



Spec Guide

BoxRail® | Surface Mount | 907

Accent, ambient or task lighting for wall or ceiling wash, grazing, cove or reveal accent.



BoxRail: Button Board

Benefits & Features

Minimal, Robust Design

Square profile, 1.14" (29mm) x 1.14" (29mm).

Superior Light Quality & Performance

Output up to 1367 lm/ft (4485lm/m) (HO), 120 lm/W (SO). 80 or 90 CRI & tunable white (2200K-6500K) available.

Adaptive Mounting System

Full range dimming power for all protocols.

Better Optics & Beam Control Options

Options of 36°, 19° x 48°, MicroBaffle™, optical film and diffuse lens. Directional control with rotation, angle gauge and lock.



85° Black Asymmetric



Rotating Bracket

Build Your Specification

907-BX				
System & Rail Type	System Length	Rail Length	Mounting	Power Location
907-BX BoxRail	Specify overall system length in ft/in or M/mm.	24 24" (610mm) 36 36" (914mm) 48 48" (1219mm) 60 60" (1524mm) 72 72" (1829mm) ZZ Other rail length or layout (please specify)	F1S Fixed 1 R1B Rotate 1 R2S Rotate 2	Remote Power RP25 25' (7.62m) Wire Harness RP50 50' (15.24m) Wire Harness RP75 75' (22.86m) Wire Harness RP100 100' (30.48m) Wire Harness
See Rail Length Chart for more details				

0				
Power Type*	Voltage	Emergency Power	LED Type	Lumen Output
Flexible 1 to 1 Power	1 120v	0 No Emergency Power	Z Zipper Board™	LO Low Output
AE eldoLED 0-10v, 1.0% Dimming	2 120v-277v	ZZ Emergency Power (specify requirements)	B Button Board™ ¹	SO Standard Output
AT eldoLED 0-10v, 0.1% Dimming	X Not Yet Specified			HO High Output
AD eldoLED DALI, 0.1% Dimming				ZZ Other (please specify)
AX eldoLED DMX, 100-0% Dimming				
AH Hi-lume 1% EcoSystem, Soft On / Fade to Black Technology, LDE1				See IES Files page for details.
AH2 Hi-lume 1% 2-wire LTEA2W (120V forward phase only)				*See Power Guide for driver features & limitations.
Optimized Power				
AEO eldoLED 0-10v, 1.0% Dimming				
ATO eldoLED 0-10v, 0.1% Dimming				
ADO eldoLED DALI, 0.1% Dimming				
AXO eldoLED DMX, 100-0% dimming				
ZZ Other (please specify)				

*See [Power Guide](#) for driver features & limitations.

0				
Color Temperature	Optics	Sensors	Finish	Options
80+ CRI	Zipper Board (Z)	0 None	AL Clear Anodized	0 None
27 2700K	1 Diffuse	ZZ Sensor (specify requirements)	WH White Painted	ZZ Other (please specify)
30 3000K	WB White Baffle		BL Black Anodized	
35 3500K	BB Black Baffle		ZZ Other (please specify)	
40 4000K	G1 120° Batwing			
90+ CRI	G2 120° FlyWing			
279 2700K	S1 40° Symmetric			
309 3000K	S2 60° Symmetric			
359 3500K	A1 85° Asymmetric			
409 4000K				
ZZ Tunable White Available See Guide for details	Button Board (B)			
	19 19° x 48° Oval			
	36 36° Medium			

NOTES & LIMITATIONS

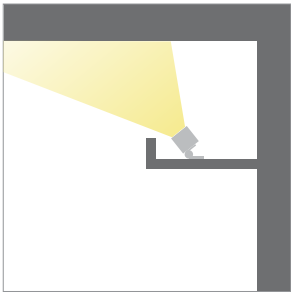
¹ Button Board (B) is not available in 90 CRI5 Year Limited Warranty. See full Vode warranty description [here](#) or at [vode.com](#).

Listed to UL standards for damp location by a Nationally Recognized Testing Laboratory (NRTL) recognized by OSHA.



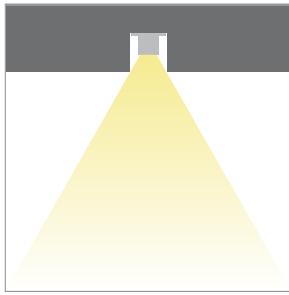
Applications

Cove



Ideal for office, retail, hospitality, museum and residential.

Slot

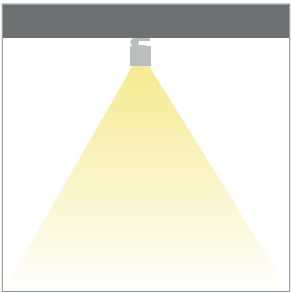


Ideal for office, institutional, retail and hospitality.

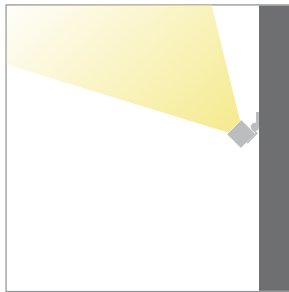


Ideal for lobby, retail, hospitality and institutional.

Surface

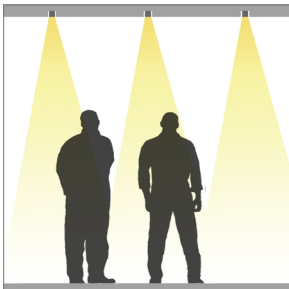


Ideal for retail, hospitality, museum and residential.



Ideal for retail, hospitality, museum and residential.

Cove, Perimeter Slot, Wall Graze, and Flood



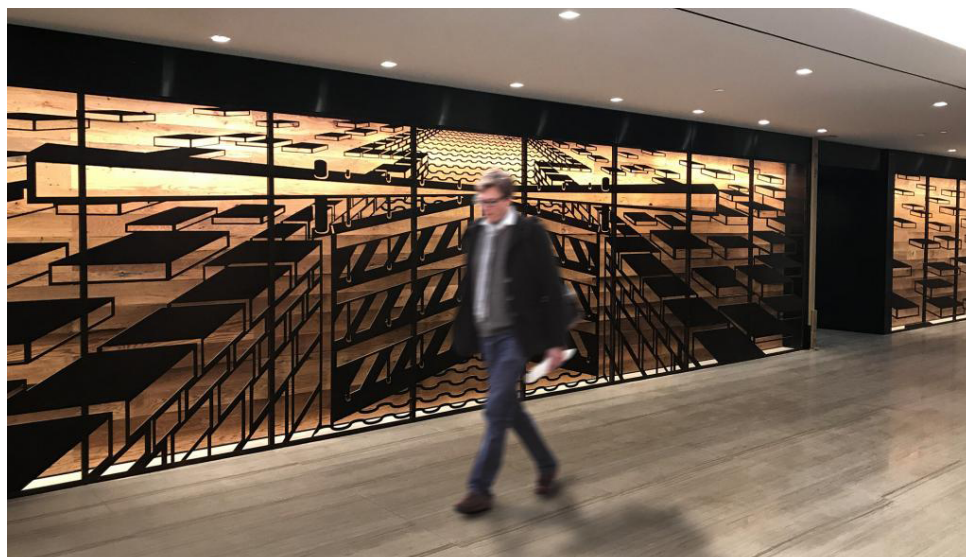
Corrs Chambers Westgarth, Melbourne, VIC

Applications

Cove, Perimeter Slot, Wall Graze, and Flood



The Fairmont, Washington, DC



The Foundry, Washington, DC



Boston Park Plaza Hotel, Boston, MA

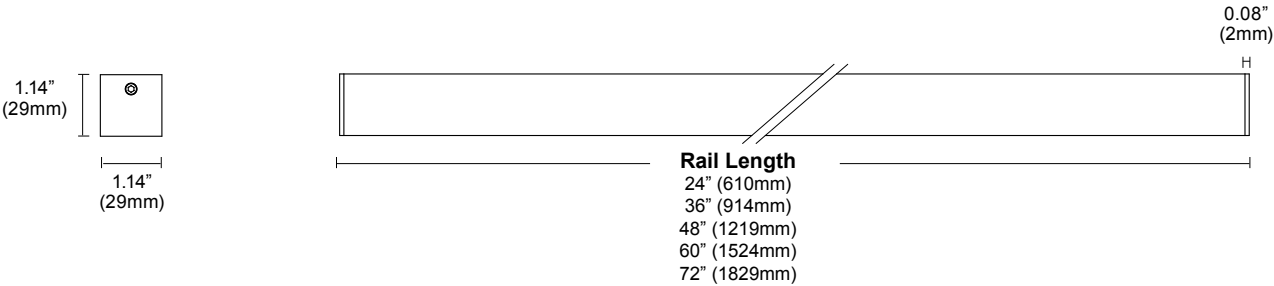
Structure

Rail Lengths	24" (610mm), 36" (914mm), 48" (1219mm), 60" (1524mm), 72" (1828mm).
Rail Dimensions	1.14" (29mm) x 1.14" (29mm).
Construction	Extruded and machined 6063 aluminum.
Run Length	24" (610mm) minimum. Rail lengths may be installed end-to-end to any length.
Operating Temperature	32°F to 104°F (0°C to 40°C).
Humidity	0-85%, non-condensing.
Weight	0.65lbs per ft (0.29kg per 305mm). <i>Power supply and housing not included.</i>

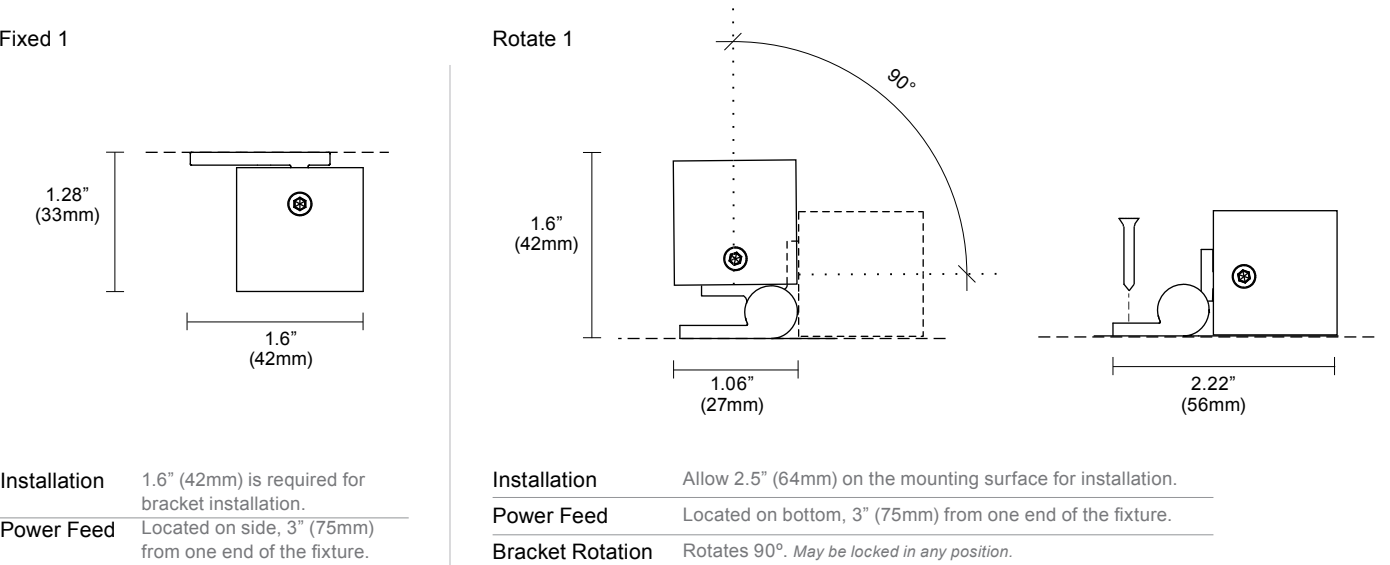
Materials

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.
Button Optics	High-impact cast acrylic glass (PMMA), polycarbonate (PC) holder.
Power Cable	Ø4mm, 18/2 AWG, Plenum (CMP) rated semi-rigid PVC or FEP, flame tested UL-910 (<i>PVC free in 2020</i>)
Cable Connectors	Unfilled black nylon, rated UL 94 V-0, halogen free, PVC or FEP overmold, RoHS compliant (<i>PVC free in 2020</i>)
Remote Linear Power Housing (RLP)	20.7" 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

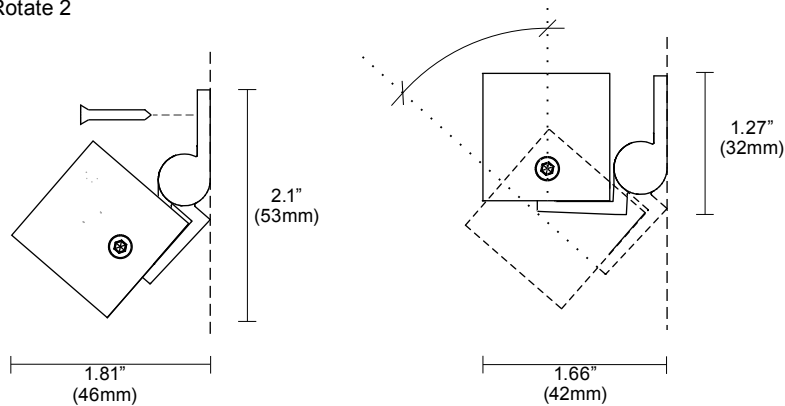


Mounting Options



Mounting Options Continued

Rotate 2



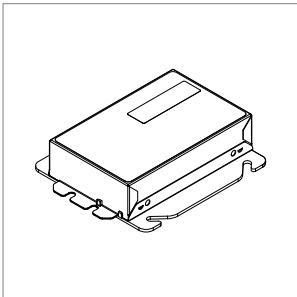
Installation	Allow 2.5" (64mm) on the mounting surface for installation.
Power Feed	Located on side, 3" (75mm) from one end of the fixture.
Bracket Rotation	Rotates 48°. May be locked in any position.

Power and Controls

Power Type	Class 2 (<60v output) constant current driver
Dimming Controls	Dimming (0.1%, 1%), 0-10v, DALI, DMX, Lutron 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.

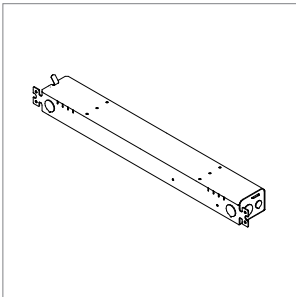
Remote power is locating the power supply away from the fixture. Remote power comes in two housing styles: brick style and linear style. Consult [Power Guide](#) to determine which type you will receive.

Remote Brick Power Housing



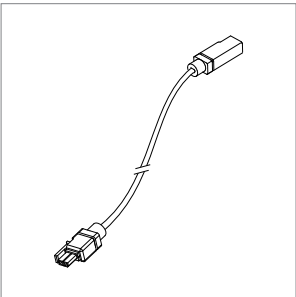
Supplied for some remote power applications. One remote power supply housing is supplied for each rail. Provided driver mounting plate fits standard 4" metal, square J-Boxes with a minimum volume of 21 in³ (J-Box not provided). See [Tech Sheet](#) for details.

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.

Wire Harness

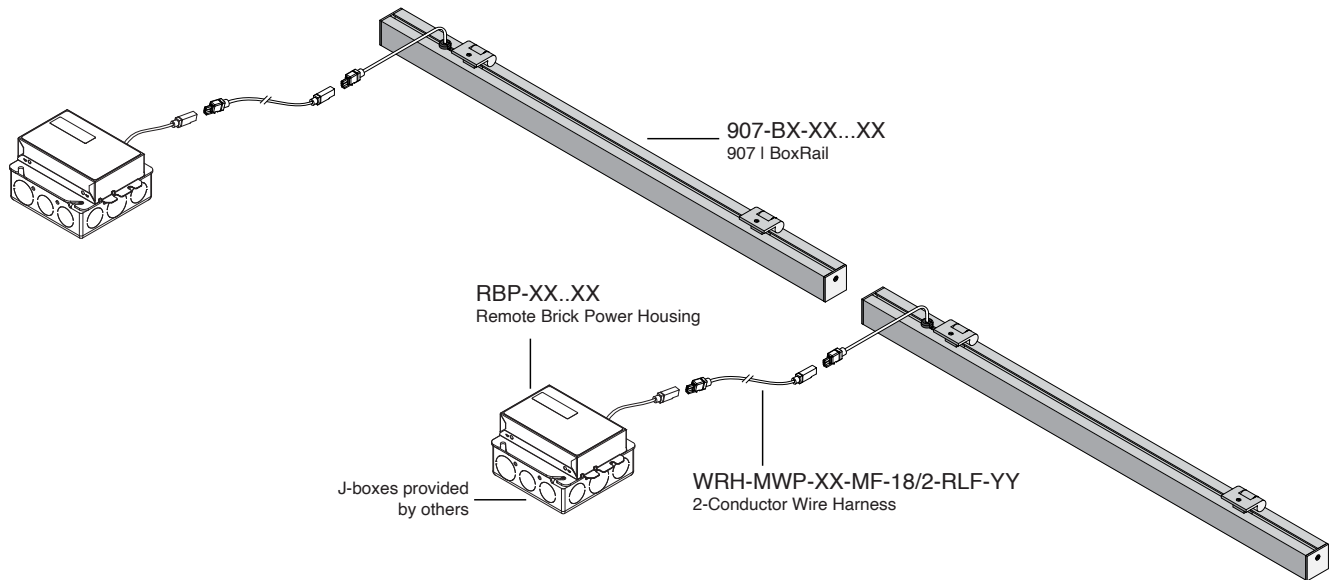


Wire harness connects driver to rail. Wire hareness is 25' (7.6m) with micro fit molex connectors for quick and easy installation. Multiple harnesses can be combined for a total length of up to 100' (30.5m). See [Tech Sheet](#) for details.

Power and Controls

Flexible 1 to 1 power

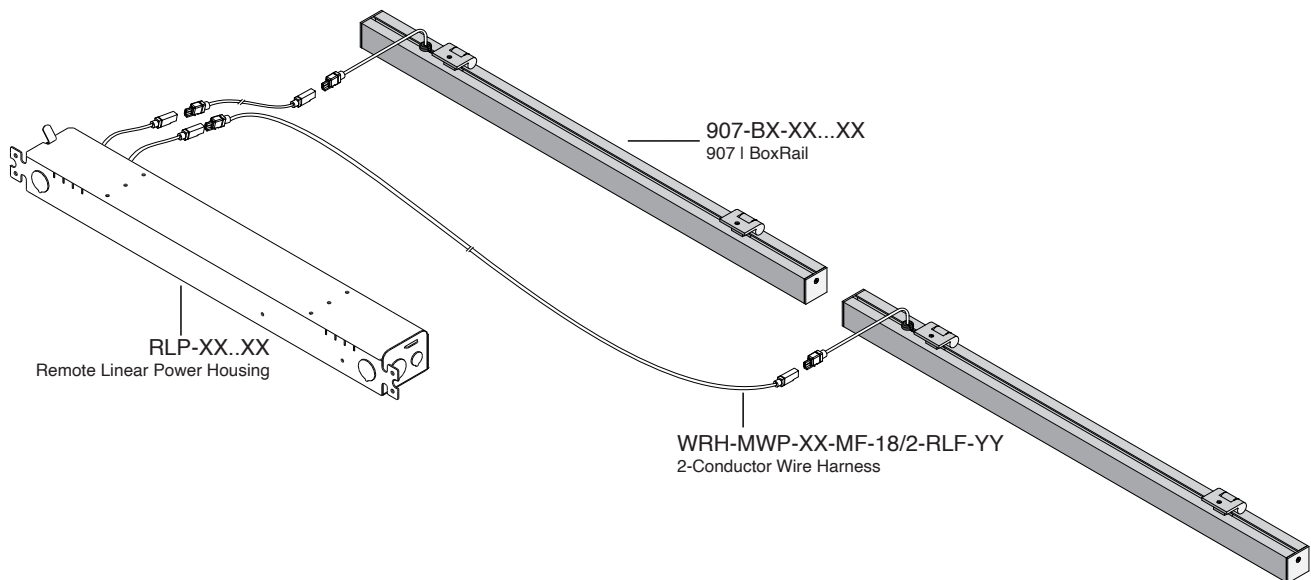
For Flexible 1 to 1 Power, Vode supplies one single output driver per fixture, allowing each fixture to be controlled independently. Direct/Indirect fixtures are supplied with two single output drivers, allowing the direct and indirect lighting to be controlled independently. Consult [Power Guide](#) 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.

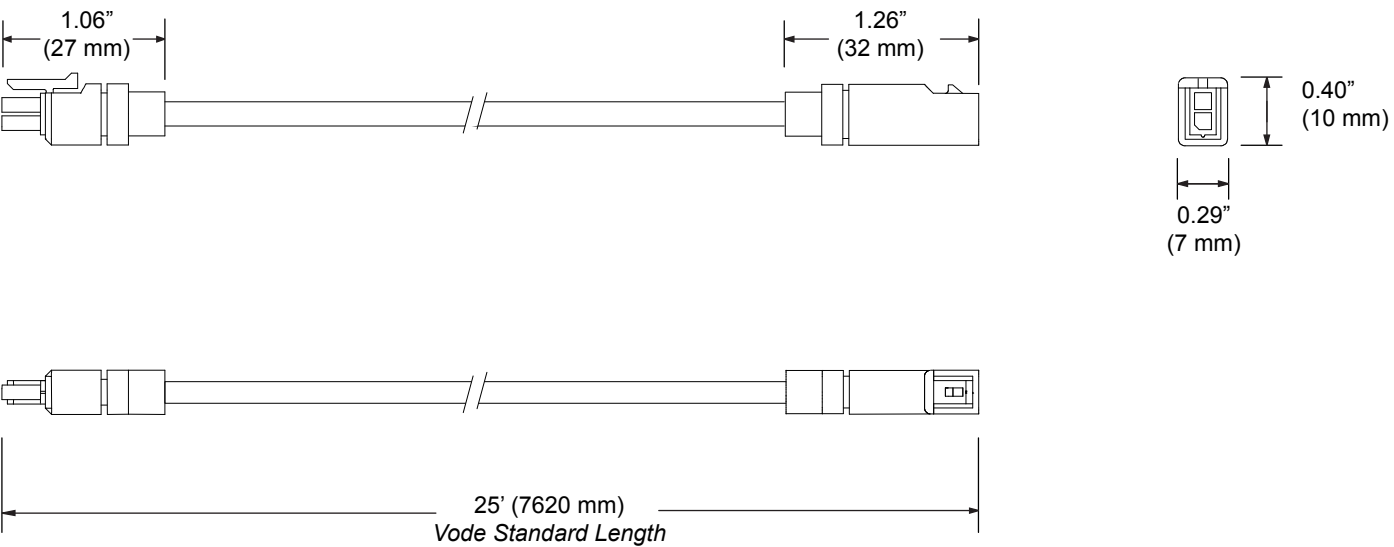


Note: Drawings not to scale, for reference only.

Power and Controls

Wire Harness

Low voltage wire harness connects driver to rail. Wire hareness is 25' (7.6m) 18/2 AWG stranded wire with provided micro fit molex connectors on either end for quick and easy installation. Multiple haresses can be combined for a total length of up to 100' (30.5m). Refer to Vode Power Guide for max remote distance based on power selection. Consult [Power Guide](#) to determine which type you will receive.

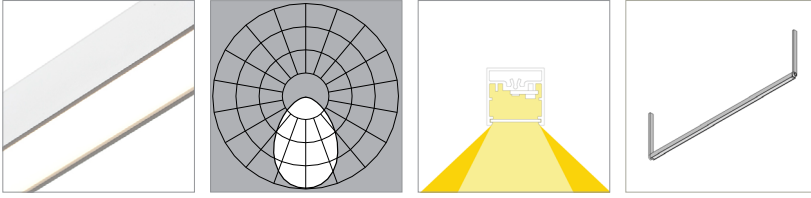


Note: Drawings not to scale, for reference only.

Performance | Zipper LED

Zipper Board has 72 diodes per foot (305mm). Testing based on a 4' rail section. Lumen measurement complies with IES-LM-79-08 testing procedures.

Diffuse (1)



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	76	79	79	79	66	68	69	71
Lumens per foot (305mm)	283	292	295	305	244	252	257	262
Watts per foot (305mm)	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8

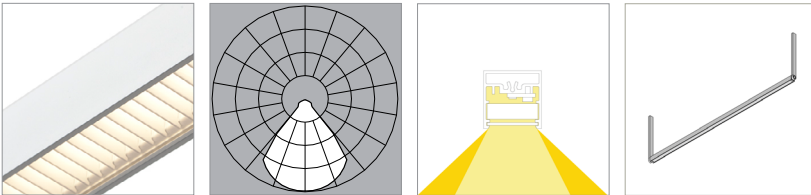
Standard Output (SO)

Efficacy - Lumens per Watt	94	97	98	98	82	84	86	88
Lumens per foot (305mm)	566	584	589	589	489	504	515	525
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

High Output (HO)

Efficacy - Lumens per Watt	88	91	92	92	76	78	80	82
Lumens per foot (305mm)	1075	1109	1120	1120	929	958	978	997
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

White Baffle (WB)



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	52	54	54	55	44	47	47	48
Lumens per foot (305mm)	191	201	201	205	164	173	173	177
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	64	66	67	67	55	57	58	59
Lumens per foot (305mm)	381	393	401	401	329	339	346	353
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

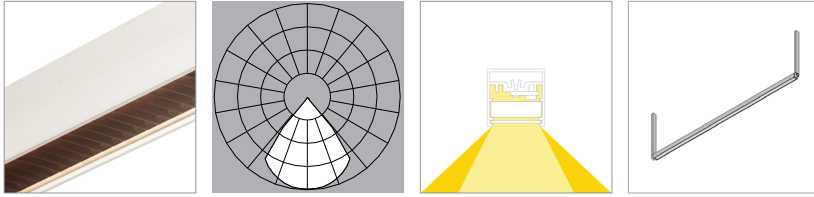
High Output (HO)

Efficacy - Lumens per Watt	59	61	62	64	51	53	54	55
Lumens per foot (305mm)	725	748	763	778	625	644	658	671
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

Performance | Zipper LED Continued

Zipper Board has 72 diodes per foot (305mm). Testing based on a 4' rail section. Lumen measurement complies with IES-LM-79-08 testing procedures.

Black Baffle (BB)



L80 >60,000 hours

	2700K	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
		3000K	3500K	4000K		2700K	3000K	3500K	4000K
Low Output (LO)									
Efficacy - Lumens per Watt	28	30	30	31		25	26	26	26
Lumens per foot (305mm)	105	110	110	112		90	95	95	97
Watts per foot (305mm)	3.8	3.8	3.8	3.8		3.8	3.8	3.8	3.8

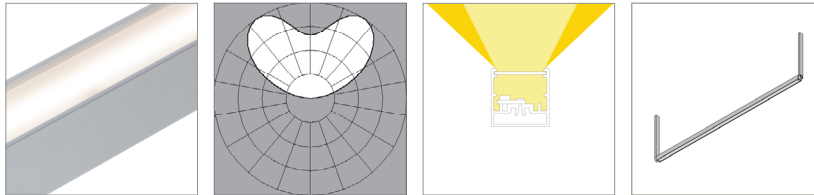
Standard Output (SO)

Efficacy - Lumens per Watt	35	36	37	38	30	31	32	33
Lumens per foot (305mm)	209	216	220	225	180	186	190	194
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

High Output (HO)

Efficacy - Lumens per Watt	33	34	35	35	28	29	30	30
Lumens per foot (305mm)	397	410	418	427	343	353	361	368
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

120° Batwing (G1)



L80 >60,000 hours

	2700K	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
		3000K	3500K	4000K		2700K	3000K	3500K	4000K
Low Output (LO)									
Efficacy - Lumens per Watt	98	101	103	105		84	87	89	91
Lumens per foot (305mm)	364	375	383	391		314	323	330	337
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	131	105	109	111	113
Lumens per foot (305mm)	727	750	766	781	627	647	660	673
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

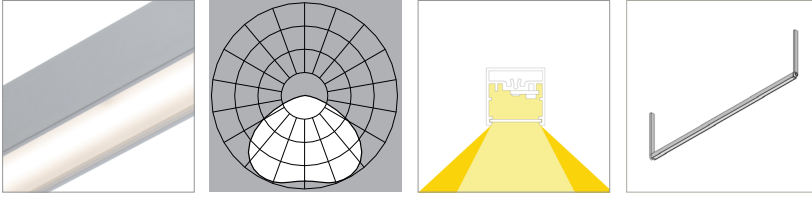
High Output (HO)

Efficacy - Lumens per Watt	113	116	119	121	97	100	102	104
Lumens per foot (305mm)	1382	1426	1455	1484	1192	1229	1254	1279
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

Performance | Zipper LED Continued

Zipper Board has 72 diodes per foot (305mm). Testing based on a 4' rail section. Lumen measurement complies with IES-LM-79-08 testing procedures.

120° FlyWing (G2)



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	90	93	95	97	78	80	82	83
Lumens per foot (305mm)	335	346	353	360	289	298	304	310
Watts per foot (305mm)	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8

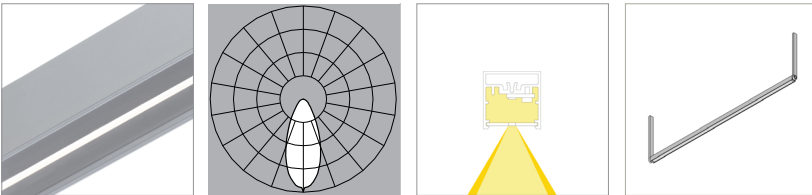
Standard Output (SO)

Efficacy - Lumens per Watt	112	115	118	120	96	99	101	103
Lumens per foot (305mm)	670	691	705	719	578	596	608	620
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

High Output (HO)

Efficacy - Lumens per Watt	104	107	109	112	90	93	94	96
Lumens per foot (305mm)	1273	1313	1340	1367	1098	1132	1155	1178
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

40° Symmetric (S1)



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	42	43	44	45	36	37	38	39
Lumens per foot (305mm)	154	159	162	165	133	137	140	142
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	52	53	54	55	45	46	47	48
Lumens per foot (305mm)	308	317	324	330	265	273	279	285
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

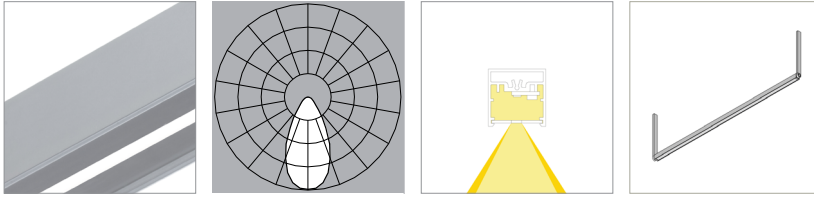
High Output (HO)

Efficacy - Lumens per Watt	48	49	50	51	41	43	44	44
Lumens per foot (305mm)	584	603	615	627	504	520	530	541
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

Performance | Zipper LED Continued

Zipper Board has 72 diodes per foot (305mm). Testing based on a 4' rail section. Lumen measurement complies with IES-LM-79-08 testing procedures.

60° Symmetric (S2)



L80 >60,000 hours

	2700K	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
		3000K	3500K	4000K	2700K	3000K	3500K	4000K	
Low Output (LO)									
Efficacy - Lumens per Watt	52	53	54	55	45	46	47	48	
Lumens per foot (305mm)	191	197	201	205	165	170	173	177	
Watts per foot (305mm)	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	

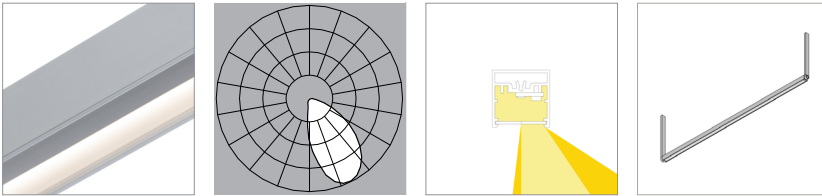
Standard Output (SO)

Efficacy - Lumens per Watt	64	66	67	69	55	57	58	59	
Lumens per foot (305mm)	382	394	402	410	329	340	347	354	
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	

High Output (HO)

Efficacy - Lumens per Watt	59	61	63	64	51	53	54	55	
Lumens per foot (305mm)	726	749	764	779	626	646	659	672	
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	

85° Asymmetric (A1)



L80 >60,000 hours

	2700K	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
		3000K	3500K	4000K	2700K	3000K	3500K	4000K	
Low Output (LO)									
Efficacy - Lumens per Watt	66	68	69	71	57	59	60	61	
Lumens per foot (305mm)	244	252	257	262	210	217	221	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	75	77	79	80	65	67	68	69	
Lumens per foot (305mm)	488	503	513	524	420	434	443	451	
Watts per foot (305mm)	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	
CRI					-	-	-	-	

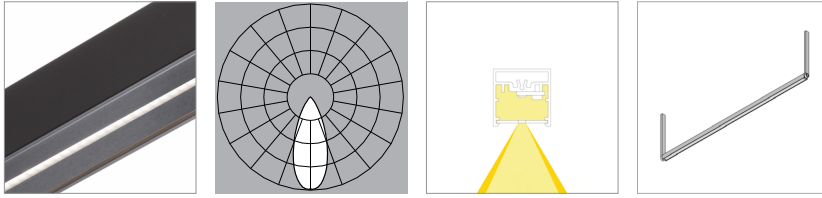
High Output (HO)

Efficacy - Lumens per Watt	76	78	80	81	65	67	69	70	
Lumens per foot (305mm)	927	956	975	995	799	824	841	858	
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	

Performance | Zipper LED Continued

Zipper Board has 72 diodes per foot (305mm). Testing based on a 4' rail section. Lumen measurement complies with IES-LM-79-08 testing procedures.

40° Symmetric, black finish (S1-BL)



L80 >60,000 hours

	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
	2700K	3000K	3500K	4000K	2700K	3000K	3500K	4000K
Low Output (LO)								
Efficacy - Lumens per Watt	32	33	33	34	28	29	29	30
Lumens per foot (305mm)	117	121	123	126	101	104	106	108
Watts per foot (305mm)	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8

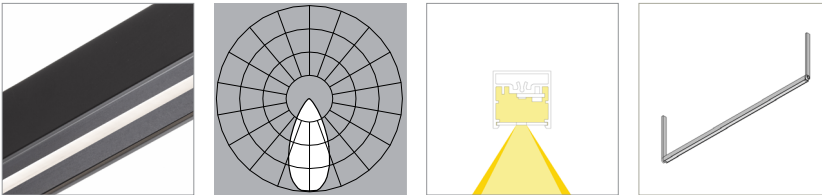
Standard Output (SO)

Efficacy - Lumens per Watt	39	41	41	42	34	35	36	37
Lumens per foot (305mm)	234	242	247	252	202	208	213	217
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

High Output (HO)

Efficacy - Lumens per Watt	37	38	39	39	32	33	33	34
Lumens per foot (305mm)	445	459	469	478	384	396	404	412
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

60° Symmetric, black finish (S2-BL)



L80 >60,000 hours

	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
	2700K	3000K	3500K	4000K	2700K	3000K	3500K	4000K
Low Output (LO)								
Efficacy - Lumens per Watt	39	40	41	41	33	34	35	36
Lumens per foot (305mm)	142	147	150	153	123	127	129	132
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	48	49	50	51	41	43	43	44
Lumens per foot (305mm)	285	294	300	306	245	253	258	263
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

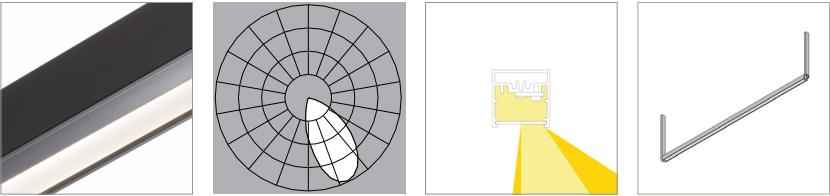
High Output (HO)

Efficacy - Lumens per Watt	44	46	47	48	38	40	40	41
Lumens per foot (305mm)	541	558	569	581	446	481	491	501
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

Performance | Zipper LED Continued

Zipper Board has 72 diodes per foot (305mm). Testing based on a 4' rail section. Lumen measurement complies with IES-LM-79-08 testing procedures.

85° Asymmetric, black finish (A1-BL)



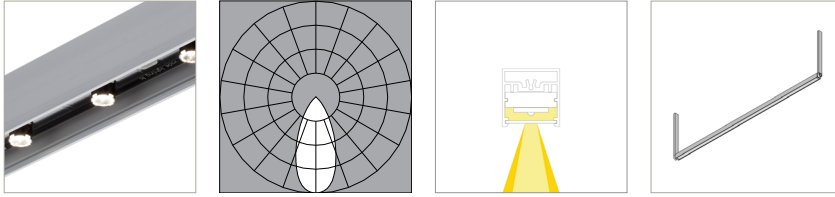
L80 >60,000 hours

	80 CRI (80min., 84 avg.)				90 CRI (90min., 96 avg.)			
	2700K	3000K	3500K	4000K	2700K	3000K	3500K	4000K
Low Output (LO)								
Efficacy - Lumens per Watt	35	36	36	37	30	31	32	32
Lumens per foot (305mm)	128	132	134	137	110	114	116	118
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	43	44	45	46	37	38	39	40
Lumens per foot (305mm)	255	263	269	274	220	227	232	236
Watts per foot (305mm)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
High Output (HO)								
Efficacy - Lumens per Watt	40	41	42	43	34	36	36	37
Lumens per foot (305mm)	485	501	511	521	418	431	440	449
Watts per foot (305mm)	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

Performance | Button LED

Button Board has 6 diodes per foot (305mm). Testing based on a 4' rail section. Lumen measurement complies with IES-LM-79-08 testing procedures.

19° x 48° Oval (19)



L80 >70,000 hours

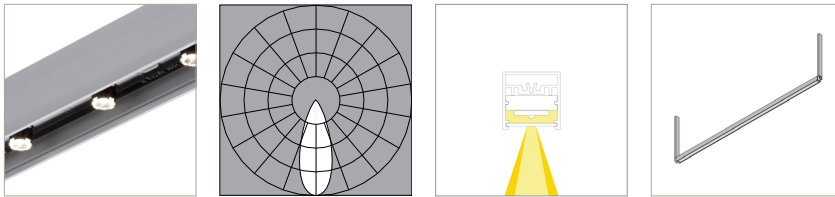
80 CRI (80min., 84 avg.)

Standard Output (SO)	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	61	64	67	69
Lumens per foot (305mm)	423	441	460	478
Watts per foot (305mm)	6.9	6.9	6.9	6.9

High Output (HO)

Efficacy - Lumens per Watt	55	57	60	62
Lumens per foot (305mm)	648	673	701	729
Watts per foot (305mm)	11.7	11.7	11.7	11.7
	-	-	83	-

36° Medium (36)



L80 >70,000 hours

80 CRI (80min., 84 avg.)

Standard Output (SO)	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	71	74	78	80
Lumens per foot (305mm)	492	513	534	556
Watts per foot (305mm)	6.9	6.9	6.9	6.9

High Output (HO)

Efficacy - Lumens per Watt	64	66	70	72
Lumens per foot (305mm)	747	778	810	843
Watts per foot (305mm)	11.7	11.7	11.7	11.7