

Project Date

Notes

#### 6.0 VARIABLE WHITE SERIES 2 RIBBONLYTE

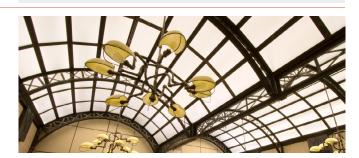
Our Variable White Series 2 RibbonLyte allows you to adjust for brightness and warmth like never before. Now with 140 LEDs per meter, our improved RibbonLyte provides better color mixing, reduced diode visibility and a wider range of color temperatures for tuning your lighting design. Available in three wattages and with a 50 mm cut length, you can use Variable White Series 2 RibbonLyte with a 2-channel dimmer to create bright, clear, colder light or the warmest, softest tones.

- Single-row, dual-chip layout means 140 LEDs per meter (42 LEDs per foot!)
- Available in three (3) wattages (1W/ft, 3W/ft, 6W/ft)
- 50 mm cut length adds amazing flexibility to your design
- Color temperature range of 2000K to 6500K and 90+ CRI
- 2-channel dimming! One channel controls brightness and one controls temperature
- Closet rated (standalone or surface channels)

# **AVAILABLE COLOR TEMPERATURES**



VW







RoHS **IP20**  **IP65** 

**IP68** 

#### ORDERING GUIDE

Category	CRI	Ribbon Type & IP Rating	Wattage + Color
RB	0		6.0VW
RB - Ribbonlyte	0 - Color Changing	VWS220 - VW Series 2 IP20	6.0VW - 1.0 Variable White
		VWS265 - VW Series 2 IP65	
		VWS268 - VW Series 2 IP68	

## **CONNECTION OPTIONS**

1. End Feed Bare Wire Connection (Default Option)

2. IP67 Connector Input





3. Soldered Daisy Chain



4. Daisy Chain with IP67 Connectors





#### Standard cable length if not specified:

- 1. 12 in. cable with bare wire (custom length up to 20 feet)
- 2. Standard 12 in. cable with IP67 connectors (custom length up to 10 feet)
- 3. Daisy chain with 3 in, cable between runs (custom length up to 36 in.)
- 4. 3 in. cable between IP67 connector and RibbonLyte (custom length up to 18 in.)
- 5. Standard 12 in. cable with bare wire (custom length up to 10 feet)
- Note: IP67 connectors are used for both IP20 and IP65/IP68 RibbonLyte

## **USAGE GUIDELINES**

- IP65 and IP68 RibbonLyte cannot be cut in the field. All custom cuts and connections for these models must be performed at the factory to ensure waterproofing standards are met. Any modification of the waterproofing will result in a void warranty.
- When installing this product, consider the surface temperature of the material where it will be mounted. Many building surfaces which are exposed to direct sunlight exceed the 70° C / 158° F maximum for which our product is rated. High-risk locations like this should be avoided.
- IP20 RibbonLyte products are for indoor use in dry areas. IP65 RibbonLyte products can be used in indoor dry/damp locations such as bathrooms and kitchens. IP68 RibbonLyte products can be used in wet, outdoor locations around pools and spa tubs, but our products are not intended to be submerged in pools and fountains and do not carry UL676 certification to do so.
- Please refer to the RibbonLyte Proper Usage Guide in our Application Guide for more information. Available for download at AcolyteLED.com.
- This product is compatible with a wide variety of control products including the entire line of Lutron dimming systems.
- For use with Acolyte drivers, 0-10V dimming modules and interface controllers (DMXINF models). Use with non-Acolyte supplied drivers is not supported or warrantied.
- Due to the nature of RibbonLyte products, cuttable lengths are generally longer or shorter than the customer requested length. Unless specified, RibbonLyte is factory cut at the shorter cuttable point.
- We reserve the right to make changes to product lineup, specifications, design and finishes at any time without notice.

Acolyte does not warrant or represent that the information is free from errors or omission. The information may change without notice and Acolyte is not in any way liable for the accuracy of any information printed and stored or in any way interpreted or used.



## SPECIFICATIONS / DIAGRAM / USAGE GUIDELINES

	·
	6.0 VARIABLE WHITE SERIES 2 RIBBONLYTE
Operating Voltage	24 V
Power Consumption	6.0 W/ft (19.7 W/m)
Current (mA) - 24V	250 mA/ft (820 mA/m)
LED Pitch	42 LEDs/ft (140 LEDs/m)
Protection Rating	IP20, IP65, IP68
Dimming/Control	DMX / 0-10V with Dimming Module
Operating Temperature	-40 F to 140 F (-40 C to 60 C) - IP20 -40 F to 122 F (-40 C to 50 C) - IP65/IP68
Color Temperatures	2000K - 6500K (IP20) 2000K - 6000K (IP65/IP68
MacAdam Ellipses (SDCM)	2-Step Binning
Maximum Light Output	2 Channel 0-10V Dimming*: 210-261 lm/ft (684-855 lm/m)  DMX Dimming: 465 lm/ft (1523 lm/m)
Binning Tolerance	+/- 100K
LED Beam Angle	120°
Lamp Life	43,000 hrs L70 @ 131° F (55° C)
Cuttable Length	1.97 in. (50mm)
Lumens/Watt	66 - 82 lm/W (Warm - Cool LED)
Constant Voltage	✓
Cable Length	12 in (30.5 cm)
Certifications	UL 2108 Issued: 2016/06/17 Ed: 1 Rev: 2021/10/16 Low Voltage Lighting Systems.  CSA C22.2 No. 250.0, General Requirements for Luminaires.  ROHS compliant UL 2108.  Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

<sup>\*2-</sup>Channel 0-10V Dimming maintains a consistent light output level while changing color temperatures.

24V DIMENSIONS	Top View	Side View	Dimensions
IP20	CUTTABLE EVERY: 1.97 in. (50 mm)		Width 0.31 in. (8 mm) Max Length* 32 ft 8 in. (10 m) Height 0.09 in. (2.3 mm)
1965	CUTTABLE EVERY: 1.97 in. (50 mm)		Width 0.31 in. (8 mm) Max Length* 32 ft 8 in. (10 m) Height 0.125 in. (3.2 mm)
1968	CUTTABLE EVERY: 1.97 in. (50 mm)		Width 0.44 in. (11.2 mm) Max Length* 32 ft 8 in. (10 m) Height 0.18 in. (4.5 mm)

## **OPTIONAL ACCESSORY**

Dual Dimming Module*	Flat Mounting Clip	Silicone Clip	0.5 in. VHB Tape**
Part Number: VWDIMMODBCC	For mounting IP20/IP65 RibbonLyte Part Number: RBMNTSIL	For mounting IP68 RibbonLyte Part Number: RBMNTSILW	Provides superior holding power in surface mounted applications Part Number: VHBTAPE0.5BK

<sup>\*</sup> When using this RibbonLyte with the VWDIMMODBCC Dual Dimming Module, for the 0-10V dimmer that controls color temperature NOT to affect the brightness, the output power should not exceed the max power for either (single) of the two color temperatures. When pairing Variable White or Warm Dim RibbonLyte with this module, the RibbonLyte power consumption should never exceed 50% of the max rated power.

**EXAMPLE:** When calculating supported loads with this module and 6.0 Variable White RibbonLyte (6.0 W/ft), you can divide the module's total rated power of 96W by half of the RibbonLyte's wattage per foot to get the total length supported. 96 / 3 = 32 ft of RibbonLyte.

<sup>\*\*</sup> RibbonLyte comes with an adhesive backing, but Acolyte recommends using VHB Tape for extra support in surface mounted applications.



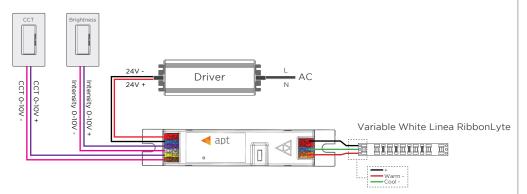
# CHANNEL COMPATIBILITY / CHANNEL OPTIONS

CHANNEL	IP20 IP65	IP68	SURFACE MOUNT	ED CHANNELS						
AC1	√ ×	~	LENS OPTIONS:	C - Clear F	- Frosted K - Black	M - Milky NP -	Narrow Prismatic	WP - Wide Prismatic	RM - Round Milky	SM - Square Milky
AC2	~	<b>/</b>								
AC3	/	<b>/</b>								b-
C4	<b>*</b>	<b>/</b>								
C5	<b>*</b>	/								
C14	<b>*</b>							. 4	4	
AP1	<b>/</b>		AC1	AC2	AC3	AC4	AC5	AC14	AP1	AS1
AR1	<b>/</b>		C, F, M	C, F, M	C, F, M	C, F, M	C, F, M	SM	C, K, M, SM	C, F, M
R2	<b>/</b>	<b>/</b>								
AR3	<b>/</b>	<b>/</b>								
AR5	<b>~</b>									
AR8	~		4.00	4.67	466	4.010	4.010	1011	4.010	45005
AR10	~		<b>AS2</b> C, F, M	<b>AS3</b> C, F, M	<b>AS6</b> C, F, M	<b>AS10</b> C, M	AS12 RM	<b>AS14</b> SM	<b>AS16</b> C, K, M	<b>AS20G</b> G
\R14	<b>/</b>									
AR16	~	<b>/</b>								
AR20	<b>~</b>	<b>/</b>						A CONTRACTOR		
R23	~			00			9			I.
R25					9				-	40
R30			AS23	AT4	AT5	AT11	AW10	AW12	AW14	AW40
AR33			C, K, M, SM	C, F, M	C, F, M	C, F, M	C, K, M	C, K, M, RM	C, K, M	C, F, M
AS1	~									
AS2	~	<b>/</b>								
AS3	~	<b>/</b>								
AS6	~	<b>/</b>					-			
AS10	~		B1	B2	C22	GL2	ROUND	ROUND12	ROUND20	ST10
AS12	~	/	C, F, M	RM	C, F, M	C, F, M	C, F, M	C, K, M	C, K, M	C, F, M
AS13		,								
AS14	<b>/</b>									
AS16	<b>*</b>	/								
AS20G	<b>/</b>									
AS23	~	~								
AS28										
AS30										
AS53			RECESSED CHAN	INFLC						
AT4	~	~	RECESSED CHAN	NELS						
AT5	<b>/</b>	<b>/</b>	LENS OPTIONS:	C - Clear F	- Frosted K - Black	M - Milky NP -	Narrow Prismatic	WP - Wide Prismatic	RM - Round Milky	SM - Square Milky
AT11	~	<b>/</b>								
AW10	<b>~</b>						<b>.</b>			
AW12	~									
AW14	/									
		<b>/</b>								
AW35		<b>/</b>								
	•		ADI	ARS	407	APE	ASS	APIG	API	APIC
AW38	·		AR1 C. F. M	AR2 C. F. M	AR3 C, F, M	AR5	AR8 C. F. M	AR10 C. M	AR14 SM	AR16 C. K. M
AW35 AW38 AW40 31			<b>AR1</b> C, F, M	<b>AR2</b> C, F, M	AR3 C, F, M	AR5 M	AR8 C, F, M	AR10 C, M	AR14 SM	<b>AR16</b> C, K, M
AW38 AW40 31	<i>✓</i>									
AW38 AW40 31	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \									
AW38 AW40 B1 B2 C22	\rightarrow	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \								
AW38 AW40 B1 B2 C22	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \								
AW38 AW40 B1 B2 C22 GL1 GL2	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
W38 W40 81 82 82 81 81 81 81 80 80	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\rightarrow \right	C, F, M	C, F, M	C, F, M	M	C, F, M	C, M	SM	
AW38 AW40 B1 B2 C22 GL1 GL2 COUND	· · · · · · · · · · · · · · · · · · ·	<b>*</b>	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 A1 A2 A22 BL1 BL2 BOUND BOUND12 BOUND20	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
0W38 0W40 1 2 22 22 1L1 1L2 0UND 0UND12 0UND20 C1	· · · · · · · · · · · · · · · · · · ·	<b>*</b>	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 A1 A2 A22 BL1 BL2 BOUND BOUND12 BOUND20 CC1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>*</b>	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 31 32 32 32 31 31 32 32 32 32 32 32 32 32 32 32 32 32 32	· · · · · · · · · · · · · · · · · · ·	<b>*</b>	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 31 32 32 32 31 31 31 32 32 32 32 32 33 34 34 34 34 34 34 34 34 34 34 34 34	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>*</b>	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 31 32 32 32 31 31 31 32 32 32 32 32 33 34 34 34 34 34 34 34 34 34 34 34 34	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>*</b>	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 31 32 32 32 32 32 32 32 32 32 32 32 32 32	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>*</b>	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 S1 S2 S22 SL1 SL2 ROUND ROUND12 ROUND20 SC1 SC2 SC3 SC4 SC5 SC6	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\frac{1}{\sqrt{1}}	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
\W38 \W40	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\frac{1}{\sqrt{1}}	C, F, M	C, F, M	C, F, M	M SC3	C, F, M	C, M	SM SC-CORNER2	
AW38 AW40 B1 B2 B2 B1 B1 B1 B1 B1 B2 B2 B2 B3 B3 B3 B4 B4 B5 B5 B5 B5 B6	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\frac{1}{\sqrt{1}}	AR20 C, K, M, SM	AR23 C, K, M	GL1 C, F, M	SC3 M	C, F, M  SC6 C, K, M, SM	SC-CORNERI M	SC-CORNER2 M	С, К, М
AW38 AW40 B1 B2 B2 BL1 BL2 BOUND BOUND12 BOUND20 BC1 BC2 BC3 BC4 BC5 BC6 BC5 BC6 BC6 BC6 BC6 BC6 BC6 BC6 BC6 BC6 BC6	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\frac{1}{\sqrt{1}}	AR20 C, K, M, SM	AR23 C, K, M	C, F, M	SC3 M	SC6 C, K, M, SM	SC-CORNERI M	SC-CORNER2 M	C, K, M



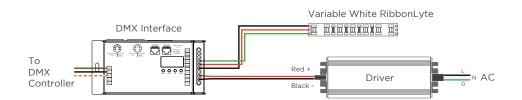
## WIRING DIAGRAMS

## 2-CHANNEL DIMMING WIRING DIAGRAM



\* 0-100% flicker-free performance not guaranteed when used with non-Acolyte Drivers

#### DMX WIRING DIAGRAM - COMPATIBLE WITH ALL MODELS OF VARIABLE WHITE RIBBONLYTE



## WIRE COLORS PER RIBBONLYTE COLOR

#### VARIABLE WHITE

Black Wire (+) Positive
Red Wire (-) Warm Channel
Green Wire (-) Cool Channel