

Project: _____

Type: _____

Drawn by: _____ Catalogue #: _____

Date: _____

REC4-L SERIES

4" LED DOWNLIGHT

With Integrated COB and Driver
Optional Emergency Remote

The 4" LED downlight series is developed with an integrated COB and built in driver with a choice of two lumen options. This fixture is ideal for commercial and residential use, proposing a variety of trim selections and beam angles.

FEATURES AND SPECIFICATIONS

• Construction

Housing

Housings are constructed of heavy duty galvanized steel with built-in thermal protection. Vertically adjustable to accommodate up to a 1-1/4" ceiling thickness for the new construction housing.

- Remodeler housing contains self-positioning screw in mounting system that allows for secure installation. The screws are positioned at an angle to assure ease of service.
- Non-IC housing complete with pre-installed hanger bars adjustable from 13" to 26" span with built-in spike and T-bar clips.
- IC housing complete with pre-installed hanger bars adjustable to 13" to 26" with built-in spike and T-bar clips.

Trims

Trims constructed with cold rolled steel with stainless steel clips. A variety of trim styles and colors are available for your design needs. Rotation angle 26°.

Heatsink

Extruded aluminum heatsink to maximize heat dissipation and promote long life.

• Installation

The self-positioning screw-in mounting system allows for an easy, fast and secure installation.

• Electrical

All housings are equipped with "quick connect" wire connectors that allow easy and rapid connections of the fixture to the main power supply.

LED

A variety of color temperatures: available in 2 700, 3 000, 3 500, and 4 000 K, with a choice of 80+ or 90+ CRI. Over 71% lumen maintenance expected at 50 000 hours.

MacAdam Steps

Color consistency within 3 MacAdam steps (SDCM).

Driver

- 9 W or 13 W, 120, 277 or 347 V
- Dimmable with line voltage LE + TE dimmers
- 0-10 V dimming standard
- Operating temperature:
 - 40°C to 50°C (-40°F to 122°F)

Beam Angles

Multiple beam angles available to meet your project requirements:

- Spot (19°)
- Medium (24°)
- Flood (43°)

• Optional Emergency Lighting

LINK Normally ON Emergency Remote LED Downlight

- Consuming 11 W, 12 -24 V DC
- 200 mA constant current
- Delivers 898 - 1 020 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 Downlight 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

- Photometric testing in compliance with IES LM 79-80
- Air-tight as per ASTM-E283 standard
- Meets requirements of ICES-005
- cCSAus rated for wet and damp location

OVERVIEW

Light source	LED
Watts (W)	9 - 13
Lumen output (lm) ¹	1 152 - 1 593
Efficacy (lm/W)	123 - 128
Color temperature (K)	2 700, 3 000, 3 500, 4 000
CRI	80+ , 90+
Weight (lbs)	1.968

¹ Lumen information is based on medium beam reflector and 3 000 K color temperature.



Integrated COB and driver



¹ 5 year warranty for the LINK normally ON remote.

² Only with REC407-L trim.

ORDERING GUIDE - HOUSINGS

Housing ¹	Lumen package (lm)	Volts (V AC)	Options
REC4 - Non IC	LS2 - 1 152	A - 120 ²	DIM1 - 0-10 V DC dimming
REC4R - Remodeler	LS3 - 1 593	E - 277 ³	EL - LINK Normally ON emergency remote ^{4,5}
REC4IC - IC		H - 347 ³	

¹ Please note each housing and trim should correspond to a specific lumen package. For more information please see table below.

² A- 120 V comes standard with line voltage dimming unless DIM1 is chosen.

³ E- 277 V and H- 347 V come standard with DIM1 option.

⁴ Not available with REC4 - Non IC, only available with REC4R - Remodeler and REC4IC - IC.

⁵ When in emergency mode, luminaire only consumes 11 W.

For emergency lighting spacing, please see page 5.

ORDERING GUIDE - TRIMS

Trims	Lumen package ² (lm)	CRI	Finish	Color temp. (K)	Beam angles ⁴ (°)
REC401	LS2 - 1 152	80 - 80+	CL-WH - Clear - White	27K - 2 700	S - Spot (19)
REC402	LS3 - 1 593	90 - 90+	BK - Black	30K - 3 000	M - Medium (24)
			BZ - Bronze	35K - 3 500 ³	F - Flood (43)
			SC - Satin chrome	40K - 4 000	
			WH - White		
REC403			BK-SC - Black - Satin chrome		
			WH-WH - White - White		
REC407 ¹			SC - Satin chrome		
			WH - White		
REC408			WH - White		

¹ Wet location.

² Lumen is based on the medium beam angle at 3 000 K. Please refer to IES files or below lumen tables for more information.

³ 3 500K is only available with 80+ CRI.

⁴ Refer to the photometrics chart for more details.

LINK TECHNICAL SPECIFICATION TABLE

Series	CRI	Lumen package	Watts (W)	LINK Watts (W)	Color temperature (K)	Beam angles (°)	LINK Lumen output (lm)
REC4-L	80+	LS2	7.5	11	3 000	S - SPOT (19)	989
		LS3	11.5			S - SPOT (19)	898
		LS2	7.5			M - MEDIUM (24)	1020
		LS3	11.5			M - MEDIUM (24)	946
		LS2	7.5			F - FLOOD (43)	988
		LS3	11.5			F - FLOOD (43)	905

TRIMS

REC401-L

REGRESSED ROUND GIMBAL



Clear - White

REC402-L

GIMBAL



Black

REC403-L

REGRESSED SQUARE GIMBAL



Black - Satin chrome

REC407-L

SHOWER TRIM



White

REC408-L

SLOT APERTURE (WALL WASHER)



White



Bronze White



White - White



Satin chrome



Satin chrome

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.

TECHNICAL SPECIFICATION TABLE

Lumen package	Watts (W)	Volts (V AC)	2 700 K		3 000 K		3 500 K		4 000 K		CRI	Life L70 (hrs)	Beam angle (°)	Power factor	THD (%)
			Lumen (lm)	Efficacy (lm/W)											
LS2	9	120	1 093	121	1 152	128	1 182	131	1 204	134	80+	50 000	Medium (24)	>0.9	<20
LS3	15	120	1 511	101	1 593	106	1 635	109	1 437	96	80+	50 000	Medium (24)	>0.9	<20

COMPATIBLE DIMMERS¹

Brand	0-10 V dimmers	Trailing edge dimmers	Leading edge dimmers
Leviton	DD 710	IPE04-1LZ, VZE06-1LX, 6615-POT	6602-X, 6681-X, 6683-X, 6684-X, 700-X, 705-X, 6633, 6674, IPI06-1LZ
Lutron	Diva DVSCTV Nova NTSTV DV	NTELV-600-XX, SELV-303P, MAELV-600-XX, DVELV-300P-XX, SEIV-300P-XX	SLV-600X, S2-LX, GL-600H, NFTU-5A, DVLV-600P
Philips		SR400RPC120	
Cooper			9530XXX
Legrand	RH4FBL3PTC		

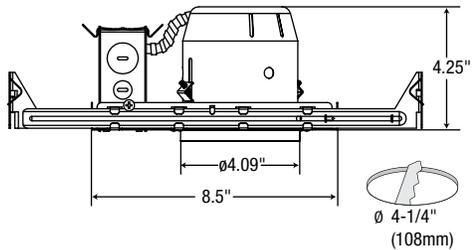
¹ Dimming range: 1%-100%.

Note: The above table shows dimmers that have been tested and have demonstrated proper operation under normal conditions. Each installation being unique, various factors such as load, common neutrals or other electrical products on the circuit can, in certain instances, cause variance in system performance. Read and comply to the dimmer installation instructions. Consult dimming system manufacturer for additional support in operation. Standard recommends to use dimmers designed to work with LED products. Older dimmers designed for incandescent products may cause erratic operation. Some dimmers may require more than one product for stable operation. The maximum number of products is determined by the dimmer wattage rating with LEDs. Be careful, these dimmers have different ratings depending on the product type. Again, refer to the dimmer installation instructions.

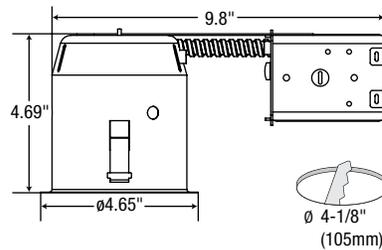
DIMENSIONS

HOUSINGS

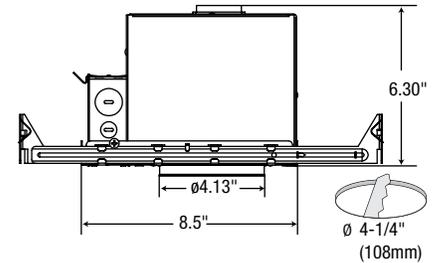
REC4-L
NON-IC FRAME-IN KIT



REC4R-L
REMODELER

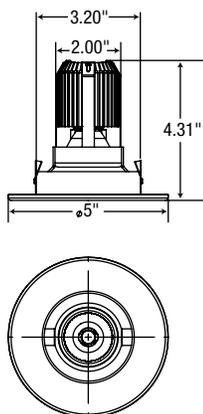


REC4IC-L
IC FRAME IN KIT

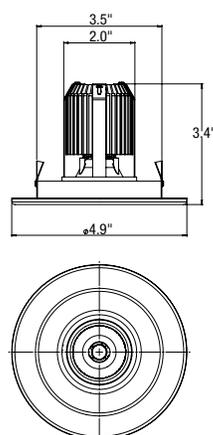


TRIMS

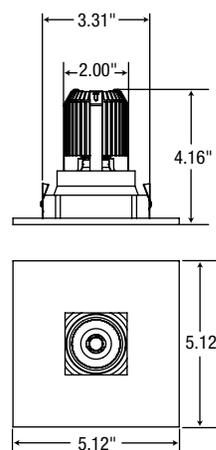
REC401-L



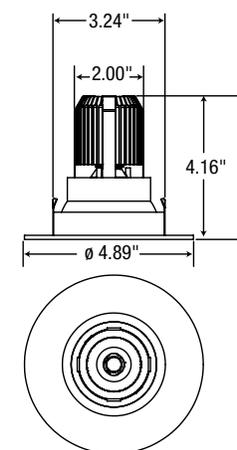
REC402-L & REC408-L



REC403-L



REC407-L



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.

LINK

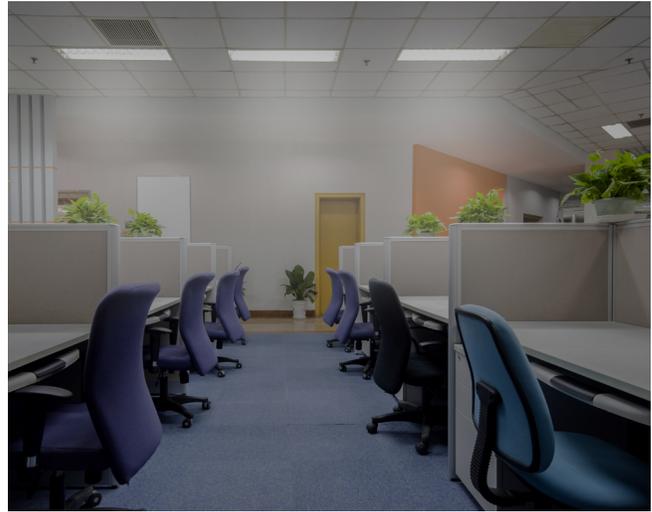
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

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 _____ in, LED downlight, 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 898 - 1 020 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_ _____

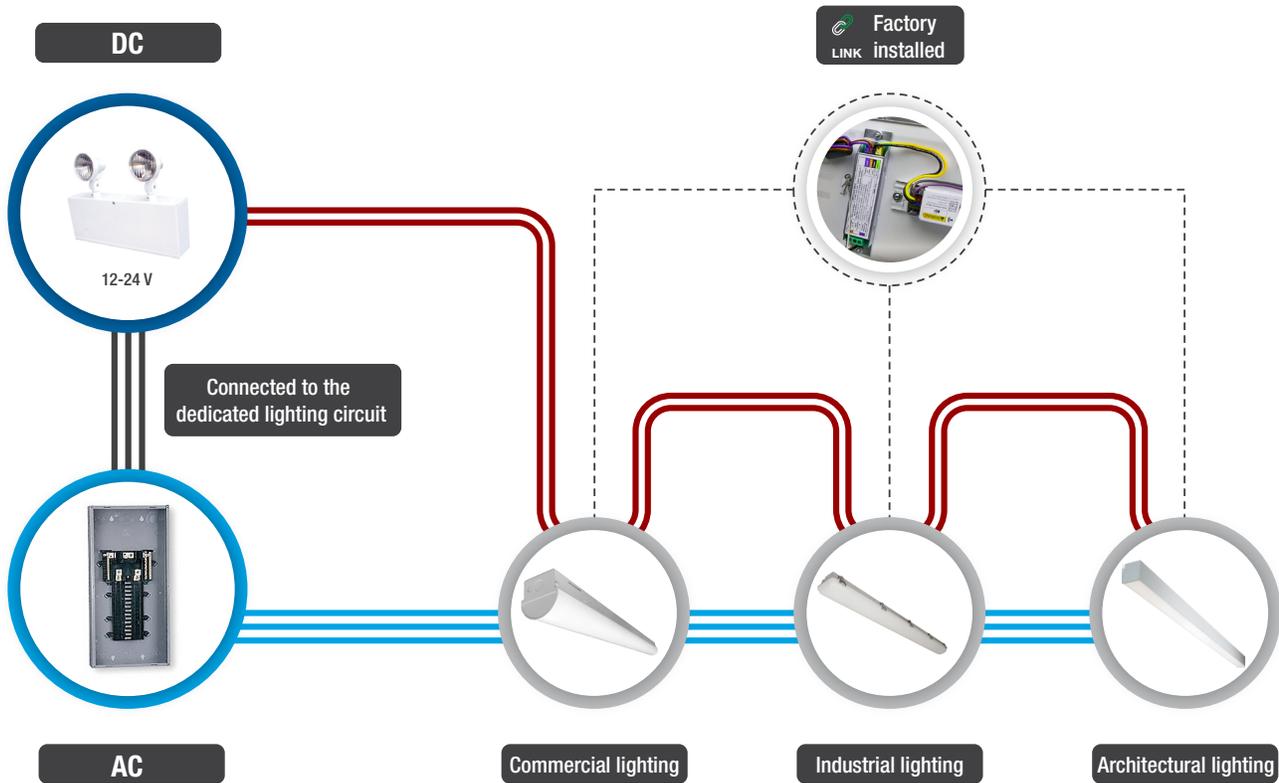
Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions. All products are subject to change or may be discontinued any time without notice.

LINK

NORMALLY ON EMERGENCY REMOTE LUMINAIRE

LINK Wiring Diagram

LINK
remote normally ON
emergency lighting
luminaire



LEGEND

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

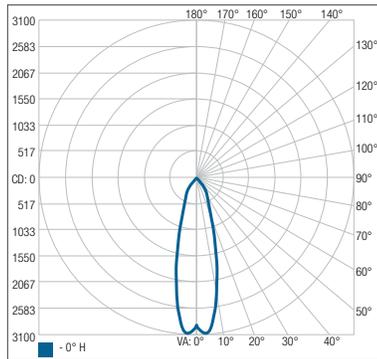
Emergency mode	Spacing
REC4-L	Average spacing for 1 out of every 3 luminaires, normally ON in the path of egress, when at 8, 10, or 12 foot mounting heights.

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.

GENERAL LIGHTING PHOTOMETRIC DATA¹

REC4-LS28030K/S • 1 117.8 lm • 80 CRI

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	916.0	81.9%
0-40	1 089.8	97.5%
0-60	1 117.8	100%
60-90	0	0%
70-100	0	0%
90-120	0	0%
0-90	1 117.8	100%
90-180	0	0%
0-180	1 117.8	100%

Illuminance at a distance

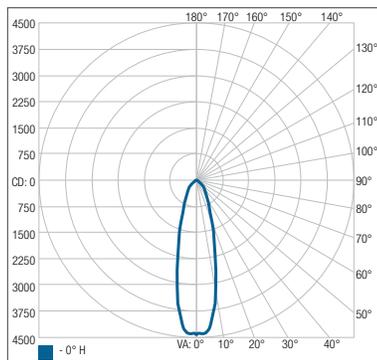
	Center beam fc	Beam width
1.7'	1 008 fc	0.9' 0.9'
3.3'	267 fc	1.7' 1.7'
5.0'	116 fc	2.5' 2.5'
6.7'	64.9 fc	3.4' 3.4'
8.3'	42.3 fc	4.2' 4.2'
10.0'	29.1 fc	5.1' 5.1'

Vert. spread: 28.4°
Horiz. spread: 28.5°

Input wattage	8.54
Total luminaire lumens	1 117.8
Lumens per watt	130.9
Beam angle	Spot 19°

REC4-LS38030K/S • 1 513.8 lm • 90 CRI

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	1 243.7	82.2%
0-40	1 477.6	97.6%
0-60	1 513.8	100%
60-90	0	0%
70-100	0	0%
90-120	0	0%
0-90	1 513.8	100%
90-180	0	0%
0-180	1 513.8	100%

Illuminance at a distance

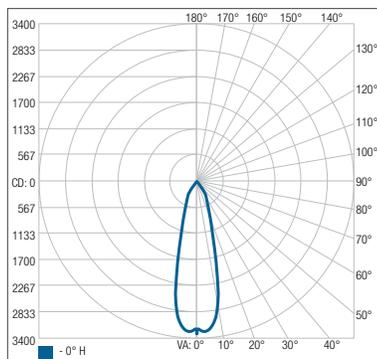
	Center beam fc	Beam width
1.7'	1 549 fc	0.8'
3.3'	411 fc	1.6'
5.0'	179 fc	2.4'
6.7'	99.7 fc	3.2'
8.3'	65.0 fc	4.0'
10.0'	44.8 fc	4.8'

Beam spread: 27.2°

Input wattage	15.02
Total luminaire lumens	1 513.8
Lumens per watt	100.78
Beam angle	Spot 19°

REC4-LS28030K/M • 1 152.4 lm • 80 CRI

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	939.4	81.5%
0-40	1 127.9	97.9%
0-60	1 142.4	99.1%
60-90	9.9	0.9%
70-100	4.0	0.3%
90-120	0	0%
0-90	1 152.4	100%
90-180	0	0%
0-180	1 152.4	100%

Illuminance at a distance

	Center beam fc	Beam width
1.7'	1 145 fc	0.8'
3.3'	304 fc	1.6'
5.0'	132 fc	2.5'
6.7'	73.7 fc	3.3'
8.3'	48 fc	4.1'
10.0'	33.1 fc	5.0'

Beam spread: 28.1°

Input wattage	8.58
Total luminaire lumens	1 152.4
Lumens per watt	134.3
Beam angle	Medium 24°

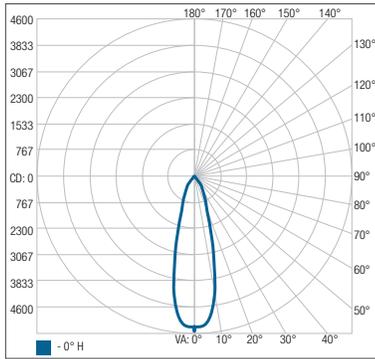
¹ Complete IES files available on our website.

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.

GENERAL LIGHTING PHOTOMETRIC DATA¹ (Continued)

REC4-LS38030K/M • 1 593.4 lm • 90 CRI

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	1 288.5	80.9%
0-40	1 559.3	97.9%
0-60	1 579.6	99.1%
60-90	13.8	0.9%
70-100	5.9	0.4%
90-120	0	0%
0-90	1 593.4	100%
90-180	0	0%
0-180	1 593.4	100%

Illuminance at a distance

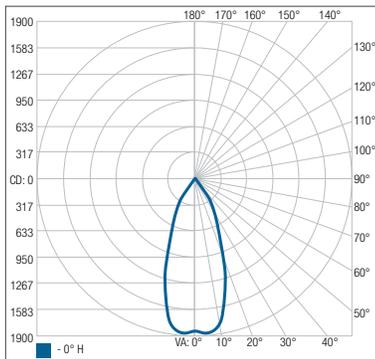
	Center beam fc	Beam width
1.7'	1 570 fc	0.8'
3.3'	417 fc	1.6'
5.0'	182 fc	2.4'
6.7'	101 fc	3.2'
8.3'	65.9 fc	4.0'
10.0'	45.4 fc	4.8'

■ Beam spread: 27.9°

Input wattage	15.03
Total luminaire lumens	1 593.4
Lumens per watt	106
Beam angle	Medium 24°

REC4-LS28030K/F • 1 116.1 lm • 80 CRI

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	866.5	77.6%
0-40	1 089.1	97.6%
0-60	1 106.1	99.1%
60-90	10.0	0.9%
70-100	5.0	0.5%
90-120	0	0%
0-90	1 116.1	100%
90-180	0	0%
0-180	1 116.1	100%

Illuminance at a distance

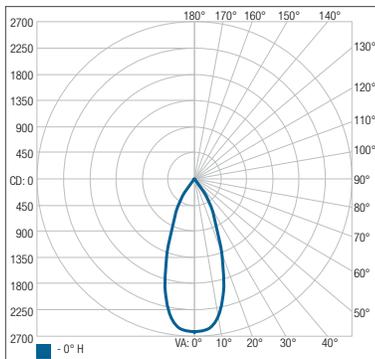
	Center beam fc	Beam width
1.7'	641 fc	1.3' 1.3'
3.3'	170 fc	2.5' 2.5'
5.0'	74.1 fc	3.7' 3.8'
6.7'	41.3 fc	5.0' 5.1'
8.3'	26.9 fc	6.2' 6.3'
10.0'	18.5 fc	7.5' 7.6'

■ Vert. spread: 40.9°
■ Horiz. spread: 41.5°

Input wattage	8.55
Total luminaire lumens	1 116.1
Lumens per watt	130.5
Beam angle	Flood 43°

REC4-LS38030K/F • 1 525.3 lm • 90 CRI

Polar candela distribution



Zonal lumen summary

Zone	Lumens	% Fixture
0-30	1 190.4	78%
0-40	1 487.8	97.5%
0-60	1 509.8	99%
60-90	14.2	0.9%
70-100	8.3	0.5%
90-120	1.4	0.1%
0-90	1 524.0	99.9%
90-180	0	0.1%
0-180	1 525.3	100%

Illuminance at a distance

	Center beam fc	Beam width
1.7'	911 fc	1.3'
3.3'	242 fc	2.5'
5.0'	105 fc	3.8'
6.7'	58.7 fc	5.0'
8.3'	38.2 fc	6.2'
10.0'	26.3 fc	7.5'

■ Beam spread: 41.1°

Input wattage	15.03
Total luminaire lumens	1 525.3
Lumens per watt	101.48
Beam angle	Flood 43°

¹ Complete IES files available on our website.

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.