OCEANOS IP67 Static White/Tunable White/RGB

LED LINEAR™ lighting solutions
Member of the Fagerhult Group

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 transluscent 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_f = 91 / R_g = 101. Consistent light intensity all along the luminaire length. Fully dimmable. Engineered and produced in Germany.

Static White   Tunable White   RGB

Project name

Fixture type   Phase

Specifier   Date

Drive Over Walk Over

ETL Intertek ETL Listed

True Color — No Color Shift
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
L/B Lifetime — L80/B10 >60,000 hrs /RGB >30,000 hrs
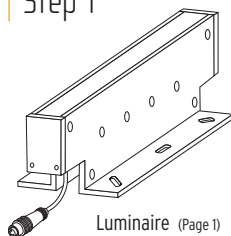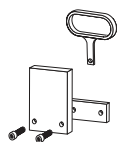**6 Digit Photometric Code** — Wxxx/339
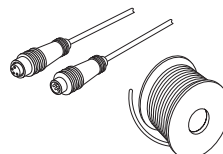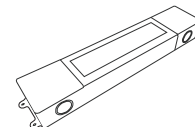**IES LM79/LM80** — LM79/LM80 Compliant

Ordering Process

Step 1	Step 2	Step 3	Step 4
Luminaire (Page 1)	Mounting Accessories (Page 4)	Cables and Connectors (Page 4)	Drivers and Controllers (Page 5)

Luminaire Order Code

Family	Model	Lumen package[A]	Color rendering	Color temperature		Standard length[C]	Optic	Ingress
VarioLED OCEANOS	_ _ _ _ _	_ _ _ _	W_	_ _		_ _ _ _	_ _ _	IP67
	TC – Static White	HD06–190 lm/ft	W8–80CRI	20–2000K	30–3000K	520–20 in	OP–Opal Optic	
		HD10–310 lm/ft	W9–90CRI[B]	22–2200K	35–3500K	1020–40 in	100–10° Optic	
		HD15–500 lm/ft		25–2500K	40–4000K		300–30° Optic	
				27–2700K	50–5000K			
	TC IQW ATON - Tunable White	HD12–230 lm/ft	–	–				
	(2200K - 4000K)	HD24–480 lm/ft	–	–				
	TC RGB -622nm (R) 532nm (G)	HD10–130 lm/ft	–	–				
	466nm (B)	HD20–240 lm/ft	–	–				

[A] Lumen Values represent 5000K (W850) and with 30° optic.

[B] Only available with HD06 and HD10 lumen packages with 2700K, 3000K, 3500K and 4000K.

[C] Values represent nominal lengths. For exact lengths, see mechanical details on page 2.
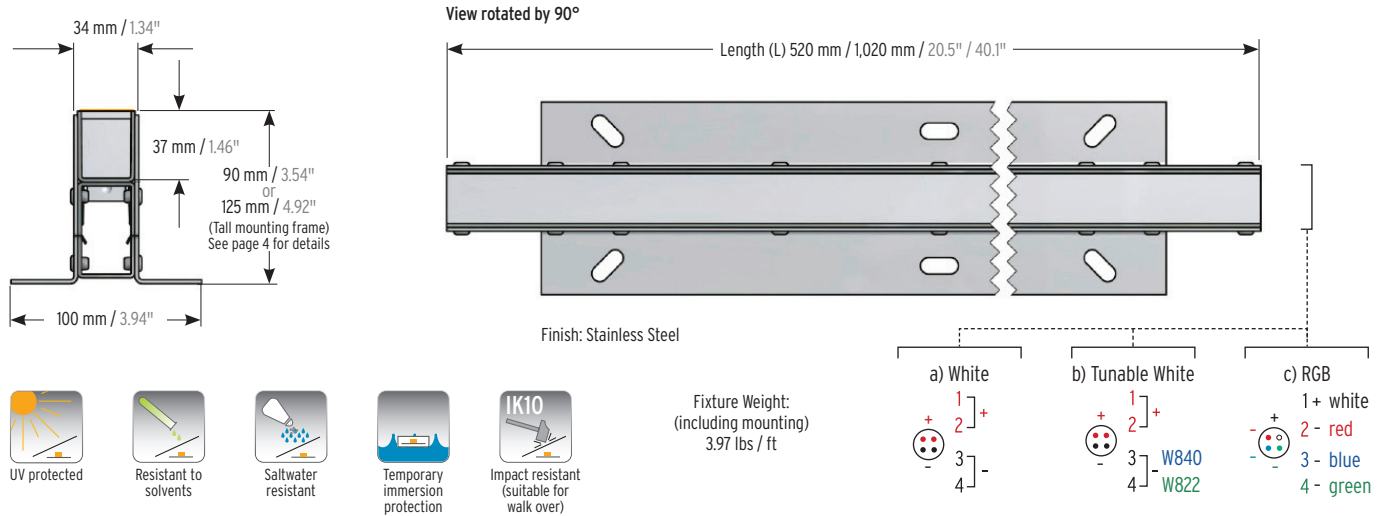
		Color temperature[A]	HD6		HD10		HD15	
			Lumen/ft[B,C]	W/ft	Lumen/ft[B,C]	W/ft	Lumen/ft[B,C]	W/ft
Static White	● W820	2,000 K	110	1.8	180	3.0	290	4.6
	● W822	2,200 K	120	1.8	210	3.0	330	4.6
	● W825	2,500 K	140	1.8	240	3.0	380	4.6
	● W827 / W927	2,700 K	130	1.8	210	3.0	400	4.6
	● W830 / W930	3,000 K	130	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%.

Mechanical Details

34 mm / 1.34"

37 mm / 1.46"

90 mm / 3.54"
or
125 mm / 4.92"
(Tall mounting frame)
See page 4 for details

100 mm / 3.94"

View rotated by 90°

Length (L) 520 mm / 1,020 mm / 20.5" / 40.1"

Finish: Stainless Steel

Fixture Weight:
(including mounting)
3.97 lbs / ft

UV protected

Resistant to solvents

Saltwater resistant

Temporary immersion protection

IK10
Impact resistant (suitable for walk over)

a) White
1
2 } +
3 } −
4

b) Tunable White
1
2 } +
3 — W840
4 — W822
+

c) RGB
1 + white
2 − red
3 − blue
4 − green

Technical Details

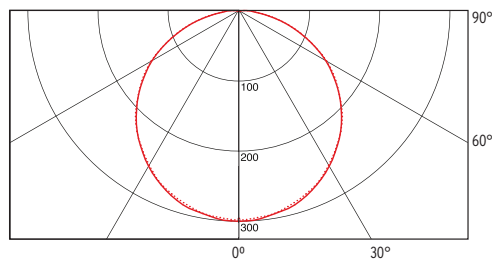|	Static White	Tunable White	RGB
Voltage	24 Volt (23 V_{min}, 25 V_{max})	24 Volt (23 V_{min}, 25 V_{max})	24 Volt (23 V_{min}, 25 V_{max})
Case temperature[A]	Tc_{min} = -13°F, Tc_{max} = 149°F	Tc_{min} = -13°F, Tc_{max} = 149°F	Tc_{min} = -13°F, Tc_{max} = 149°F
Storage temperature	Ts_{min} = -22°F, Ts_{max} = 185°F	Ts_{min} = -22°F, Ts_{max} = 185°F	Ts_{min} = -22°F, Ts_{max} = 185°F
Ambient temperature	Ta_{min} = -13°F, Ta_{max} = specific, see Table below	Ta_{min} = -13°F, Ta_{max} = specific, see Table below	Ta_{min} = -13°F, Ta_{max} = specific, see Table below

[A] The position of the Tc-point is marked on each step of the LED strip. The Tc-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 (Ta_{max})	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%.
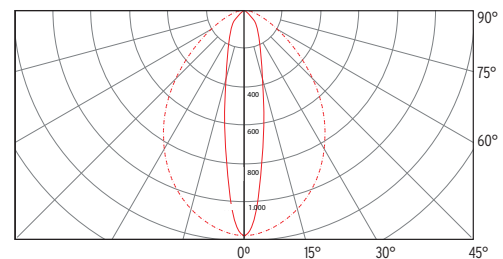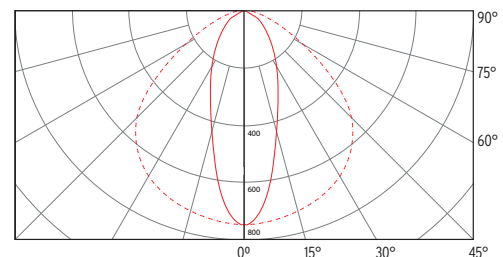
Light Distribution

Opal Optic

90°
100
200
300
60°
0°   30°

cd/1.000 lumen
—— C0/C180
•••••• C90/C270

10° Optic

90°
75°
400
600
800
1.000
60°
0°   15°   30°   45°

30° Optic

90°
75°
400
600
800
60°
0°   15°   30°   45°

Colorimetric Details

Photometric Code	CCT	CRI	R9	R_f	R_g
W830/339	3000 K	85	23	82	99

Color Vector Graphic
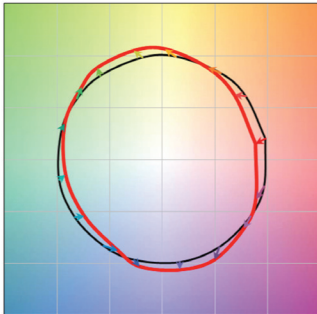
— Reference Illuminant
— Test Source

Color Distortion Graphic

① Approx. limits for sources on the Planckian locus.
② Approx. limits for practical light sources.
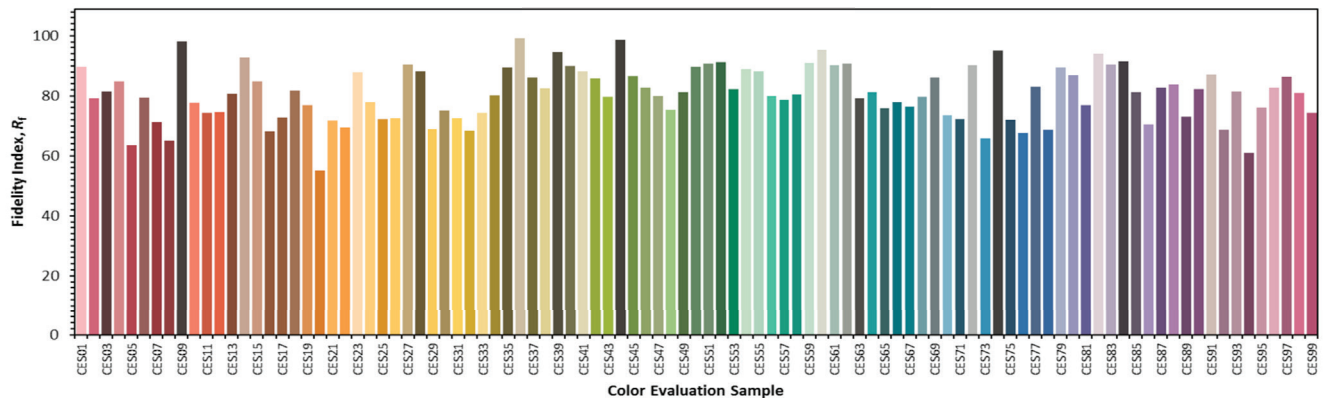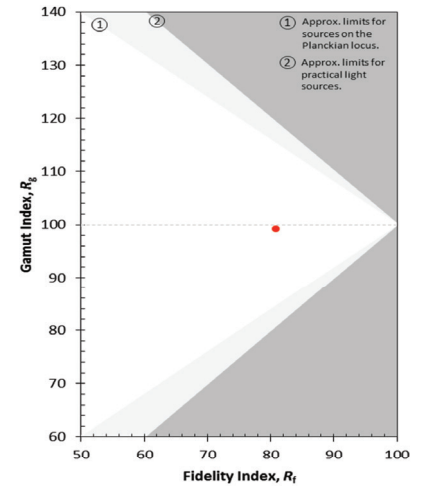
Colorimetric Details

Photometric Code	CCT	CRI	R9	R_f	R_g
W930/339	3000 K	96	70	91	101

Color Vector Graphic

— Reference Illuminant
— Test Source

Color Distortion Graphic

① Approx. limits for sources on the Planckian locus.
② Approx. limits for practical light sources.
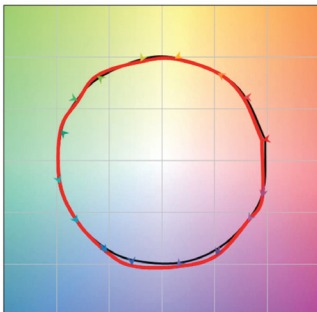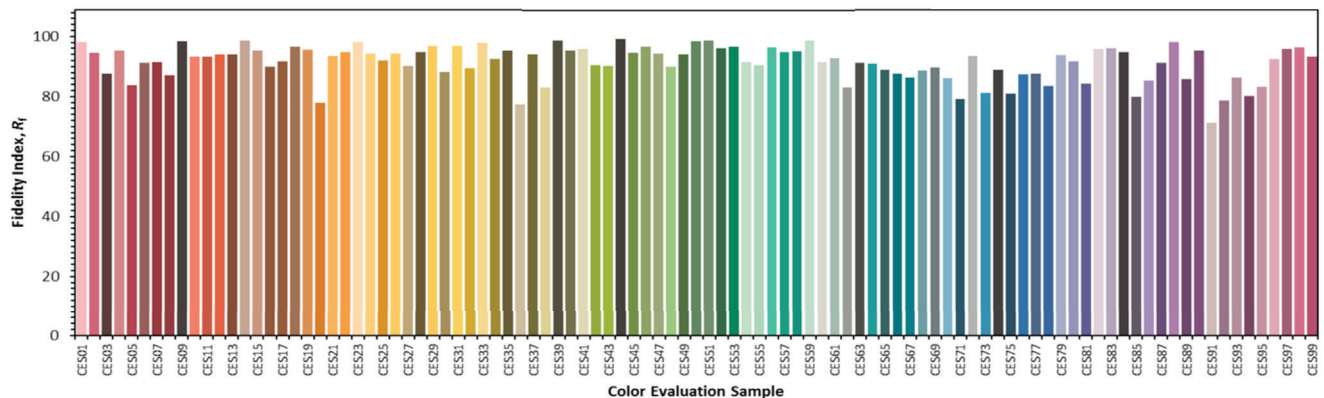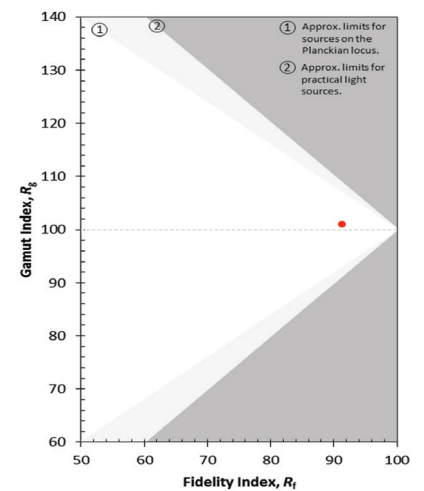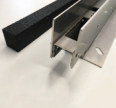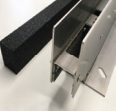
Mounting Accessories

Item	Description	Dimensions	Order Code
Oceanos IP67 End Cap Mounting Kit	Recommended end cap accessory for easy disassembly and maintenance.	—	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 23 Awg, 20 in	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 23 Awg , 16.5 ft	11000116
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

Drivers

Item	Specifications	Downloads
LED LINEAR™ Non-Dimmable Drivers	• 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 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 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
MW MEAN WELL PWM Dimmable Drivers	• 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
LUTRON Dimmable Drivers	• 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	• Available in linear or rectangular format • 100W, DMX/DALI interface • 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 and Tunable White Applications **210/D** Dali Contoller for Static White, RGB and Tunable White Aplications **211/D-LG** 0-10V Logarithmic Dimming Controller **211/D-LN** 0-10V Linear Dimming Controller **212/D** DMX Controller for Static White and Static Color Applications **DimWheel** DMX Wall Controller for RGB and Tunable White Applications	180/D SPEC SHEET 210/D SPEC SHEET 211/D-LG SPEC SHEET 211/D-LN SPEC SHEET 212/D SPEC SHEET DIM WHEEL SPEC SHEET

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