

## Series Spec Sheet

# FN-L GEN. 2

## LED VAPOR TIGHT HIGH BAY

Specification Grade for Food Processing, Beverage and Rigorous Applications  
 Optional Emergency Remote

The FN-L series is a suitable design for both indoor and outdoor applications where dust and water resistance are required. Designed for easy assembly and maintenance. Appropriate for environments that may require: washability/hose down, complete containment of the LEDs, the ability to withstand reduced temperatures and moderate impact.

### FEATURES AND SPECIFICATIONS

#### • Applications

- Food processing
- Beverage industry
- Manufacturing and warehousing
- Gymnasiums
- Freezers

#### • Construction

##### Housing

- Reinforced white fiberglass and impact resistant with 12 high durability and chemical resistant white POM latches. The captive design of the latch will not allow it to fly off during maintenance. The fixture can be opened from either side for easy installation and maintenance
- Entry holes for 1/2" NPT/M20 fittings
- 1 hole on each side of the housing. One fitted with a waterproof cable gland and the other with a rubber plug
- High quality poured-in gasket

##### Lens

Fixture comes standard with an impact resistant acrylic frosted lens for durability and reduction of glare

#### • Specifications

- Wash down design
- Very durable
- Easy to clean and service
- LED technology for long term energy savings

#### Driver

- 120 V, 120-277 V, 347 V
- 0-10V dimming driver (down to 1%). Dimming cables sold separately, see ordering guide
- 2.5 kV surge protection (standard). See options table for additional surge protection

#### Operating temperature

- 40 °C to 40 °C (-40 °F to 104 °F)
- DL: 0 °C to +25 °C (32 °F to 77 °F)

#### Mounting

Easily mounted with stainless steel V-hooks which come standard with the fixture. No holes need to be drilled through the housing. The stainless steel V-hooks with hook hangers are UL rated to hold 4 times the fixture's weight.

#### • Emergency Lighting Compliances

- CSA certified as a C22.2 C141-15 emergency lighting luminaire
- Meets ICES-005 requirements

#### • Compliances

- Premium grade
- Suitable for wet and damp locations
- IP66, IP67
- 1500 PSI: High pressure hose down test (1.3 gallon per minute for 3 minutes at 1.5'-2.0' from the unit) to maintain the integrity of the fixture. No water ingress is allowed
- NSF
- NEMA 4X
- Meets requirements of ICES-005
- UL1598, UL8750
- CSA Certified to C22.2 #250.0, #250.13
- cCSAus
- CSA Certified to C22.2 #141-15 (When use with DL option)
- DLC Premium
- BC Hydro

### OVERVIEW

Light source	LED
Watts (W)	77 - 205
Lumen output (lm)	12 620 - 31 470
Efficacy (lm/W)	143 - 176
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+
Weight (lbs)	26



Not all products are qualified on the DLC QPL. To view our DLC qualified products, please consult the DLC Qualified Products List at [www.designlights.org/search](http://www.designlights.org/search).

## ORDERING GUIDE

Series	Lamp type	Lumen package (lm)	CRI	Volts (V)	Color temp. (K)	Options
FN	L - LED	S1B } Refer to the S2B } technical S3B } specification S4B } table for S5B } more details	80 - 80	A - 120 H - 347 W - 120-277	30K - 3 000 35K - 3 500 40K - 4 000 50K - 5 000	DIM1 <sup>1</sup> - 5 wire cable for AC and 0-10 V dimming DIM2 <sup>2</sup> - Leading edge dimming 120 V only L6 - 6' white power cable length L10 - 10' white power cable length L6-BK - 6' black power cable length L10-BK - 10' black power cable length AC - Aviation cable kit OS <sup>3</sup> - Occupancy sensor DL <sup>4,5</sup> - Emergency back up (from 0°C to +25°C) 120 V and 120-277 V only U347 - Male 347 V twist lock plug CMB - Ceiling mounting bracket KV - 10kV surge protector RMB - Rigid mounting bracket SS - Stainless steel latches (set of 10pcs) U120 - Male 120 V twist lock plug LT - Lens tether PC - Polycarbonate frosted lens

<sup>1</sup> When selecting DIM1 option please also select cable option whether L6, L10, L6-BK, L10-BK. DL option is not compatible with DIM1.

<sup>2</sup> DIM2 is for S3B lumen package only.

<sup>3</sup> To see available options, please consult the occupancy sensors section.

<sup>4</sup> Fixture functional in AC mode, when power goes off emergency bodine powers LED boards. One bodine per fixture is standard unless otherwise specified.

<sup>5</sup> NEMA 4X certification and IP ratings are not applicable when selecting DL option.

TECHNICAL SPECIFICATION TABLE<sup>1</sup>

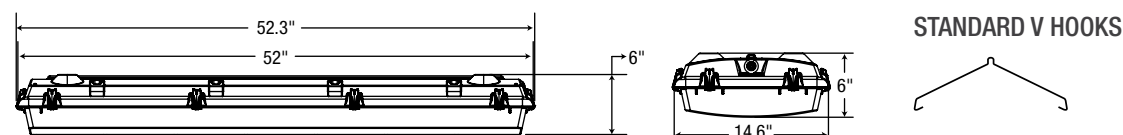
Lumen package	Watts (W)	Volts (V)	30K		35K		40K		50K		CRI	Life L70 (hrs)	Tested hours LM-80 (hrs)	Power factor	THD (%)	
			Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)						
S1B	77	120-277 347	12 620	164	13 030	170	13 340	174	13 550	176	80+	180 950	9 000	0.975	10.274	
S2B	107		16 080	150	16 610	155	17 000	159	17 270	161		0.980		5.974		
S3B	123		18 740	153	19 360	158	19 810	161	20 130	164		173 200		0.966	9.367	
S4B	179		26 570	148	27 440	153	28 090	157	28 530	159				0.939	9.282	
S5B	205		29 300	143	30 260	147	30 970	151	31 470	153		163 850		0.972	10.245	

<sup>1</sup> Lumen values are based on standard acrylic frosted lens. For other lens options, please refer to IES files

## DLC UNIQUE ID TABLE

DLC Family Code	Certified	Primary Designation(s)
JJJPDU	Premium	High-Bay Luminaires for Commercial and Industrial Buildings

## DIMENSIONS



Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions.  
All products are subject to change or may be discontinued any time without notice.

## OCCUPANCY SENSORS

## ON-OFF SENSORS

Detection - On at (Detection Area) % during (Hold Time) min. Off

Part number	Position	Volts (V)	Technology	Height (ft)	Detection Area (%)	Hold time (min)	Daylight min level (lux)	Remote <sup>2</sup>	Location <sup>3</sup> (°C)
OSE-PO-0303 <sup>1</sup>	External	120-347	PIR	20-40	100	20	N/A	N/A	Dry, -10 to +40
OSE-PO-0304 <sup>1</sup>	External	120-347	PIR	20-40	100	20	N/A	N/A	Dry, -40 to +40
OSE-PO-0503 <sup>1</sup>	External	120-347	PIR	15-40	100	15	3 000	OSI-FSIR-100	Dry, 0 to +40
OSE-PO-0504 <sup>1</sup>	External	120-347	PIR	15-40	100	15	3 000	N/A	Dry, 0 to +40
OSE-PO-0704 <sup>1</sup>	External	120-277	PIR	40	100	15	N/A	N/A	Wet, -40 to +40
OSE-PO-0804 <sup>1</sup>	External	347	PIR	40	100	15	N/A	N/A	Wet, -40 to +40
OSI-FO-0301	Internal	120-277	High frequency	32 max	100	20	Disable	N/A	Dry and wet, -25 to +40
OSI-FO-0601	Internal	120-347	High frequency	25 max	100	30	Disable	68681	Dry and wet, -35 to +40
OSI-FO-0602	Internal	120-347	High frequency	25 max	100	15	Disable	68681	Dry and wet, -35 to +40
OSI-FO-0603	Internal	120-347	High frequency	25 max	100	15	100	68681	Dry and wet, -35 to +40

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## BI-LEVEL SENSORS

Detection - On at (Detection Area) % during (Hold Time) min., then (Stand-by Dim level) %

Part number	Position	Volts (V)	Technology	Height (ft)	Detection Area (%)	Hold time (min)	Stand-by Dim level (%)	Daylight min level (lux)	Remote <sup>2</sup>	Location <sup>3</sup> (°C)
OSE-PB-0202	External	120-347	PIR	20	100	30	40	Disable	OSI-FSIR-100	Wet, -40 to 40
OSI-FB-0301	Internal	120-277	High Frequency	32 max	100	20	30	Disable	N/A	Dry and wet, -25 to +40
OSI-FB-0302	Internal	120-277	High Frequency	32 max	100	20	10	Disable	N/A	Dry and wet, -25 to +40
OSI-FB-0303	Internal	120-277	High Frequency	32 max	100	20	50	Disable	N/A	Dry and wet, -25 to +40
OSE-FB-0402	External	120-347	High Frequency	50 max	100	20	30	50	OSI-RC-MH10	Wet, -35 to +40
OSI-FB-0603	Internal	120-347	High Frequency	25 max	100	15	40	Disable	68681	Dry and wet, -35 to +40
OSI-FB-0604	Internal	120-347	High Frequency	25 max	100	30	40	Disable	68681	Dry and wet, -35 to +40
OSI-FB-0605	Internal	120-347	High Frequency	25 max	100	15	30	Disable	68681	Dry and wet, -35 to +40
OSI-FB-0606	Internal	120-347	High Frequency	25 max	100	15	10	Disable	68681	Dry and wet, -35 to +40

## TRI-LEVEL SENSORS

Detection - On at (Detection Area) % during (Hold Time) min., then (Stand-by Dim level) % during (Stand-by period) min. Off

Part number	Position	Volts (V)	Technology	Height (ft)	Detection Area (%)	Hold time (min)	Stand-by Dim level (%)	Stand-by period (min)	Daylight min level (lux)	Remote <sup>2</sup>	Location <sup>3</sup> (°C)
OSI-FT-0301	Internal	120-277	High Frequency	32 max	100	20	30	10	Disable	N/A	Dry and wet, -25 to +40
OSE-FT-0402	External	120-347	High Frequency	50 max	100	30	30	10	50	OSI-RC-MH10	Wet, -35 to +40
OSI-FT-0601	Internal	120-347	High Frequency	25 max	100	30	30	10	Disable	68681	Dry and wet, -35 to +40

<sup>1</sup> Sensor with arm

<sup>2</sup> To be ordered separately.

<sup>3</sup> Min and max ambient temperature of the fixture with the specific sensor. Please verify fixture temperature on the first page for compatibility with sensor.

For more settings visit

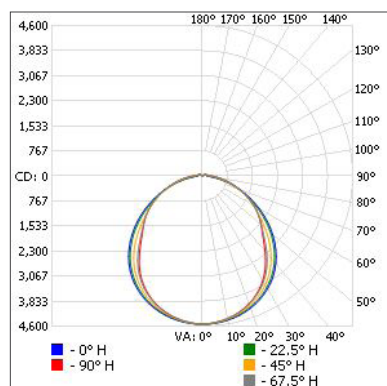
[www.standardpro.com/documentation/technical-information/](http://www.standardpro.com/documentation/technical-information/)

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PHOTOMETRIC DATA<sup>1</sup>

## FN-LS1B-80-(A/H/W)/40K • 13 337 lm

## Polar candela distribution



## Zonal lumen summary

Zone	Lumens	% Fixture
0-30	3 526.4	26.4
0-40	5 757.0	43.2
0-60	9 969.3	74.8
60-90	2 901.4	21.8
70-100	1 578.2	11.8
90-120	390.9	2.9
0-90	12 870.7	96.5
90-180	465.8	3.5
0-180	13 336.5	100

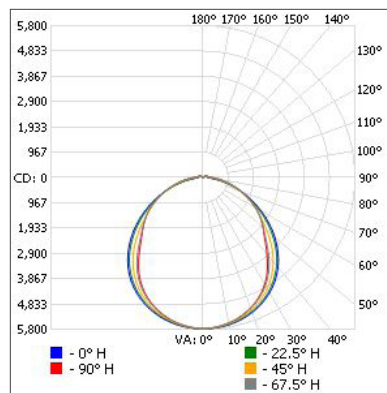
## Illuminance at a distance

Center beam fc		Beam width	
1.7'	1 570	5.2'	4.3'
3.3'	417	10.1'	8.4'
5.0'	182	15.4'	12.7'
6.7'	101	20.6'	17.0'
8.3'	65.9	25.5'	21.0'
10.0'	45.4	30.7'	25.3'

Vert. spread: 113.9°  
 Horiz. spread: 103.4°

## FN-LS2B-80-(A/H/W)/40K • 16 996 lm

## Polar candela distribution



## Zonal lumen summary

Zone	Lumens	% Fixture
0-30	4 493.9	26.4
0-40	7 336.5	43.2
0-60	12 704.6	74.8
60-90	3 697.4	21.8
70-100	2 011.2	11.8
90-120	498.2	2.9
0-90	16 402.0	96.5
90-180	593.6	3.5
0-180	16 995.6	100

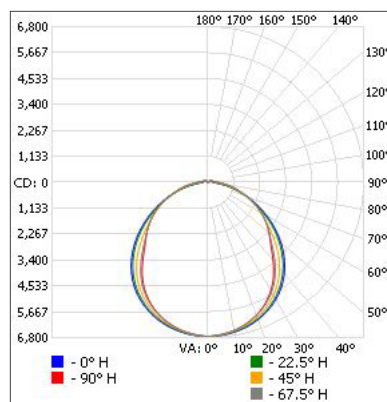
## Illuminance at a distance

Center beam fc		Beam width	
1.7'	2 001	5.2'	4.3'
3.3'	531	10.1'	8.4'
5.0'	231	15.4'	12.7'
6.7'	129	20.6'	17.0'
8.3'	83.9	25.5'	21.0'
10.0'	57.8	30.7'	25.3'

Vert. spread: 113.9°  
 Horiz. spread: 103.4°

## FN-LS3B-80-(A/H/W)/40K • 19 806 lm

## Polar candela distribution



## Zonal lumen summary

Zone	Lumens	% Fixture
0-30	5 237.0	26.4
0-40	8 549.6	43.2
0-60	14 805.3	74.8
60-90	4 308.8	21.8
70-100	2 343.8	11.8
90-120	580.6	2.9
0-90	19 114.2	96.5
90-180	691.7	3.5
0-180	19 805.9	100

## Illuminance at a distance

Center beam fc		Beam width	
1.7'	2 332	5.2'	4.3'
3.3'	619	10.1'	8.4'
5.0'	270	15.4'	12.7'
6.7'	150	20.6'	17.0'
8.3'	97.8	25.5'	21.0'
10.0'	67.4	30.7'	25.3'

Vert. spread: 113.9°  
 Horiz. spread: 103.4°

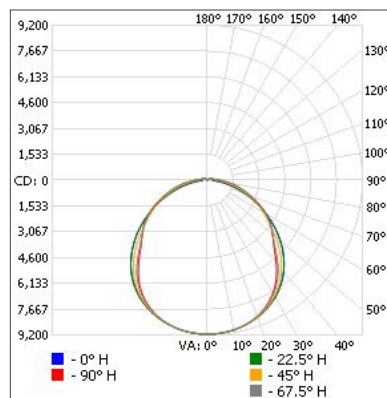
<sup>1</sup> Complete IES files available on our website.

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PHOTOMETRIC DATA<sup>1</sup>

## FN-LS4B-80-(A/H/W)/40K • 28 084 lm

## Polar candela distribution



## Zonal lumen summary

Zone	Lumens	% Fixture
0-30	7 212.5	25.7
0-40	11 838.9	42.2
0-60	20 681.3	73.6
60-90	6 326.6	22.5
70-100	3 527.3	12.6
0-120	902.2	3.2
0-90	27 008.0	96.2
90-180	1 076.1	3.8
0-180	28 084.1	100

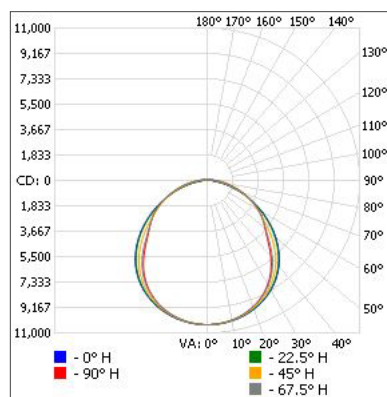
## Illuminance at a distance

Center beam fc		Beam width	
1.7'	3 167	5.2'	4.9'
3.3'	841	10.1'	9.5'
5.0'	366	15.3'	14.4'
6.7'	204	20.5'	19.3'
8.3'	133	25.4'	23.9'
10.0'	91.5	30.6'	28.7'

Vert. spread: 113.7°  
Horiz. spread: 110.3°

## FN-LS5B-80-(A/H/W)/40K • 30 963 lm

## Polar candela distribution



## Zonal lumen summary

Zone	Lumens	% Fixture
0-30	8 158.7	26.4
0-40	13 377.3	43.2
0-60	23 242.3	75.1
60-90	6 694.3	21.6
70-100	3 590.4	11.6
0-120	875.5	2.8
0-90	29 936.6	96.7
90-180	1 025.9	3.3
0-180	30 962.5	100

## Illuminance at a distance

Center beam fc		Beam width	
1.7'	3 602	5.2'	4.4'
3.3'	956	10.1'	8.6'
5.0'	416	15.4'	13.0'
6.7'	232	20.6'	17.4'
8.3'	151	25.5'	21.6'
10.0'	104	30.7'	26.0'

Vert. spread: 113.8°  
Horiz. spread: 104.9°

<sup>1</sup> Complete IES files available on our website.