

Project: \_\_\_\_\_

Type: \_\_\_\_\_

Drawn by: \_\_\_\_\_ Catalogue #: \_\_\_\_\_

Date: \_\_\_\_\_



# AR6

## ARCHITECTURAL LED DOWNLIGHT 6"

### Optional Emergency Remote

Our architectural 6 inch LED downlight is available for new construction non-IC and remodeler in all commercial lighting applications. This specification grade LED downlight offers high versatility, can reach up to 5 000 lumens and allows to choose the right amount of light required as well as the color temperature that will bring out the best in any space. The AR6 comes in a variety of lumen packages, color temperatures, finishes and beam angles to suit all needs.

### FEATURES AND SPECIFICATIONS

**• Construction**

**Finishing**

- Smooth baffle and trim finish available in silver haze, matte white and matte black
- Lenses are available in clear or frosted and are constructed with glass material

**Mounting**

- 6 1/2" - 6 5/8" cutting hole
- Non-IC frame-in kit and remodeler installation options
- Housing constructed of heavy duty galvanized steel with built-in thermal protection

**Optics**

- High quality optic and reflector design
- Spot (15° to 21.5°)
- Narrow Flood (24° to 40.5°)
- Flood (38° to 44.2°)
- Wide (60° to 65°)

**• Technical specifications**

- 19 W to 51 W, 120 V or 347 V
- 0-10V dimming standard
- LED chip binning 2-3 step MacAdam Ellipse to ensure color consistency
- Color temperature 3 000, 3 500 and 4 000 K
- Estimated lifespan of 36 000 hours to L70
- Operating temperature:
  - 40°C to 25°C (-40°F to 77°F)

**• Optional Emergency Lighting**

LINK Normally On Emergency Remote Architectural Downlight

- Consuming 11 W, 12 - 24 VDC
- 200 mA constant current
- Delivers 603 - 674 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 architectural 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 Lightning Compliances**

- cCSAus rated for wet location
- Meets requirements of ICES-005
- Air-tight as per ASTM-E283 standard



<sup>1</sup> 5 year warranty for the LINK module.

### OVERVIEW

Light source	LED
Watts (W)	19 - 51
Lumen output (lm)	1 964 - 5 281
Efficacy (lm/W)	100 - 108
Color temperature (K)	3 000, 3 500, 4 000
CRI	80+
Weight (lbs)	4 - 6.12

**ORDERING GUIDE - TRIMS**

Series	Lumen package (lm) <sup>1</sup>	CRI <sup>2</sup>	Baffle finish	Lens finish	Color temp. (K) <sup>2</sup>	Beam angles
AR6	18 - 1 800 25 - 2 500 34 - 3 400 50 - 5 000	80 - 80+	HZ - Silver haze WH - Matte white BK - Matte black	C - Clear lens <sup>3</sup> F - Frosted lens <sup>4</sup>	30K - 3 000 35K - 3 500 40K - 4 000	S - Spot <sup>5</sup> N - Narrow flood F - Flood W - Wide

<sup>1</sup> Lumen packages based on photometry testing with frosted lens

<sup>2</sup> For more options, please consult factory.

<sup>3</sup> Lumen increase of 10% to be expected.

<sup>4</sup> F - Frosted lens is not available with the S - Spot beam angle.

<sup>5</sup> S - Spot beam angle is not available with lumen packages 50 – 5000.

**ORDERING GUIDE - HOUSINGS**

Series	Lumen package (lm)	Volts (V)	Options
AR6 AR6R	18 - 1 800 25 - 2 500 34 - 3 400 50 - 5 000	A - 120 H - 347	EL - LINK Normally ON emergency remote <sup>1</sup>

<sup>1</sup> When in emergency mode, luminaire only consumes 11 W.

For emergency lighting spacing, please see page 5.

**TECHNICAL SPECIFICATION TABLE**

Lumen package	Watts (W)	Volts (V)	3 000 K		3 500 K		4 000 K		CRI	Life L70 (hrs)	Beam angle (°)	Lens finish	Power factor	THD (%)
			Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)						
18	19	120	1 964	103	2 027	107	2 039	107	80+	36 000	24	Clear	>0.9	<20
25	23	120	2 396	104	2 472	107	2 487	108	80+	36 000	24	Clear	>0.9	<20
34	34	120	3 414	100	3 523	104	3 543	104	80+	36 000	24	Clear	>0.9	<20
50	51	120	5 088	100	5 251	103	5 281	104	80+	36 000	24	Clear	>0.9	<20

**LINK TECHNICAL SPECIFICATION TABLE**

Series	CRI	Lumen package	Watts (W)	LINK Watts (W)	Color temperature (K)	Lens finish	Beam angle (°)	LINK Lumen output (lm)
AR6	80+	18	19	11	3 000	Frosted lens	Narrow	668.28
		25	23					674.07
		34	34					603.89
		50	51					631.27

**COMPATIBLE DIMMERS**

Brand	Model number <sup>1</sup>
Legrand	CD4FBW, WS4FBL3P
Leviton	IP710-DLZ, IP710DLX, CFCS, DS710
Lutron	NOVA NFTV, NOVA T NTSTV, DIVA DVTV, DVSCVT
WATTSTOPPER	ADF-120277

**Dimming range: 1 %-100 %**

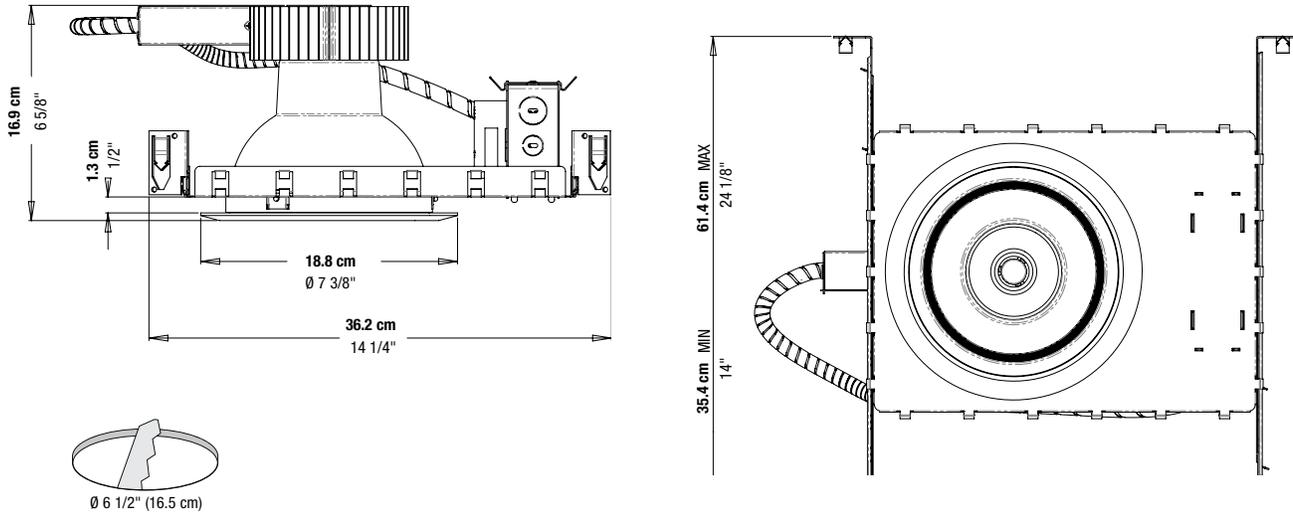
<sup>1</sup> 0-10 V dimmers.

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. Stanpro 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.

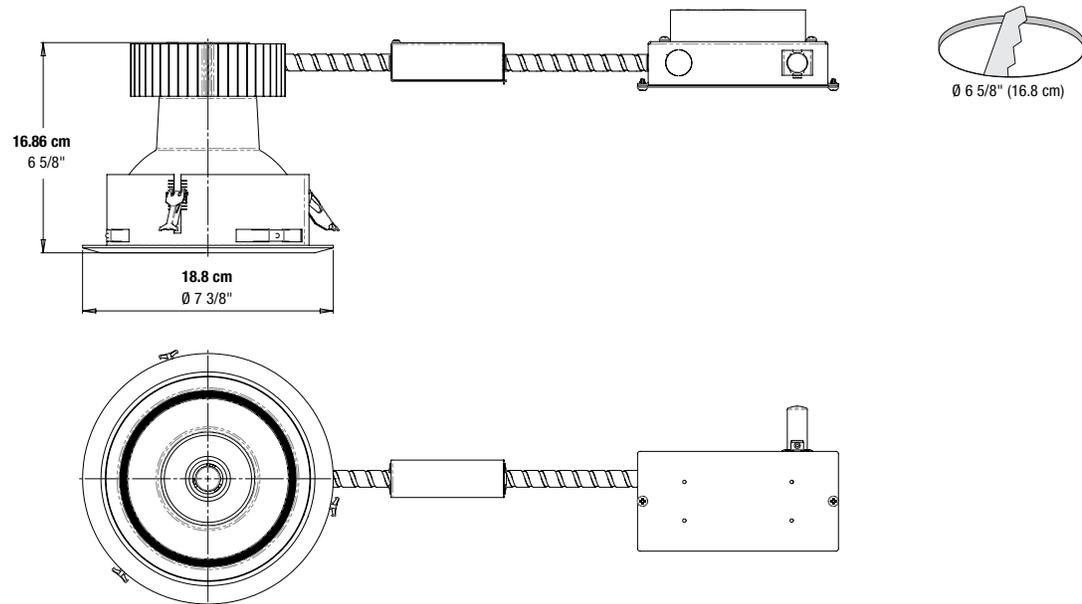
Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions. All products are subject to change or may be discontinued any time without notice.

**DIMENSIONS**

**AR6  
NON-IC FRAME-IN KIT**



**AR6R  
REMODELER**



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# LINK

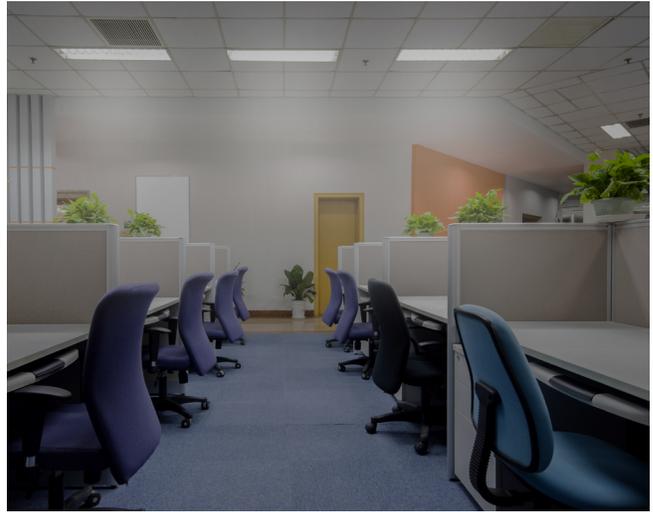
## NORMALLY ON EMERGENCY REMOTE LUMINAIRE

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, architectural 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 1 137 - 2 934 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.

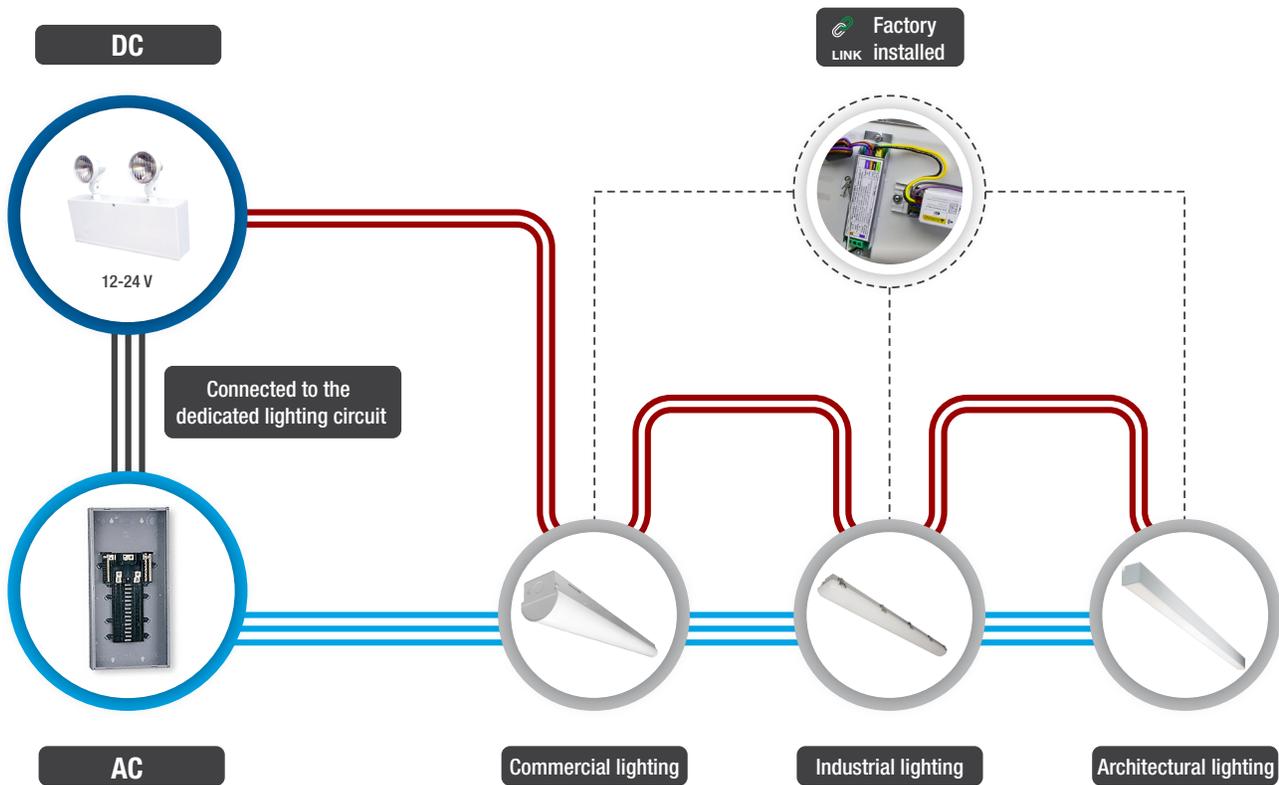
The unit shall be Stanpro model: SL\_ \_\_\_\_\_

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# LINK

## NORMALLY ON EMERGENCY REMOTE LUMINAIRE

### LINK Wiring Diagram



**LEGEND**

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

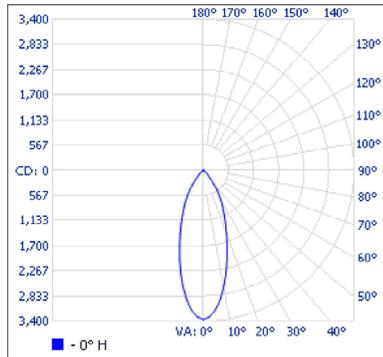
Emergency mode	Spacing
AR6	Average spacing for 1 out of every 3 luminaires, normally ON in the path of egress, when at 8, 10, or 12 foot mounting heights.

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**GENERAL LIGHTING PHOTOMETRIC DATA<sup>1</sup>**

**AR6-1880-XX-F-30K-N • 1 864.5 lm**

**Polar candela distribution**



**Zonal lumen summary**

Zone	Lumens	% Fixture
0-30	1 369.0	73.4%
0-40	1 695.0	90.9%
0-60	1 852.9	99.4%
60-90	11.7	0.6%
70-100	5.3	0.3%
90-120	0	0%
0-90	1 864.5	100%
90-180	0	0%
0-180	1 864.5	100%

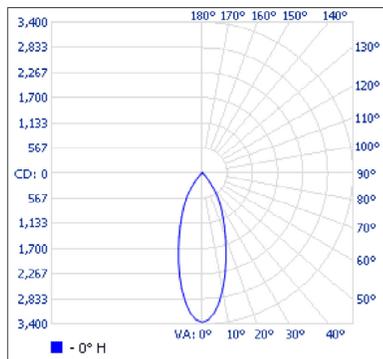
**Illuminance at a distance**

Center beam fc	Beam width
1.7'	1.1'
3.3'	2.2'
5.0'	3.4'
6.7'	4.5'
8.3'	5.6'
10.0'	6.7'

Vert. spread: 37.1°

**AR6-2580-XX-F-30K-N • 2 409.8 lm**

**Polar candela distribution**



**Zonal lumen summary**

Zone	Lumens	% Fixture
0-30	1 772.0	73.5%
0-40	2 193.2	91%
0-60	2 395.9	99.4%
60-90	13.9	0.6%
70-100	6.1	0.3%
90-120	0	0%
0-90	2 409.8	100%
90-180	0	0%
0-180	2 409.8	100%

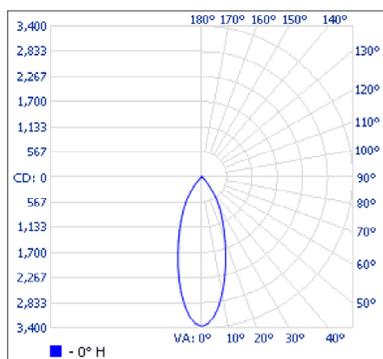
**Illuminance at a distance**

Center beam fc	Beam width
1.7'	1.1'
3.3'	2.2'
5.0'	3.3'
6.7'	4.5'
8.3'	5.5'
10.0'	6.7'

Vert. spread: 36.9°

**AR6-3480-XX-F-30K-N • 3 321.4 lm**

**Polar candela distribution**



**Zonal lumen summary**

Zone	Lumens	% Fixture
0-30	2 432.0	73.2%
0-40	3 020.2	90.9%
0-60	3 299.6	99.3%
60-90	21.8	0.7%
70-100	9.8	0.3%
90-120	0	0%
0-90	3 321.4	100%
90-180	0	0%
0-180	3 321.4	100%

**Illuminance at a distance**

Center beam fc	Beam width
1.7'	1.2'
3.3'	2.4'
5.0'	3.6'
6.7'	4.8'
8.3'	6.0'
10.0'	7.2'

Vert. spread: 39.5°

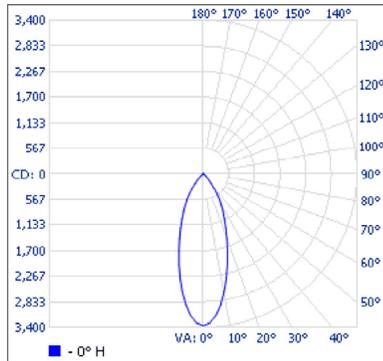
<sup>1</sup> Complete IES files available on our website.

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**GENERAL LIGHTING PHOTOMETRIC DATA<sup>1</sup>**

AR6-5080-XX-F-30K-N • 4 928.8 lm

**Polar candela distribution**



**Zonal lumen summary**

Zone	Lumens	% Fixture
0-30	3 513.6	71.3%
0-40	4 442.1	90.1%
0-60	4 896.6	99.3%
60-90	32.2	0.7%
70-100	12.2	0.2%
90-120	0	0%
0-90	4 928.8	100%
90-180	0	0%
0-180	4 928.8	100%

**Illuminance at a distance**

	Center beam fc	Beam width
1.7'	2 746	1.3'
3.3'	729	2.4'
5.0'	317	3.7'
6.7'	177	4.9'
8.3'	115	6.1'
10.0'	79.4	7.4'

■ Vert. spread: 40.5°

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