

Series Spec Sheet

FN-L

LED VAPOUR TIGHT HIGH BAY

Specification grade for food processing, beverage and rigorous applications

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 those applications that may require: washability/hose down, complete containment of the LEDs, the ability to withstand reduced temperatures and withstand moderate impact.

FEATURES AND SPECIFICATIONS

• Applications

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

Driver

- 120 V, 120-277 V, 347 V
- 0-10 V dimming driver standard (down to 1%)

Ambient temperature

-40°C to +40°C

• 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.

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 for 4 times fixture weight.

• Compliances

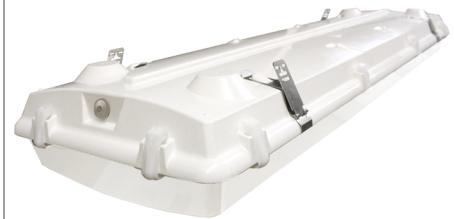
- Premium grade
- Suitable for wet and damp locations
- IP66
- IP67
- 1500 PSI: High pressure hose down test (1.3 gallon per minute for 3 minutes at 1.5'-2.0' from the unit) to maintain the integrity of the fixture. No water ingress is allowed
- NSF
- Nema 4X
- Meets requirements of ICES-005
- UL1598,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

• Specifications

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

OVERVIEW

Light source	LED
Watts (W)	83 - 223
Lumen output (lm)	11 396 - 28 039
Efficiency (lm/W)	114 - 151
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.

ORDERING GUIDE

Series	Lamp type	Lumen package (lm)	Volts (V)	Color temp. (K)	Options
FN	L - LED	S1A S2A S3A S4A S5A	A - 120 H - 347 W - 120-277	30K - 3 000 35K - 3 500 40K - 4 000 50K - 5 000	DIM1 ¹ - 5 wire cable for AC and 0-10 V dimming DIM2 ² - Leading edge dimming 120 V only L6 - 6' white power cord L10 - 10' white power cord L6-BK - 6' black power cord L10-BK - 10' black power cord AC - Aviation cable kit OS ³ - Occupancy sensor DL ⁴ - 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 - 10 kV surge protector RMB - Rigid mounting bracket SS - Stainless steel latches U120 - Male 120 V twist lock plug LT - Lens tether PC - Polycarbonate frosted lens HCRI ⁵ - HIGH CRI 90+

¹ When selecting DIM1 option please also select cable option whether L6, L10, L6-BK or L10-BK.

² DIM2 is for S3A lumen package only.

³ To see available options, please consult the occupancy sensors section.

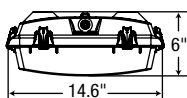
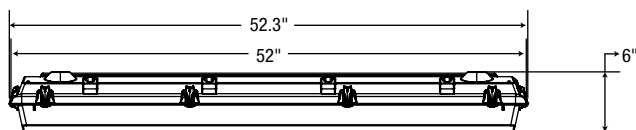
⁴ Fixture functional in AC mode, when power goes off emergency bodine powers LED boards. One bodine per fixture is standard unless otherwise specified. With the DL option, LS2A and LS3A lumens packages and DIM2 option are not DLC certified.

⁵ DLC is not available with this option. HCRI option may decrease lumen output from 15% to 19% depending on the CCT.

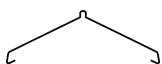
TECHNICAL SPECIFICATION TABLE

Lumen package	Watts (W)	Volts (V)	3 000 K		3 500 K		4 000 K		5 000 K		CRI	Life L70 (hrs)	Tested hours LM-80 (hrs)	Power factor	THD (%)
			Lumen (lm)	Efficiency (lm/W)	Lumen (lm)	Efficiency (lm/W)	Lumen (lm)	Efficiency (lm/W)	Lumen (lm)	Efficiency (lm/W)					
S1A	83	120-277 347	11 396	136	11 671	140	12 002	143	12 487	151	80+	187 000	10 000	0.98	8
S2A	121		15 460	127	15 887	131	16 400	135	17 005	140	80+	187 000	10 000	0.98	9
S3A	137		17 136	131	17 551	134	18 048	138	18 688	142	80+	187 000	10 000	0.98	11
S4A	192		23 827	124	24 486	127	25 276	131	26 208	136	80+	187 000	10 000	0.97	10
S5A	223		25 492	114	26 197	117	27 042	121	28 039	125	80+	187 000	10 000	0.98	10

DIMENSIONS



STANDARD V HOOKS



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 ²	Location ³ (°C)
OSE-PO-0303 ¹	External	120-347	PIR	20-40	100	20	NA		Dry, -10 to +40
OSE-PO-0304 ¹	External	120-347	PIR	20-40	100	20	NA		Dry, -40 to +40
OSE-PO-0503 ¹	External	120-347	PIR	15-40	100	15	3 000	OSI-FSIR-100	Dry, 0 to +40
OSE-PO-0504 ¹	External	120-347	PIR	15-40	100	15	3 000		Dry, 0 to +40
OSE-PO-0704 ¹	External	120-277	PIR	40	100	15	NA		Wet, -40 to +40
OSE-PO-0804 ¹	External	347	PIR	40	100	15	NA		Wet, -40 to +40
OSI-FO-0301	Internal	120-277	High frequency	32 max	100	20	Disable		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 ²	Location ³ (°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		Dry and wet, -25 to +40
OSI-FB-0302	Internal	120-277	High Frequency	32 max	100	20	10	Disable		Dry and wet, -25 to +40
OSI-FB-0303	Internal	120-277	High Frequency	32 max	100	20	50	Disable		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 ²	Location ³ (°C)
OSI-FT-0301	Internal	120-277	High Frequency	32 max	100	20	30	10	Disable		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

¹ Sensor with arm

² To be ordered separately.

³ 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

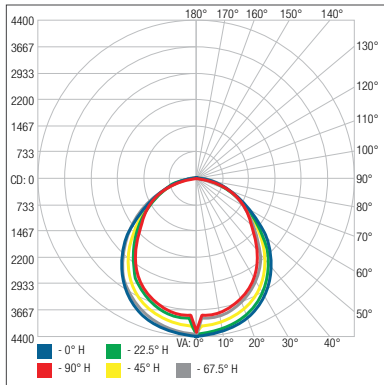
www.standardpro.com/documentation/technical-information/

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.

PHOTOMETRIC DATA¹

FN-LS1A-(W/H)/40K • 11 999.0 lm

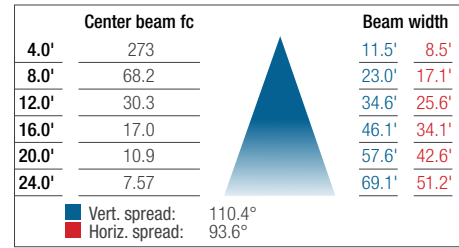
Polar candela distribution



Zonal lumen summary

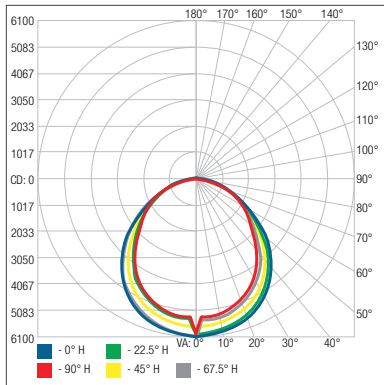
Zone	Lumens	% Fixture
0-30	3 207.0	26.7
0-40	5 239.8	43.7
0-60	9 004.3	75
60-90	2 581.6	21.5
70-100	1 440.3	12
90-120	332.7	2.8
0-90	11 585.9	96.6
90-180	413.1	3.4
0-180	11 999.0	100

Illuminance at a distance



FN-LS2A-(W/H)/40K • 16 395.7 lm

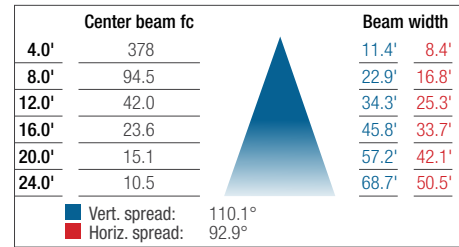
Polar candela distribution



Zonal lumen summary

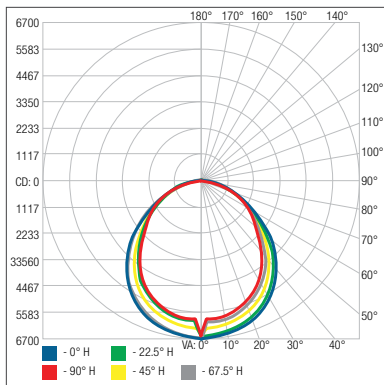
Zone	Lumens	% Fixture
0-30	4 431.5	27
0-40	7 195.1	43.9
0-60	12 312.7	75.1
60-90	3 525.2	21.5
70-100	1 960.7	12
90-120	452.5	2.8
0-90	15 837.9	96.6
90-180	557.9	3.4
0-180	16 395.7	100

Illuminance at a distance



FN-LS3A-(W/H)/40K • 18 043.3 lm

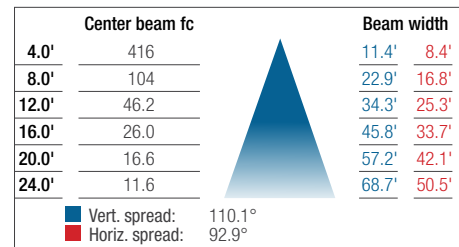
Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	4 876.8	27
0-40	7 918.1	43.9
0-60	13 549.9	75.1
60-90	3 879.5	21.5
70-100	2 157.7	12
90-120	498	2.8
0-90	17 429.4	96.6
90-180	613.9	3.4
0-180	18 043.3	100

Illuminance at a distance



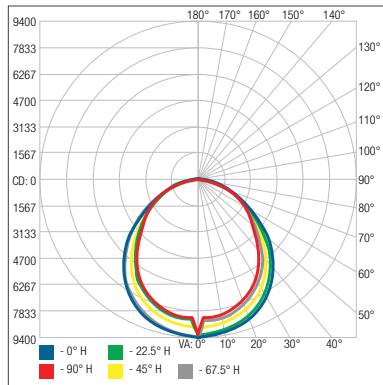
¹ Complete IES files available on our website.

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PHOTOMETRIC DATA (cont'd)

FN-LS4A-(W/H)/40K • 25 268.6 lm

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	6 831.1	27
0-40	11 145.4	44.1
0-60	19 107.6	75.6
60-90	5 318.2	21
70-100	2 908.1	11.5
90-120	671.7	2.7
0-90	24 425.8	96.7
90-180	842.8	3.3
0-180	25 268.6	100

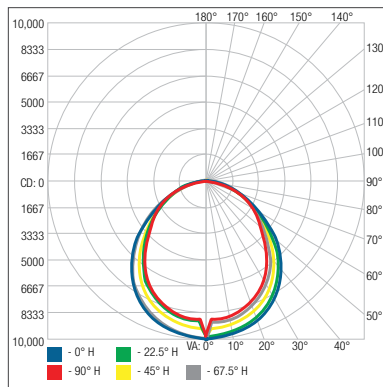
Illuminance at a distance

Center beam fc	Beam width
4.0'	11.5' 8.5'
8.0'	23.0' 17.0'
12.0'	34.4' 25.5'
16.0'	45.9' 34.0'
20.0'	57.4' 42.5'
24.0'	68.9' 51.0'

Vert. spread: 110.3°
Horiz. spread: 93.5°

FN-LS5A-(W/H)/40K • 27 034.2 lm

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	7 293.3	27
0-40	11 875.8	43.9
0-60	20 372.5	75.4
60-90	5 747.2	21.3
70-100	3 170.6	11.7
90-120	733.9	2.70
0-90	26 119.7	96.6
90-180	914.5	3.4
0-180	27 034.2	100

Illuminance at a distance

Center beam fc	Beam width
4.0'	11.4' 8.7'
8.0'	22.8' 17.4'
12.0'	34.2' 26.1'
16.0'	45.6' 34.8'
20.0'	57.1' 43.5'
24.0'	68.5' 52.2'

Vert. spread: 109.9°
Horiz. spread: 94.8°

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