VALENT® RGBW Wet Location 24V
Color Changing LED Tape Light

Bright, saturated RGBW tape light for high performance color changing applications. Capable of billions of color combinations, plus pure 3000K white light.

Date

Project Notes

IP65 | 24 VDC | NEC 410.16.A.3 & 410.16.C.1.3 CLOSET RATED

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
- 2 inch cuttable increments
- 7 Year limited warranty

ORDERING CODES

Order spools, and components for field assembly

OPTIONAL ORDERING CODES

Add Length, Assembly Preferences, and Finish

	Voltage	Model	CCT	Length	Channels	Finish	Mounting		Driver	Delivery
DI										
	24V	VL	RGBW (RGBW)	W016 (16.4 feet) W100 (100 feet)	S2 (S2) S45 (S45) 16 (16mm Square) RC20 (20mm Round)	AL (Aluminum) BL (Black) WH (White)	3M (3M Adhesive) MC (Mounting Clip) UC (U-Clip)	VC (Vertical Clip) HNG (Hanging Hardware) RC (Rotating Clip)	VLM (Constant Voltage) O/O (On / Off) PoE (Power over Ethernet)	Field Assembly Factory + Field (Hybrid) Factory Assembly

24V VALENT® RGBW Wet Location - SPECIFICATION TABLE

Models	**24V-VL-RGBW-W**
Voltage	**24VDC**
Wattage	**6.1W/ft.**
Lumens RGBW	All: 291 Lm/ft. White: 144 Lm/ft. Red: 36 Lm/ft. Green: 104 Lm/ft. Blue: 23 Lm/ft.
Cut Points	2 in.
Dimmable	Yes
Max Run (ft.)	16.4 ft.
Max Run (Class 2)	16.4 ft.
CRI	90+
Dimensions	0.55 × 0.22 in. (W x H)
TM-30 (LM-80)	>50,000 hours
Environment	Outdoor / Wet Location (IP65)
Ambient Temperature	-4 ~ 122°F (-20 ~ 50°C)
Operating Temperature	-4 ~ 176°F (-20 ~ 80°C)
LED Chips	72/ft.
Certification	UL Listed 2108
Warranty	7 Year

VALENT® RGBW Wet Location 24V

Color Changing LED Tape Light

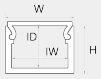
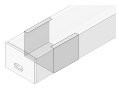
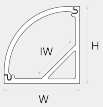
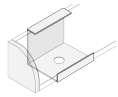
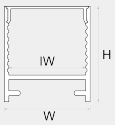
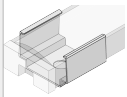
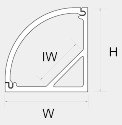
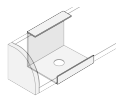
Bright, saturated RGBW tape light for high performance color changing applications. Capable of billions of color combinations, plus pure 3000K white light.

Date

Project Notes

IP65 | 24 VDC | NEC 410.16.A.3 & 410.16.C.1.3 CLOSET RATED

RECOMMENDED CHANNELS

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
S2 Channel DI-CHB-S2 (S2) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.57 in. Width (W): 0.74 in. Interior Depth (ID): 0.34 in. Interior Width (IW): 0.63 in. 	48 in. Channel & Frosted Lens, 1 open end cap, 1 closed end cap, 2 mounting clips, 2 mounting screws 96 in. Channel & Frosted Lens, 2 open end cap, 2 closed end cap, 4 mounting clips, 4 mounting screws	 16mm Wet Location Tape Light: Soldered Lead Only	 Classic Frosted Lens VL: Semi-Diffused	• Beam Angle: 120° Classic Frosted Lens • Light Loss: 20% • CCT Shift: -40K • IP Rating Shift: IP40	 U-Clip: 0.58 × 0.75 in. (H x W)
S45 Channel DI-CHB-S45 (S45) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.78 in. Width (W): 0.78 in. Interior Depth (ID): 0.54 in. Interior Width (IW): 0.6 in. 	48 in. Channel & Frosted Lens, 1 open end cap, 1 closed end cap, 2 mounting clips, 2 mounting screws 96 in. Channel & Frosted Lens, 2 open end cap, 2 closed end cap, 4 mounting clips, 4 mounting screws	 16mm Wet Location Tape Light: Soldered Lead Only	 Classic Frosted Lens VL: Semi-Diffused	• Beam Angle: 120° Classic Frosted Lens • Light Loss: 20% • CCT Shift: -40K • IP Rating Shift: IP40	 U-Clip: 0.79 × 0.79 in. (H x W)
16mm Square Channel DI-CPCHB-16MM (16) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.89 in. Width (W): 0.77 in. Interior Width (IW): 0.63 in. 	48 in. channel & Architectural Frosted Lens 2x surface mounting clips End caps: 1x open, 1x closed. 96 in. channel & Architectural Frosted Lens 4x surface mounting clips End caps: 2x open, 2x closed.	 16mm Wet Location Tape Light: Soldered Lead Only	 Architectural Frosted Lens VL: Dotless	• Beam Angle: 120° Architectural Frosted Lens • Light Loss: 20% • CCT Shift: -35K Black Lens • Light Loss: 90% • CCT Shift: -350K • IP Rating Shift: IP40	 Mounting Clip: 0.89 × 0.77 in. (H x W)
20mm Round Channel DI-CPCHB-RC20 (RC20) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 1.18 in. Width (W): 1.18 in. Interior Width (IW): 0.84 in. 	48 in. channel & frosted lens 2x surface mounting clips End caps: 1x open, 1x closed. 96 in. channel & frosted lens 4x surface mounting clips End caps: 2x open, 2x closed.	 16mm Wet Location Tape Light: Soldered Lead Only	 Classic Frosted Lens VL: Dotless	• Beam Angle: 180° Classic Frosted Lens • Light Loss: 20% • CCT Shift: -40K • IP Rating Shift: IP40	 U-Clip: 1.19 × 1.19 in. (H x W)

VALENT® RGBW Wet Location 24V

Color Changing LED Tape Light

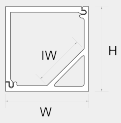
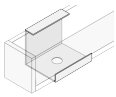
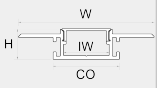
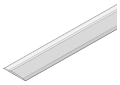
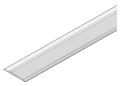
Bright, saturated RGBW tape light for high performance color changing applications. Capable of billions of color combinations, plus pure 3000K white light.

Date

Project Notes

IP65 | 24 VDC | NEC 410.16.A.3 & 410.16.C.1.3 CLOSET RATED

RECOMMENDED CHANNELS

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
20mm Square Channel DI-CPCHB-SQC20 (SQ20) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 1.18 in. Width (W): 1.18 in. Interior Width (IW): 0.84 in. 	48 in. channel & frosted lens 2x surface mounting clips End caps: 1x open, 1x closed. 96 in. channel & frosted lens 4x surface mounting clips End caps: 2x open, 2x closed.	 16mm Wet Location Tape Light: Soldered Lead Only	 Classic Frosted Lens VL: Dotless	• Beam Angle: 180° Classic Frosted Lens • Light Loss: 20% • CCT Shift: -40K • IP Rating Shift: IP40	 U-Clip: 1.19 × 1.19 in. (H x W)
1-inch Mud-In Channel DI-CPCHB-MUD1 (MI1) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.54 in. Width (W): 2.42 in. Interior Width (IW): 0.81 in. Cut Out Width (CO): 1.19 in. 	96 in. channel & opal lens 2x surface mounting clips End caps: 2x open, 2x closed.	 16mm Wet Location Tape Light: Soldered Lead Only	 Opal Lens VL: Dotless	• Beam Angle: 120° Opal Lens • Light Loss: 55% • CCT Shift: -200K • IP Rating Shift: IP40	 Recessed Mount: 0.54 × 2.42 in. (H x W)
2-inch Mud-In Channel DI-CPCHB-MUD2 (MI2) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.8 in. Width (W): 3.86 in. Interior Width (IW): 1.84 in. Cut Out Width (CO): 1.97 in. 	96 in. channel & opal lens 2x surface mounting clips End caps: 2x open, 2x closed.	 16mm Wet Location Tape Light: Soldered Lead Only	 Opal Lens VL: Dotless	• Beam Angle: 120° Opal Lens • Light Loss: 55% • CCT Shift: -200K • IP Rating Shift: IP40	 Recessed Mount: 0.8 × 3.86 in. (H x W)

VALENT® RGBW Wet Location 24V

Color Changing LED Tape Light

Bright, saturated RGBW tape light for high performance color changing applications. Capable of billions of color combinations, plus pure 3000K white light.

Date

Project Notes

IP65 | 24 VDC | NEC 410.16.A.3 & 410.16.C.1.3 CLOSET RATED

RECOMMENDED 24V DRIVERS

SKU	INPUT VOLTAGE / FREQUENCY	OUTPUT VOLTAGE	MAXIMUM LOAD	MINIMUM LOAD	CLASS 2	DIMMABLE	LENGTH	WIDTH	HEIGHT
VLM Series Constant Voltage Driver **Compact driver for on/off, PWM dimming, and color-changing applications.**									
							VLM Series Constant Voltage Driver Specification Sheet https://www.diodeled.com/custom/download/productFile/filename/VLM-Specification%20Sheet%20(Driver%20&%20J-Box).pdf/ **Contains** • Additional Models • Additional Features • Derating Curves • System Diagrams		
VLM60W-24-LPS3R	120 / 277VAC 47 - 63Hz	24V	60W	No Minimum Load	Yes	PWM	10.79 in.	7.34 in.	2.36 in.
VLM60W-24-LPM	120 / 277VAC 47 - 63Hz	24V	60W	No Minimum Load	Yes	PWM	8.19 in.	2.94 in.	1.31 in.
VLM100W-24-LPS3R	120 / 277VAC 47 - 63Hz	24V	100W	No Minimum Load	Yes	PWM	10.79 in.	7.34 in.	2.36 in.
VLM200W-24-LPL	120 / 277VAC 47 - 63Hz	24V	200W	No Minimum Load	Yes	PWM	13.5 in.	4.5 in.	2.38 in.
MEANWELL Constant Voltage Driver **Drivers for on/off or PWM dimming applications.**									
							MEANWELL Constant Voltage Driver Specification Sheet https://www.diodeled.com/custom/download/productFile/filename/commercial-grade-CV-Driver-Specification%20Sheet%20(24V%20Models).pdf/ **Contains** • Additional Models • Additional Features • Derating Curves • System Diagrams		
DI-CV-MW24V60W-277-LPS3R	120 ~ 277VAC 50/60Hz	24V	60W	No minimum load	Yes	Yes, with compatible PWM dimmer/controls	10.79 in.	7.34 in.	2.36 in.
DI-CV-MW24V60W-277-LPS	120 ~ 277VAC 50/60Hz	24V	60W	No minimum load	Yes	Yes, with compatible PWM dimmer/controls	11.25 in.	3.75 in.	1.9 in.
DI-CV-MW24V90W-277-LPS3R	120 ~ 277VAC 50/60Hz	24V	90W	No minimum load	Yes	Yes, with compatible PWM dimmer/controls	10.79 in.	7.34 in.	2.36 in.
PoE (Power over Ethernet) **Constant voltage platform, ready for Power over Ethernet (inquire)**									

RECOMMENDED CONTROLLERS

SKU	DESCRIPTION
CASAMBI® Controllers **The CASAMBI controllers will remotely control your lighting through the app - downloadable for IOS & Android.**	
CBU-PWM4	CASAMBI PWM4 Single Color Dimming Controller
CBU-A2D	CASAMBI A2D 2 Channel 0-10V/DALI Controller
CBU-ASR	CASAMBI ASR 0-10V Controller
CBU-TED	CASAMBI TED AC High Voltage Controller
TOUCHDIAL™ Control Systems **The TOUCHDIAL™ zone control system controls single color dimming, tunable white, and color changing LED lighting via mobile device and additional TOUCHDIAL controls.**	
DI-RF-WMT-RGBW	TOUCHDIAL RGB(W) Wall Control - Single Zone
DI-RF-REC-CV-A	TOUCHDIAL Color Control System - WiFi Receiver

VALENT® RGBW Wet Location 24V

Color Changing LED Tape Light

Bright, saturated RGBW tape light for high performance color changing applications. Capable of billions of color combinations, plus pure 3000K white light.

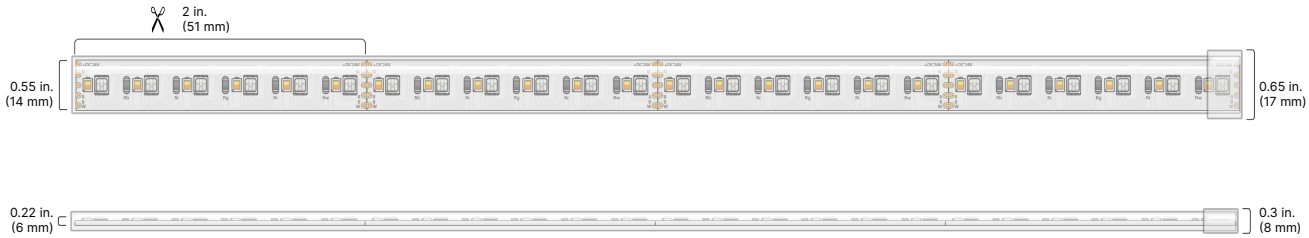
Date

Project Notes

IP65 | 24 VDC | NEC CLOSET RATED

MECHANICAL DIAGRAMS

24V-VL-RGBW-W



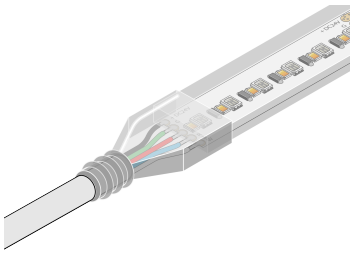
CONNECTIONS

36 in. Bare Lead 20/5 AWG UL 2464 Wire with Strain Relief

36 in. Bare Lead 20/5 AWG UL 2464 Wire with Strain Relief

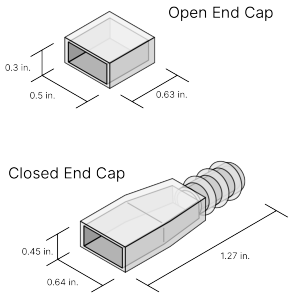
ACCESSORIES

Soldered Lead Only



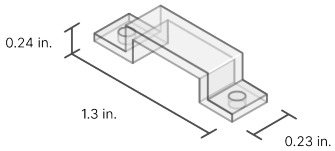
DI-VL-RGBW-WL-EC-5

14mm Terminal Open and Closed End Caps



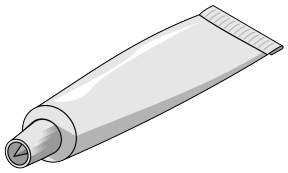
DI-WLMC-12MM

12mm Wet Location Mounting Clips



DI-WPSL

Wet Location 3M Sealant



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.

VALENT® RGBW Wet Location 24V

Color Changing LED Tape Light

Bright, saturated RGBW tape light for high performance color changing applications. Capable of billions of color combinations, plus pure 3000K white light.

Date

Project Notes

IP65 | 24 VDC | NEC 410.16.A.3 & 410.16.C.1,3 CLOSET RATED

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.
- UL Listed Field Cuttable.
- Approved for storage areas of clothes closets per NEC 410.16.A.1,3 and 410.16.C.1,3,5

Environment

- 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 Year limited warranty

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/ 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.

- 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.