

24V, IP67 protected and IK10 certified, linear LED luminaire for indoor and outdoor in-ground installation. Suitable for installation into roads and parking lots according to EN 60598-2-13. The product can be walked on and traversed by vehicles with air filled tires including trucks used for delivery. Polyurethane encapsulation offering a premium water proof sealing, UV resistance, chemical stability and protection against abrasion. Stainless Steel V4A housing delivered with male/female IP67 connectors. Available either with an opal top layer or translucent with an internal 10° and 30° optics for wall grazing. Light source assembled using state of the art automated Reel to Reel (R2R) production process supporting LED Linear™ Tj Away® thin flexible circuit board technology. Outstanding lifetime of >60,000 hrs L80/B10 for static white/tunable white and >30,000 hrs for RGB. Embeds high quality LEDs with 3 step MacAdams (SDCM3) binning centered on target CCT (One Bin Only) with an extended photometric code of Wxxx/339 ensuring exceptional color consistency over the rated lifetime. Premium color rendition with CRI up to 95 and TM-30-15 up to R_r = 91 / R_g = 101. Consistent light intensity all along the luminaire length. Fully dimmable. Engineered and produced in Germany.

Project name _____

Fixture type _____ Phase _____

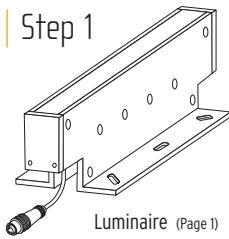
Specifier _____ Date _____



- Integrated Circuit Driver**
Up to 500 lm/ft 107 lm/W Constant Light Output
- Reel-to-Reel R2R Production**
High Quality Solder Free Reels
- TjAway® Thermal Management**
Exceptional Thermal Dissipation
- One Bin Only**
3 MacAdam up to 95 CRI
- Drive Over Walk Over**
- L/B Lifetime**
L80/B10 >60,000 hrs / RGB >30,000 hrs
- 6 Digit Photometric Code**
Wxxx/339
- IES LM79/LM80**
LM79/LM80 Compliant

Ordering Process

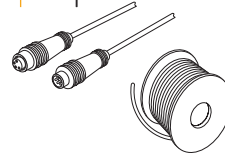
Step 1



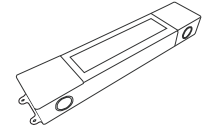
Step 2



Step 3



Step 4



Luminaire Order Code

Family	Model	Lumen package ^a	Color rendering	CCT 10°/30° Optic	CCT Opal Optic	Standard length ^c	Optic	Ingress
VarioLED OCEANOS	-----	-----	W_	---	---	-----	---	IP67
	— Static White	HD06—130 lm/ft	W8—85CRI	20—2000K	21—2100K	520—20 in	0P—Opal Optic	
		HD10—210 lm/ft	W9—95CRI ^b	22—2200K	23—2300K	1020—40 in	100—10° Optic	
		HD15—430 lm/ft		25—2500K	25—2500K		300—30° Optic	
				27—2700K	28—2800K			
				30—3000K	32—3200K			
				35—3500K	37—3700K			
				40—4000K	45—4500K			
				50—5000K				
	IQW ATON - Tunable White (2200K - 4000K)	HD12—230 lm/ft	—	—	—			
		HD24—480 lm/ft	—	—	—			
	RGB - 622nm (R) 532nm (G) 466nm (B)	HD10—130 lm/ft	—	—	—			
		HD20—240 lm/ft	—	—	—			

^a Lumen Values represent 3000K (W930) and with 30° optic.

^b Only available with HD06 and HD10 lumen packages with 2700K, 3000K, 3500K and 4000K. (2500K, 2800K, 3200K, 3700K for Opal version.)

^c Values represent nominal lengths. For exact lengths, see mechanical details on page 2.

30° Opal Optic Lumen Chart (See page 4 for Opal Optic)

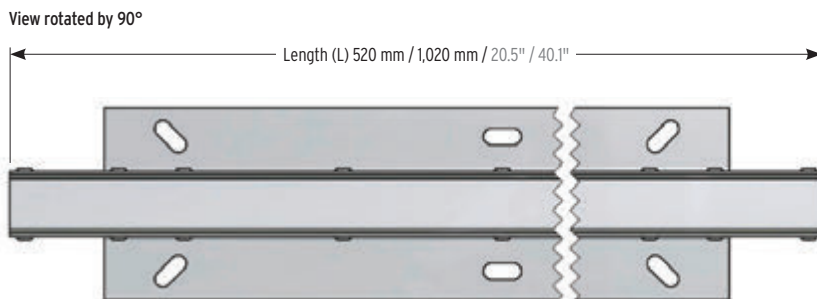
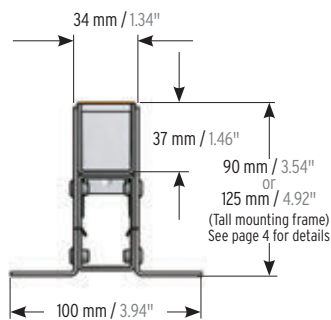
	Color temperature ^a	HD6		HD10		HD15		
		Lumen/ft ^{b,c}	W/ft	Lumen/ft ^{b,c}	W/ft	Lumen/ft ^{b,c}	W/ft	
Static White	● W820	2,000 K	110	1.8	180	3.0	290	4.6
	● W822	2,200 K	120	1.8	210	3.0	330	4.6
	● W825	2,500 K	140	1.8	240	3.0	380	4.6
	● W827/W927	2,700 K	130	1.8	210	3.0	400	4.6
	● W830/W930	3,000 K	130	1.8	210	3.0	430	4.6
	● W835/W935	3,500 K	130	1.8	220	3.0	450	4.6
	● W840/W940	4,000 K	140	1.8	230	3.0	460	4.6
	● W850	5,000 K	190	1.8	310	3.0	500	4.6

^a CCT Tolerances occur in IP67 products due to the encapsulation of the fixture.

^b The given data are typical values. Due to tolerances of the production process and the electrical components, values for light output and electrical power can vary up to 10%.

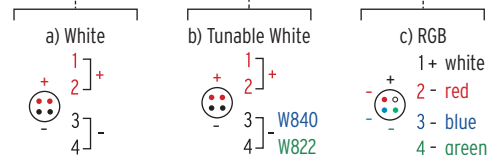
^c Measurements are done using 30° optic. Opal optic decreases light output by 75%. See the chart on page 4 for detailed information.

Mechanical Details



Finish: Stainless Steel

Fixture Weight:
(including mounting)
3.97 lbs / ft



Technical Details

	Static White	Tunable White	RGB
Voltage	24 Volt (23 V _{min} , 25 V _{max})	24 Volt (23 V _{min} , 25 V _{max})	24 Volt (23 V _{min} , 25 V _{max})
Case temperature ^A	T _{Cmin} = -13°F, T _{Cmax} = 149°F	T _{Cmin} = -13°F, T _{Cmax} = 149°F	T _{Cmin} = -13°F, T _{Cmax} = 149°F
Storage temperature	T _{Smin} = -22°F, T _{Smax} = 185°F	T _{Smin} = -22°F, T _{Smax} = 185°F	T _{Smin} = -22°F, T _{Smax} = 185°F
Ambient temperature	T _{Amin} = -13°F, T _{Amax} = specific, see Table below	T _{Amin} = -13°F, T _{Amax} = specific, see Table below	T _{Amin} = -13°F, T _{Amax} = specific, see Table below

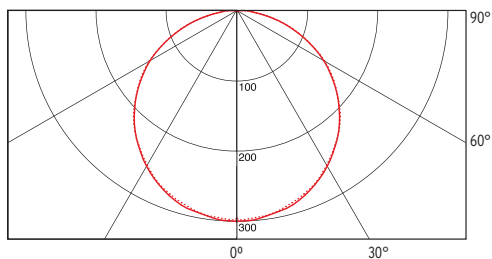
^A The position of the T_C-point is marked on each step of the LED strip. The T_C-point should be measured in thermal equilibrium according to IEC EN 60598-1.

	Static White			Tunable White		RGB	
	HD6	HD10	HD15	HD12	HD24	HD10	HD20
Power (W/ft) ^B	1.8	3.0	4.6	3.7	7.3	3.2	6.7
Efficacy (lm / W) ^B @ W850	106	106	107	67	66	33	30
Max serial run length (ft / m)	16.4 / 5	16.4 / 5	13.1 / 4	16.4 / 5	13.1 / 4	16.4 / 5	13.1 / 4
CRI / R9 @ 3000 K	95 / 70	95 / 70	85 / 30	85 / 20	85 / 20	-	-
Max ambient temperature (T _{Amax})	122°F	113°F	104°F	122°F	104°F	122°F	95°F

^B The given data are typical values. Due to tolerances of the production process and the electrical components, values for light output and electrical power can vary up to 10%.

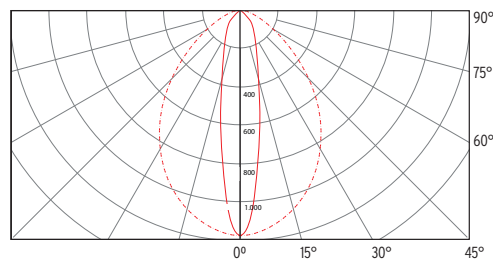
Light Distribution

Opal Optic

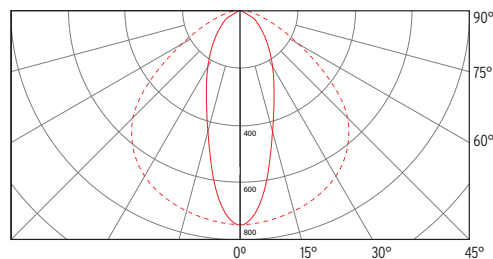


cd/1,000 lumen
 — C0/C180
 C90/C270

10° Optic



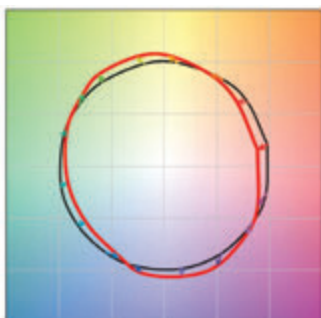
30° Optic



Colorimetric Details

Photometric Code	CCT	CRI	R9	R _f	R _g
W830/339	3000 K	85	23	82	99

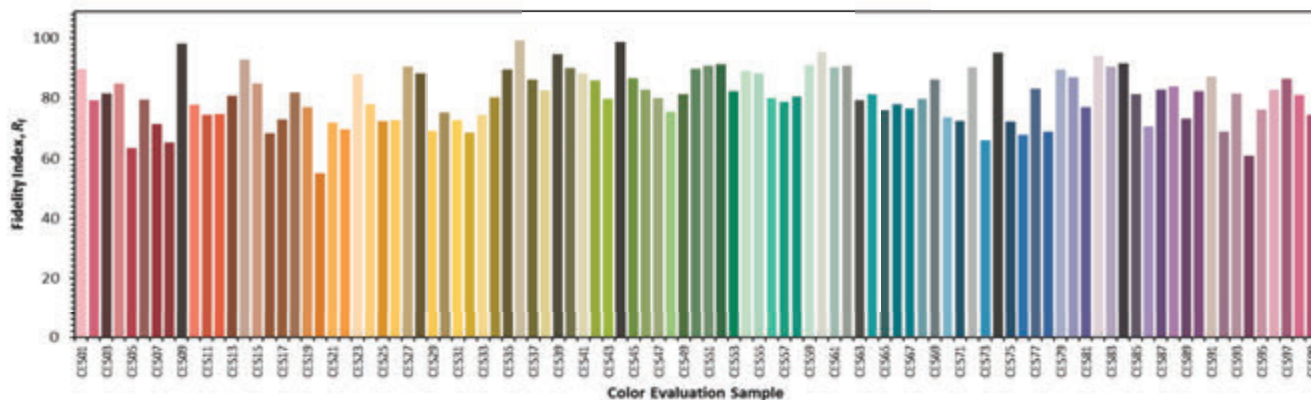
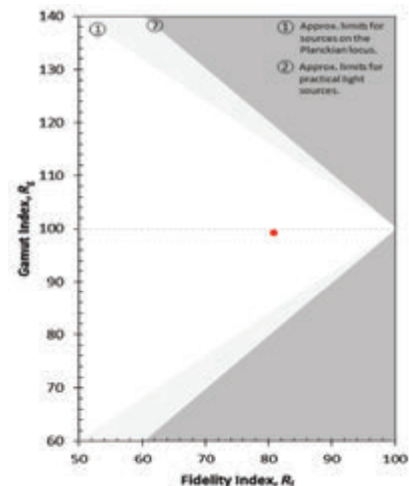
Color Vector Graphic



Color Distortion Graphic



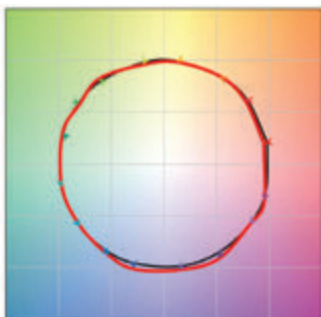
Reference Illuminant
Test Source



Colorimetric Details

Photometric Code	CCT	CRI	R9	R _f	R _g
W930/339	3000 K	96	70	91	101

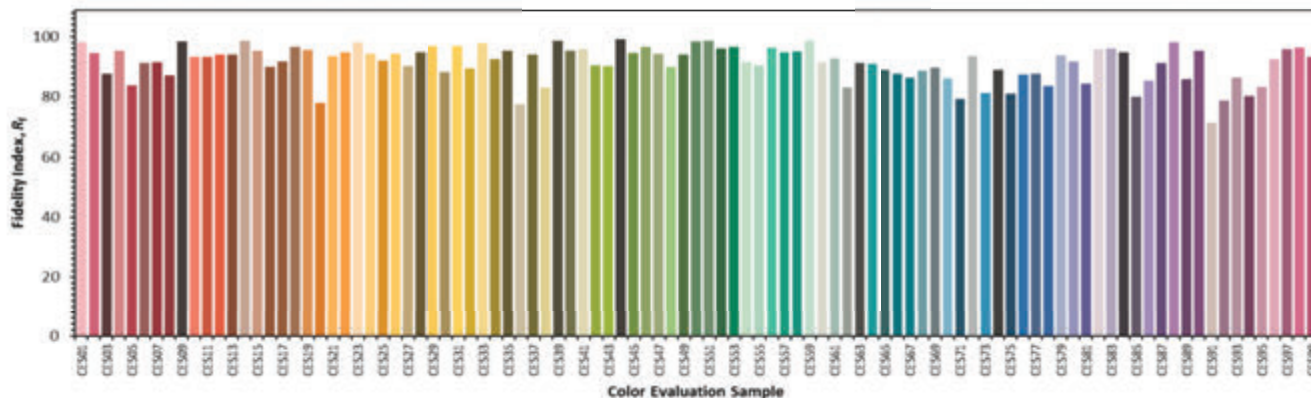
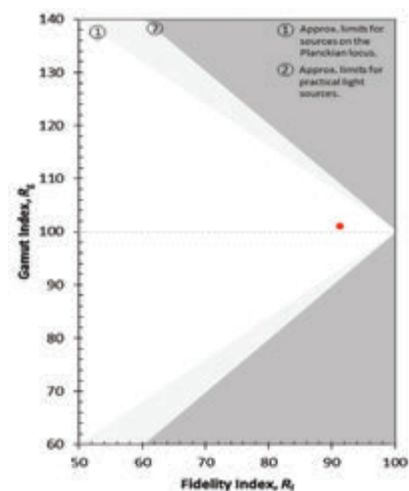
Color Vector Graphic







Color Distortion Graphic






Reference Illuminant
Test Source



Mounting Accessories

Item	Description	Dimensions	Order Code
	Oceanos IP67 End Cap Mounting Kit Recommended end cap accessory for easy disassembly and maintenance. The kit includes one endcap.	—	11000226
	Oceanos IP67 Disassembly Tool Use to take the fixture out of the inground mounting frame.	—	13100031
	Oceanos IP67 Mounting Frame - Short (90mm) Stainless Steel Mounting frame. Required for product installation.	520mm x 90mm 1020mm x 90mm	10000541-L520 10000541-L1020
	Oceanos IP67 Mounting Frame - Tall (125mm) Tall, Stainless Steel Mounting frame for deeper installations. Required for product installation.	520mm x 125mm 1020mm x 125mm	10000578-L520 10000578-L1020

Cables and Connectors

Item	Description	Model	Dimensions	Order Code
	Oceanos Female Connector IP67 Use to run cable from the driver to the first fixture of the run or to the next fixture. Female connector on one side and open end cable on the other side.	Static White / Tunable White / RGB	4 x 18 Awg, 16.5 ft	15000127
	Oceanos Extension IP67 Use to extend the distance between connection points. Female connector on one side and male connector on the other side.	Static White / Tunable White / RGB	4 x 18 Awg, 20 in	15000126
	Oceanos Female Protection Cap IP67 Use to cap and seal the unused end of the cable before starting the inground installation. Required to maintain IP67 grade.	Static White / Tunable White / RGB	—	18200066

Opal Optic Lumen Chart


			HD6		HD10		HD15	
Color temperature ^A			Lumen/ft	W/ft	Lumen/ft	W/ft	Lumen/ft	W/ft
Static White	● W821	2,100 K	35	1.8	55	3.0	90	4.6
	● W823	2,300 K	40	1.8	65	3.0	100	4.6
	● W825/W925	2,500 K	35	1.8	58	3.0	110	4.6
	● W828/W928	2,800 K	35	1.8	58	3.0	115	4.6
	● W832/W932	3,200 K	35	1.8	60	3.0	120	4.6
	● W837/W937	3,700 K	35	1.8	62	3.0	125	4.6
	● W845	4,500 K	50	1.8	85	3.0	135	4.6

^A CCT Tolerances occur in IP67 products due to the encapsulation of the fixture.

Drivers

Item	Specifications	Downloads
LED LINEAR™ Non-Dimmable Drivers 	<ul style="list-style-type: none"> • UL 8750 Listed Enclosure - With Built-In Junction Boxes • Universal Input Voltage 120V - 277V • IP65 - For Both Indoor and Outdoor Use • No Minimum Load Requirement • 24V Constant Voltage Output, Class 2 • Available in three wattages 30W, 60W and 96W • Max. Dimensions: 12-1/8" x 2-3/8" x 1-3/8" 	30 W SPEC SHEET 60 W SPEC SHEET 96 W SPEC SHEET INSTALLATION INSTRUCTIONS
LED LINEAR™ 0-10V Dimmable Drivers 	<ul style="list-style-type: none"> • UL 8750 Listed Enclosure - With Built-In Junction Boxes • 0-10V Dimmable - Flicker Free Down to 1% • Universal Input Voltage 120V - 277V • IP65 - For Both Indoor and Outdoor Use • 24V Constant Voltage Output, Class 2, Class P • Available in three wattages 30W, 60W and 96W • Max. Dimensions: 12-1/8" x 2-3/8" x 1-3/8" 	30 W SPEC SHEET 60 W SPEC SHEET 96 W SPEC SHEET INSTALLATION INSTRUCTIONS
LED LINEAR™ ELV/Triac Dimmable Drivers 	<ul style="list-style-type: none"> • UL 8750 Listed Class 2 Enclosure • 24V constant voltage output • Compact size yet high efficiency and performance in dry and damp environments (IP67) • Multiple Inputs: 120V or 277V • Fully dimmable: ELV Dimmers - Reverse or Adaptive Phase Control, Trailing Edge • Available in two wattages 48W and 96W • Multiple Circuits are available up to 4 units (up to 384W) 	48 W SPEC SHEET 96 W SPEC SHEET INSTALLATION INSTRUCTIONS
 PWM Dimmable Drivers 	<ul style="list-style-type: none"> • Universal AC input / Full range (up to 305VAC) • Constant voltage PWM style output • Built-in 3 in 1 dimming function (0-10Vdc or PWM signal or resistance) • Dimming range : 0-100% • Class 2 power unit • Suitable for dry / damp / wet locations • UL Recognized component, 5 years warranty 	40 W SPEC SHEET 60 W SPEC SHEET 90 W SPEC SHEET INSTALLATION INSTRUCTIONS
OLUTRON Dimmable Drivers 	<ul style="list-style-type: none"> • UL Listed Enclosure • Dimming Range: 100% to 1% and 0.1% (Premiere) • LED lighting turns on to any dimmed level without flashing to full brightness • Operating Voltage: 120V~ to 277V~ at 50/60 Hz • Rated lifetime of 50,000 hours at 40°C (104°F) ambient temperature and maximum loading • For rated warranty, ambient temperature not to exceed 40°C (104°F) • Open-circuit protected output 	HI-LUME SPEC SHEET HI-LUME PREMIERE SPEC SHEET INSTALLATION INSTRUCTIONS
eldoLED DALI/DMX Dimmable Drivers 	<ul style="list-style-type: none"> • Available in linear or rectangular format • 100W, DMX/DALI interface for Static White, Tunable White and RGB/W Applications • 4 control channels • 24V constant voltage, 4 x 24V outputs • Metal or plastic case options 	100 W SPEC SHEET INSTALLATION INSTRUCTIONS

Controllers

Item	Specifications	Downloads
eldoLED Controllers 	180/D DMX Controller for RGB/W and Tunable White Applications	180/D SPEC SHEET
	210/D Dali Controller for Static White Applications	210/D SPEC SHEET
	211/D-LG 0-10V Logarithmic Dimming Controller	211/D-LG SPEC SHEET
	211/D-LN 0-10V Linear Dimming Controller	211/D-LN SPEC SHEET
	212/D DMX Controller for Static White and Static Color Applications	212/D SPEC SHEET
	DimWheel DMX Wall Controller for RGB/W and Tunable White Applications	DIM WHEEL SPEC SHEET

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