

Project: _____

Type: _____

Drawn by: _____ Catalogue #: _____

Date: _____

VN4-L GEN. 2

4' LED VAPOR TIGHT

Specification Grade Multi-Purpose Luminaire Optional Emergency Remote

The VN series of sealed 4' linear luminaires are for use in for both indoor and outdoor applications. Ideal for food processing and beverage plants, refrigerated storage, schools and parking garages. Appropriate for environments that may require: washability/hose down, complete containment of the LEDs, the ability to withstand reduced temperatures and moderate impact. Seals dust out.

FEATURES AND SPECIFICATIONS

• Applications

- Food processing facilities
- Commercial kitchens
- Breweries and bottling facilities
- Livestock containment buildings
- Under awnings
- Exterior retail areas
- Marinas and offshore
- Pedestrian tunnels
- Pools

• Construction

Housing

- The housing is constructed from a one piece glass reinforced white fiberglass and impact resistant acrylic lens
- A closed cell, high temperature poured in place gasket and acetal polyoxymethylene (POM) latches seal the enclosure from most hostile environments

Lens

The fixture comes standard with an impact resistant acrylic ribbed frosted lens.

• Specifications

- Wash down design
- LED technology for long term energy savings
- The luminaire enclosure was found to be in compliance with the indicated requirements of Enclosures for Electrical Equipment NEMA 4X

Driver

- 120 V, 120-277 V, 347 V
- 0-10 V 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

Stainless steel ceiling mounting brackets and mounting bail brackets for suspended mount included. Wall mounting bracket as an option.

• Optional Emergency Lighting

LINK Normally ON LED Vapor Tight Luminaire

- Consuming 11 W, 12 - 24 VDC
- 200 mA constant current
- Delivers 1 179 to 1 364 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 family
- Patent pending

Please view the LINK specification section for more details on this technology

• Emergency Lighting Compliances

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

• General Lighting Compliances

- Premium grade
- IP66, IP67
- 1 500 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 and EL options)
- DLC Premium, DLC Standard
- BC Hydro

OVERVIEW

Light source	LED
Watts (W)	27 - 93
Lumen output (lm)	3 652 - 13 090
Efficacy (lm/W)	127 - 145
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+, 90+
Weight (lbs)	13



¹ 5 year warranty 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.

ORDERING GUIDE

VN4 — L

Series	Lamp type	Lumen package (lm)	CRI	Volts (V)	Color temp. (K)	Options
VN4	L - LED	S1B - S2B - S3B - S4B - S5B -	80 - 80+ 90 ⁷ - 90+	A - 120 H - 347 W - 120-277	30K - 3 000 35K - 3 500 40K - 4 000 50K - 5 000	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 SS - Stainless steel latches KV - 10kV surge protector TP ¹ - Vandal Resistant Kit (includes 6pcs screws) DL ^{2, 11} - AC and Emergency backup (from 0 °C - 25 °C) 120 V, 120-277 V DIM1 ³ - 5 wire cable for AC and 0-10 V dimming DIM2 ⁴ - Leading edge dimming 120 V only PC - Polycarbonate ribbed frosted lens SCAL - Smooth clear acrylic lens SFAL - Smooth frosted acrylic lens SCPL - Smooth clear polycarbonate lens SFPL - Smooth frosted polycarbonate lens OS ⁵ - Occupancy sensor AC ⁶ - Aviation cable kit EL ⁹ - LINK Normally ON Emergency Remote RMP-05 ^{8, 11} - Rigid mono point on the luminaire with 3/4" center hole for 1/2 NPT conduit RMP-075 ^{8, 11} - Rigid mono point on the luminaire with 1" center hole for 3/4 NPT conduit RGB-45 ¹⁰ - 45° mount bracket

- ¹ Tamper proof bit (HAR06-TPBIT-UDR) included per order. Please consult the accessory table to order additional quantities.
- ² Fixture functional in AC mode, when power goes off emergency battery back-up powers LED boards. One emergency battery back-up per fixture is standard unless otherwise specified. Not compatible with the following options: EL, RMP-05, RMP-075.
- ³ When selecting DIM1 option please also select cable option whether L6, L10, L6-BK or L10-BK. DL option is not compatible with DIM1.
- ⁴ DIM2 is for S1B, S2B and S3B lumen packages.
- ⁵ To see available options, please consult the occupancy sensors section.
- ⁶ Aviation cable length based on selected power cable length.
- ⁷ 90 CRI option may decrease lumen output from 15% to 19% depending on the CCT.
- ⁸ The LINK Emergency Power conversion module is compatible with all the following all configurations: LS1B, LS2B, LS3B, LS4B, LS5B. Not compatible with the following options: DL, EH, OS (external), RMP-05, RMP-075. When in Emergency Mode, luminaire only consumes 11 W.
- ⁹ RMP-05 and RMP-075 are not available for LS5B lumen package.
- ¹⁰ Horizontal wall mount.
- ¹¹ When selecting DL, RMP-05 and RMP-075 options, the fixture maintains wet location status, however NEMA 4X and IP ratings are no longer applicable. For emergency lighting spacing, please see page 5.

TECHNICAL SPECIFICATION TABLE¹

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)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)							
S1B	27	120-277 347	3 652	135	3 773	139	3 860	142	3 922	145	80+	>54 000	9 000	0.94	13		
S2B	37		4 718	127	4 874	132	4 987	135	5 068	137						0.92	15
S3B	50		6 574	133	6 791	137	6 948	140	7 060	142						0.92	9
S4B	62		8 286	133	8 560	138	8 759	141	8 900	143						0.97	10
S5B	93		12 190	130	12 590	135	12 880	138	13 090	140						0.98	7

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

LINK TECHNICAL SPECIFICATION TABLE

Lumen package	LINK Watts (W)	LINK Watts (W)	3 000 K	3 500 K	4 000 K	5 000 K
			Lumen output (lm)	Lumen output (lm)	Lumen output (lm)	Lumen output (lm)
LS1B	31	11	1 270	1 312	1 342	1 364
LS2B	40					
LS3B	60		1 179	1 218	1 246	1 266
LS4B	79					
LS5B	93					

DLC UNIQUE ID TABLE

DLC Family Code	Certified	Primary Designation(s)
LLLCIP	Premium	Stairwell and Passageway Luminaires
		High-Bay Luminaires for Commercial and Industrial Buildings ¹
	Standard	Low-Bay Luminaires for Commercial and Industrial Buildings ²
		Direct Linear Ambient Luminaires

¹ LS5B lumen package only
² LS2B, LS3B, LS4B lumen packages only

ACCESSORIES (order separately)

Order code	Type
HAR06-TPBIT-UDR	Tamper Proof 2" Steel Power Bit (1pc)

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 ¹	Location ² (°C)
OSE-PO-0301	External	120-347	PIR	20-40	100	20	N/A	N/A	Dry, -10 to +40
OSE-PO-0501	External	120-347	PIR	15-40	100	15	3 000	OSI-FSIR-100	Dry, 0 to +40
OSE-PO-0502	External	120-347	PIR	15-40	100	15	3 000	N/A	Dry, 0 to +40
OSE-PO-0701	External	120-277	PIR	20	100	15	N/A	N/A	Wet, -40 to +40
OSE-PO-0801	External	347	PIR	20	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

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 ¹	Location ² (°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 ¹	Location ² (°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 To be ordered separately.

² 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

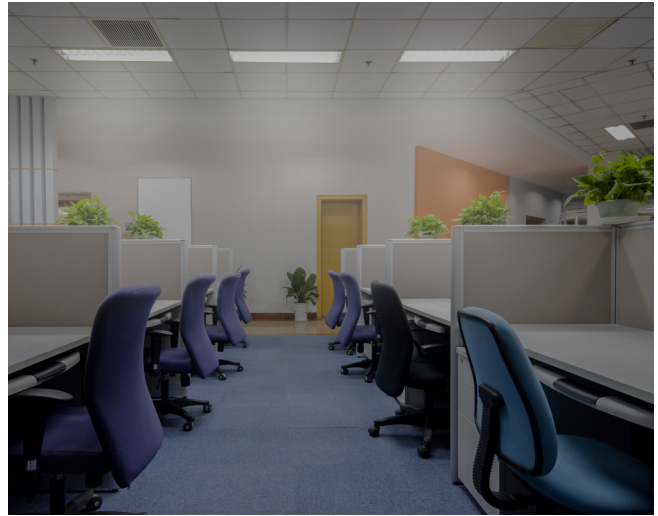
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

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 luminaire, 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 1 462 - 1 573 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 Efficacy, 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.

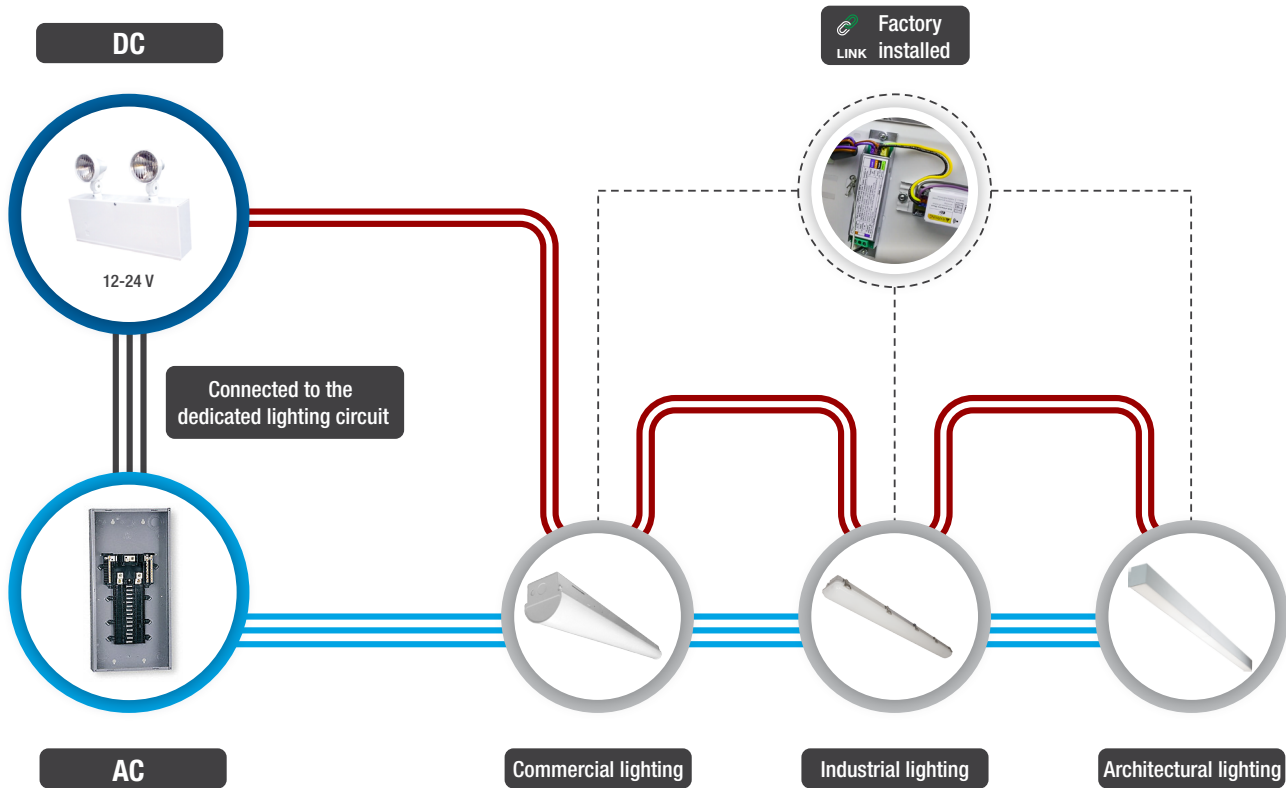
The unit shall be Stanpro model: SL_ _____

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LINK

NORMALLY ON EMERGENCY REMOTE LUMINAIRE

LINK Wiring Diagram



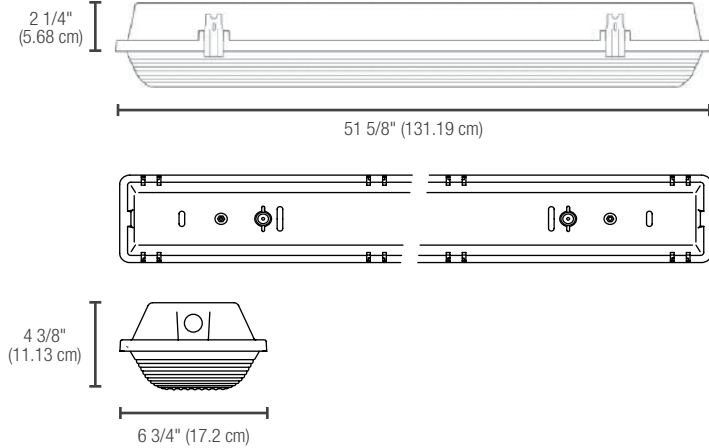
LEGEND

- AC wires
- Connected to the dedicated lighting circuit
- DC wires
- LINK factory installed

Emergency mode	Spacing
VN4-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.

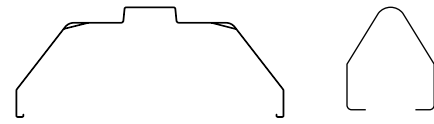
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DIMENSIONS



CEILING MOUNTING BRACKETS

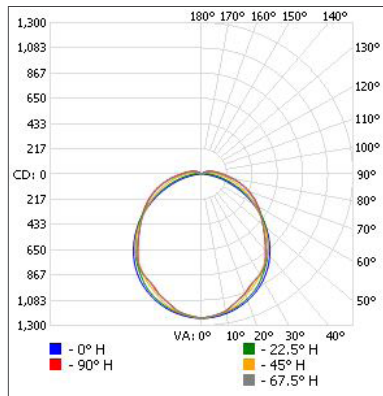
BAIL BRACKETS



PHOTOMETRIC DATA¹

VN4-LS1B-80-(A/H/W)/40K • 3 859 lm

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	934.2	24.2
0-40	1 529.2	39.6
0-60	2 698.1	69.9
60-90	949.4	24.6
70-100	604.0	24.6
90-120	192.6	5
0-90	3 647.4	94.5
90-180	211.7	5.5
0-180	3 859.1	100

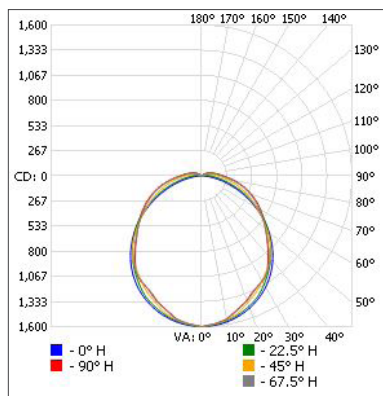
Illuminance at a distance

Center beam fc		Beam width	
1.7'	428	4.9'	4.9'
3.3'	114	9.5'	9.6'
5.0'	49.5	14.4'	14.5'
6.7'	27.6	19.3'	19.4'
8.3'	18.0	23.9'	24.0'
10.0'	12.4	28.8'	28.9'

■ Vert. spread: 110.4°
 ■ Horiz. spread: 110.7°

VN4-LS2B-80-(A/H/W)/40K • 4 986 lm

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	1 206.9	24.2
0-40	1 975.7	39.6
0-60	3 485.5	69.9
60-90	1 226.5	24.6
70-100	780.4	15.7
90-120	248.8	5
0-90	4 712.4	94.5
90-180	273.5	5.5
0-180	4 985.9	100

Illuminance at a distance

Center beam fc		Beam width	
1.7'	553	4.9'	4.9'
3.3'	147	9.5'	9.6'
5.0'	63.9	14.4'	14.5'
6.7'	35.6	19.3'	19.4'
8.3'	23.2	23.9'	24.0'
10.0'	16.0	28.8'	28.9'

■ Vert. spread: 110.4°
 ■ Horiz. spread: 110.7°

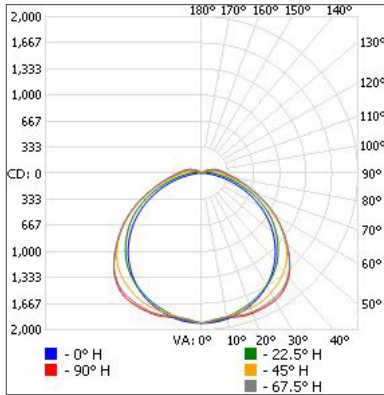
¹ Complete IES files available on our website.

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PHOTOMETRIC DATA¹

VN4-LS3B-80-(A/H/W)/40K • 6 947 lm

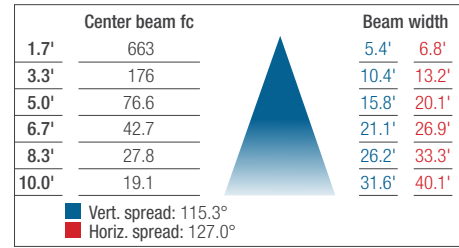
Polar candela distribution



Zonal lumen summary

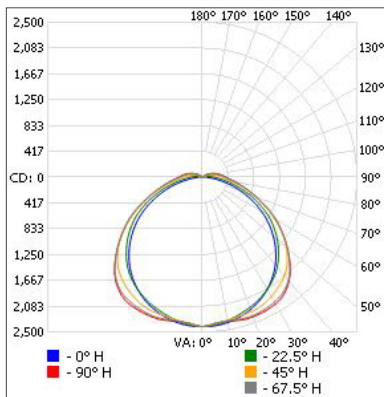
Zone	Lumens	% Fixture
0-30	1 538.2	22.1
0-40	2 600.7	37.4
0-60	4 819.5	69.4
60-90	1 733.0	24.9
70-100	1 081.2	15.6
90-120	363.1	5.2
0-90	6 552.5	94.3
90-180	394.7	5.7
0-180	6 947.2	100

Illuminance at a distance



VN4-LS4B-80-(A/H/W)/40K • 8 758 lm

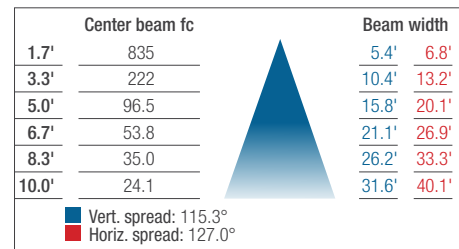
Polar candela distribution



Zonal lumen summary

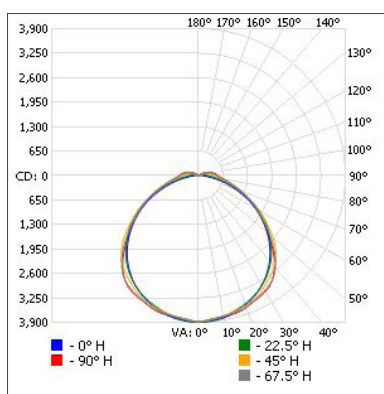
Zone	Lumens	% Fixture
0-30	1 939.2	22.1
0-40	3 278.6	37.4
0-60	6 075.7	69.4
60-90	2 184.7	24.9
70-100	1 363.1	15.6
90-120	457.8	5.2
0-90	8 260.4	94.3
90-180	497.6	5.7
0-180	8 757.9	100

Illuminance at a distance



VN4-LS5B-80-(A/H/W)/40K • 12 879 lm

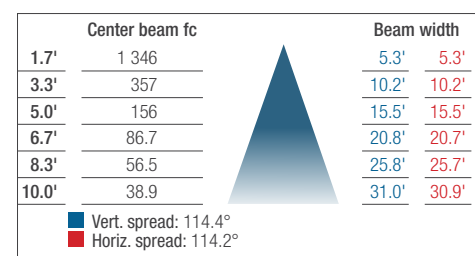
Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	3 072.2	23.9
0-40	5 128.7	39.8
0-60	9 212.5	71.5
60-90	2 963.2	23
70-100	1 826.6	14.2
90-120	646.1	5
0-90	12 175.8	94.5
90-180	703.3	5.5
0-180	12 879.1	100

Illuminance at a distance



¹ Complete IES files available on our website.

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