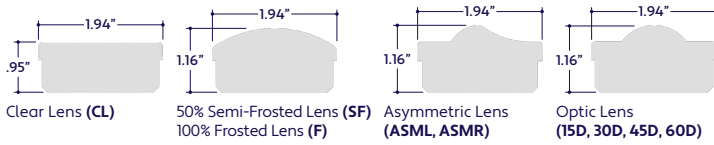


### END VIEWS / DIMENSIONS



### MINIMUM & MAXIMUM RUNS

Wattage	1.5W	2W	3W	4W	5W	6W	8W	10W	12W
<b>0-10V &amp; DALI Minimum Run</b>	4'	3'	2'	2'	2'	1'	1'	1'	1'
<b>0-10V &amp; DALI Maximum Run</b>	39'	27'	19'	14'	11'	9'	7'	6'	5'
<b>DMX Minimum Run</b>	4'	3'	2'	2'	2'	1'	1'	1'	1'
<b>DMX Maximum Run</b>	26'	18'	13'	9'	8'	6'	4'	4'	3'

### SPECIFY PRODUCT CODE | CHOOSE FROM DROP DOWNS

Series	Lens / Optics	Finish	BIOS LED	Watts per Foot	Dimming	Listing	Luminaire Voltage <sup>7</sup>	Luminaire Length
<b>A1-ZUCO-STW-BIOS</b>								<b>UNV</b>
ZUCO Standard Wide BIOS Illuminated (A1-ZUCO-STW-BIOS)	Clear Lens (CL)	Natural Silver <sup>*2</sup> (NA)	BIOS Biological Static: 3500K Daytime <sup>*3</sup> (BS-35K)	1.5 Watts (1.5W) 234 Lumens / ft <sup>*6</sup>	0-10V (10V)	Indoor (DRY)	120-277V Line Voltage (UNV)	Specify Length in Feet & Inches Example: 7'8"
	50% Semi-Frosted Lens (SF)	Silver (SR)		2 Watts (2W) 312 Lumens / ft <sup>*6</sup>				
	100% Frosted Lens (F)	White (WH)		3 Watts (3W) 468 Lumens / ft <sup>*6</sup>				
	Asymmetric Lens Left (ASML)	Satin (SA)	BIOS Biological Dynamic: 3500K Daytime - 3000K Evening <sup>*4</sup> (BD-35K-30K)	4 Watts (4W) 624 Lumens / ft <sup>*6</sup>	DALI (DALI)	Outdoor (DAMP)		
	Asymmetric Lens Right <sup>*1</sup> (ASMR)	Black (BK)		5 Watts (5W) 780 Lumens / ft <sup>*6</sup>				
	15° Optics (15D)		BIOS Biological Tunable: 3500K Daytime - 2700K Evening <sup>*5</sup> (BT-35K-27K)	6 Watts (6W) 936 Lumens / ft <sup>*6</sup>	DMX-512 (DMX)			
	30° Optics (30D)			8 Watts (8W) 1248 Lumens / ft <sup>*6</sup>				
	45° Optics (45D)			10 Watts (10W) 1560 Lumens / ft <sup>*6</sup>				
	60° Optics (60D)			12 Watts (12W) 1872 Lumens / ft <sup>*6</sup>				

<sup>\*1</sup> Default Asymmetric Direction is Right (ASMR) if unspecified.  
<sup>\*2</sup> Default finish is Natural Silver (NA) if left blank.  
<sup>\*3</sup> BIOS Biological Static available in standard 3500K Daytime CCT. Consult factory for other color temperature options.  
<sup>\*4</sup> BIOS Biological Dynamic available in standard 3500K Daytime - 3000K Evening CCT gamut. Consult factory for other color temperature options.  
<sup>\*5</sup> BIOS Biological Tunable available in standard 3500K Daytime - 2700K Evening CCT gamut. Consult factory for other color temperature options.  
<sup>\*6</sup> Lumens per Foot based on 35K CCT LED. Example: 156 Lumens x 4 Watts = 624 Initial Lumens per Foot.  
<sup>\*7</sup> Remote drivers wattage sized based on length of run. Example: 6' run x 10 watts per foot = 60 watts. Driver will be sized to 60 watts maximum.



### LAMP FEATURES

<b>Lamp Type</b>	BIOS SkyBlue™ LEDs
<b>CRI</b>	> 80
<b>Efficacy*</b>	156 Lumens per Watt

**Note:** Efficacy is based on Biological Static (BIOS-BS-35K) with Clear Lens (CL).

### LAMP SPECIFICATIONS

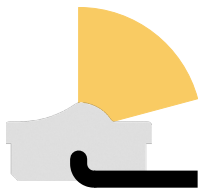
Lamp Number	Description	Efficacy (Lumens per Watt)	L70 LED Life
<b>BIOS-BS-35K</b>	Biological Static: 3500K Daytime	156	
<b>BIOS-BD-35K-30K</b>	Biological Dynamic: 3500K Daytime - 3000K Evening	156	60,000 hrs.
<b>BIOS-BT-35K-27K</b>	Biological Tunable: 3500K Daytime - 2700K Evening	156	

**Note:** Efficacy is based on 35K CCT LED with Clear Lens (CL).

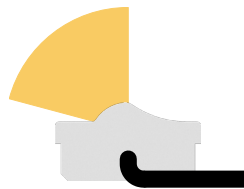
**Note:** To calculate Lumens per Foot, multiply Efficacy by Watts per Foot.

**Example:** 156 Lumens per Watt x 4 Watts per Foot = 624 Lumens per Foot.

### OPTICS ORIENTATION



Asymmetric Lens Right (ASMR)



Asymmetric Lens Left (ASML)

**Note:** Refer to the above diagrams to understand optics orientation in relation to the power feed.

### LENS / OPTICS APPEARANCE



Clear Lens (CL)  
Visible Diode Image  
0% Loss Factor



50% Semi-Frosted Lens (SF)  
Slight Diode Image  
12.5% Loss Factor



100% Frosted Lens (F)  
No Diode Image: Line of Light  
25% Loss Factor

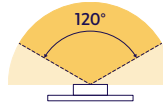


Asymmetric Lens (ASML, ASMR)  
Slight Diode Image  
18% Loss Factor

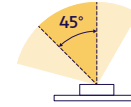


Optic Lens (15D, 30D, 45D, 60D)  
Slight Diode Image  
18% Loss Factor

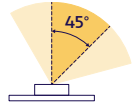
### BEAM ANGLES



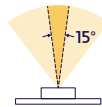
120° x 120° Beam  
Clear Lens (CL)  
50% Semi-Frosted Lens (SF)  
100% Frosted Lens (F)



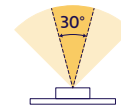
45° x 60° Beam  
Asymmetric Lens Left  
(ASML)



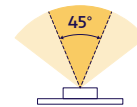
45° x 60° Beam  
Asymmetric Lens Right  
(ASMR)



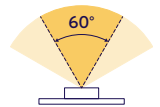
15° x 60° Beam  
Optic Lens  
(15D)



30° x 60° Beam  
Optic Lens  
(30D)



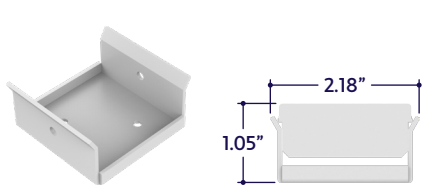
45° x 60° Beam  
Optic Lens  
(45D)



60° x 60° Beam  
Optic Lens  
(60D)

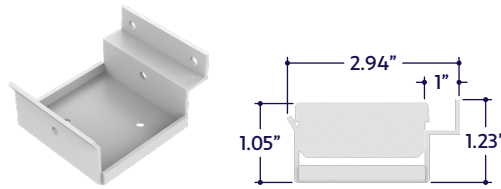
## MOUNTING OPTIONS (Sold Separately)

**Note:** Mounting clips are only available in Natural Silver Finish, unless otherwise specified.



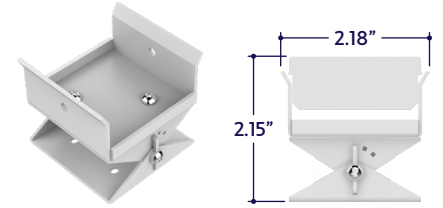
Part #	Qty.
A1-ZUCO-STW-MC-1	

**Note:** Use 1 mounting clip per 2', rounded up.  
 Click on image to see cut sheet for additional details.



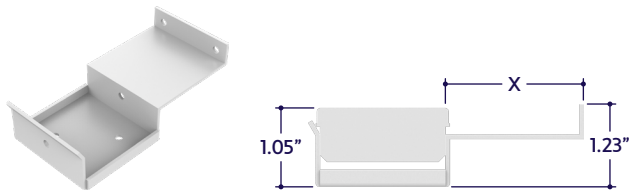
Part #	Qty.
A1-ZUCO-STW-MC-2	

**Note:** Use 1 mounting clip per 2', rounded up.  
 Click on image to see cut sheet for additional details.



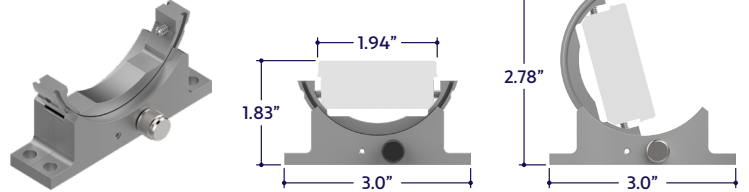
Part #	Qty.
A1-ZUCO-STW-MC-3	

**Note:** Use 1 mounting clip per 2', rounded up.  
 Click on image to see cut sheet for additional details.



Part #	Length	Qty.
A1-ZUCO-STW-MC-4-		

**Note:** Use 1 mounting clip per 2', rounded up.  
 Click on image to see cut sheet for additional details.

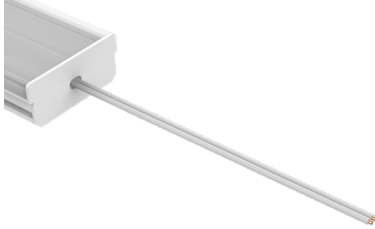


Part #	Qty.
A1-ZUCO-STW-MC-PVT	

**Note:** Use 1 mounting clip per 2', rounded up.  
 Click on image to see cut sheet for additional details.

### POWER CONNECTORS (Sold Separately)

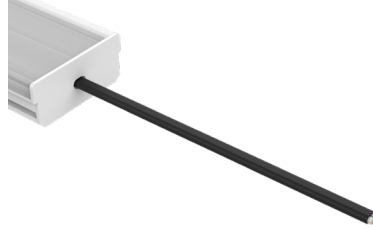
**Note:** Connectors are factory assembled to each run length. Connectors are subject to change without notice.



Dry Power Connector  
(Biological Static LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BS-DRY-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BS-DRY-	36"	
A1-ZUCO-STW-BIOS-PC-BS-DRY-		

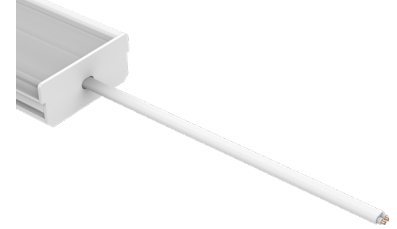
**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



Dry Power Connector with Black Jacket  
(Biological Static LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BS-DRY-BK-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BS-DRY-BK-	36"	
A1-ZUCO-STW-BIOS-PC-BS-DRY-BK-		

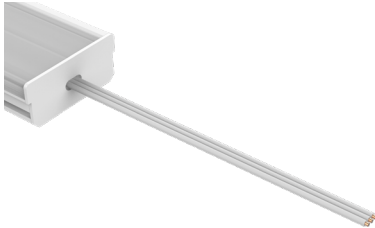
**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



Dry Power Connector with White Jacket  
(Biological Static LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BS-DRY-WH-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BS-DRY-WH-	36"	
A1-ZUCO-STW-BIOS-PC-BS-DRY-WH-		

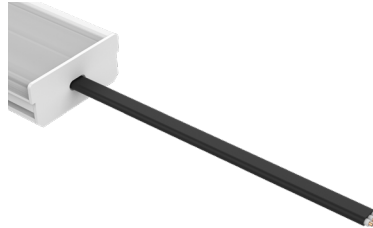
**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



Dry Power Connector  
(Biological Dynamic LEDs Only)  
(20/3 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BD-DRY-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BD-DRY-	36"	
A1-ZUCO-STW-BIOS-PC-BD-DRY-		

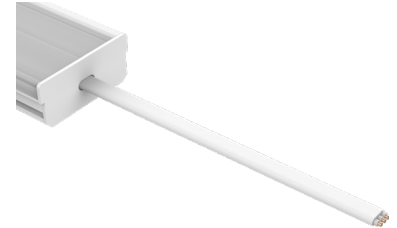
**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



Dry Power Connector with Black Jacket  
(Biological Dynamic LEDs Only)  
(20/3 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BD-DRY-BK-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BD-DRY-BK-	36"	
A1-ZUCO-STW-BIOS-PC-BD-DRY-BK-		

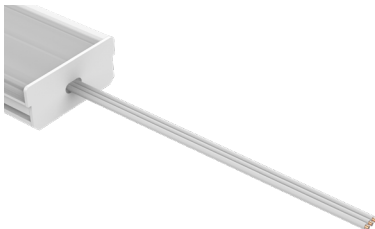
**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



Dry Power Connector with White Jacket  
(Biological Dynamic LEDs Only)  
(20/3 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BD-DRY-WH-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BD-DRY-WH-	36"	
A1-ZUCO-STW-BIOS-PC-BD-DRY-WH-		

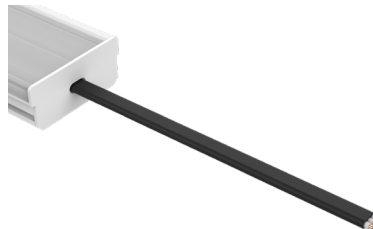
**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



Dry Power Connector  
(Biological Tunable LEDs Only)  
(20/3 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BT-DRY-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BT-DRY-	36"	
A1-ZUCO-STW-BIOS-PC-BT-DRY-		

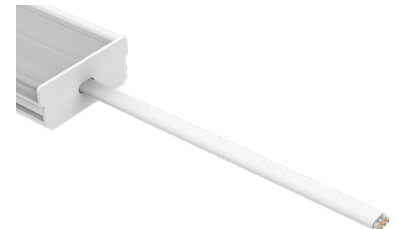
**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



Dry Power Connector with Black Jacket  
(Biological Tunable LEDs Only)  
(20/3 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BT-DRY-BK-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BT-DRY-BK-	36"	
A1-ZUCO-STW-BIOS-PC-BT-DRY-BK-		

**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.



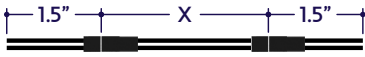
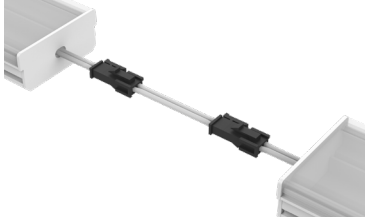
Dry Power Connector with White Jacket  
(Biological Tunable LEDs Only)  
(20/3 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-PC-BT-DRY-WH-X)**  
X = Specify Length, 36" Default, 25' Maximum

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-PC-BT-DRY-WH-	36"	
A1-ZUCO-STW-BIOS-PC-BT-DRY-WH-		

**Note:** Specify 1 Power Connector for each lead required.  
Power Connectors are factory assembled to each length.

### CONTINUOUS CONNECTORS (Sold Separately)

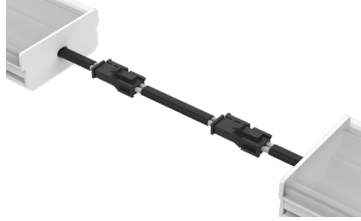
**Note:** Connectors are factory assembled to each run length. Connectors are subject to change without notice.



Dry Continuous Connector  
(Biological Static LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BS-DRY-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BS-DRY-	3"	
A1-ZUCO-STW-BIOS-CC-BS-DRY-		

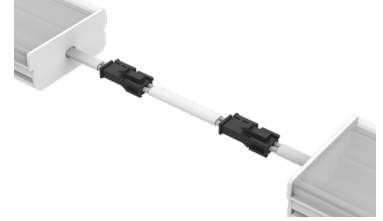
**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector with Black Jacket  
(Biological Static LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BS-DRY-BK-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BS-DRY-BK-	3"	
A1-ZUCO-STW-BIOS-CC-BS-DRY-BK-		

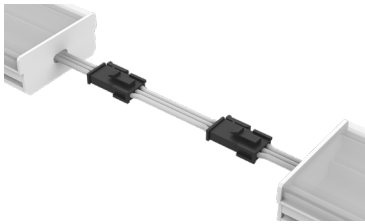
**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector with White Jacket  
(Biological Static LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BS-DRY-WH-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BS-DRY-WH-	3"	
A1-ZUCO-STW-BIOS-CC-BS-DRY-WH-		

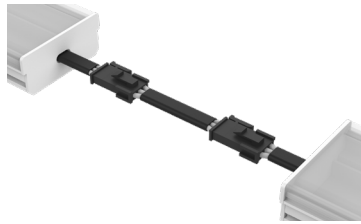
**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector  
(Biological Dynamic LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BD-DRY-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BD-DRY-	3"	
A1-ZUCO-STW-BIOS-CC-BD-DRY-		

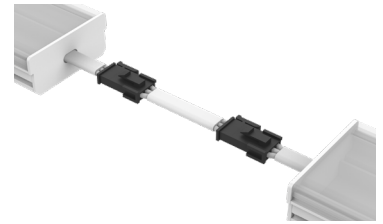
**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector with Black Jacket  
(Biological Dynamic LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BD-DRY-BK-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BD-DRY-BK-	3"	
A1-ZUCO-STW-BIOS-CC-BD-DRY-BK-		

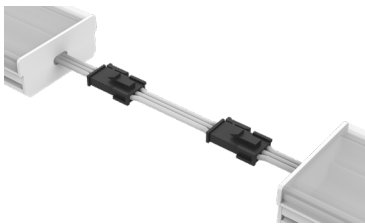
**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector with White Jacket  
(Biological Dynamic LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BD-DRY-WH-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BD-DRY-WH-	3"	
A1-ZUCO-STW-BIOS-CC-BD-DRY-WH-		

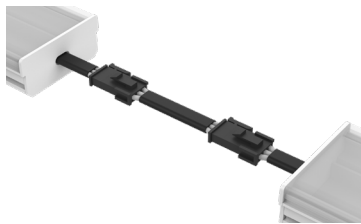
**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector  
(Biological Tunable LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BT-DRY-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BT-DRY-	3"	
A1-ZUCO-STW-BIOS-CC-BT-DRY-		

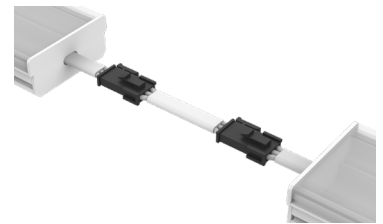
**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector with Black Jacket  
(Biological Tunable LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BT-DRY-BK-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BT-DRY-BK-	3"	
A1-ZUCO-STW-BIOS-CC-BT-DRY-BK-		

**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.



Dry Continuous Connector with White Jacket  
(Biological Tunable LEDs Only)  
(20/2 Gauge Wire)  
**(A1-ZUCO-STW-BIOS-CC-BT-DRY-WH-X)**  
X = Specify Length, 3" Default

Part #	Length	Qty.
A1-ZUCO-STW-BIOS-CC-BT-DRY-WH-	3"	
A1-ZUCO-STW-BIOS-CC-BT-DRY-WH-		

**Note:** Specify Continuous Connectors to traverse a gap or obstacle. Continuous Connectors are factory assembled to specified lengths.

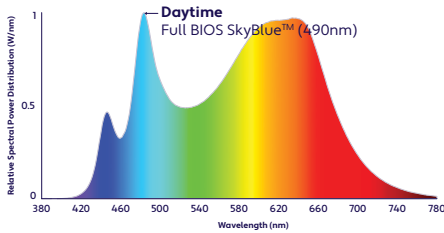
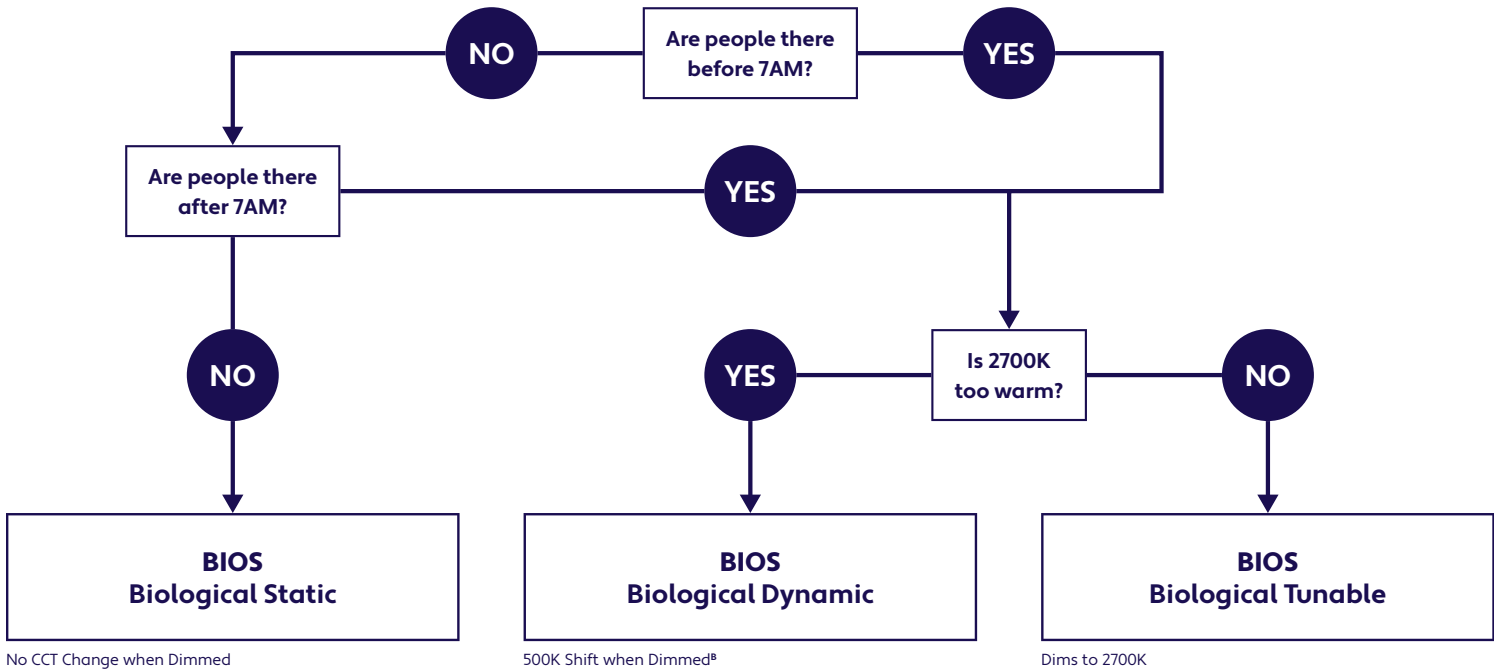
## DELIVERED MELANOPIC RATIOS

BIOS Solution / Nominal CCT / Product Code	Spectral Mode	CRI	R9	Daytime Spectrum Melanopic Ratio* (M/P)	
				m-EER	m-DER
BIOS Biological Static: 3500K Daytime (BIOS-BS-35K)	Daytime Solution	80+	> 90	≥ 0.80	≥ 0.72
BIOS Biological Dynamic: 3500K Daytime - 3000K Evening (BIOS-BD-35K-30K)	Daytime + Evening Solution	80+	> 90	≥ 0.70	≥ 0.63
BIOS Biological Tunable: 3500K Daytime - 2700K Evening (BIOS-BT-35K-27K)	Daytime + Evening Solution	80+	> 90	≥ 0.80	≥ 0.72

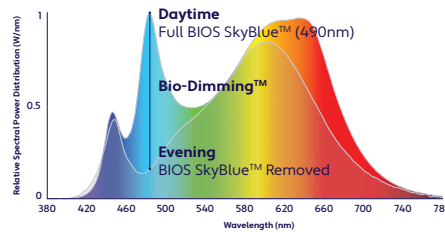
\*Melanopic ratios are provided in two forms: (m-EER) which is calculated using the WELL v2 methodology and the corresponding CIE melanopic Daylight Equivalent Ratio, (m-DER).

## CHOOSING YOUR BIOS SOLUTION

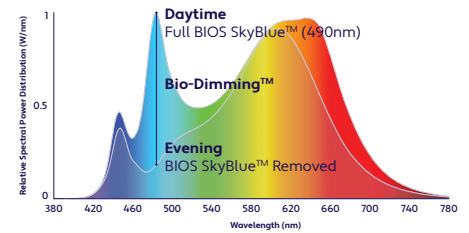
ALUZ offers four different BIOS Circadian LED Solutions – Biological Static, Biological Dynamic, and Biological Tunable White. Use the decision tree below to identify when and where to use BIOS Wellness LED Lighting Solutions .



**Daytime Solution**  
 (Offices, Medical / Dental Offices)  
 Spaces in operation during daytime hours, between 7AM and 7PM.



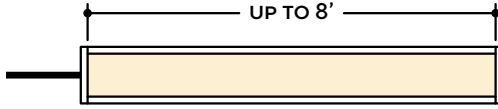
**Daytime + Evening Solution**  
 (Hospitals)  
 Spaces in operation overnight, after 7PM and before 7AM. CCT color shift in the evening not preferred.  
 (<sup>B</sup>3000K dims to 2700K)



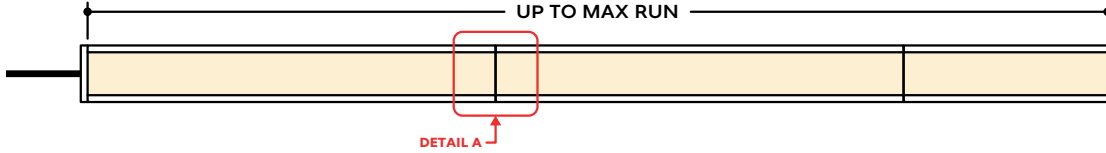
**Daytime + Evening Solution**  
 (Offices, Shiftwork)  
 Spaces in operation overnight, after 7PM and before 7AM and people do not sleep there. CCT color shift in the evening not preferred.

## DESIGN GUIDELINES

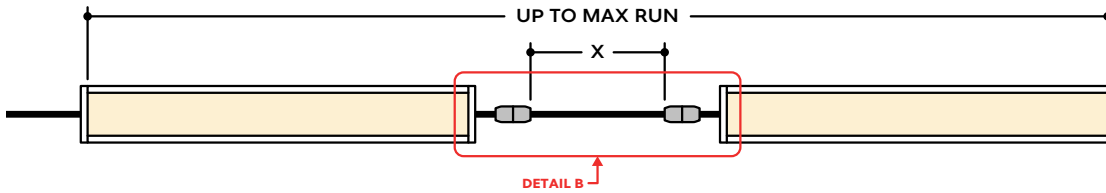
### Individual Fixture



### Continuous Run (Dry Location)



### Runs with Continuous Connector (Dry Location)



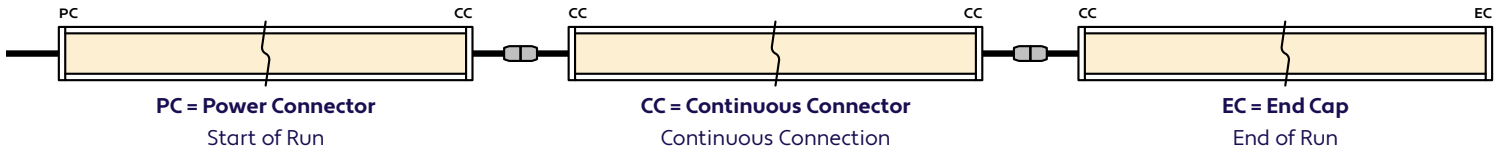
## KEY

**Detail A** **Continuous Connection (Dry Location):** Luminaire segments connect using pins, leaving no gaps between segments, with a mounting clip holding the two segments together. Refer to installation instructions for additional information.

**Detail B** **Dry Continuous Connector:** Used to span a corner or traverse a gap, corner, or obstacle in a dry location installation area.

**Note:** Drawings not to scale. Product may differ from examples shown.

## CONNECTION SEQUENCE

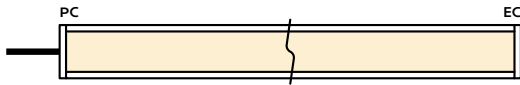


- Specifying a layout is not required to place an order.
- Configuration code applies to full length ordered and will be built per the Continuous Run models on Design Guidelines.
- Connector type subject to change based on availability and listing. Refer to Design Guidelines for details.

## HOW TO SPECIFY CONFIGURATIONS

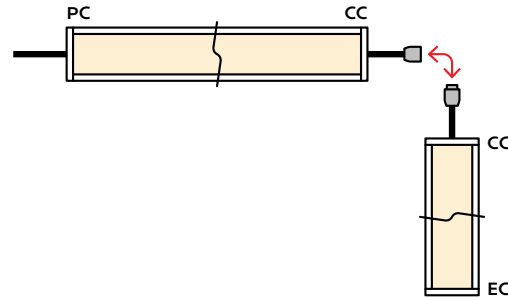
### Example: 20' Straight Run

- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-9'-PC-EC



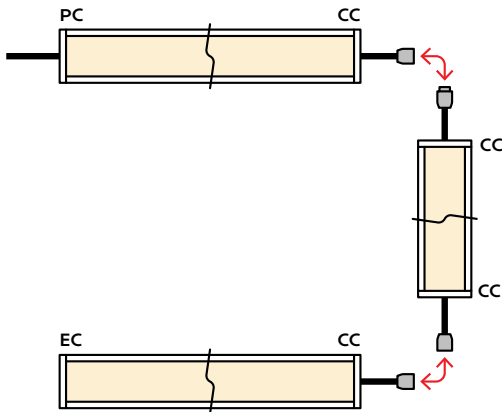
### Example: 25' L-Shaped Run

- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-6'-PC-CC
- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-7'-CC-EC



### Example: 30' U-Shaped Run

- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-6'-PC-CC
- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-9'-CC-CC
- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-6'-CC-EC



### Example: 28' Rectangle Shaped Run

- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-5'-PC-CC
- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-3'-CC-CC
- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-5'-CC-CC
- 1x A1-ZUCO-STW-BIOS-CL-NA-BS-35K-10W-10V-DRY-UNV-3'-CC-EC

