![vode logo] Adaptive Architectural Lighting Systems

Spec Guide

DoubleRace | Ceiling Cable | 107

Red List Approved
Declare.

Direct/indirect lighting for open office and ambient applications.

DoubleRace, direct/indirect

Benefits & Features

Minimalistic, Robust Design
Oval profile, 2.41" (61mm) x 1.14" (29mm).
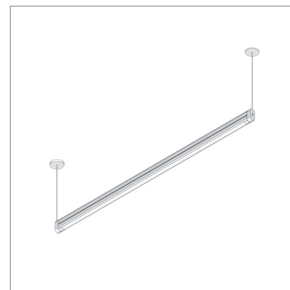
Superior Light Quality & Performance
Output up to 2888 lm/ft (9474 lm/m) (HO), 126 lm/W (SO). 80 or 90 CRI & tunable white (2200K-6500K) available.

Adaptive Power
Full range dimming power for all protocols. Integral or remote power available.

Simple Installation
Modular snap-fit assembly for quick installation and maintenance.

Small Round Canopy

Integral Power

Build Your Specification

107-DR	01			CC	▸▸

System & Rail Type
107-DR DoubleRace

Single/Double Rail
01 Single Rail

System Length
Specify overall system length in ft/in or M/mm.

Corner and Shapes Available
See Guide *for details.*

Rail Length

24	24" (610mm)
36	36" (914mm)
48	48" (1219mm)
60	60" (1524mm)
72	72" (1829mm)
96	96" (2438mm)
ZZ	Other rail length or layout (please specify)

See **Rail Length Chart** for more details.

⚠ ***Custom lengths may result in light gaps on the fixture. See* Rail Length Chart *for more details.***

Mounting
CC Ceiling Cable

Cable Length
Field adjustable.

48	48" cable (1210mm)
96	96" cable (2438mm)
ZZ	Other (please specify)

			▸▸

Power Location

Integral Power [1]

IP   Integral Power

Remote Power

Specify mounting and harness length code example: **2R25, 4R25**...etc.

Mounting Option
2R Small Round Canopy
4R Large Round Canopy

Wire Harness
10 10' (3.048m) Wire Harness
25 25' (7.62m) Wire Harness
50 50' (15.24m) Wire Harness
75 75' (22.86m) Wire Harness
100 100' (30.48m) Wire Harness

Power Type

Flexible 1 to 1 Power

AE	0-10V, 1.0% Dimming
AT	0-10V, 0.1% Dimming
AD	DALI, 0.1% Dimming
AX	DMX, 100-0% Dimming
AH	Hi-lume 1% EcoSystem, Soft On / Fade to Black Technology, LDE[1]
AH2	ELV 1% 2-wire (Forward and Reverse Phase)

Optimized Power

Add '**O**' to power type example: AE**O**, AT**O**...etc. [2]

VodeNODE

Add '**N**' to power type for Flexible 1 to 1 Power
Add '**ON**' to power type for Optimized Power
example: AE**N**, AT**N**, AE**ON**, AD**ON**...etc. [3]

ZZ   Other (please specify)

See **Power Guide** for driver features & limitations.

Voltage
1 120V
2 120V - 277V
X Not Yet Specified

Emergency Power
0 No Emergency Power
ZZ Emergency Power *(specify requirements)*

Z				

LED Type
Z Zipper Board

Lumen Output
LO Low Output
SO Standard Output
HO High Output
ZZ Other (please specify)

See **IES Files** page for details.
See **Power Guide** for driver features & limitations.

Color Temperature

80+ CRI
27 2700K
30 3000K
35 3500K
40 4000K

90+ CRI
279 2700K
309 3000K
359 3500K
409 4000K

ZZ Tunable White Available
See Guide for details.

Optics

Zipper Board™ (Z)
22 Diffuse, Round, up | Diffuse, Round, down
G12 120° Batwing, Flat, up | Diffuse, Round, down
G1G2 120° Batwing, Flat, up | 120° FlyWing, Flat, down

Sensors
0 None
ZZ Sensor *(specify requirements)*

▸▸	

Finish
AL Clear Anodized
WH White Powder Coat
BL Black Anodized
ZZ Other (please specify)

Options
0 None
9 9' 18/3 Cord and Plug [4]
CP Chicago Plenum

NOTES & LIMITATIONS
[1] *Integral Power (IP) is not available with 24" rail lengths in AE, AH, AH2.*
[2] *Optimized Power is not available with Hi-lume 1% EcoSystem (AHO) Power Type.*
[3] *VodeNODE enclosure is not available with ELV 1% 2-wire (AH2) Power Type.*
[4] *9' 18/3 Cord and Plug only available with Remote Power (RP).*
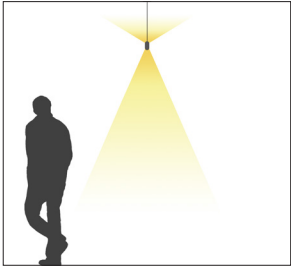[5] *Chicago Plenum not applicable for wall arm mounting.*

*Standard 5 Year Limited Warranty. See details **here**. Contact factory for options on Limited Warranties up to 20 years.*

Listed to UL standards for damp location by a Nationally Recognized Testing Laboratory (NRTL) recognized by OSHA. Certain limitations exist for each Certification. Contact factory for verification.

Applications

General Interior, Open Office, and Conference Room

SRG Office, Portland, OR

Open Office: rendering.

Open Office: rendering.

Declare Label

All Vode Lighting linear light fixtures proudly carry the Red List Approved designation.
See **International Living Future Institute** website for details.

Declare.℠

Red List Approved
Declare.

Vode Adaptive Architectural Lighting Systems
Vode Lighting LLC

Final Assembly: Sonoma, California, US
Life Expectancy: 10+ Year(s)
End of Life Options: Recyclable (100%)

Ingredients:

Anodized Aluminum (6063-T5 Alloy); Steel; Small Electrical Component (RoHS)[1]; Copper; Fluorinated Ethylene Propylene (masterbatch)[2]; Polymethyl methacrylate (PMMA); Stainless Steel; Polyoxymethylene Copolymer (POM); Styrene-butadiene polymer, hydrogenated; Poly(methyl methacrylate/butyl acrylate/styrene) (PMMA/BA/S); Styrene/butadiene copolymer; Distillates; Polypropylene; Calcium carbonate; Polycarbonate; EVA Copolymer; Methyl methacrylate (MMA); Polyphenylene Oxide; Brass; Tin, Organic

[1]LBC Temp Exception RL-002 - Small Electrical Components
[2]LBC Temp Exception RL-023 - Wire Sheathing Subject to NFPA 90A, NFPA 262, UL® 910

Living Building Challenge Criteria: Compliant

I-13 Red List:
☐ LBC Red List Free   % Disclosed: 100% at 100ppm
■ LBC Red List Approved   VOC Content: Not Applicable
☐ Declared

I-10 Interior Performance: Not Applicable
I-14 Responsible Sourcing: Not Applicable

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MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY
INTERNATIONAL LIVING FUTURE INSTITUTE™ living-future.org/declare
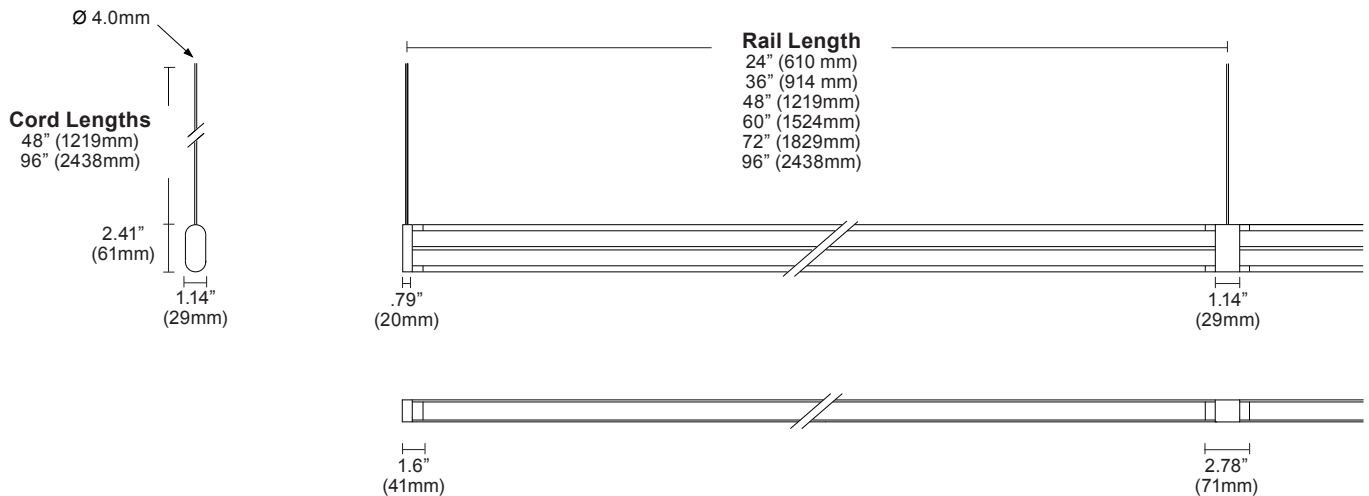
Structure

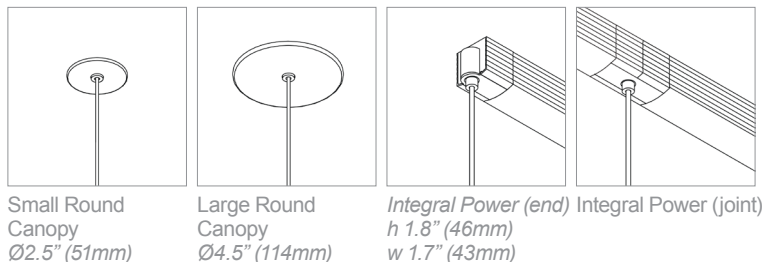|	
Rail Length	24" (610mm) - 96" (2438mm). Modified lengths available. *See **Rail Length Chart** for more details.*
Rail Dimension	2.41 (61mm) x 1.14 (29mm) x length.
Construction	Extruded and machined 6063 aluminum.
Mounting	Ceiling mount to jbox or integral driver housing.
Cable Length	48" (1219mm) and 96" (2438mm) available. Field adjustable. Non-standard cable lengths available.
System Run Length	24" (610mm) minimum. Unlimited maximum.
Operating Temperature	32°F to 104°F (0°C to 40°C).
Humidity	0-85%, non-condensing.
System Weight	1.05lbs (0.48kg) per foot (305mm) Power supply and housing not included.

Materials

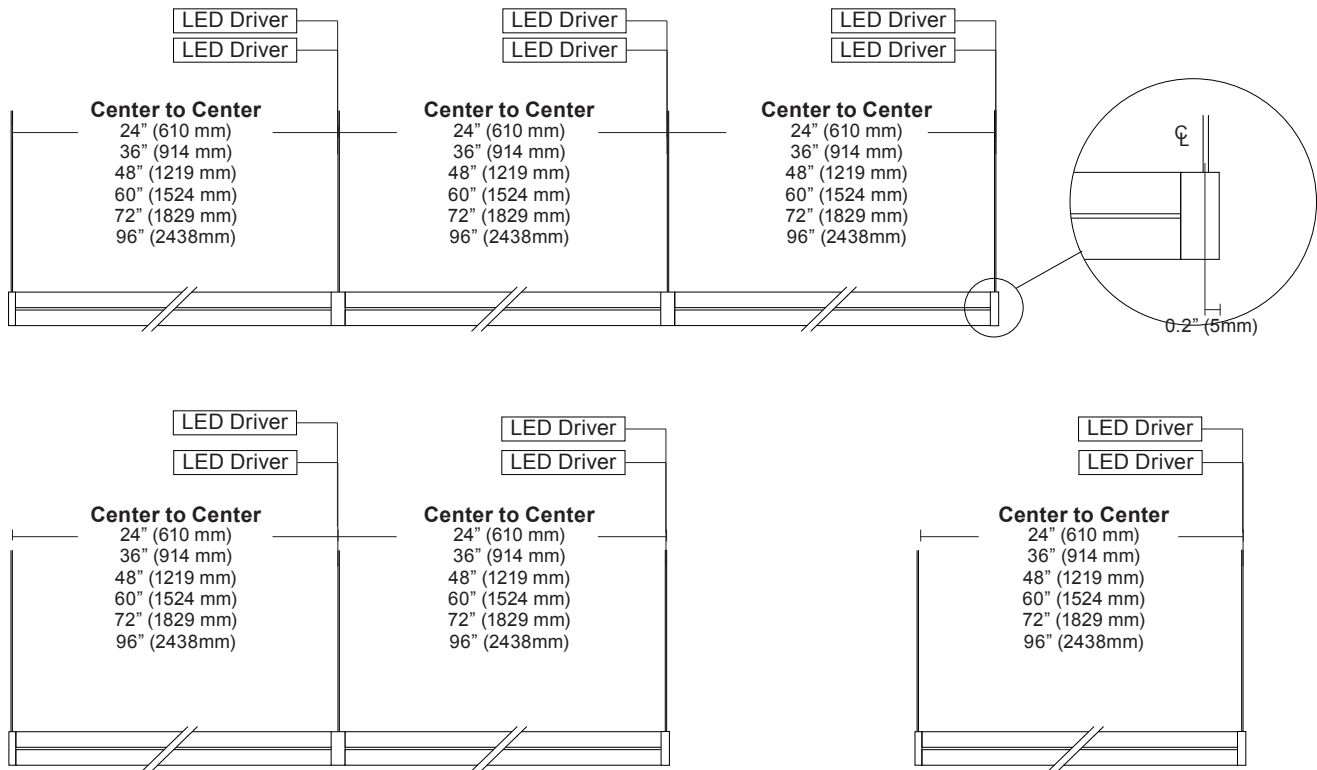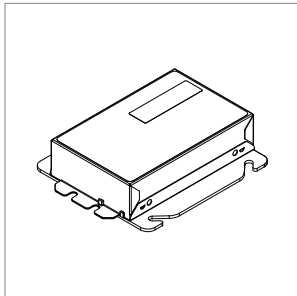|	
LED Board Construction	Aluminum core PCB, black LCP connectors, RoHS compliant.
Lens	High-impact extruded acrylic glass (PMMA).
Baffle	6063 aluminum, RoHS compliant painted finish.
Suspension Cable	Ø4mm, 22/2 AWG, PVC jacket, FEP-insulated, RoHS compliant.
Power Cable	Ø4mm, 18/2 AWG, Plenum (CMP) rated semi-rigid PVC, flame tested UL-910.
Cable Connectors	Unfilled white nylon, rate UL 94 V-0, halogen free, PVC overmold, RoHS compliant.
Remote Power Housing	24.5" x 1.9" x 1.9", 1/16" (0.8mm) formed steel, zinc chromate plating.

Dimensions

Ø 4.0mm

Cord Lengths
48" (1219mm)
96" (2438mm)

2.41"
(61mm)

1.14"
(29mm)

Rail Length
24" (610 mm)
36" (914 mm)
48" (1219mm)
60" (1524mm)
72" (1829mm)
96" (2438mm)

.79"
(20mm)

1.14"
(29mm)

1.6"
(41mm)

2.78"
(71mm)

Mounting Options

Small Round
Canopy
Ø2.5" (51mm)

Large Round
Canopy
Ø4.5" (114mm)

Integral Power (end)
h 1.8" (46mm)
w 1.7" (43mm)

Integral Power (joint)

Layout

| LED Driver |
| LED Driver |

Center to Center
24" (610 mm)
36" (914 mm)
48" (1219 mm)
60" (1524 mm)
72" (1829 mm)
96" (2438mm)

| LED Driver |
| LED Driver |

Center to Center
24" (610 mm)
36" (914 mm)
48" (1219 mm)
60" (1524 mm)
72" (1829 mm)
96" (2438mm)

| LED Driver |
| LED Driver |

Center to Center
24" (610 mm)
36" (914 mm)
48" (1219 mm)
60" (1524 mm)
72" (1829 mm)
96" (2438mm)

℄

0.2" (5mm)

| LED Driver |
| LED Driver |

Center to Center
24" (610 mm)
36" (914 mm)
48" (1219 mm)
60" (1524 mm)
72" (1829 mm)
96" (2438mm)

| LED Driver |
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Center to Center
24" (610 mm)
36" (914 mm)
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72" (1829 mm)
96" (2438mm)

| LED Driver |
| LED Driver |

Center to Center
24" (610 mm)
36" (914 mm)
48" (1219 mm)
60" (1524 mm)
72" (1829 mm)
96" (2438mm)

Corner and Shapes Available (Square, Rectangle, L-Shape, U-Shape, ZigZag) **See Guide** for details.

Power and Controls

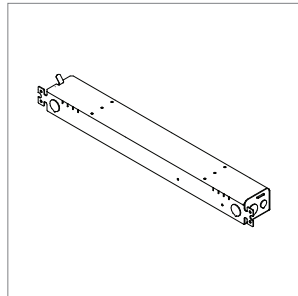|	
Power Type	Class 2 (<60V output) constant current driver.
Dimming Controls	Dimming (0.1%, 1%), 0-10V, DALI, DMX, Hi-lume 1% are available. *See **Power Guide** for details.*
Input Voltage	120V - 277V, 50/60hz.
Power Location	Integral or remote power. Maximum remote distance up to 100' (30.5m) *depending* on driver selection. *See **Power Guide** for details.*

Vode power locations fall into two categories: integral and remote. Remote power is locating the power supply away from the fixture. Remote power comes in two housing styles: brick style and linear style. Consult **Power Guide** to determine which type you will receive. Integral power is locating the power supply into the lighting fixture or mounting.
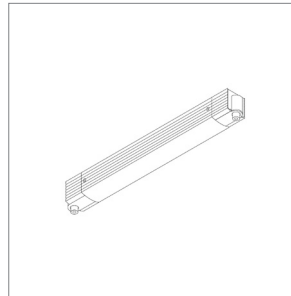
Remote Brick Power Housing

Supplied for some remote power applications. One remote power supply housing is supplied for each rail. Provided driver mounting plate fits standard 4" metal, square J-Boxes with a minimum volume of 21 in³ (J-Box not provided).
See *Tech Sheet* for details.
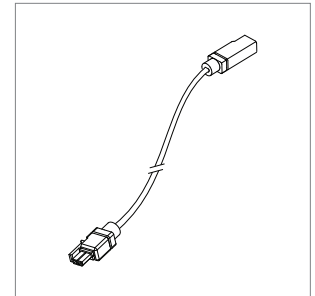
Remote Linear Power Housing

One remote power supply housing is supplied with each power supply. All Vode linear remote drivers come in a 0.054" (0.8mm) formed galvanized steel power supply housing with five (5) knockouts: (4) 1-1/8", (1) 7/8" and (1) 9/16". Accommodates standard linear power supplies.
See *Tech Sheet* for details.

Integral Power

Houses integral power supply. Direct conduit feed is recommended, but integral power supply housing will mount to any standard North America 4" j-box. Mounts to most surfaces. Blocking is recommended at all arm junctions.
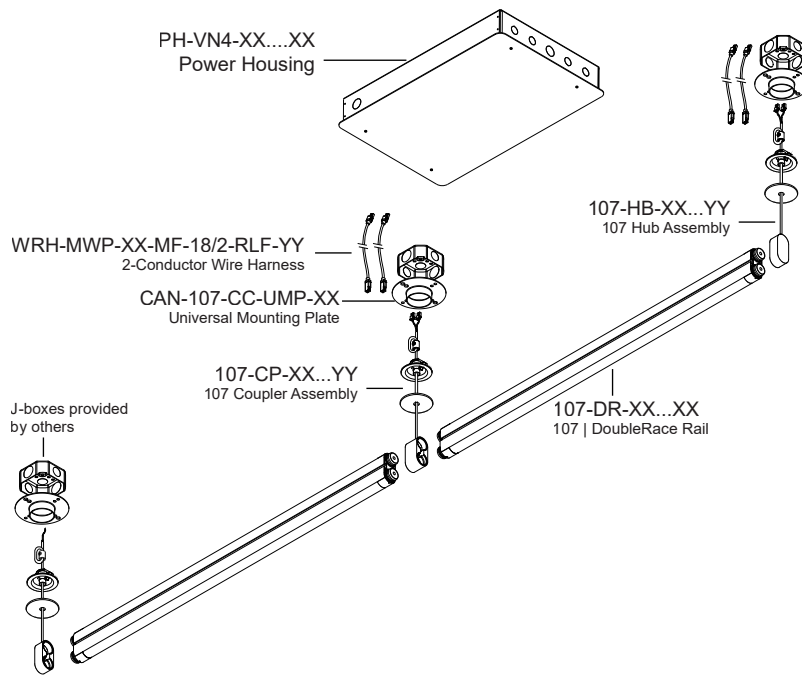See *Tech Sheet* for details.

Wire Harness

Wire harness connects driver to rail section. Lengths of 10' (3.0m) & 25' (7.6m) with snap-lock connectors for quick and easy installation. Multiple harnesses may be combined for lengths up to 100' (30.5m).
See *Tech Sheet* for details.
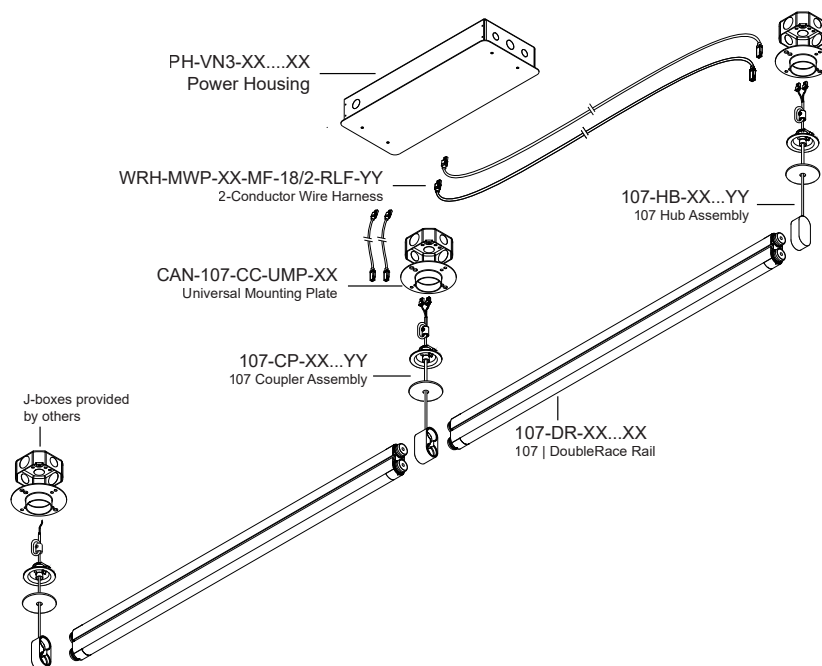
Power and Controls

Flexible 1 to 1 power

For Flexible 1 to 1 Power, Vode supplies one single output driver per fixture, allowing each fixture to be controlled independently. Direct/Indirect fixtures are supplied with two single output drivers, allowing the direct and indirect lighting to be controlled independently. Consult **Power Guide** to determine which type you will receive.

PH-VN4-XX....XX
Power Housing

107-HB-XX...YY
107 Hub Assembly

WRH-MWP-XX-MF-18/2-RLF-YY
2-Conductor Wire Harness

CAN-107-CC-UMP-XX
Universal Mounting Plate

107-CP-XX...YY
107 Coupler Assembly

107-DR-XX...XX
107 | DoubleRace Rail

J-boxes provided
by others

Optimized Power

To optimize power, Vode configures specifications with drivers that have 2 or 4 outputs. Depending on system configurations and power requirements, up to 4 fixtures can be powered from a 4-output driver. Consult **Power Guide** to determine which type you will receive.

IMPORTANT: Each fixture will still require individual wire harnesses, as shown below.

PH-VN3-XX....XX
Power Housing

WRH-MWP-XX-MF-18/2-RLF-YY
2-Conductor Wire Harness

107-HB-XX...YY
107 Hub Assembly

CAN-107-CC-UMP-XX
Universal Mounting Plate

107-CP-XX...YY
107 Coupler Assembly

107-DR-XX...XX
107 | DoubleRace Rail

J-boxes provided
by others

Note: Drawings not to scale, for reference only.

Finish

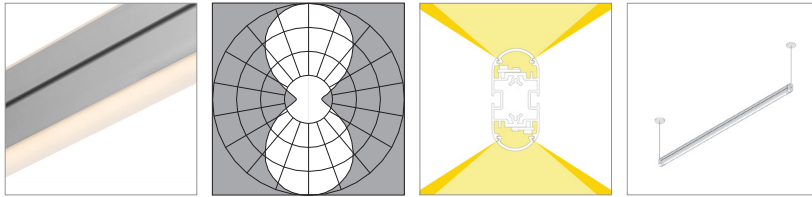| Clear Anodized Finish	White Powder Coat Finish	Black Anodized Finish
Clear Anodized Rail, White Canopy/Clear Anodized Integral Power, White Cable	White Rail, White Canopy/Integral Power, White Cable	Black Rail, Black Canopy/Integral Power, Black Cable

Performance | Zipper Board Optics

Zipper Board Optics design has 72 diodes per foot (305mm).
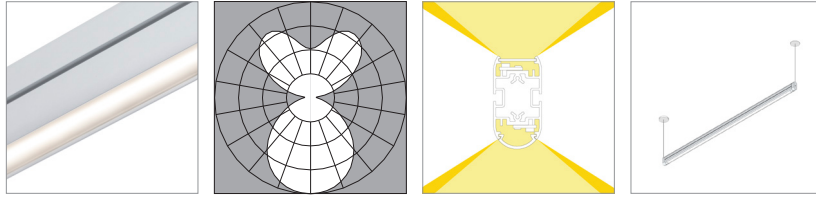
Diffuse, Round, up | Diffuse, Round, down (22)

L80 >60,000 hours

	80 CRI (80min., 84 avg.)				**90 CRI** (90min., 96 avg.)			
Low Output (LO)	2700K	3000K	3500K	4000K	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	126	130	132	132	108	112	114	115
Lumens per foot (305mm)	865	892	910	910	746	769	785	793
Watts per foot (305mm)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Standard Output (SO)								
Efficacy - Lumens per Watt	145	150	153	153	125	129	132	133
Lumens per foot (305mm)	1730	1784	1821	1821	1491	1538	1570	1585
Watts per foot (305mm)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
High Output (HO)								
Efficacy - Lumens per Watt	134	139	142	142	116	120	122	123
Lumens per foot (305mm)	3287	3391	3460	3460	2833	2923	2983	3012
Watts per foot (305mm)	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6

Performance | Zipper Board Optics

Zipper Board Optics design has 72 diodes per foot (305mm).
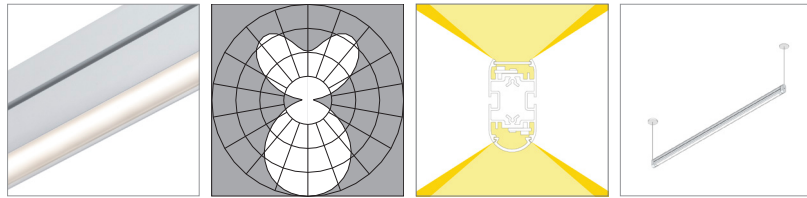
120° Batwing, Flat, up | Diffuse, Round, down (G12)

L80 >60,000 hours

	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
Low Output (LO)	2700K	3000K	3500K	4000K	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	116	120	122	122	100	103	105	106
Lumens per foot (305mm)	798	823	840	840	688	710	724	731
Watts per foot (305mm)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Standard Output (SO)								
Efficacy - Lumens per Watt	134	138	141	141	116	119	122	123
Lumens per foot (305mm)	1596	1646	1680	1680	1376	1419	1448	1462
Watts per foot (305mm)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
High Output (HO)								
Efficacy - Lumens per Watt	124	128	131	131	107	110	113	114
Lumens per foot (305mm)	3032	3128	3191	3191	2614	2696	2751	2779
Watts per foot (305mm)	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6

120° Batwing, Flat, up | 120° FlyWing, Flat, down (G1G2)

L80 is >60,000 hours

	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
Low Output (LO)	2700K	3000K	3500K	4000K	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	108	110	113	113	92	95	97	98
Lumens per foot (305mm)	741	759	775	775	634	654	668	674
Watts per foot (305mm)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Standard Output (SO)								
Efficacy - Lumens per Watt	124	127	130	130	107	110	112	113
Lumens per foot (305mm)	1472	1518	1549	1549	1269	1309	1336	1349
Watts per foot (305mm)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
High Output (HO)								
Efficacy - Lumens per Watt	114	118	120	120	99	102	104	105
Lumens per foot (305mm)	2796	2885	2943	2943	2411	2487	2537	2563
Watts per foot (305mm)	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6