vode Adaptive Architectural Lighting Systems

Spec Guide

RaceRail | Ceiling-Wall Arm | 107

Red List Approved
Declare.

Direct or indirect lighting for open office, wall wash and ambient applications.

RaceRail: direct or indirect, 370° rotation

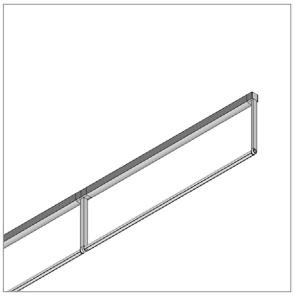
Benefits & Features

Super Slim, Adaptive Design
Round profile, Ø1.12" (28mm).

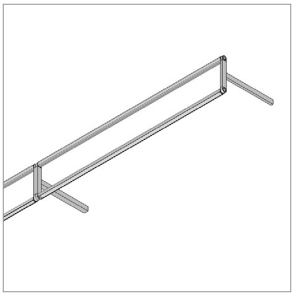
Superior Light Quality & Performance
Output up to 1507 lm/ft (4943 lm/m) (HO), 132 lm/W (SO). 80 or 90 CRI & tunable white (2200K-5000K) available.

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

Better Optics & Beam Control Options
Batwing, FlyWing, and diffuse lens available. Directional control with 370° rotation, angle gauge and lock.



Integral Power



Double Rail with Tee, Zero Canopy™

Build Your Specification

107-RR					

System & Rail Type
107-RR RaceRail

Single/Double Rail
01 Single Rail
03 Double Rail with 3" (76mm) Tee
06 Double Rail with 6" (152mm) Tee
12 Double Rail with 12" (305mm) Tee
ZZ Other (please specify)

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)
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
CA Ceiling Arm
WA Wall Arm

Arm Length
1.25 1.25" arm (32mm) [1]
3 3" arm (76mm)
6 6" arm (152mm)
12 12" arm (305mm)
18 18" arm (457mm) [2]
24 24" arm (610mm) [2]
ZZ Other (please specify) [2]

Power Location
Integral Power

IP Integral Power

Remote Power

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

Mounting Option
00 Zero Canopy
0B Zero Block
2R Small Round Canopy
2S Small Square Canopy
4R Large Round Canopy
4S Large Square 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. [3]

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. [4]

ZZ Other (please specify)

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

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

	Z				

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

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)
2 Diffuse, round
G1 120° Batwing
G2 120° FlyWing

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 [5]
CP Chicago Plenum [6]

NOTES & LIMITATIONS

[1] *1.25" arm length is not available with Zero Block™ (0B).*
[2] *For arms 18" and longer, wall-mounted systems include a cable tie-back.*
[3] *Optimized Power is not available with Hi-lume 1% EcoSystem (AHO) Power Type.*
[4] *VodeNODE enclosure is not available with ELV 1% 2-wire (AH2) Power Type.*
[5] *9' 18/3 Cord and Plug only available with Remote Power (RP).*
[6] *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 and Open Office

Hicksons Lawyers, Barangaroo, Sydney, Australia

Open Office: rendering.

Newport Beach Civic Center, Newport Beach, CA

Declare Label

All Vode Lighting linear light fixtures proudly carry the Red List Approved designation.

See ***International Living Future Institute*** website for details.

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
■ LBC Red List Approved
☐ Declared

% Disclosed: 100% at 100ppm
VOC Content: Not Applicable

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

VDE-0001
EXP. 01 JAN 2025
Original Issue Date: 2018

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

Red List Approved
Declare.

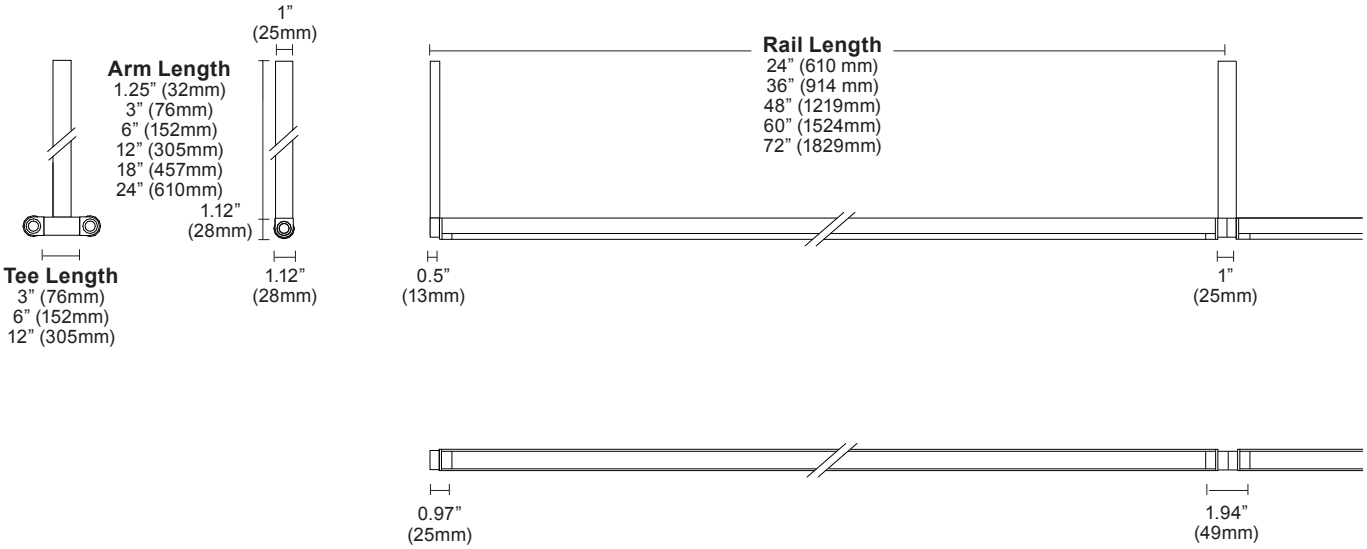
Structure

Rail Lengths	24” (610mm) - 72” (1829mm). Modified lengths available. *See **Rail Length Chart** for more details.*
Rail Dimensions	Ø1.12” (28mm) x length.
Construction	Extruded and machined 6063 aluminum.
Mounting	Ceiling or wall mount to jbox or driver housing.
Arm Length	1.25” (32mm) – 24” (610mm). Non-standard arm lengths available.
System Run Length	24” (610mm) minimum. Unlimited maximum.
Operating Temperature	32ºF to 104ºF (0ºC to 40ºC).
Humidity	0-85%, non-condensing.
System Weight	0.88lbs per ft (0.40kg per 305mm) Power supply and housing not included.

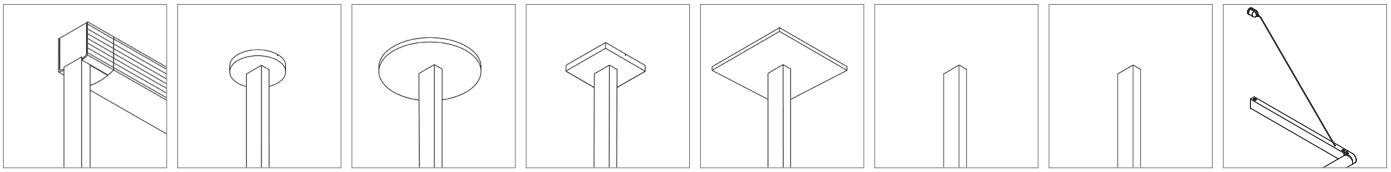
Materials

LED Board Construction	Aluminum core PCB, black LCP connectors, RoHS compliant.
Lens	High-impact extruded acrylic glass (PMMA).
Power Cable	Ø4mm, 18/2 AWG, Plenum (CMP) rated semi-rigid PVC or FEP, flame tested UL-910 *(PVC free in 2020).*
Cable Connectors	Unfilled black nylon, rated UL 94 V-0, halogen free, PVC or FEP overmold, RoHS compliant *(PVC free in 2020).*
Remote Linear Power Housing (RLP)	0.7” x 2.375” x 2.53”, 0.054” formed Galvanized Steel.
Remote Brick Power Housing (RBP)	4.32” x 3.37” x .078” Galvanized Steel mounting plate.

Dimensions



Mounting Options



Integral Power
h 1.8” (46mm)
w 1.7” (43mm)

Small Round Canopy Ø2.5” (64mm)

Large Round Canopy Ø4.5” (114mm)

Small Square Canopy 2.5” (64mm)

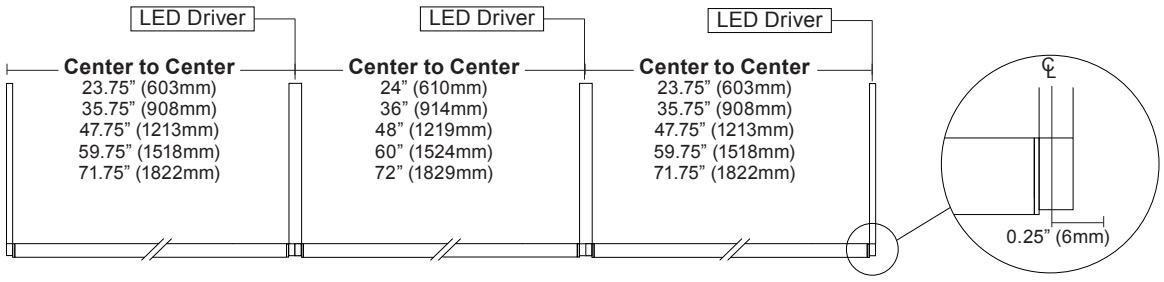
Large Square Canopy 4.5” (114mm)

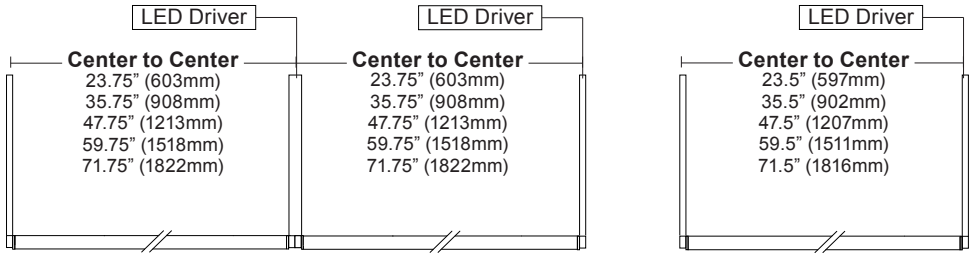
Zero Block

Zero Canopy

Cable Tie Back for wall arms ≥ 18” (457mm) and tees ≥ 6” (152mm).

Layout





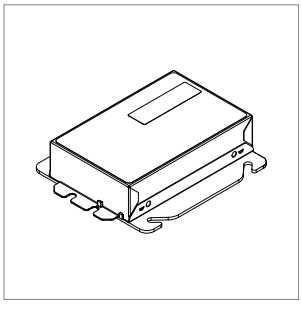
Corner and Shapes Available (Square, Rectangle, L-Shape, U-Shape, ZigZag) ***See Guide*** *for details.*

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.*

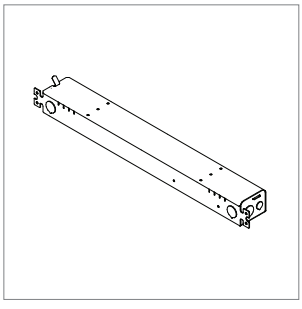
Vode power locations fall into two categories: integral and remote. Remote power is locating the power supply away from the fixture. Remote power comes in two housing styles: brick style and linear style. Consult ***Power Guide*** to determine which type you will receive. Integral power is locating the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

Remote Brick Power Housing



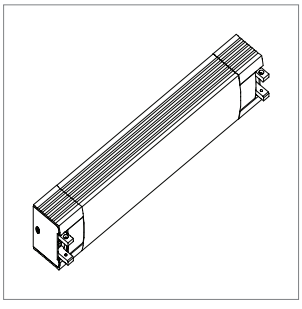
Supplied for some remote power applications. One remote power supply housing is supplied for each rail. Provided driver mounting plate fits standard 4” metal, square J-Boxes with a minimum volume of 21 in^3 (J-Box not provided).
See ***Tech Sheet*** for details.

Remote Linear Power Housing



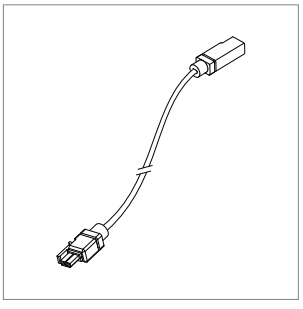
One remote power supply housing is supplied with each power supply. All Vode linear remote drivers come in a 0.054” (0.8mm) formed galvanized steel power supply housing with five (5) knockouts: (4) 1-1/8”, (1) 7/8“ and (1) 9/16”. Accommodates standard linear power supplies.
See ***Tech Sheet*** for details.

Integral Power



Houses integral power supply. Direct conduit feed recommended. Housing mounts to standard North America 4” j-box. Mounts to most surfaces. Blocking recommended at all arm junctions.
See ***Tech Sheet*** for details.

Wire Harness

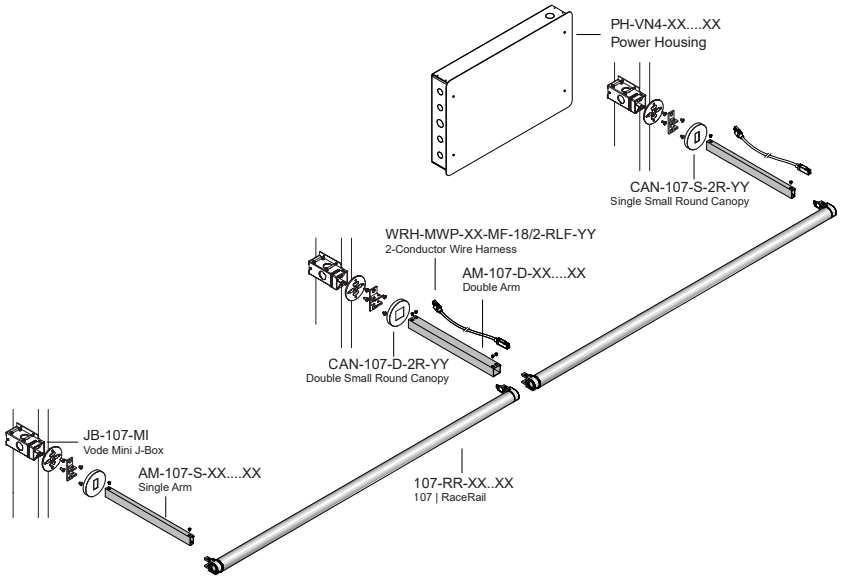


Wire harness connects driver to rail section. Lengths of 10’ (3.0m) & 25’ (7.6m) with snap-lock connectors for quick and easy installation. Multiple harnesses may be combined for lengths up to 100’ (30.5m).
See ***Tech Sheet*** for details.

Power and Controls

Flexible 1 to 1 power

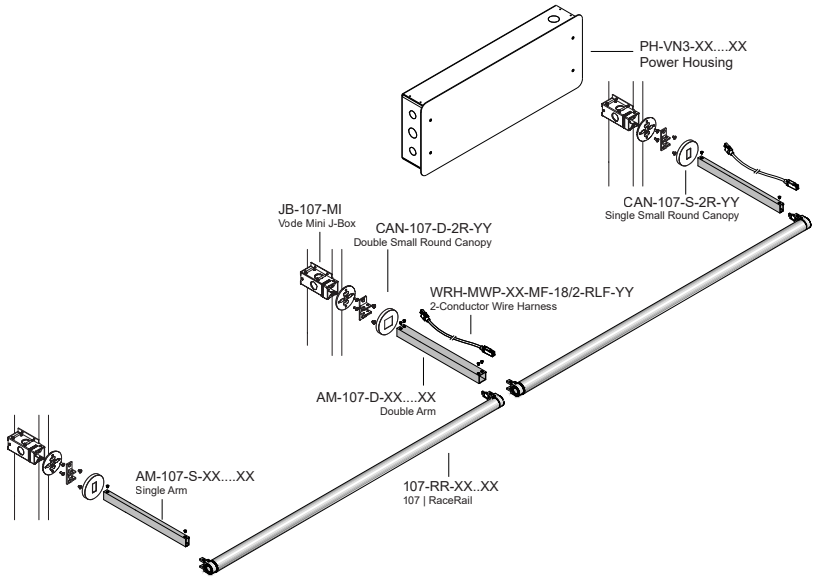
For Flexible 1 to 1 Power, Vode supplies one single output driver per fixture, allowing each fixture to be controlled independently. Direct/Indirect fixtures are supplied with two single output drivers, allowing the direct and indirect lighting to be controlled independently. Consult ***Power Guide***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



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.

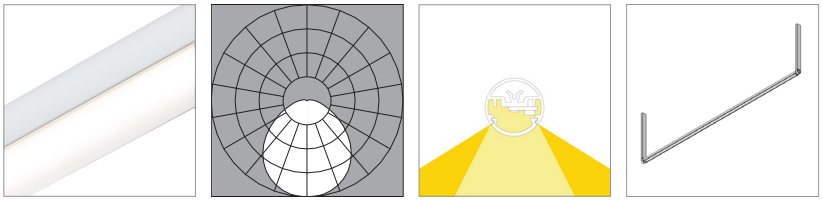


Note: Drawings not to scale, for reference only.

Performance | Zipper Board Optics

Zipper Board Optics design has 72 diodes per foot (305mm).

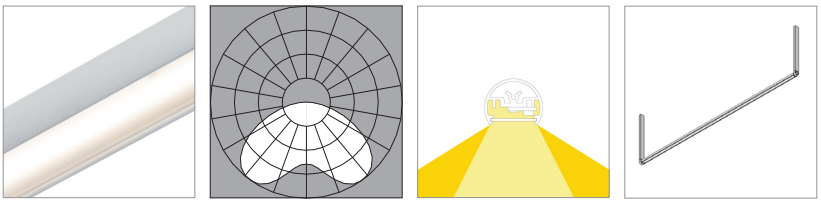
Diffuse, round (2)



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	109	112	114	115
Lumens per foot (305mm)	432	446	455	455	373	385	392	396
Watts per foot (305mm)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Standard Output (SO)								
Efficacy - Lumens per Watt	145	150	153	153	125	129	132	133
Lumens per foot (305mm)	865	892	910	910	746	769	785	793
Watts per foot (305mm)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
High Output (HO)								
Efficacy - Lumens per Watt	134	139	142	142	116	120	122	123
Lumens per foot (305mm)	1643	1695	1730	1730	1416	1461	1491	1506
Watts per foot (305mm)	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3

120° Batwing (G1)



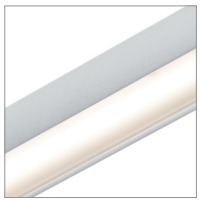
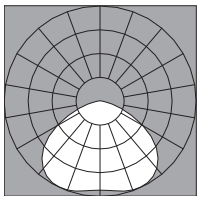
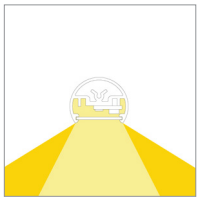
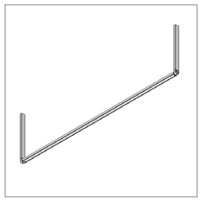
L80 >60,000 hours

	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	98	101	103	103	85	87	89	90
Lumens per foot (305mm)	365	377	385	385	315	325	332	335
Watts per foot (305mm)	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Standard Output (SO)								
Efficacy - Lumens per Watt	122	126	128	128	106	109	111	112
Lumens per foot (305mm)	731	754	769	769	630	650	663	670
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.0
High Output (HO)								
Efficacy - Lumens per Watt	114	117	120	120	98	101	103	104
Lumens per foot (305mm)	1389	1433	1462	1462	1197	1235	1260	1273
Watts per foot (305mm)	12.3	12.3	12.3	12.3	12.4	12.4	12.4	12.4

Performance | Zipper Board Optics

Zipper Board Optics design has 72 diodes per foot (305mm).

120° FlyWing (G2)

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	111	114	114	93	96	98	99
Lumens per foot (305mm)	370	382	390	390	319	329	336	339
Watts per foot (305mm)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Standard Output (SO)								
Efficacy - Lumens per Watt	124	128	131	131	107	110	113	114
Lumens per foot (305mm)	741	764	780	780	639	659	672	679
Watts per foot (305mm)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
High Output (HO)								
Efficacy - Lumens per Watt	115	119	121	121	99	103	105	106
Lumens per foot (305mm)	1408	1452	1482	1482	1213	1252	1277	1290
Watts per foot (305mm)	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3