vode Adaptive Architectural Lighting Systems

Spec Guide

ZipTwo | Square 5020 | Ceiling Cable | 707

Red List Approved
Declare.

Direct or indirect lighting for wall wash and ceiling wash applications.

Square 5020, Critical Edge, white

Benefits & Features

Minimal Profile, Robust Design
Rectangular profile. 2" (51mm) x .75" (19mm).

Superior Light Quality & Performance
Output up to 1103 lm/ft (3617 lm/m) (HO), 112 lm/W (HO). 90 CRI & tunable white (2200K-5000K) available.

Adaptive Power Body
Full range dimming power for all protocols. Integral or remote power available. Remote power available up to 100' (30.5m) away.

Floating Plane of Light
Clean lines created by Critical Edge™ optic and a wide luminous surface without diode image.
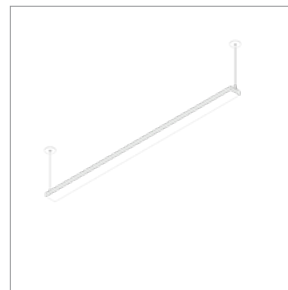
Small Round Canopy

Integral Power

Build Your Specification

707-Z2	S			CC	▸▸

System & Rail Type

707-Z2 ZipTwo

System Type

S   Suspended

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)
108   108" (2743 mm)
120   120" (3048 mm)
132   132" (3352 mm)
144   144" (3658 mm)
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* <u>Rail Length Chart</u> *for more details.*

Mounting

CC   Ceiling Cable

Arm/Cord Length

48   48" cord (1219mm)
96   96" cord (2438mm)
ZZ   Other (please specify)

▸▸			▸▸

Power Location

Integral Power

IP   Integral Power

Remote Power

Specify mounting and harness length code example: **2R25, 2R50**...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, LDE1
AH2   ELV 1% 2-wire (Forward and Reverse Phase)

Optimized Power

Add '**O**' to power type example: AE**O**, AT**O**...etc. [1]

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. [2]

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

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

ZZ   Tunable White Available
        See Guide *for details*

Optics

W5   Square 5020, Critical Edge

Sensors [3]

0   None
ENC   Canopy with integrated Enlighted Micro Sensor
WSC   Canopy with integrated Legrand Wattstopper sensor
LAC   Canopy with integrated Lutron Athena sensor
ZZ   Other (please specify)

▸▸	

Finish

WH White
BL Black

Options

0   None
9   9' 18/3 Cord and Plug
CP   Chicago Plenum
LLLC Luminaire Level Lighting Controls

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

NOTES & LIMITATIONS

[1] Optimized Power is not available with Hi-lume 1% EcoSystem (AHO) Power Type.

[2] VodeNODE enclosure is not available with ELV 1% 2-wire (AH2) Power Type.

[3] Sensors, drivers, and control units that are integrated into Vode fixtures are discrete components that communicate with network lighting controls. For more information about each network lighting control system, visit the manufacturer's website for additional system information and technical data sheets.
For general information about network lighting controls, consult the DesignLights Consortium® (DLC) **Networked Lighting Control Qualified Product List**.

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

Square 5020, Critical Edge

Square 5020, Critical Edge

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   % 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

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) - 144" (3658mm). Modified lengths available. *See **Rail Length Chart** for more details.*
Rail Dimensions	2" (51mm) x 1.44" (37mm) x length.
Construction	Extruded and machined 6063 aluminum.
Mounting	Ceiling mount to jbox or driver housing.
Cable Length	48" (1220mm) 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	0.11kg per foot (xx kg 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).
Suspension Cable	Ø4mm, 22/4 AWG, TPE jacket, FEP-insulated, Red List Approved.
Power Cable	Ø3mm, 33/2 AWG, Plenum (CMP) rated semi-rigid PVC or FEP, flame tested UL-910, Red List Approved.
Cable Connectors	Unfilled black nylon, rated UL 94 V-0, halogen free, PVC or FEP overmold, RoHS compliant, Red List Approved.
Remote Linear Power Housing	20.7" x 2.375" x 2.53", 0.054" formed Galvanized Steel.
Remote Brick Power Housing	4.32" x 3.37" x .078" Galvanized Steel mounting plate.
Integral Power Housing	extruded and machined 6063 aluminum.
Center Cable Suspension	3/64" aircraft cable.

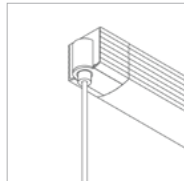## Mounting Options

Remote Power
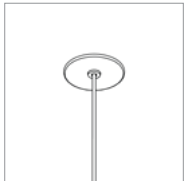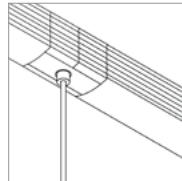

Small Round
Canopy
Ø2.5" (51mm)
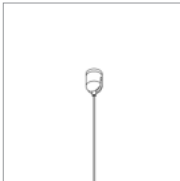
Center Support Cable
108" - 144" Rails Only

*Center Support Cable for
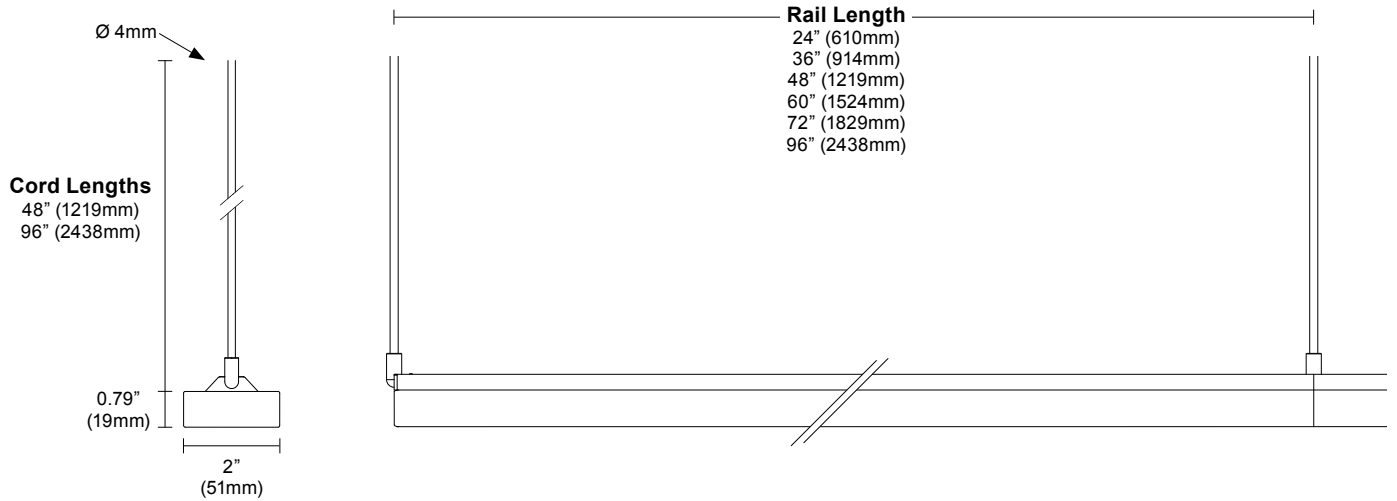mounting to T-Bar tile available.*

Integral Power (24"-72")

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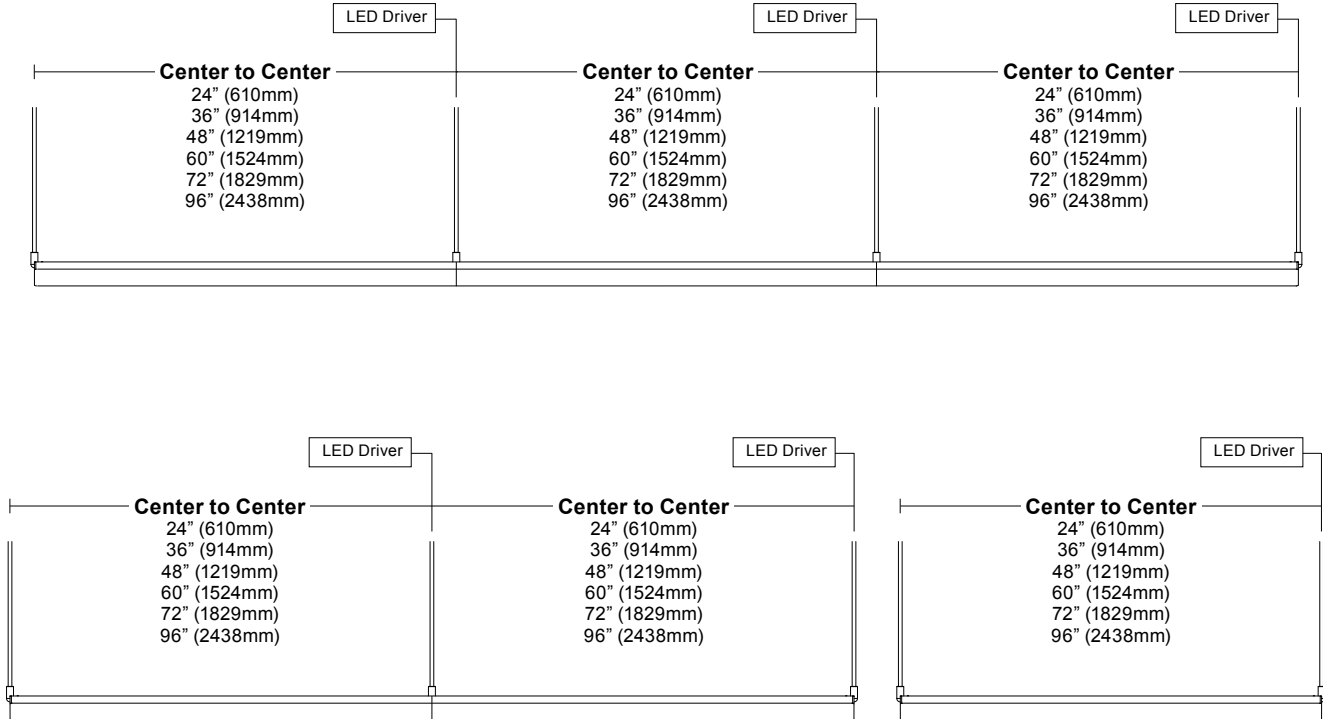(end)
*h 1.8" (46mm)
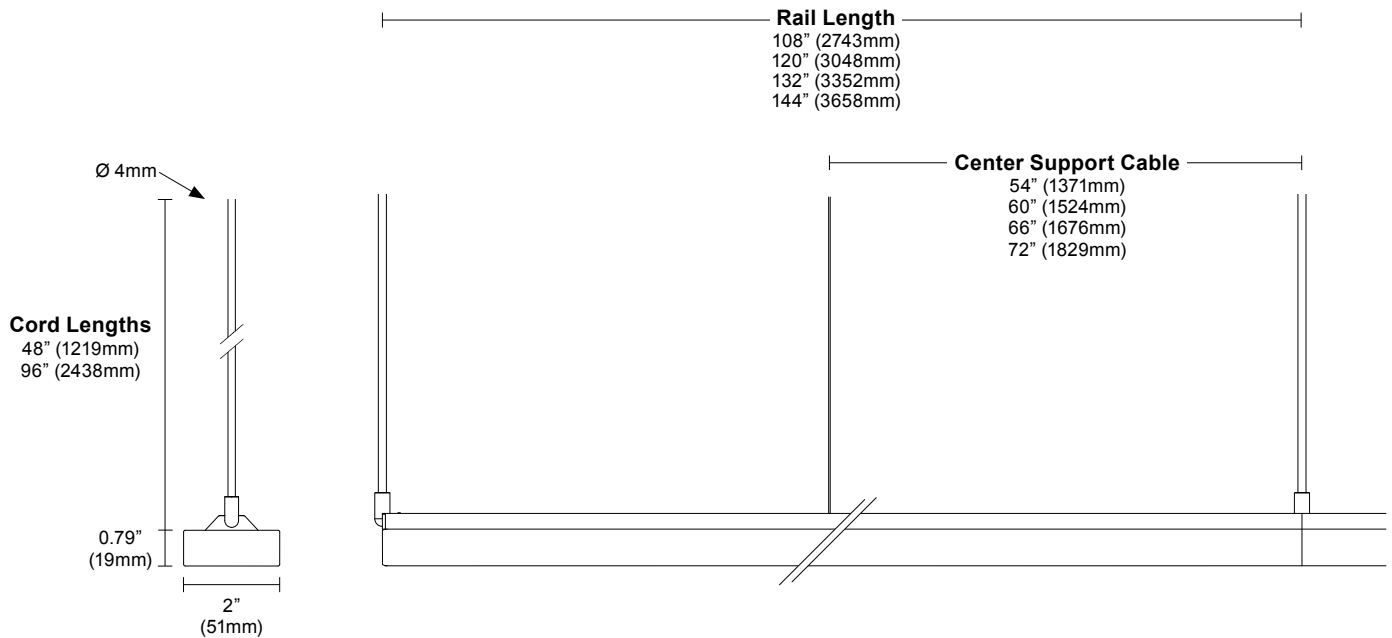w 1.7" (43mm)*

Integral Power
(joint)

Dimensions

Ø 4mm

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

0.79"
(19mm)

2"
(51mm)

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

Layout

LED Driver

LED Driver

LED Driver

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

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

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

LED Driver

LED Driver

LED Driver

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

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

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

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

Dimensions

Rail Length
108" (2743mm)
120" (3048mm)
132" (3352mm)
144" (3658mm)

Center Support Cable
54" (1371mm)
60" (1524mm)
66" (1676mm)
72" (1829mm)

Ø 4mm

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

0.79"
(19mm)

2"
(51mm)

Layout

LED Driver

Center to Center
108" (2743mm)
120" (3048mm)
132" (3352mm)
144" (3658mm)

LED Driver

Center to Center
108" (2743mm)
120" (3048mm)
132" (3352mm)
144" (3658mm)

LED Driver

Center to Center
108" (2743mm)
120" (3048mm)
132" (3352mm)
144" (3658mm)

Support Cable Center (typical)
54" (1371mm)
60" (1524mm)
66" (1676mm)
72" (1829mm)

LED Driver

Center to Center
108" (2743mm)
120" (3048mm)
132" (3352mm)
144" (3658mm)

LED Driver

Center to Center
108" (2743mm)
120" (3048mm)
132" (3352mm)
144" (3658mm)

LED Driver

Center to Center
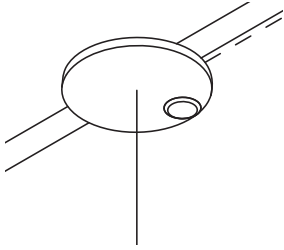108" (2743mm)
120" (3048mm)
132" (3352mm)
144" (3658mm)

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

vodeCONNECT Sensors

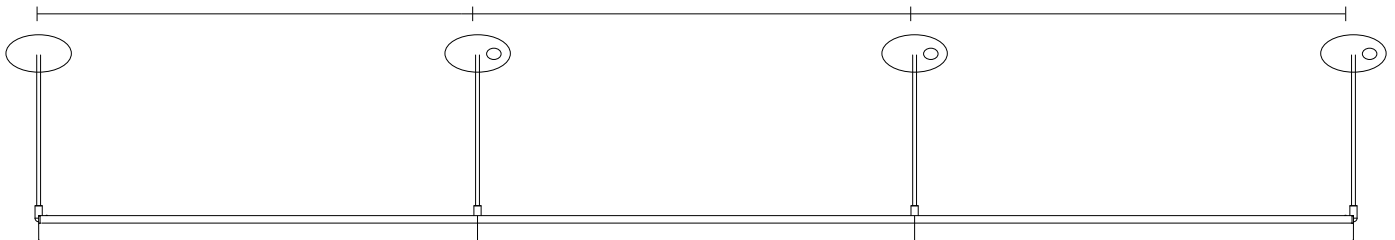## Canopy with integrated sensor

Sensor partners

Integrated canopy sensor layout ¹

*1 sensor per fixture. See **vodeCONNECT brochure** for more details.*
NOTES: 1. Available with Large Round Canopy only.

Compatible sensors


Lutron Athena

Legrand Wattstopper

Enlighted Micro Sensor

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	Remote power. Maximum remote distance up to 100' (30.5m) *depending* on driver selection. *See Power Guide for details.*

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.

| Remote Brick Power Housing	Remote Linear Power Housing	Integral Power	Wire Harness
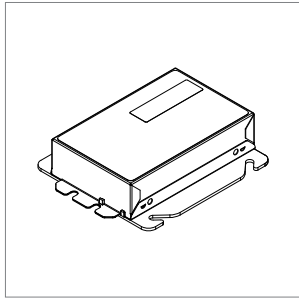
Supplied for some remote power applications. One remote power supply housing is supplied for each rail. Provided driver mounting plate fits standard 4" metal, square J-Boxes with a minimum volume of 21 in^3 (J-Box not provided).
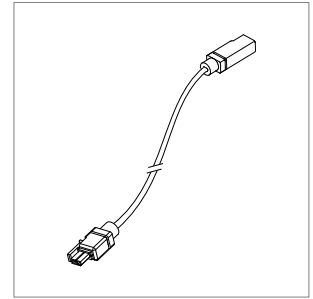See *Tech Sheet* for details.
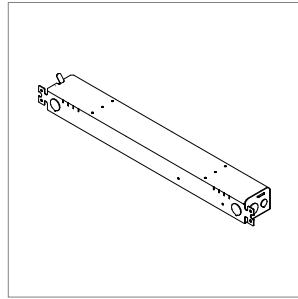
One remote power supply housing is supplied with each power supply. All Vode linear remote drivers come in a 0.054" (0.8mm) formed galvanized steel power supply housing with five (5) knockouts: (4) 1-1/8", (1) 7/8" and (1) 9/16". Accommodates standard linear power supplies.
See *Tech Sheet* for details.
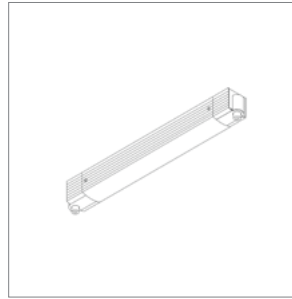
Houses integral power supply. Direct conduit feed is recommended, but integral power supply housing will mount to any standard North America 4" j-box. Mounts to most surfaces. Blocking is recommended at all arm junctions.
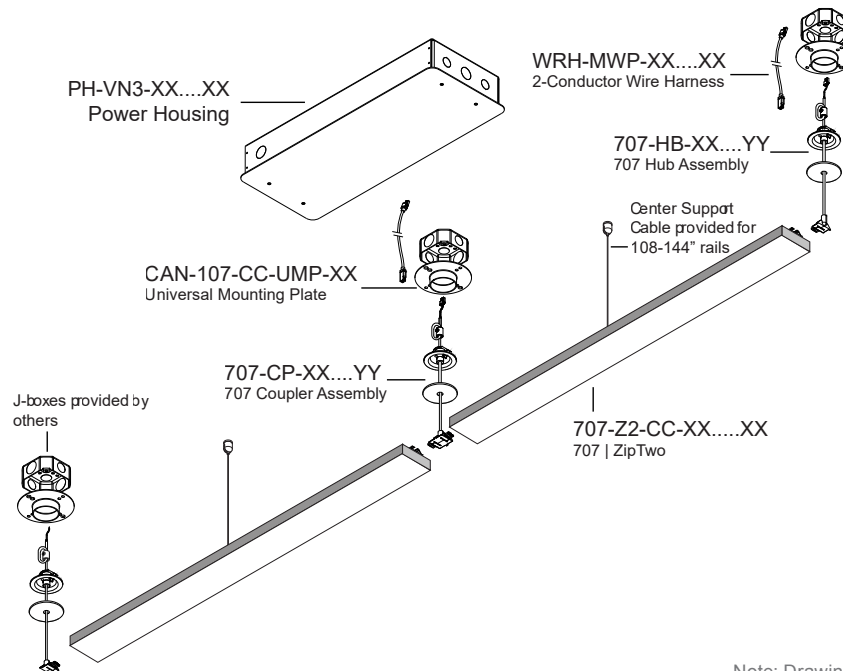See *Tech Sheet* for details.

Wire harness 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-VN3-XX....XX
Power Housing

WRH-MWP-XX....XX
2-Conductor Wire Harness

707-HB-XX....YY
707 Hub Assembly

Center Support
Cable provided for
108-144" rails

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

707-CP-XX....YY
707 Coupler Assembly

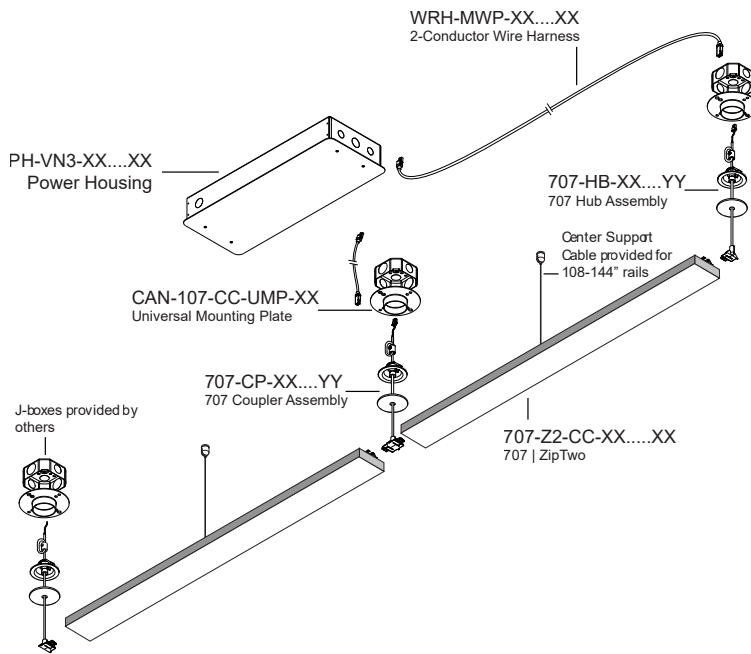707-Z2-CC-XX.....XX
707 | ZipTwo

J-boxes provided by others

Note: Drawings not to scale, for reference only.
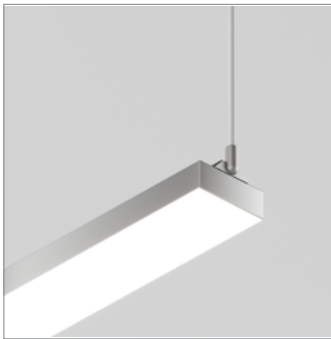
Optimized Power

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.

WRH-MWP-XX....XX
2-Conductor Wire Harness

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

707-HB-XX....YY
707 Hub Assembly

Center Support
Cable provided for
108-144" rails

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

707-CP-XX....YY
707 Coupler Assembly

707-Z2-CC-XX.....XX
707 | ZipTwo

J-boxes provided by
others
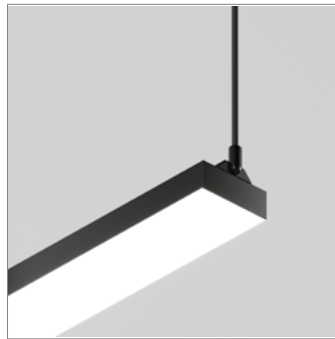
Finish

White Finish

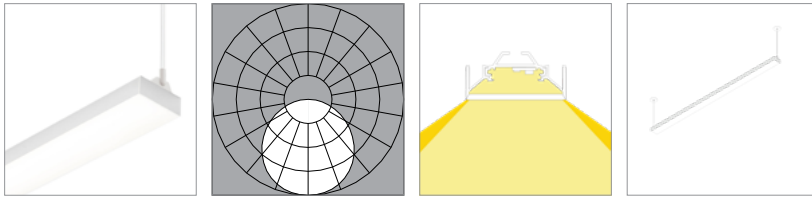White Rail, White Canopy/Integral
Power, White Cable

Black Finish

Black Rail, Black Canopy/Integral
Power, Black Cable

Note: Drawings not to scale, for reference only.

Performance | Zipper Board Optics

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

Square 5020, Critical Edge, white finish (W5-WH)

L90 >100,000 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	94	97	99	99	81	84	86	86
Lumens per foot (305mm)	349	360	368	368	301	311	317	320
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	107	111	113	113	93	96	98	99
Lumens per foot (305mm)	698	720	735	735	602	621	634	640
Watts per foot (305mm)	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
High Output (HO)								
Efficacy - Lumens per Watt	106	110	112	112	92	95	97	98
Lumens per foot (305mm)	1048	1081	1103	1103	903	932	951	960
Watts per foot (305mm)	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9

Square 5020, Critical Edge, black finish (W5-BL)
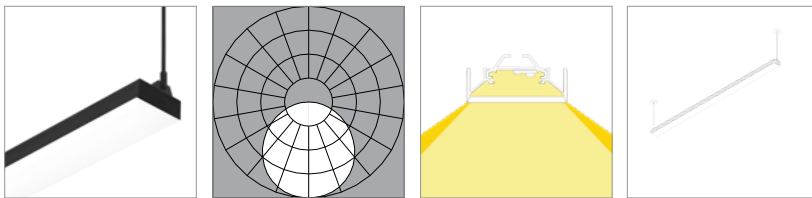
L90 >100,000 hours

	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	67	69	70	70	58	59	61	61
Lumens per foot (305mm)	247	255	260	260	213	220	224	226
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	76	79	80	80	66	68	69	70
Lumens per foot (305mm)	494	509	520	520	426	439	448	452
Watts per foot (305mm)	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
High Output (HO)								
Efficacy - Lumens per Watt	75	78	79	79	65	67	68	69
Lumens per foot (305mm)	741	764	780	780	638	659	672	679
Watts per foot (305mm)	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9