

# A186


## ARCHITECTURAL LED DOWNLIGHT 6"


### OPTIONAL EMERGENCY REMOTE

Our architectural 6 inch LED downlight is available for new construction non-IC and remodeler. 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 A186 comes in a variety of lumen packages, color temperatures, finishes and beam angles to suit all needs.



OVERVIEW			
LIGHT SOURCE	LED	COLOR TEMPERATURE [K]	3 000, 3 500, 4 000
WATTS [W]	19 - 51	CRI	80+
LUMEN OUTPUT [LM]	1 964 - 5 281	WEIGHT [LBS]	4 - 6.12
EFFICACY [LM/W]	100 - 108		






BRIDGE

EMERGENCY LIGHTING


LUMINAIRE

REMOTE NORMALLY ON


1




LED




DIMMABLE




WET  
LOCATION



AIRTIGHT



ICES  
005



CUS

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



## FEATURES & 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
- 0-10 V 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

#### BRIDGE Normally On Emergency Remote Architectural Downlight

- Consumes 11 W, 12 - 24 V DC
- 200 mA constant current
- Delivers 603 - 674 lumens in emergency mode
- Ease of maintenance when used with AimLite emergency lighting battery units complete with auto test function
- Complements AimLite's normally ON architectural downlight family
- Patent pending

Please view the **BRIDGE** 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

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

## ORDERING GUIDE - TRIMS

A186						
SERIES	LUMEN PACKAGE <sup>1</sup>	CRI <sup>2</sup>	BAFFLE FINISH	LENS FINISH	COLOR TEMP. [K] <sup>2</sup>	BEAM ANGLES
A186	18 - 1 800 25 - 2 500 34 - 3 400 50 - 5 000	80 - 80+	S - SILVER HAZE W - MATTE WHITE B - MATTE BLACK	C - CLEAR LENS <sup>3</sup> F - FROSTED LENS <sup>4</sup>	30 - 3 000 35 - 3 500 40 - 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

A186			
SERIES	LUMEN PACKAGE	VOLTAGE [V]	OPTIONS
A186 - NON IC A186R - REMODELER	18 - 1 800 25 - 2 500 34 - 3 400 50 - 5 000	4 - 120 8 - 347	EL <sup>1</sup> - BRIDGE 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 6.

## TECHNICAL SPECIFICATION TABLE

LUMEN PACKAGE	WATTS [W]	VOLTS [V AC]	LUMEN OUTPUT [LM]	EFFICACY [LM/W]	CRI	LIFE L70 [HRS]	BEAM ANGLE [°]	LENS FINISH	POWER FACTOR	THD [%]
<b>3 000 K</b>										
18	19	120	1 964	103	80+	36 000	24	CLEAR	>0.9	<20
25	23	120	2 396	104	80+	36 000	24	CLEAR	>0.9	<20
34	34	120	3 414	100	80+	36 000	24	CLEAR	>0.9	<20
50	51	120	5 088	100	80+	36 000	24	CLEAR	>0.9	<20
<b>3 500 K</b>										
18	19	120	2 027	107	80+	36 000	24	CLEAR	>0.9	<20
25	23	120	2 472	107	80+	36 000	24	CLEAR	>0.9	<20
34	34	120	3 523	104	80+	36 000	24	CLEAR	>0.9	<20
50	51	120	5 251	103	80+	36 000	24	CLEAR	>0.9	<20
<b>4 000 K</b>										
18	19	120	2 039	107	80+	36 000	24	CLEAR	>0.9	<20
25	23	120	2 487	108	80+	36 000	24	CLEAR	>0.9	<20
34	34	120	3 543	104	80+	36 000	24	CLEAR	>0.9	<20
50	51	120	5 281	104	80+	36 000	24	CLEAR	>0.9	<20

## BRIDGE TECHNICAL SPECIFICATION TABLE

SERIES	CRI	LUMEN PACKAGE	WATTS [W]	BRIDGE WATTS [W]	COLOR TEMPERATURE [K]	LENS FINISH	BEAM ANGLE (°)	BRIDGE LUMEN OUTPUT [LM]
A186	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
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%

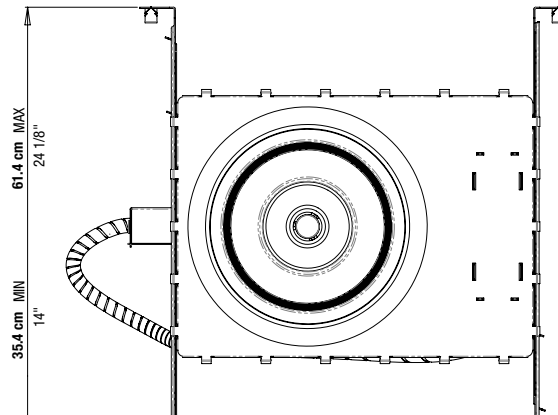
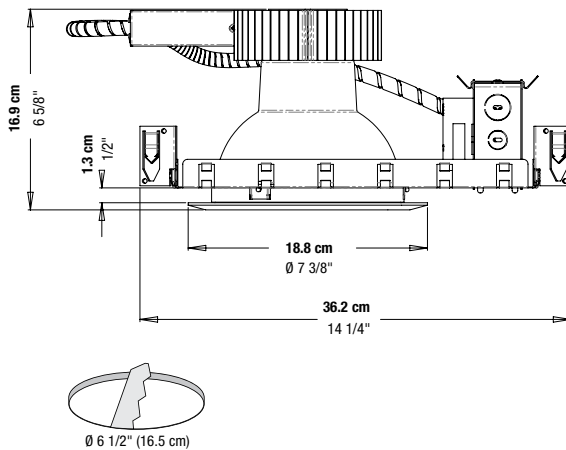
0-10 V DIMMERS.

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. AIMLITE 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 LEOS. BE CAREFUL, THESE DIMMERS HAVE DIFFERENT RATINGS DEPENDING ON THE PRODUCT TYPE. AGAIN, REFER TO THE DIMMER INSTALLATION INSTRUCTIONS.

## DIMENSIONS

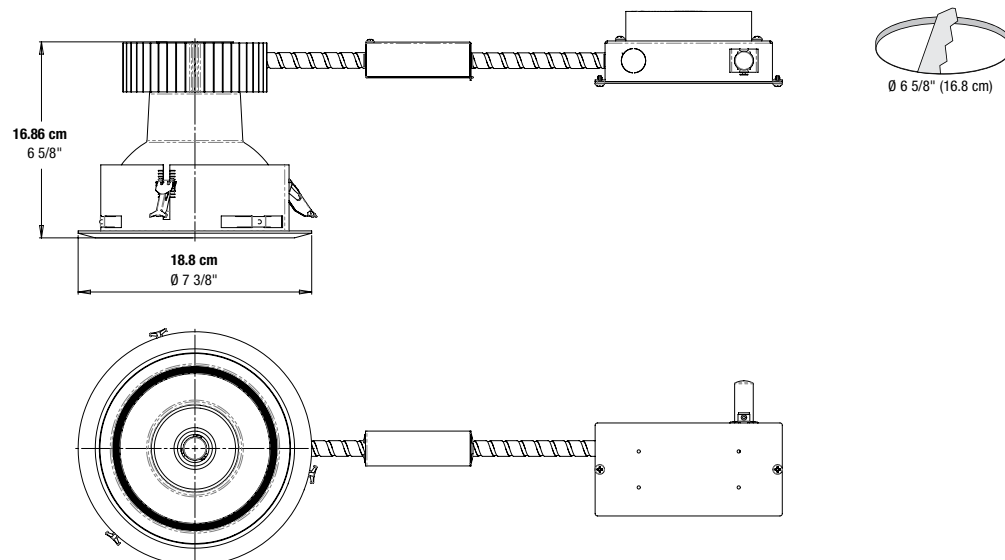
### A186

NON-IC FRAME-IN KIT



### A186R

REMODELER





## BRIDGE

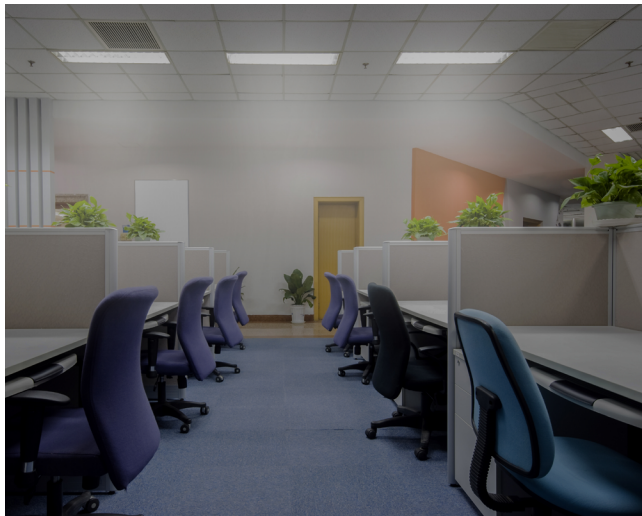
### NORMALLY ON EMERGENCY REMOTE LUMINAIRE

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

#### NORMAL MODE



#### EMERGENCY MODE



#### TYPICAL SPECIFICATION

Supply and install AimLite BRIDGE \_\_\_\_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 an AimLite 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 an AimLite emergency lighting battery unit as described herein and shown on the drawings. The AimLite 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.

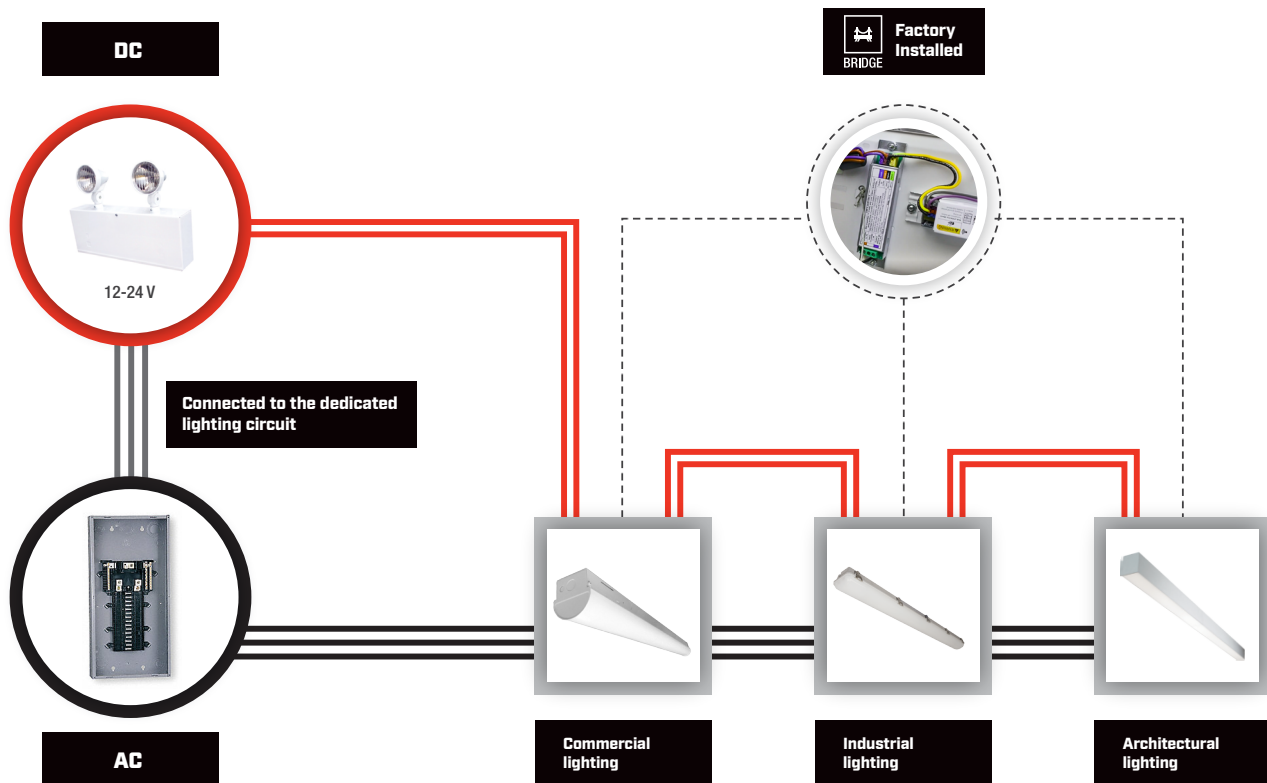
The charge voltage factory set to  $\pm 1\%$  tolerance. High efficiency, rapid recovery, precision control charging system shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the 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 of 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 AimLite 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 AimLite model: EBST \_\_\_\_\_

## BRIDGE NORMALLY ON EMERGENCY REMOTE LUMINAIRE

# BRIDGE WIRING DIAGRAM



### LEGEND

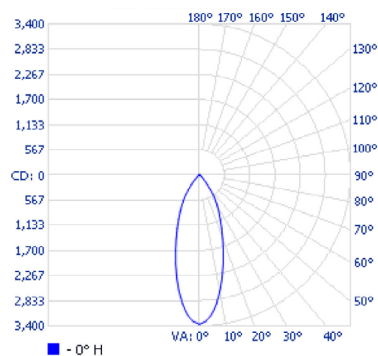
AC wires  
 Connected to the dedicated lighting circuit  
 DC wires  
 - - - - BRIDGE Factory Installed

Emergency mode	Spacing
A186	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.

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

A186-1880-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%

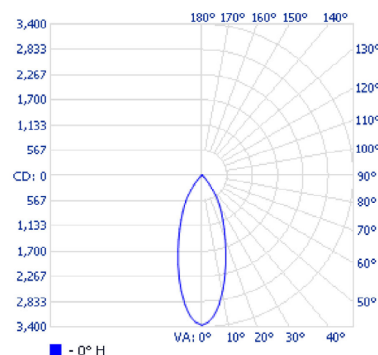
### ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH
1.7'	1 163		1.1'
3.3'	309		2.2'
5.0'	134		3.4'
6.7'	74.9		4.5'
8.3'	48.8		5.6'
10.0'	33.6		6.7'

■ Vert. Spread: 37.1°

A186-2580-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%

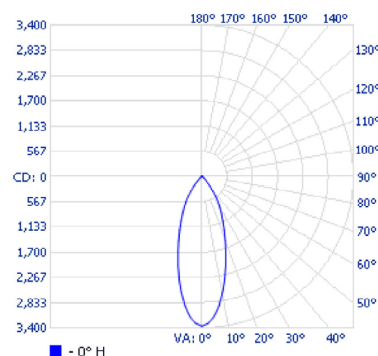
### ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH
1.7'	1 514		1.1'
3.3'	402		2.2'
5.0'	175		3.3'
6.7'	97.5		4.5'
8.3'	63.5		5.5'
10.0'	43.8		6.7'

■ Vert. Spread: 36.9°

A186-3480-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'	1 952		1.2'
3.3'	518		2.4'
5.0'	226		3.6'
6.7'	126		4.8'
8.3'	81.9		6.0'
10.0'	56.4		7.2'

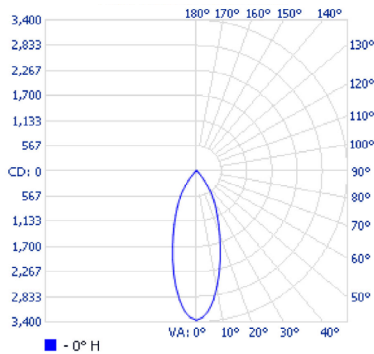
■ Vert. Spread: 39.5°

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

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

A186-5080-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°

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