

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 | |
| REC403 | | | WH - White | | |
| | | | BK-SC - Black - Satin chrome | | |
| REC407 ¹ | | | WH-WH - White - White | | |
| | | | SC - Satin chrome | | |
| REC408 | | | WH - White | | |
| | | | 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

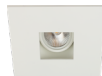
SLOT APERTURE (WALL WASHER)



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) | Lumen (lm) | Efficacy (lm/W) | Lumen (lm) | Efficacy (lm/W) | 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 DVSCVT 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%.

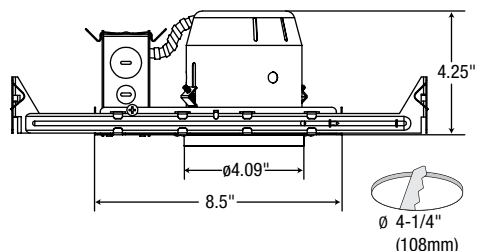
Note: The above table shows dimmers that have been tested and have demonstrated proper operation under normal conditions. Each installation being unique, various factors such as load, common neutrals or other electrical products on the circuit can, in certain instances, cause variance in system performance. 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

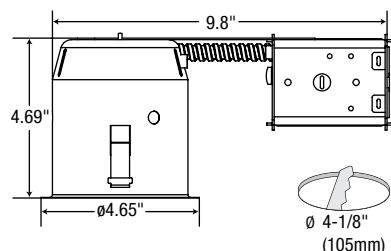
REC4-L

NON-IC FRAME-IN KIT



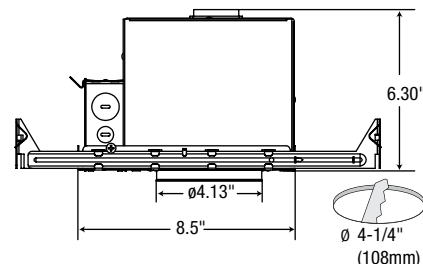
REC4R-L

REMODELER



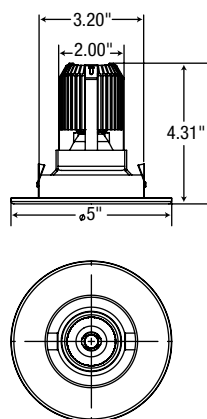
REC4IC-L

IC FRAME IN KIT

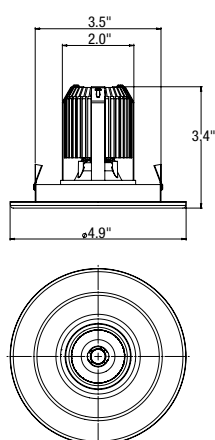


TRIMS

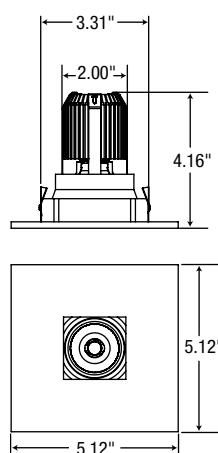
REC401-L



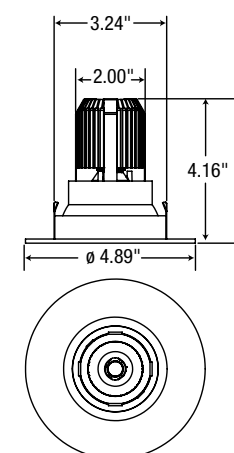
REC402-L & REC408-L



REC403-L



REC407-L



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LINK

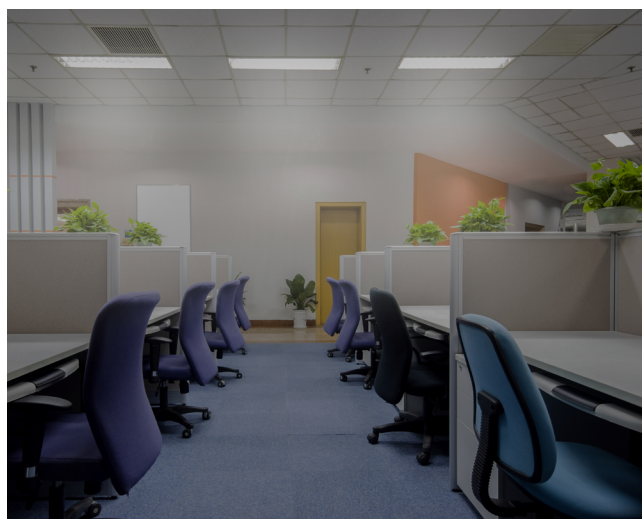
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

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 _____ 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.

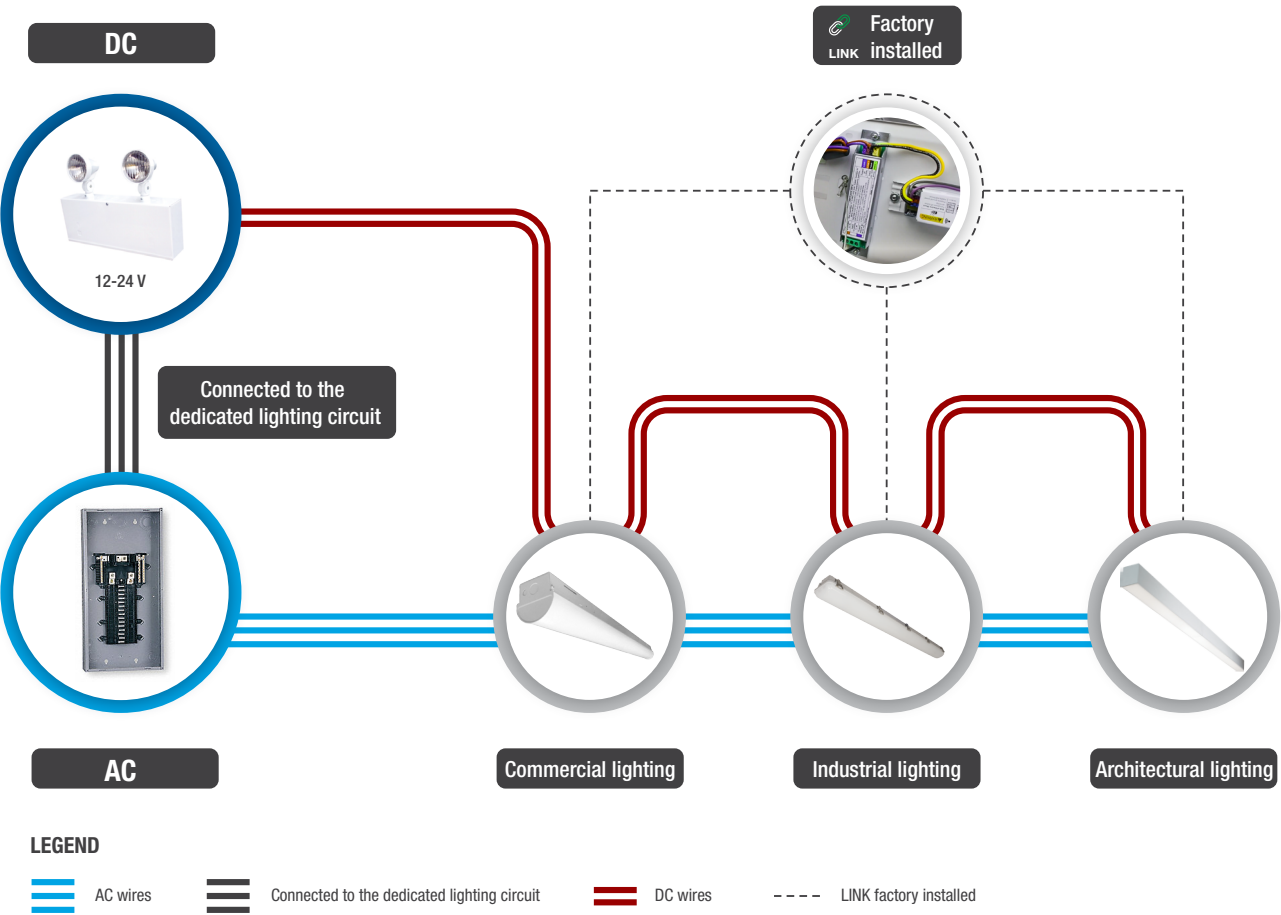
The unit shall be Stanpro model: SL_ _____

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LINK
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

LINK Wiring Diagram

LINK
remote
normally ON
emergency lighting
luminaire



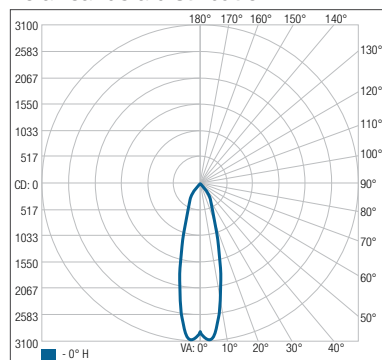
| Emergency mode | Spacing |
|----------------|---|
| REC4-L | Average spacing for 1 out of every 3 luminaires, normally ON in the path of egress, when at 8, 10, or 12 foot mounting heights. |

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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% |

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

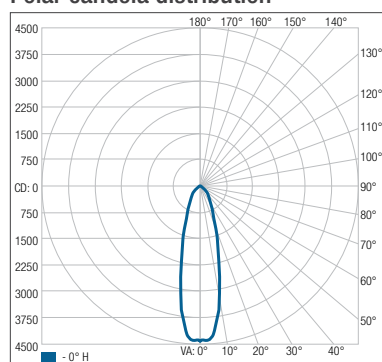
Illuminance at a distance

| | 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°

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% |

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

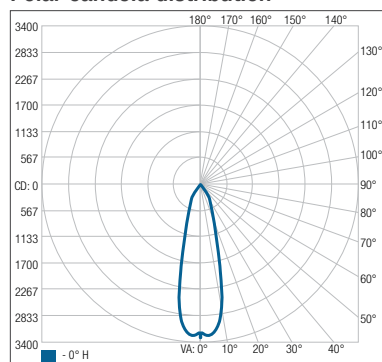
Illuminance at a distance

| | 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°

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% |

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

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°

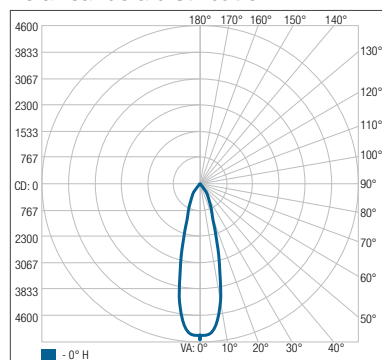
¹ Complete IES files available on our website.

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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% |

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

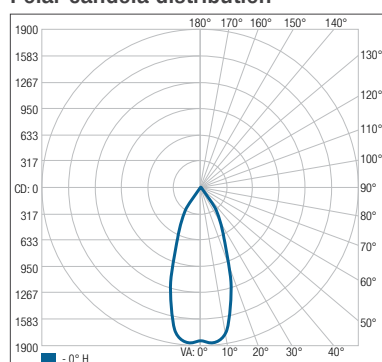
Illuminance at a distance

| | 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°

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% |

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

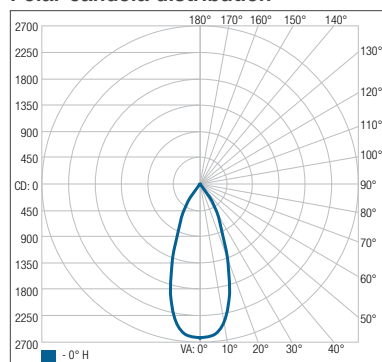
Illuminance at a distance

| | 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°

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% |

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

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°

¹ Complete IES files available on our website.

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