

Specification Sheet

VALENT® Wet Location 24V High Density LED Tape Light

Versatile, high density tape light for most applications. Full diffusion and dotless light when paired with channels. Suitable for wet locations (IP65).

| Date | | | |
|---------------|--|--|--|
| | | | |
| Project Notes | | | |









FEATURES

- · Dense LED placement for uninterrupted linear light
- 200/500 lumen outputs
- Precision color rendering with 90+ CRI
- · Wet Location IP65 Rated



| ORDERING CODES Order spools, and components for field assembly | | | OPTIONAL ORDERING CODES Add Length, Assembly Preferences, and Finish | | | | | | | |
|---|-----|------------|---|---|---|--|--|---|---|--|
| Voltage Model CCT Length | | | | Channels | Finish | Моц | unting | Driver | Delivery | |
| DI | | | | | | | | | | |
| | 24V | VL2 VL5 | 24 (2400K) 27 (2700K) 30 (3000K) 35 (3500K) | W016 (16.4 feet) W100 (100 feet) | \$2 (\$2) \$45 (\$45) 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) | ELV (Electronic) VLM (Constant Voltage) O/O (On / Off) PoE (Power over Ethernet) | Field Assembly Factory + Field (Hybrid) Factory Assembly |

24V VALENT® Wet Location - SPECIFICATION TABLE

| Models | 24V-VL2-W | 24V-VL5-W |
|-----------------------|-------------------------------|-------------------------------|
| Voltage | 24VDC | 24VDC |
| Wattage | 1.72W/ft. | 4.28W/ft. |
| 2400K | 197 Lm/ft. | 506 Lm/ft. |
| Lumens 2700K | 221 Lm/ft. | 539 Lm/ft. |
| 3000К | 222 Lm/ft. | 504 Lm/ft. |
| 3500К | 206 Lm/ft. | 506 Lm/ft. |
| Cut Points | 1.32 in. | 1.32 in. |
| Max Run (ft.) | 55 ft. | 29 ft. |
| Max Run (Class 2) | 55 ft. | 25 ft. |
| CRI | 90+ | 90+ |
| Dimensions | 0.55 × 0.22 in. (W x H) | 0.55 × 0.22 in. (W x H) |
| TM-30 (LM-80) | >50,000 hours | >50,000 hours |
| Environment | Outdoor / Wet Location (IP65) | Outdoor / Wet Location (IP65) |
| Ambient Temperature | -4 ~ 122°F (-20 ~ 50°C) | -4 ~ 122°F (-20 ~ 50°C) |
| Operating Temperature | -4 ~ 176°F (-20 ~ 80°C) | -4 ~ 176°F (-20 ~ 80°C) |
| LED Chips | 72/ft. | 72/ft. |
| Chip Type | 2835 | 2835 |
| Certification | UL Listed 2108 | UL Listed 2108 |
| Warranty | 7 Year | 7 Year |



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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 (II): 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 | | | Beam Angle: 120° Classic Frosted Lens Light Loss: 20% CCT Shift: -40K IP Rating Shift: IP40 | U-Clip: 0.58 × 0.75 in. (H × 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. IW W | 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 | | Classic Frosted Lens VL2, VL5: Dotless | Beam Angle: 120° Classic Frosted Lens Light Loss: 20% CCT Shift: -40K IP Rating Shift: IP40 | U-Citp: 0.79 × 0.79 in. (H × 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 VL2, VL5: 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): 118 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 closes Fod caps: 1x open, 1x close 96 in. channel & frosted lens 4x surface mounting clips End caps: 2x open, 2x closed. | 16mm Wet Location Tape Light: Soldered Lead Only | | 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) |



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RECOMMENDED CHANNELS

| MODEL 20mm Square Channel DI-CPCHB-SQC20 (SQ20) 48", 96" Aluminum For 14mm Tape Lights or smaller | DIAGRAM Height (H): 1.18 in. Width (W): 1.18 in. Interior Width (IW): 0.84 in. | INCLUDED ACCESSORIES 48 in. channel & frosted lens 2x surface mounting clips eff dags: 1x open, 1x closed. 96 in. channel & frosted lens 4x surface mounting clips End caps: 2x open, 2x closed. | CONNECTION OPTIONS THE STATE OF THE STATE O | IN CHANNEL DIFFUSION Classic Frosted Lens V1.2, V1.5: Dotless | TECHNICAL RATINGS - Beam Angle: 180° Classic Frosted Lone - Light Loss: 20% - CCT Shift: -40K - IP Rating Shift: IP40 | U-Clip: 1.19 x 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. Width (W): 2.42 in. Cut Out Width (CO): 1.19 in. W H CO | 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 VL2, VL5: 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 (W): 1.94 in. Cut Out Width (CO): 1.97 in. W H 107 | 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 VL2, VL5: Dotless | Beam Angle: 120° Opal Lens Light Loss: 55% CCT Shift: 200K IP Rating Shift: IP40 | Recessed Mount: 0.8 × 3.96 in. (H x W) |



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RECOMMENDED 24V DRIVERS

| SKU | INPUT VOLTAGE / FREQUENCY | OUTPUT VOLTAGE | MAXIMUM LOAD | MINIMUM LOAD | CLASS 2 | DIMMABLE | LENGTH | WIDTH | HEIGHT |
|-------------------------------|--|-------------------|-----------------|---------------------------|--------------------------|--|----------------------|----------------------|---|
| OMNIDRIVE® X Dimma | able Driver | I. | | | https://www.diodele | d.com/custom/download/p | | | r Specification Shee ecification-sheet.pdf |
| | -performance dimming on ELV, TRIA | C, and 0-10V | | | | | | Cont | |
| systems. | | | | | | | | | Derating Curves System Diagrams |
| DI-ODX-24V30W-J | 120-277V | 24V | 30W | No minimum load | Yes | Yes | 6.5 in. | 3.7 in. | 1.36 in. |
| DI-ODX-24V60W-J | 120-277V | 24V | 60W | No minimum load | Yes | Yes | 7.4 in. | 3.7 in. | 1.36 in. |
| DI-ODX-24V96W-J | 120-277V | 24V | 96W | No minimum load | Yes | Yes | 8.66 in. | 3.7 in. | 1.36 in. |
| DI-ODX-24V120W-J | 120-277V | 24V | 120W | No minimum load | No | Yes | 8.66 in. | 3.7 in. | 1.36 in. |
| VI M Sories Constant | Voltogo Driver | | | | | | | - | r Specification Shee |
| VLM Series Constant | voltage briver VM dimming, and color-changing app | | | https://www.diodeled. | com/custom/download | I/productFile/filename/VLN | M-Specification%20 | Sheet%20(Drive | |
| Compact driver for on/on, Pv | vivi dilililililig, alid color-changing app | Jiications. | | | | | | onal Models | 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. |
| /LM100W-24-LPS3R | 120 / 277VAC 47 - 63Hz | 24V | 100W | No Minimum Load | Yes | PWM | 10.79 in. | 7.34 in. | 2.36 in. |
| MEANWELL Constant | Voltage Driver | · | | | | | | - | r Specification Shee |
| Drivers for on/off or PWM din | | | https://www | .diodeled.com/custom/dowr | iload/productFile/filena | me/commercial-grade-C\ | -Driver-Specificatio | n%20Sheet%20 Cont | |
| | 3.11 | | | | | | | | 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. |

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





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Date

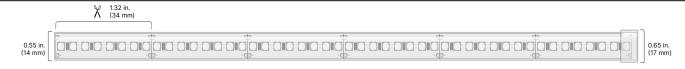






MECHANICAL DIAGRAMS

24V-VL2-W 24V-VL5-W



Project Notes

0.22 in. (6 mm) 0.3 in. (8 mm)

CONNECTIONS



36 in. Bare Lead 20/2 AWG UL 2464 Wire with Strain Relief



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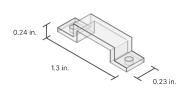




ACCESSORIES

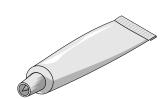
DI-WLMC-12MM

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)

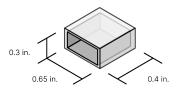
Finished lengths of light with leads. CHANNELS either bulk or factory finished. Some field assembly required.

Factory Assembly

Fastest installation: fixtures fully assembled in the factory.

DI-WL-12MM-EC-5

12mm Terminal Open and Closed End Caps



- 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.
- UL Listed Field Cuttable.
- Approved for storage areas of clothes closets per NEC 410.16.A.3 and 410.16.C.5
- CE & EMC Compliant: Verification No. GZEM141200683705V

Environment

RoHS Compliant: Verification No. CANEC1610091501

Performance

- Can be used to comply with TITLE 24 Part 6 High Efficacy Lighting LED requirements JA8-2016-2022-E
- 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

- 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
- 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.
- 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
- 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.
- 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.
- 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.