

## VALENT® TUNABLE WHITE 24V Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_

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



**TITLE  
24**



### FEATURES

- Tunable white light range
- Wide Kelvin range from 1800K-4000K
- Up to 400 lm/ft.
- Controllable from a variety of technology choices
- 3M™ adhesive backing
- 7 Year limited warranty

### ORDERING CODES

Order spools, and components for field assembly

### OPTIONAL ORDERING CODES

Add Assembly Preferences, Finish, Lens, Mounting, Driver, and DELIVERY

	Voltage	Model	CCT	Length	Channels				Finish	Lens	Mounting	Driver	DELIVERY
DI													
	24V (24V Volt)	VL	TW1840 (1800K-4000K)	016 (16 feet)  100 (100 feet)	A1 (A1)	S45 (S45)	SQ (Square)	ROD (Rod)	AL (Aluminum)	*blank* (Classic Frosted Lens)	3M (3M Adhesive)	VLM (Constant Voltage)	Field Assembly
					A2 (A2)	SL (Slim)	45 (45°)	MI1 (1-inch Mud-In)	BL (Black)	AFS (Arch. Frosted Satin Lens)	MC (Mounting Clip)	O/O (On / Off)	Factory + Field (Hybrid)
					A3 (A3)	16 (16mm Square)	45DCO (45° Deco)	MI2 (2-inch Mud-In)	WH (White)	BL (Black Lens)	RC (Rotating Clip)	PoE (Power over Ethernet)	Factory Assembly
					S1 (S1)	RC20 (20mm Round)	90 (90° Sideview)	REC (Recessed)		CLT (Arch. Clear Lens)	CHN (Mounting Channel)		
					S2 (S2)	SQ20 (20mm Square)	REF (Reflector)			FRT (Arch. Frosted Lens)			
										OPT (Opal Lens)			
										PD (Prem. Diffusion Lens)			

\*See page 2 for Channel / Lens / Mounting compatibility

### VALENT® TUNABLE WHITE - SPECIFICATION TABLE

Models	24V-VL-TW1840
<b>Voltage</b>	<b>24VDC</b>
<b>Wattage</b>	<b>5.85W/ft.</b>
Lumens 1800K-4000K	1800K: 167 Lm/ft. 4000K: 275 Lm/ft. All on: 400 Lm/ft.
Cut Points	1.6 in.
Max Run (ft.)	16.4 ft.
CRI	90+
Dimensions	0.39 x 0.07 in. (W x H)
TM-21 (LM-80)	>50,000 hours
Environment	Indoor/Damp Location (IP20)
LED Chips	87/ft.
Chip Type	2216
Certification	UL Listed 2108
Warranty	7 Year

## VALENT® TUNABLE WHITE 24V

### Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_



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



**TITLE**  
**24**

### CHANNEL / LENS / MOUNTING COMPATIBILITY

Channel	Compatible Lenses	Available Finishes	Mounting Options
A1 (A1)	FRT	AL / WH / BL	UC
A2 (A2)	CLT / FRT / AFS	AL / WH / BL	UC
A3 (A3)	CLT / FRT / AFS	AL / WH / BL	UC
S1 (S1)	*blank*	AL	UC
S2 (S2)	*blank*	AL	UC
S45 (S45)	*blank*	AL	UC
SL (Slim)	*blank* / CLT / FRT / BL / PD	AL / WH / BL	MC / 3M / MAG
16 (16mm Square)	FRT	AL	MC
RC20 (20mm Round)	*blank*	AL	UC
SQ20 (20mm Square)	*blank*	AL	UC
SQ (Square)	*blank* / CLT / FRT / BL / PD	AL / WH / BL	MC / VC / RC / HNG
45 (45°)	*blank* / CLT / FRT / BL / PD	AL / WH / BL	MC / VC / RC / HNG
45DCO (45° Deco)	*blank*	AL	MC
90 (90° Sideview)	*blank*	AL	MC
REF (Reflector)	*blank*	AL	
ROD (Rod)	*blank*	AL	RC / CLO / ART / ARM
MI1 (1-inch Mud-In)	OPT	AL	
MI2 (2-inch Mud-In)	OPT	AL	
REC (Recessed)	*blank*	AL	3M

### LEGEND

Lens		Finish		Mounting	
*blank*	Classic Frosted Lens	AL	Aluminum	3M	3M Adhesive
AFS	Architectural Frosted Satin Lens	WH	White	ARM	Wall Arm
BL	Black Lens	BL	Black	ART	Art Lighting Arm
CLT	Architectural Clear Lens			CLO	Closet Mount
FRT	Architectural Frosted Lens			HNG	Hanging Hardware
OPT	Opal Lens			MAG	Magnetic Clip
PD	Premium Diffusion Lens			MC	Mounting Clip
				RC	Rotating Clip
				UC	U-Clip
				VC	Vertical Clip

**VALENT® TUNABLE WHITE 24V**
**Tunable White Lighting System**

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_

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


**RECOMMENDED CHANNELS**

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
<b>A1 Channel</b> DI-CHB-A1  (A1) 48", 90" Aluminum, White, Black  For 14mm Tape Lights or smaller	Height (H): 0.31 in. Width (W): 0.67 in. Interior Depth (ID): 0.45 in. Interior Width (IW): 0.79 in.	48" Aluminum, Black, & White Channels • 48 in. channel & lens • 2x surface mounting clips • 1 retaining clip • End caps: 1x open, 1x closed.	12mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VALENT® TUNABLE WHITE - VL: Semi-Diffused	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Architectural Frosted Lens</li> <li>• Light Loss: 30%</li> <li>• CCT Shift: -35K</li> <li>• IP Rating Shift: IP40</li> </ul>	 U-Clip: 0.82 x 0.88 in. (H x W)
<b>A2 Channel</b> DI-CHB-A2  (A2) 48", 96" Aluminum, White, Black  For 12mm Tape Lights or smaller	Height (H): 0.55 in. Width (W): 0.63 in. Interior Depth (ID): 0.33 in. Interior Width (IW): 0.49 in.	48" Aluminum, Black, & White Channels • 48 in. channel & lens • 2x surface mounting clips • End caps: 1x open, 1x closed.	12mm Tape Light: Soldered Lead Only	Architectural Frosted Satin Lens VALENT® TUNABLE WHITE - VL: Dotless  Architectural Frosted Lens VL: Semi-Diffused	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Architectural Frosted Lens</li> <li>• Light Loss: 30%</li> <li>• CCT Shift: -35K</li> <li>Architectural Frosted Satin Lens</li> <li>• Light Loss: 45%</li> <li>• CCT Shift: -80K</li> <li>• IP Rating Shift: IP40</li> </ul>	 U-Clip: 0.56 x 0.64 in. (H x W)
<b>A3 Channel</b> DI-CHB-A3  (A3) 48", 96" Aluminum, White, Black  For 12mm Tape Lights or smaller	Height (H): 0.39 in. Width (W): 0.63 in. Interior Depth (ID): 0.33 in. Interior Width (IW): 0.49 in.	48" Aluminum, Black, & White Channels • 48 in. channel & lens • 2x surface mounting clips • End caps: 1x open, 1x closed.	12mm Tape Light: Soldered Lead Only	Architectural Frosted Satin Lens VALENT® TUNABLE WHITE - VL: Dotless  Architectural Frosted Lens VL: Semi-Diffused	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Architectural Clear Lens</li> <li>• Light Loss: 10%</li> <li>• CCT Shift: -20K</li> <li>Architectural Frosted Lens</li> <li>• Light Loss: 30%</li> <li>• CCT Shift: -35K</li> <li>Architectural Frosted Satin Lens</li> <li>• Light Loss: 45%</li> <li>• CCT Shift: -80K</li> <li>• IP Rating Shift: IP40</li> </ul>	 U-Clip: 0.4 x 0.64 in. (H x W)
<b>S1 Channel</b> DI-CHB-S1  (S1) 48", 90" 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.	48 in. channel & frosted cover 2x surface mounting clips End caps: 1x open, 1x closed.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Semi-Diffused	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Classic Frosted Lens</li> <li>• Light Loss: 20%</li> <li>• CCT Shift: -40K</li> <li>• IP Rating Shift: IP40</li> </ul>	 U-Clip: 0.32 x 0.68 in. (H x W)

## VALENT® TUNABLE WHITE 24V

### Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_

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



### RECOMMENDED CHANNELS

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
<b>S2 Channel</b> 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	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Semi-Diffused	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>IP Rating Shift: IP40</li> </ul>	<p>U-Clip: 0.58 x 0.75 in. (H x W)</p>
<b>S45 Channel</b> 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	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Semi-Diffused	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>IP Rating Shift: IP40</li> </ul>	<p>U-Clip: 0.79 x 0.79 in. (H x W)</p>
<b>Slim Channel</b> 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.  	48" Aluminum, Black, & White Channels • 48 in. channel & lens • 2x surface mounting clips • End caps: 1x open, 1x closed  96" Aluminum, Black, & White Channels • 96 in. channel & lens • 4x surface mounting clips • end caps: 2x open, 2x closed	12mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VALENT® TUNABLE WHITE - VL: Semi-Diffused  Premium Diffusion Lens VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Architectural Clear Lens</li> <li>Light Loss: 10%</li> <li>CCT Shift: -20K</li> <li>Architectural Frosted Lens</li> <li>Light Loss: 30%</li> <li>CCT Shift: -35K</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>Black Lens</li> <li>Light Loss: 50%</li> <li>CCT Shift: -350K</li> <li>Premium Diffusion Lens</li> <li>Light Loss: 10%</li> <li>CCT Shift: -30K</li> <li>IP Rating Shift: IP40</li> </ul>	<p>Slim Mount: 0.54 x 0.87 in. (H x W)</p> <p>3M Adhesive: 0.48 x 0.82 in. (H x W)</p> <p>Magnetic U-Clip: 0.59 x 0.82 in. (H x W)</p> <p>Premium Diffusion: 0.96 x 0.82 in. (H x W)</p>
<b>16mm Square Channel</b> DI-CPCHB-16MM  (16) 48", 96" Aluminum  For 14mm Tape Lights or smaller	Height (H): 0.89 in. Width (W): 0.77 in. Interior Depth (ID): 0.58 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.	12mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Architectural Frosted Lens</li> <li>Light Loss: 30%</li> <li>CCT Shift: -35K</li> <li>IP Rating Shift: IP40</li> </ul>	<p>Mounting Clip: 0.89 x 0.77 in. (H x W)</p>

**VALENT® TUNABLE WHITE 24V**
**Tunable White Lighting System**

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_

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


**TITLE 24**
**RECOMMENDED CHANNELS**

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS	
<b>20mm Round Channel</b> DI-CPCHB-RC20 (RC20) 48", 96" Aluminum For 14mm Tape Lights or smaller		Height (H): 1.18 in. Width (W): 1.18 in. Interior Depth (ID): 0.84 in. Interior Width (IW): 0.84 in.  For 14mm Tape Lights or smaller	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 VALENT® TUNABLE WHITE - VL: Dotless  • Beam Angle: 180° • Classic Frosted Lens • Light Loss: 20% • CCT Shift: -40K  • IP Rating Shift: IP40	 U-Clip: 1.18 x 1.18 in. (H x W)	
<b>20mm Square Channel</b> DI-CPCHB-SQC20 (SQ20) 48", 96" Aluminum For 14mm Tape Lights or smaller		Height (H): 1.18 in. Width (W): 1.18 in. Interior Depth (ID): 0.84 in. Interior Width (IW): 0.84 in.  For 14mm Tape Lights or smaller	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 VALENT® TUNABLE WHITE - VL: Dotless  • Beam Angle: 180° • Classic Frosted Lens • Light Loss: 20% • CCT Shift: -40K  • IP Rating Shift: IP40	 U-Clip: 1.18 x 1.18 in. (H x W)	
<b>Square Channel</b> DI-CPCHB-SQ (SQ) 48", 96" Aluminum, White, Black For 14mm Tape Lights or smaller		Height (H): 0.55 in. Width (W): 0.62 in. Interior Depth (ID): 0.27 in. Interior Width (IW): 0.67 in.  For 14mm Tape Lights or smaller	48" Aluminum Channel • 48 in. channel & frosted lens • 2x surface mounting clips • End caps: 1x open, 1x closed.  48" Black & White Channels • 48 in. channel & clear, or frosted lens • 4x surface mounted clips • 2x End-to-end interconnects  96" Aluminum Channel • 96 in. channel & frosted lens • 4x surface mounting clips • End caps: 2x open, 2x closed.  96" Black & White Channels • 96 in. channel & clear, or frosted lens • 4x surface mounted clips • 2x End-to-end interconnects	12mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VALENT® TUNABLE WHITE - VL: Semi-Diffused  Premium Diffusion Lens VL: Dotless  For diffusion options not listed, refer to Square Channel Specification Sheet.	• Beam Angle: 120° • Architectural Clear Lens • Light Loss: 10% • CCT Shift: -20K  Architectural Frosted Lens • Light Loss: 30% • 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  • IP Rating Shift: IP40	 Chromapath Surface Mount: 0.61 x 0.82 in. (H x W)   Vertical Mount: 0.61 x 0.82 in. (H x W)   Rotating Mount: 1.29 x 0.82 in. (H x W)   Hanging Mount: 1.51 x 0.82 in. (H x W)   Premium Diffusion: 1.13 x 0.82 in. (H x W)
<b>45° Channel</b> DI-CPCHB-45 (45) 48", 96" Aluminum, White, Black For 14mm Tape Lights or smaller		Height (H): 0.94 in. Width (W): 0.67 in. Interior Depth (ID): 0.32 in. Interior Width (IW): 0.67 in.  For 14mm Tape Lights or smaller	48" Aluminum, Black, & White Channels • 48 in. channel & clear, or frosted lens • 4x surface mounted clips • 2x End-to-end interconnects  96" Aluminum Channel • 96 in. channel & clear, or frosted lens • 8x surface mounted clips • 4x End-to-end interconnects  96" Black & White Channels • 96 in. channel & clear, or frosted lens • 4x surface mounted clips • 2x End-to-end interconnects	12mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VALENT® TUNABLE WHITE - VL: Semi-Diffused  Premium Diffusion Lens VL: Dotless  For diffusion options not listed, refer to 45° Channel Specification Sheet.	• Beam Angle: 120° • Architectural Clear Lens • Light Loss: 10% • CCT Shift: -20K  Architectural Frosted Lens • Light Loss: 30% • 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  • IP Rating Shift: IP40	 Chromapath Surface Mount: 1 x 0.67 in. (H x W)   Vertical Mount: 1 x 0.67 in. (H x W)   Rotating Mount: 1.68 x 0.67 in. (H x W)   Hanging Mount: 1.9 x 0.67 in. (H x W)   Premium Diffusion: 1.52 x 0.67 in. (H x W)

## VALENT® TUNABLE WHITE 24V Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.  
Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_



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



**TITLE  
24**

### RECOMMENDED CHANNELS

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
<b>45° Deco Channel</b> DI-CPCHB-45DCO (45DCO) 48", 96" Aluminum For 10mm Tape Lights or smaller	Height (H): 0.73 in. Width (W): 0.73 in. Interior Depth (ID): 0.42 in. Interior Width (IW): 0.47 in.  	48 in. channel & frosted cover Mounting hardware End caps: 1x open, 1x closed.  96 in. channel & frosted cover Mounting hardware End caps: 2x open, 2x closed.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>IP Rating Shift: IP40</li> </ul>	 Mounting Clip: 0.73 x 0.73 in. (H x W)
<b>90° Sideview Channel</b> DI-CPCHB-90SD (90) 48", 96" Aluminum For 12mm Tape Lights or smaller	Height (H): 0.92 in. Width (W): 0.92 in. Interior Depth (ID): 0.3 in. Interior Width (IW): 0.48 in. Mounting Canal Width (MC): 0.25 in.  	48 in. channel & frosted cover Mounting hardware End caps: 1x open, 1x closed.  96 in. channel & frosted cover Mounting hardware End caps: 2x open, 2x closed.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>IP Rating Shift: IP40</li> </ul>	 Mounting Clip: 0.92 x 0.92 in. (H x W)
<b>Reflector Channel</b> DI-CPCHB-RFCTR (REF) 48", 96" Aluminum For 12mm Tape Lights or smaller	Height (H): 2.75 in. Width (W): 0.95 in. Interior Depth (ID): 0.29 in. Interior Width (IW): 0.54 in. Cut Out Width (CO): 2.35 in. Recessed Wing (RW): 0.2 in.  	48 in. channel & frosted cover End caps: 1x open, 1x closed.  96 in. channel & frosted cover End caps: 1x open, 1x closed.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>IP Rating Shift: IP40</li> </ul>	 Recessed Mount: 2.75 x 1 in. (H x W)
<b>Rod Channel</b> DI-CPCHB-RDCL (ROD) 48", 96" Aluminum For 12mm Tape Lights or smaller	Height (H): 0.95 in. Width (W): 0.95 in. Interior Depth (ID): 0.5 in. Interior Width (IW): 0.48 in. Height W/o Cover (H/C): 0.72 in.  	78.74 in. channel & frosted lens 1x open end-cap, 1x closed end-cap 4x 180° swivel brackets 2x Closet Mounting Brackets 2x Support Brackets	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 180°</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>IP Rating Shift: IP40</li> </ul>	 Rotating Mount: 1.69 x 0.95 in. (H x W)   Closet Mount: 1.28 x 3.25 in. (H x W)   Art Lighting Arm: 2.72 x 10.15 in. (H x W)   Wall Arm: 4.5 x 2.15 in. (H x W)

## VALENT® TUNABLE WHITE 24V

### Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

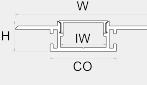
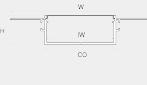
Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_

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



### RECOMMENDED CHANNELS

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
<b>1-inch Mud-In Channel</b> DI-CPCHB-MUD1 (MI1) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.54 in. Width (W): 2.42 in. Interior Depth (ID): 0.44 in. Interior Width (IW): 0.81 in. Cut Out Width (CO): 1.19 in.  	96 in. channel & opal lens 2x end-to-end connectors End caps: 2x open, 2x closed.	12mm Tape Light: Soldered Lead Only	Opal Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Opal Lens</li> <li>Light Loss: 55%</li> <li>CCT Shift: -200K</li> <li>IP Rating Shift: IP40</li> </ul>	 Recessed Mount: 0.54 x 2.42 in. (H x W)
<b>2-inch Mud-In Channel</b> DI-CPCHB-MUD2 (MI2) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.8 in. Width (W): 3.86 in. Interior Depth (ID): 0.69 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.	12mm Tape Light: Soldered Lead Only	Opal Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Opal Lens</li> <li>Light Loss: 55%</li> <li>CCT Shift: -200K</li> <li>IP Rating Shift: IP40</li> </ul>	 Recessed Mount: 0.8 x 3.86 in. (H x W)
<b>Recessed Channel</b> DI-CPCHB-REC (REC) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 1.03 in. Width (W): 1.03 in. Interior Depth (ID): 0.42 in. Interior Width (IW): 0.59 in. Cut Out Width (CO): 0.74 in. Recessed Wing (RW): 0.15 in.  	48 in. channel & frosted lens 2x surface mounted clips end caps: 1x open, 1x closed  96 in. channel & frosted lens 4x surface mounted clips end caps: 2x open, 2x closed.	12mm Tape Light: Soldered Lead Only	Classic Frosted Lens VALENT® TUNABLE WHITE - VL: Dotless	<ul style="list-style-type: none"> <li>Beam Angle: 120°</li> <li>Classic Frosted Lens</li> <li>Light Loss: 20%</li> <li>CCT Shift: -40K</li> <li>IP Rating Shift: IP40</li> </ul>	 3M Adhesive: 0.59 x 1.03 in. (H x W)      Recessed Mount: 0.49 x 1.03 in. (H x W)

## VALENT® TUNABLE WHITE 24V

### Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_

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



**TITLE  
24**

### RECOMMENDED 24V DRIVERS

SKU	INPUT VOLTAGE / FREQUENCY	OUTPUT VOLTAGE	MAXIMUM LOAD	MINIMUM LOAD	CLASS 2	DIMMABLE	LENGTH	WIDTH	HEIGHT
<b>VLM Series Constant Voltage Driver</b>									
Compact driver for on/off, PWM dimming, and color-changing applications.									
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.
<b>MEANWELL Constant Voltage Driver</b>									
Drivers for on/off or PWM dimming applications.									
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.
<b>PoE (Power over Ethernet)</b>									
Constant voltage platform, ready for Power over Ethernet (Inquire)									

### RECOMMENDED CONTROLLERS

SKU	DESCRIPTION
<b>DMX Color Control System</b>	
DMX Color Control Systems	
DI-1810	DMX512 4-Channel Decoder with Digital Display controls LED RGB and RGBW lighting fixtures
DI-DMX-TW-WMDC-1ZWH	DMX 512 Wallmount Dual Color - Tunable White 1-Zone Controller
<b>TOUCHDIAL™ Control Systems</b>	
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-REC-CV-A	TOUCHDIAL Color Control System - WiFi Receiver
DI-RF-REM-TW-4	TOUCHDIAL Color Control System - Tunable White 4-Zone Remote Controller
<b>DMX Color Control System</b>	
DMX Color Control Systems	
DI-1810	DMX512 4-Channel Decoder with Digital Display controls LED RGB and RGBW lighting fixtures
DI-DMX-DEC-5	DMX512 5-Channel Decoder with RDM and Digital Display, controls LED TW, RGB, RGBW and RGBWW lighting fixtures
DI-DMX-DEC-25	DMX512 25-Channel Decoder with RDM and Digital Display, controls LED TW, RGB, RGBW and RGBWW lighting fixtures



## VALENT® TUNABLE WHITE 24V

### Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_



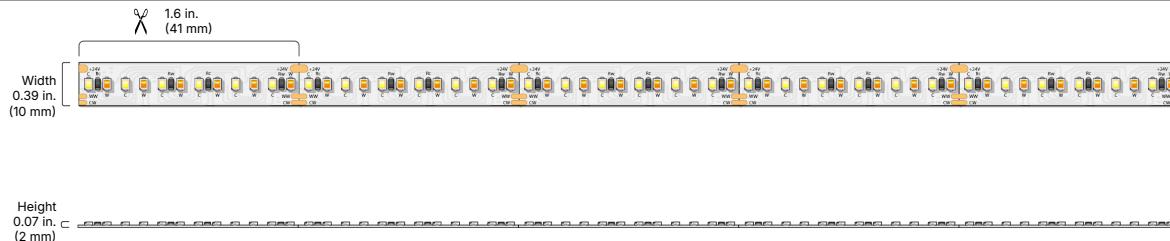
Project Notes \_\_\_\_\_



**TITLE  
24**

### MECHANICAL DIAGRAMS

24V-VL-TW1840



### CONNECTIONS



36 White Bare Lead 20/3 AWG UL 2464 Wire with Strain Relief

### DELIVERY OPTIONS

- **Field Assembly**

Fastest order fulfillment. Field connectors and accessories not included.

- **Factory + Field (Hybrid)**

Onsite modifications with factory connection. Additional accessories not included.

- **Factory Assembly**

Fastest installation. Factory made-to-order fixtures.

- 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.

## VALENT® TUNABLE WHITE 24V

### Tunable White Lighting System

Tunable white light that changes color temperature (CCT) at the push of a button or DMX controls.

Change the light from warm to cool for aesthetic or circadian effects.

Date \_\_\_\_\_



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



## 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.
- CE & EMC Compliant: Verification No. GZEM141200683705V
- Approved for storage areas of clothes closets per NEC 410.16.A.1,3 and 410.16.C.1,3,5

### Environment

- Ambient Temperature: -4 ~ 122°F (-20 ~ 50°C)
- Operating Temperature: -4 ~ 176°F (-20 ~ 80°C)
- 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.
- 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 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.
- 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.
- 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, voiding the warranty.
- 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/](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 infill 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.