

ULTRA BLAZE™ 12V & 24V LED TAPE LIGHT

SPECIFICATION SHEET

- Very High Brightness
- 16.4 ft. maximum run (12V)
- 20 ft. maximum run (24V)
- UL Listed & R/C SAM Manual
- Suitable for closet use (12V only)
- 5-Year limited warranty



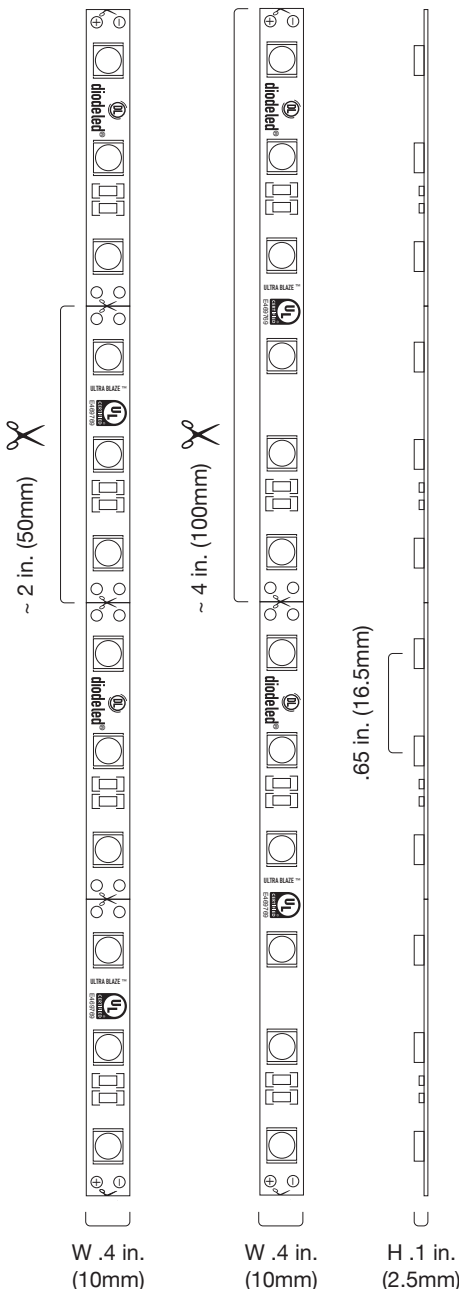
12V



24V

12V Model

24V Model



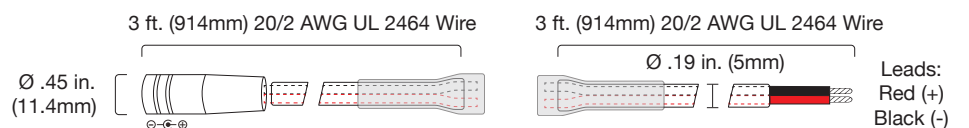
SPECIFICATIONS

Input Voltage: 12V or 24VDC Constant Voltage
Power Consumption / ft.: 4.32W / 360mA
LED Chip Type: Epistar 5050 SMD chip
LED Chip Beam Angle: 120°
LED Chips / ft.: 18
Mounting: 3M™ 55280 Adhesive
Field Cutable: ~ 2 in. (12V), ~ 4 in. (24V)
Maximum Run¹: 16.4 ft. (12V), 20 ft. (24V)
Connections²: 3 ft. Female DC plug on end.
 3 ft. hard-wire lead opposing end. Leads: 20/2 AWG

Dimmable: Yes
Ambient Temp³: -4 ~ 122°F (-20 ~ 50°C)
Operating Temp⁴: -4 ~ 176°F (-20 ~ 80°C)
Environment⁵: Indoor / dry location
Dimensions: 0.4 x 0.1 in. (W x H)
Certifications: UL Listed 2108. UL 1598 / CSA 250.0-08, UL 8750. UL 879 / CAN/CSA-C22.2 no. 207-M89. E469769 (UL Listed), E469770 (SAMS Manual). Suitable for installation in a clothes closet (12V model only)

| Item # | CCT (Kelvin) ⁶ | Lumens / ft. ⁷ | CRI | Efficacy (lm/W) ⁸ |
|-----------------------|---------------------------|---------------------------|-----|------------------------------|
| DI-12V-0094 (16 ft.) | 3000K | 467 | 70 | 108.1 |
| DI-12V-0018 (100 ft.) | 3000K | 467 | 70 | 108.1 |
| DI-12V-0095 (16 ft.) | 6300K | 437 | 70 | 101.1 |
| DI-12V-0019 (100 ft.) | 6300K | 437 | 70 | 101.1 |
| DI-24V-0120 (16 ft.) | 3000K | 432 | 70 | 100 |
| DI-24V-0014 (100 ft.) | 3000K | 432 | 70 | 100 |
| DI-24V-0121 (16 ft.) | 6300K | 425 | 70 | 98.3 |
| DI-24V-0015 (100 ft.) | 6300K | 425 | 70 | 98.3 |

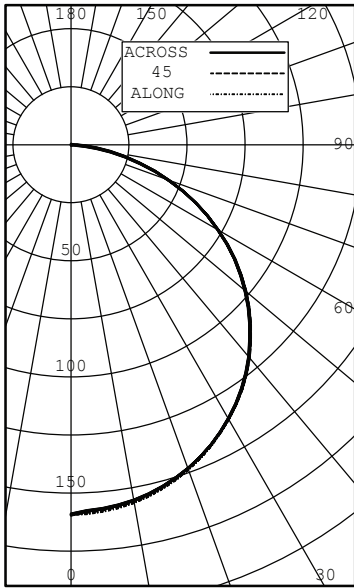
- Note**¹ Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
Note² Wire leads and accessories are not rated for in-wall installation unless otherwise noted. Attached wire leads and connections are field-cutable.
Note³ Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
Note⁴ Operating temperature is measured according to the minimum and maximum ambient temperature environment.
Note⁵ Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
Note⁶ Epistar 5050 SMD Chip binning ranges: (3000k 70 CRI: 2800-3200k), (6300k 70 CRI: 6000-6500k).
Note⁷ Lumen value measured in accordance to IES LM-79-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
Note⁸ Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value has been provided and calculated as follows: Lumen value (measured in accordance to IES LM-79-08) divided by average power consumption per foot.



| | |
|---------|----------|
| Item #: | Project: |
|---------|----------|

12V ULTRA BLAZE™ 3000K
DI-12V-0094, DI-12V-0018

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

| ANGLE | ALONG | 22.5 | 45 | 67.5 | ACROSS |
|-------|-------|------|-----|------|--------|
| 0 | 159 | 159 | 159 | 159 | 159 |
| 5 | 159 | 160 | 158 | 159 | 157 |
| 10 | 157 | 158 | 156 | 157 | 156 |
| 15 | 153 | 155 | 153 | 154 | 152 |
| 20 | 149 | 150 | 149 | 149 | 148 |
| 25 | 143 | 145 | 143 | 144 | 143 |
| 30 | 136 | 138 | 136 | 137 | 136 |
| 35 | 129 | 130 | 129 | 129 | 128 |
| 40 | 119 | 121 | 120 | 120 | 119 |
| 45 | 109 | 111 | 110 | 110 | 109 |
| 50 | 98 | 100 | 99 | 99 | 98 |
| 55 | 86 | 88 | 87 | 87 | 86 |
| 60 | 73 | 74 | 74 | 74 | 73 |
| 65 | 59 | 61 | 60 | 60 | 59 |
| 70 | 45 | 46 | 45 | 46 | 45 |
| 75 | 31 | 32 | 31 | 31 | 31 |
| 80 | 17 | 18 | 17 | 17 | 17 |
| 85 | 6 | 7 | 6 | 6 | 6 |
| 90 | 0 | 0 | 0 | 0 | 0 |

ZONAL LUMENS AND PERCENTAGES

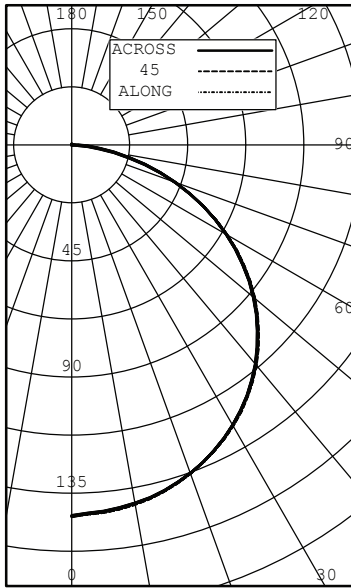
| ZONE | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-30 | 125 | 26.70 |
| 0-40 | 205 | 43.96 |
| 0-60 | 367 | 78.63 |
| 0-90 | 467 | 100.00 |
| 40-90 | 262 | 56.04 |
| 60-90 | 100 | 21.37 |
| 90-180 | 0 | 0.00 |
| 0-180 | 467 | 100.00 |

Cone Of Light Tabulation

| Mounting Height (Feet) | Footcandles at Nadir | Diameter (Feet) |
|------------------------|----------------------|-----------------|
| 4.00 | 9.98 | 5.11 |
| 6.00 | 4.43 | 7.67 |
| 8.00 | 2.49 | 10.2 |
| 10.0 | 1.60 | 12.8 |
| 12.0 | 1.11 | 15.3 |
| 14.0 | 0.814 | 17.9 |
| 16.0 | 0.623 | 20.4 |

12V ULTRA BLAZE™ 6300K
DI-12V-0095, DI-12V-0019

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

| ANGLE | ALONG | 22.5 | 45 | 67.5 | ACROSS |
|-------|-------|------|-----|------|--------|
| 0 | 144 | 144 | 144 | 144 | 144 |
| 5 | 143 | 145 | 143 | 143 | 143 |
| 15 | 139 | 141 | 139 | 139 | 139 |
| 25 | 131 | 133 | 131 | 131 | 131 |
| 35 | 119 | 121 | 119 | 119 | 119 |
| 45 | 102 | 104 | 103 | 103 | 102 |
| 55 | 81 | 83 | 82 | 82 | 81 |
| 65 | 56 | 58 | 57 | 57 | 56 |
| 75 | 30 | 30 | 30 | 30 | 29 |
| 85 | 6 | 7 | 7 | 7 | 6 |
| 90 | 0 | 0 | 0 | 0 | 0 |

ZONAL LUMENS AND PERCENTAGES

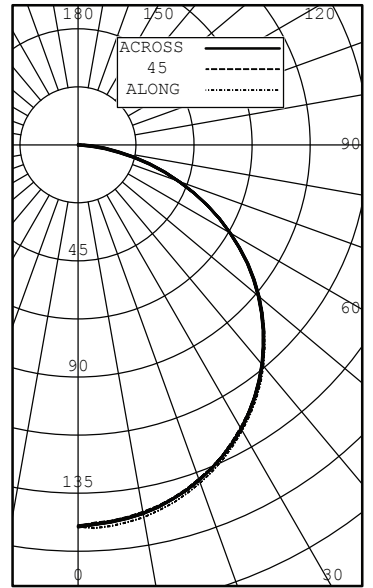
| ZONE | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-30 | 114 | 26.03 |
| 0-40 | 188 | 43.10 |
| 0-60 | 341 | 77.91 |
| 0-90 | 436 | 99.82 |
| 40-90 | 248 | 56.72 |
| 60-90 | 96 | 21.91 |
| 90-180 | 1 | 0.18 |
| 0-180 | 437 | 100.00 |

Cone Of Light Tabulation

| Mounting Height (Feet) | Footcandles at Nadir | Diameter (Feet) |
|------------------------|----------------------|-----------------|
| 4.00 | 9.98 | 5.11 |
| 6.00 | 4.43 | 7.67 |
| 8.00 | 2.49 | 10.2 |
| 10.0 | 1.60 | 12.8 |
| 12.0 | 1.11 | 15.3 |
| 14.0 | 0.814 | 17.9 |
| 16.0 | 0.623 | 20.4 |

24V ULTRA BLAZE™ 3000K
DI-24V-0120, DI-24V-0014

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

| ANGLE | ALONG | 22.5 | 45 | 67.5 | ACROSS |
|-------|-------|------|-----|------|--------|
| 0 | 148 | 148 | 148 | 148 | 148 |
| 5 | 148 | 149 | 146 | 146 | 147 |
| 10 | 147 | 147 | 145 | 144 | 145 |
| 15 | 144 | 144 | 142 | 141 | 142 |
| 20 | 139 | 140 | 138 | 137 | 138 |
| 25 | 134 | 135 | 133 | 132 | 133 |
| 30 | 128 | 128 | 126 | 126 | 127 |
| 35 | 120 | 121 | 119 | 119 | 119 |
| 40 | 112 | 112 | 111 | 110 | 111 |
| 45 | 102 | 103 | 101 | 101 | 102 |
| 50 | 92 | 92 | 91 | 91 | 91 |
| 55 | 80 | 81 | 80 | 79 | 80 |
| 60 | 68 | 69 | 68 | 67 | 68 |
| 65 | 55 | 56 | 55 | 55 | 55 |
| 70 | 42 | 43 | 42 | 42 | 42 |
| 75 | 28 | 29 | 29 | 28 | 29 |
| 80 | 16 | 16 | 16 | 16 | 16 |
| 85 | 5 | 6 | 6 | 6 | 6 |
| 90 | 0 | 0 | 0 | 0 | 0 |

ZONAL LUMENS AND PERCENTAGES

| ZONE | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-30 | 116 | 26.76 |
| 0-40 | 190 | 44.05 |
| 0-60 | 340 | 78.70 |
| 0-90 | 432 | 100.00 |
| 40-90 | 242 | 55.95 |
| 60-90 | 92 | 21.30 |
| 90-180 | 0 | 0.00 |
| 0-180 | 432 | 100.00 |

Cone Of Light Tabulation

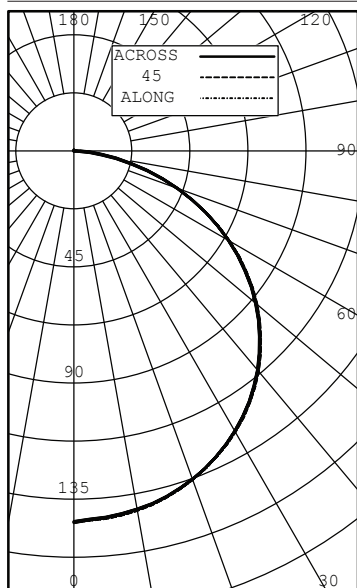
| Mounting Height (Feet) | Footcandles at Nadir | Diameter (Feet) |
|------------------------|----------------------|-----------------|
| 4.00 | 9.24 | 5.11 |
| 6.00 | 4.11 | 7.66 |
| 8.00 | 2.31 | 10.2 |
| 10.0 | 1.48 | 12.8 |
| 12.0 | 1.03 | 15.3 |
| 14.0 | 0.755 | 17.9 |
| 16.0 | 0.578 | 20.4 |

* Photometric data complies with LM-79-08, ANSI C82.77-02.

24V ULTRA BLAZE™ 6300K

DI-24V-0121, DI-24V-0015

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

| ANGLE | ALONG | 22.5 | 45 | 67.5 | ACROSS |
|-------|-------|------|-----|------|--------|
| 0 | 144 | 144 | 144 | 144 | 144 |
| 5 | 143 | 145 | 143 | 143 | 143 |
| 15 | 139 | 141 | 139 | 139 | 139 |
| 25 | 131 | 133 | 131 | 131 | 131 |
| 35 | 119 | 121 | 119 | 119 | 119 |
| 45 | 102 | 104 | 103 | 103 | 102 |
| 55 | 81 | 83 | 82 | 82 | 81 |
| 65 | 56 | 58 | 57 | 57 | 56 |
| 75 | 30 | 30 | 30 | 30 | 29 |
| 85 | 6 | 7 | 7 | 7 | 6 |
| 90 | 0 | 0 | 0 | 0 | 0 |

ZONAL LUMENS AND PERCENTAGES

| ZONE | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-30 | 114 | 26.03 |
| 0-40 | 188 | 43.10 |
| 0-60 | 341 | 77.91 |
| 0-90 | 436 | 99.82 |
| 40-90 | 248 | 56.72 |
| 60-90 | 96 | 21.91 |
| 90-180 | 1 | 0.18 |
| 0-180 | 437 | 100.00 |

Cone Of Light Tabulation





| Mounting Height (Feet) | Footcandles at Nadir | Diameter (Feet) |
|------------------------|----------------------|-----------------|
| 4.00 | 9.98 | 5.11 |
| 6.00 | 4.43 | 7.67 |
| 8.00 | 2.49 | 10.2 |
| 10.0 | 1.60 | 12.8 |
| 12.0 | 1.11 | 15.3 |
| 14.0 | 0.814 | 17.9 |
| 16.0 | 0.623 | 20.4 |

* Photometric data complies with LM-79-08, ANSI C82.77-02.

ACCESSORIES

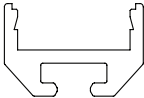
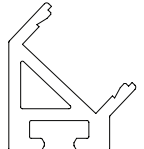
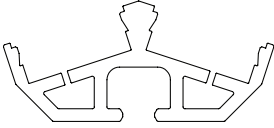

CLICKTIGHT™ TAPE LIGHT CONNECTORS

ULTRA BLAZE require a unique installation with CLICKTIGHT Connectors. Please see the 'Solid Color Tape Light Installation Guide' for installation instructions. CLICKTIGHT accessories have a Class 2 amp rating: 60W/5A @ 12VDC; 100W/4.17A @ 24VDC.

| Item # | Type | Description | Image |
|---|--------------------------------|--|---|
| DI-0870-** 3 in. | ULTRA BLAZE DC Plug Connector | Attaches tape light directly to plug-in adapter or DC plug accessory. 3 x 0.50 x 0.20 in. (L x W x H) |  |
| DI-0875-** 3 in. DI-0876-** 24 in. DI-0877-** 48 in. | ULTRA BLAZE Splice Connection | Attaches tape light directly to a hard-wired driver or low voltage control. 3 ~ 48 x 0.50 x 0.20 in. (L x W x H) |  |
| DI-0880-** 3 in. DI-0898-** 6 in. DI-0899-** 12 in. DI-0881-** 24 in. DI-0882-** 48 in. | ULTRA BLAZE Flexible Extension | Attaches two sections of tape light together. Wire lead allows for turns around tight corners. 3 ~ 48 x 0.50 x 0.20 in. (L x W x H) |  |
| DI-0869-** | ULTRA BLAZE Tape Link | Attaches two sections of tape light together. 0.60 x 0.50 x 0.20 in. (L x W x H) |  |

** Products available in 25x and 50x bulk quantities. Add -25 or -50 to item #.

CHROMAPATH™ ALUMINUM CHANNELS

| CHROMAPATH Model* | Description | Image |
|-------------------------|---|---|
| SQUARE Aluminum Channel | Field-cuttable, SQUARE aluminum tape light enclosure with a matte anodized finish. Available in 4 ft. (48 in.) lengths. |  |
| 45° Aluminum Channel | Field-cuttable, 45° aluminum tape light enclosure with a matte anodized finish. Available in 4 ft. (48 in.) lengths. |  |
| DUO Aluminum Channel | Field-cuttable, DUO aluminum tape light enclosure with a matte anodized finish. Available in 4 ft. (48 in.) lengths. |  |
| SLIM Aluminum Channel | Field-cuttable, SLIM aluminum tape light enclosure with a matte anodized finish. Available in 4 ft. (48 in.) lengths. |  |

* See the 'CHROMAPATH Aluminum Channels' product page for kit and bundle item #'s and additional accessory options.

SWITCHES, CONTROLS, LED DRIVERS, & SYSTEM DIAGRAMS

We offer a variety of switches, controls, and LED drivers (power supplies) to address all common light installations. For additional information, please see the additional component sections of our website or catalog. See the 'Solid Color Tape Light Installation Guide' for system diagrams and installation instructions. For additional questions and concerns please contact technical support.

ADDITIONAL RESOURCES

Visit the on line product page at www.DiodeLED.com for additional resources including:

- **SOLID COLOR LED TAPE LIGHT Installation Guide**
For system diagrams and full installation instructions.
- **Voltage Drop Charts**
Use to specify appropriate wire gauge for installation. Available at the 'Tools & Resources' page at www.DiodeLED.com.

SAFETY & DISCLOSURES

- Install in accordance with the National Electric Code and local regulations.
- This product is intended to be installed and serviced by a qualified, licensed electrician.
- This product requires a compatible LED driver for proper configuration. Do not connect directly to high voltage 120–277V AC power.
- The UL Listing of this product requires the fixture to be powered with a compatible Class 2 DC constant voltage LED driver (power supply).
- It is generally recommended to load the driver no more than 80% the labeled rating for maximum performance and longevity. However, see each driver specification sheet for exact minimum and maximum loading values.
- Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment.
- Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
- Do not power tape light on the plastic spool or when tightly coiled. Excess heat may melt the spool and/or cause damage to the product.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
- Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
- Attached wire leads or wire accessories are not rated for in-wall installation unless otherwise noted.
- 'Voltage drop' is a gradual decrease in voltage along a conductor through which current is flowing. When specifying an LED system, ensure to calculate voltage drop appropriately. Voltage drop calculators will suggest the proper gauge wire and distance to install the driver from the fixture. To meet maximum performance, the beginning of the tape light should be receiving no less than 3% of input power rating.
- Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.
- Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted.
- All fixture accessories including CLICKTIGHT™ connectors, DC connections, etc. have a Class 2 amperage rating unless otherwise noted (60W/5A @ 12V DC; 100W/4.17A @ 24V DC).
- Ensure wire leads at opposing ends of the tape light are not crossed when the fixture is turned on. It is acceptable to modify the length or cut off the attached wire leads and DC connections in the field.
- Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
- Lighting technology has some amount of gradual light degradation (output and/or color) over the lifespan of the products. Diode LED products are designed to minimize degradation, but some light degradation and color shift is a normal part of the life span of any LED lighting system.
- We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

WARRANTY INFORMATION

Limited Warranty

This LED fixture has a five (5) year limited warranty from the date of shipment. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.DiodeLED.com under the 'Tools & Resources' tab. For warranty related questions, please contact customer service.

Consumer's Acknowledgment

Diode LED stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the right components is essential. Diode LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Diode LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Diode LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchaser agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.



Toll Free: 877.817.6028 | Fax: 415.592.1596 | www.DiodeLED.com | info@DiodeLED.com
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