

# C186 COMMERCIAL LED DOWNLIGHT 6"

## OPTIONAL EMERGENCY REMOTE

Our commercial 6 inch LED downlight is available for non-IC and remodeler construction. Up to 5 000 lm, the C186 is perfect for all commercial lighting applications. This downlight comes in a variety of lumen packages, color temperatures, finishes and beam angles to suit all needs.



### FEATURES & SPECIFICATIONS

#### CONSTRUCTION

##### Finishing

- Trims constructed with cold rolled steel
- A variety of trims styles and colors are available
- 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 SPECIFICATION

- 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 2 700, 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 Commercial LED Downlight

- Consuming 11 W, 12 - 24 V DC
- 200 mA constant current
- Delivers 767 - 828 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 Commercial LED 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 damp and wet location
- Meets requirements of ICES-005
- Air-tight as per ASTM-E283 standard

OVERVIEW			
LIGHT SOURCE	LED	EFFICACY [LM/W]	96 - 107
WATTS [W]	19 - 51	COLOR TEMPERATURE [K]	2 700, 3 000, 3 500, 4 000
LUMEN OUTPUT [LM]	1 890 - 5 251	CRI	80+ , 90+

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

<sup>2</sup> Wet location when using frosted or clear lens.

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.

## ORDERING GUIDE - TRIMS

C186 — — — — / — / — / — / —								
SERIES	LUMEN PACKAGE [W]	CRI	REFLECTOR FINISH	BAFFLE FINISH	FLANGE FINISH	COLOR TEMP. [K]	BEAM ANGLES¹ [°]	OPTIONS²
C186	18 - 1 800 25 - 2 500 34 - 3 400 50 - 5 000	80 - 80+ 90 - 90+	C - CLEAR W - WHITE	B - BLACK W - WHITE O - NO BAFFLE	W - WHITE B - BLACK	27 K - 2 700 30 K - 3 000 35 K - 3 500 40 K - 4 000	S - SPOT [15] N - NARROW FLOOD [24] F - FLOOD [38] W - WIDE [60]	F - FROSTED LENS³ L - CLEAR LENS

¹ Refer to beam distribution chart for more details.

² When selecting lens options F (frosted lens) or L (Clear lens), you must select a Baffle finish of B (Black) or W (White). The “No Baffle” option does not apply when a lens option is selected.

³ Lumen loss of 15%-18% to be expected.

## ORDERING GUIDE - HOUSINGS

C186 — — — /			
SERIES	LUMEN PACKAGE [W]¹	VOLTAGE [V AC]	OPTIONS
C186 - NON IC C186R - REMODELER	18 - 1 800 25 - 2 500 34 - 3 400 50 - 5 000	4 - 120 8 - 347	EL² - BRIDGE NORMALLY ON EMERGENCY REMOTE

¹ Please note that each housing and trim should correspond to a specific lumen package.

For more information, please see Trims Ordering Guide above.

² 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 AC]	LUMEN OUTPUT [LM]	EFFICACY [LM/W]	CRI	LIFE L70 [HRS]	BEAM ANGLE [°]	POWER FACTOR	THD [%]
2 700 K									
18	19	120	1 890	99	80+	36 000	24	>0.9	<20
25	23	120	2 305	100	80+	36 000	24	>0.9	<20
34	34	120	3 284	97	80+	36 000	24	>0.9	<20
50	51	120	4 895	96	80+	36 000	24	>0.9	<20
3 000 K									
18	19	120	1 964	103	80+	36 000	24	>0.9	<20
25	23	120	2 396	104	80+	36 000	24	>0.9	<20
34	34	120	3 414	100	80+	36 000	24	>0.9	<20
50	51	120	5 088	100	80+	36 000	24	>0.9	<20
3 500 K									
18	19	120	2 027	107	80+	36 000	24	>0.9	<20
25	23	120	2 472	107	80+	36 000	24	>0.9	<20
34	34	120	3 523	104	80+	36 000	24	>0.9	<20
50	51	120	5 251	103	80+	36 000	24	>0.9	<20
4 000 K									
18	19	120	2 039	107	80+	36 000	24	>0.9	<20
25	23	120	2 487	108	80+	36 000	24	>0.9	<20
34	34	120	3 543	104	80+	36 000	24	>0.9	<20
50	51	120	5 281	104	80+	36 000	24	>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]
C186	80+	18	19	11	3 000	CLEAR LENS	NARROW	828.78
		25	23					789.39
		34	34					767.96
		50	51					787.62

## 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

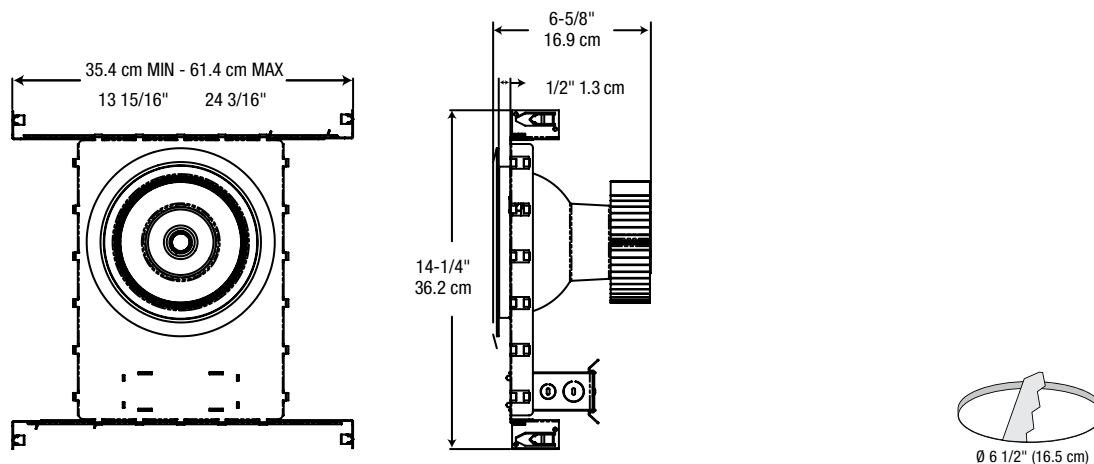
DIMMING RANGE : 1%-100%  
<sup>1</sup>0-10 V DIMMERS.

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

## DIMENSIONS

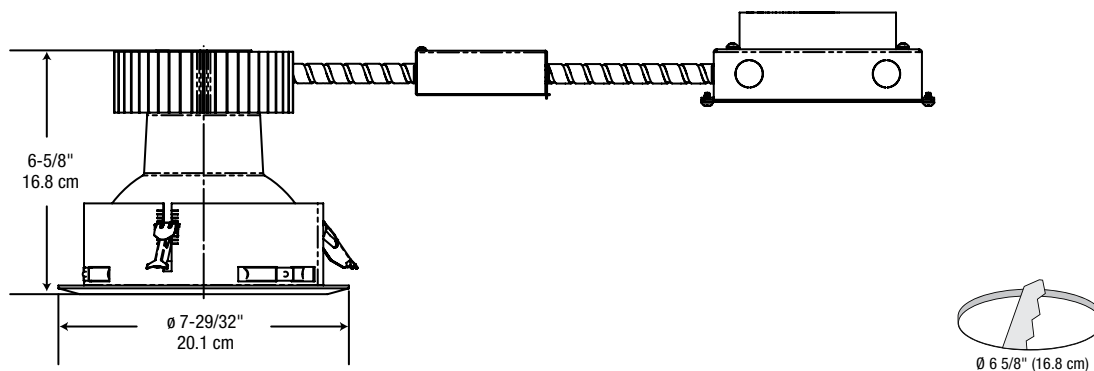
### C186

NON-IC FRAME-IN KIT



### C186R

REMODELER



# BRIDGE

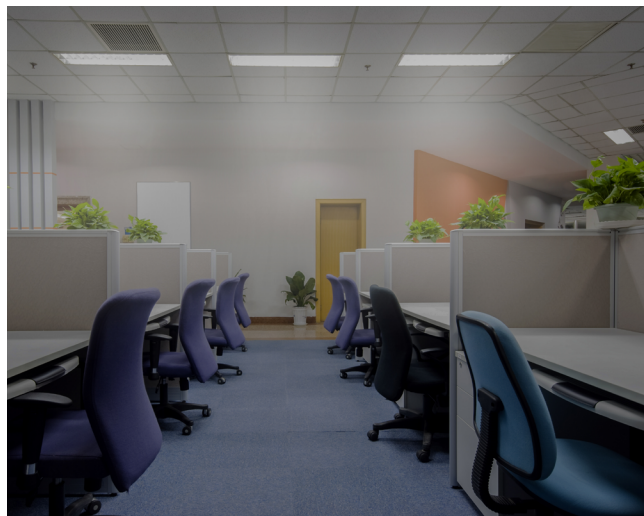
## NORMALLY ON EMERGENCY REMOTE LUMINAIRE

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, Commercial 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 1 097 - 1 146 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 \_\_\_\_\_

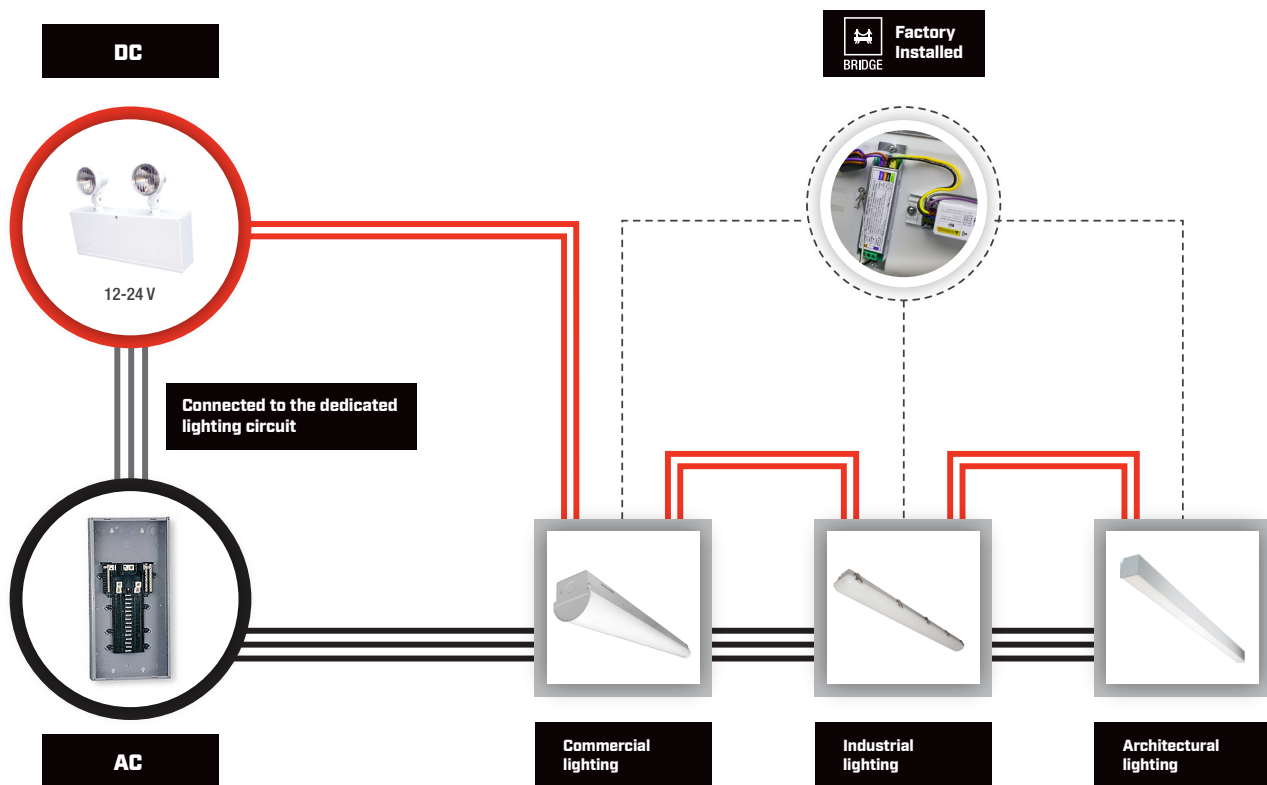
Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions. All products are subject to change or may be discontinued any time without notice.

# BRIDGE

NORMALLY ON EMERGENCY REMOTE LUMINAIRE



## BRIDGE WIRING DIAGRAM



### LEGEND



AC wires



Connected to the dedicated lighting circuit



DC wires



BRIDGE Factory Installed

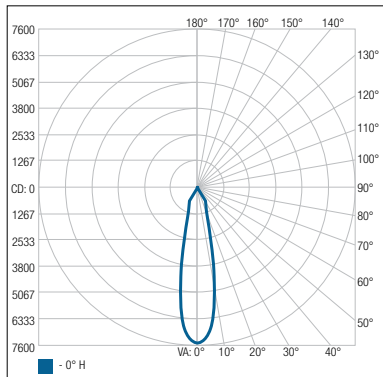
Emergency mode	Spacing
C186	Average spacing for 1 out of every 4 luminaires, normally ON in the path of egress, when at 8, 10, or 12 foot mounting heights.

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 DATA<sup>1</sup>

**C186-1880-COW-30K-N • 1 964.2 LM**

### POLAR CANDELA DISTRIBUTION



### ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	1 694.2	86.3%
0-40	1 911.0	97.3%
0-60	1 946.3	99.1%
60-90	17.9	0.9%
70-100	10.7	0.5%
90-120	0	0%
0-90	1 964.2	100%
90-180	0	0%
0-180	1 964.2	100%

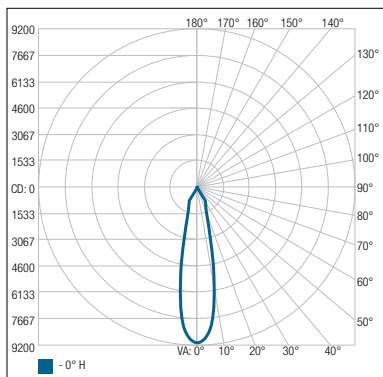
### ILLUMINANCE AT A DISTANCE

CENTER BEAM FC	BEAM WIDTH
1.7'	2 596
3.3'	689
5.0'	300
6.7'	167
8.3'	109
10.0'	75.0

■ Vert. Spread: 24.1°

**C186-2580-COW-30K-N • 2 395.8 LM**

### POLAR CANDELA DISTRIBUTION



### ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	2 067.5	86.3%
0-40	2 332.1	97.3%
0-60	2 374.9	99.1%
60-90	20.9	0.9%
70-100	12.4	0.5%
90-120	0	0%
0-90	2 395.8	100%
90-180	0	0%
0-180	2 395.8	100%

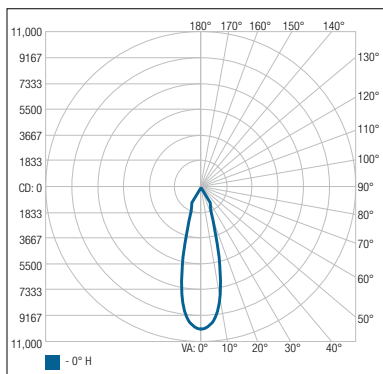
### ILLUMINANCE AT A DISTANCE

CENTER BEAM FC	BEAM WIDTH
1.7'	3 168
3.3'	841
5.0'	366
6.7'	204
8.3'	133
10.0'	91.5

■ Vert. Spread: 24.1°

**C186-3480-COW-30K-N • 3 413.6 LM**

### POLAR CANDELA DISTRIBUTION



### ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	2 931.8	85.9%
0-40	3 345.8	98%
0-60	3 402.2	99.7%
60-90	11.4	0.3%
70-100	1.2	0%
90-120	0	0%
0-90	3 413.6	100%
90-180	0	0%
0-180	3 413.6	100%

### ILLUMINANCE AT A DISTANCE

CENTER BEAM FC	BEAM WIDTH
1.7'	3 475
3.3'	922
5.0'	402
6.7'	224
8.3'	146
10.0'	100

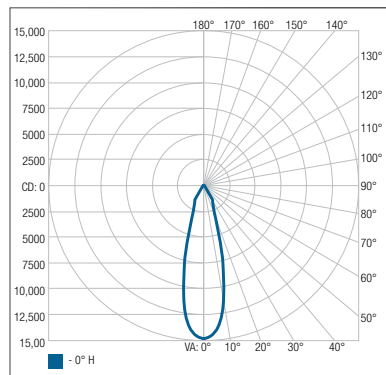
■ Vert. Spread: 29.2°

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

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

C186-5080-COW-30K-N • 5 088.0 LM

## POLAR CANDELA DISTRIBUTION



## ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	4 369.9	85.9%
0-40	4 987.0	98%
0-60	5 071.1	99.7%
60-90	16.9	0.3%
70-100	1.8	0%
90-120	0	0%
0-90	5 088.0	100%
90-180	0	0%
0-180	5 088.0	100%

## ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH
1.7'	5 179	
3.3'	1 374	
5.0'	599	
6.7'	333	
8.3'	217	
10.0'	150	

■ Vert. Spread: 29.2°

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