diode led®

- High brightness
- Full color spectrum tuning
- 80+ CRI (3000K chip)
- 20 ft. maximum run
- UL Listed & R/C SAM Manual
- 5-Year limited warranty
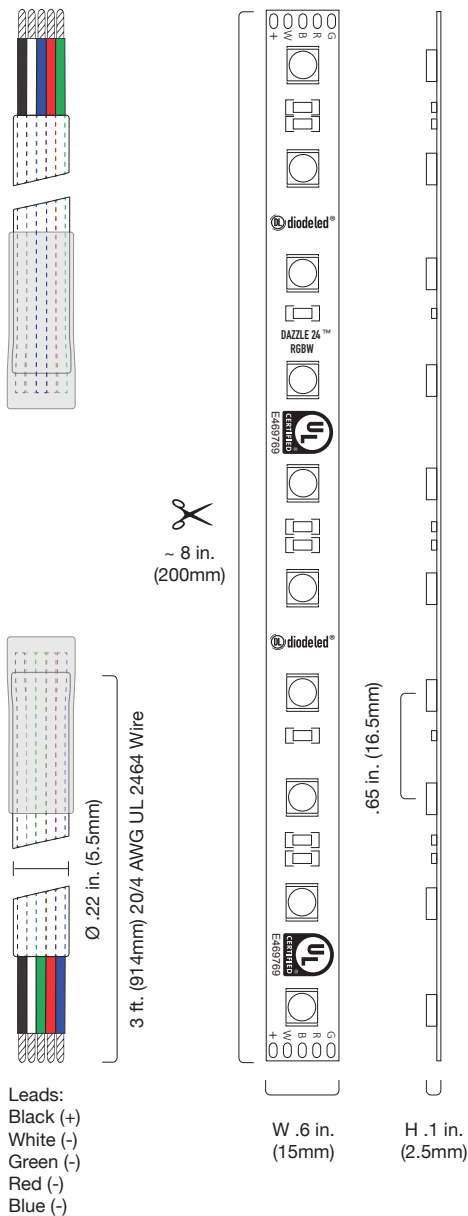

SPECIFICATIONS

Input Voltage: 24VDC Constant Voltage
Power Consumption / ft.: 4.39W / 180mA (max)
LED Chip Type: Epistar 5050 Solid Color & RGB Tri-Chip SMD
LED Chip Beam Angle: 120°
LED Chips / ft.: 9 White, 9 RGB
Mounting: 3M™ 55280 Adhesive
Field Cuttable: ~ 8 in.
Maximum Run [1]: 20 ft.
Connections [2]: 3ft. hard-wire leads on each end Leads: 20/5 AWG

Dimmable [3]: Yes
Ambient Temp [4]: -4 ~ 122°F (-20 ~ 50°C)
Operating Temp [5]: -4 ~ 176°F (-20 ~ 80°C)
Environment [6]: Indoor / dry location
Dimensions: .6 x .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. Suitable for installation in a clothes closet. E469769 (UL Listed), E469770 (SAMS Manual)

Item #	CCT (Kelvin) [7]	Lumens / ft. [8]	CRI	Efficacy (lm/W) [9]
DI-24V-RGBW-0020	White 3000K Red (625nm) Green (525nm) Blue (465nm)	198	White: 82.3 RGB: N/A	45.1

Note [1] Each maximum run requires a dedicated power feed from the controller or 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] Dimmable with a compatible RGB controller or DMX controller & decoder.
Note [4] 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 [5] Operating temperature is measured according to the minimum and maximum ambient temperature environment.
Note [6] Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
Note [7] Epistar 5050 SMD Chip binning ranges: (White 80+ CRI: 3045-3220K)
Note [8] Lumen value measured in accordance to IES LM-79-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
Note [9] 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.
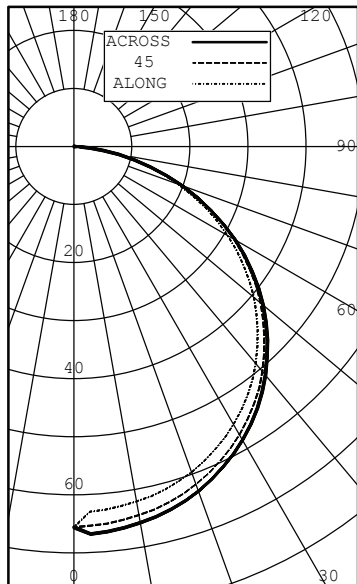
~ 8 in. (200mm)

.65 in. (16.5mm)

Ø .22 in. (5.5mm)

3 ft. (914mm) 20/4 AWG UL 2464 Wire

DAZZLE 24™ RGBW

E469769

Leads:
Black (+)
White (-)
Green (-)
Red (-)
Blue (-)

W .6 in. (15mm)

H .1 in. (2.5mm)

Item #:   Project:

DAZZLE 24™ RGBW (All RGBW Chips)
DI-24V-RGBW-0020

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POLAR CANDELA DISTRIBUTION GRAPH
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INTENSITY(CANDLEPOWER) SUMMARY

ANGLE  ALONG  22.5   45   67.5  ACROSS
  0     66    66    66    66    66
  5     63    65    65    67    67
 10     62    65    65    66    66
 15     61    64    63    65    65
 20     60    62    62    63    63
 25     58    60    60    61    61
 30     55    57    57    58    58
 35     52    54    54    55    55
 40     49    51    51    51    51
 45     45    47    46    47    47
 50     41    42    42    43    43
 55     36    37    37    38    38
 60     31    32    32    32    32
 65     25    26    26    26    26
 70     19    20    20    20    20
 75     13    14    14    14    14
 80      8     8     8     8     8
 85      3     3     3     3     3
 90      0     0     0     0     0
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ZONAL LUMENS AND PERCENTAGES

 ZONE    LUMENS   % LUMINAIRE
 0-30      52       26.14
 0-40      86       43.22
 0-60     155       77.95
 0-90     198      100.00
40-90     113       56.78
60-90      44       22.05
90-180      0        0.00
 0-180    198      100.00
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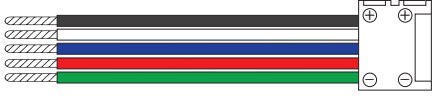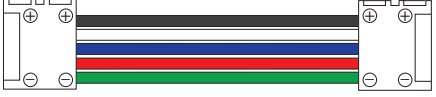
Cone Of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	4.11	5.19
6.00	1.82	7.78
8.00	1.03	10.4
10.0	0.657	13.0
12.0	0.456	15.6
14.0	0.335	18.1
16.0	0.257	20.7

* Photometric data complies with LM-79-08, ANSI C82.77-02.
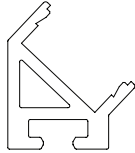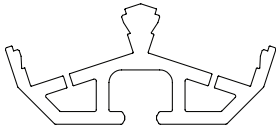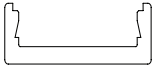
DAZZLE 24™ RGBW CLICKTIGHT™ Connectors

DAZZLE 24 RGBW CLICKTIGHT connectors have a Class 2 amp rating: 60W/5A @ 12VDC; 100W/4.17A @ 24VDC. RGBW CLICKTIGHT Connectors are not compatible with CHROMAPATH Aluminum Channels due to the wide connector design.

Item #	Type	Description	Image
DI-RGBW-CKT3-SPLE-** *3 in.* DI-RGBW-CKT24-SPLE-** *24 in.*	RGBW Splice Connector	Attaches RGBW tape light directly to an RGBW controller or DMX decoder. 3 ~ 24 x 0.75 x 0.20 in. (L x W x H)	
DI-RGBW-CKT3-EXT-** *3 in.* DI-RGBW-CKT24-EXT-** *24 in.*	RGBW Flexible Extension	Attaches two sections of RGBW tape light together. Wire lead allows for turns around tight corners. 3 ~ 24 x 0.75 x 0.20 in. (L x W x H)	
DI-RGBW-CKT-LNK-**	RGBW Tape Link	Attaches two sections of RGBW tape light together. 0.60 x 0.75 x 0.20 in. (L x W x H)	

** Products available in 25x and 50x pack bulk quantities. Add -25 or -50 to each product # for bulk quantities.

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. RGBW CLICKTIGHT Connectors are not compatible with CHROMAPATH Aluminum Channels due to the wide connector design.

SWITCHES, CONTROLS, LED DRIVERS, & SYSTEM DIAGRAMS

We offer a variety of RGBW/DMX controllers, and LED drivers (power supplies) to address the most common RGBW installations. For additional information, please see the RGBW, DMX, and LED Driver sections of our website or catalog. See the 'DAZZLE 24 24V RGBW Tape Light Installation Guide' for system diagrams and installation instructions. For additional questions and concerns please contact technical support.

ADDITIONAL RESOURCES

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

- **DAZZLE 24™ 24V RGBW 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.