

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)
LINK: -40 °C to +40 °C (-40 °F to 104 °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.

• Optional Emergency Lighting

LINK Normally ON LED Vapor Tight High Bay Luminaire

- Consuming 11 W, 12-24 V DC
 - 200 mA constant current
 - Delivers 1 322 to 1 446 lumens in emergency mode
 - Ease of maintenance when used with Stanpro emergency lighting battery units complete with auto test function
 - Complements Stanpro's Normally ON LED Vapor Tight High Bay family
 - Patent pending
- Please view the LINK specification section for more details on this technology

• Emergency Lighting Complies

- 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



¹ 5 year warrantee for the LINK module

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.

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+, 90+
Weight (lbs)	26

ORDERING GUIDE

Series	Lamp type	Lumen package (lm)	CRI	Volts (V)	Color temp. (K)	Options
FN	L - LED	S1B S2B S3B S4B S5B	80 - 80 90 ⁵ - 90	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 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 ³ - Occupancy sensor DL ^{4,7} - 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) EL1 ⁶ - 1 LINK Normally ON Emergency Remote EL2 ⁶ - 2 LINK Normally ON Emergency Remote EL3 ⁶ - 3 LINK Normally ON Emergency Remote U120 - Male 120 V twist lock plug LT - Lens tether PC - Polycarbonate frosted lens

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

² DIM2 is for S3B 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.

⁵ 90 CRI option may decrease lumen output from 15% to 19% depending on CCT.

⁶ The LINK Normally ON Emergency Remote is compatible with the following configurations: EL1 - LS1B, LS2B, LS3B, LS4B, LS5B; EL2 - LS3B, LS4B, LS5B; EL3: LS4B, LS5B. Not compatible with the following options: DL, EH, OS (external). When in Emergency Mode, luminaire only consumes 11W.

⁷ NEMA 4X certification and IP ratings are not applicable when selecting DL option.

For emergency lighting spacing, please see page 5.

TECHNICAL SPECIFICATION TABLE¹

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		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

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

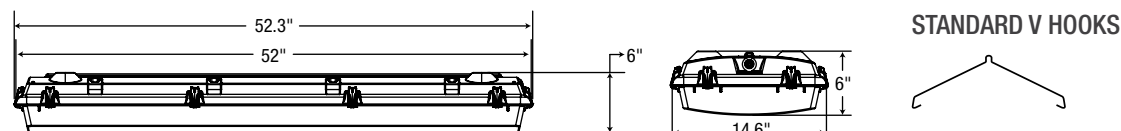
LINK TECHNICAL SPECIFICATION TABLE

Lumen package	Luminaire Watts (W)	LINK Watts (W)	30K	35K	40K	50K
			Lumen (lm)	Lumen (lm)	Lumen (lm)	Lumen (lm)
LS1B	77	11	1 341	1 385	1 418	1 440
LS2B	107		1 347	1 391	1 424	1 446
LS3B	123		1 322	1 365	1 397	1 419
LS4B	179		2 715	2 803	2 870	2 915
LS5B	205	22	2 658	2 744	2 810	2 854
LS3B	123		3 992	4 122	4 220	4 286
LS4B	179					
LS5B	205	33				

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 ²	Location ³ (°C)
OSE-PO-0303 ¹	External	120-347	PIR	20-40	100	20	N/A	N/A	Dry, -10 to +40
OSE-PO-0304 ¹	External	120-347	PIR	20-40	100	20	N/A	N/A	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	N/A	Dry, 0 to +40
OSE-PO-0704 ¹	External	120-277	PIR	40	100	15	N/A	N/A	Wet, -40 to +40
OSE-PO-0804 ¹	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

F

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	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 ²	Location ³ (°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

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/

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LINK

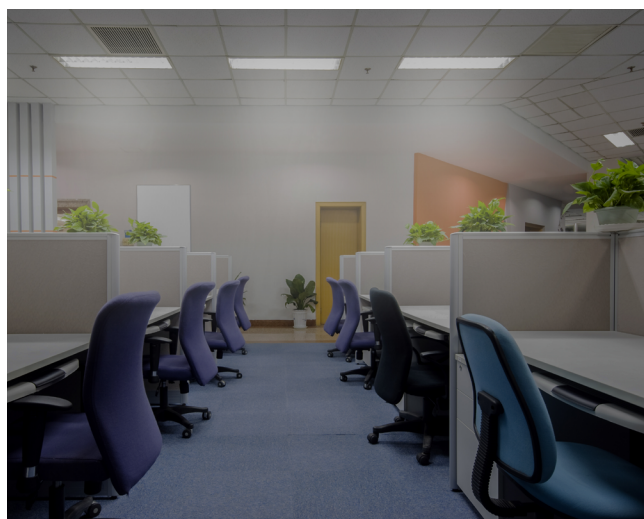
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

This luminaire can be used with an emergency backup powered by either a 12 V or 24 V DC Stanpro battery unit, complete with or without auto test.

NORMAL MODE



EMERGENCY MODE



TYPICAL SPECIFICATION

Supply and install Stanpro LINK _____ ft, LED vapor tight, Model number: _____ remote normally ON emergency luminaire, CSA C22.2 141-15 certified and meet the requirements prescribed by ICES-005. Normally ON when AC is present and when connected to a Stanpro battery unit complete with or without auto test, the luminaire shall act as an emergency lighting remote and consume 11 W of DC power in _____ V producing 2 924 - 3 146 lumens in emergency mode.

The remote normally ON emergency luminaire shall be powered by a Stanpro emergency lighting battery unit as described herein and shown on the drawings. The Stanpro auto diagnostic micro-controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120 V, 277 V or 347 V, 60 Hz and be CSA listed. The unit shall have an output of: ____V and ____W. The charge voltage factory set to $\pm 1\%$ tolerance. High efficiency, rapid recovery, precision control charging system shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The pulse charger shall be precisely regulated and shall charge the battery in relation to its temperature, state or charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load when the battery reaches the end of discharge.

The automated testing performed by the Stanpro auto test system has been designed to comply with all of the requirements of the National Fire Code. Every month, a 5 minute discharge and diagnostic test checks the operational status of the unit. Every 12 months, this test is extended to the full 30 minute, code required duration. This ensures that the battery charger is recharging the battery in accordance with code requirements.

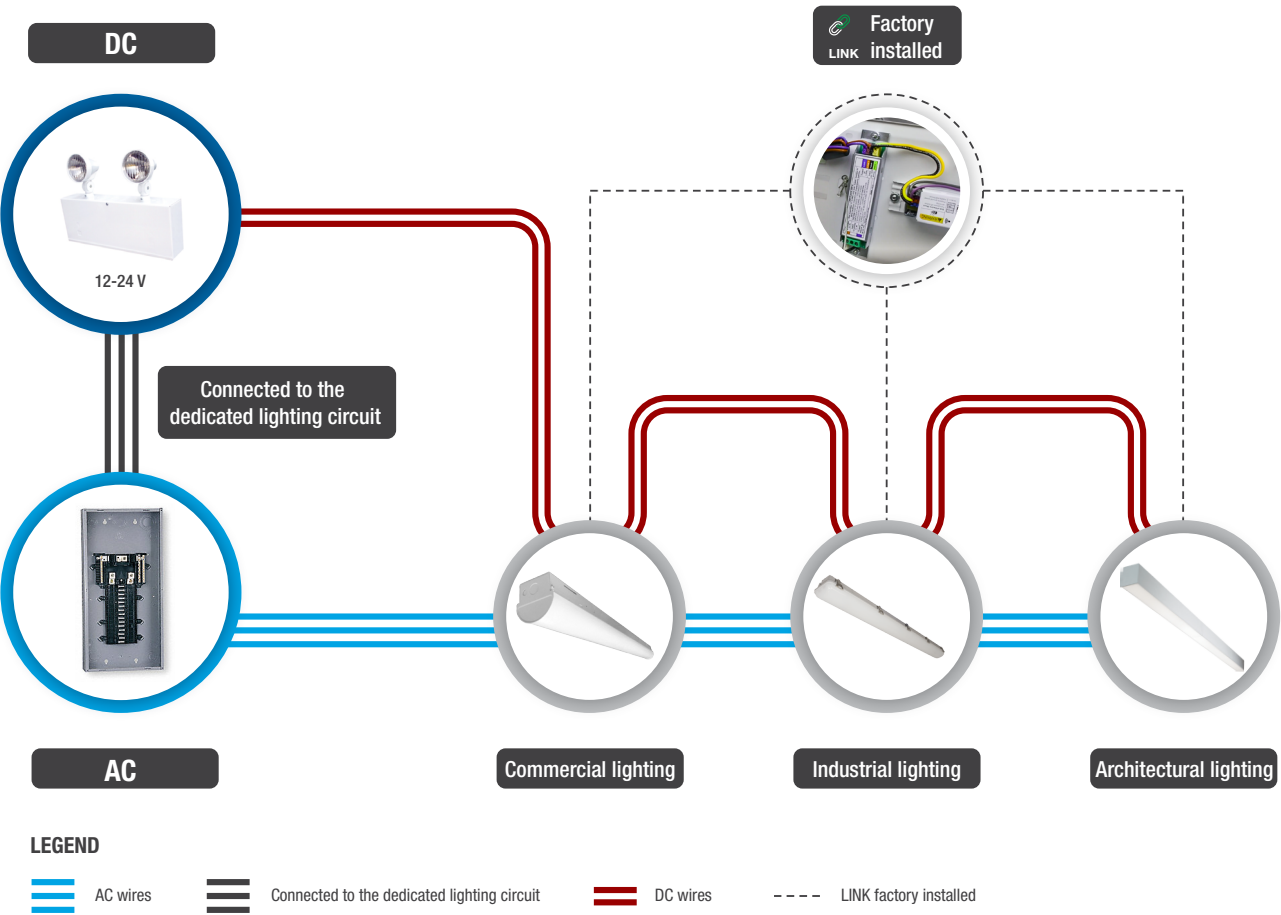
The unit shall be Stanpro model: SL_ _____

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LINK
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

LINK Wiring Diagram

LINK
remote
normally ON
emergency lighting
luminaire



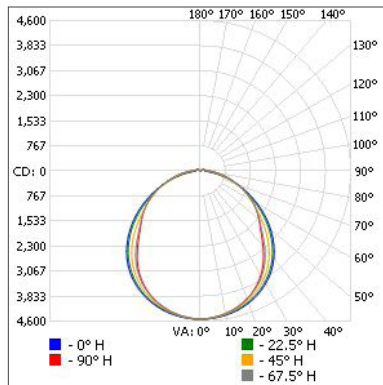
Emergency mode	Spacing
FN-L GEN 2	Average spacing for 1 out of every 4 luminaires, normally ON in the path of egress, when at 8, 10, or 12 foot mounting heights.

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PHOTOMETRIC DATA¹

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

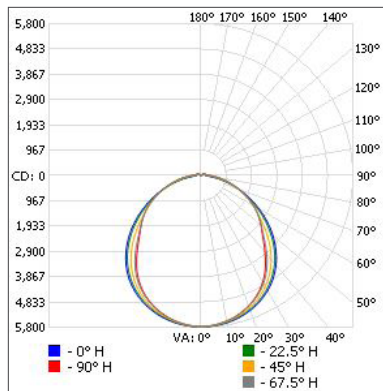
Illuminance at a distance

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

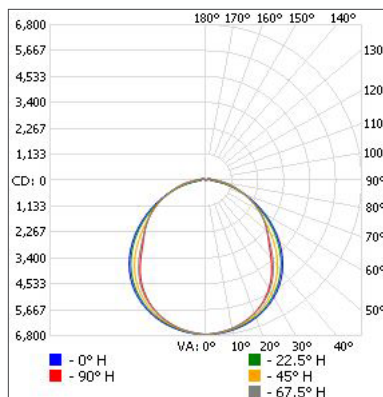
Illuminance at a distance

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°

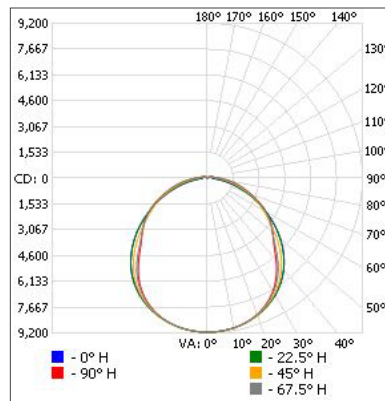
¹ Complete IES files available on our website.

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PHOTOMETRIC DATA¹

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
90-120	902.2	3.2
0-90	27 008.0	96.2
90-180	1 076.1	3.8
0-180	28 084.1	100

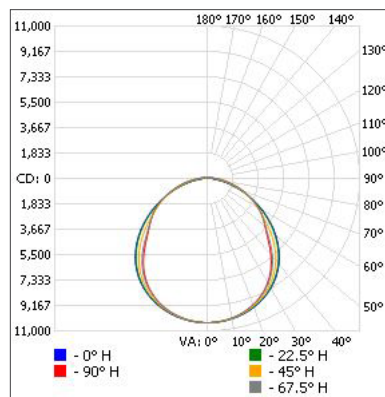
Illuminance at a distance

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
90-120	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°

¹ Complete IES files available on our website.