

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<sub>r</sub> = 91 / R<sub>g</sub> = 101. Consistent light intensity all along the luminaire length. Fully dimmable. Engineered and produced in Germany.

Project name \_\_\_\_\_

Fixture type \_\_\_\_\_ Phase \_\_\_\_\_

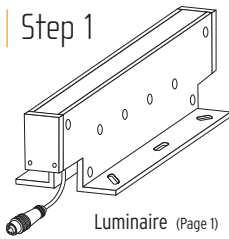
Specifier \_\_\_\_\_ Date \_\_\_\_\_



- 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

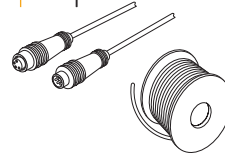
Step 1



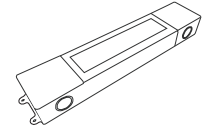
Step 2



Step 3



Step 4



## Luminaire Order Code

| Family           | Model                                       | Lumen package <sup>a</sup> | Color rendering       | CCT 10°/30° Optic | CCT Opal Optic | Standard length <sup>c</sup> | 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 <sup>b</sup> | 22—2200K          | 23—2300K       | 1020—40 in                   | 10D—10° Optic |         |
|                  |   | HD15—430 lm/ft             |                       | 25—2500K          | 25—2500K       |                              | 30D—30° Optic |         |
|                  |   |                            |                       | 27—2700K          | 28—2800K       |                              |               |         |
|                  |   |                            |                       | 30—3000K          | 32—3200K       |                              |               |         |
|                  |   |                            |                       | 35—3500K          | 37—3700K       |                              |               |         |
|                  |   |                            |                       | 40—4000K          | 45—4500K       |                              |               |         |
|                  |   |                            |                       | 50—5000K          |                |                              |               |         |
|                  | IQW ATON - Tunable White<br>(2200K - 4000K) | HD12—230 lm/ft             | —                     | —                 | —              |                              |               |         |
|                  |   | HD24—480 lm/ft             | —                     | —                 | —              |                              |               |         |
|                  | RGB - 622nm (R) 532nm (G)<br>466nm (B)      | HD10—130 lm/ft             | —                     | —                 | —              |                              |               |         |
|                  |   | HD20—240 lm/ft             | —                     | —                 | —              |                              |               |         |

<sup>a</sup> Lumen Values represent 3000K (W930) and with 30° optic.

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

<sup>c</sup> Values represent nominal lengths. For exact lengths, see mechanical details on page 2.

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

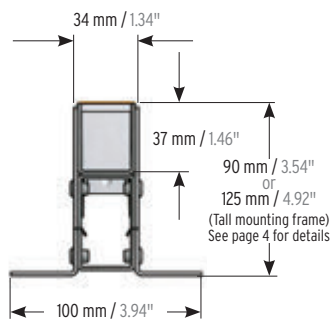
|              | Color temperature <sup>a</sup> | HD6                     |      | HD10                    |      | HD15                    |      |     |
|--------------|--------------------------------|-------------------------|------|-------------------------|------|-------------------------|------|-----|
|              |                                | Lumen/ft <sup>b,c</sup> | W/ft | Lumen/ft <sup>b,c</sup> | W/ft | Lumen/ft <sup>b,c</sup> | 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 |

<sup>a</sup> CCT Tolerances occur in IP67 products due to the encapsulation of the fixture.

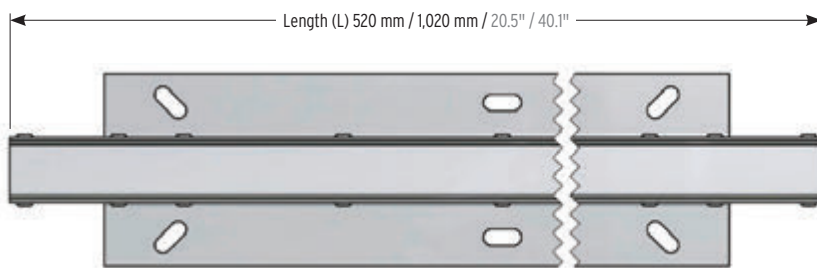
<sup>b</sup> The given data are typical values. Due to tolerances of the production process and the electrical components, values for light output and electrical power can vary up to 10%.

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

## Mechanical Details

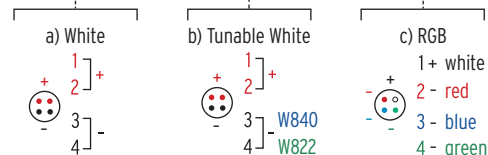


View rotated by 90°



Finish: Stainless Steel

Fixture Weight:  
(including mounting)  
3.97 lbs / ft



## Technical Details

|                               | Static White   | Tunable White  | RGB  |
|-------------------------------|--|--|--|
| Voltage                       | 24 Volt (23 V <sub>min</sub> , 25 V <sub>max</sub> )                       | 24 Volt (23 V <sub>min</sub> , 25 V <sub>max</sub> )                       | 24 Volt (23 V <sub>min</sub> , 25 V <sub>max</sub> )                       |
| Case temperature <sup>A</sup> | T <sub>Cmin</sub> = -13°F, T <sub>Cmax</sub> = 149°F                       | T <sub>Cmin</sub> = -13°F, T <sub>Cmax</sub> = 149°F                       | T <sub>Cmin</sub> = -13°F, T <sub>Cmax</sub> = 149°F                       |
| Storage temperature           | T <sub>Smin</sub> = -22°F, T <sub>Smax</sub> = 185°F                       | T <sub>Smin</sub> = -22°F, T <sub>Smax</sub> = 185°F                       | T <sub>Smin</sub> = -22°F, T <sub>Smax</sub> = 185°F                       |
| Ambient temperature           | T <sub>a</sub> min = -13°F, T <sub>a</sub> max = specific, see Table below | T <sub>a</sub> min = -13°F, T <sub>a</sub> max = specific, see Table below | T <sub>a</sub> min = -13°F, T <sub>a</sub> max = specific, see Table below |

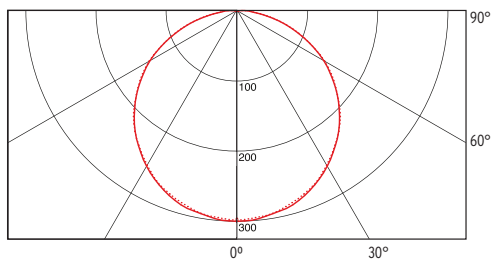
<sup>A</sup> The position of the T<sub>C</sub>-point is marked on each step of the LED strip. The T<sub>C</sub>-point should be measured in thermal equilibrium according to IEC EN 60598-1.

|  | Static White |          |          | Tunable White |          | RGB      |          |
|--|--------------|----------|----------|---------------|----------|----------|----------|
|  | HD6          | HD10     | HD15     | HD12          | HD24     | HD10     | HD20     |
| Power (W/ft) <sup>B</sup>                    | 1.8          | 3.0      | 4.6      | 3.7           | 7.3      | 3.2      | 6.7      |
| Efficacy (lm / W) <sup>B</sup> @ 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 <sub>a</sub> max) | 122°F        | 113°F    | 104°F    | 122°F         | 104°F    | 122°F    | 95°F     |

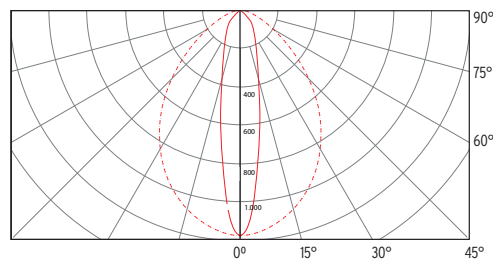
<sup>B</sup> The given data are typical values. Due to tolerances of the production process and the electrical components, values for light output and electrical power can vary up to 10%.

## Light Distribution

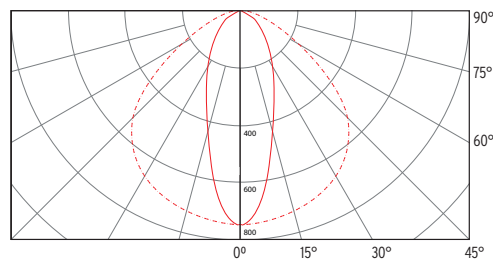
Opal Optic



10° Optic



30° Optic

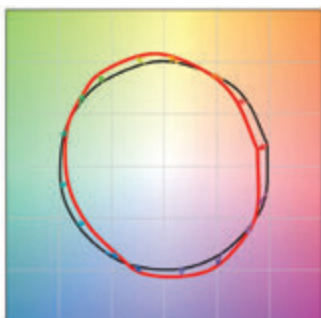


cd/1,000 lumen  
— C0/C180  
..... C90/C270

## Colorimetric Details

| Photometric Code | CCT    | CRI | R9 | R <sub>f</sub> | R <sub>g</sub> |
|------------------|--------|-----|----|----------------|----------------|
| W830/339         | 3000 K | 85  | 23 | 82             | 99             |

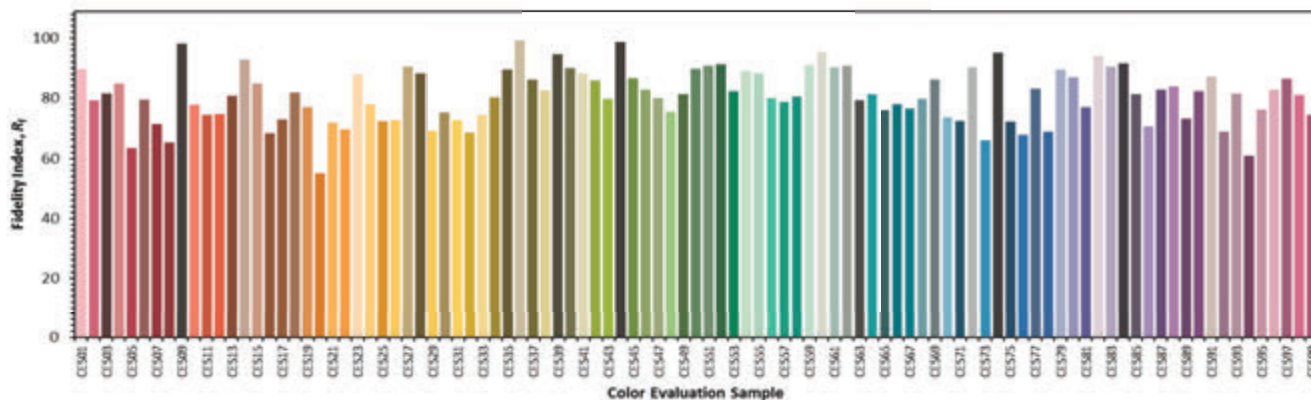
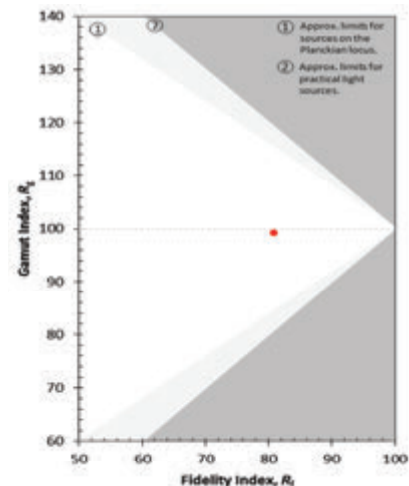
Color Vector Graphic



Color Distortion Graphic



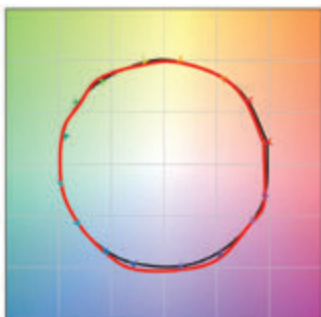
Reference Illuminant  
Test Source



## Colorimetric Details

| Photometric Code | CCT    | CRI | R9 | R <sub>f</sub> | R <sub>g</sub> |
|------------------|--------|-----|----|----------------|----------------|
| W930/339         | 3000 K | 96  | 70 | 91             | 101            |

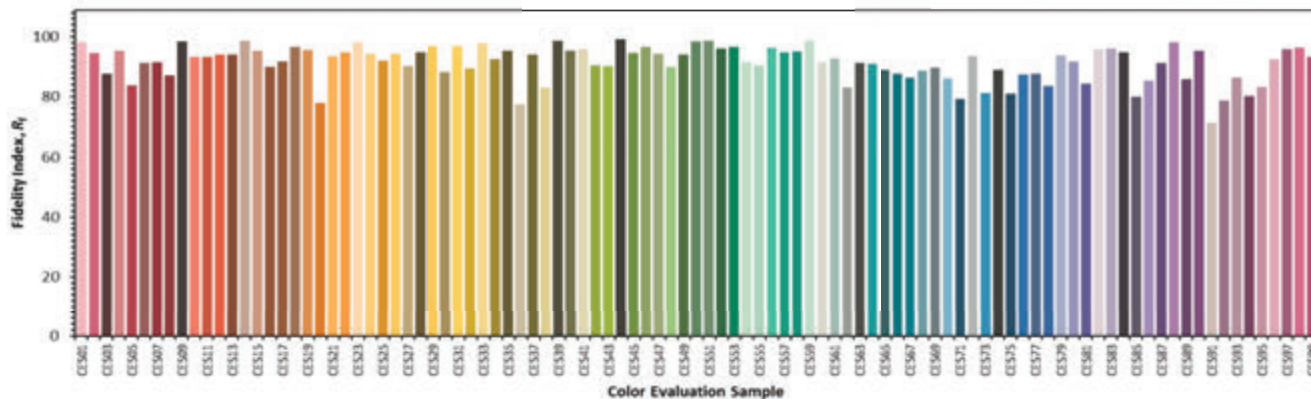
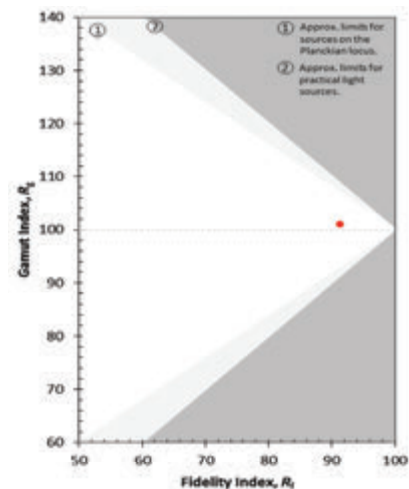
Color Vector Graphic







Color Distortion Graphic






Reference Illuminant  
Test Source



## Mounting Accessories

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

## Cables and Connectors

| Item  | Description  | Model                              | Dimensions          | Order Code |
|---|--|------------------------------------|---------------------|------------|
|    | Oceanos Female Connector IP67<br>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<br>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<br>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


|              | Color temperature <sup>A</sup> | HD6      |      | HD10     |      | HD15     |      |     |
|--------------|--------------------------------|----------|------|----------|------|----------|------|-----|
|              |                                | 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 |

<sup>A</sup> CCT Tolerances occur in IP67 products due to the encapsulation of the fixture.

## Drivers

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

## Controllers

| Item  | Specifications   | Downloads                            |
|---|--|--------------------------------------|
| <b>eldoLED</b><br>Controllers  | <b>180/D</b> DMX Controller for RGB/W and Tunable White Applications         | <a href="#">180/D SPEC SHEET</a>     |
|   | <b>210/D</b> Dali Controller for Static White Applications                   | <a href="#">210/D SPEC SHEET</a>     |
|   | <b>211/D-LG</b> 0-10V Logarithmic Dimming Controller                         | <a href="#">211/D-LG SPEC SHEET</a>  |
|   | <b>211/D-LN</b> 0-10V Linear Dimming Controller                              | <a href="#">211/D-LN SPEC SHEET</a>  |
|   | <b>212/D</b> DMX Controller for Static White and Static Color Applications   | <a href="#">212/D SPEC SHEET</a>     |
|   | <b>DimWheel</b> DMX Wall Controller for RGB/W and Tunable White Applications | <a href="#">DIM WHEEL SPEC SHEET</a> |

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