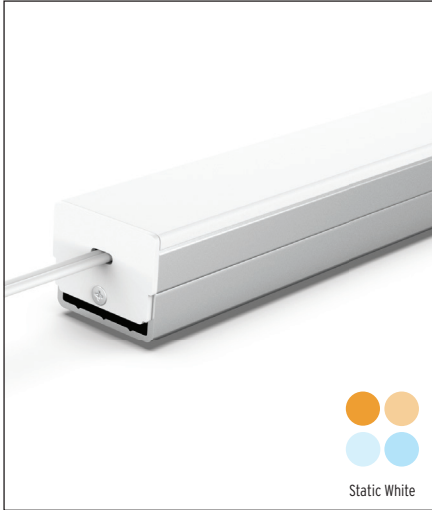


SurfaceMount Shallow - Assembled Fixture

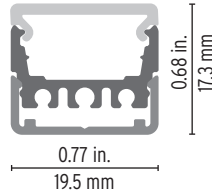
LED LINEAR™



Fixture is designed to ensure that the LED source is invisible, offering uniform and soft lighting for the eyes. Compact and versatile design.

Features

- Designed to give a uniform light without hot spots.
- Extra heatsinking to accommodate better heat dissipation.
- Compatible with multiple installation accessories.
- Cable Feed: End (E), Side (S).



Project name _____

Fixture type _____ Phase _____

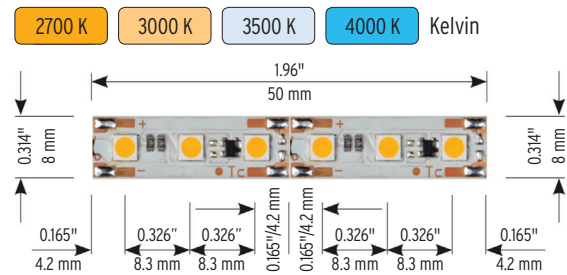
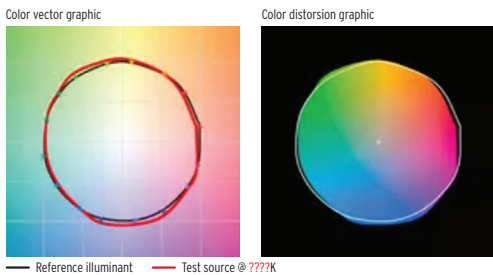
Specifier _____ Date _____

Order Code

| Family | LED Tape | CRI | CCT | Optic | Cable / Connector ² | Cable Position | Mounting ³ | Fixture length (mm) | Ingress |
|-----------------|--------------------------|----------|----------------|---------------|------------------------------------|----------------|------------------------------|-------------------------------------|---------|
| VarioLED 0002 | ----- | W9 | --- | --- | --- | --- | --- | ----- | IP20 |
| Surface Shallow | HD10-3.0 w/ft, 300 lm/ft | W9 90CRI | 27 2700K | HD High Opal | FM Female & Male (4") | E End | FMP Flat Mounting Profile | Refer to length chart on page 3 & 4 | IP20 |
| | HD17-5.2 w/ft, 490 lm/ft | | 30 3000K | LD Low Opal | MS Male one side only (4") | S Side | FMC Flat Mounting Clip | | |
| | HD27-8.3 w/ft, 760 lm/ft | | 35 3500K | RO Round Opal | OB Open Cable both sides (6.5') | | 15C 15° Mounting Clip | | |
| | | | 40 4000K | | OS Open Cable one side only (6.5') | | 30C 30° Mounting Clip | | |
| | | | | | HS High Semi-Opal | | 45C 45° Mounting Clip | | |
| | | | | | LS Low Semi-Opal | | PMC Plastic Mounting Clip | | |
| | | | | | RS Round Semi-Opal | | AMC Adjustable Mounting Clip | | |
| | | | | | | | WMP Wall Mounting Profile | | |
| | | | | | HC High Clear | | | | |
| | | | | | LC Low Clear | | | | |
| | | | RC Round Clear | | | | | | |

¹ Delivered Lumens @3000K with Clear Optic. ² 2 x 22 AWG wires are supplied. See page 5 for more connectors. ³ See Components spec sheet for details.

LED Tape Specifications



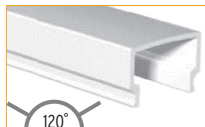
| | | HD10 | | HD17 | | HD27 | | Power (W/ft) ^b | HD10 | HD17 | HD27 | |
|--------------|--------|---------|-----------------------|-------------------|-----------------------|-------------------|-----------------------|---------------------------|----------------------------------------|------------|------------|-------------------|
| | | CCT | Lumen/ft ^a | W/ft ^b | Lumen/ft ^a | W/ft ^b | Lumen/ft ^a | | | | | W/ft ^b |
| Static White | ● W927 | 2,700 K | 300 | 3.0 | 480 | 5.2 | 740 | 8.3 | 3.0 | 5.2 | 8.3 | |
| | ● W930 | 3,000 K | 300 | 3.0 | 490 | 5.2 | 760 | 8.3 | 108 | 102 | 100 | |
| | ● W935 | 3,500 K | 310 | 3.0 | 510 | 5.2 | 790 | 8.3 | 27.9 | 23.0 | 16.4 | |
| | ● W940 | 4,000 K | 320 | 3.0 | 520 | 5.2 | 810 | 8.3 | CRI / R ₉ (up to) | 90 / 66 | 90 / 66 | 90 / 66 |
| | | | | | | | | | R _r / R _g | 89 / 103 | 89 / 103 | 89 / 103 |
| | | | | | | | | | Temp. Tc-point (Ta _{max}) | 158°F/70°C | 158°F/70°C | 167°F/75°C |
| | | | | | | | | | Max ambient temp. (Ta _{max}) | 122°F/50°C | 122°F/50°C | 113°F/45°C |

^a Lumen values represent bare LED tape. Refer to page 2 to calculate delivered fixture lumens by using the light efficiency percentages.
^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%.

Technical Details

HIGH OPAL

55% light transmittance



Dot free

5% warmer CCT offset

This lens provides a homogenous line of light.

LOW OPAL

50% light transmittance



Dot free

5% warmer CCT offset

This lens provides a homogenous line of light.

ROUND OPAL

55% light transmittance



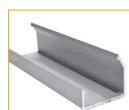
Dot free

5% warmer CCT offset

This lens provides a homogenous line of light.

Clear and Semi-Opal are 95% and 80% efficient respectively. They exhibit visible dotting effect.

Mounting Dimensions



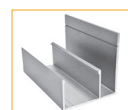
15C/30C/45C
Angled Mounting Clips



FMP/FMC
Flat Mounting
Profile / Clip



PMC
Plastic
Mounting Clip

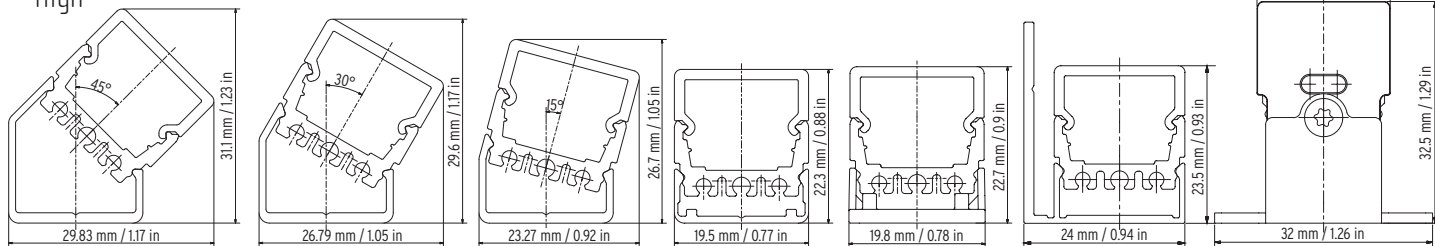


WMP
Wall Mounting Profile

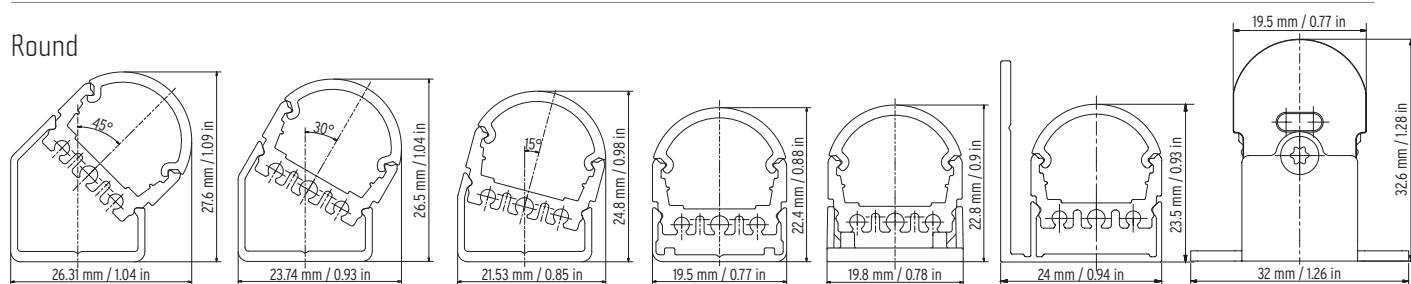


Adjustable
Mounting Clip

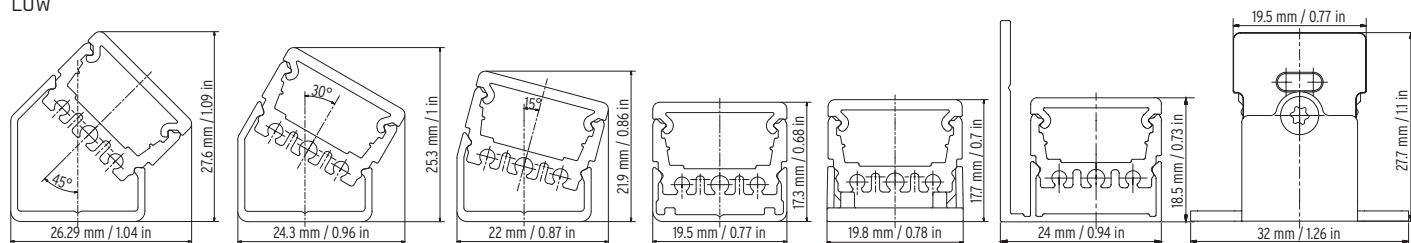
High



Round



Low





LENGTH CHART - End Feed (E)

| Fixture length | | HD10 3.0 Watts/Ft | | HD17 5.2 Watts/Ft | | HD27 8.3 Watts/Ft | |
|----------------|------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| inches | mm | Watts/fixture | Lumens/fixture @3000K | Watts/fixture | Lumens/fixture @3000K | Watts/fixture | Lumens/fixture @3000K |
| 2.8 | 70 | 0.7 | 69 | 1.2 | 113 | 1.9 | 174 |
| 4.7 | 120 | 1.2 | 118 | 2.0 | 193 | 3.3 | 299 |
| 6.7 | 170 | 1.7 | 167 | 2.9 | 273 | 4.6 | 424 |
| 8.7 | 220 | 2.2 | 216 | 3.8 | 354 | 6.0 | 548 |
| 10.6 | 270 | 2.7 | 266 | 4.6 | 434 | 7.4 | 673 |
| 12.6 | 320 | 3.1 | 315 | 5.5 | 514 | 8.7 | 798 |
| 14.6 | 370 | 3.6 | 364 | 6.3 | 595 | 10.1 | 922 |
| 16.5 | 420 | 4.1 | 413 | 7.2 | 675 | 11.4 | 1047 |
| 18.5 | 470 | 4.6 | 462 | 8.0 | 755 | 12.8 | 1172 |
| 20.5 | 520 | 5.1 | 512 | 8.9 | 836 | 14.2 | 1296 |
| 22.4 | 570 | 5.6 | 561 | 9.7 | 916 | 15.5 | 1421 |
| 24.4 | 620 | 6.1 | 610 | 10.6 | 996 | 16.9 | 1546 |
| 26.4 | 670 | 6.6 | 659 | 11.4 | 1077 | 18.2 | 1670 |
| 28.3 | 720 | 7.1 | 708 | 12.3 | 1157 | 19.6 | 1795 |
| 30.3 | 770 | 7.6 | 758 | 13.1 | 1238 | 21.0 | 1919 |
| 32.3 | 820 | 8.1 | 807 | 14.0 | 1318 | 22.3 | 2044 |
| 34.3 | 870 | 8.6 | 856 | 14.8 | 1398 | 23.7 | 2169 |
| 36.2 | 920 | 9.1 | 905 | 15.7 | 1479 | 25.0 | 2293 |
| 38.2 | 970 | 9.5 | 954 | 16.5 | 1559 | 26.4 | 2418 |
| 40.2 | 1020 | 10.0 | 1004 | 17.4 | 1639 | 27.8 | 2543 |
| 42.1 | 1070 | 10.5 | 1053 | 18.2 | 1720 | 29.1 | 2667 |
| 44.1 | 1120 | 11.0 | 1102 | 19.1 | 1800 | 30.5 | 2792 |
| 46.1 | 1170 | 11.5 | 1151 | 20.0 | 1880 | 31.9 | 2917 |
| 48.0 | 1220 | 12.0 | 1200 | 20.8 | 1961 | 33.2 | 3041 |
| 50.0 | 1270 | 12.5 | 1250 | 21.7 | 2041 | 34.6 | 3166 |
| 52.0 | 1320 | 13.0 | 1299 | 22.5 | 2122 | 35.9 | 3290 |
| 53.9 | 1370 | 13.5 | 1348 | 23.4 | 2202 | 37.3 | 3415 |
| 55.9 | 1420 | 14.0 | 1397 | 24.2 | 2282 | 38.7 | 3540 |
| 57.9 | 1470 | 14.5 | 1446 | 25.1 | 2363 | 40.0 | 3664 |
| 59.8 | 1520 | 15.0 | 1496 | 25.9 | 2443 | 41.4 | 3789 |
| 61.8 | 1570 | 15.4 | 1545 | 26.8 | 2523 | 42.7 | 3914 |
| 63.8 | 1620 | 15.9 | 1594 | 27.6 | 2604 | 44.1 | 4038 |
| 65.7 | 1670 | 16.4 | 1643 | 28.5 | 2684 | 45.5 | 4163 |
| 67.7 | 1720 | 16.9 | 1692 | 29.3 | 2764 | 46.8 | 4288 |
| 69.7 | 1770 | 17.4 | 1742 | 30.2 | 2845 | 48.2 | 4412 |
| 71.7 | 1820 | 17.9 | 1791 | 31.0 | 2925 | 49.5 | 4537 |
| 73.6 | 1870 | 18.4 | 1840 | 31.9 | 3005 | 50.9 | 4662 |
| 75.6 | 1920 | 18.9 | 1889 | 32.7 | 3086 | 52.3 | 4786 |
| 77.6 | 1970 | 19.4 | 1938 | 33.6 | 3166 | 53.6 | 4911 |

LENGTH CHART - Side Feed (S)

| Fixture length | | HD10 3.0 Watts/Ft | | HD17 5.2 Watts/Ft | | HD27 8.3 Watts/Ft | |
|----------------|------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| inches | mm | Watts/fixture | Lumens/fixture @3000K | Watts/fixture | Lumens/fixture @3000K | Watts/fixture | Lumens/fixture @3000K |
| 2.2 | 55 | 0.5 | 54 | 0.9 | 88 | 1.5 | 137 |
| 4.1 | 105 | 1.0 | 103 | 1.8 | 169 | 2.9 | 262 |
| 6.1 | 155 | 1.5 | 153 | 2.6 | 249 | 4.2 | 386 |
| 8.1 | 205 | 2.0 | 202 | 3.5 | 329 | 5.6 | 511 |
| 10.0 | 255 | 2.5 | 251 | 4.3 | 410 | 6.9 | 636 |
| 12.0 | 305 | 3.0 | 300 | 5.2 | 490 | 8.3 | 760 |
| 14.0 | 355 | 3.5 | 349 | 6.1 | 571 | 9.7 | 885 |
| 15.9 | 405 | 4.0 | 399 | 6.9 | 651 | 11.0 | 1010 |
| 17.9 | 455 | 4.5 | 448 | 7.8 | 731 | 12.4 | 1134 |
| 19.9 | 505 | 5.0 | 497 | 8.6 | 812 | 13.7 | 1259 |
| 21.9 | 555 | 5.5 | 546 | 9.5 | 892 | 15.1 | 1384 |
| 23.8 | 605 | 6.0 | 595 | 10.3 | 972 | 16.5 | 1508 |
| 25.8 | 655 | 6.4 | 645 | 11.2 | 1053 | 17.8 | 1633 |
| 27.8 | 705 | 6.9 | 694 | 12.0 | 1133 | 19.2 | 1757 |
| 29.7 | 755 | 7.4 | 743 | 12.9 | 1213 | 20.6 | 1882 |
| 31.7 | 805 | 7.9 | 792 | 13.7 | 1294 | 21.9 | 2007 |
| 33.7 | 855 | 8.4 | 841 | 14.6 | 1374 | 23.3 | 2131 |
| 35.6 | 905 | 8.9 | 891 | 15.4 | 1455 | 24.6 | 2256 |
| 37.6 | 955 | 9.4 | 940 | 16.3 | 1535 | 26.0 | 2381 |
| 39.6 | 1005 | 9.9 | 989 | 17.1 | 1615 | 27.4 | 2505 |
| 41.5 | 1055 | 10.4 | 1038 | 18.0 | 1696 | 28.7 | 2630 |
| 43.5 | 1105 | 10.9 | 1087 | 18.8 | 1776 | 30.1 | 2755 |
| 45.5 | 1155 | 11.4 | 1137 | 19.7 | 1856 | 31.4 | 2879 |
| 47.4 | 1205 | 11.9 | 1186 | 20.6 | 1937 | 32.8 | 3004 |
| 49.4 | 1255 | 12.3 | 1235 | 21.4 | 2017 | 34.2 | 3128 |
| 51.4 | 1305 | 12.8 | 1284 | 22.3 | 2097 | 35.5 | 3253 |
| 53.3 | 1355 | 13.3 | 1333 | 23.1 | 2178 | 36.9 | 3378 |
| 55.3 | 1405 | 13.8 | 1383 | 24.0 | 2258 | 38.2 | 3502 |
| 57.3 | 1455 | 14.3 | 1432 | 24.8 | 2338 | 39.6 | 3627 |
| 59.3 | 1505 | 14.8 | 1481 | 25.7 | 2419 | 41.0 | 3752 |
| 61.2 | 1555 | 15.3 | 1530 | 26.5 | 2499 | 42.3 | 3876 |
| 63.2 | 1605 | 15.8 | 1579 | 27.4 | 2580 | 43.7 | 4001 |
| 65.2 | 1655 | 16.3 | 1629 | 28.2 | 2660 | 45.1 | 4126 |
| 67.1 | 1705 | 16.8 | 1678 | 29.1 | 2740 | 46.4 | 4250 |
| 69.1 | 1755 | 17.3 | 1727 | 29.9 | 2821 | 47.8 | 4375 |
| 71.1 | 1805 | 17.8 | 1776 | 30.8 | 2901 | 49.1 | 4500 |
| 73.0 | 1855 | 18.3 | 1825 | 31.6 | 2981 | 50.5 | 4624 |
| 75.0 | 1905 | 18.7 | 1875 | 32.5 | 3062 | 51.9 | 4749 |
| 77.0 | 1955 | 19.2 | 1924 | 33.3 | 3142 | 53.2 | 4873 |

Connectors

| Item | Description | Model | Dimensions | Order Code |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------|----------------------|
|  | Mini Female Connector IP20 for Static White Use to connect the driver to the beginning of the LED tape run or to the next LED tape section. Female mini connector on one side and open end cable on the other side. | Static White | 2 x 22 Awg, 6.5 ft | 15000147 |
|  | Mini Extension IP20 for Static White Use to extend the distance between connection points. Female mini connector on one side and male mini connector on the other side. | Static White Static White | 2 x 22 Awg, 3.2 ft 2 x 22 Awg, 6.5 ft | 15000148 15000149 |

VOLTAGE DROP INFORMATION FOR THE FEED-IN LINE (From Driver to Fixture)


| | Cable Cross Section | | | | | | | |
|-------|---------------------|---|-----------------------------------------------|------|--------|------|--|--|
| | Run length | | Max. cable length between driver and LED tape | | | | | |
| | feet | m | AWG 22 | | AWG 15 | | | |
| | | | feet | m | feet | m | | |
| HD 10 | 3.3 | 1 | 63.6 | 19.4 | 280.8 | 85.6 | | |
| | 6.6 | 2 | 31.8 | 9.7 | 140.4 | 42.8 | | |
| | 9.8 | 3 | 20.9 | 6.4 | 93.5 | 28.5 | | |
| | 13.1 | 4 | 15.7 | 4.8 | 70.2 | 21.4 | | |
| | 16.4 | 5 | 12.4 | 3.8 | 56.1 | 17.1 | | |
| | 19.6 | 6 | 10.4 | 3.2 | 46.5 | 14.2 | | |
| | 22.9 | 7 | 8.8 | 2.7 | 40.0 | 12.2 | | |
| HD 17 | 3.3 | 1 | 37.4 | 11.4 | 165.6 | 50.4 | | |
| | 6.6 | 2 | 18.7 | 5.7 | 82.6 | 25.2 | | |
| | 9.8 | 3 | 12.4 | 3.8 | 55.1 | 16.8 | | |
| | 13.1 | 4 | 9.1 | 2.8 | 41.3 | 12.6 | | |
| | 16.4 | 5 | 7.2 | 2.2 | 32.8 | 10.0 | | |
| | 19.6 | 6 | 6.2 | 1.9 | 27.5 | 8.4 | | |
| | 22.9 | 7 | 5.2 | 1.6 | 23.6 | 7.2 | | |
| HD 27 | 3.3 | 1 | 23.2 | 7.1 | 104.0 | 31.7 | | |
| | 6.6 | 2 | 11.4 | 3.5 | 51.8 | 15.8 | | |
| | 9.8 | 3 | 7.5 | 2.3 | 34.4 | 10.5 | | |
| | 13.1 | 4 | 5.5 | 1.7 | 25.9 | 7.9 | | |
| | 16.4 | 5 | 4.5 | 1.4 | 20.6 | 6.3 | | |

Calculation refers to the cable configuration on-site. Calculation based on a max. voltage drop of 0.85 V.

Compatible 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 |
|  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 |

Click for more information

VOLTAGE DROP CALCULATOR

INSTALLATION

LED LINEAR TECHNOLOGY