classrooms, corridors, gym and offices divided into Zones. An Office Tower could have each floor divided into open area, perimeter offices, meeting rooms and reception Zones.



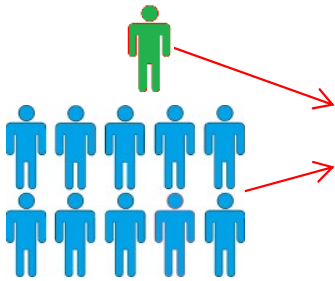
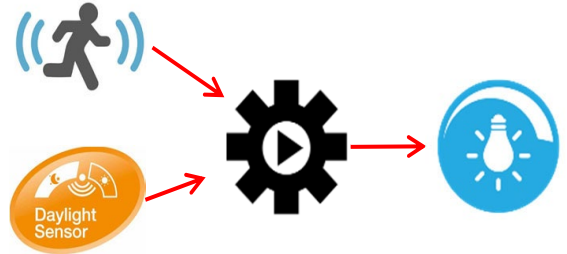
Nodes consist of Lights, Switches, & Gateways. Lights may include onboard motion detectors and daylight photo sensors.



### Smart Blu™ Bluetooth Lighting Control (Cont.)

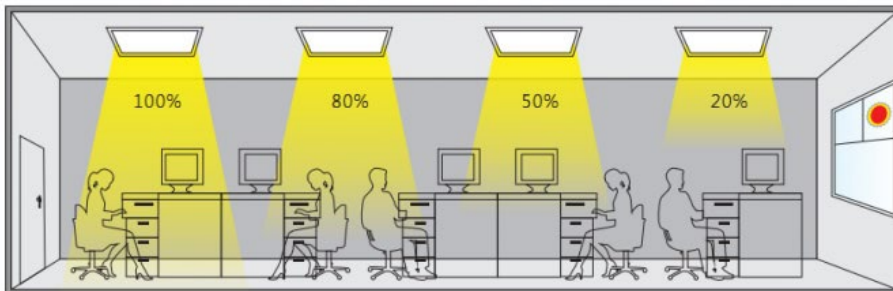
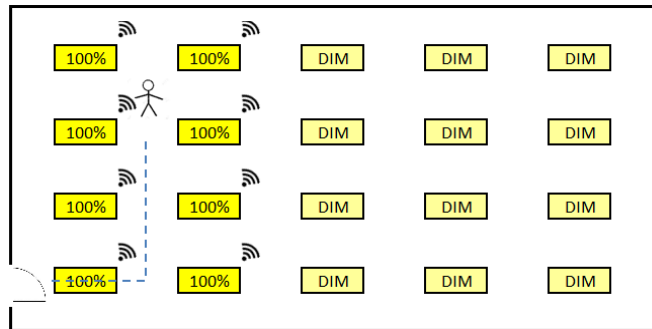
# SMART BLU™

Lights may be supplied without sensors or they may be supplied with motion and/or photo sensors to allow automation of Light level control.



Lights may be controlled individually or in Groups. They can be set to operate automatically via sensors and/or respond to manual switches or smartphones.

Lights may also be linked such that if one Light motion sensor is tripped, all other Lights in the Group respond in unison thus making the whole space appear lit and less foreboding.



Daylight Harvesting is taking advantage of natural light that enters an interior space through windows by

adjusting artificial lighting to save power. SMART BLU™ can dim Lights closest to windows lower than Lights further away from windows.






## Automation Defaults

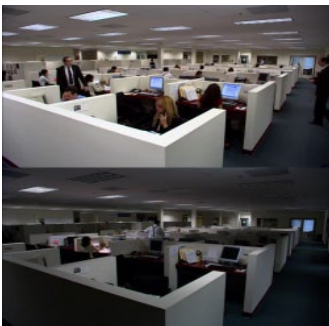


**SMART BLU™** incorporates Motion and Photo detectors. Motion detectors sense the presence of people and Photo detectors measure light levels. When enabled, these detectors can automatically make light level adjustments within a space without requiring manual adjustments by the occupants. The idea is to Automatically provide the right amount of light when it is needed and to dim or shut lights Off when it is not. The purpose of making automatic adjustments is to **save on energy and maintenance costs.**

**SMART BLU™** allows you to set Automation Defaults (Brightness, and Motion/Photo Detectors) for individual Lights or Groups of Lights. These may be disabled by choosing static Scenes via the APP or from physical Switches.

Automation Defaults may be set in two different sections of the APP; “Lights” and “Groups”. ***NOTE: If you set an Automation Default in one section, then alter the settings in another section, the LAST settings you make will be expressed by the system.***

An Automation icon  will appear in the following sections where it applies.



Scenes may be created with Groups and/or Individual Lights by adjusting brightness levels and color temperature (if available). Consider meeting rooms or classrooms when presentations are given and you wish to dim the light to view a smartboard or TV but still wish to provide light on the presenter.