Project	Type
Catalogue nº	Date



aimlite.com

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				
WEAR IT	DGE 1 RGENCY LIGHTING NAME OTE NORMALLY ON	Q DIMMA	ABLE WET LOCATION	AIRTIGHT	ICES 005



¹5 year warranty for the BRIDGE module.

A186 • REV. 14/12/2022 т 514 227-1288 TF 1866 348-2374

A186



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 50°C (-40°F to 122°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

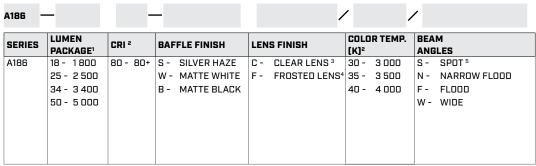
- CSA certified as a C22.2 C141-15 emergency lighting luminaire
- Meets ICES-005 requirements

GENERAL LIGHTING COMPLIANCES

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



ORDERING GUIDE - TRIMS



¹ Lumen packages based on photometry testing with frosted lens

ORDERING GUIDE - HOUSINGS

A186 -	_	-	/
SERIES	LUMEN PACKAGE	VOLTAGE (V)	OPTIONS
A186 - NON IC AR18R - REMODELER	18 - 1800 25 - 2500 34 - 3400 50 - 5000	4 - 120 8 - 347	EL¹ - BRIDGE NORMALLY ON EMERGENCY REMOTE¹

¹ When in emergency mode, luminaire only consumes 11 W.

For emergency lighting spacing, please see page 6.

TECHNICAL SPECIFICATION TABLE

LUMEN	WATTS	VOLTS (V	LUMEN	EFFICACY		LIFE L70	BEAM ANGLE	LENS	POWER	THD
PACKAGE	(w)	AC)	OUTPUT (LM)	[LM/W]	CRI	(HRS)	[°]	FINISH	FACTOR	[%]
3 000 K										
18	19	120	1964	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
3 500 K										
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
4 000 K										
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

² For more options, please consult factory.

³ Lumen increase of 10% to be expected.

⁴F - Frosted lens is not available with the S - Spot beam angle.

 $^{^{5}}$ S - Spot beam angle is not available with lumen packages 50 - 5000.

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			668.28
		25	23			FROSTED LENS	NARROW	674.07
		34	34			FRUSTED LENS	NARROW	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, DVSCTV
WATTSTOPPER	ADF-120277

DIMMING RANGE: 1%-100%

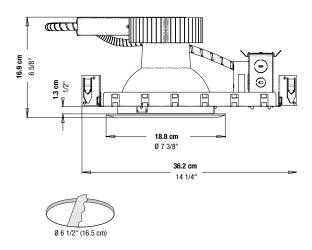
0-10 V DIMMERS.

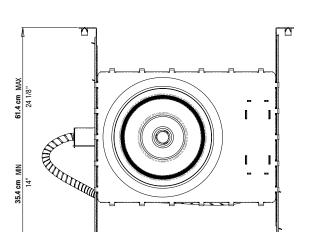
NOTE: THE ABOVE TABLE SHOWS DIMMERS THAT HAVE BEEN TESTED AND HAVE DEMONSTRATED PROPER OPERATION UNDER NORMAL CONDITIONS. EACH INSTALLATION BEING UNIQUE, VARIOUS FACTORS SUCH AS LOAD, COMMON NEUTRALS OR OTHER ELECTRICAL PRODUCTS ON THE CIRCUIT CAN, IN CERTAIN INSTANCES, CAUSE VARIANCE IN SYSTEM PERFORMANCE. READ AND COMPLY TO THE DIMMER INSTALLATION INSTRUCTIONS. CONSULT DIMMING SYSTEM MANUFACTURER FOR ADDITIONAL SUPPORT IN OPERATION. AMILITE 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

A186

NON-IC FRAME-IN KIT

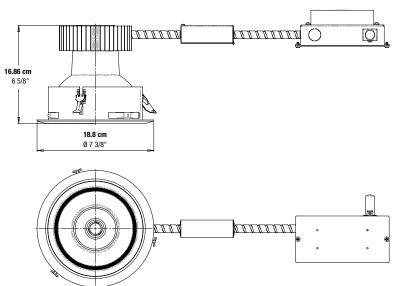




Ø 6 5/8" (16.8 cm)

A186R

REMODELER





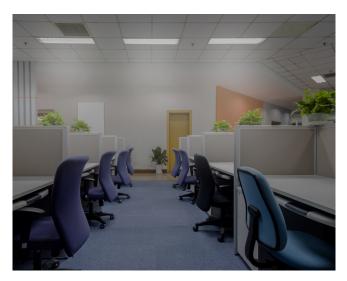
BRIDGE NORMALLY ON EMERGENCY REMOTE LUMINAIRE

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 1137 - 2934 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 ± 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 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.

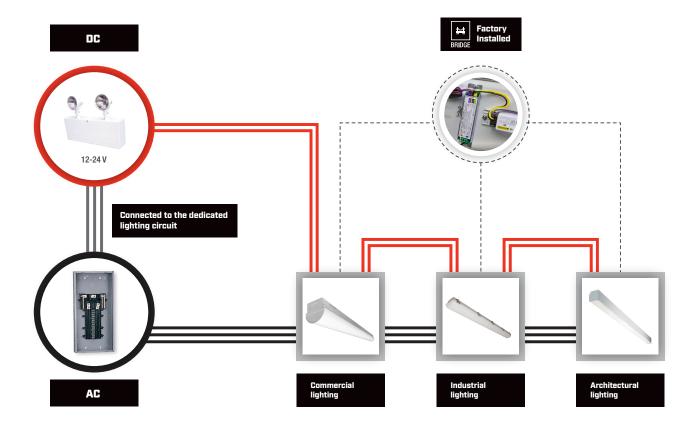
The unit shall be AimLite model: EBST_



BRIDGE NORMALLY ON EMERGENCY REMOTE LUMINAIRE







LEGEND



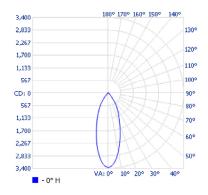
Emergency mode	Spacing
A186	Average spacing for 1 out of every 3 luminaires, normally ON in the path of egress, when at 8, 10, or 12 foot mounting heights.

TF 1866 348-2374

GENERAL LIGHTING PHOTOMETRIC DATA¹

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	1852.9	99.4%
60-90	11.7	0.6%
70-100	5.3	0.3%
90-120	0	0%
0-90	1864.5	100%
90-180	0	0%
0-180	1864.5	100%

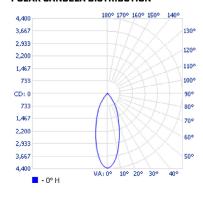
ILLUMINANCE AT A DISTANCE

CENT	ER 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	1772.0	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%

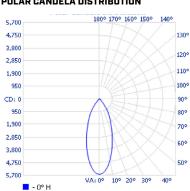
ILLUMINANCE AT A DISTANCE

CENT	ER 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

CENT	ER 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°

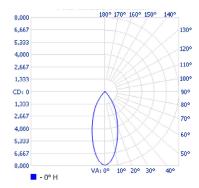
¹ Complete IES files available on our website.



GENERAL LIGHTING PHOTOMETRIC DATA¹

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

ER BEAM FC		BEAM WIDTH
2 746		1.3'
729		2.4'
317		3.7'
177		4.9'
115		6.1'
79.4		7.4'
	2 746 729 317 177 115	2 746 729 317 177 115

■ Vert. Spread: 40.5°

¹ Complete IES files available on our website.