

**VALENT® RGBW 24V**  
Color Changing LED Tape Light

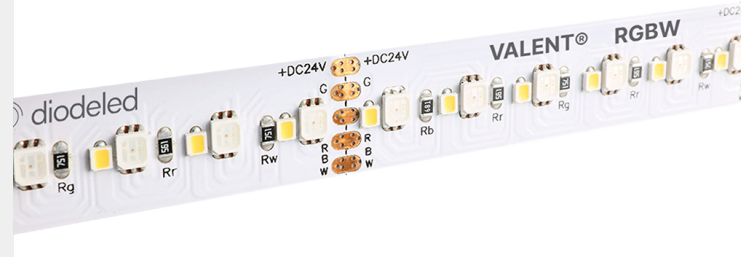
Bright, saturated RGBW tape light for high performance color changing applications. Features a Tri-chip capable of billions of color combinations, as well as pure 3000K white light.

Date \_\_\_\_\_

Project Notes \_\_\_\_\_

**FEATURES**

- Dense LED placement for uninterrupted linear light
- RGB Tri-Chip and 3000K White Chip capable of billions of colors
- Controllable via DMX, Casambi, Touchdial, and other options
- Field cuttable every 2 inches
- 7 year limited warranty



**ORDERING CODES**

Order spools and components for field assembly

**OPTIONAL ORDERING CODES**

Mounting, drivers, and assembly preference

Diode LED	Voltage	Model	CCT	Length	Channels			Finish	Mounting		Driver	Delivery
DI												
	24V	VL	RGBW (RGBW)	016 (16.4) ft. 100 (100) ft.	SL (Slim) CA (Canal) S1 (S1) 16 (16mm) RC20 (20mm Round)	SQ20 (20mm Square) SQ (Square) 45 (45°) 45DCO (45° Deco) 90 (90° Sideview)	REF (Reflector) MI1 (1-inch Mud-In) MI2 (2-inch Mud-In) REC (Recessed) WF (Waveform)	AL (Aluminum) WH (White) BL (Black)	3M (3M Adhesive) MC (Mounting Clip) UC (U-Clip)	VC (Vertical Clip) HNG (Hanging Hardware) RC (Rotating Clip)	NERO (Nero Driver) DMX/DDCO (Decoder & Driver) VLM (Constant Voltage) PoE (Power over Ethernet)	FIELD HYBRID FACTORY *See Delivery Options

**Model 24V-VL-RGBW**

**Voltage 24V**

**Wattage 6.1 W/ft.**

Lumens RGBW  
All: 291/ft.  
White: 144/ft.  
Red: 36/ft.  
Green: 104/ft.  
Blue: 23/ft.

Cut Points 2 in.

Max Run (ft.) 16.4 ft.

Max Run (Class 2) 15 ft.

LED Chips 72/ft.

CRI 90+ (3000K)

Dimensions 0.47 in. x 0.06 in. (W x H)

Environment Indoor / Damp Location (IP20)

Ambient Temperature -4 ~ 122°F (-20 ~ 50°C)

Operating Temperature -4 ~ 176°F (-20 ~ 80°C)

Certification UL Listed 2108

Warranty 7 Year

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**RECOMMENDED COLOR CONTROLLERS**

CONTROLLER	SKU
<b>Casambi Color Controller</b> Remotely control lighting through an app.	
Casambi PWM4	CBU-PWM4
<b>DMX Color Controllers</b> Advanced color control systems.	
Nicolaudie Easy Stand Alone	DI-DMX-ESA
Nicolaudie STICK-DE3	DI-DMX-DE3
Nicolaudie STICK-GA2	DI-DMX-GA2
Nicolaudie® STICK-KE2	DI-DMX-KE2
DMX Wall Mount Controller	DI-DMX-WIFI-WMUS-3Z-WH
DMX 4 Channel Decoder	DI-1810
<b>TOUCHDIAL™ Control System</b>	
Receiver	DI-RF-REC-CV-A
Mini Remote (RGBW)	DI-RF-REM-RGBW-1
Remote (RGBW) Control	DI-RF-REM-RGBW-4
Wall Control (RGBW)	DI-RF-WMT-RGBW
WiFi Hub	DI-WIFI-RF-TRMS
<b>ATTRIBUTE® Color Controller</b>	
ATTRIBUTE® Color Controller	DI-ATT-RGBW-REM

**RECOMMENDED DRIVERS**

SKU	WATTAGE	LENGTH	WIDTH	HEIGHT
<b>NERO Advanced Control Drivers</b> Dims to dark on 0-10V, DMX, and DALI control systems. Achieve complete dimming control to very low levels.				
VIP-NR-010-24V96-3R	96W	10.79 in.	7.34 in.	2.36 in.
VIP-NR-DALI-24V96-3R	96W	10.79 in.	7.34 in.	2.36 in.
VIP-NR-DMX-24V96-3R	96W	10.79 in.	7.34 in.	2.36 in.
<b>DMX Decoder with Built-in LED Driver</b> Driver with integrated DMX controller for integrating static color and color-changing tape light into DMX systems with the fewest possible components.				
DI-DMX-DCO-24V96W-277-LPL	96W	13.5 in.	4.5 in.	2.38 in.
<b>VLM Series Constant Voltage Drivers</b> Compact constant-voltage LED driver				
VLM60W-24-LPM	60W	8.19 in.	2.94 in.	1.31 in.
VLM100W-24-LPM	100W	8.19 in.	2.94 in.	1.31 in.

**RECOMMENDED CHANNELS**

MODEL	SKU	SOLDERED CONNECTION	IN CHANNEL DIFFUSION	DIAGRAM
Slim (SL) 48", 96" Aluminum, White, Black	DI-CPCHB-SL	Soldered Lead Only	VL: Semi-Diffused	
Canal (CA) 48", 96" Aluminum, White, Black	DI-CPCHB-CAN	Soldered Lead Only	VL: Dotless	
S1 (S1) 48", 96" Aluminum	DI-CPCHB-S1	Soldered Lead Only	VL: Semi-Diffused	
16mm (16) 48", 96" Aluminum	DI-CPCHB-16MM	Soldered Lead Only	VL: Dotless	
20mm Round (RC20) 48", 96" Aluminum, White, Black	DI-CPCHB-RC20	Soldered Lead Only	VL: Dotless	
20mm Square (SQ20) 48", 96" Aluminum, White, Black	DI-CPCHB-SQC20	Soldered Lead Only	VL: Dotless	
Square (SQ) 48", 96" Aluminum, White, Black	DI-CPCHB-SQ	Soldered Lead Only	VL: Semi-Diffused	
45° (45) 48", 96" Aluminum, White, Black	DI-CPCHB-45	Soldered Lead Only	VL: Semi-Diffused	
45° Deco (45DCO) 48", 96" Aluminum	DI-CPCHB-45DCO	Soldered Lead Only	VL: Semi-Diffused	
90° Sideview (90) 48", 96" Aluminum	DI-CPCHB-90SD	Soldered Lead Only	VL: Semi-Diffused	
Reflector (REF) 48", 96" Aluminum	DI-CPCHB-RFCTR	Soldered Lead Only	VL: Semi-Diffused	
1-inch Mud-In (MI1) 48", 96" Aluminum	DI-CPCHB-MUD1	Soldered Lead Only	VL: Dotless	
2-inch Mud-In (MI2) 48", 96" Aluminum	DI-CPCHB-MUD2	Soldered Lead Only	VL: Dotless	
Recessed (REC) 48", 96" Aluminum	DI-CPCHB-REC	Soldered Lead Only	VL: Runway Diffusion	
Waveform (WF) 48" Aluminum	DI-CPCHB-WF	Soldered Lead Only	VL: Runway Diffusion	

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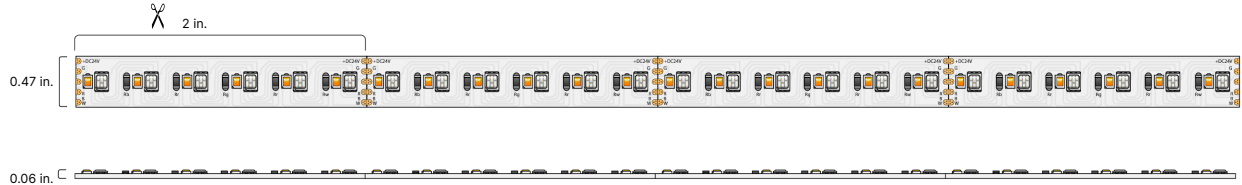
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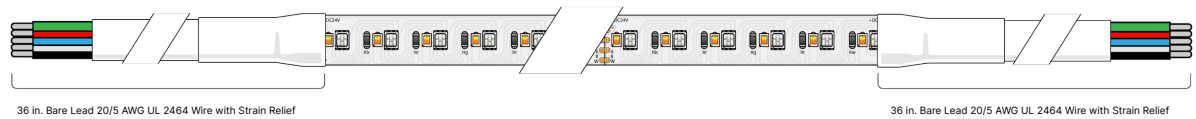
Project Notes \_\_\_\_\_

**MECHANICAL DIAGRAMS**

24V-VL-RGBW



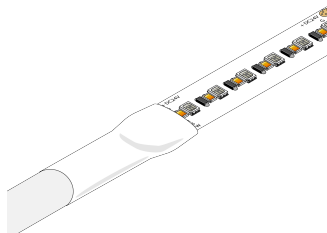
**CONNECTIONS**



**CONNECTORS**

Soldered Lead

Soldered Tape Light Connection



**DELIVERY OPTIONS**

- **Field Assembly**  
Stock items for in-field assembly. Fastest order fulfillment.
- **Factory + Field (Hybrid)**  
Finished lengths of light with leads. Channels either bulk or factory finished. Some field assembly required.
- **Factory Assembly**  
Fastest installation: fixtures fully assembled in the factory.

- Lumen value measured in accordance to IES LM-80-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length. Max run may exceed Class 2 limit. Actual wattage may differ from calculated wattage due to voltage drop across run.
- 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.
- Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value can be calculated as follows: Lumen value divided by average power consumption per foot.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment.

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**CERTIFICATIONS**

**Safety**

- UL Listed 2108 Low Voltage Lighting System / Low Voltage Luminaire. UL 1598 / CSA 250.0-08, UL 8750. UL 879 / CAN/CSA-C22.2 no. 207-M89. Certified for United States and Canada. File # E469769.
- Approved for storage areas of clothes closets per NEC 410.16.A.3 and 410.16.C.5

**Environmental**

- RoHS Compliant

**Performance**

- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Elemental LED's Innovation Lab.

**Safety / Warnings / Disclosures**

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
4. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
5. Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted. Tape light and attached wire leads are field-cuttable.
6. 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.
7. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
8. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature ratings
9. Do not install indoor LED tape light products in outdoor / wet location environments. Only wet location tape light models are rated for outdoor / wet locations.
10. Do not modify product beyond instructions or warranty will be void.
11. Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.
12. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
13. 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**

**Limited Warranty**

- 7 Years

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/limited-warranty/](http://www.diodeled.com/limited-warranty/) within the Policies section. For warranty related questions please contact product support.

**Consumer's Acknowledgment**

Elemental LED, Inc. 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 correct components is essential. Elemental 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 Elemental 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 Elemental 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 purchase 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. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental 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 Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.