ULTRA BLAZE™ 12V & 24V LED TAPE LIGHT

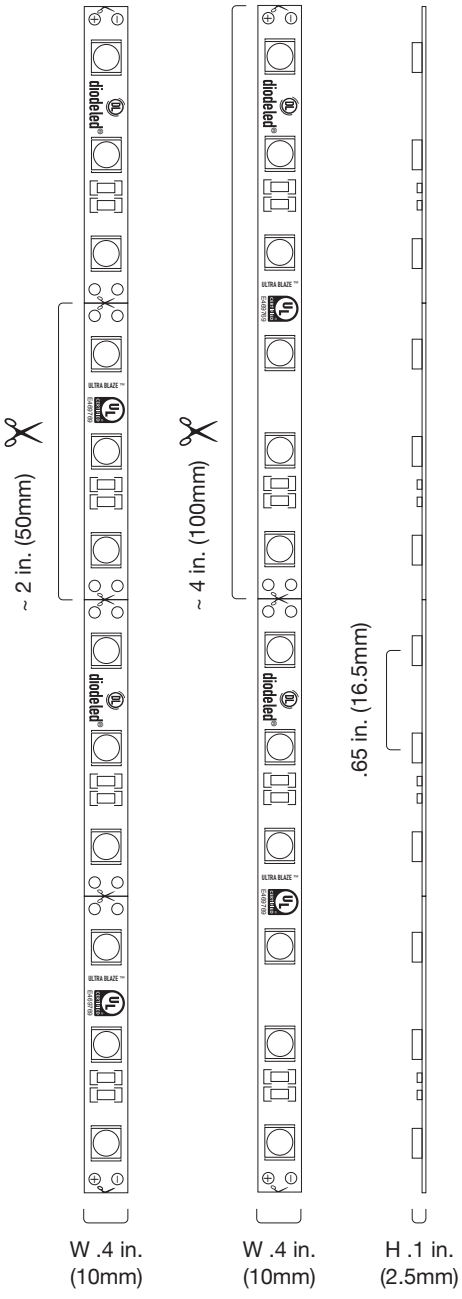
SPECIFICATION SHEET

- 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

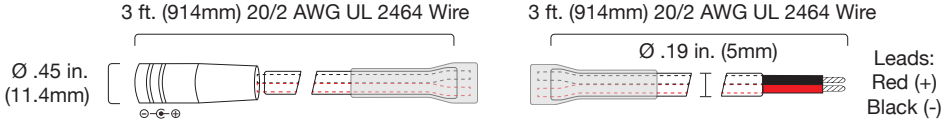
Input Voltage: 12V or 24VDC Constant Voltage
Power Consumption / ft.: 4.32W
LED Chip Type: Epistar 5050 SMD chip
LED Chip Beam Angle: 120°
LED Chips / ft.: 18
Mounting: 3M™ 55280 Adhesive
Field Cuttable: ~ 2 in. (12V), ~ 4 in. (24V)
Maximum Run [1]: 16.4 ft. (12V), 20 ft. (24V)
Connections [2]: 3 ft. Female DC plug on end. 3 ft. hard-wire lead opposing end. Leads: 20/2 AWG

Dimmable: Yes
Ambient Temp [3]: -4 ~ 122°F (-20 ~ 50°C)
Operating Temp [4]: -4 ~ 176°F (-20 ~ 80°C)
Environment [5]: 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-UB27-80**	2700K	347	81	78
DI-12V-UB30-80**	3000K	360	81.3	83.33
DI-12V-UB63-80**	6300K	406	84	93.98
DI-24V-UB27-80**	2700K	368	81	83
DI-24V-UB30-80**	3000K	362	81.8	83.79
DI-24V-UB63-80**	6300K	415	84.2	96.06

** - Substitute with **16** for 16.4 ft. spool(12V only), **20** for 20 ft. spool(24V only), or **100** for 100 ft. spool

Note [1] Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
Note [2] Wire leads and accessories are not rated for in-wall installation unless otherwise noted. Attached wire leads and connections are field-cuttable.
Note [3] 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.
Note [4] Operating temperature is measured according to the minimum and maximum ambient temperature environment.
Note [5] Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
Note [6] Epistar 5050 SMD Chip binning ranges: (2700K 80 CRI: 2580–2725K), (3000K 80 CRI: 2850–2975K), (6300K 80 CRI: 6020–6530K).
Note [7] Lumen value measured in accordance to IES LM-79-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
Note [8] 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.



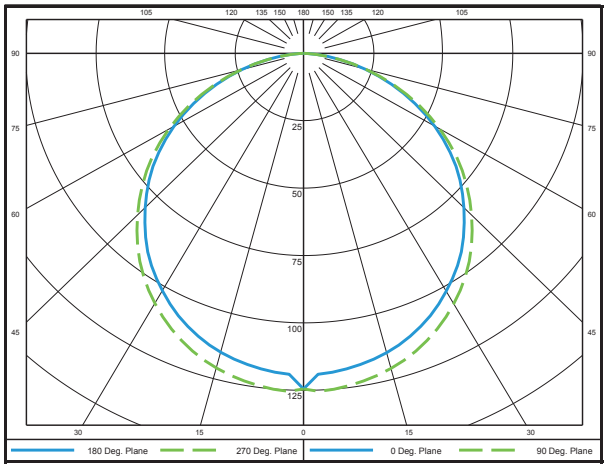
Item #:		Project:	

PHOTOMETRICS*

ULTRA BLAZE™ 12V 3000K

DI-12V-UB30-80**

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-5	3.2	0.9%
5-10	8.8	2.4%
10-15	14.4	4.0%
15-20	19.5	5.4%
20-25	23.9	6.6%
25-30	27.6	7.7%
30-35	30.4	8.4%
35-40	32.2	8.9%
40-45	32.8	9.1%
45-50	32.3	9.0%
50-55	30.9	8.6%
55-60	28.3	7.9%
60-65	24.7	6.9%
65-70	20.2	5.6%
70-75	15.1	4.2%
75-80	9.8	2.7%
80-85	4.9	1.4%
85-90	1.1	0.3%
90-95	0.0	0.0%

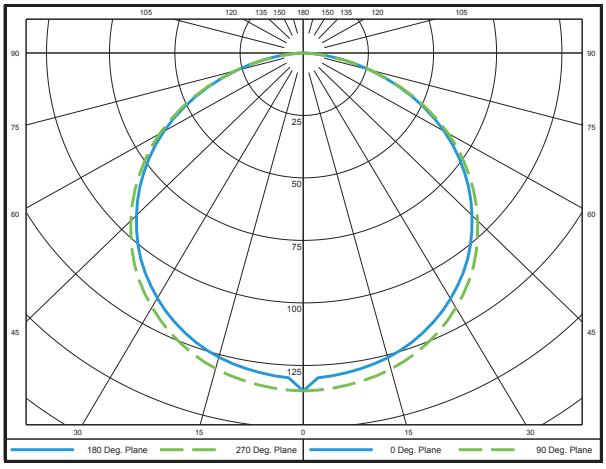
Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
1.00	124	1.27
2.00	31.1	2.54
3.00	13.8	3.81
4.00	7.78	5.08
6.00	3.46	7.63
8.00	1.95	10.2
10.0	1.24	12.7

ULTRA BLAZE™ 12V 6300K

DI-12V-UB63-80**

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-5	3.4	0.8%
5-10	9.6	2.4%
10-15	15.7	3.9%
15-20	21.3	5.3%
20-25	26.3	6.5%
25-30	30.5	7.5%
30-35	33.7	8.3%
35-40	35.9	8.9%
40-45	36.8	9.1%
45-50	36.6	9.0%
50-55	35.1	8.6%
55-60	32.4	8.0%
60-65	28.5	7.0%
65-70	23.5	5.8%
70-75	17.7	4.4%
75-80	11.5	2.8%
80-85	5.7	1.4%
85-90	1.4	0.3%
90-95	0.0	0.0%

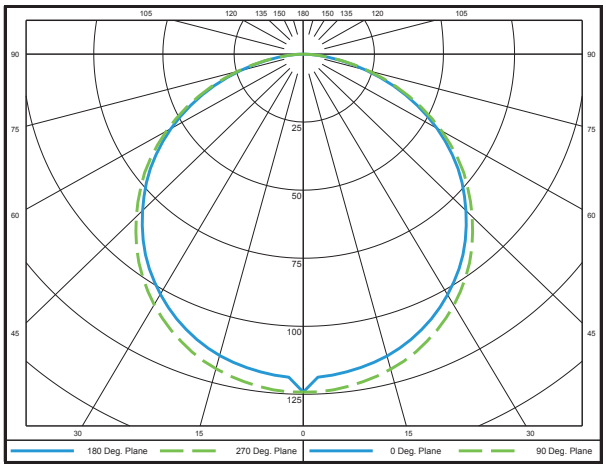
Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
1.00	135	1.29
2.00	33.8	2.59
3.00	15.0	3.88
4.00	8.45	5.18
6.00	3.76	7.76
8.00	2.11	10.4
10.0	1.35	12.9

ULTRA BLAZE™ 24V 3000K

DI-24V-UB30-80**

Polar Plot



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25-30	27.6	7.6%
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35-40	32.2	8.9%
40-45	32.8	9.1%
45-50	32.4	8.9%
50-55	31.0	8.6%
55-60	28.5	7.9%
60-65	24.9	6.9%
65-70	20.5	5.7%
70-75	15.4	4.3%
75-80	10.2	2.8%
80-85	5.3	1.5%
85-90	1.6	0.4%
90-95	0.0	0.0%

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
1.00	124	1.27
2.00	31.0	2.55
3.00	13.8	3.82
4.00	7.76	5.09
6.00	3.45	7.64
8.00	1.94	10.2
10.0	1.24	12.7

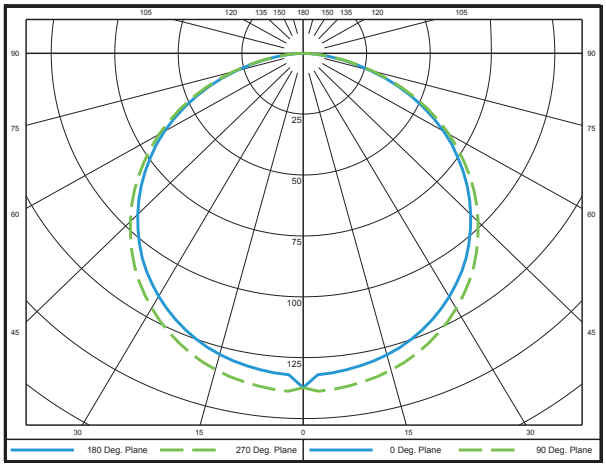
* Photometric data complies with LM-79-08, ANSI C82.77-02

PHOTOMETRICS*

ULTRA BLAZE™ 24V 6300K

DI-24V-UB63-80**

Polar Plot



Zonal Lumen Summary

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20-25	26.7	6.4%
25-30	31.0	7.5%
30-35	34.3	8.3%
35-40	36.5	8.8%
40-45	37.5	9.0%
45-50	37.3	9.0%
50-55	35.8	8.6%
55-60	33.1	8.0%
60-65	29.2	7.0%
65-70	24.2	5.8%
70-75	18.3	4.4%
75-80	12.1	2.9%
80-85	6.3	1.5%
85-90	1.8	0.4%
90-95	0.0	0.0%

Cone of Light Tabulation

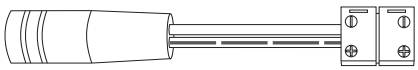
Mounting Height	Footcandles at Nadir	Diameter (Feet)
1.00	137	1.30
2.00	34.3	2.59
3.00	15.3	3.89
4.00	8.58	5.18
6.00	3.81	7.77
8.00	2.15	10.4
10.0	1.37	13.0

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

ACCESSORIES

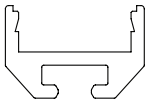
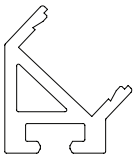
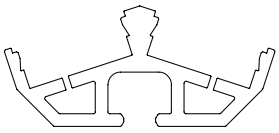
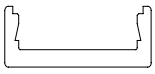
CLICKTIGHT™ TAPE LIGHT CONNECTORS

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 and local electrical code regulations.
- This product is intended to be installed and serviced by a qualified, licensed electrician.
- This product must be powered with a compatible Class 2 DC constant voltage LED driver (power supply).
- Do not connect directly to high voltage or AC power.
- Do not install in location where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
- 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. Ensure adequate airflow and heatsinking is considered when mounting/installing.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment. Exceeding the maximum operating temperature may damage the controller or fixture.
- 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.
- '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.
- Attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted.
- All fixture accessories including wet location connectors, DC connections, etc. have a Class 2 amperage rating unless otherwise noted (60W/5A @ 12V DC; 100W/4.17A @ 24V DC).
- Do not modify or disassemble this product beyond instructions or the warranty will be void.
- Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
- 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.

diode led®
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