

# Bend

4" PENDANT OR SURFACE DIRECT OR INDIRECT/DIRECT

## FEATURES

- Variable Intensity technology provides a range of specifiable outputs and resulting fixture wattages
- 1150 lumens max direct; 1500 lumens max indirect. See performance data table for additional information.



## SPECIFICATIONS

Due to the complexity of this specification, submittal drawings for any configuration are required. Some configurations may require remote mounting drivers.

### CONSTRUCTION

- 4.5" x 4.8" profile with 3.5" aperture (nominal).
- Extruded aluminum housing with machined aluminum end headers
- Machined aluminum end caps mechanically attached with no exposed fasteners

### OPTICS

- 3 SDCM CCT consistency, 80 CRI.
- White Opal (WOL) diffuse acrylic downlight diffuser
- Optional White Opal (WOL) or Clear (L1) acrylic indirect diffuser

### ELECTRICAL

- Variable Intensity (VI) technology allows precise specification of fixture output/wattage. Fixture will be programmed and labeled to specification.
- LED boards and solid state constant current driver are field-servicable.
- LED rated life L85 > 50,000 hours. Tested in accordance to LM79-2008 & rated life derived from EPA TM-21 calculator.
- 1C (1 Circuit) Fixture wired for a single circuit
- 2C (2 Circuit) Uplight and downlight switched/dimmed separately. Two power feeds required.
- 10W battery powered driver. Provides a minimum of 90 minutes of emergency lighting. Available in straight fixtures greater than 3' in length.

### ELECTRICAL (CONTINUED)

- Inverter-Compatible. Provided by others.
- Operating Temperature: -20 to 25°C

### INSTALLATION

- Suspension required at every row joint. 3/32" diameter field adjustable cables, ship separately
- Low profile cable gripper limits visibility.
- Non-feed canopy covers 2" diameter (unless 5" non-feed cover specified).
- Surface mount available as direct distribution only.

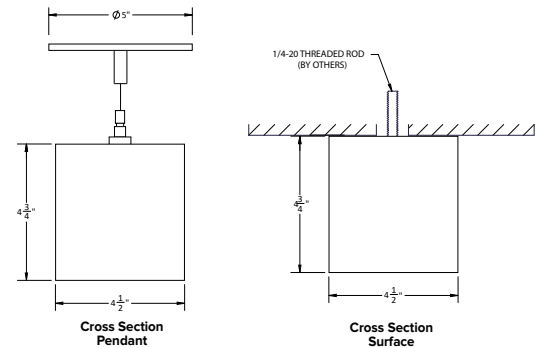
### CERTIFICATIONS

- ETL listed for wet locations
- IBEW
- AF of L
- This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) and Trade Agreements Act (FAR 52.225-11). See [Buy America\(n\) Solutions](#).
- Emergency Battery Backup options are California Energy Commission (CEC) Title 20 Compliant.

### WARRANTY

- LED boards - 5 years
- LED drivers (standard) - 5 years

# bend



	Weight
88L-PS-4	4 lbs/ft

KEY DATA	
Lumen Range	I: 450–1500 D: 350–1150
SDCM	3
Rated Life	L85 > 50,000 Hours
Efficacy	82–109

ORDERING GUIDE

Example: 88L-P-ID-4-STD-16-08-WOL-C1-35K-I060-D080-D01-2C-UNV-FA1-L1

CATALOG #

88L – Straight Sections							
Series	Mounting	Distribution	Aperture	Uplight Distribution	Row Length (In Feet)	Max Length in Row	Direct Diffuser
88L Bend	P Pendant S Surface <sup>1</sup>	D Direct ID Indirect/Direct	4 4"	STD Standard	Enter in foot increments	02 2', 609mm 03 3', 914mm 04 4', 1219mm 05 5', 1524mm 06 6', 1828mm 08 8', 2438mm	WOL White Opal Diffuse Lens, Lambertian
Finish/Color	CCT/CRI	Indirect Output/Ft <sup>2</sup>	Direct Output/Ft <sup>3</sup>	Driver	Circuiting	Voltage	
C1 Matte White (Default)	30K 3000K, 80CRI	I045 450 (Min	D035 350 (Min)	D01 1% Dimming, 0-10V	1C 1 Circuit	UNV 120-277V	
C4 Machined Aluminum	35K 3500K, 80CRI	to	to		2C 2 Circuit - Uplight/ Downlight		
C5 Carbon Black	40K 4000K, 80CRI	I150 1500 (Max)	D115 1150 (Max)				
CC Custom Color							

OPTIONAL

Mounting Kit <sup>7</sup>	Nightlight	Emergency	Thru-Wiring	Uplight Diffuser
FA1 Suspension Kit, 51" FA2 Suspension Kit, 87" FA3 Suspension Kit, 219"	NL Nightlight Circuit Required <sup>4</sup>	EF 10W Emergency Battery Backup (CEC Title 20 Compliant) <sup>5</sup>	W1 No Thru-Wire W2 Provide Normal and NL/EF Thru-Wiring <sup>6</sup> W3 Provide Normal Thru-Wiring Only	WOL White Opal Diffuse Lens L1 Clear Acrylic Dust Cover

Notes:

<sup>1</sup> For surface mount, Mounting Kit specification not required.

<sup>2</sup> Specifiable in 50 lumen increments. Reference the Performance Data Table for full performance offering and exceptions.

<sup>3</sup> Specifiable in 50 lumen increments. Reference the Performance Data Table for full performance offering and exceptions.

<sup>4</sup> Enter Quantity. 2NL= 2 Nightlight circuits per row.

<sup>5</sup> Enter Quantity. 2EF= 2 Batteries per row. 10W battery powered driver. Provides a minimum of 90 minutes of emergency lighting. Inverter Compatible. Provided by others.

<sup>6</sup> Only applicable when specified with Emergency/Nightlight

<sup>7</sup> Add suffix /V to replace all 2" non-feed canopy covers with 5" canopy covers. FA1/V = 51" suspension kit w/ 5" canopies; canopies and feed cord are supplied in white regardless of fixture color unless otherwise specified.

Bend

4" PENDANT OR SURFACE DIRECT OR INDIRECT/DIRECT

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

ORDERING GUIDE

Example: 88L-P-ID-4-STD-A4/90-WOL-C1-35K-I060-D080-D01-2C-UNV-FA1-L1

CATALOG #

Table with 7 columns: Series, Mounting, Distribution, Aperture, Uplight Distribution, Arc, Direct Diffuser. Row 1: 88L Bend, P Pendant, D Direct, 4 4", STD Standard, A2/90 2' Diameter, 90° Arc, WOL White Opal Diffuse Lens, Lambertian.

Table with 7 columns: Finish/Color, CCT/CRI, Indirect Output/Ft², Direct Output/Ft³, Driver, Circuiting, Voltage. Row 1: C1 Matte White (Default), 30K 3000K, 80CRI, I045 450 (Min), D035 350 (Min), D01 1% Dimming, 0-10V, 1C 1 Circuit, UNV 120-277V.

OPTIONAL

Table with 4 columns: Mounting Kit, Nightlight, Thru-Wiring, Uplight Diffuser. Row 1: FA1 Suspension Kit, 51", NL Nightlight Circuit Required, W1 No Thru-Wire, WOL White Opal Diffuse Lens.

Notes:
1 For surface mount, Mounting Kit specification not required.
2 Specifiable in 50 lumen increments. Reference the Performance Data Table for full performance offering and exceptions.
3 Specifiable in 50 lumen increments. Reference the Performance Data Table for full performance offering and exceptions.
4 Enter Quantity. 2NL= 2 Nightlight circuits per row.
5 Enter Quantity. 2EF= 2 Batteries per row. 10W battery powered driver. Provides a minimum of 90 minutes of emergency lighting. Inverter Compatible. Provided by others.
6 Only applicable when specified with Emergency/Nightlight

PERFORMANCE DATA TABLE

Distribution/Output	Lumens/Ft	W/Ft	Efficacy
Direct			
D035	350	3.8	93
D040	400	4.3	94
D045	450	4.8	93
D050	500	5.3	94
D055	550	6.0	92
D060	600	6.5	92
D065	650	7.2	91
D070	700	7.8	90
D075	750	8.4	89
D080	800	9.1	88
D085	850	9.8	87
D090	900	10.5	86
D095	950	11.3	84
D100	1000	12.0	83
D105	1050	12.8	82
D110	1100	13.6	81
D115	1150	14.4	80
Indirect			
I045	450	3.2	141
I050	500	3.5	142
I055	550	3.9	142
I060	600	4.2	142
I065	650	4.6	142
I070	700	4.9	142
I075	750	5.3	143
I080	800	5.6	142
I085	850	6.0	141
I090	900	6.4	141
I095	950	6.8	139
I100	1000	7.3	138
I105	1050	7.7	137
I110	1100	8.1	136
I115	1150	8.5	135
I120	1200	9.0	134
I125	1250	9.4	133
I130	1300	9.8	132
I135	1350	10.3	130
I140	1400	10.8	130
I145	1450	11.3	129
I150	1500	11.8	127

(wattage may vary up to 5% from published)

Output Multiplier Table

Photometrics and outputs published on this spec sheet are based on nominal 3500K temperature. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

CCT	80 CRI
3000K	0.98
3500K	1
4000K	1.03

Bend

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DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

DIMENSIONS

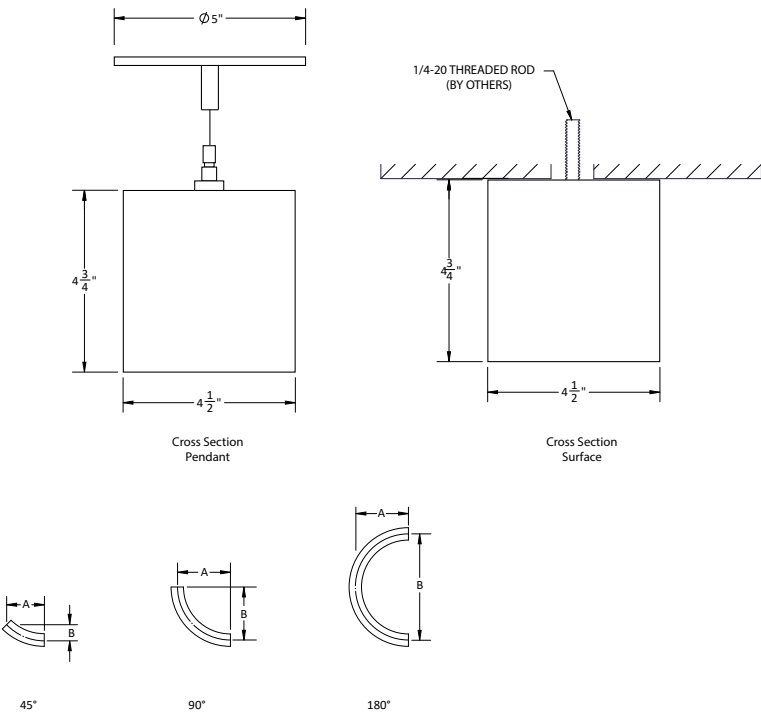
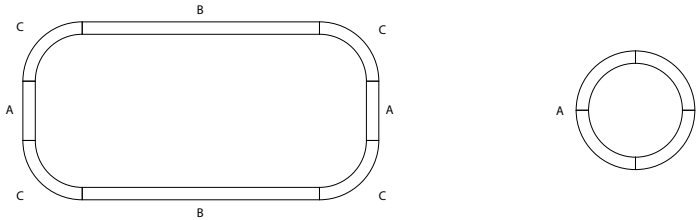


Table with 5 columns: Arc Specification, Diameter [Nominal], Angle, DIM A, DIM B. It lists various fixture configurations and their corresponding dimensions.

Ordering Examples



A: (QTY 2) 88L-P-D-4-2-02-WOL-C4-35K-D080-D01-1C-UNV-FA1
B: (QTY 2) 88L-P-D-4-8-08-WOL-C4-35K-D080-D01-1C-UNV-FA1
C: (QTY 4) 88L-P-D-4-A4/90-WOL-C4-35K-D080-D01-1C-UNV-FA1
A: (QTY 4) 88L-P-D-4-A4/90-WOL-C5-35K-D100-D01-1C-UNV

Bend

4" PENDANT OR SURFACE DIRECT OR INDIRECT/DIRECT

PHOTOMETRY

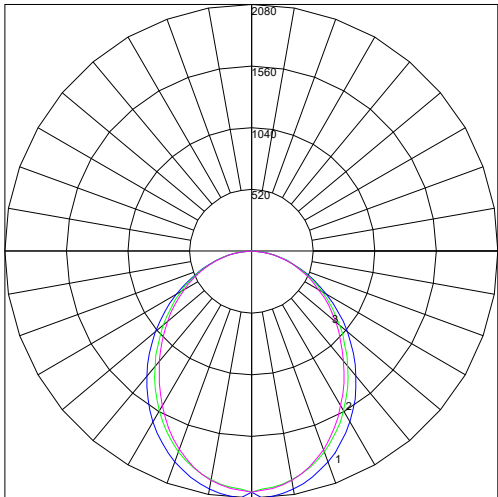
88L-P-D-4-4-WOL-C1-35K8-D125-D01-1C-UNV-H

Test No.	R22.01373-49
Description	Pendant Direct 4" Aperture, 4' Length
Delivered Lumens	5000
Watts	59.2
Efficacy	84
Mounting	Pendant

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2398	48
0-60	4015	80
0-90	5000	100
0-180	5000	100

POLAR GRAPH



Maximum Candela = 2080.282 . Located At Horizontal Angle = 0, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Vertical Plane Through Horizontal Angles (45 - 225)  
# 3 - Vertical Plane Through Horizontal Angles (90 - 270)