

**Specification Sheet** 

# STREAMLITE™ RGBW 24V Color Changing Diffused Linear Light

Dot-free and color changing (RGBW) linear lighting that delivers vibrant and saturated colors. Ideal for tight spaces, this tape light ensures simple, impactful installations with the potential for billions of color combinations.

Date <u>https://www.diodeled.com/streamlite-rgbw.htr</u>

Project Notes









#### **FEATURES**

- · Dotless and diffused full color RGBW light
- Dynamic RGB + 3000K color mixing (1B+ colors)
- Small form factor and compatible with popular channels
- Compatible with DMX and stand alone color control accessories



ORDERING CODES Order spools, and components for field assembly					OPTIONAL ORDERING CODES Add Length, Assembly Preferences, and Finish								
	Voltage	Model	ССТ	Length	Channels			Finish	Mounting		Driver	Delivery	
DI													
	24V	STMLT	RGBW (RGBW)	016 (16.4 feet)	S1 (S1) S2 (S2) S45 (S45) SL (Slim) CA (Canal)	16 (16mm Square) RC20 (20mm Round) SQ20 (20mm Square) SQ (Square) 45 (45°)	45DCO (45° Deco) 90 (90° Sideview) REF (Reflector) ROD (Rod) MI1 (1-inch Mud-In)	MI2 (2-inch Mud-In) REC (Recessed) WF (Waveform)	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 STREAMLITE™ RGBW - SPECIFICATION TABLE

Models	24V-STMLT-RGBW
Voltage	24VDC
Wattage	5.2W/ft.
Lumens RGBW	270 Lm/ft.
Cut Points	2.46 in.
Dimmable	Yes
Max Run (ft.)	16.4 ft.
Max Run (Class 2)	16.4 ft.
CRI	90+
Dimensions	0.47 × 0.08 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)
LED Chips	176/ft.
Certification	UL Listed 2108
Warranty	7 Year



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MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
S1 Channel DI-CHB-S1 (S1) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.31 in. Width (W): 0.67 in. Interior Depth (ID): 0.25 in. Interior Width (IW): 0.58 in. Interior Width (IW): 0.58 in.	48 in. channel 8, frosted cover 2x surface mounting clips End caps: 1x open, 1x closed.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens STMLT: Dotless	Beam Angle: 120° Classic Frosted Lens     Light Loss: 20%     CCT Shift: -40K     IP Rating Shift: IP40	U-Clip: 0.32 × 0.68 in. (H x W)
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. Width (W): 0.74 in. Interior Depth (III): 0.34 in. Interior Width (IW): 0.63 in. INTERIOR WIDTH (IW): 0.63 in. INTERIOR WIDTH (IW): 0.64 in. INTERIOR WIDTH (IW): 0.64 in. INTERIOR WIDTH (IW): 0.65 in. INTE	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	L	Classic Frosted Lens STMLT: Dotless	Beam Angle: 120°  Classic Prosted Lans     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 (II): 0.54 in. Interior Width (IW): 0.6 in. INTERIOR (IW): 0.6 in. INTERIOR (IW): 0.6 in. INTERIOR (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	1	Classic Frosted Lens STMLT: Dottess	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)
Silm Channel DI-CPCHB-SL (SL) 48", 96" Aluminum, White, Black For 14mm Tape Lights or smaller	Height (H): 0.38 in. Width (W): 0.82 in. Interior Depth (ID): 0.3 in. Interior Width (IW): 0.67 in. IW  H	48" Aluminum, Black, & White Channels  48 in: Ahannel & Iens  - 28 surface mounting clips  - End caps: 1x open, 1x closed  96" Aluminum, Black, & White Channels  - 96 in: channel & Iens  - 48 surface mounting clips  - end caps: 2x open, 2x closed	12mm Tape Light: Soldered Lead Only	Architectural Frosted Lens STMLT: Dotless  Premium Diffusion Lens STMLT: Dotless  For diffusion options not listed, refer to Slim Channel Specification Sheet.	Beam Angle: 120° Architectural Clear Lens - Light Loss: 10% - CCT Shift: -20K Architectural Frosted Lens - Light Loss: 20% - CCT Shift: -35K Classic Frosted Lens - Light Loss: 20% - CCT Shift: -40K Black Lens - Light Loss: 90% - CCT Shift: -350K Premium Diffusion Lens - Light Loss: 10% - CCT Shift: -30K	Slim Mount: 3M Adhesive: Magnetic U-Clip: Premium Diffusion: 0.54 × 0.87 in. (H x W) 0.48 × 0.82 in. (H x W) 0.59 × 0.82 in. (H x W) 0.96 × 0.82 in. (H x W)



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Canal Channel DI-CPCHB-CAN (CA) 48", 96" Aluminum, White, Black For 14mm Tape Lights or smaller	Height (H): 0.59 in. Width Wit: 0.69 in. Width Wit: 0.69 in. Interior Depth (ID): 0.54 in. Interior Width (IW): 0.61 in.  H IW IW IC	48" Aluminum, Black, & White Channels  48 in: channel & opal lens  - 28 surface mounting clips - End caps: 1x open, 1x closed.  96" Aluminum, Black, & White Channels - 96 in: channel & opal lens  - 48 surface mounting clips - End caps: 2x open, 2x closed.	12mm Tape Light: Soldered Lead Only	Opal Lens STMLT: Dotless	- Beam Angle: 120° Opal Lens - Light Loss: 55% - COT Shift: 200K - IP Rating Shift: IP40	U-Clip: 0.6 × 0.7 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 (W): 0.63 in.  IW  W	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.	12mm Tape Light: Soldered Lead Only	Architectural Frosted Lens STMLT: 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: 0.88 × 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 closes 69 in. channel & frosted lens 4x surface mounting clips End caps: 2x open, 2x closed.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens STMLT: 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)
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.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens STMLT: 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)



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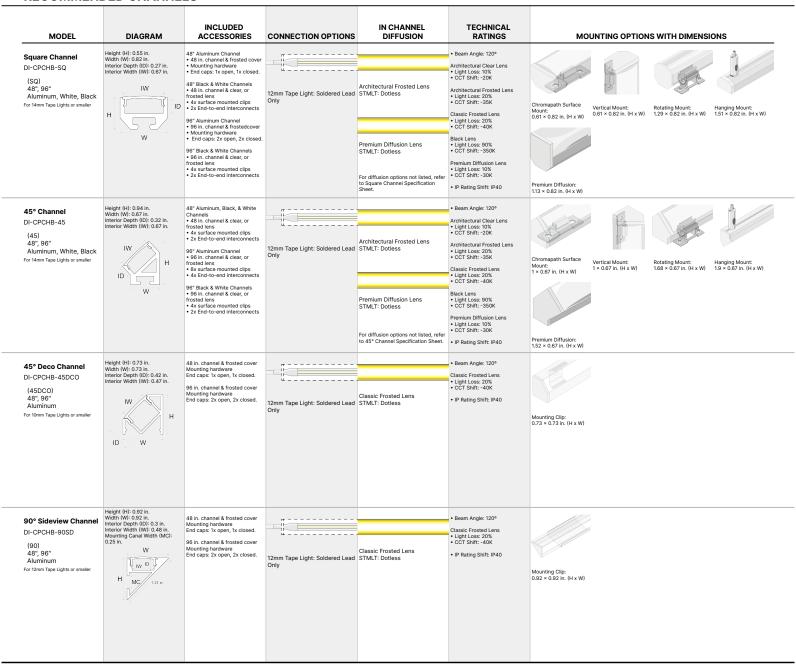
https://www.diodeled.com/streamlite-rgbw.htm













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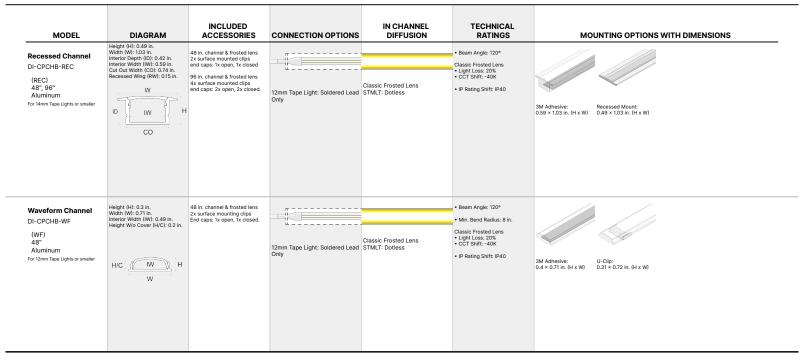
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3.75 in.

7.34 in.

11.25 in.

10.79 in.

1.9 in.

2.36 in.



#### **RECOMMENDED 24V DRIVERS**

SKU	INPUT VOLTAGE / FREQUENCY	OUTPUT VOLTAGE	MAXIMUM LOAD	MINIMUM LOAD	CLASS 2	DIMMABLE	LENGTH	WIDTH	HEIGHT
VLM Series Constant	Voltage Driver	1	'	https://www.diodeled	com/custom/downloa	d/productFile/filename/VLM		-	Specification Sheet
	/M dimming, and color-changing app	olications.		https://www.diodeled.	com/custom/uowniou	a/producti lie/lilerialile/velv	1 Specification/#20	Conta	
. ,	,								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	'						-	Specification Sheet
Drivers for on/off or PWM dim	•		https://www	r.diodeled.com/custom/down	iload/productFile/filen	ame/commercial-grade-CV	-Driver-Specificatio	in%20Sheet%20( Conta	
Silvers for only of P Will diff	minig approations.								Derating Curves System Diagrams
DI-CV-MW24V60W-277-LPS3R	120 ~ 277VAC 50/60Hz	24V	60W	No minimum load	Yes	Yes, with compatible PWM	10.79 in.	7.34 in.	2.36 in.

60W

90W

No minimum load

No minimum load

PoE (Power over Ethernet)

DI-CV-MW24V60W-277-LPS

DI-CV-MW24V90W-277-LPS3R

DI-RF-WMT-RGBW

DI-RF-REC-CV-A

Constant voltage platform, ready for Power over Ethernet (inquire)

### **RECOMMENDED CONTROLLERS**

SKU  CASAMBI® Controllers  The CASAMBI controllers will remotely control IOS & Android.	DESCRIPTION of your lighting through the app - downloadable for
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 control changing LED lighting via mobile device and a	ols single color dimming, tunable white, and color diditional TOUCHDIAL controls.

120 ~ 277VAC

50/60Hz

120 ~ 277VAC 50/60Hz 24V

24V

TOUCHDIAL RGB(W) Wall Control - Single Zone

TOUCHDIAL Color Control System - WiFi Receiver



dimmer/controls
Yes, with

compatible PWM dimmer/controls

Yes, with

compatible PWM dimmer/controls

Yes

Yes





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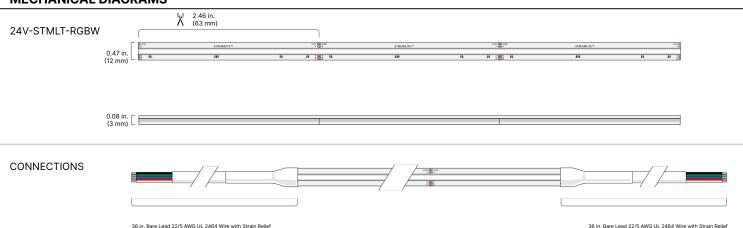








#### **MECHANICAL DIAGRAMS**



### **ACCESSORIES**

#### Soldered Lead Only



### **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 Flexible Lighting Systems. 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

#### **Environment**

RoHS Compliant: Verification No. CANEC1610091501

#### **Performance**

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
- This product is intended to be installed and serviced by a qualified, licensed electrician
- Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
- Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall 5. 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, 6. factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire
- Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
- Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature ratings
- 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
- Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product,
- ctual 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 13. 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